

SOUNDER

January-February 1986

Volume XIV Number One



Campaign 85 final report

*Typical scene from the Our Resource campaign.
See story inside*

Letters

Thank you

Dear Editor:

I would like, through the medium of "Sunder", to thank all of my friends and colleagues with the Department who, despite the atrocious weather prevailing at the time, were able to attend the dinner given for me in Victoria on November 22. Their presence, the good wishes received from those unable to attend and the gifts of a magnificent brass clock, plaque and framed set of photographs of my various ships made me realize the number of valuable friendships I have been privileged enough to forge over the course of my nearly fifteen years with the Department.

Although I left the Department in September, it is only since the dinner that it has really sunk in that I have severed my ties with Fisheries and I am quite sincere in saying that it marked the conclusion of one of the most rewarding times of my life. The training and experience gained at sea and on the various courses I attended which led to my appointment as a patrol vessel master are proving to be of inestimable value in the pursuit of my current goal to become a B.C. coast pilot and I shall be forever grateful to those people in DFO who made those decisions regarding my training and career development; in making these remarks I must emphasize that I refer not only to nautical training but also to the various management

and RCMP courses I attended as in my new career as a pilot the ability to communicate with people of many nationalities in many situations is essential.

I am currently in the middle of serving my six month apprenticeship as a pilot and it is proving to be a very hectic and challenging time, although the real challenges will arrive next summer when I will be piloting ships on my own.

Once again, my sincere thanks to you all, and I look forward to our occasional meetings up and down this magnificent coast of ours.

Capt. Roger Myerscough
ex H.Q. Relief Master

Here's a thought:
Dear Editor

Commitment and Involvement

People at DFO often say they are committed to their jobs. Others feel they are deeply involved in their projects. Not everyone appreciates the difference between the words "commitment" and "involvement."

The best time of day to ponder on this is after eating a large "logger's breakfast" with bacon, eggs, toast and hashbrowns. As you push aside the little orange slices, you can think that somewhere along the line a chicken was involved in your breakfast. But the pig made a real commitment.

Anonymous

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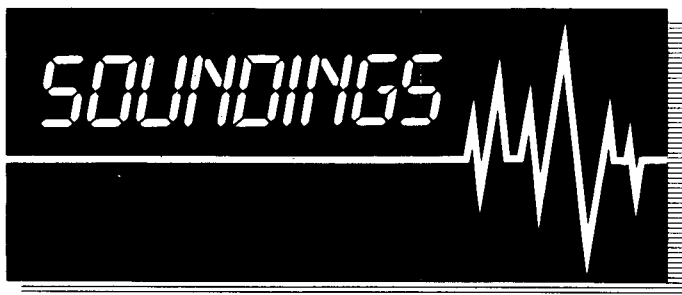
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Government of Canada
Fisheries and Oceans



To fully assure you of confidentiality being maintained, all questions for the "Soundings" program should be sent to:
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 V6C 1N5

Question

Re: Conflict of Interest Guidelines

As an employee and as a supervisor, I find the recently issued Code too vague, and would like some further direction. It seems that if hindsight indicates there was conflict of interest, then there was. Such an open-ended policy leaves me uncertain as to how to reply to various outside offers, without diverting our limited manpower into a review process for each and every case. Surely provision of some general guidelines relating to areas that DFO employees are likely to become involved in would be less wasteful of everyone's time.

One obvious area that deserves some additional attention is private-sector aquaculture. I doubt that DFO draftspersons would be cited for conflict of interest if they did the blueprints for a private hatchery outside of their jobs with DFO. My particular area of expertise involves the provision of site-specific biological criteria for design of facilities. If I did similar work for the private sector on my own time, would this be conflict of interest? What if I, or my employee, was asked to do risk evaluations of fish farms for an insurance underwriter? Prior to the Code coming out, we were advised informally to avoid anything to do with private-sector aquaculture. Is this now the official stance? If it is, I think it is overly restrictive; not just in terms of loss of potential extra outside income, but also in terms of spin-off benefits to the Department (two examples being raising of cost-consciousness and transfer of technology).

I am sure a lot of us in SEP would appreciate knowing just in what, if any, aspects of private-sector aquaculture we safely may become involved.

Reply

The recently implemented Conflict of Interest and Post Employment Code for the Public Service has certainly generated many questions and expressions of concern on the part of employees.

I am not aware of any helpful guidelines other than those contained in the booklet that was issued to all employees. Explanations of the Code are contained in a videotape presentation that will be made available for employee viewing in the near future. More detailed and meaningful guidelines will be developed as particular cases are dealt with and rulings are issued. In the meantime, one must interpret the Code using common sense in applying the nine principles listed in the booklet.

The writer raises a number of hypothetical questions that in my opinion relate to the principle:

Employees shall not knowingly take advantage of, or benefit from, information that is obtained in the course of their official duties and responsibilities and that is not generally available to the public.

The examples provided by the writer appear to deal with outside activities using knowledge and experience obtained as an employee and for which he or she would receive compensation.

The question to be answered is: is the denial of such an employee request necessary to prevent real, potential or apparent conflicts of interest? On the surface the appropriate answer would be to deny such requests.

The writer also raises the question of technology transfer. As I understand it, technology transfer is an accepted concept when practised as part of an employee's ongoing responsibilities. To apply the practise in the form of outside employment would, again, appear to be in conflict with the aforementioned principle.

As indicated previously, the writer has raised a number of hypothetical questions. I will forward his questions to DFO Headquarters and request opinions, but at present, I would urge each employee when facing situations as described to complete and forward a confidential report for which a response will be provided based on the pertinent facts of each real situation.

Pat Chamut
 Director general

What are they doing now?

He left the boats, but not the fish



Fish get their breakfast early, and the sun was not yet up when Sounder found Don Collison feeding the fry at the Semiahmoo Fish and Game Club hatchery in Surrey.

"I just like boats."

Don Collison spent almost 18 years working as a relief engineer for DFO serving on such boats as the Atlin Post and the Comox Post.

"I really enjoyed it," says Don. "If I hadn't, I wouldn't have stayed that long!"

After a career that started in the north (Don was born at Nass River) and moved to the south to "try someplace new," Don retired in 1980. Now Don enjoys collecting Canadian coins, a hobby that started when an acquaintance in Terrace sold him some coins over twenty years ago.

Last fall, Don added another activity to his schedule; he volunteered to help out at the Little Campbell River hatchery. It is operated by the Semiahmoo Fish and Game Club not far from Don's home in Surrey.

The duties at the hatchery are not all that heavy ("I'm gaining weight," says Don), but the

project welcomes willing volunteers to aid the enhancement effort. The most demanding part of feeding fry is that they like to get breakfast early. Don arrives at the hatchery at 8 a.m. every Thursday morning to begin the chore. The fry get fed every fifteen minutes, so other odd jobs around the place get done in fits and starts. Don puts in a four-hour shift.

Things are fairly quiet in the winter. Most of the rush comes during the fall egg-take and spring fry clipping season. Summers get busy, too, with many visitors attracted to the club's beautiful grounds to watch the fish and ducks, and explore the creekside trails.

Don says that the local community is well aware of the club's activities and is very supportive. Semiahmoo has over 200 members and they have equipped the grounds and the hatchery to a very high standard.

"Everything here was done with volunteer labour," says Don. Everything includes the hatchery building, wells, aeration tower, rearing troughs and ponds, counting fence, trails and the meeting and picnic facilities.

Don says he still keeps in touch with some of his friends from DFO days; Roy Johanson and Ross Skogg have crossed his path a few times. He has a lot of new acquaintances, too; members of the club and the fish and the ducks at Semiahmoo.

Why did Don volunteer to get involved?

"I've been involved with fish all my life, catching them and eating them. It was a natural."



Small Craft Harbours regional director, Warren Parkinson (right), presented this wooden carving of a salmon to Stan Wallace to mark his recent retirement.

Stan spent 30 years with the Armed Forces and ten more with Small Craft Harbours, most recently as Property & Operations manager. Photo: Al Gorman

Pacific Region Update

Quinsam update

The March 1982 issue of the Sounder contained an article about a proposal by Quinsam Coal Ltd. to develop a one million tonne per year open pit thermal coal mine near Campbell River. At that time, an environmental assessment report had been rejected by both the federal and provincial governments, and the company was required to prepare supplementary information.

The Company submitted an addendum environmental assessment report in August 1982. Based on this submission the provincial government granted approval-in-principle for the mine in February 1983, subject to, among other conditions, a public inquiry being held prior to issuance of any permits or licences.

DFO and the Department of Environment (DOE) submitted a joint brief to the public inquiry which was held in Campbell River in October-November 1983. The Commission of Inquiry's report was released in May 1984.

While DFO was generally satisfied with the Commission's conclusions on most issues, there were outstanding concerns with respect to the potential impact of nutrient releases from the mining operation. Accordingly, an independent research program was undertaken by DFO Fisheries Research Branch scientists, and a subsequent technical report was prepared.

As a result of the research results and a DFO review of the Commissioner's report in May 1985, the Minister of Fisheries and Oceans advised the Province of B.C. and the company of the Departmental requirements that would have to be reflected in provincial effluent discharge permits. These requirements included specific mitigation strategies to protect fish and fish habitat in the Quinsam Lake system from the potentially negative effects of excessive nutrient loads and other specifications regarding the control of suspended sediments and acid mine drainage.

Currently, DFO is continuing technical discussions with provincial agencies and DOE towards developing required permits and licences for the operation. While the company is anxious to have their permits finalized as soon as possible, it is not anticipated that full-scale mining will occur until markets for thermal coal improve.

Wayne Knapp, Mike Nassichuk
Habitat Management

Appointments of interest

Anthony D. O'Connor of Victoria, British Columbia, has been appointed regional director of Hydrography of the Canadian Hydrographic Service (CHS), Pacific Region.

He is responsible for the planning and direction of all CHS programs related to Pacific and western Arctic waters, including the Athabasca-Mackenzie system, and inland field hydrography, nautical chart production, tidal and current surveys, and electronics and engineering support. The position is also responsible for the operation of the research and survey fleet of the Institute of Ocean Sciences.

Mr. O'Connor, a native of Dublin, Ireland, obtained his early education in England. He gained his first hydrographic survey experience in the United Kingdom and also served as a navigating officer with the British Merchant Marine. He is a licensed Canada Lands Surveyor (CLS) and holds a Master (350T) Certificate of Competency (Canada). He has also attained CHS certification in hydrography.

In 1967, Mr. O'Connor was appointed to the position of assistant hydrographer with the Pacific Region of CHS. He held various positions of increasing responsibility with CHS and, in 1981, was assigned as senior hydrographer/chief scientist on board CSS Hudson for the Beaufort Sea and Northwest Passage portion of her cruise. In 1982, he resigned his position as senior hydrographer to gain private sector experience.

For the past three and one-half years, Mr. O'Connor has been manager of the hydrographic division of Terra Surveys Ltd., a well-established survey and mapping company. He held total responsibility for the company's hydrographic surveying and nautical charting activities in Canada and abroad.

(From DFO news release)

NOTICE to readers of the SEP 1984 Annual Report. More complete data has become available since publication. An errata to the tables will be issued. The 1984 Summary Annual Report will show the corrected figures.

SPORTS NEWS

There was a volleyball game at the annual fisheries control organization course in Arnprior, Ontario, December 5th.

From where I stand

When Sounder surveyed you, its readers, last year, one of the areas in which many people indicated a desire for more information was outside, public issues affecting fisheries and DFO.

In keeping with that, we have asked representatives from various of our client groups to offer their perspective in Sounder.

The following article is one of that series, and is reproduced here in unedited form. The opinions presented are those of the writer. Doubtless some within DFO will find issues to quarrel with in these articles from time to time; we would urge you to contribute your ideas to these pages as well.

**pacific
gillnetters
association**



The following article was written on behalf of the Pacific Gillnetters Association by Nancy Marshall, owner/operator of the Albion Chief. Nancy is a director of the PGA and of the Prince Rupert Fishermen's Cooperative and was a Canadian advisor on the Canada/U.S. Treaty talks.

One sunny day in June, I was lazing on the deck of my gillnetter, which was tied to the end of my net, drifting around in Barkley Sound. Because the net was drifting close to the fishing boundary, I had checked my position both visually and with radar, so when the patrol vessel, James Sinclair, roared past, I wasn't concerned about the position of the net. What concerned me was the huge wash the Sinclair was putting up, and the fact that, unless I moved fast, my coffee pot was going to spill on the floor. As I grabbed for the pot, I noticed someone on the Sinclair's bridge making a strange circular gesture with his hand. I marvelled that the fisheries officers had taken to making obscure and possibly obscene gestures and went to bed. About half an hour later, I picked up my net, picked out the occasional fish and headed the boat up the inlet. A friend called me on the radio, "Albion Chief, you on here?"

"Yep," I replied.

"You're getting brave," he said.

"I was O.K.," I said.

"Yeah," he replied, "but the Sinclair told you to pick it up."

"They did?" I said.

"Yeah, he signalled you to drum it on."

"Oh!" said I, thinking rapidly and finally realizing the meaning of the hand signals, "Is that what they meant?" DRUM IT ON--next to "You're under arrest."--they are the words most dreaded by gillnetters.

'Drum it on' is an order to wrap the net on the drum without stopping to remove the fish. To minimize or avoid breaking the law, the net is taken from the water quickly. The net, weighing over 400 pounds, pulling a boat that averages about 5 tons, goes on the drum tightly. Any fish in the net is crushed; and, with broken connective tissue and bruised and bloody flesh, is the poorest possible product. To a gillnetter, it seems bizarre that the same DFO that is so concerned with quality would give such an order.

The deliberate law breakers in the gillnet fleet are few, but the act of fishing often places a gillnetter in illegal situations.

A miscalculation in the speed or direction of the tide will carry a gillnetter over a boundary. Fishing 'on the line' is frequently the most lucrative, so that a gillnetter will try to keep his net there as long as possible. Fish do not gill in the net at a steady rate. The net can be surrounded by fish who refuse to be caught. Fish gill at certain stages of the tide, or when the light and weather conditions are right or for no reason yet known to most of us. If these peak fishing times coincide with a fishing closure, or a change in tide which pulls the net over a boundary, the hapless gillnetter could find himself with too many fish, and too little time to pick up the net. If he is caught by the enforcement team, and he frequently is, he may be told to 'drum it on' and may end up in court as well.

Gillnetters will take chances because, in these days of short fishing openings, removing the net from the water too soon before a closure can mean significant lost revenue. As an example, in San Juan this year, if a gillnetter left his net in the water through day break--a peak gilling time--he would not have time to pick it up before the closure. Some picked up early, watched others still fishing, and lost money. Some waited until the gilling period was over, and wrapped the fish on the drum, crushing them, but had some cheap fish

for sale. Others didn't wrap, got caught, went to court, and lost money.

Over the season resentment builds. If a gillnetter hails his catches to the fisheries patrol boat, the officer reports them to head office on the "private" radio channel. Those in the fleet who are not listening to the private channel have friends who are. News travels fast. The man who is quietly fishing in the "hot spot" is soon overwhelmed with other boats. He soon learns to lie.

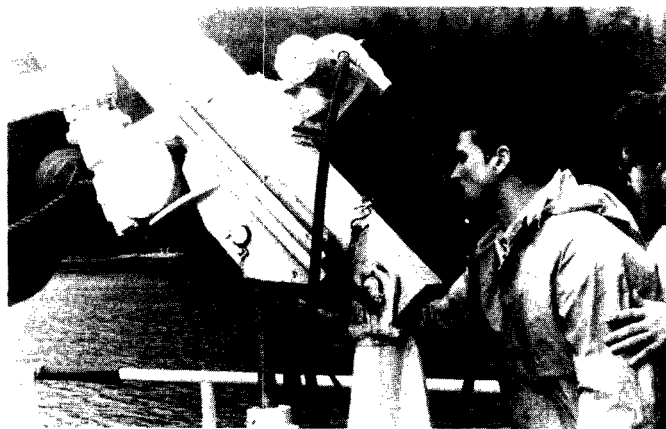
Silly rules drive gillnetters nuts. It is illegal to tie a gillnet to the beach, except in an isolated lagoon in Smith's Inlet, yet seiners can tie their nets to the beach. A gillnetter must have his license number on his balls (marking the end of the net). According to the Fisheries Act, a gillnetter can't untie his boat from his net which would lead to incredible problems if the wind shifted. Thankfully this law has either been changed or is not being enforced.

Sometimes it seems that the fisheries officers resent the "quick" bucks made by fishermen. What isn't obvious is the endless hours of waiting, net mending, and boat repairs between bonanzas. The long hours and lack of sleep lead to stupid mistakes and bad tempers. The financial pressure leads to taking chances.

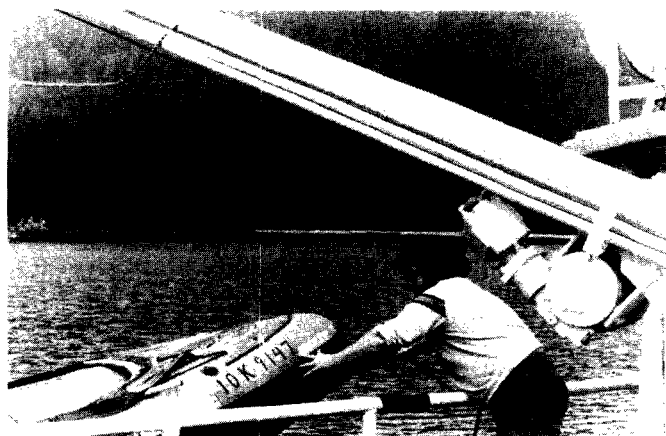
I once calculated that, in a good year, I made 90 cents an hour. Three years out of the last ten, I have lost money. I frequently fish through gruesome weather, I have slept in exhaustion and drifted over boundaries, both domestic and international, and have been overtime at closures and I consider myself an honest and cautious person.

I have concluded that there is but one solution, and that solution is in the hands of DFO. Instead of countless research dollars going towards coded-wire tagging, and electrophoresis, and international treaties, and fisheries enforcement, and the breeding of hermaphrodite fish; I submit that all research monies be spent on developing tractable salmon. The ideal salmon will make its numbers and origin known upon request, will gill only at designated times and places, will not cross boundaries without permission, will space itself evenly around the fishing grounds, will not take part in illegal activities, and will not be crushed, bent, mutilated or spindled. If possible, it will change species on demand.

Crew at work



The Sooke Post operates on the west coast of the Queen Charlotte Islands. Captain Ken Harley's crew (relief engineer, Joe Stokes and deckhand Brian Murland) lower the zodiac to begin a chum salmon count on Steel Creek.



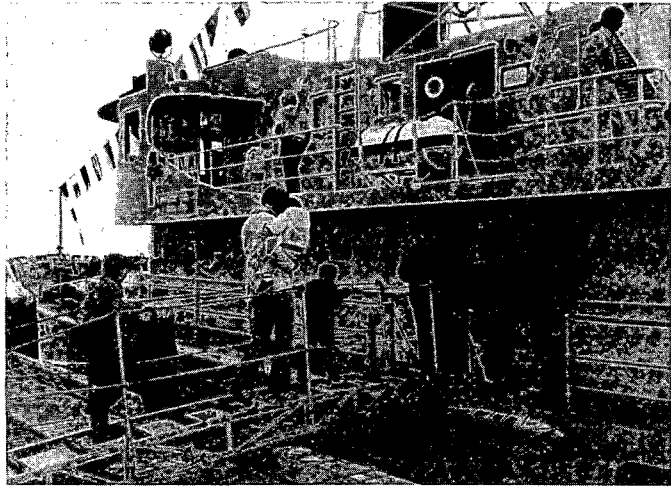
Brian Murland guides the craft into the waters on the west coast of Graham Island for a stream inspection.



Joe Stokes undertakes the vital job of counting chum spawners in the creek.

Sooke Post photos: Joan Skogan

Our Resource . . . The wrap-up



About 200 elementary school children from Comox Elementary School trudged the ten blocks in stormy weather to participate in the Open House on board the FVP Tanu and Atlin Post.

Evaluations always bring out both positive and negative feedback. But this one--the evaluation of the 1985 Our Resource Awareness Campaign, had trouble finding negative feedback. A few comments showed up on the public response cards; one pointing out that children should not enjoy catching fish and another told us we'd labelled a quillback rockfish incorrectly. Staff and coordinators from each of the 13 locations had recommendations on how they would improve things next year for an even better campaign.

But the loudest message received and then confirmed at the January 22 evaluation session was that response to the campaign had been overwhelmingly positive.

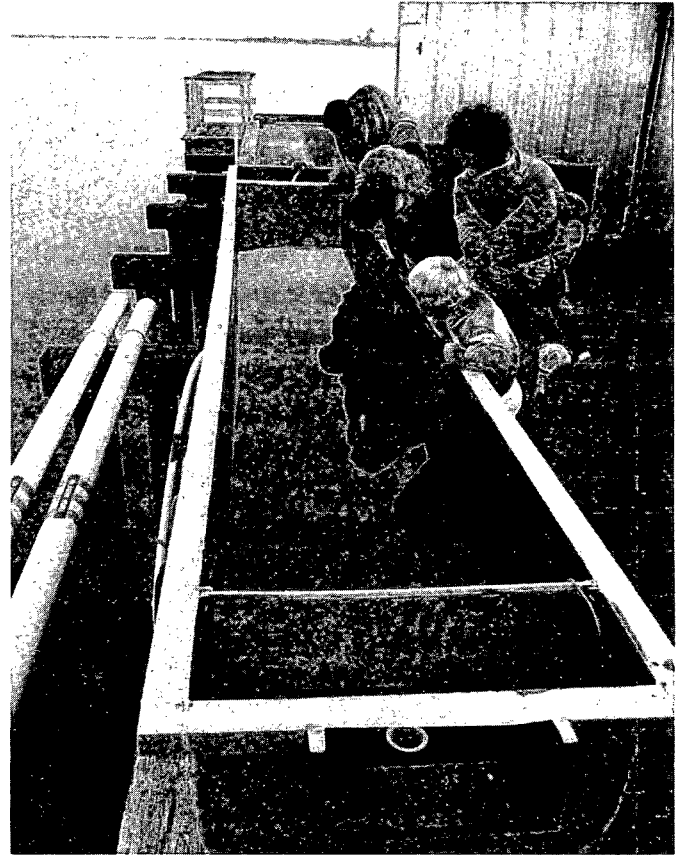
Local businesses have told us that their business is increasing. For example, this quote from a fish and seafood supplier in Victoria: "We have had to double our skate order...and yes, our overall business is up. The young people are trying different things, clearly a result of your efforts over the past two years. Thank you, and thank Fisheries for us."

In another campaign location, a small business has been able to set up as a result of the increased awareness of fish. Communities are recognizing the fisheries resource in their local economic plans.

The public response cards brought in comments that were common to all campaign locations. Some of them were:

"Programs like this should be continued."

"It's important to keep the public aware, information like this is important."



Kids and their curiosity (Moms' too) make it all happen. This hands-on "live touch and feel" display at Comox brought fascinated ooh's and aah's.

"The fishery personnel are great (exceptional, the tops, helpful, nice)."

People want more too. They enjoy and have come to expect the activities and displays put on by Fisheries.

From all reports, there is a broader understanding and awareness of the resource in each of the communities which hosted a campaign.

The public is enjoying a greater relationship with the local fisheries offices and learning more about the role of the fishery officer.

From Port Hardy: "I enjoyed my tax dollars being utilized on these programs."

From Gibsons: "I don't mind seeing the government spend money this way."

Comments like these tend to make the toes tingle and the heart feel warm. It's nice to know that all the hard work and those many "extra steps" were worth so much.

Susan Stitt
Contributing writer

Think fish — quick!



That might have been the instruction given to eight Vancouver home economics students on the afternoon of January 28 at the Four Seasons Hotel.

The youngsters, four two-person teams, were competing in the first national "Fish Fun" cooking competition. The event was run as a pilot in Ottawa last year and was so successful that the Department decided to make it nation-wide in 1986.

The challenge would daunt even an experienced cook: enter a room and occupy one of four tables that have been set up with a pre-determined selection of ingredients (with a focus on fish, of course). Decide upon and prepare a tasty, nutritious and attractive meal in only 45 minutes. And, just to complicate things, do it with friends, family and media representatives watching every move and popping flashbulbs at you!

The eight young women, representing Britannia, Churchill, King George and Windermere secondary schools, rose to the occasion and produced a tempting array of delicacies; hors d'oeuvres, sandwiches and salads. Their presentations were a delight to the eye and, according to the judges, to the palate. The contest was close, but the team of Erica Ikari and Shannon Critchley from Windermere were declared the winners. Their achievement was celebrated at a dinner the following night at Bridges (seafood, naturally) and they also won the chance to compete in the national "cook-off" in Ottawa on February 19.

This is a new promotion for DFO, aimed, as award presenter Dennis Deans explained, at

raising the Canadian public's awareness and appreciation of fish as a food to enjoy.

"We hope you will all sample these dishes, then rush right to your nearest seafood restaurant or supermarket counter," said Dennis.

Rod retires



Pat Chamut, director general, observes as Rod Palmer unveils one of the gifts presented at a luncheon to celebrate his retirement on January 31.

Photo: Maxine Glover



Sunday by the fire

Editor's note: The following musings were received from Trevor Morris, community advisor on southern Vancouver Island, when he was asked to provide some information on fish feeders for SEP volunteers. Part of it is offered here both for its enjoyable style and to provide an answer to those who wonder what a community advisor does on a Sunday! Thanks, Trevor.



Trevor Morris, SEP community advisor for lower Vancouver Island, enjoying a quiet moment with no cat in sight.

(Musings of a CA)

It's alright to get 97 percent from egg to fry, we did well, we sure worked hard enough, but how can we feed the little perishers when we are at work during the day? A couple or three weeks of feeding will sure give them a good start. Some of the clubs freeze the food into blocks with water and let it melt above the rearing pond but we haven't got that much freezer room and all that mixing and measuring is a hassle. Besides, that method feeds day and night and fish don't eat much at night.

How can they get food when they need it, as much as they need and where they need it?

Old Alfie said they should be trained to ring a bell for the grub when they're hungry. Daft idea, who's going to answer the bell? Maybe we could; oh, I don't know. I wonder if fish would ask for their food, or at least work for it. Let's see, perhaps Alf isn't so daft after all.

What we need is something to hold the food with a hole in the bottom for the food to come out of and a hole to put the food into. A bucket! No, that has a flat bottom. A large plastic bottle, upside down, with the bottom cut off. That might work. It does narrow down kind of sudden, though. Time for another beer, this is getting complicated.

I guess the more gentle the slope of the cone, the easier it will flow, especially that fine starter stuff. Maybe I should line the cone with a plastic bag or something. Now, the food is running out nice and smooth. How can I slow it down so that it only comes out when the fish need it? Damn; fire's going out...that's better. Sure is hard to think about feeding fish with the weather so cold, but before we know it there'll be hundreds of little critters swimming around looking for grub. Alf and his "ring a bell." Electric, batteries, mechanics, breakdowns, theft, vandals; too fancy; too risky; too expensive.

Oh cat, get down, can't you see I'm busy, you're crumpling the pages of my notebook! Cat, book, bells, candle. Bell, book and candle. Movie, book or something. Bell, one of those old fashioned bells, like a school bell where the clapper hits the inside of the bell. That's it, Alf. We can't shake the bell but the fish might shake the clapper. That could move a disc inside to release the feed.

Now we need something for the fish to bump or chew on just above the water to jiggle the wire and disc. Perhaps a short length of string or plastic or leather or...

Nice fire, I wish someone would move me back before I burn, nice and cozy though, better than picking eggs in that cold water, could have done with some of the warmth yesterday, getting dark, should put the light on.

I heard one of the guys at Ladysmith made a clock feeder. Arnold, Arnold Westly, that was his name, should give him a call. Had a piece of flat hardboard with a battery clock motor stuck up through the middle. Soldered a tin sweeper blade onto the hour hand and left the other hand off. As the clock went round, it swept fish food from the top surface of the board down through slots into the water for the fish. That would be good for that fine starter food. That stuff always causes trouble.

The subject was sockeye

Nanaimo's Malaspina College was the site of Sockeye '85, an International Sockeye Salmon Symposium hosted by the Fisheries Research Branch, November 19 - 22. The theme of the symposium, which attracted between 125 and 150 participants from Canada, the U.S., Japan, and the USSR, was "Sockeye Population Biology and Future Management."

A total of 38 papers were accepted for presentation at the four-day symposium covering three major topics: life history strategies, habitat and development, and management options--past, present, and future. Howard Smith, associate director of FRB, was chairman of the symposium. Dr. Wally Johnson moderated the session of life history strategies; Dr. Tim Parsons of UBC, the session on habitat and development; and Dr. Ole Mathisen of the University of Alaska, Juneau, the segment on management options.

Despite valiant attempts by Mother Nature to throw everything into total chaos, the four-day event proceeded fairly smoothly with only a few minor "glitches". By the end of the week, most people had forgotten about 'woeful Wednesday' (no hot water at the hotel, no cooks to cook breakfast, snowbound buses...) and they were treated to a typically entertaining speech by Dr. Peter Larkin at a banquet held Thursday evening.

Proceedings of the symposium will be published as a Special Publication of Fisheries and Aquatic Sciences and will hopefully be available by December 1986.

Kelly Francis
Pacific Biological Station

The lost is found

Readers of the article on the new facility for the West Van Lab were no doubt startled by a sentence that stopped short. The paragraph should have read:

"The West Vancouver Laboratory and its program enjoy an international reputation, and despite the current poor condition of the research facilities, there are frequent Canadian and foreign visitors and there exists a very wide spread interest in the progress in the three areas of investigation."

Sounder apologizes to Howard Smith, who wrote the article, and to those readers who were dismayed by the unexpected game of "fill in the blanks."

Rod Palmer, A/Chief, Aquaculture Division, accepted the golden handshake offered senior managers and retired from the Department January 31. Rod and Marg plan to do some travelling in the Spring. Paul Breen, research scientist, Nanaimo has left the Department to accept a job in New Zealand.

Passed away in December 1985, Tom Hutton. Prior to his retirement he was senior draftsman with SEP engineering. A welcome is extended to the following staff who have joined DFO from the IPSFC January 1, 1986:

Joining SEP Engineering:

Per Saxvik - sr. project engineer

Harold Hiltz - engineering technician

Les Woods - draftsman

Bob Johnson - assistant project operator, Hell's Gate Fishway

Joining Field Services Branch:

Micheal Fretwell - project biologist, Habitat, Vancouver

Ross Stewart - chief, Operations Division, New Westminster

Robin Kent - assistant chief, Operations Division, New Westminster

Miles King - project supervisor, New Westminster

Orval Brockwell - project supervisor, New Westminster

Ken Peters - field supervisor, New Westminster

Staffing - I.P.S.F.C.

To Fisheries Research Branch, Cultus Lake:

Jim Servizi

Robert (Bob) Gordon

Dennis Martens

Dave Barnes

Chris Mack

Al Lesberg

Sally Morelli

Ian Williams

Ken Morton

Craig Mueller

Herman Enzenhoffer

THE BOXES WERE FULL!

Late in November, DFO at 1090 West Pender began its Care and Share Christmas program. By delivery time, 3½ weeks later, the food and toy boxes were full, with donors contributing over 200 food items and 60 gifts for children.

Coordinators Lois Hooge, Rita Morris, and Linda Jamieson report that the program was a successful first effort, and there are plans to make this program an annual event.

Sincere thanks go to the many donors whose contributions made Christmas '85 a little happier for their neighbours in need.

Faster times & shorter lines

Mention the word Licensing to most people who work in the fishing business (commercial or sport) or within DFO and you will conjure up all sorts of images. Some will immediately have a picture of a myriad of restrictions or bureaucratic red tape. Some will think of complex and detailed policies and regulations or the exhaustive 300 page Pearse Commission of Inquiry into the Pacific Fisheries. Others will see a group on the main floor of 1090 West Pender totting up numbers or punching mysterious letters and figures into computer terminals. Few will see Licensing, as the staff who work in the Division do, as a continuing and interesting responsibility and at times even an exciting challenge.

When I first came into Licensing in 1981, I found a group that had grown used to working with an inadequate budget, short-staffed conditions and a cumbersome handkept card file system.

Don Wilson, the past director of Field Services and now Garnet Jones, our present director, have committed enough resources along with strong senior level support since 1981 to bring the administrative operations up to a more efficient standard. The average time to issue a license in 1981 ranged up to 15 or 20 minutes each.

During 1981, we converted Licensing to an on-line operating computer system. This means that every record for every license is now contained in a computer file. The only way to update the file and issue a new licence is through the computer. While on-line computer operating systems are nothing new (department stores, airlines, even hospitals have them now), it was certainly a whole new approach for us. Our finished system was delivered in three months by a private computer service company, Comshare Ltd. Average times to issue a license now range about 1 1/2 to 2 minutes or 1/10th of the previous time. Fishermen who used to stand in line for three, four or more hours now rarely have to wait in line more than 30 minutes even at peak periods. Turnaround time for applications mailed in is now measured in days during peak periods rather than weeks as it used to be.

One of the important attributes that we look for in staff to work in Licensing is that you have to like working with people. Some of our clients do get a little "owly", but as in most public businesses the majority responds to a smile and a helpful approach. Most of our staff have found that as a rule of thumb, if someone

has something to tell you--good or bad--it is best to listen.

A few numbers--just for interest.

We record over 30,000 fishermen, boat owners and license holders on our files, 6,000 fishing boats and 8,000 license records. We account for \$2.6 million in license fees annually and we now have a fairly simple microfilm records system with over 600,000 historical license documents on record. Our microfilm records are no big deal; the Motor Vehicle Branch in Victoria records up to 250,000 documents per week. The films take up one corner in about 70 small rolls of film, and retrieval time for any document is a matter of only a few minutes.

We also brought in a satellite Licensing office in Prince Rupert in 1982. This was made possible only because of the on-line operating system. It would be impossible to keep two sets of handkept records in two different locations on the Coast but, through telephone line computer linkage making the records available almost anywhere, it is no longer a problem. The greater challenge has been to keep the Prince Rupert Licensing office staffed with trained people. It takes about six weeks to develop a basic understanding of Licensing and the administrative system. This is chiefly why we have not attempted more decentralization of Licensing to date. So for those of you on the Island who would like to see a Licensing office set up, we haven't forgotten you--we're just not sure if you're ready to take us on yet!

A word about policy. Licensing policy really is not developed around boiling pots of green liquids with people throwing in herbs and other magic potions to see what will appear. The recommendations for the changes come for the most part from those with the most invested in the resource - the fishermen, the fishery officers, the management biologists and the fishing industry as a whole, processors, etc. We in Licensing have attempted during the past several years to provide more support at the Regional level to coordinate input from everyone on policy and regulations and to send more good recommendations on their way.

Next time you are passing through the lobby at 1090 you may want to remind yourself that you can walk through, not having to elbow your way past, and you might want to wave or say hello to the women at the counter--they like people!

Dick Carson
Licensing Division



Sounder caught License Division staff members on a busy day in January and got this photograph of Barb Mullan on the "upper deck" and Eileen Brade (left) and Judy Roberts.

License numbers

DFO's licence division deals with some pretty large numbers. Consider the following:

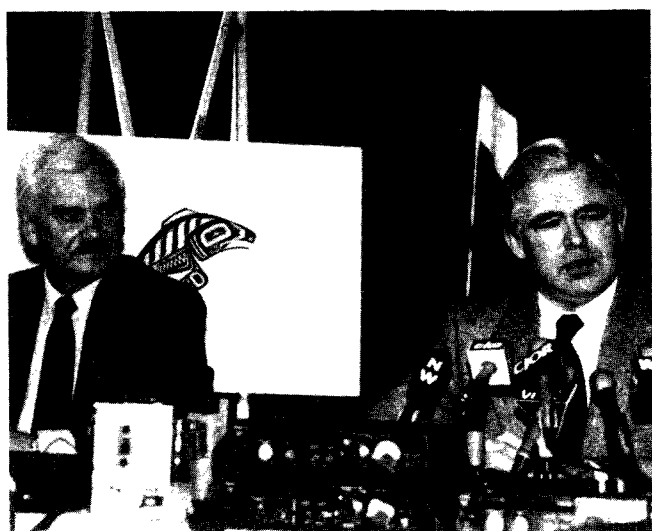
- 8,000 limited entry licences were issued in 1985;
- 14,000 personal licences were also issued; as well,
- 3,459 valid five-year personal licences were in effect;
- 11 people on staff at 1090 and (usually)
- 2 more in Prince Rupert handle all licence issuings;
- 17,000 phone calls are handled each year;
- 600,000 historical licencing documents are kept on microfilm and
- 10,000 correspondence files are maintained.

About 40 percent of the dealings with fishermen are over-the-counter, the other 60 percent are by mail.

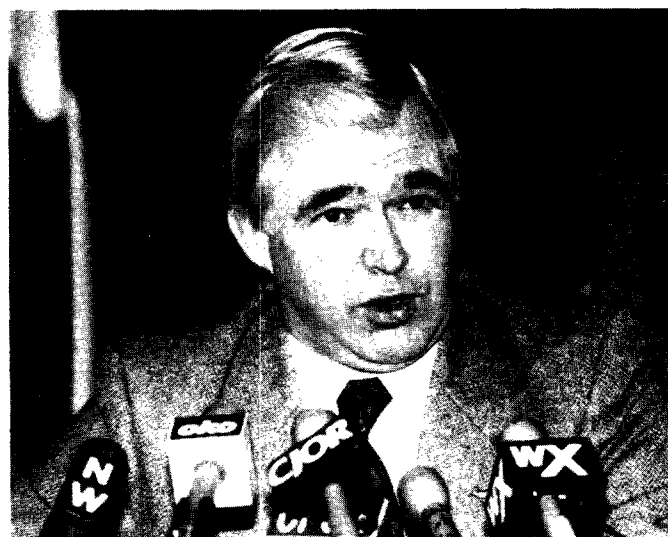
Processing licences used to take about 20 minutes each. Today it takes about one and one-half to two minutes.

To find out what made the difference, see the accompanying story by Dick Carson.

Meet the press



The future of SEP was one of the topics at the press conference held by Minister of Fisheries & Oceans Tom Siddon in January. Harold Swan, SEP's acting director, joined the minister to discuss the program. Photo: Danny Tanaka



The Honourable Tom Siddon, Minister of Fisheries & Oceans, faced a battery of media microphones and wide-ranging questions at a press conference held at the Hyatt Regency on January 20. Photo: Danny Tanaka

Sticking their necks out

"We started with a fair bit of apprehension. After all, we had volunteered to be criticized!"

Dave Schutz, chairman of the Pacific Stock Assessment Review Committee (PSARC) acknowledged that the prospect of review by one's peers is disquieting, even if it was built into the system and expected from the start.

"It turned out to be quite a positive experience, however," says Dave, "and many of the reviewers' comments were very worthwhile."

The exercise in which the committee and the scientists and biologists who work with them had volunteered to be criticized was the first peer review of PSARC's work and methodology. The review took place in December 1985 during a week of meetings at Pacific Biological Station, Nanaimo.

PSARC subcommittee chairmen are:
Dr. Dan Ware--herring
Dr. Al Tyler--groundfish
Dr. Glenn Jamieson--invertebrates
Dr. Brian Riddell--salmon.

Since the work on salmon is not yet ready, only the other three species groups were reviewed at this session.

Members of the review team were: Dr. W. (Bill) Doubleday, director, resource research branch, Ottawa and past chairman of Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC); Dr. Dan Kimura of the National Marine Fisheries Service, Seattle; Dr. Robert O'Boyle from DFO Dartmouth and Dr. Robert Miller, DFO Halifax.

Each of the subcommittee chairmen selected the papers to be reviewed for each species and selected the reviewers who were to join Dr. Doubleday in the review process.

Groundfish papers were reviewed by Doubleday, Kimura and O'Boyle, herring by Doubleday and O'Boyle and invertebrates by Doubleday and Miller.

It was a busy week for both the presenters and the reviewers. Herring assessment work for the whole west coast, sablefish, rockfish and flatfish and seven papers on invertebrates were reviewed.

Dave feels that the process was valuable both for what the subcommittees can gain from the reviewers' comments and for the exercise itself. It gave Pacific and Atlantic fisheries scientists a chance to learn a great deal about similarities and differences in the two areas and about the assessment methodologies that are used in each. It also gave the participants

some valuable experience in how to stage such review sessions.

"We began with a seminar style of presentation," says Dave, "with the speakers standing up at the front of the room. It felt like a pretty stressful situation for those presenting papers. Later we had to move to a smaller room where we sat around a table. The atmosphere was much more relaxed. That is certainly the approach we would take for future sessions of this sort."

In future, each species group may not need to be reviewed annually, but there are many subjects to cover and annual meetings are likely. As well, the meeting of scientists from both coasts has led to the suggestion that they make a two-way exchange of reviewing each other's work in the future.

The comments from December have not yet been fully analysed, but Dave says that they were certainly valuable and offered a number of suggestions that will be incorporated into next year's stock assessment work.

Program pays off for all

Excerpt from: *Entre filets*, November 1985

The Incentive Award Plan and the Suggestion Program Award were fostered by Treasury Board. They encourage employees to suggest various measures and solutions to reduce costs and improve productivity in the Public Service of Canada.

During the last five years, under the suggestion Award Program, DFO employees' suggestions to increase efficiency and reduce costs have earned \$27,410 and resulted in a net savings of \$606,872 for the department. Two awards were presented in Quebec recently.

Pierre Arpin, a laboratory technician with DFO's Inspection Branch in Longueuil, received a suggestion award certificate along with a cash prize of \$1,105 from Mr. Denis Martin, Director General of DFO's Québec Region. This award was presented in recognition of the computer programs he designed for the specific needs of various regional laboratories charged with analysing data on contaminants in fish products. For the second consecutive year, DFO honoured Mrs. Violette Royal, also from the Longueuil Laboratory. She received a cheque for \$135 from Mr. Martin for her suggestion to improve the way laboratory test results are sent.

More on oil

In the May 1985 issue of the *Sounder*, I presented an article which briefly summarized the history of offshore hydrocarbon exploration on the West Coast. It discussed the events leading up to the recent public hearing and review process on proposed resumption of offshore hydrocarbon exploration. The Department's involvement in that review process at that time, under the auspices of its West Coast Offshore Developments Committee (WESCOD), was outlined.

Since then, the West Coast Offshore Exploration Environmental Assessment Panel, jointly established by the federal and provincial governments, conducted a series of informal hearings. These were held in September 1985 at numerous coastal communities in order to solicit the opinion of the residents. Many Departmental staff from the Area, District, and Subdistrict offices attended these meetings. In October and November, the Panel conducted formal public hearings in Queen Charlotte City, Prince Rupert, Vancouver, and Victoria. A DFO contingent was established to represent the Department at these hearings. It was comprised of staff from the Habitat Management Division, Ocean Science and Surveys, Fisheries Research Branch, and Fish Habitat Management Branch (Ottawa).

A Departmental position statement prepared by WESCOD was submitted to the Panel and was presented in summary form at the Vancouver hearings in opening remarks by the director general, Pat Chamut. Briefly, the Department's primary concern with the resumption of exploration is the significant impacts on fisheries resources, their supporting habitats and fishing activities that could result from a major oil spill or blowout.

As part of its position statement, the Department indicated that the acceptability of exploratory drilling in certain areas on the West Coast cannot be determined prior to a detailed review of site-specific proposals. The Department's review of site-specific exploratory drilling proposals would involve consideration of appropriate conditions and restrictions which may include exclusion of drilling in certain areas, particularly those areas where the risk to fisheries resources and fishing activities is unacceptable to DFO.

Departmental experts also presented technical submissions to the Panel on issues pertaining to physical oceanography, oil blowout impacts on fisheries resources, fisheries and habitat compensation, and aquaculture. The Department's closing

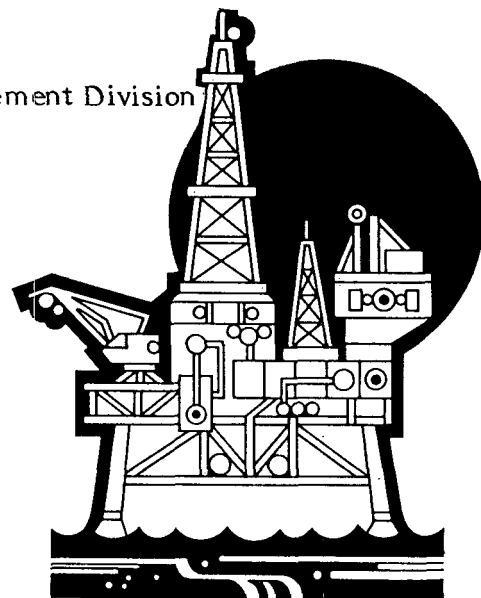
statement was presented by Forbes Boyd. It summarized our major concerns with respect to the proposed resumption of offshore hydrocarbon exploration on the West Coast.

The technical reviews and presentations that were undertaken by the Department for the public hearings were very comprehensive and required a considerable commitment of time and effort by DFO staff. It was gratifying that the Department was complimented by the Panel and other intervenors for the quality and comprehensiveness of its presentations at these hearings.

With the close of the public hearings, the Panel began preparing their report based on information received during the hearing and review process. Recommendations in their report will be directed at the primary questions of whether offshore hydrocarbon exploration could be resumed on the West Coast in a safe and environmentally responsible manner and under which conditions, if any, that exploration could proceed. It is currently expected that the report will be completed by mid-February 1986 for submission to the federal and provincial governments. Once it is received, DFO will undertake a review of the report and prepare a position on the Panel's recommendations.

Presently, WESCOD is preparing a compendium of the information which the Department prepared and submitted to the Panel in conjunction with the public hearing and review process. This should be available shortly. In addition, a performance evaluation will be completed to assess the Department's participation in the hearings and to assist in future undertakings.

Mike Flynn
Habitat Management Division



Pacific Tidings



Recent marriages include:

Fishery officers Susan Julien, formerly of Madeira Park and Stefan Beckmann, Bella Bella were married December 21 and are residing in Bella Bella.

Barry Peters, community advisor, Terrace, married Marcha Lloyd on December 27th.

Stu Barnetson, manager, Fulton River SEP facility, was married to wife Shelley on December 17th.

Bruce Adkins, management biologist, Nanaimo, married Brenda Nicoll on December 28th.

Bruce Hillaby, habitat biologist, Nanaimo, married Judy Barnetson on December 18th.

Paula De Vente, office manager, Regulations, Vancouver, to Bill Kusters on January 25th.

Recent births include:

Anne Ho, administration coordinator, SEP, and husband Richard had particular cause to celebrate on New Year's Eve; son Jonathan Trevor was born at 2 a.m. on December 31st. He weighed 3.18 kg (7 lbs.) at birth. If anyone in Pacific Region came closer to having this year's New Year's Baby, we'd like to hear about it.

Fishery officer, Brian Spilsted and wife Cynthia, Prince Rupert, had a baby boy on January 19th. Micheal Edward weighed 3.49 kg (7 lbs. 11 oz.) at birth.

Margaret Birch, chief, Salmon Services, and husband Gary have a baby boy--their first child. Daniel Trevor Noman was born December 26th. He weighed 3.71 kg (8 lbs. 3 oz.).

Cam and Kim West, both SEP biologist in Vancouver, also had their first child, a son, Douglas Cameron, weighing 4.25kg (9 lbs. 6 oz.) on January 24th.

On January 15th, a baby girl was born to Maurice and Kathryn Coulter-Boisvert.

Taylor Leigh is the couple's first child and she weighed 2.55 kg (5 lbs. 10 oz.). Please also note that Maurice Boisvert, project coordinator with the Community Development Program has changed his name to Maurice Coulter-Boisvert.

Mary Jean Comfort, communications branch, has gone on a three-month secondment to Ottawa. Her place in

Pacific Region is being filled by Joan Skogan from Prince Rupert. Joan is a frequent contributor of Sounder photographs.

Sharon Henderson, formerly chief, Computer Services Division, has accepted a permanent position in Ottawa as chief, Operations Systems.

Vance McEachern, inspection supervisor, Prince Rupert, has also accepted a permanent job in Ottawa.

Don MacQuarrie, head, Community Economic Development Program, has taken a year's leave of absence effective February 3, 1986. Colin Masson will be A/head of this program for the one year period.

John Kinvig has joined Computer Services Division as a term program analyst. He will be working with micro-users and on standardization of data.

The following people won fishery officer competitions:

David Flegel - fishery officer, Bella Coola

Robert Tompkins - sport fish officer, Victoria

John Arnold - fishery enforcement officer, New Westminster

Scott Coultish - fishery officer, Salmon Arm

Richard Elson - fishery officer trainee, Vancouver Sub-District

Eric Kremer, formerly area manager for the North Coast, has moved to Regional Headquarters as A/chief, Allocation and Industry Liaison, Field Services Branch, where he will supervise the herring, recreational and shellfish/aquaculture coordinators and the Offshore and Statistics Divisions. Carol Bouskill has joined the group as secretary; Carol previously worked for the National Museum of Man in Ottawa.

Paul Sprout, has been appointed acting area manager, North Coast, reporting to Garnet Jones, and Dave Peacock has been appointed acting senior biologist for the North Coast.

Tom Perry will continue in the role of operations manager for the North Coast Division.

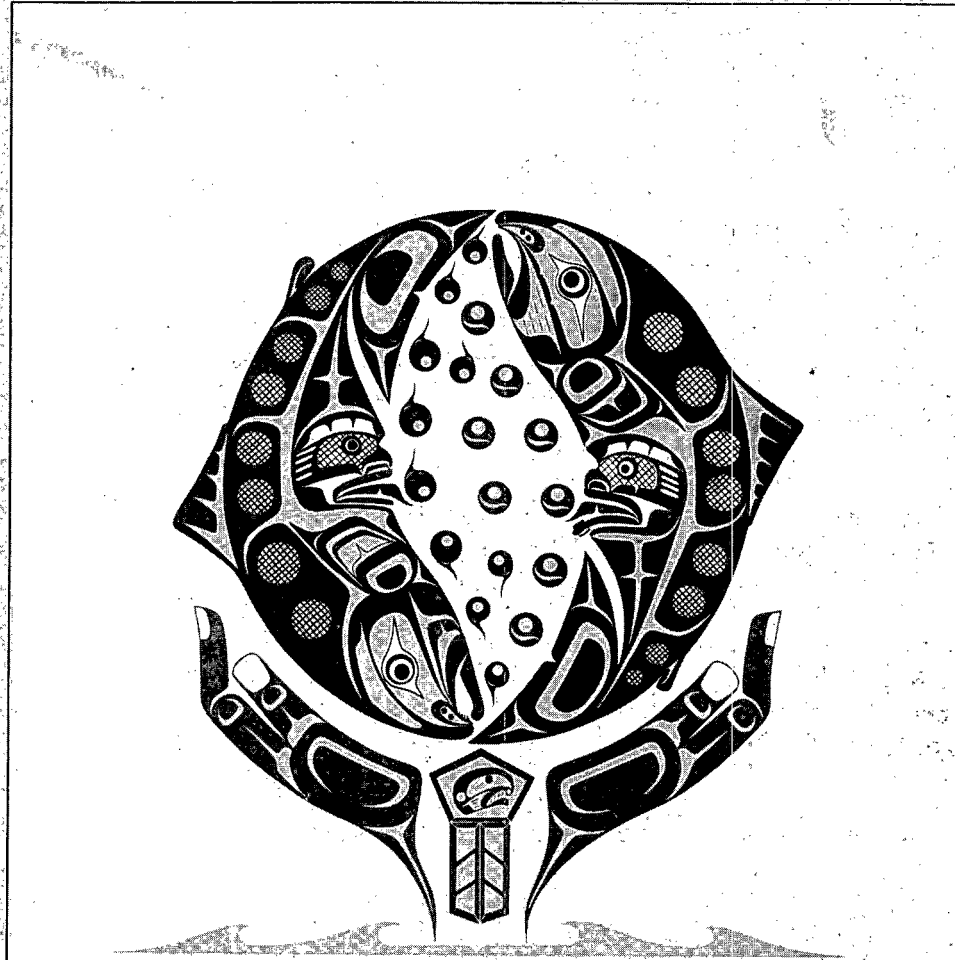
Dee Haase will be A/supervisor, Operations Centre and Cathy Iviney will be acting Operations Clerk during Vilma Miller's leave of absence. Pam Watt will be replacing Cathy as acting information receptionist.

Keith Sandercock, chief, SEP Operations, has returned to full-time duties after a lengthy absence due to illness. *Cont. p.11*

SOUNDER

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JIM GILBERT

CHINOOK RESTORATION

Chinook closures; getting the word out

Editorial

I am going to indulge myself a little this month. I have been editing Sounder for more than a year now, and I have left its pages to you -- the employees of DFO. That is as it should be. The desire to editorialize, however, overcomes us all from time to time, so here goes.

First, I must explain that I am an Information Addict; I have a craving to learn something new on a regular basis. Or maybe I'm a busybody -- with an urge to learn something meaningful about everybody else's business. Anyway, since becoming involved with DFO, I have been fascinated with fish and the fishery resource. This fascination has been fed and indulged by any number of people whose knowledge I find staggering. For that, I thank them all. One thing slightly mystifies me, however, and that is that the true information addict soon grabs a "fix" -- a little knowledge -- and loses interest. With salmonids, however, I have remained entranced. Naturally, I have also wondered why. What is it that makes this an unusually appealing subject? Recently, I think I found the answer. It is very likely that all of you found it long ago, but just in case, I offer this.

I found myself beside the outflow from Cultus Lake. The weather (pre-blizzard) was uncommonly warm for February, and I stood on the bridge, looking down into the river. My eye was caught by what appeared to be lengths of white tree limbs on the gravel bottom. I wondered at this, then suspected what I was really seeing.

I moved down from the bridge to the water's edge and looked more closely. All my "education" from DFO biologists and their written works became real.

The white branches in the river were, in fact, the remains of spawned out fish, long since done with their life struggle and now slowly decaying in the icy waters.

I had previously stood in hatcheries and observed the tiny fry in Cap troughs. I had gone, out of aroused curiosity, to the banks of the Capilano to know the homing instinct I have learned of all my life. But this was the first time I had seen the mute evidence of the end of the story.

Shreds of totally colourless flesh trailed and waved in the current. It might have been grotesque, or distasteful or repulsive, but it was not. I got my camera and spent some time engrossed, photographing my completely unconcerned subjects, and wondered why there was no revulsion in the face of such graphic death.

The answer, I think, was that in a world awash in confusion and things which seem incomplete and uncertain, this made sense. The gravel on which these lifeless forms lay must already hold eyed eggs. There was the felt (as opposed to known) fact that the pattern was, at this time and in this one place, fulfilled.

If you have never been there, go. Maybe, as I did, you will see one small part of your universe complete.

Dixie Cutler
Editor

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Government of Canada
Fisheries and Oceans

Art with a purpose

When the Sport Fishing Advisory Board recommended spot closures to the minister as a way to conserve the wild chinook it was clear that a symbol for the program was needed. The board looked to one of their own members to create the design.

The artist who created the graphic is a man as unique as the design itself: Jim Gilbert is a non-native who learned Northwest Coast Native art styles and techniques from his father, Harry, who painted and carved until his death in 1967.

Jim's involvement with B.C. salmon is nothing new either; he was born and raised at Brentwood Bay and began guiding salmon fishermen at the age of 13.

Jim credits the Hunt family of Native artists for helping and encouraging him in his attempts to fit his own creativity into their art forms. One of the designs that came out of this blending of cultures is the Chinook Restoration design. Jim's description, written to accompany the limited edition prints he offers for groups to sell to support salmonid enhancement efforts, explains some features of the design:

What the artist has attempted to stylistically illustrate in Chinook Restoration is simply a circle (head to tail) of a pair of chinook in darkened spawning colouration, with eggs and sperm coming together in the water of a spawning nest. The salmon are cradled in human, profiled, upturned-palmed hands with a salmon copper (signifying wealth) placed between the hands and waves below (representing the total water environment).

The female chinook is on the right and the male chinook on the left. These are represented as wild stock chinook since they both retain the adipose fin.

The female is releasing eggs from the open mouth of a profiled Kwa-gulth style human head situated in her abdominal cavity. This stylized head represents the legendary supernatural human (Salmon People) counterpart form of salmon in fish form.

The male chinook, the left, has a somewhat hooked and toothed snout and upturned tipped lower jaw. Again in the abdominal cavity is a typical Kwa-gulth profiled human head, representing Salmon People, black in

colouration with open mouth and black tongue releasing egg-seeking tailed and eyed sperm.

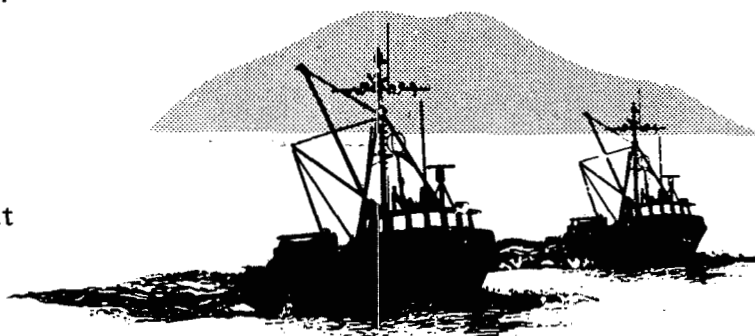
The artist sees the circle of salmon as symbolic of the circle of life and the tightness of the universality in all living things on earth. The human hands are interpreted as cradling the wild chinook salmon resource, making a graphic statement that we, as humans, have within our hands the very destiny of the wild chinook salmon.

Centrally in the graphic between the upturned palms is a copper: a Native Indian shield-like unit, (some exceeding 3 feet in height) made of sheet copper and bearing the crest of the owner. Coppers are owned by people of high prestige, social status and wealth.

This copper has a stylized profiled head of a male hook-nosed chinook and is symbolic as being the copper of the wealthy supernatural Salmon People. This copper then graphically represents and is symbolic of the wealth that we have recognized in the chinook salmon resource.

The grey, four-crested-waved water at the bottom of the design (four was a 'magic' number to Coastal Indians) is symbolic of the foundation from which all life on earth came and is still dependent upon. Humans, like the chinook, require for survival a clean water environment, both on the land and in the ocean.

(Those who are interested in obtaining a print should contact Jim Gilbert at 570 Seacliffe Road, R.R. 2, Saanichton, B.C.)



4 **The experiment is working**

New units to supplement enforcement efforts

In response to the recommendation of the Commission on Pacific Fisheries Policy (Pearce Commission), DFO, in late 1984 and 1985, initiated and implemented specially designed enforcement teams in each of the three divisions within the Field Services Branch.

Because the teams were designed and located in accordance with the problems and needs of each division, each team is somewhat different in its deployment. The programs, however, are based on the following similar objectives: to supply increased enforcement effort on target problems -- deep seines and monofilament gillnets, to supply close monitoring of continuing chronic areas of poaching and sale of illegal product and to achieve increased compliance rates in areas of highly pressured stocks -- Gulf of Georgia chinook.

Each team has been structured to tackle the problems from what has been considered its best logistical position.

In the South Coast division, there are 10 officers and one coordinator who have line responsibility to the division manager. They are placed in the following areas.

1 - GT 3,	1 - GT 2	- Nanaimo
1 - GT 3,	2 - GT 2s	- Port Alberni
1 - GT 3,	2 - GT 2s	- Campbell River
1 - GT 3,	1 - GT 2	- Victoria
1 - Coordinator		- Nanaimo

The unit became fully functional on June 1, 1985 and went to work immediately.

Results to date are extremely encouraging in those endeavours to which the team has been assigned.

The workload is put forth by the districts. Priorities are boiled down to realistically match the staff and budget available. The South Coast team is equipped with three Lucas 18-foot Hurricane boats to supplement work while on the water.

Another important concept is for the team to be highly mobile and available if and when the unexpected arrives; e.g., the 1985 Gulf

Trollers' protest fishery and anticipated illegal occupation of the Campbell River district office. On both occasions sufficient staff was quickly summoned to be able to maintain control if the situation were to get out of hand.

The majority of the work is done in conjunction and cooperation with districts and subdistrict officers. The unit is an extra tool designed to supplement general duty officers where required.

The overall description of these specialists is also designed to keep them active in all issues to a degree. For example, their work includes habitat and resource management. In many instances, because of the nature of net fisheries, this concept works out well.

The unit is also involved to some degree in plainclothes activities. Several such operations were undertaken during 1985 and were very successful. These were focused on the use of illegal sports fishing gear, overlimiting of daily and bag limits of salmon and the apprehension of poachers working and selling product from closed areas.

A team of investigators, working out of regional headquarters, has assisted greatly in meeting objectives in 1985.

Because theirs is a new concept, the teams did anticipate a few growing pains. Certainly South Coast had theirs. Solid and professional communication efforts by the enforcement officers and district personnel will be the key to future success.

Feedback from the various client user groups has been entirely positive. As well, appreciation from the Region has made these growing pains very minor compared to what has been done to build success in this new field of specialized enforcement.

As a result of being assigned to projects which usually go through to completion, the fishery officers involved enjoy a level of satisfaction which is readily seen in their motivation and commitment to this new concept. Given the same efforts, 1986 may prove to be a rewarding and enjoyable year.

Ed Lochbaum
South Coast Division

A matter of public interest

Sometimes it seems as if we only hear from the guy who has a beef. The sports fishing fraternity wants more of the chinook; the commercial folks say that DFO mismanages everything and then harasses them on the fishing grounds. You all know the litany of complaints.

There is another group out there, though; a group with a very positive attitude. These are the people who work as volunteers in the Public Involvement Program of SEP. They clean up streams, count spawners, educate children's groups and raise fish to restock streams all around B.C.

Recently, these people were surveyed to seek their opinions on PIPnews, a newsletter which is published four times per year to bring news and technical information to their projects. Along with specific questions about story length, subject matter and readability, the volunteers were asked for more general opinions. Some of their comments are offered here as an antidote for those who have heard too many negatives over the past few months.

"Increase budgets for CAs (community advisors) -- not for frills, just to get the job done. We are fortunate on the QCIs; now and in the past, we have had excellent CAs."

"I have a really good group of 16 people who are dedicated, willing, eager and fun, and full of questions I can't always answer. We all love what we are doing and are really anxious to see more put into small stream improvements."

"I have been a commercial fisherman since 1932. I built the incubation box we have at Oona River. It has been a very interesting project and I would say, should have been started years ago; I never knew it could be so simple."

"We will never be able to give enough credit to our (community advisor) in this area. He has been absolutely super."

"Excellent program."

There you have it -- there is some good news out there after all!

Cross cultural seminar

The Fraser River, Northern B.C. and Yukon Division will be holding a cross cultural seminar for its staff on April 10 and 11, 1986 in the Museum of Anthropology at the University of British Columbia.

The cross cultural seminar will be led by world renowned cross cultural educator Dr. Neil McDonald of the University of Manitoba.

The session is designed to increase the staff's knowledge and appreciation for native cultures and values and, further, the unique position Canada's native people hold in Canadian society.

The seminar should also add to the staff's ability to work with native people.

For more information, contact Ernie Crey, extension officer at 666-8426.

More culture, page 15

Quick...what is this DFO employee known for (besides a great smile)?



From where I stand

The following article is the second in our series of guest editorials from representatives of our client groups. Sounder hopes that you will find this small opportunity to exchange views at least interesting, and possibly beneficial.

In keeping with our policy, the article is presented in unedited form. The opinions expressed are those of the writer.

Our guest editor this time is Dan Sewell, chairman of the Sport Fishing Advisory Board. We thank Dan for his contribution to our pages.



The recreational fisherman is you and me, the Native Indian, the commercial fisherman and, in fact, every Canadian and guest who has picked up a fishing rod and dropped a hook over the side. This even includes Department of Fisheries and Oceans personnel and executives such as Pat Chamut, the Pacific director general. Anyone can purchase a sport fishing licence and have the opportunity to create the hype and expectation of catching a salmon.

Why then, if we are all true recreational fishermen, do we find conflict between various users? The arguments fly: "You are only Sunday fishermen and so do not make a real living off the resource," "You want the Gulf Troller excommunicated," "You catch more chinook than the Native food fishery and the commercial trollers put together."

These are all red herrings and not true. Many myths abound and much controversy rages. It would require a book to discuss all the myths and half truths surrounding the West Coast fishery. The bottom line is, perhaps, communication, understanding and acceptance.

It is essential that the recreational industry provide the opportunity to angle and at the same time enhance the dream of expectation with some chance of success. These objectives must be accomplished throughout an uninterrupted fishery.

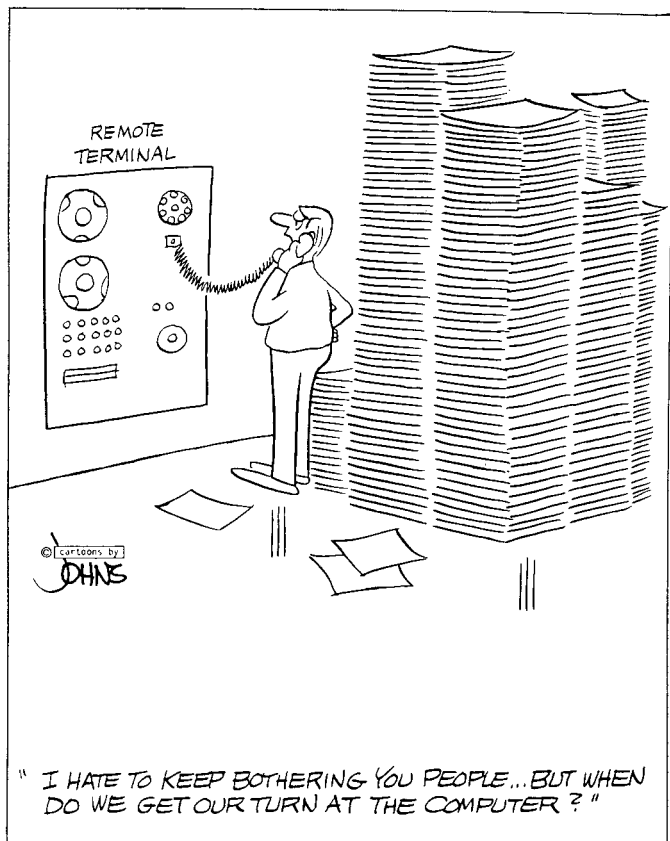
This concept of "opportunity, expectation and an uninterrupted fishery" is the backbone or foundation in creating a healthy, prosperous, taxpaying tourist industry. This concept was fine tuned during the 1985 season with the introduction of the Chinook Restoration Program. This program recognized the needs of the Canada/United States Pacific Salmon Treaty; at the same time it provided the opportunity to angle.

The recreational fishermen reduced their annual bag limit from 30 chinook to 20 and the daily catch from four salmon of any species to four salmon, only two of which could be chinook. Then, through a comanagement team cochaired by Bob Wright of the Sport Fishing Advisory Board and Dennis Brock of the Department of Fisheries and Oceans, a series of more than 33 spot closures or conservation areas was created. These windows of opportunity were developed in such a way, with regard to both area and time, so as to maximize the "passing through" of chinook destined for the spawning grounds.

The reduction of daily and annual bag limits, plus the spot closures passed in excess of 125,000 chinook on in the Gulf of Georgia. This program enabled the recreational fishermen to place the extra 4,000 chinook on the spawning grounds as requested by DFO while recognizing the need for opportunity, expectation and a 12-month fishery. This program of comanagement was a major success. The Chinook Restoration Program satisfied the needs of the international treaty while, at the same time, it allowed the recreational fishing industry to prosper. The concept was so well respected by the mass of recreational fishermen that enforcement and educational problems were minimal. The program and the comanagement policy were a major success for all parties, including the chinook salmon.

The recreational fishery is a part of the team. The sport fishing community does not want to be in conflict with the other users of the resource. The sport fishery utilizes only 3 to 5 per cent of the catch while contributing

significantly to the profile of British Columbia as a tourist mecca. The recreational fishing industry asks for recognition and acceptance of the need for opportunity, expectation and an uninterrupted 12-month fishery.



Don't hit the spot!

By now, most DFO employees and certainly every sport fisherman knows that certain spots--of water, that is--are not to be hit for sport fishing this season.

Implemented for the first time last year, spot closures are designed to conserve dwindling chinook stocks in the Strait of Georgia with the least disruption to sport fishermen. They apply to all species of fish and were part of a scheme to reduce daily and annual chinook limits.

"Spot closures were developed to help us keep within the ceiling on sport fish chinook catch in the Strait," DFO's recreational fisheries coordinator Bob Wowchuk says. "The fishermen themselves support the concept. They would much rather see small portions of fishing areas closed than a blanket closure."

When former Fisheries Minister John Fraser agreed to try spot closures last year, the Communications Branch was asked to come up with a way to get the spot closure message to the fishermen. Since the decision was made just before the season opened, communicating the closures in time presented a real challenge.

Newspaper ads proved the most efficient way to advertise the closures. Twenty-eight spot closures appeared in more than 90 daily and weekly newspapers in B.C.

This year, the information will appear in the 1986/87 Tidal Sport Fishing Guide. "With the time constraints we had last year, newspaper ads worked well," Wowchuk says, "but this year, we will save money by putting them in the Sport Fishing Guide."

Lois Hooge
Communications

Volunteers, ingenuity and fish

Sunday, February 23 was a day of ideas and information for Lower Mainland Public Involvement Program (PIP) volunteers. Displays were set up, speakers offered advice and a panel discussion explored some of the implications of small stream enhancement.

Dr. Carl Walters from UBC gave the volunteers some facts about genetics, "Mother Nature selects a lot harder than you do," and suggested ways for the projects to make use of the knowledge, "Select your brood stock from throughout the run and mix the sizes."



Volunteers traded tips on equipment and enhancement techniques.

The Sapperton Fish & Game Club was honoured for its work on the Brunette.



Photos: Maxine Glover

The panel, composed of Dr. Art Tautz from B.C. Fish and Wildlife, and Don Aurel, district supervisor, Otto Langer, habitat management, and Robin Harrison, management biology, all from New Westminster, discussed the Role of Public Involvement.

The ingenuity of the PIP projects led to an interesting variety of displays and the volunteers demonstrated the ways that they have found to solve a multitude of problems with the smallest possible expenditure of dollars.

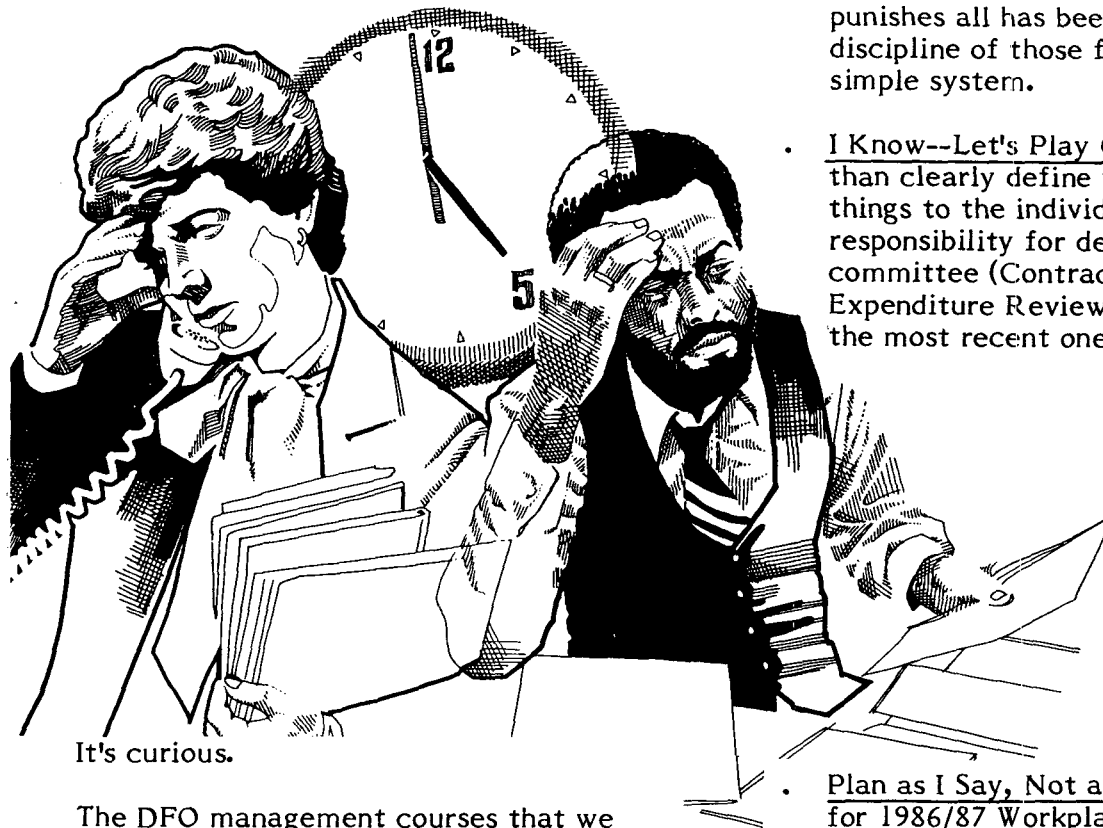
The day offered one other highlight; the presentation of plaques to thank officially those volunteers whose projects have now been contributing to enhancement for at least three years.



The panel: Art Tautz, Don Aurel, Robin Harrison and Otto Langer. Presentation to Brian Waite of Noons Creek fame was made by Harold Swan.



In search of "them" (forget excellence)



It's curious.

The DFO management courses that we take emphasize that the only way to motivate employees is to "give them challenging work in which they can assume responsibility." We are told that more than 95% of all employees are begging for more responsibility. John Fraser, as our newly-appointed Minister (time flies), stated his intention to boost morale in DFO, and "to have one of the best-run departments in the Government of Canada". The Nielsen Task Force set out to study ways to simplify and reform government operations. Our present Minister recently announced a streamlining of DFO HQ operations "by eliminating unnecessary layers of bureaucracy and enhancing administrative productivity".

So how come, while the Honourable Erik Nielsen is giving a speech in Parliament on his stated intention to reduce the government's paper pushing, the steady snowfall of new forms and procedures at DFO has become a blizzard? Just a few examples:

- Can I Use the Car Tonight, Dad? Now if we want to get an early start on a working trip by parking a DFO car overnight at home, we must fill out a form and have it signed by the Supervisor and the Director (how much do those signatures cost? Is this really what senior people should be spending time on?). Paperwork that

punishes all has been substituted for discipline of those few who abused the old, simple system.

- I Know--Let's Play Committee! Rather than clearly define the rules and leave things to the individual manager, responsibility for decisions is diffused in a committee (Contract Evaluation and Expenditure Review, just to name two of the most recent ones).
- Plan as I Say, Not as I Do. The deadline for 1986/87 Workplans was the end of November (of course, there was a request to use a different form after we had completed them). Then in early February of 1986, 'Operation Deep Freeze' was sprung on managers. Inevitably, a lot of spending that would have happened in the last quarter will happen in the first quarter of the next fiscal. What do you want to bet they will be asking why our first-quarter spending is higher than what we projected back in November?
- Let Me Get Back to You on That.... Does the DFO employee get full insurance coverage on his rental car? Well, it seems to depend on who you got that rental from. If you are on full travel status and ordered it through Central Travel, full coverage is OK. If you pick up that car in Vancouver through DSS, you are supposed to take minimum coverage only. One of our committees has been considering this inconsistency since November; some day it may even come to a decision. This is particularly annoying, in that I suspect it stems from simple misinterpretation of what "Nil-Deductible" means in the government handbook on rental rates.
- Form Not Function. We all have to fill out that Monthly Attendance Record form,

(cont)

right? After all, we won't get paid without it, right? Wrong. I know someone who went for a couple of years without filling out that form; he still got paid, and he was never asked by Personnel for them. I bet there is probably a couple of years of completed forms sitting unused and unfiled in cardboard boxes over in Personnel.

- New and Improved. Vague yet all encompassing. The Conflict of Interest Form. Need I say more?

All these wonderful things seem to have been brought to us by an amorphous 'they', fulfilling the needs of a 'Corporate HQ'. Can that name even be real? This is DFO, not a corporation, for Pete's sake. Do 'they' hope that use of such a name will somehow bestow the presumed efficiency of private-sector big business on us? Instead, I see a steady erosion of individual accountability in favor of faceless and complex control systems, that eat ever more manpower at the same time that we are losing people. Morale continues to drop. And the only way 'administrative productivity' has been enhanced, is if it is measured in the number of forms completed.

It would sure be nice to get back to dealing with fish (they can't fill out forms), and stop drowning in paper. I can forego all that neat Management Theory, but I just can't submit quietly to the current bureaucratic silliness. If I did, I would probably become one of 'them'....

'Frustrated in Fisheries'

Note

A writer's anonymity is guaranteed on request, provided the writer identifies himself or herself to the editor.

Managers responsible for the areas criticized by "Frustrated in Fisheries" have been invited to have their say in the next edition of Sounder.

Expo boaters' chart

A special Expo 86 nautical chart will assist boaters visiting the Vancouver area over the Fair period. The chart, appropriately numbered 1986, was produced by the Canadian Hydrographic Service (CHS).

The main Expo site at False Creek and the Coal Harbour location of the Canadian Pavilion are covered, in two separate sections, on one side of the chart. At a scale of 1:5,000, it shows depth contours and navigation aids such as lights and buoys in addition to the positions of major, although temporary, landmarks such as the pavilions of USA and USSR. Moorages are also identified. Unlike most charts, 1986 also shows major streets, in part to help visitors and emergency response teams pinpoint locations for any required assistance.

The other side, drawn at a scale of 1:25,000 is "Approaches to/Approaches à Vancouver Harbour" and is an updated version of standard chart 3481. The new chart is available folded, for small craft, and unfolded, for chart table use.

Chart 1986 (incorporating 3481) remains valid only until the end of 1986. At that time, a new edition of 3481 will be issued.

In announcing the new chart, Minister Siddon said, "It is unusual for CHS to issue a chart with such a short life span but the special marine traffic patterns in effect for Expo 86 and the anticipated number of first-time boating visitors make it necessary. It is important to provide as much information as possible to avoid marine mishaps and disasters and to make visits to Vancouver and Expo 86 as enjoyable as possible."

CHS recommends that recreational boaters visiting Vancouver use chart 1986 in conjunction with the new edition of Small Craft Guide, Volume 2 (Boundary Bay to Cortes Island), due in April, and the Canadian Coast Guard's free publication "Expo 86 Marine Advisory." CHS products are available from authorized dealers in Canada and other countries.

D.L. Fisher
Institute of Ocean Sciences
Sidney

A retirement plan

So you have made the big decision; you are going to retire. The following observations, based on five years of retirement, were offered by Rod Hourston, previously Regional director of Fisheries, to Rod Palmer on the occasion of his retirement party at the On On Restaurant on January 31, 1986.

Like everything else, Rod, there is good news and bad news about retirement.

Let's look at the good news first:

Your Clock Radio

Move the alarm ahead about an hour. When it awakens you, don't turn it off. Just lie back and listen to the traffic reports: "... volume delays on both North Shore bridges, a stall in the north bound lane of the Oak Street bridge; traffic is backed up to No. 5 Road. There is an MVA at Granville and Georgia, emergency vehicles attending ..." Ah, the poor commuters.

Your Clothing

Take all your suits and shirts and move them to the far end of the clothes rack -- you aren't going to need them very often. In fact, I had to make sure I didn't come here today wearing the suit I wore to my own retirement party five years ago.

Your Car

You are probably going to put as much mileage on the car as you did when you worked, but during the off-peak hours driving is much less frantic. You will notice a lot more trucks around and people driving more slowly. Those curb lanes that are clear during rush hours will be full of parked cars, so leave extra time. Finally, make sure you are off the road by 3, otherwise you will run into all those maniacs rushing to get home from work.

Business Travel

Just think -- no more crowded airport terminals, no more security line ups, no more crowded aircraft with plastic meals on plastic plates, no more baggage carousels, no more jet lag and -- best of all -- no more Ottawa.

Your Time

You are going to panic -- what am I going to do with all this time? How am I going to put in the day -- maybe I better take some courses or join some groups. Advice -- relax -- make no commitments -- do not join anything for the first six months. You will probably not have enough time to join anything.

Now the Bad news.

Your Pension Cheque

Once you get on that big pension computer in Moncton you have it made. The only problem is you get paid once a month, not every second Thursday. So you are going to have to make a few adjustments in your spending habits. There is also that old problem of some months with four weekends and some with five. Good old February.

Your Wife

You are going to find that wives think that all your new found time should be spent on projects around the house. The project list will be presented to you on about day two. As fast as you complete the one on the top of the list two more get added to the bottom. There is no advice that can be given on this problem; you are on your own.

Anxiety

Early in retirement you find yourself questioning your decision to leave. All your training and experience are not being used. You are no longer needed. But wait. Take a look at the daily headlines. "Salmon fight looms in B.C. Rivers," "Minister mum on troll quota hike," "Gulf trollers upset with chinook allocation," "Fishermen picket 1090." Hey--who needs to be needed.

Your Colleagues

You miss all your associates at the office, after all, you have been with them for 30 years or more. It is a very strange feeling the first time you go back to the building -- no office, no desk -- but everyone greets you warmly and briefs you on the latest developments. As time goes on, you notice that there are some new faces and people have moved to different offices or floors. You don't feel quite as comfortable visiting as you used to. Finally, the day comes; you phone and the receptionist says "Rod who?" Then you know you have finally made it safely into retirement. Welcome on board, Rod Palmer; it is a happy ship you are joining.

Rod Hourston

At the time of his retirement, Rod Hourston was intergovernmental and native affairs director. Prior to that, he was regional director of Fisheries, Pacific Region.

Dream on, if you can . . .

Lotto odds revealed

A group of people at my son's place of work "invested" heavily in the last big 6/49 draw. Optimism ran high as the stake grew to more than \$500, and the talk was of an "assured" win of at least a third prize. When he mentioned it to me I told him that with their stake they might recover a couple of hundred dollars in fourth prizes (3 right of 6) but they still only had a slightly better than 50/50 chance of getting that third prize and maybe 1 in 10 for a second. He asked me to show him just what the odds were.

With my trusty old HP-35 (really, it still works like a charm!) I quickly calculated the precise odds of a first and in a few minutes approximations to the others. The cold, icy truth stared him in the face: gambling has nothing to do with investment, at least not the kind that returns money!

As a public service to all you (fellow) dreamers, I'm passing on the real 6/49 odds in the accompanying table. I reworked my approximations with our mathematician Jon Schnute's help; these are the real McCoy! The rows represent values for the successively

Reality Table

Numbers Drawn	Probability, successive events				ODDS 1 in
	Singly		Cumulative		
1	6:49	.12245	.12245	00	8.2
2	5:48	.10417	.12755	-01	78.4
3	4:47	.08511	.10855	-02	921
4	3:46	.06522	.70796	-04	14,125
5	2:45	.04444	.31465	-05	317,814
6 (=1st)	1:44	.02273	.71511	-07	13,983,816
7	1:43	.02326	N/A		-
	Probability, combined events				
(5 of 6)+7	(=Bonus # prize)	.46399		-06	2,155,212
5 of 6	(=3rd prize)	.19952		-04	50,121
4 of 6	(=4th prize)	.11594		-02	862.5
3 of 6	(=5th prize)	.23948		-01	41.76

Probabilities are given as fractions of 1, where the second figure is the exponent to base 10, e.g. -04 indicates moving the decimal point 4 places to the left.

If you can follow all this, you're probably too smart to believe in luck anyway. For the rest of us, read across from column one to column four - that's all you really need to know! - Editor

drawn winning numbers listed in the first column, and various combinations thereof. The next four columns show the probability (P) of a "hit" on each successive draw, on all successive draws (or combinations), and the same figure expressed as the customary "odds." Odds of 1 in 6, for example, represent the chance of getting any particular face value in a single roll of a single die. The odds of single hits are not bad as gambling goes, but note the steep increase towards the later numbers. This happens because you, the player, have fewer and fewer numbers to be lucky with. On average, you'd need to get the first five winning numbers right 44 times to get one jackpot; and how often do you get that far?

The figures of real concern are, of course, those that give the likelihood of getting successive draws right -- the only way to get into the money. And this is where the truth emerges, a truth that requires an immense faith (or an inversely-sized common sense) to be ignored.

The last two columns show these cumulative probabilities as we go from 1 to 6 hits. Our intuition fails us here and reality soon leaves our worst guesses behind. This is because the probabilities in column six are obtained by multiplying the single ones in column three. Just as the chance of getting two sixes in two rolls of a die is not 1 in 12 but 1 in 36 ($1/6$ times $1/6$), so is the chance of successive wins $6/49 \times 5/48 \times 4/47$, etc. for an astounding 1 in 14 million.

To visualize such odds, imagine a field 100 x 100 yards divided into square inches. To win is to throw a dart anywhere in this very large field and hit the one and only winning square among the 12.96 million that are there. Obviously, we are still a million squares short to simulate the jackpot odds and to set that right, almost, you must tack on an old city building lot, measuring a cool 66 x 105 feet!

As you can see, the chances for the other prizes are far better, including the bonus number win, but, given the usual prize values, a bargain they ain't! Fourth prize is a fixed \$10--and that costs you \$41.76 to get; crazy? You bet!

Surely, these are sobering statistics -- but will they influence the true believer? Of

course not. Most of us have a great capacity to dream, in addition to a secret belief of having access to inside tracks that will change the odds in our favour, usually via some complex and, obviously, irrational formulas that make reading the old chicken innards or tea leaves look like child's play. Actually, by violating randomness in your selection of numbers, e.g. by using birthdays (series favoring numbers under 31 and 12) etc., you are probably decreasing your real-world chances. But then, that's not where this game is played, is it?

Oh well, better luck next time!

Rob Bams
Pacific Biological Station

Can you tell me how to get to Sesame Street?

When Lonnie Hindle watched an hour of Sesame Street on February 25 he wasn't brushing up on the alphabet or his arithmetic. He was watching some of his Gitksan relatives prepare and eat a native dessert.

His cousin Margaret Heit, a housewife and artist, had been asked to prepare the dish for a Sesame Street segment on Canadian Indian culture. Mrs. Heit whipped up soapberry juice and sugar to a creamy consistency to the delight of Lonnie's son Jason, 8, and daughter, Natasha, 10. Lonnie's 10-year-old nephews John and James Clowes, and 12-year-old niece, Lisa, also savoured the soapberry concoction.

Lonnie, director of the region's Native Affairs Branch, says that various berries were used to sweeten the dessert before sugar was widely available. Taste for the dessert is an acquired one, Lonnie says, but it certainly cleanses the palate, especially "after a heavy fish meal."

Shakers – what are the odds?

Catch and release fisheries are common wherever angling is a favorite leisure activity. In North America these fisheries are extremely popular and have often been promoted by outdoors writers, including the noted B.C. author Roderick Haig-Brown. Catch and release regulations appear to be the only way of maintaining good trout fishing in areas of heavy angler pressure such as Yellowstone Park. In British Columbia, application of this strategy to the wild steelhead fishery has slowed or reversed the decline in these stocks.

Although it has not been described as such, we also have a saltwater catch and release fishery. Salmon below a certain length (chinook less than 45 cm and coho less than 30 cm) must be released and, in fact, many keen salmon anglers release fish that are well above the minimum size. Commercial trollers must release chinook and coho that are less than 62 and 48 cm, respectively. In the recreational fishery, more salmon are released than are kept and similarly high numbers of undersize salmon or "shakers" are released during the commercial troll fishery. Consequently, catch and release fisheries impact on a considerable proportion of the chinook and coho stocks, particularly in Georgia Strait where 90 per cent of the recreational fishery takes place.

This raises an important question: what is the fate of salmon released from these fisheries? Clearly some fish do survive because a substantial proportion of spawning chinook and coho salmon have obvious hook scars. Numerous studies of hooking mortality of salmonids have been conducted in both fresh water and the marine environment. A review of the published work related to hooking mortality of freshwater salmonids indicates that, with few exceptions, survival of released fish has been high (more than 90 per cent), but results from most experiments conducted on Pacific salmon in salt water have been more variable. While the data were far from conclusive, it appeared that the levels of hooking mortality for salmon in salt water were as high as 50 per cent, much higher than mortality levels for trout in fresh water. Three possible reasons for this phenomenon are outlined below.

One of the major differences between saltwater and freshwater fisheries for salmonids is the size of fish hooks used. Most

trout (except for winter steelhead) are caught with hooks having a gape (distance from point to shank) of less than 1 cm (size #1 and smaller). Anglers trolling in salt water use hooks with a gape of 1-2 cm (size 1/0 to 5/0) while commercial trolling hooks have a gape of more than 2 cm (5/0 to 8/0). Since the brain, eyes, gills and major blood vessels are all close to the mouth of a fish, large, deeply penetrating hooks can readily cause fatal or debilitating injuries in small salmon. Removal of these hooks often results in considerable damage because the barbs are so large. The available data indicate that undersize salmon caught on 5/0 hooks receive notably more severe injuries than do larger fish, although both size classes can suffer considerable mortality.

Another factor has to do with predation. In fresh water, 20- to 30-cm trout are often the largest fish present and other large predators are not particularly numerous. Consequently, a fish that is temporarily disoriented upon release from a hook is not likely to be ingested by a predator. On the other hand, salmon of a similar size in coastal waters are likely prey for a large number of fish, birds, and marine mammals. The degree of trauma and resulting disorientation experienced by the young salmon is very likely proportional to the extent of hook damage and the amount of handling required to release them.

Stress is the third factor affecting mortality rates. According to work done in the late 1950s, large chinook and coho salmon are quite likely to die following hyperactivity. When these fish are actively feeding in salt water, a considerable proportion of their respiratory capacity is taken up by digestive processes alone. If such salmon are forced to struggle violently, much of the energy must come via anaerobic metabolism which causes build-up of lactic acid in the blood. This condition has been associated with post-exercise mortality in large salmon. However, high blood lactate and associated mortality after hooking did not occur at all in coho salmon once they had reached fresh water on their spawning migration.

While we know that some of the stress resulted from holding the fish in small tanks for study purposes and while we recognize the results of more recent work on lactic acid

Live, onstage

dehydrogenase isozymes, the results of these early experiments cannot be discarded entirely. Survival of chinook and coho hooked and released during their second and (for chinook) later years in the ocean should be examined in some detail. This would be critical in evaluating the effects of single-species or marked-fish-only fisheries and of increasing minimum size limits.

The recreational fishery research program at the Pacific Biological Station is now conducting studies to assess hooking mortality of both small and large salmon. One interesting development to date has been that the mortality rates that apply to released fish from the commercial troll fishery appear to be much higher than for sport-caught fish. Where larger commercial hooks and possibly longer handling times have led to about 50 per cent mortality for grilse taken commercially, recent work with sport fishermen indicates a mortality of about 20 per cent for released grilse.

The influence of hook size and type on hooking stress and mortality will continue to be examined and results compared with those from similar tests conducted on wild fish. Anglers are presently cooperating in studies in North Vancouver and Campbell River. We also plan to catch, tag, and release fin-clipped hatchery coho in 1986 to provide additional data on survival of fish released into the natural environment.

Ultimately, we hope to be able to recommend angling methods that will maximize the survival rate of hooked and released salmon, yet will also permit anglers to efficiently capture fish. A very substantial proportion of the chinook and coho stocks is caught and released from the troll and recreational fisheries. Any increase in the survival rate of these fish will provide considerably more fish for catch and escapement in subsequent years. In addition, the ability to estimate mortality of selected salmon upon release from a given fishery will likely give managers more scope in the development of options for stock rebuilding.

Terry Gjernes
Pacific Biological Station

Last September Souder told you about Valerie Dudoward, her job as communications officer for the native Affairs Branch at DFO and her talents as a successful new playwright.

For those of you living in the Vancouver area, there's an opportunity to see some of those talents come alive on stage. One of Dudoward's works -- her first three-act play -- is currently being performed by Spirit Song theatrical company.

Teach Me The Ways of the Sacred Circle is playing from March 28 to 30 at the Native Education Centre, 285 East 5th, Vancouver. Performances start at 8 p.m.

From here the play will travel throughout British Columbia, performing at schools, Native Friendship Centres and Band Councils. It will return to Vancouver for more performances at the Native Education Centre from April 18 to 20.

Susan Stitt
Contributing Writer



Pacific Tidings



Passed away February 25, 1986 at San Jose, Costa Rica, Captain Barney Ogmundson, Chilliwack, B.C. Prior to his retirement from the Department, Barney was master of the headquarters vessel Laurier.

Recently retired from the Department is Al Groat, fishery officer, Fraser River Division.

The following people have recently left the Department to pursue other interests:

Valerie Rogers, information processing officer, Nanaimo

Vi Fitzpatrick, subdistrict clerk, Kitimat

Barb Bogart, licensing supervisor, Prince Rupert

Susan Laurie, commercial licensing clerk, Vancouver

Sue Murphy, staffing assistant, Personnel Branch

Chris Gignac has transferred to the Pacific Biological Station, director's office; Chris previously was secretary in the director general's office.

Dave Reid, senior economist, has returned to work after an eight-month leave of absence.

Sue Hahn, fishery officer, Queen Charlotte, and Jack Robinson, master, Arrow Post, have returned to work after leaves of absence spent travelling the world.

Recent births include:

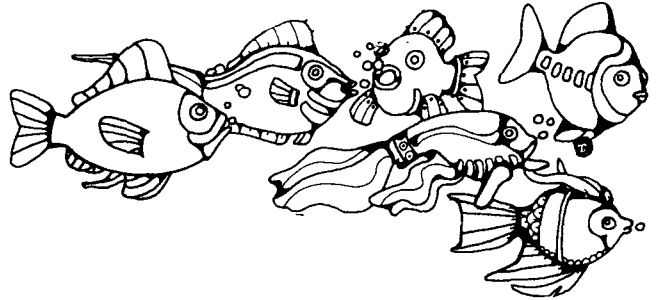
Born to fishery officer Lyle Enderud, Masset, and wife on February 24, twins (a girl and a boy).

Born to fishery officer Randy Brahniuk, Qualicum, and wife, a daughter, Allison Rose.

Born 3:50 a.m. February 6, to Sue and Tom Shardlow, biologist, Nanaimo, their second daughter, Terra Brienne, 2.86 kg (6 lb. 5 oz.).

Born to Laura-Lee and Phil Edgell, fish culturist, Robertson Creek hatchery, on March 3rd, identical twin boys, one 2.97 kg (6 lb. 9 oz.) and the other 2.83 kg (6 lb. 4 oz.) No names as yet.

Larry Duke is A/Area manager, South Coast Division, during Dennis Brock's secondment to Ottawa.



THIRD ANNUAL FISHERY OFFICER REGIONAL ORIENTATION COMPLETED

The third annual Fishery Officer Regional Orientation Course held at Chilliwack (Sardis) was completed on February 7, 1986. In my opinion, it was the most successful to date with its high level of esprit de corps, interest and scholastic standing. The class, with its in-depth questions on all subjects, provided a pleasurable challenge to the instructors.

This year we have added a module on Record Keeping (Historical Stock Management) taught by Hugh McNairnay and have changed completely the Introduction to the Salmonid Enhancement Program.

The following fishery officers made up the class: Gary Cardinal, Ben Mitchell-Banks, Richard Elson, Vivian Marchand, Herb Redekopp, Bob Tupniack, Gerald Pelle, Siegi Kriegl, Byron Koke, Brad Rushton, John Arnold, Dave Flegel, Nancy Seigel, Lawrence Joe, Gordon Curry, Allan Cowan, Wally Kowalzyk, Ron Chow, Garry Deis, William Duguid, Louis Malo and Joel Swain (Skip).

Our only regret this year is that the facility we have used for the last three years is closing in September 1986 so we will have to look elsewhere for another facility.

To conclude, I would like to thank both instructors and students for making this year the most enjoyable Regional Orientation to date.

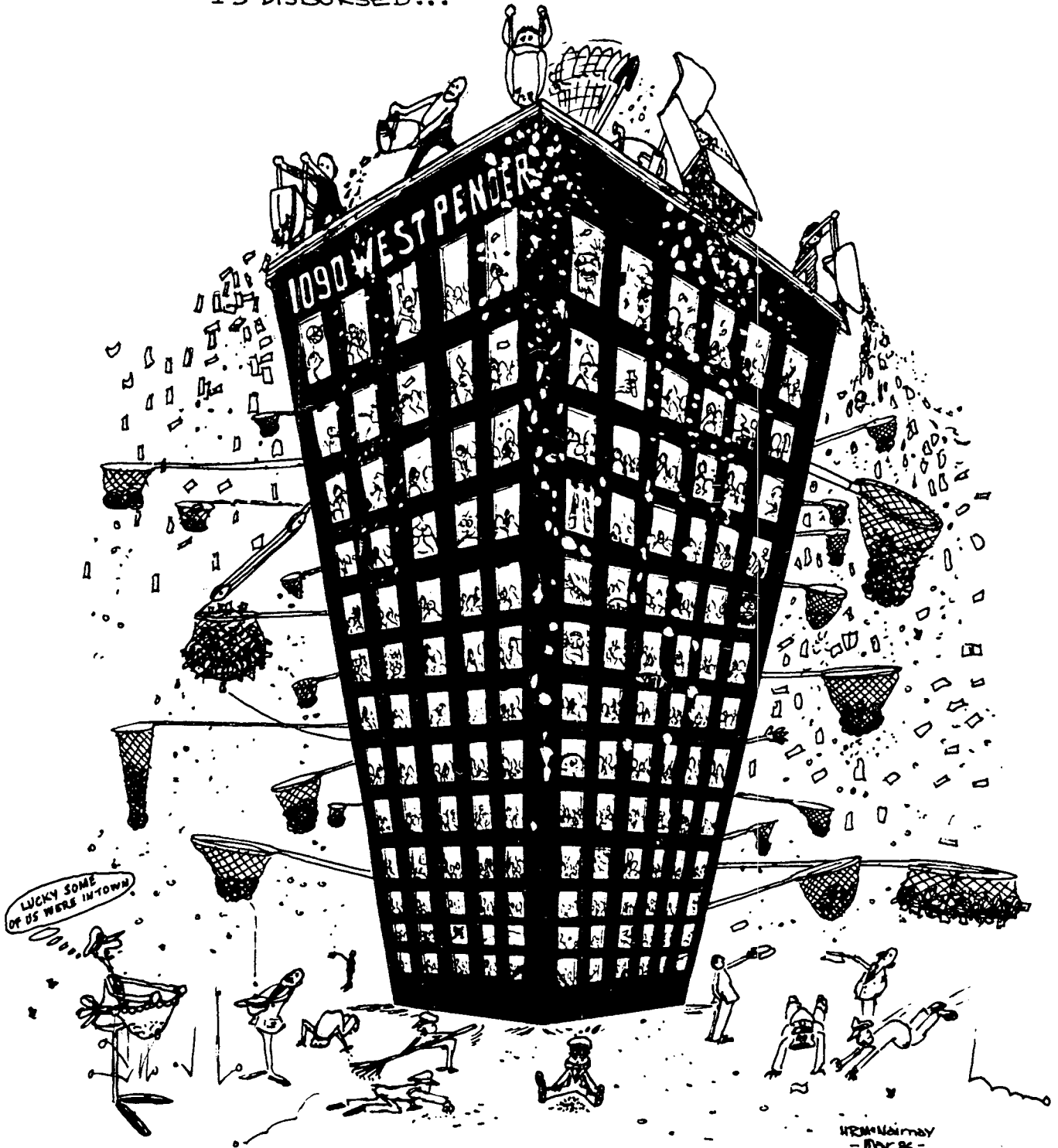
Brian Richman
Training and Career Development

SOUNDER

Volume XIV Number Three

April-May 1986

REGIONAL BUDGET
IS DISBURSED...



... THE ONLY THING TO FALL THROUGH
THE WEBBING IS THE "CHANGE".

Pacific Region Update

Dave Schutz moves

A change in title and location has made Dave Schutz the victim of lost mail.

To set the record straight, Dave's new title is "chief biologist" and his office is now on the fifth floor. The Biological Services Unit will be involved with Salmon Services as well as Chinook and Coho Biology (under Ken Pitre).

Dave's responsibilities will cover biological program reviews, coordination of biological programs and development of a career package for biological and technical staff in the region.

Searching for space

Public Works Canada has been authorized to issue a Public Tender Call for proposals for new headquarters office space. The call seeks occupancy by May 1, 1987 and gives preference (but preference only) to obtaining all the needed 7,869 square metres under one roof. The call gives the following limits for the location:

".. within the boundaries of Burrard Inlet to the north, Stanley Park to the west, Broadway between Granville Street and Boundary Road to the south and Boundary Road to the east."

The tender closes on May 21. The proposals will be evaluated, one recommended and Treasury Board approval sought. This process will take more than a month. A memo from Dennis Villeneuve warns:

"Although numerous rumours will abound, nothing will be official until the Treasury Board approval is given."

So the move is back on track. Enjoy the rumours to your heart's content, but remember that rumours are like TV docudramas: more fun than fact!

Letters

Dear Editor:

Just a quick note to let you know that in last month's Sounder I was appointed as fishery officer trainee in Vancouver. To clarify, I am a fishery officer trainee in Prince George. I was congratulated on my appointment to Vancouver many times, however.

Yours truly,
Richard Elson

Sorry, Richard, for moving you without your knowledge. Hope you are enjoying Prince George.

Editor

Re: Vol. XIV, No. 2 (March)

Thanks for the copies of this issue with my article on the Lotto 649 in it. It was very well presented.

Much to my consternation, I realized the minute I looked at it that I had sent you the right table (with all the odds), but that the text was an earlier version that had not been similarly updated. There also was a misleading typo that I should have picked up.

All this came about due to a last minute update to use Lotto's terminology in prize numbering rather than the one I had used. In it, second to fourth prize numbers became third to fifth and the unadjusted text is now somewhat confusing.

Sorry about this; it always surprises me how something still gets by after repeated checks.

R.A. Bams
Pacific Biological Station
It surprises us, too, Rob, see above.
Editor

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Sounder is the staff newsletter of Fisheries and Oceans, Pacific Region. **Sounder** is printed eight times per year.

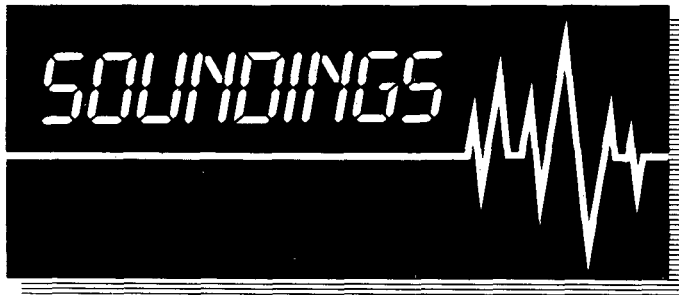
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Government of Canada
Fisheries and Oceans



Question

NON-SMOKING AT DFO.

There appears to be much confusion about non-smoking rules in federal buildings, especially in light of recent Vancouver city bylaws and increased concern about the nature of second-hand smoke. I also understand that some departments have initiated their own anti-smoking regimes. As a non-smoker who is surrounded by heavy smoking workmates I look at those departments with envy. I also suspect my workmates will not willingly give up their habit. Therefore, I hope that a departmental directive is in the works. Please advise.

Reply

At present guidelines are being drafted to cover the concerns mentioned by the writer. When the draft is complete it will be referred to the Regional Union - Management Consultative Committee for review.

John MacArthur
Staff Relations and
Compensation

Editor's note: We feel that the situation has not been sufficiently clarified to answer the writer's concern. As soon as something more definite has been decided we will try to get word to you.

A reminder to staff: Sounder is available to you for notices about committee requirements if the issue (DFO or community service) is of broad interest to others in the region.

Just send a notice to Sounder c/o 6th floor, 1090 West Pender Street but remember that lead times vary from four to six weeks.

And the winner is...

IABC honours photo, film

Two certificates presented at the B.C. Chapter, International Association of Business Communicators Awards of Excellence banquet on April 11 were of interest to DFO employees.

The photograph "Broodstock capture" which appeared on the cover of Sounder in November 1985 won an Award of Excellence for Dixie Cutler of Glover Business Communications.

The other winning effort was the film/video A Good and Careful Harvest which was produced for SEP's Educational Program. It explains the commercial fishery for elementary school audiences and will be followed this spring with programs on the native and sport fisheries.

Dick Harvey, who recently retired as manager at Eagle Hatchery, shot the footage, which the judges found excellent. The script and post-production were the work of New Communication Concepts Ltd. of Vancouver.

"The video was a rare combination of entertainment value as well as teaching you something!" was the judges' summing-up remark on "Harvest."

NOTICE to readers of the SEP 1984 Annual Report. The errata to the published tables has been issued. If you did not receive a copy in the mail, you can contact Bev Bowler at 666-0292 or pick the errata up from 6th floor reception.

Of interest to those who have been waiting for the SEP 1984 Annual Report Summary: the document went to the printer when the freeze was lifted and should be appearing in May.

CORRECTION:

Our last issue carried a story on shaker mortality studies. Terry Gjernes of PBS (the author) called to point out two errors in the second paragraph of that story. The word "must" should not have been underlined and the reference to sizes of fish which are released by the commercial fishing industry was intended to be a general guide only. Actual restrictions vary from area to area.

Thanks to Terry for setting the record straight.

The staff bleeds for you

"I thought I could get one Life Bus to take about 15 donors over to Oak Street and back. Instead, 60 volunteered, forty of whom were actually able to donate. We had to spread it over four days."

Michelle Nadeau was delighted with the response when DFO employees were asked to give blood to replenish the diminishing Red Cross supply in March.

The idea came to Michelle when her husband's place of employment (Department of Supply and Services) held a blood drive. Michelle thought that DFO could do at least as well as DSS in the community spirit field and she was right.

In only three weeks the effort was organized. The drive got the blessing and full support of the director general. Each branch head was sent a memo outlining the plan and eligibility requirements (if you had your ears pierced within the last six months you would not be able to donate) and donors were signed up.

Thanks are due to:

Kathy Derouin, Ron Diewert, Lise Madore, Michelle Nadeau, Laurie Newton, Laurie Eakins, Bob Wowchuk, Pam Watt, Cathy Iviney, Robin Hoffas, Jurick Gwiazda, Dave Mullen, Joe Choo-Foo, Ann Gillespie, Rhonda Miller, Brian Anderson, Mike Neville, Donna Lee, Chris Steneker, Rosanne Hamilton, Edie Preugschat, Roberta Cook, Earl Friesen, Bruce Shepherd, Mike Romaine, Mary Hobbs, Susan Ponlin, Dennis Villeneuve, Dave Barrett, Nancy Szeto, Kathy Pontus, Margeri Wheelham, Brian Richman, Brandy Buchner, Catherine Skally, Colin MacKinnon, Karrina McGivney and Dale Gueret.

Michelle adds special thanks to Nancy Szeto for her help in organizing the drive and to the DG for his support.

As for next time, those of you who have never donated should remember this comment Michelle made to Sounder, "It's a really nice feeling. Even if you're really, really broke you can give blood. And if you ever need it, you'll be very glad someone did."

Yukon mining

Technical and jurisdictional problems associated with the control of placer mining in the Yukon have prevented introduction of an adequate fisheries protection regime despite the efforts of DFO staff over many years.

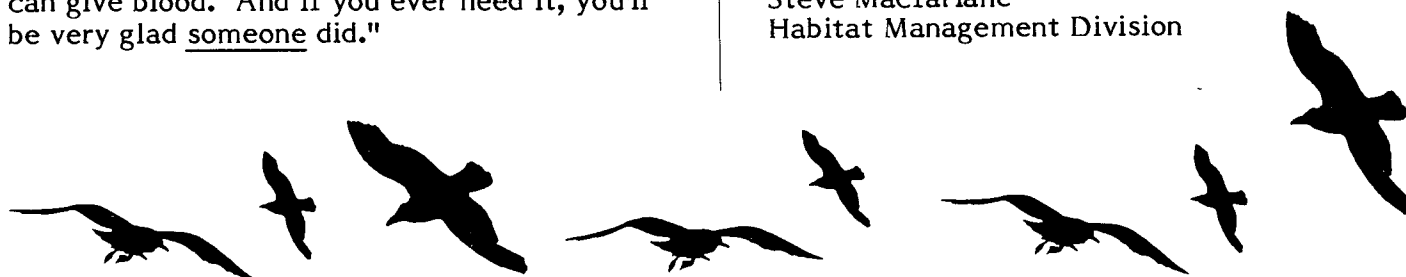
In 1983, the Yukon Placer Mining Guidelines Review Committee held a series of public meetings in various centres throughout the Yukon Territory to review draft guidelines. The guidelines were developed jointly by the Department of Fisheries and Oceans (DFO), the Department of Indian Affairs and Northern Development (DIAND), and the Department of Environment (DOE). The committee submitted its recommendations to their ministers for consideration.

Since that time, DFO, DIAND, and DOE have reviewed the committee's recommendations and public concerns identified during the hearings with a view to finalizing a regulatory regime. The three departments have also undertaken research studies of various aspects of the industry, such as the use of flocculants, settling pond design and efficiency, fisheries inventories and studies on the effects of sediment on arctic grayling.

The Yukon Territory Water Board is responsible for issuing water licences to placer miners as well as other water users. The board is therefore very interested in the efforts of government to finalize a regulatory regime for this industry. DIAND Minister David Crombie announced on March 3, 1986 in Whitehorse that he had asked the chairman of the Water Board to set up a task force to review existing information and make recommendations which would enable him to develop a placer mining policy and a regulatory regime which would provide legal certainty to the industry and optimum protection for the environment.

DFO has been asked to provide input into this process. A submission to the Task Force is expected by early May. Mr. Crombie has asked that a report be submitted by the Water Board Chairman by June 30, 1986.

Steve Macfarlane
Habitat Management Division



Canada: unique in the world

A series of cross-cultural seminars were held for Fraser River division employees in April. Two half-day sessions were summaries of the full two-day session, with much of the same information presented in a capsulized form for staff of 1090 West Pender. For those who did not attend, we offer the following.

Seminar leader Dr. Neil McDonald pointed out that Canada, in its determination to maintain a multicultural society in a bilingual framework, is unique in the world.

McDonald also said that intergroup relationships have been, are, and will continue to be the most severe problem facing Canada.

Dr. Neil McDonald's studies and projects in cross-cultural awareness have broken new ground, and revealed new perceptions of the roots of prejudice. Major causes include perceived threat, media, visibility, poverty, different lifestyle/culture, special status/rights, stereotype, isolation and ignorance.

Dr. McDonald sought to create empathy at the seminar's opening session by illustrating how almost every ethnic group in Canada has suffered from racist immigration policies, including many Europeans, East Indians, blacks, Jews, Chinese and Japanese.

McDonald then outlined the experience of native people. There were residential schools, segregated and only extending to Grade 8, which were gradually phased out beginning in the late 1950s. As well, it was only in 1960 that Indian people received federal voting rights. McDonald said that this history indicates that the government and churches attempted to assimilate the Indian people into "mainstream" society. Dr. McDonald pointed out that even if these interferences were well-meant, they still placed Indian people in the role of unwilling victims.

On more current topics, McDonald explained the rights -- as yet undefined -- which are guaranteed to the Indian, Inuit and Metis people in the Constitution Act 1982. He emphasized that the Constitutional process of defining these rights and increasing acceptance of Indian self-government are realities at the highest levels of government, and that no matter what our feelings are on a personal level, it is our job as civil servants to carry out policy, not to define it.

The official policy of the Department of Fisheries and Oceans places the Indian food fishery as the second highest priority following conservation.

The recent discussion paper, "A Policy Proposal for a B.C. Indian Community Salmon Fishery," jointly released by the Ministers of Fisheries and Oceans, and Indian Affairs and Northern Development, was a hot topic of discussion. The paper proposes principles for comanagement of the salmon fishery, and commercialization of an agreed portion of Indian caught salmon now defined as food fish. It is of particular interest now; at least two comanagement pilot projects are targeted for the 1986 B.C. fishing season.

This paper provoked the most vocal response from participants. Some expressed both concern for the resource and a lack of faith in the ability of Indian people to manage and police their own fishery. "Who will police the Indians?" was one question asked.

The success or failure of this type of seminar is really determined by the participants: their willingness to ask questions and express opinions, to absorb new facts and perspectives presented, to break down their own barriers and perceptions. On the following page we offer a sampling of their responses to the intense and complex information presented them in both the half-day and two-day sessions.

Valerie Dudoward
Native Affairs Branch

We are at the crossroads of great change in the whole area of Indian self-government and Indian rights in Canada. Particularly in British Columbia, where only 15 treaties in two corners of the province were signed, there has been a resurgence of Indian political activity and increased federal government response to the unsettled issues.

The Native Affairs Branch is a critical element in the process of liaison and education between the Indian people and the Department. The series of cross-cultural seminars which our Branch sponsored and co-ordinated is a part of the process of awareness-raising. We look forward to ongoing sessions in other parts of the province. Release of the discussion paper, "A Policy Proposal for a B.C. Indian Community Salmon Fishery," gave increased relevance to the seminars.

We applaud those staff members who participated in the sessions, who asked questions, offered comments, and really tried to grasp the information presented. We welcome your comments and criticisms.

Lonnie Hindle, Director
Native Affairs Branch

Seminar: striving for another view

Following the conclusion of the seminars on cross-cultural issues, the following comments were obtained from some of the DFO staff members who were able to attend the sessions.

"I enjoyed the experience very much. Neil McDonald did an excellent job of presenting, as he promised, a different perspective of native peoples' issues in Canada."

"It may have been perceived through the course of his presentation that Mr. McDonald is very biased in favor of native people. I don't really care if he is or not. I don't think that fact is relevant in light of his purpose in speaking to us."

G. Bruce McDonald, fishery officer
i/c, Surrey subdistrict

STAFF RESPONSES TO THE HALF-DAY SESSIONS

"Informative, interesting ... the presentation was excellent. I think we could've used at least a full day. Dr. McDonald presented it in as unbiased a fashion as was possible. It was straight facts ... I would go again in a minute."

Bill Otway, recreation fisheries
advisor and ombudsman

"I found it really interesting, educational in the sense of the historical perspective of the issue of Native rights -- it was really worthwhile to have that perspective, even if you don't agree with it, it gives you a framework to work in. The only criticism would be that he wasn't well-organized to get through the scheduled agenda."

Dennis Deans, chief, special projects

"Certainly for me, being a non-Canadian, it was an excellent history lesson."

John Payne, chief, land use, habitat
management

"I am quite a novice and so found it very interesting and informative. He laid out terms and points of reference, which was very good. I achieved some realization of the problems and their magnitude."

Hillary Schwenk, human resources
planning and training officer,
Personnel

"I found the seminar itself very enlightening. The information that he was giving to us is going to be very important to everybody in the Department at some point in the future. I learned things about some of my own ethnic background as well. I was really impressed with how Dr. McDonald tried to present things in a very fair manner. This fellow could do a lot of good ... for example with MAC ..." (Minister's Advisory Council)

Bob Wowchuk, sport fishing
co-ordinator

"Dr. McDonald provided some new historical perspectives to Canada's cultural background that showed how misleading it can be to try and relate current views with those commonly held in earlier years. After the half-day session, I was more than inclined to stay around for the two-day workshop with the Fraser Division staff.

Alan Gibson, chief, Management
Services, Field Services Branch

Living in a multicultural mosaic



Lana LeBlanc and Buffalo-Child in Valerie Dudoward's play, Teach Me the Ways of the Sacred Circle. It examines one youth's struggle with two cultures.

Photo: Hollie Bartlett, Native Comm'ns.

We sympathize, but...

Fred Iviney and Bob Smith offer the following response to the article "Forget Excellence" which ran in the last issue of Sounder.

One can sympathize with the writer's frustration about the many administrative procedures public servants are required to endure or adhere to. But, frustrated or not, he or she, as a public servant, is ultimately responsible to the people of Canada. This responsibility requires one to be accountable for expenditure of public funds and to be perceived as using such funds properly.

It is the elected government through its central agencies such as Treasury Board, the Auditor General and the Comptroller General, not DFO Headquarters, that introduces the many administrative procedures they perceive to be in the best interests of the people of Canada.

A number of procedures the writer found frustrating were imposed following audits of our regional procedures. The increased control over vehicle usage, contracting and the introduction of monthly attendance records are examples of audit recommendations.

The Code of Conduct was promulgated to bring the public service into line with the Conflict of Interest and Post Employment Code for Public Office Holders introduced by the Prime Minister in September, 1985.

Workplanning is required to determine how public funds will be utilized over a given period of time. Any good organization, public or private, plans and budgets toward established objectives. A government decision to freeze spending in the public service may be irritating, but it should not be taken as a reason not to plan. Indeed, if we had not planned it would have been almost impossible to prioritize programs and make the necessary reductions in order to meet government restraint targets.

There is hope, however, for the public servant who must adhere to the many administrative procedures that are seemingly imposed by Administration, Finance and Personnel. There are the Nielsen Task Force studies, and other groups are investigating ways to simplify administrative processes. For example, two years ago the Public Service Commission began to reform the administration of staffing in the public service.

Another thrust is the government's philosophy of holding managers more responsible for the actions of themselves and

their subordinates. This "let the manager manage" approach does presumably place responsibility and accountability in the hands of managements. We await introduction, if any, of controls and monitoring procedures that will be put in place to audit their acceptance and exercise of additional responsibilities.

In summary, there is some hope for introduction in the future of simplified administrative procedures. But, the interests of the public and government's judgment on how these interests shall be preserved and protected must necessarily result in administrative rules and procedures.

Re: Let me get back to you on that...

Insurance for Rental Vehicles

We are pleased to update you on amended DFO policy. DFO employees now have the same insurance options as offered in the Government Handbook, Supply and Services Canada, and used by Central Travel Service. For short term rentals (less than 30 days) and daily rental, insurance coverage will be:

- 1) Collision Insurance
Collision Damage Waiver:
 NIL-DEDUCTIBLE, which is full collision coverage and is obtainable by paying the additional daily or weekly charges as indicated by the rental company;
 STANDARD-DEDUCTIBLE, which is limited collision coverage (the Crown is liable for damage up to the deductible amount and the cost of this is included in the daily rental rate).
- 2) Third Party Insurance
 Public liability, property damage, fire, theft and comprehensive coverage is included in the daily rental rate.

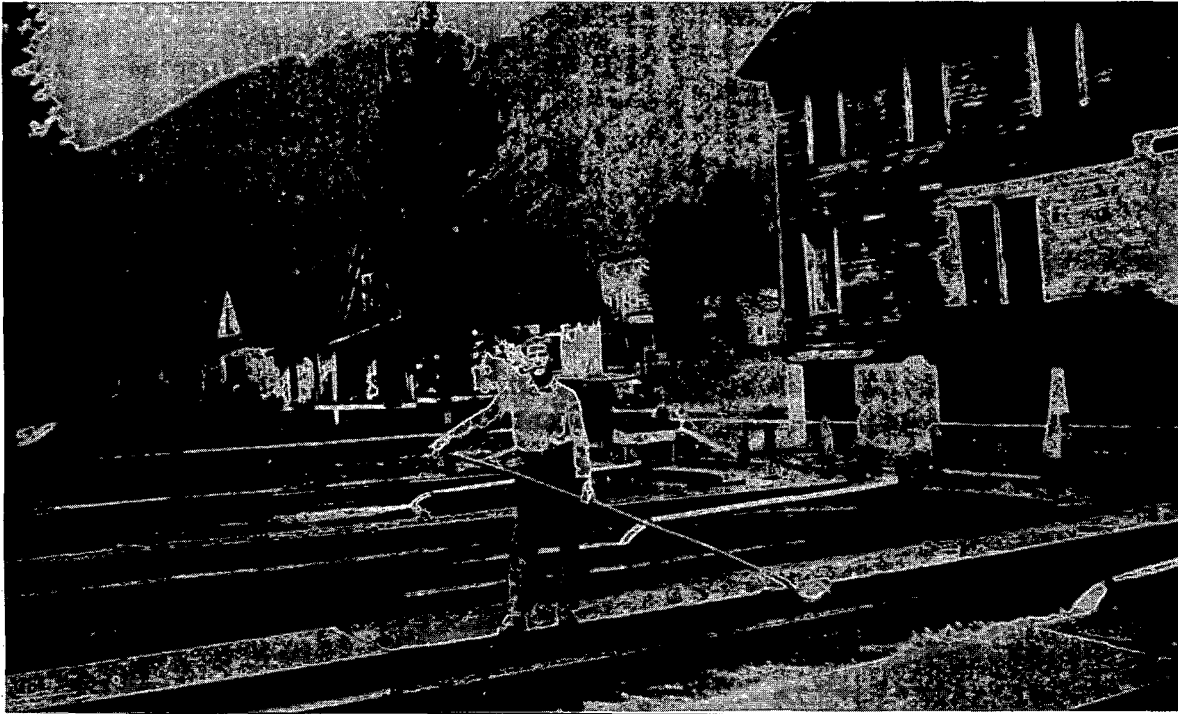
DFO Purchasing Section previously applied the government self-insurance policy, and used this when initiating Standing Offers. All Standing Offers have either expired or have been amended to reflect the new insurance policy.

The insurance options, Nil or Standard Deductible, are decided by the employee when obtaining the rental vehicle. Insurance cost is therefore included on the rental invoice, payable by the Financial Division and charged to the appropriate financial coding.

Hopefully this will clarify this issue for "Frustrated in Fisheries." (See Sounder, March 1986.)

Bob Smith
Support Services Branch.

A man who cared



Bert Cullis at the original Taft hatchery sometime in the 1930s.

Note the Model T behind him and the wooden raceways that were used at the site.

Bert Cullis died last year, just shy of 75, having spent most of his life involved in fish culture. Bert loved the salmonid resource and had worked at and lobbied for hatcheries for almost 60 years.

Bert grew up in Taft, B.C., a Canadian Pacific Railway siding town between Sicamous and Revelstoke. Before the Second World War, Taft was a thriving community of 1,500. Bert attended the one-room school at Craigellachie (of Last Spike fame). The valley was alive with young families trying to eke out livings from the land.

In 1925, the Fisheries Research group at Cultus Lake sent W. Baxter to Taft to establish a hatching station for sockeye salmon. Fisheries had a number of egg collection and hatchery sites around the province and was planting millions of fry into the Fraser system to try to reestablish stocks that had been decimated by the Hells Gate slide in 1913. The railway was a natural confederate in the program because milk cans of fry could be loaded onto the trains and dumped into various streams the railway crossed.

Taft was an attractive site for a satellite station because it was on the CPR route. The Eagle River feeds into the very productive Shuswap Lakes (which also supported fry from the world famous Adams River). There was also already a large capacity, gravity fed water supply for the town.

Mr. Baxter set up hatching troughs under the hotel to handle the incubation of about 500,000 sockeye eggs. A field beside the hotel was dug out in 1926 by local boys under Mr. Baxter's direction. Wood plank walls were erected for a bank of round ended, centre divided rearing raceways similar to modern Burrows ponds. Each raceway received its flow from a long pipe located near the hotel end.

Bert Cullis, who was 15 at the time, was one of the boys who helped build the raceways. Bert was employed in subsequent springs and summers to tend the eggs and feed the fish before they were released.

In 1932, the Fisheries Department decided to close the Taft satellite station. Of the millions of fish released from Taft, only one returning adult with the appropriate left ventral, adipose fin-clip was ever recovered, at Cultus Lake. However, local residents, through the Revelstoke Rod and Gun Club, petitioned the provincial game department to use the facility to rear trout for stocking local lakes. The government obtained 200,000 rainbow trout eggs annually from the United States and gave the club a grant of \$300 to pay for feed and wages. Bert was put in charge and ran this operation until he joined the RCAF in 1940. The Taft hatchery was closed for lack of a competent operator and the hatching troughs were moved to Revelstoke, where a small hatchery operated until 1954.

After the war, Bert returned to the Eagle valley and worked at the mill at Malakwa, on his farm located a few kilometres upstream of Taft and on his trapline in the surrounding mountains. The town of Taft had essentially died and many of the buildings had been moved to other communities.

Bert had not forgotten the fish, though. In 1962 he convinced rod and gun clubs from Sicamous and Salmon Arm to join the Eagle River Rod and Gun Club (of which he was president) to establish the Taft Hatchery Association and pay for the construction of a new hatchery. The site chosen was on the Cullis farm, using a 1,000 litre per minute spring with a constant year-round temperature of a little over 7°C. Bert leased the land to the association for a token \$1 per year. He had estimated that a 250,000 capacity hatchery would cost about \$1,200 to build (with volunteer labour) and \$3,000 to operate yearly, buying eggs from the States.

The province funded the hatchery for four years, with technical support and eggs supplied by the Summerland hatchery. About 200,000 eyed eggs were provided and 0.9 gram fry were released in the fall after 2.5 months of rearing. Twenty-five per cent of the released fry were marked but no marks were recovered over an intensive four-year creel census program.

At a number of public meetings over the years, Bert promoted the idea that the Shuswap could be restored to world prominence as a "giant rainbow" lake if enough trout fry were stocked. Meanwhile, Bert operated the facility as a private trout farm.

Bert accepted an offer from Calgary businessmen to buy his hatchery. They wanted to use it to supply fingerlings to the pothole trout farm industry that appeared ready to boom on the prairies. Professor George Klontz, a trout farming expert from the University of Idaho, was brought in to revamp and update the hatchery to maximize production. The facility passed out of the influence of Bert Cullis and out of service to the public.

Bert's influence on the resource was not over. He had talked to Larry Kahl, now hatchery manager at the Chehalis facility, while Larry was reconnoitering the area for the Salmonid Enhancement Program in 1978. The spring on Bert's farm was too small to support a major facility, but the water quality and temperature of the aquifer was ideal for salmon culture. Rumours about a sockeye hatchery at the old Taft townsite led SEP staff to investigate the area in more detail.

Wells were drilled just downstream of Crazy Creek and the same 7°C aquifer that occurs at Cullis' farm was found under the old townsite. The combination of warm groundwater and potential gravity-fed surface water from the creek, along with a desperate need to do something to reverse the decline of Eagle and Salmon River chinook stocks, led to the construction of the Eagle River pilot hatchery in 1983, followed by expansion in 1985.

Dick Harvey, who ran this new and much more sophisticated hatchery at Taft until his retirement this March, remembers Bert and his extensive knowledge of the local stocks fondly. Bert visited the new hatchery almost daily, and was very generous with his help to DFO staff. He is sorely missed for his cheerful outlook and kindness.

The town is gone, the old hatchery is gone, and the man is gone, but their spirits live on in the efforts of the new generation to preserve the resource.

Don MacKinlay
SEP Operations

With special thanks to Mrs. Marg Cullis and Dick Harvey for their help.

*An aerial view, looking west, shows SEP's Eagle River hatchery today.
Dick Harvey photo.*



The Optimape Odyssey *Part I*

The serial story has been the making of many literary reputations; Charles Dickens, Arthur Conan Doyle ... now, from within the halls of 1090 West Pender ...

The following story was told to me by an ancient archivist who presided for many years over the dusty records harboured deep in the basement of a certain building on Big Bender Street in Vancouver. The true identities of the chief protagonists, secondary characters and places will remain uncertain forever, because reports of their exploits were signed illegibly. Personnel records give no clue to their surnames or (as is the custom in the personnel departments of all great organizations) to any other item of relevance. Even their travel expense claims have long since gone to the shredder. The keeper of the archives alone can vouch for the authenticity of this strange tale.

Long, long ago, when the streams of British Columbia were overflowing with salmon and everyone knew that Ottawa was only a fairytale town somewhere far to the east of the Rocky Mountains, a fishery officer and a biologist set off together on a great search. Now, even in those days the idea of a fishery officer and a biologist going around together in public raised eyebrows. But when the purpose of their mission became known, the whole region gave them up for lost.

Tom (the fishery officer) and Mike (the biologist), had vowed never to return until they had found a living specimen of the elusive Optimape. Together with just about everybody else at that time, Tom and Mike were convinced that the health and happiness of the Pacific salmon would be secure only when every stream worth mentioning was guarded by an Optimape. The beast was visualized as a sort of mascot, something our troops could rally around when the enemy approached, keen for the blood of the last surviving salmon. Nobody had ever seen an Optimape, and everybody had a different opinion about its shape and appearance. In accordance with tradition, the matter was duly referred to a committee for long-term study.

Tom and Mike were drawn into the affair during an Optimape Committee meeting one fine spring morning on the top floor of the office building on Big Bender Street. The meeting, everyone was told, was going to achieve, once and for all, on an official description of the marvelous Optimape. Many

of the senior people there thought the Optimape looked something like a brindled cow, with black spots, and with a faint but unmistakable halo girdling its horns. Tom proclaimed loudly that this was ridiculous (he might have said "ludicrous," which was one of his favorite words in those days, but nobody can really remember that far back). Banging the butt of his revolver on the table, he declared that the Optimape, in his opinion, was definitely an artificial creature, almost certainly a form of humanoid robot spawned in a university lavatory during some weird biological experiment (again, he might have meant "laboratory", but we can't be certain of that either).

All of the biologists at the meeting rose on the toes of their sandals to oppose Tom's heresy, and they insisted that more research was needed. Although they wouldn't give a definite opinion about the external characteristics of the Optimape, they noted that the fishery officer was not professionally qualified to make judgements on such an important matter. Mike, in the heat of argument, announced that it would be easy to demonstrate the fallacy of the fishery officer's position by finding an Optimape and bringing it back for public display and scientific study.

"Why don't you and I," Tom challenged, "go and catch ourselves an Optimape?"

The suggestion was the only idea that people could agree on, so it was accepted as a formal resolution, and the meeting adjourned. From that day hence, the fishery officer and the biologist were joined in a common quest -- not in a blossoming spirit of unnatural amicability, as certain nasty-minded gossips suggested at the time, but in a healthy mood of loud and persistent hostility.

Neither the fishery officer nor the biologist had any difficulty getting time off from their regular workload to go after the Optimape. Tom was obliged to promise his district supervisor that he would never again carry his handcuffs to the Christmas party. Mike had to swear solemnly that he would get a haircut and wear a shirt when working in the office. Thus, united in mutual self-sacrifice, armed with a collator number to which their travel expenses could be charged, and exhilarated by the blessings of their respective supervisors, they went off to seek the beast that everyone confidently believed would save the Pacific salmon from destruction.

Tune in next issue for the next chapter in this incredible saga.

Fishing for fun

"Directions" was the theme of the 1987 B.C. Wildlife Federation Conference in Penticton, April 9 - 12.

Bill Otway orchestrated a DFO presentation. I accepted his invitation to participate in the four-person panel hesitantly. My hip waders were still shiny and unused and I hadn't fired my gun in more than 40 years.

My main concern, however, was not stage fright, but that I might be breaking a federal-provincial fishing regulation by taking along some explosive material -- developed for the purpose of attracting and landing "fishy" delegates. I was to show the new SEP film, "Fishing is Fun."

How could a film be considered combustible? My anxiety was caused by an incident that had taken place more than a month ago.

I had been lured (hook, line and sinker) into attending a prescreening session to critique the content of the presentation. Everyone watched politely. Then came the "discussion". No spot closures were imposed on the participants. It was open season and, although the audience was composed of expert anglers, no catch and release ethics were in operation.

Perhaps, if I name drop you will understand the tautness of the lines being cast and how much like a fish out of water I felt that afternoon.

In attendance: Lee Straight, Bill Otway, Don McDermid, Bob Wowchuk, Ken Glover.

I already knew that fish was a four letter word but I learned that day that "mooching", "jigging" and "trolling" could also be considered part of that category. Anglers have very strong opinions about terminology!

When I showed the final cut of the film "Fishing is Fun" to at least two hundred BCWF members early on the last day of their convention it was extremely well received. Fortunately, no one there launched another "discussion" of fishing lingo.

Although the AV was prepared for school audiences, I received inquiries for copies/presentations from a variety of individuals including BCWF members, CORE instructors, service group representatives, girl guide and scout leaders.

The show will be available on video or film through Communications Branch.

Linda Bermbach
SEP Education Coordinator

BOOK REVIEW

'The Gilly' Completed and Edited by
Alfred G. Davy
A Flyfisher's Guide to British Columbia

Gilly - what a wonderful word. The Gilly - what a delightful book!

I am not even a novice angler. Indeed, I consider the sport from a unique angle since, in my job as education coordinator for SEP, I provide information to teachers and students about sportfishing but I am confined to telling, not demonstrating.

I find many students in my travels who love to fish but very few who realize that it is important to become knowledgeable about fish. Through our curriculum materials, audiovisual presentations and books such as The Gilly, I hope future generations will become more familiar with the types of activities that affect fish and their habitat.

The following passages illustrate some of the book's non-technical aspects. There is also a wealth of how-to information in The Gilly.

Barry Thornton, describing the challenge of catching saltwater salmon on the fly, illustrates techniques and sums up his feelings when he says that "fly fishing in these circumstances creates an adrenalin high which is difficult to describe."

Peter Caverhill emphasizes that "Being complete as an angler should require going beyond the skills needed to consistently catch good fish under difficult circumstances."

I have known Tom Murray for many years and I have considered him friendly but never highly excitable. He describes an experience he and his fishing partner had that left them "as giddy as a couple of kids in a candy store." They were catching one sea-run trout after another. "We were missing fish we should have landed. We didn't care -- next cast, another fish. It seemed to last all day. That was one day we won't forget."

When an old friend and ex-professional educator Ralph Shaw autographed my copy, his inscription and handshake conveyed his endorsement of all our efforts to educate young people in the province about more than terminology, gear and regulations. He knows that it is far more important to instill in them a feeling of stewardship -- a conservation ethic or attitude about their obligations and responsibilities on behalf of future generations.

The Gilly is published for British Columbia Flyfishers with all money going to their Conservation Fund.

Linda Bermbach

Honours received



QCI SEP AWARDS DINNER

There was definitely something fishy going on in the Queen Charlotte City Legion basement the evening of Saturday April 5. About 20 people from Queen Charlotte Islands communities ranging from Lyell Island in the south to Masset in the north, were gathered for an awards dinner honoring salmonid enhancement project volunteers for five years of dedication. On hand to thank the SEP volunteers on behalf of the Department were James Boland, head of the SEP Public Involvement Program, and Tom Rutherford, SEP community advisor for the Charlottes.

The groups being honoured for their long term dedication were Frank Beban Logging, Lyell Island; Sewell Inlet WFP, Sewell Inlet; the Gore Brook Group, Queen Charlotte City, the Northern Trollers Association, Masset, and the QCI Chapter of the B.C. Steelhead Society. Over the past five years the groups have collectively produced more than 1.3 million salmon fry and have participated in habitat improvement, tagging programs, counting fence operation, and educational activities. Each group received an engraved plaque.

1984 International Conference on Biology of Pacific Salmon

Think back to 1984 and you may remember the International Conference on Biology of Pacific Salmon. Think a bit harder and you may remember the stationery that was used for the conference. It is reproduced here in black and white, but the fish logo was printed in blue, as was the year.

Why are we telling you all this now? Because the stationery was recently honoured with an Award of Excellence from

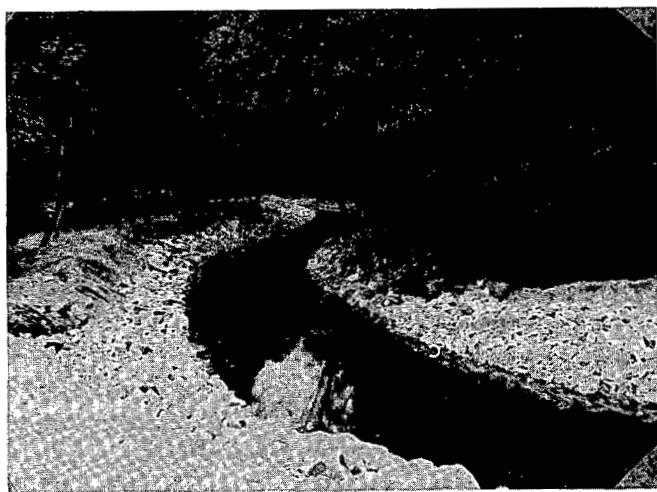


Georgia-Pacific for printed communication.

Darrell Cassidy of the design firm Cochrane and Cassidy created the design under the direction of Dr. F. Keith Sandercock who chaired the event.

Fish do it naturally

B.C. Rail channel is a combination spawning and rearing channel with a simple and reliable flow control system: upwelling groundwater. Built last summer on land owned by the railway company at the Cheakamus River near Squamish, the unmanned channel is one of 17 habitat improvement projects of its type developed in the last seven years by the Small Projects Unit of SEP. The channel is 30 centimetres deep and approximately 390 metres long by 6 metres wide, providing 2,340 square metres of quality habitat that will augment natural production of chum and coho salmon in the Cheakamus River. The photograph below, taken during construction, shows the simplicity of this relatively new enhancement concept.



Groundwater, which feeds into a channel by way of countless tiny upwelling springs distributed along the bottom, is the key to the success of these projects. It flows constantly, neither flooding nor drying (although flows may diminish during the late summer months) and it provides a steady supply of water and dissolved oxygen to developing eggs and alevins within the gravel bed. The water is always clear, free of silt or sand, and temperatures are always within a moderate range.

The B.C. Rail channel was excavated within the boundaries of an old dry gully that had been scoured out by flooding many years ago. (By following this existing depression we realized a considerable saving in excavating costs.) We extended the lower end of the channel to meet the Cheakamus, providing drainage for the channel and access for fish to and from the river. Material excavated from the channel bed was used to build a flood-protection berm several metres back from the edge of the channel along the side nearest the river.

Care was taken to create a channel with a natural appearance. Large trees were left in place wherever possible. A stream-like meander pattern was achieved by following the curves of the old dry gully. The banks were sloped well back from the water's edge to avoid the appearance of a ditch. Finally, machine ruts and dirt piles were smoothed over and planted with grass seed.


After the channel was excavated clean, size-graded (1.3 - 10.2 cm) gravel was added to its bed. Several studies reported in the scientific literature reveal that clean gravel, such as is found in riffle sections of streams, promotes production of bottom-dwelling aquatic insect larvae and other organisms. These minute animals enter the drift and become available as food for foraging salmonids.

Any doubts about fish accepting the brand new B.C. Rail channel vanished this winter when an estimated 1,500 chum and 200 coho entered and spawned. This good showing was very encouraging considering that only a few fish spawned near the outlet of the old flood channel that existed here previously. In addition to the adult spawners, juvenile coho, originating from the previous year's spawners, have moved in from the Cheakamus to escape the seasonal floods and are currently overwintering in the channel.

Assessment studies conducted over the years at other groundwater-fed channels indicate that the B.C. Rail channel should produce on average approximately 500 chum fry and 1.5 coho smolts per square metre of channel bed each year, providing that there are adequate numbers of spawners to seed the channel to its carrying capacity. Multiplying this by the total area of the channel (2,340 square metres) gives us an expected average annual output of about 1,170,000 chum fry and 3,500 coho smolts. Subsequent adult production, calculated by applying the SEP biostandards, would average 16,000 chum and 530 coho annually. Under current management practice, up to 40 percent of adult chum and up to 85 percent of adult coho are destined to be harvested by fisheries.

Considering that the cost of developing B.C. Rail channel was only \$34,000.00 or \$14.50 per square metre (this includes capital, administration and person-year costs), with its low maintenance costs and no operating costs, it won't take many years to pay for itself.

Dave Marshall
Small Projects Unit, SEP



June 3 census day

June 3 is census day.

It pays to stand up and be counted.

These are the two messages the people at Statistics Canada want to convey to DFO staff -- and all B.C. residents -- prior to the day of our national stock taking.

According to StatsCan, increased participation at census time will directly benefit B.C. residents -- in the form of increased per capita grants -- who, in the past, had a poor census record.

In other words, the more we are, the more money we get.

And to this end we are being asked to cooperate with the more than 4,500 workers who will deliver census forms to every doorstep in B.C. and the Yukon. We will be asked questions about age, sex, marital status, language and housing. Most households will be asked nine questions, while a sample of the households -- one in five -- will be asked to answer a longer questionnaire covering 23 additional topics such as education, migration, income, labour force participation and occupation. The 1986 census will provide detailed statistical information about people and the economic conditions affecting them.

DFO Support Services Director Bob Smith is betting that DFO employees won't mind getting their census taken, once they know what it's all about. And to this end, Smith has agreed to let StatsCan superimpose its logo on some DFO letters and envelopes. He has also OK'd a StatsCan request to display its posters in DFO offices.

Census information is also important because:

- * B.C. transfer payments are calculated directly from census counts. Transfer payments are funds transferred from the federal to the provincial government for health and education programs.
- * Federal electoral boundaries are determined from census information.
- * All levels of government -- municipal, provincial and federal -- rely heavily on census information when planning their programs.
- * The census provides the main source of statistical data for B.C. municipalities.
- * Increasingly, private businesses use census data in making important marketing and site-location decisions.

"I know DFO employees won't mind giving StatsCan a hand," Smith said.

"We can help them out by reminding people that this massive undertaking is coming up. It is a kind of national stock taking." All collected information will be strictly confidential, Smith said.

DFO employees wishing further census information may call Rita Nesich of StatsCan at 666-3002.

You, too, can be a philanthropist

Carnegie, Rockefeller, Mellon and you? Yes, it is possible for you to make a gift that probably exceeds the value of all the billions donated by those illustrious philanthropists -- you can give someone the gift of life.

Transplant International (Canada) was launched on July 18, 1985 to increase public awareness of the importance of organ donations. The association held an annual Donor Week, April 21-25, to promote this goal.

We are all familiar with the newspaper and television stories of children who are literally snatched from the jaws of death through the last minute availability of a kidney or of young adults who return to normal, healthy lives after a heart transplant. They received the gift of life.

This gift requires both modern medical transplant expertise and a healthy organ for the medical team to transplant. That's where we come in. While we may not care to imagine that we could die in circumstances that would make us potential donors, we can surely face that possibility long enough to make the following decision: "If I were killed in an accident, or died of natural causes so that healthy organs were left, it would be gratifying to give someone else a new chance at life. I will sign the donor card today and be sure that my doctor and family are aware of my choice."

If you have ever considered the idea, but have wanted more information, please contact: Transplant International (Canada) at 339 Windermere Rd., London, Ontario, N6A 5A5.

"philanthropy: n. love of mankind" -- Webster's Dictionary. It's something to consider.

Tyee Club's past

The following material was taken from a Comox Free Press clipping of 1930. Brian Richman submitted it to Sounder with the comment that the gear and vessel restrictions in effect at that time are of special interest today. Was this approach, while consistent with good sportsmanship, also an attempt at chinook conservation -- conscious or otherwise?

In any case, this glimpse into fisheries history makes interesting reading. Thanks to Brian for passing it along.



For over thirty years sportsmen from all over the world have made pilgrimages to the famous Tyee fishing area and this year is no exception. Cars from California, Washington, many other states and various parts of Canada are parked outside the headquarters of the Tyee Club, and many visitors are encamped on the Spit.

It has been estimated that every Tyee caught by members of the club, irrespective of its weight, costs an average of about \$100. An impression has been created that only residents of British Columbia belong to the Tyee Club. This is far from true, because one has only to look at the list of directors and honorary members to see that the club is not only national in scope but international.

Non-resident anglers are required by the provincial government to pay a fee of \$1 per day or \$10 for the season. Licences may be had from any government office or from Tyee headquarters.

Membership in the Tyee Club is limited strictly to amateur anglers who have qualified by taking a Tyee salmon weighing 30 pounds or over on light tackle. The angler must bring his fish to gaff unaided and no other person may touch rod, reel or line, except for the purpose of removing the lead and handling the leader for the purpose of gaffing.

All fish entered for membership qualifications or for prizes must be weighed by the official weigher of the club and on scales

approved by the club. There is no chance of fluking. The official weigher signs the weight certificate, which has to be witnessed by a boatman, certifying to its capture and method.

Only fish weighed on the date of capture are eligible for membership qualifications or club competition.

Acts or omissions which disqualify a catch are: Failure to comply with tackle specifications, throwing gaff at fish, use of harpoon or lily iron, use of mushroom or umbrella floats, use of gaff over four feet long, any assistance from more than one hook attached to the leader at any one time.

Fish hooked or taken from motor-driven boats are disqualified because of the restricted area of fishing waters, the shallow pools and inability to manage a boat without oars, and to stay clear of other lines. One power boat can spoil the fishing of 50 anglers. This, and the fact that no large button fish of the Tyee Club has ever been caught from a power boat, makes this regulation advisable. The use of a hand line by anyone in the boat disqualifies. Shooting a hooked fish disqualifies.

The idea behind all these regulations of the Tyee Club is to the end that the brave Tyee may have a fair fight, and that men wearing the coveted emblem of the Tyee Club shall be known as worthy champions of the rod.

One of the Tyee Club's mottoes is "not how many but how big." Some of the more skillful members of the Tyee Club have taken several Tyees over 25 pounds in one day and three or four have taken more than 40 in one season. Only record fish are listed, however. A 30-pound Tyee gives a member of the Tyee Club a bronze medal. A 40-pound fish is worth a silver button; a 50-pound Tyee, a gold button. The largest Tyee of the season wins a championship medallion.

The Tyee Club does not bar any light tackle which, in the opinion of the tackle committee conforms to the spirit of giving the fish an even chance for its life. The Tyee light tackle rod is of wood, with butt and tip, not shorter than six feet over all. The line should be of standard nine-strand linen, with a maximum breaking strain when dry of 26 pounds. The length of the lines is unlimited. Metal lines will not be permitted, but leaders may be of wire or other material, limited to six feet in length. Double line may be used if desired, but limited to 10 feet. One hook only is permitted. Any line of more than 12 strand is barred from the Tyee Club competition.

Pacific Tidings



Glenda MacQuarrie won the competition for subdistrict clerk, Salmon Arm (part-time basis) for South Coast Division.

Ben Mitchell-Banks won the competition for fishery officer, QCI.

Greg Savard won the competition for fishery officer in Sandspit, North Coast Division.

George Baker was appointed as laboratory technician for FSB Inspection Division in Burnaby.

Linda Zado was appointed as bacteriological lab technician for FSB Inspection Division, Burnaby. Linda transferred from PBS.

Steve Emonds has won the competition for GT-3 at Nitinat hatchery.

Marilyn Joyce has joined SEP as the biology clerk for North Coast and Fraser River Units.

Mary Jean Comfort has returned to Communications Branch, Vancouver, after a three-month secondment to Ottawa.

For those staff who sent in contributions in memory of Barney Ogmundsen, please be advised that a wreath was purchased and a donation was made to the Canadian Diabetic Society.

We understand that Jim Connor has obtained a job as watchman for MacMillan Bloedel at Beattie Anchorage, Queen Charlotte Islands. He's enjoying being back on the ocean, seeing herring spawn and black bears visit. Jim was a fishery officer and district supervisor prior to his retirement several years ago.

Fishery officer Ted Epps, Nanaimo, has retired from the Department after 42 years of government service. Ted was honoured at a surprise dinner on April 24 in Nanaimo. Ted was the last of the class of '47 and probably had the longest service of any FO on the West Coast +-39 years.

Another recent retiree from the Department: Capt. Bob Alton, master, South Relief Crew, Ship Division.

Born to Bonnie and Brian Lunn, fishery officer, Dawsons Landing, Rivers Inlet, their third son, Jarrett Robert, on March 18 weighing 4.01 kg (8 lbs. 13.5 oz.).

Born to Terry and Tom Stewart, SEP Engineering, on March 3, 1986, a daughter, Sarah Ellen.

Born to Rob Brouwer, assistant manager, Conuma River hatchery and Karen, their second child, a son. Colin John was born on April 11 and weighed 3.54 kg (7 lbs. 13 oz.).

Judy and Dale Fetzner of Williams Lake (Dale is assistant manager of Quesnel Hatchery) are pleased to announce the birth of their third son, Cole Derek Fetzner, on March 10, 1986.

Born to Mike Fretwell, biologist, Habitat Management, Vancouver, and wife, a son, Michael Christopher, 3.26 kg (7 lbs. 3 oz.). Mike recently transferred from IPSFC.

Joining Enhancement Operations from IPSFC

Vic Ewart - channel operator - Weaver Creek

Al Stobbart - channel operator - Pitt River

Bill Wells - channel operator - Gates Creek

Brad Thompson - channel operator - Seton River

Bruce Van Horlick - channel operator - Nadina River

Cathy Derouin has accepted a position as technical administration coordinator for SEP, South Coast Unit.

Dick Harvey Retires

Dick Harvey retired on April 30 after 30 years of distinguished service. Dick is best remembered as the first manager of Qualicum River and Eagle River hatcheries. In addition to his photographic skills, Dick displayed a strong commitment to the restoration of the fish resource through all methods of enhancement.

Dick was honoured in January at the Enhancement Operations meeting in Kamloops. It was pointed out that nearly one half of the staff at regional enhancement facilities had either worked or trained under Dick.

Notice: colour film found

A few weeks ago Jim Northup found a 36-exposure film cartridge on the floor of his office. He was reasonably sure that the film wasn't his but he had it developed and prints made.

He retrieved it at the cost of \$11.55 for the 26 exposures printed.

Some shots show sailing vessels in what looks like English Bay; there are night shots of a skyline and a marina; and daylight shots of a steel fabrication facility, a warehouse and a young man (Japanese, 15-16 years old?).

Jim thinks it might belong to one of our employees who can claim it--and pay for it--by calling 666-0738.

SOUNDER

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DEPARTMENT OF FISHERIES AND OCEANS
FISHERIES MANAGEMENT REGIONAL LIBRARY
1090 WEST PENDELL STREET, VANCOUVER, B.C.
CANADA V6E 2P1

What are they doing?
See page 8

Herring: a long wait up north



BRIDES AND BOATS?

Remarkable as it seems, there really is a connection. Plans of all sorts were disrupted by this year's late start in the northern herring fishery. Pity the poor fisherman who had to contemplate choosing between his bride and an opening!

"Considering all the obstacles; size of fleet, poor weather, late spawning, etc., it was a fairly well ordered fishery," is how North Coast acting area manager Paul Sprout describes this year's herring fishery.

A total of 15,880 short tons of roe herring were hauled; 8,861 by seiners and 7,019 by gillnetters. This put the seiners, at 55.7 per cent of the catch, slightly over the target and gillnetters, at 44.3 per cent, slightly under.

Roe yields were very good with record highs (12 per cent) noted for the Prince Rupert seine fishery. Gillnet yields were very good, but a large number of males in the catches, coupled with smaller skeins than would be expected for the size of fish, kept yields below record levels.

Only a few charges were laid for fishing violations. This has been attributed to the higher profile enforcement.

The late spawning season did produce some nerve-wracking situations for members of the fleet, however. One bride phoned DFO to try to find out if the groom would be able to get back in time for the wedding and there were rumours that one fisherman jumped overboard out of sheer frustration after waiting around for six weeks or so. There were, however, no major disruptions despite the delays.

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No articles from **Sounder** may be reprinted without the editors' permission.



Government of Canada
Fisheries and Oceans

It's a first

Canadian Occupational Health and Safety Week: June 15-21. Surprisingly enough, this is a first.

We have had national weeks to honour all manner of interests and activities, but never before a week to remind us of the importance of health and safety in the workplace.

In 1985, the Canadian Society of Safety Engineering set out to rectify that situation. It got the support of various governments, safety groups and the Canadian Labour Congress. A committee was formed, a lot of work was done, and the first Occupational Health and Safety Week was declared.

The week will now be an annual event. An even better idea might be to try to make it part of every week in YOUR workplace.



Quiz

Lyn suggests you try the following quiz:

1. What is the name of legislation which came into effect April 2, 1986 relating to health and safety in federal workplaces?
2. Health and safety committees are a requirement for all workplaces (excluding ships) with _____ or more employees.
3. Who should you notify if you see a workplace hazard?
4. Workplace accidents are caused by _____ and _____.
5. Workplace hazards can be discovered by regular _____.
6. The purpose of an accident investigation is _____.

Answers:

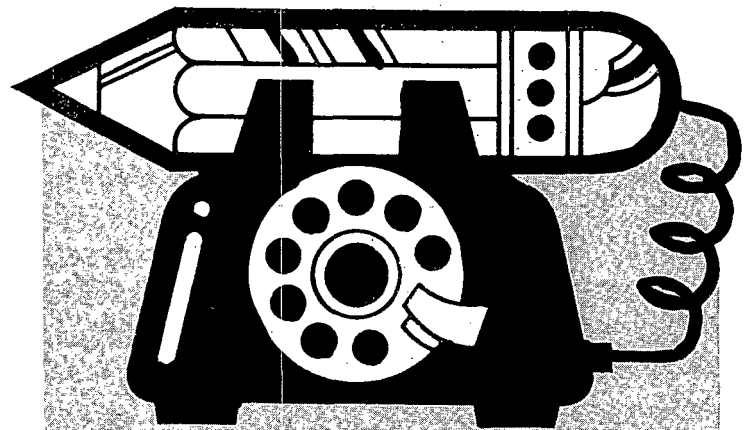
1. Canada Labour Code Part IV (Revised).
2. Twenty.
3. Your supervisor.
4. Unsafe acts and unsafe conditions.
5. Inspections.
6. To determine causes and to make recommendations to prevent occurrence.

Safety news:

Those of you who failed the quiz can take heart -- comments and information on Occupational Health and Safety, from a DFO perspective, will appear on a regular basis in Sounder.

The information will be provided by Lyn Peters and it is her hope, and ours, that regular reminders and tips on Health and Safety issues will lead to happier and healthier work lives for all DFO employees.

If you have ideas, hints or questions on the subject, call Lyn or write to Sounder c/o 6th Floor, 1090 West Pender, and we will pass your letters on.



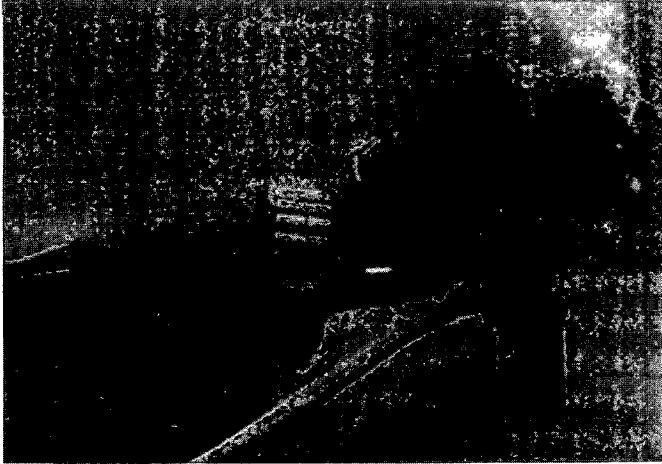
for Health and Safety
information call

Lyn Peters

Regional Health & Safety Officer

666-2150

A different way, a different harvest



A geoduck diver averages approximately two to three clams per minute. High pressure water jets make the job a bit easier than hand digging.

Diving for various types of shellfish is a unique aspect of commercial fishing in B.C. waters. It is also a significant business. Approximately 140 vessels and more than 300 divers landed between \$5 and \$6 million worth of shellfish in 1985.

Only certain shellfish species can be harvested commercially by divers: geoducks, horse clams, scallops, abalone, octopus, sea urchins and sea cucumbers. With the exception of incidental trawl landings of octopus and scallops, these species are harvested exclusively by divers. Commercial use of diving gear to spearfish for lingcod, rockfish and other fishes was prohibited in 1978. These and other species are, however, landed by sport divers.

Some of the fisheries are carried out with the use of conventional scuba gear. The major fisheries, for geoduck, horse clams, sea urchins and sea cucumbers, operate with a compressor and reserve tank on board the vessel.

Geoduck landings peaked in 1985 at 5 million kilograms with a landed value of \$4.5 million. Staggered openings now manage this fishery to ensure a year-round supply of geoducks for live markets.

Geoducks and horse clams are harvested commercially with hand held, high pressure water jets, guided and controlled underwater by a diver to loosen and displace the substrate surrounding individual clams. A water pump on board the vessel delivers water through fire hose to a nozzle or "stinger" held by the diver.

Diving for horse clams is limited to those licensed for geoducks. The horse clam fishery has been small due to a lack of markets.

The shellfish with the highest unit value is the abalone. The commercial abalone fishery has suffered a marked decline from landings of 481 and 433 tonnes (t) in 1978 and 1979. Current coastwide quotas are 47 t for landed values of \$500,000 to \$600,000.

Divers spend long days in the water because abalone are found in shallow waters, the lower intertidal zone to a 10-metre depth. Diving is conducted with scuba gear to avoid entanglement in kelp beds and because the shallow depths allow longer bottom times. A tender follows in a small skiff, picking up the diver's catch and passing down new collection bags.



Sea urchins are now the second most valuable diving fishery in B.C. Only one species is harvested on a commercial basis.

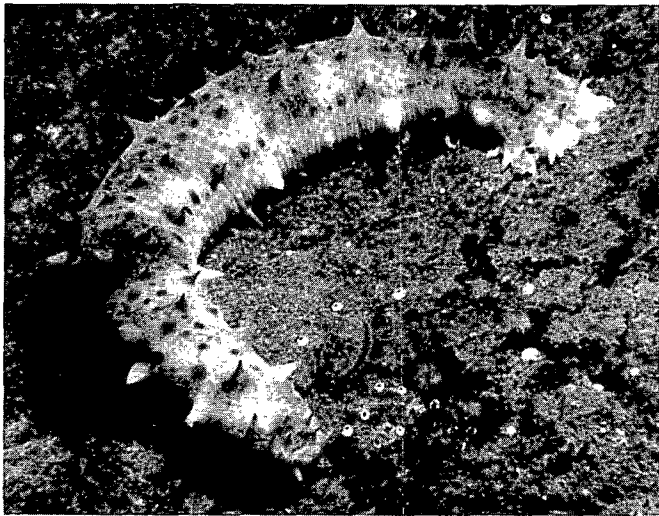
The fishery for sea urchins has grown rapidly since 1979 to become the second most valuable diving fishery. Landings in 1985 were 1653 t for a landed value of \$695,000. Although there are 45 to 50 vessels landing sea urchins, at least half of these are also licensed for geoducks.

There are three common species of sea urchins in B.C., but there is a fishery only for the red sea urchin. The common name is misleading: the colour may vary from bright red to dark maroon.

Red sea urchins are found in shallow waters, to 10 metres, with densities up to 30/m². Divers use surface supplied air because of the long bottom times (four to five

hours per day) at shallow depths. Sea urchins are usually found where there are considerable currents; they are conspicuous on the bottom but experience is necessary to select the desirable size. Divers use a small rake or pronged tool to remove the urchins from the bottom and flip them into collection bags.

To take advantage of peak market demand, the south coast is only open from October 15 to February 15, with quotas set for most areas. The fishery has great potential to expand on the west coast of Vancouver Island and to the central and northern coast.



Photos: Rick Harbo

The sea cucumber is related to the sea urchins, sea stars and sand dollars. There is a small fishery on this coast.

Fishing for sea cucumbers has been a minor fishery in B.C. The California sea cucumber is a long, cylindrical, bottom dwelling animal found primarily on rock and gravel bottoms and, less frequently, on sand and mud.

The sea cucumber is fished locally for its internal muscle bands which comprise 12 to 15 per cent of the total weight. The local variety does not have a thick body wall like tropical sea cucumbers, and a dried product has not been successfully processed and marketed.

The historical catch data for octopus are incomplete; much of the catch was incidental to other species and the octopus were often used as bait rather than being sold.

Directed diving effort for octopus appears to have a higher catch per unit effort than either trap or trawl. Divers land, on average, three to five octopus, or 35 to 50 kg an hour.

The life history of octopus is not well known. They live for three to six years and grow rapidly, with individuals commonly

weighing 50 kg. Most octopus landed by divers average about 10 kg.

Diving for spiny scallops, *Chlamys hastata*, and pink (smooth) scallops, *C. rubida*, is a fishery that has grown since 1982. These are small scallops and are not processed for the muscle alone, but are cooked whole like clams or mussels. Landed values likely exceed \$125,000.

Scallop divers use conventional scuba gear, but average short bottom times daily, 35 to 60 minutes, because of the greater depths at which scallops are found. There is a wide variation in the landings. Divers land, on average, 35 to 90 kg per hour or as many as 1,500 to 3,575 pieces per hour. Spiny scallops are typically found on rocky reefs; pink scallops on soft bottoms.

Spiny and pink scallops grow slowly. They reach 60 mm shell height, the minimum legal size limit for both species, at two to three years. This allows them to spawn at least once before entering the fishery. The size limit is under review, with the possibility of lowering it to 55 mm shell height.

Pink and spiny scallops are common along the coast of B.C. and an increased market demand could lead to an expansion of this fishery.

Rick Harbo, Management Biology,
South Coast Division

Business as usual

At the request of Director General Pat Chamut, responsibility for Sounder has been taken over by Communications Branch.

This note is to assure everyone, especially those in Field Services Branch who spawned Sounder, that while there is a new management, it will be business as usual. Frances Dickson, Al Wood and all who have mothered Sounder over the years will be as fully involved as ever; they just won't have to worry about the paperwork.

Communications Branch will be taking an active part in the competent team that produces Sounder. We will welcome suggestions, accept criticisms and strive with Editor Dixie Cutler to make Sounder even better.

Jack Nightscales,
Director,
Communications Branch

PIP - Who are those people?

From time to time, stories about the Public Involvement Program of SEP appear on Sounder's pages. Some of you may have only a vague notion of what PIP is all about: "Who are those volunteers, and what do they actually do?" The following is a quick look at PIP.

The volunteers are a mixed group -- in age, economic standing, educational background and occupation. Many are retired. A large number are school children, working under their teacher's guidance. Some are involved in the commercial fishery, others are fond of recreational fishing. Most are involved as part of a group, but some work on enhancement projects alone or as a family unit. They exist throughout B.C. -- anywhere the waters are frequented by salmonids.

What they do varies, too. Some operate incubation boxes, a favorite for schools or individuals. Others have impressive hatchery operations, neat, clean well-equipped and competently operated with volunteer labour. There are also many habitat activities: boulder placement, creation of spawning platforms and stream cleaning. (One group collected 140 tires in 6 1/2 hours!)

PIP projects produce quite respectable numbers of fish (see chart) and they frequently offer the additional value of producing fish in small systems where total capacity is too low to justify work by the department.

There is another side to PIP activities, one that cannot be put on a chart. The program has a strong educational/awareness element. The impact of this side of PIP is felt in schools, clubs and communities. It boils down to this; people can't get involved with fish without also getting involved with habitat protection. They not only get involved themselves; they inform their friends and neighbours and urge schools to spread the word. It can't be charted, but as this kind of concern for how we treat our waterways spreads, we all benefit.

Public Involvement Program 1985 fry production

Coho:	2,104,000
Chinook:	534,000
Chum:	1,266,800
Pink:	24,125
Sockeye:	1,200
Steelhead:	33,600
Cutthroat:	12,150

Praise and advice for Island volunteers

Southern Vancouver Island Public Involvement groups exchanged ideas and heard speakers from Pacific Region headquarters in Lake Cowichan on May 25.

Group representatives presented reports on their activities over the past year and compared notes, photographs and press clippings. Most were happy to reach the end of a year marked by strange weather conditions and unexpectedly low water flows. Hopes are high for an easier time in 1986-87.

Speakers included James Boland, head, Public Involvement, Gary Logan, A/head, Small Projects Unit, Bob Hurst, biologist, SEP and Brian Tutty, habitat biologist, Planning. Bob Hooton was present to report on the provincial steelhead program's success.

James gave the volunteers a chance to view a slide presentation normally used to explain the program to interested officials from Japan, Norway, Great Britain and the United States.

"You may not realize just how unique this program and your activities are in the world," he said, "but we get many inquiries about how this success has been achieved."

The presentation outlined the growth of the program in size, from four projects in 1978 to more than 200 now, and in sophistication as groups have become more experienced and confident.

"I don't have anything in my vocabulary to do your efforts justice," he said, "but we thank you." James' lesson in history was followed by Gary Logan's in geography as he described the tour of Japan's facilities that he and Ted Perry of SEP enhancement operations division took last September.

Gary's slides provided insights into Japan's fisheries and enhancement techniques and also its geography and culture. (Try sushi for breakfast!)

Self-help was also a feature of the afternoon as Jonathan Oldroid from Saltspring Island presented information on the benefits of incorporation under the Societies Act for the volunteer groups. Many have already taken the step, but Jonathan's talk provided valid and logical reasons for others to follow.

Bob Hurst was present to bring the groups up to date on coho colonization and Brian Tutty presented the Cowichan Valley Habitat inventory. Bob Hooton's presentation on the steelhead program was the final item on a long but interesting agenda.

The Optimape Odyssey *Part II*

When we left our heros, Tom and Mike were setting off on the quest for the holy Optimape. Join us now for the next exciting segment of this thrilling tale of courage and dedication.

There is nothing whatever to be learned from their adventures during the first decade of this ill-fated epic. They appear to have visited every area in B.C. at least five times, charting their progress neatly on a map and making weekly reports to their respective supervisors. In each subdistrict their research gravitated naturally to three points of interest: the liquor store, the beer parlour, and the local fisheries office. After 10 years of triangulating the province in this fashion, they had a chart of B.C. that bristled with little three-pointed figures. They knew the finer points of every brand of scotch and rum, and could speak for hours on the marital histories of the bartenders in dozens of pubs. Our heroes might even have distressed a few damsels here and there, although their reports are not clear on that point. But they had not, so to speak, sunk a lance into a single live, fire-breathing Optimape.

To be sure, dead and preserved specimens were popping up everywhere. Every fishery manager in western North America knew by then that Optimapes were the most effective weapon in the war against higher salmon harvests. Every subdistrict kept at least a dozen, dried and compressed neatly in the stream files, duplicated dutifully in endless official reports, and displayed solemnly in public meetings and documents. But nobody anywhere could tell Tom and Mike where these Optimapes came from, or who captured them.

This was demoralizing, especially since the purpose of their mission had been expanded somewhat by their supervisors. After all, almost everyone knew by now what an Optimape looked like. But the dried-out samples so abundantly available were not what people wanted. They expected Tom and Mike to come up with the real McCoy, spitting fire and on the hoof, not a withered relic pressed between the papers of an office file. Moreover, people wanted to know the best way of catching these treasured creatures. A less virtuous pair of adventurers would have turned seriously to drink in the face of such unrealistic demands.

Towards the end of the second decade, they found what appeared to be a solution to their quest. Reports came to them of a young fishery officer, a go-getter who had actually

been known to replace old and decaying Optimapes with new, improved specimens. Tom and Mike immediately left the cocktail lounge in which they were residing and caught the next flight to the remote coastal town of Rince Poophard. They found their man in the local office, busily swivelling his chair in never-ending circles, occasionally speaking crisp syllables into the telephone, and moving mountains of correspondence from his in-basket to his out-basket. Their spirits rose. "Surely, they thought, "this virtuoso of modern public administration will be able to show us the way to catch Optimapes."

"No problem," he said, wiping the spit off his telephone handset, dumping a fresh box of paper in his in-tray, and giving his chair another spin. "All you have to do is find the spawning escapement which historically produces the best returns. You adjust this according to the officer's personal knowledge of spawning and rearing capacities. Then you use the average escapement to evaluate trends over a long time. The procedure will lead you to any Optimape around. There's just nowhere left for him to hide." And he tore through half-a-dozen examples, just to show them how easy it all was.

But although Tom and Mike stayed in Rince Poophard for the better part of two years, they could never quite get the hang of it. Every time they started on a hot trail, something would happen to put them off the scent.

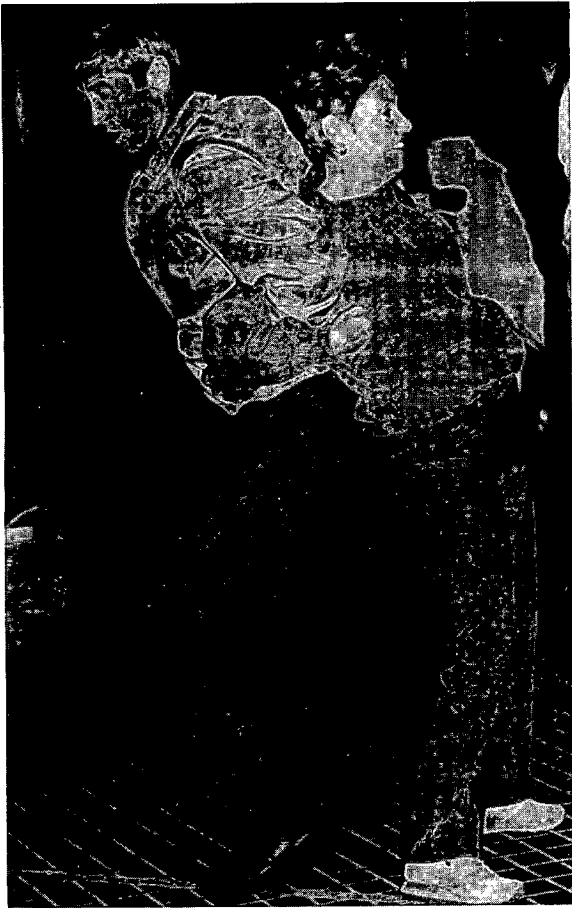
"How reliable do you think those escapement estimates really are," a voice would whisper hoarsely as Tom and Mike passed down a dim hallway. "If you've ever tried to count fish yourself, you'll know how imaginary the estimates are for at least half the streams in B.C." The first time Tom heard that voice, everything he'd ever believed in fell apart.

The voice was only one of the demons sent to try them. Sometimes a fiercely articulate drunk would corner them in a bar.

"Total return?" he would say, and fall off his stool laughing. "You've got to be kidding. Why, nobody ever tried to include estimates of the troll, sport, food, and illegal catch in those figures. You can't possibly find a real Optimape with the outhouse numbers you guys got."

We know the suspense is killing you, dear reader, but you will have to wait for our next issue to learn more about the quest.

FSB annual meeting scrapbook



What are they doing?

Are Forbes Boyd and Marg Cruickshank demonstrating the newest dance craze...or the latest technique for stress management...or are they just fighting for a share of the scarce resources?

Actually, this was one of the events in a hilarious obstacle race that the staff of the Delta Mountain Inn organized for staff at the Field Services Branch annual meeting.



Al Gibson and Diana McMullin (also on our cover) show eggs-actly how it's done.



In the three-legged race, Marg and Forbes know that it's cornering that counts.

Sheila Laflamme and Dave Schutz gave a demonstration of comanagement at its best. Teamwork -- that's the long and short of it.



Winning teams were:

Obstacle race:

Dennis Villeneuve & Rosanne Hamilton

Volleyball:

New Westminster Habitat

Softball:

Victoria



Of course, for those who understand the importance of upholding tradition, there was the volleyball game. The game was brisk. So was the air.

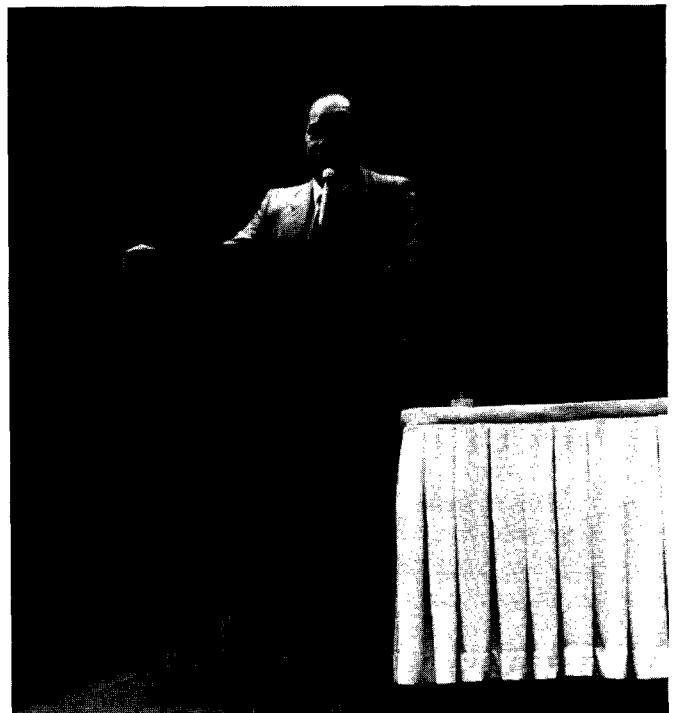


All of the fun and fitness sessions were a welcome opportunity to stretch muscles that had to go back to the meeting rooms for another day of business.

Down to business

There was also a lot of serious business for the group. FSB staff attended a common session on the opening day. They then broke into occupational groups for the remaining sessions.

Garnet Jones addressed the common session on May 13, as did ADM Aimee Lefebvre-Anglin and Director General Pat Chamut. Their remarks were followed by Al Gibson's update on land claims and comanagement, a discussion of the aquaculture industry by George Hunter and an explanation of new operational planning methods by Hugh McNairnay and Don Radford. A session on the Pacific Salmon Commission wrapped up the morning.



"Do more with less"

The weather got better during the Field Services Branch meeting at Whistler in May (after all, it couldn't get worse) but the news showed no signs of improvement.

The message, from assistant deputy minister Aimee Lefebvre-Anglin, from director general Pat Chamut and from FSB's own Garnet Jones was for continued cutbacks.

"Last year I spoke to you about doing more with the same," the ADM said. "This is 1986, and I'm talking to you about doing more with less."

Aimee explained that the first round of cuts, which were taken in Ottawa in February, had served to buy the regions some time. She hoped that time to think and plan will help the regions to avoid the massive layoffs that occurred in Ottawa.

"It is not an experience I would wish on anybody," she said, with the conviction of one who has been there.

She also alluded to the human tendency to hope it will all go away (grief counsellors call it the denial phase) and assured staff that this will not happen.

"If we don't all work at the economy game, we will all lose," Aimee said.

Pat Chamut said the region, faced with reduced resources, has been setting priorities and planning for ways to be successful at doing more with less.

He made no secret of the fact that times will be difficult and will require adjustment. "Living with Change" had proven to be a very appropriate theme for the meeting, he said.

While press reports of increased funding for Pacific Region are correct, the funding in question is tied to specific projects and will not alleviate the reductions being required throughout the region, he said, echoing the ADM's remarks: "The fortunate thing is that we have time to plan."

Garnet Jones reminded FSB staff that change is not just ahead; it has been constant for some months: new Minister, new deputy minister, new DG and other staff changes through the region.

Adjusting to so much change, and to restraints and the spending freeze has made this "an uncomfortable year, if not a difficult one," Garnet said.

Garnet, Al Gibson and others throughout the sessions said that change has been happening, is happening, and will clearly continue to happen: Changes in the Canada-United States situation with the new treaty; changes in the situation on some

watersheds as native land claims await settlement; changes in the consultative process.

"If we are going to live with change, we are going to have to change," was Garnet's message.

Although various groups held their own sessions, the doors were generally open for attendance at will. With so much change in the wind, it was a good opportunity for staff members to exchange notes, ideas and viewpoints, hopefully leading to some ways to cope with the changes that will be facing all in Pacific region over the next few years.

SHIP DIVISION MEETINGS

Restraint impact

Bob Smith, director, Support Services stressed the inevitability of future restraint measures in accordance with the stated policy of the present administration and pointed out the need for innovation and imagination in the day-to-day conduct of our business. Waste must be eliminated; he urged all not to be reluctant to contact their supervisors to discuss ways, means and ideas, that can improve our efficiency and cost effectiveness.

* * *

Fishery officers and ships

Garnet Jones, director, Field Services, and Norm Lemmen, district supervisor, District 5, joined the meeting to discuss communications between district officers and vessel masters and crew.

Norm commented that it was his opinion that communication and the relationship between fishery officers and vessel crews had declined.

Garnet then stated that he too perceived that the relationship between Field Service and Ship Division personnel was not what it used to be. The relationship between vessel masters and vessel crews and Field Service officers must be improved. Vessel masters and crews should be very much involved in what's going on; there is too much expertise and knowledge within the fleet which was not being used.

* * *

New form analyzed

On Thursday and Friday a review of the proposed new Weekly Vessel Report was carried out. Its purpose was to develop an up-to-date system for the recording of information and statistics required by Regional and National Headquarters. This was a most useful exercise.

Several important points about the new forms were raised and discussed.

It was a busy and valuable schedule. Capt. Brian Murray

CEDP projects progress

When you are dealing with the lifecycle of salmonids, it takes time to see results. Some of the longest-running Community Economic Development Program's projects are getting documentation of the results that they have been waiting for, and they look good.

Data from the Mark Recovery Program indicates that some of these projects have consistently achieved survivals that exceed the SEP biostandards. The Nanaimo project, for example, had average coho survivals for 1980-81 at 4.5 per cent, compared to a biostandard of 1.5 per cent. These tag results were drawn from nine different groups, so they are significant.

One of the main thrusts for the program over the next year or two will be to continue its assessment work. Information on why some of these projects are doing so well would prove valuable in planning future projects and strategies.

The accompanying chart shows expected adult returns for total CEDP production for the years 1984, '85 and '86. The dip in chum figures for 1986 was due to changes in the biological plans. The numbers for chum will grow slowly in the future, but plans call for a dramatic increase in pink production over the next few years. Both coho and chinook production will consistently increase as more projects come on line.

Expected Adult Returns from CEDP

<u>Species</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Coho	12,340	49,312	60,938
Chinook	5,401	10,079	15,251
Chum	84,425	100,871	80,035
Pink		2,000	41,286

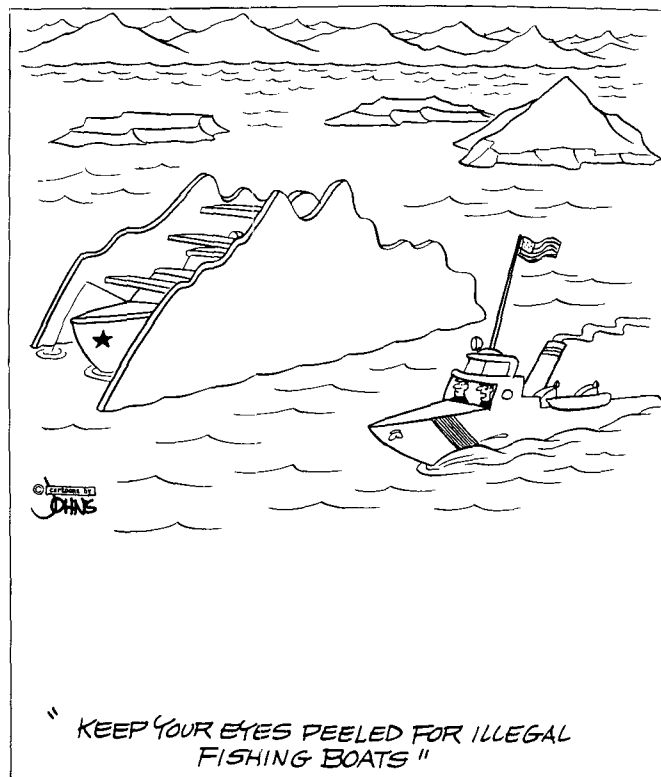
There are 28 CEDP projects in B.C. at the present time. About half of these are fully, or close to fully operational, with the remainder still in a developmental phase. Most of the operational projects have been running from five to nine years. Some have changed their operational plans over the years to suit changing management priorities as expressed in the Stock Rebuilding Plan.

The Special Initiative projects at Port Hardy, Powell River and Terrace were given a rapid launch, with skilled labour available to them at the outset. As might be expected, these have made rapid progress.

There are also a group of joint funded projects. All 10 of these are in native communities and were funded by DFO and Canada Employment and Immigration. After three years of joint funding, these projects are funded primarily by CEDP after ensuring that the project rationale is sound, the community is fully committed to its success and funds are available. These are still in the developmental stage but are making excellent progress.

The final group of developmental projects are the pilot projects. Their major objective is generally to collect information and assess enhancement possibilities. Work with water high in iron has been under way at Fort St. James and coded-wire tag studies at the Penny pilot are monitoring the results from a program that releases incubated and reared fish at the same size as the natural migrants.

Colin Masson, who took charge when Don MacQuarrie left at the beginning of the year, says that this program, like all DFO activities at the present time, has to compete for resources. This makes the availability of results from the early releases important. The projects that have several years of operation behind them are making significant contributions to Canadian catch figures -- and application of some of the techniques in use at these projects should keep those figures climbing in years to come.



Short term pain not in vain



"How do you expect me to work in a mess like this?"

Dr. John Stockner gave Sounder a look at the future, and at what it takes to get there. The new lab in West Van will rise on this site as soon as the fill to replace the old beach has been compacted. Work is already proceeding on other parts of the site. The mud and debris will soon be gone, but the noise and vibration will continue for some months yet. The staff are not about to complain too much though, they are just looking forward to their longed for new facilities.

Heavy equipment and finely calibrated scientific instruments do not combine well, as the staff at the West Van lab have been learning recently.

Construction started last winter on a new facility, due to open next spring. While the promise of better working conditions may delight the staff, the impact has certainly been felt, literally.

"Microscopy studies have been very difficult," says Dr. John Stockner, "and our balances have not been giving very accurate readings."

As well as the problems caused by vibrations, there have been other odd happenings as the work got under way.

"Well, there have been a few power outages, one of which was not scheduled. We have worked in the dark for periods of up to four hours. The water was off, too, at least three different times. And, when you open a door to go outside, you can never be sure the stairs will still be there!" John says as he welcomes you to what he laughingly calls "our war zone."

When Sounder toured the site in May, a bulldozer was busy removing the last of an old beach that had been unearthed where part of the foundation will be placed. The schedule was delayed until the old logs and timbers could be hauled out and the area refilled with suitable, stable gravel and compacted.

The old parking lot is gone and the trees which used to surround the buildings are now taking root in their new locations between the building site and Marine Drive. The tanks for fish were moved to an area on the eastern edge of the site for the construction period. The move went well and there is no sign so far that the fish have felt any ill effects.

The trees made it, too



If you have visited the West Van Lab, you may remember that the buildings were surrounded by pine trees. When construction began, the trees were in the way, so they were moved. It is a bit risky to move trees of this size, but they were transplanted to a location bordering Marine Drive last fall. Now, as the photo shows, they are in good shape and putting out new growth.

An Expo visitor receives guests

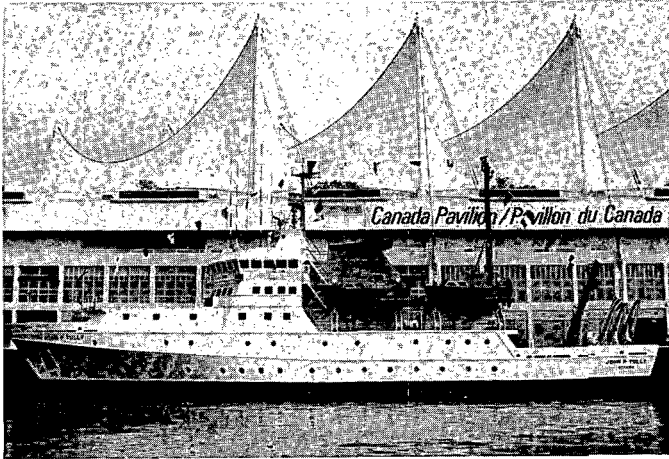


Photo: Danny Tanaka

It's always the little things that count: especially in arranging a visit for 70 Grade 12 students and teachers to the CSS John P. Tully.

Some of the little things involved borrowing benches from the Vancouver Parks Board because chairs took up too much room in the ship's lab, and rental companies don't have benches; scrounging coat hangers in case it rained and the visitors' jackets needed drying; triple checking passage past the security in place for the stay of Prince Charles and Princess Diana at the Pan Pacific Hotel; and stationing Communications Branch staffer Lois Hooge bedecked in a fishery officer vest so the visitors would know who to look for in the crowds assembled to see the Royals.

Tom Siddon, Minister of Fisheries and Oceans and MP for Richmond-South Delta, wanted science students to learn about the department. When he heard that the Tully was to visit Vancouver to take part in the opening ceremony for Expo 86 and Polar Transportation and Communications Week, he saw an opportunity.

The first request to organize an event was disquieting. "The Minister wants to invite all graduating Grade 12 biology students from the Lower Mainland aboard the Tully," an anonymous Ottawa telephone voice said.

A couple of local phone calls established that British Columbia does not distinguish between biology, chemistry and physics students; they all take mandatory science, and there are more than 1,500 of them in the Lower Mainland. The Tully could accommodate about 35 at a time comfortably.

Jack White and Deborah Cameron of the British Columbia Ministers Office agreed to limit the numbers of students. The 15 Lower Mainland and Sechelt Peninsula school boards agreed to choose the students on basis decided by their teachers, and in numbers more suitable to the Tully.

From that point on it was Kate Glover, the information officer for the Institute of Ocean Sciences in Sidney; Kelly Francis, information officer at the Pacific Biological Station in Nanaimo; and Mary Jean Comfort of Communications Branch in Vancouver, who looked after the big and little things.

Everyone involved -- scientists, ship's crew, support staff -- pitched in. To give credit where it is due (and known):

Captain Bernard L. Newton, Master of the Tully; Jon Purdie, second officer; Alec Scoones, third officer; Phil Pereira, chief engineer; David Stanway, second engineer; Brian Heegsterman, third engineer; Art Moore, fourth engineer; Pat Murphy, boatswain; cook Don Boughton and catering crew Doug Hankin and Bill Prunkl; and Allan MacRae, electrician.

Tony O'Connor, regional hydrographer, IOS; Rick Thomson, physical oceanographer; Mike Woods, senior hydrographer; Bob Wilson, chief, Ocean Information Division; Ron Parkinson, marine superintendent; Kathleen Hamilton, personnel manager;

Kees Groot, PBS Nanaimo; John Stockner, Colin Levings, George Kruzynsky, Ed Donaldson, Ted Down and Tillman Bentey of the West Vancouver laboratory.

The Tully, in Vancouver between May 3 and 9, hosted more than 1,000 visitors during six days of open house. Pacific Region provided two capable French-speaking staffers to help the vessel's crew with francophone visitors. Constance Desjardins and Andy Charette got away from their respective desks as secretary to Bob Smith, director of Support Services Branch, and Material Management contracts officer.

After brief lectures by IOS and PBS scientists, the students and teachers toured the Tully. Jim Folster of personnel and Brian Richman, training and career development officer, were available for students considering a future with DFO. After lunch, students, teachers and the Minister and his party were taken by bus to the West Vancouver laboratory to see some of the experiments being conducted. Capilano MP Mary Collins welcomed the visitors.

With the Minister and his wife were deputy minister Dr. Peter Meyboom; Scott Parsons, assistant deputy minister - Science; Dr. Les Filotas, a special assistant to the Minister; and Pat Chamut, Pacific Region director general.

The day ended with a trip, hosted by Nova Scotia Premier John Buchanan, aboard the schooner Bluenose II.

Cont. page 16

Our Resource: It works so well, we're doing it again

Only by telling people what we do and how we do it will we contribute to people's perception of DFO. And that's the primary purpose of our Public Awareness Campaign.

In 1984, when 11 communities throughout B.C. participated in the first Awareness Campaign, our objective was:

"to inform the general public about the importance of the fisheries resource to the province of B.C. and to inform them of the role DFO plays in managing, protecting and enhancing the fisheries resource."

That's still our primary goal as we begin the third year of our public awareness campaign -- we want to continue to improve everyone's knowledge and understanding.

It makes our jobs easier when people know why we do things. It helps the resource, too, when people learn that they are active participants in looking after it. That's why we've kept the theme Our Resource.

There are six measurable evaluation components built into the structure of the campaign that tell us the positive impacts of the program.

1985 Results

In 1985, 13 communities participated in the campaign. Eight of those communities repeated campaign activities for a second year.

The total campaign required approximately 2,500 hours of staff time, involving about 145 DFO personnel. Those were estimates based on reported information only and did not include hours committed by the central Steering Committee in the Vancouver office.

An estimated 60,000 people visited DFO events and activities over the total campaign period. This doesn't include that part of the population (approximately 400,000) exposed to DFO through radio talk shows, television shows and interviews, and articles, announcements and advertising in the print media.

Individual evaluations of each campaign location noted significant improvements in those areas repeating a campaign for the second year. Public interest and awareness had increased; there were improvements in community group involvement in specific events; more confidence on the part of DFO staff in their interaction with community members; and an increasing rapport between the public and DFO.

1986 Plans

This year, the Our Resource theme will be carried to the Queen Charlottes, Campbell River, Port Hardy, Whitehorse and Steveston. These are the first five locations to be confirmed. Budget concerns and tight funding situations mean that five additional campaign locations are on a tentative basis. With limited funds available (about half that of last year), the Steering Committee decided to do fewer campaigns and maintain the quality of each. It was agreed by all members that a smaller number of campaigns would be more effective and beneficial than spreading the money out over a larger number of campaigns. The average budget per campaign of \$6,000 is the same as last year.

As in the past two years, some area campaigns will tie in with local community events and in others DFO will host activities.

The Queen Charlotte Islands began their campaign activities on May 20 with a school poster contest. An expected 600 entries will be judged and put on display during the main campaign events. On June 10 and 11, fishery officers, habitat personnel and the community advisor presented a special program to school children which included talks, films, support packages and materials for distribution.

The majority of events will take place at the Queen Charlotte City community hall on June 13 and 14. Activities include a seafood preparation demonstration focussing on fish other than salmon, a hands-on fish quality display that will identify quality and how to maintain it while handling the fish, estuary tours, a touch tank, and contests. A few of the displays being organized involve PIP projects, Small Craft Harbours, offshore surveillance and enforcement. In addition, the King Creek chinook facility and the Copper River counting fence have model displays for the event. The Massett (Haida)/Skidegate CEDP projects have prepared displays to be incorporated in the program.

It's a large campaign with lots of fun and information. We will keep you posted on the final activities -- pictures and all -- in the next issue. In the meantime, it's time to take that Our Resource button out of the old desk drawer and pin it on again!

Susan Stitt, Campaign Coordinator

Our Resource

Results of the 1985 Awareness Campaign

Community awareness of the importance of the resource. There is an increasing commitment by local town councils and community leaders to recognize and include the fishery resource as an integral part of community planning. One example included higher and broader sales volume in a local fish store (attributed by the owners as a direct result of campaign activities).

Understanding DFO's role within individual communities. For example, in communities where campaigns were held for a second time, the public was seen as requesting more in-depth information; questions were much more focussed, indicating an increased awareness of the resource and of the role of DFO.

Relationship between DFO and the community. One rewarding aspect at one location was the developing rapport between DFO and local businesses--small business and industry support is much stronger, with generous donations to campaign events or activities. For communities where a campaign was held for the second year, there was increased involvement by local community groups and a desire to do more in future campaigns.

Community interaction is positive and beneficial. For example, staff at one campaign location were very apprehensive about their campaign activities because of a poor DFO reputation in the community. The outcome proved a big success, with a large number of people responding positively and resulting in an improved image of DFO.

Increased interest by the media in DFO activities. Local campaigns received strong support from radio and television in interviews, open-line talk shows and live coverage of campaign events.

Increased recognition of volunteers. For example, incorporated into one campaign was the DFO presentation of plaques to volunteers in the Public Involvement Program of SEP who have had an enhancement project going for three or more years.

The guide is out

"We'd like all the information a sport fisherman needs to know about a species in one place," Bob Wowchuk and Bill Otway told me last October. As new kid on the block, I had been given the awesome task of compiling the 1986-87 Sport Fishing guide. And this year, we wanted a new look to give to Expo tourists.

How, I wondered, do I make octopus gear restrictions interesting and appealing to a visitor who knows nothing about sport fishing (or even for those who do)? How to convey the daily limit for eulachons with some pizzazz? And what about sewage contamination? How was I going to make that subject fun and exciting?

The answer can be found in the new, improved, Expo edition of the B.C. Tidal Water Sport Fishing guide. Big alphabet blocks in "new wave" colors draw the reader's eye to information organized by species or category. Lots of photos and drawings add "sex appeal" to rather technical, dry material.

Of course, it doesn't matter how well organized or attractive the guide might be -- it doesn't do much good if it doesn't get off the press. This year, mountains of printed material generated by Expo gummed up the process from typesetting to the final printing. As well, just when the final stages of the guide had been completed, we received word that groundfish regulation changes sitting in Ottawa for more than 18 months were finally going to be passed. So the original April 15 deadline extended to May 12.

What else is new in this year's guide? We took out some old information -- the head recovery depots, and the shell fish contamination schedules -- and added some new -- the spot closure and commercial vessel illustrations.

This year's guide has been given the seal of approval from most departmental staff. If you haven't seen the new guide yet, pick up your copy at 1090 West Pender, 2nd Floor, and be sure to tell me what you think.

We've asked for feedback from the fishermen and this will be the ultimate test of success.

Lois Hooge

Pacific Tidings



Floyd McKee won the competition for Chilliwack subdistrict fishery officer.

Susan Hahn, fishery officer, is transferring from Queen Charlotte City to Pender Harbour.

Brian Spilsted won the competition for subdistrict fishery officer, Area 6 in Prince Rupert.

Suzanne Bechmann is now working as a seasonal fishery officer at Bella Bella.

Keni Lorette, head, Offshore Operations Unit and Doug Harris, secretary of Offshore have both left DFO.

Evelyn Padelec won the competition for subdistrict clerk working part-time at Prince George.

Tarnia Schultz won the competition for secretary in Whitehorse, Fraser River Division.

Vivian Marchand is transferring as a fishery officer from Port Alberni to the Steveston subdistrict.

Herb Redekopp is transferring from Chilliwack to be the Surrey subdistrict fishery officer.

Lorraine Jung, executive assistant to the Regional Director General, is transferring to work for Wayne Shinnors who has been appointed as a Canadian commissioner to the Pacific Salmon Commission.

Lee Wood has left us for the South Pacific island of Vanuatu (formerly known as the New Hebrides), where he will be working as the "microcomputer expert" for the National Planning and Statistics Office. Prior to his departure, Lee was the data administrator, ITSD (Computer Services Division).

Ann Thompson, secretary at PBS, has been seconded to the director's office to work with Kelly Francis on the PBS open house scheduled for Sept. 18 to 21.

Welcome back to Pam McNally who returns to work after an absence due to illness and to Vilma Miller after her months of travel.

DFO picnic -- Saturday, July 5, Maple Grove Park. Everyone welcome! More details to come.

Birth Announcements:

Born to Susan and Gordon Richardt, SEP Engineering, a daughter, Desiree Camille, weighing 3.63 kg (8 lbs. 1/2 oz.) on April 24.

Born to Heather and Jim Wild, SEP Engineering, a daughter, weighing 2.83 kg (6 lbs. 4 1/2 oz.) on May 15.

Born to Kelly and Claire Burnett, Records Administration, a son Ryan Kelly, weighing 2.47 kg (5 lbs. 7 oz.) on October 15, 1985 -- a late announcement!

Born to Robin and Bonnie Richardson, Records Management, a daughter, Shelly, weighing 3.38 kg (7 lbs. 7 oz.) in March, 1986.

Born to Kathie and Rob Wilkins, Fisheries Inspection officer, Burnaby, their first son, Kristopher Jay, weighing 3.97 kg (8 lbs. 12 oz.) on May 4th.

Meyers resigning from Fisheries

The Bridge River-Lillooet News announced that Hans Meyer, Lillooet fisheries officer, will resign July 31.

At the ripe old age of 40 he said if he didn't leave now he might be too scared to later, "and become an old sour government bureaucrat retiring at 60."

He plans to stay on as a patrolman for a few months to help his replacement and to make some money for a trip to Switzerland.

He has a one-year taxidermy job lined up at a museum there under the man he apprenticed with for five years.

Meyer plans to return to Lillooet later and set up his own shop.

Mary Wiebe Retires

Mary Wiebe retired on June 20, 1986 after 30 years of distinguished service.

Mary is best remembered for her commitment to the B.C. Commercial Catch Report and Export Publications - Fisheries Production Statistics of B.C.

Mary will be enjoying her new apartment and traveling to and from Palm Springs.

Mary was honoured at a surprise luncheon on June 12, 1986 and will be greatly missed by all her co-workers.

"Tully" cont. from page 13

For two of the students, at least, another visit aboard the Tully is scheduled. The Minister challenged the students to write an essay of up to 1,000 words describing what they saw and heard, and what they research on their own about oceanography, hydrography and what the fish resource means to British Columbia and Canada.

Two winners will be selected by the IOS and PBS scientists who lectured the students. The prize will be a three-week cruise to the Arctic aboard the Tully when it sails in early July. The students will be flown home from Tuktoyuktuk.

SOUNDER

July-August 1986

Volume XIV Number Five



FOLDING GRAPHIC SURFACES
NO. 2 ON NO. 1 ETC
FOR WINTER

GRAPHIC SURFACES
6" X 6" SUPPORT BEAMS
IN CEMENT FOOTING

EXISTING WOODEN
VIEWING DECK

love story on display



Quiz

How much do you know about food? Try your luck with these gourmet-challenging questions from the Queen Charlottes Our Resource campaign.

1. Luis Firpo, "The Bull of the Pampas," credited his legendary strength to a food he ate every day of his life. Luis Firpo once knocked Jack Dempsey right out of the ring. Luis Firpo's strength-building food was:
 - a) fish
 - b) jelly doughnuts
 - c) watercress sandwiches
 - d) french fries with gravy
2. Which of the following meals is lowest in calories?
 - a) 6 ounces of filet of sole, fried in butter, with a tossed green salad (Roquefort dressing) and a glass of white wine
 - b) 4 ounces of broiled sirloin steak with a lettuce leaf and a glass of water
 - c) 4 ounces of roasted chicken with a cup of cottage cheese and a glass of skim milk
 - d) 5 jelly doughnuts and a coke
3. In classic French cuisine only three foods qualify as hors d'oeuvres riches, the ultimate meal starters. One of these foods is foie gras (goose liver). The others are:
 - a) fish products (smoked salmon and caviar)
 - b) vegetables (artichokes and carrots)
 - c) pork products (ham and sausage)
 - d) pastries (jelly doughnuts and cream puffs)

(Note: You're on your own. Answers will not be published in future issues.)

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Government of Canada
Fisheries and Oceans

Pacific Salmon Commission *Interview with Ian Todd*

"It's important to understand that we're not servants of either country, but servants of both."

So speaks Ian Todd, as he describes the role of the Pacific Salmon Commission (PSC), established under the Canada-United States Salmon Treaty.

Ian has a combination of more than 30 years experience within the fisheries, making him ideally suited to his new role as executive secretary to the PSC.

His work with DFO began with a summer job the year he graduated from high school in 1953, through to positions as district and project biologist and on to that of executive assistant to the Deputy Minister in 1970 in Ottawa. During this time, Ian witnessed the transition from the name Department of Fisheries and Forestry to the Department of Environment. He continued to work with the Department from 1971 until 1978 as an area manager for Southern Operations.

In about 1971, Ian became involved in the Canada-United States salmon talks as a technical advisor to the Canadian delegation. In the ensuing years, he was to become more and more involved with international concerns and with Canada-United States fisheries problems.

In 1978, Ian left DFO on an interchange program to gain experience in the commercial industry. This eventually resulted in a permanent position as the general manager of Trans-Pacific Fish until March 1986.

With this background, Ian began his new duties this April with the Pacific Salmon Commission.

Basically, the Commission has replaced the IPSFC (International Pacific Salmon Fisheries Commission).

Under the new treaty between Canada and the United States, the PSC will make recommendations to the two countries on fishing plans on all Pacific salmon stocks which originate in the waters of one country and:

- a) are or might be subject to interception by the other country;
- b) affect the management of stocks of the other country; or
- c) affect biologically the stocks of the other country.

It works something like this:

The Commission is made up of eight Commissioners (you could look at these people as the "board of directors"). There are four commissioners from each country and one

alternate designated to each commissioner to serve in their absence, if any.

Three panels, the Southern, Fraser River and Northern, are also established by the Commission. Each panel is allowed up to six members from each country, plus a designated alternate to each panel member.

Part of the responsibility of panel members is to provide information and make recommendations to the Commissioners. For example, panels examine the annual reports produced by each country and report on these to the Commission, they examine information on salmonid enhancement programs and review fishery regulations.

Development of fishing plans work this way:

Specific fishing plans are developed by technical teams, then forwarded on to panel members for recommendations. From here the various area plans are sent to the Commissioners for approval. At this stage, the Commissioners meet to consult and negotiate the plans until it is agreed that all treaty requirements have been met to the satisfaction of both countries.

That's looking at the whole picture in a very basic way, but the PSC is "to serve as a forum for consultation and negotiation of annual management plans for the major intercepting fisheries."

The Commission has one chairman and one vice-chairman. This year, Don Collinsworth, from the United States is chairman and Wayne Shinnors is vice-chairman. These offices will alternate between the countries every 12 months. (Wayne will automatically become chairman at the end of September, with the U.S. appointing a vice-chairman.)

The seat of the Commission is presently in New Westminster, B.C., but Ian reports that they are in the process of planning a move to downtown Vancouver. "We are working actively through Bud Graham (international section in DFO), the facilities and planning division in DFO and Public Works," says Ian.

In addition to making recommendations to or advising the two countries on any matters relating to the treaty, the Commission carries out such functions as an annual meeting, other meetings deemed necessary, preparing an annual budget, an annual report and an annual financial statement.

The Commission appoints the executive secretary who is responsible for general administration, appointment and supervision of any support staff.

Cont.

PSC cont.

"The first thing to do is to implement and develop administrative procedures, and communications links; for example, electronic mail systems to provide rapid communication between all the commissioners, and developing computer systems to transfer existing data between various agencies in the two countries. Coordinating this flow of information is all part of the Commission's role," says Ian.

"We also want to develop in-house communications so that the Fraser River data are readily available to scientific teams in both countries. We've got to establish and develop accounting programs and budgets -- everything right from the ground up."

"The impression I have gained is that the individuals of both parties have a real desire for the treaty to work well. There is a clear realization on both sides that the long-term strength of salmon stocks involved in the treaty depend on the success of the Commission. That, to me, is a remarkable change in attitude, from my recollections of the mid-1970s.

"We're starting from scratch really and we have to establish and develop all our administrative procedures and policies that will make the Commission work."

Susan Stitt

Going to the dogs



New Brunswick has a new enforcement effort under way -- a dog team has been operating there since last fall. The experiment was evaluated recently and found to be effective.

The dog team approach was tried because it was felt a dog would have value in tracking suspects and in uncovering hidden gear. It was also felt that a dog might offer additional protection to the human officer and serve as a deterrent to violence.

The area selected for this experiment was the Saint John district and the officer who won the competition for the position of dogmaster was James Kierstead.

The district then had to select a trainer, purchase a dog and convert one of the patrol vehicles to accommodate the team.

The officer and the dog were put through a training course for three months to bring them to the required national standard. Once they had demonstrated their readiness, the team was brought into the district and a thorough public relations program was used to introduce the new concept and the team to the public and to other enforcement agencies in the area.

How do the district people feel about the service dog program now? Pretty positive, it seems: the recent evaluation made a strong recommendation that the team be kept and that the concept expand to other areas.

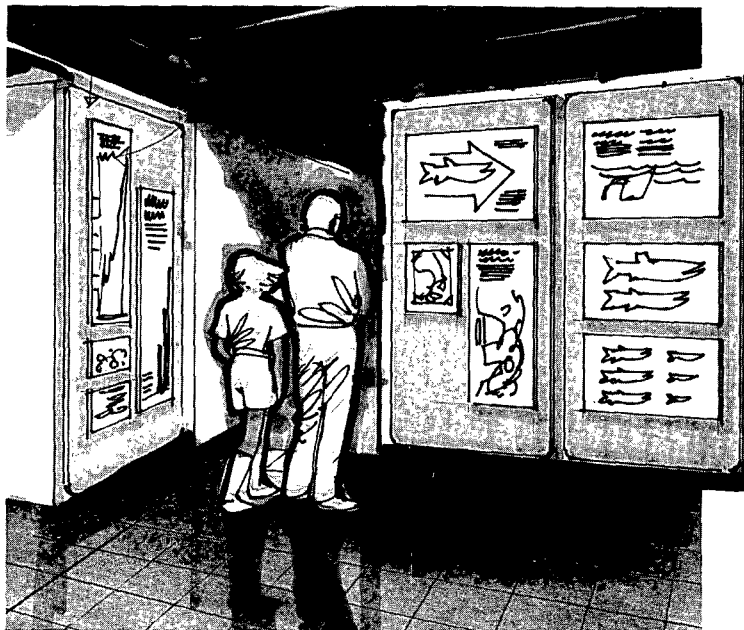
Some of the specifics that were mentioned were a decrease in illegal clam digging, seizure of illegal gear and defusing of a poaching situation that had become dangerous.

As an additional benefit, the report states that the team has been working in close cooperation with other enforcement agencies. This has resulted in greater understanding and cooperation with these agencies.

The cost for all this? An initial expense of \$10,750 plus an annual outlay of \$2,420. A pretty sound investment.



Adams River love story



WALL MOUNTED GRAPHIC SUPPORT PANELS
FISHERIES AND OCEANS / HELLS GATE



6 SIDED INTERPRETIVE KIOSK/ADAMS RIVER

The Adams River love story will be on display for the 1986 dominant sockeye run on site and at Hells Gate canyon.

It's not a soap, but the story of the sockeye's instinctive cycle of birth, death and renewal -- a love story for families to see.

The Adams River display is designed to last at least two sockeye cycles. Instead of a series of wooden panels erected and dismantled every four years, DFO's display will be weatherized and folded away during the winter.

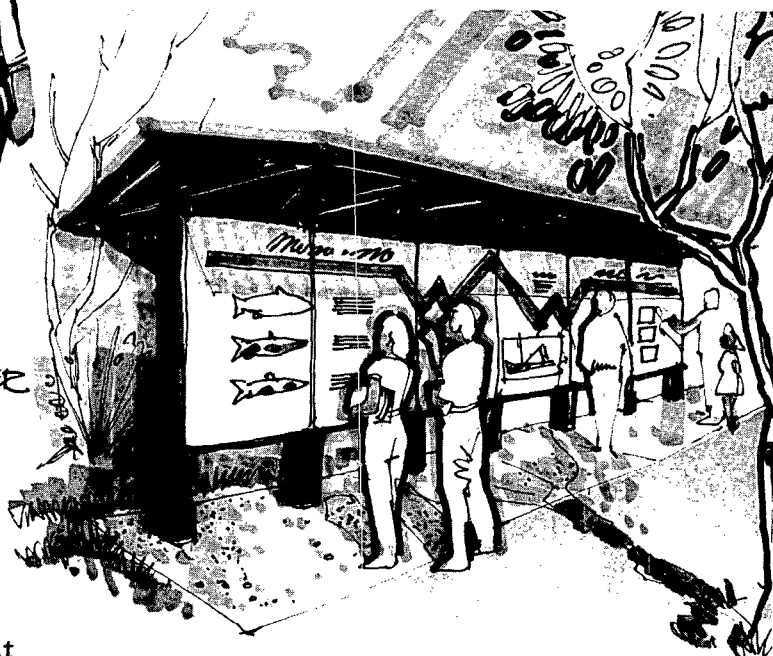
Hells Gate has become DFO's responsibility under the Canada-United States Pacific Salmon Treaty. The display area initiated by the former International Pacific Salmon Fisheries Commission (IPSFC) has been in need of an update for some time. A Vancouver design company has been awarded a contract by DSS to carry out a concept developed by Asoka Weerasinghe, DFO exhibits manager in Ottawa's Communications Directorate.

Weerasinghe, at Pacific region Communications Branch invitation, visited Hells Gate and Adams River last October. James Boland, head, Public Involvement Program, and Joe Arsenault of Habitat Management, accompanied him.

Weerasinghe submitted a design concept for Adams River and Hells Gate that was accepted by the Regional Executive Committee, and approved in the 1986-87 regional workplans by headquarters.

Arsenault, who will retire after the 1986 Adams River run, and Robin Kent (formerly of the IPSFC), are actively involved in making the October 12 Adams River Salute to the Sockeye a success -- especially in the year of Expo.

They have worked closely with Pacific region Communications Branch, and Harvey Wright, executive director of the Fisheries Council of B.C.; Rick Howie, of the B.C. Ministry of Lands, Parks and Housing.



PART OF DIRECTIONAL WALL LEADING TO
OBSERVATION PLATFORM/ADAMS RIVER

It's summer picnic time



No, it's not another magic trick from the GM Spirit Lodge at Expo; the man going up in smoke is Field Services Branch director Garnet Jones. The other (clearly visible) chef is Pat Chamut.

Photo: Bud Graham

The DFO headquarters picnic was held Saturday, July 5 at Maple Grove Park in Vancouver. Bud Graham, president of the Staff Association, reports that approximately 175 staff and children consumed 220 barbecued hamburgers. These were provided free courtesy of the Staff Association which raises most of its funds through the sale of Entertainment Books.

Four teams participated in the mixed slo-pitch tournament. The final game, played during the morning of the picnic, pitted the defending Inspection team against the 3/4's (FSB third and fourth floor). The 3/4's overpowered the Inspectors, 11 to 5, and took possession of the Spawners Cup.

Once again, both children and adults took part in a variety of novelty races coordinated by Dennis Villeneuve, Ted Perry, Colin McKinnon and Rosanne Hamilton.

The tug-of-war again proved popular with a FSB team composed primarily of the fourth floor staff plus the DG outmuscling the others to win this trophy. As Lloyd Webb pointed out, age does count -- the love handles do help!

Special thanks go to Bud Graham who coordinated the food, organized the chefs (our directors and DG) and generally ensured the success of the picnic.

The *Tanu* meets the *Tanu*

When fisheries patrol vessel *Tanu* was launched in 1968 she was named for the *Tanu* tribe of *Tanu* Island on the southern end of the Queen Charlotte Islands.

More recently the vessel renewed acquaintances with some members of the tribe. A gift was presented and vessel master Tony Preston sent the letter below:

F.P.V. "TANU".

Mr. Miles Richardson,
Chief, Wolf and Raven Clan of *Tanu*,
c/o Department of Fisheries and Oceans,
Box 99,
Queen Charlotte City,
Queen Charlotte Islands, B.C.
V0T 1S0

Dear Mr. Richardson:

For myself, and on behalf of my crew, I would like to thank you for the handsome "little token of appreciation" which you so kindly sent to me through Mrs. Harley.

It was a very great pleasure and an honour to meet two Chiefs of the *TANU* Tribe of the Haida Nation and their ladies, and it is my hope that in the future it will be possible to further the 'special relationship' which exists between this vessel and the *TANU* tribe.

I also wish to thank you and accept your most kind invitation to meet your clan at some time in the very near future. Indeed, it is my hope that the vessel can make another visit to Queen Charlotte City before the end of this summer. I shall be contacting my superiors on this matter when I return to Victoria on the 19th of June to see what can be arranged, and will keep you informed of developments through our Queen Charlotte Office.

In the meantime we will fondly remember your visit with us.

I have the honour to be
Your friend

A.J. Preston
Master, F.P.V. *TANU*, (Red Crew).

Bad backs are bad business

Your back is the most injury-prone part of your body.

24 per cent of all WCB claims in 1984 were for backs. Back problems can mean pain, lost time, expense, inconvenience and disability.

Preventing back injuries is a lot easier than correcting them.

This year again, Labour Canada is offering a Back Injury Prevention Program. The 30 to 45-minute program includes information on:

- basic spinal anatomy,
- major causes of back strain,
- correct posture,
- lifting techniques,
- exercises,
- lifestyle adjustments to maintain back health.

The free presentation can be given, until August 15, 1986, at a time and place convenient to you. If your workplace is interested in a Back Injury Prevention Presentation, call Lyn Peters at 666-2150.

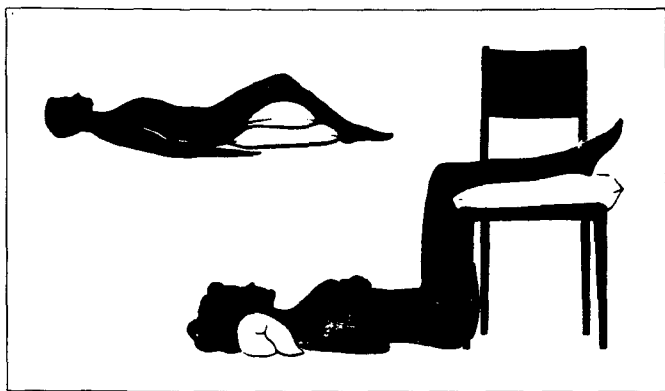
A tip:

Back tired and painful at the end of the day?

Rest is the first rule for the tired, painful back.

The positions illustrated relieve pain by taking all the pressure and weight off the back and legs (maintain from 5 to 25 minutes).

Note pillow under knees to relieve strain on spine.



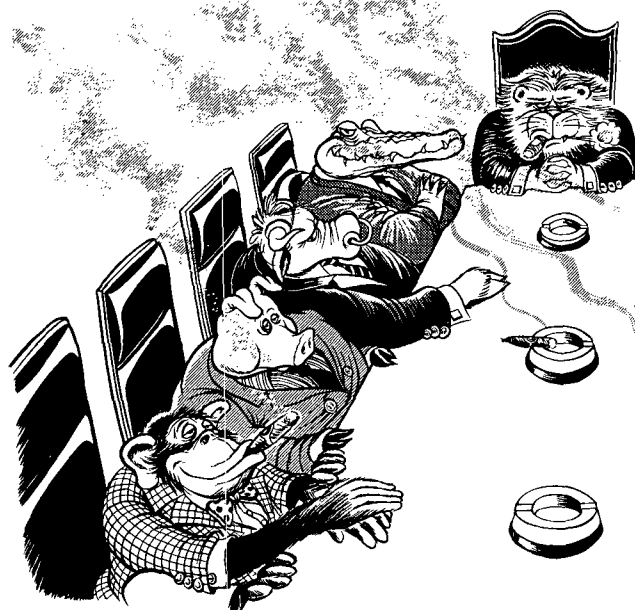
for

information call

Lyn Peters 666-2150

Regional Health & Safety Officer

Give us air



A memo circulated on the fifth floor in July may be of interest to others in DFO:

SMOKING

Recently 26 people on our floor responded to a smoking questionnaire. Twenty-three of them would like restrictions or a total ban on smoking. Currently there are no enforceable rules in the Department or in Vancouver City bylaws to prohibit smoking on our floor, nor is it possible during the remainder of our stay in this building to provide fair and effective designated non-smoking areas. Consequently voluntary compliance is the only option left.

Smokers on the third floor gave up smoking in the work areas at the request of their peers and manager. We are asking for a similar response from fifth floor smokers.

We look forward to your cooperation.

D.C. Schutz
F.K. Sandercock

QCI is aware of Our Resource



Delicious odors wafting up from the cooking table proved to be creative delights of non-salmon seafood dishes.

It was literally the talk of the town, during and after the two action-packed days of the Queen Charlotte's public awareness campaign.

Even before the actual campaign days, the Council for the Village of Massett, requested that the next campaign be held in Massett, to give all an "equal opportunity to view this important program."

Two specific programs -- a school and a public program -- featured 16 activities, attracted about 1,400 people, was a lot of fun and was a tremendous opportunity to learn about almost every aspect of DFO.

Some of the highlights:

- Tracker flyby from Offshore Division
- beach seining/electroshocking demonstration
- Pallant Creek salmonid mark recovery demonstration
- ships tours -- the Tanu, Arrow Post, Sooke Post and Pillar Rock
- touch tank and crab races.

About 50% (500) of the students in the district were exposed to a DFO activity or representative. Letters of thanks from one elementary school brought in these comments:

- thought the Tanu was the greatest or "awesome", including one little girl who thought the "Tuna" was great
- wanted to know if the crew would write back
- thought the sea cucumbers were great -- soft too
- were impressed by the nose tagging and

- glad it didn't hurt the fish
- thought the frozen fish display was "cool", had never in "all their lives seen so many different fish."

The public program brought more than 900 people to the campaign events. The target group -- forest service personnel -- attended and were impressed. In addition, the local committee hoped to draw in the parents of those children who had attended the day before. Both goals were felt to be achieved.

The ships' open houses attracted more than 1,100 people.

The local coordinator in Queen Charlotte City commented in his evaluation: "... the dedication of the local committee; never hesitant to expend the time and energy required... The local DFO staff and resource persons who came to participate in our program were determined to achieve success. I did not receive one hesitant response to participation in the program. In fact, despite dwindling budgets, people were enthusiastic. This determination to succeed was a great motivator for me."



Discovering just one of the wonders in fisheries management makes any campaign a success story -- especially this glimpse into the microscopic world of scale analysis.

Story and photos: Susan Stitt

Steveston: a soggy success

July 1 weather report: rain, mixed with showers, some morning downpours.

The Our Resource display tent at the Steveston Salmon Festival on July 1 was one of the few covered areas on the fairgrounds but that is not the only reason it was packed with visitors all day. The tent offered a wide range of experiences for those who braved the weather.



The starfish were stars at the touch tank exhibit at the Steveston Salmon Festival campaign. Joe Arseneault and Vivian Marchand handled the "introductions."

The most attention-getting part of the display was the sushi preparation and sampling. Presented with the cooperation of Richmond's Kamei Sushi restaurant, this display gave visitors a chance to see how the Japanese delicacy is prepared. While a few of the visitors seemed reluctant, many sampled the raw fish appetizers with obvious enjoyment.

Other activities included a fresh product display, where fish inspection officer Viveka Ohman offered prizes to anyone who could successfully identify all the species (only about 10 could), a fry tank, helium balloons, customized buttons and a touch tank where kids and adults were invited to get acquainted with tidepool creatures. Joe Arseneault's successful diving efforts yielded an interesting array of occupants for the tank. Those who talked with Joe or fishery officer Vivian Marchand about the specimens found this a fascinating part of the day.

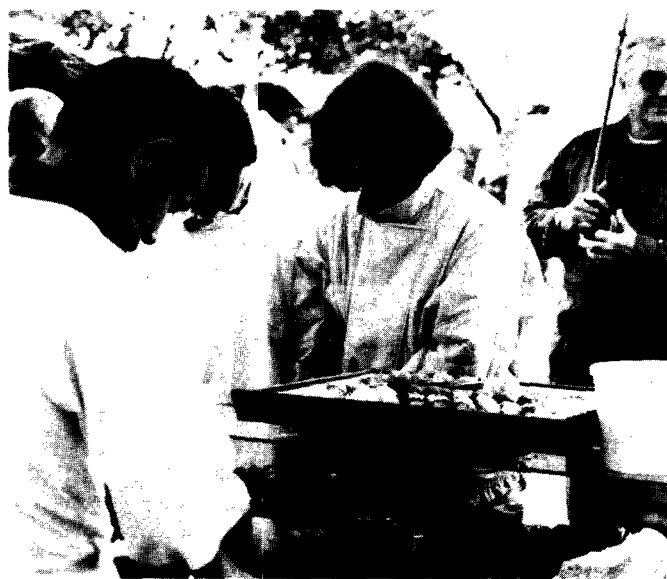
Education was the focus for DFO's companion in the tent, the Steveston Senior Secondary School hatchery project. Students and teachers had photographs and a model of the project on display and were offering T-shirts, buttons and "Adopt an Egg" certificates to visitors.

A contest to guess the number of fry in the display tank brought guesses ranging from 88 to 2,500. Only one entrant, 13-year-old Brian Cross of Richmond, got it right. His estimate of 271 fry won him the prize -- a large chinook salmon. Fortunately, according to Brian's mother, he is a good cook.

The day's activities also involved another participant. Tom Siddon, Minister of Fisheries and Oceans, represents Richmond-South Delta and he dropped in at the tent to sample the sushi and don a button. He also took time to visit the school's hatchery and meet teachers and students involved in that project.

The enthusiasm of the many visitors made the day enjoyable, even for staff and helpers who were drenched long before it ended. It was great to hear people expressing real interest, to see kids proudly displaying starfish on their hands and to hear Festival chairman Jack Gilmore say that he would "like to see more of these informational displays in the future."

So would we, but next time we'd like dryer weather!



Fortunately, the sushi demonstration was undercover -- who would sample soggy sushi? This event was a real attention-getter and a natural for a community with a strong Japanese heritage. The samples even won some new sushi fans.

A child's view

Salmon River history

The following is one of a series of essays written by Grade 6 students at Salmon Arm West Elementary School and sent to Sounder by community advisor Dennis Demontier. We thought you would find this student's perspective interesting.

The History and Future of the Salmon River

About 75 years ago the old timers could climb Mt. Ida and see the river red with salmon.

Until 1913 the dominant runs returned in odd-numbered cycle years. That year in fact produced the greatest number ever recorded -- 31 million fish and 6 million spawners to head upstream, but 1913 was also the year when rock rumbled into the Fraser. This was caused by railway builders and the slides blocked the river at Hell's gate in the Fraser canyon. Most of the sockeye belonging to the Salmon River were cut off as a result.

Today's runs are increasing bit by bit. In 1982 there were 1,602 sockeye. Chinook and coho also did well that year. The number of chinook has averaged around 300 to 500. Coho have averaged about 800, but they often exceed 1,000 in the run. Last year the run was good for both coho and chinook. There were 1,670 chinook and about 3,800 coho.*

Other salmon runs are increasing in the Shuswap thanks to the Eagle River hatchery which is located 15 miles east of Sicamous. This hatchery was begun in 1982. Since then all chinook and coho salmon runs are increasing.

Clearing trees on the side of the river has been a problem. When they clear the land the water heats up. The small fish will have no shade and heat up and die. Some people along the river have also taken salmon illegally by spearing them or blocking off part of the river and scooping them out. Farm waste can also pollute the river and kill young fish and the insects that they feed on.

It is hoped that these runs will continue to do well. Maybe we will once again be able to climb Mt. Ida and see the river red with salmon.

Andrew Comber
Student

* These numbers refer to Salmon River returns only.

PBS will play host

In response to numerous requests from visitors and clients, Fisheries Research Branch is busy planning for another Open House at the Pacific Biological Station in September.

The theme of this year's event, scheduled for September 18 to September 21, is: Come to the Pacific Biological Station - Where Science Meets the Sea. Our new research vessel, the W.E. Ricker, will be one of the major attractions. Visitors will be able to tour the vessel and see displays on what happens to B.C. salmon on the high seas, a state-of-the-art shipboard computer, and demonstrations of sophisticated hydro-acoustic equipment.

The station will be transformed by a huge variety of displays covering all major areas of fisheries research. There will be lots to see and do. Some of the highlights will include descriptions of fluctuations in herring fisheries around the world and our explanation for the cycles of abundance which make B.C. herring so difficult to manage. There will be an innovative groundfish display where visitors will begin by walking into the mouth of a huge trawl net and will be tagged with tags specially designed for the occasion; touch tanks for children of all ages; displays about our world famous Aging Unit, graphs illustrating trends in coho and chinook production and survival over a number of years, sport fishery research, salmon migration; computer games to learn about salmon and even something called Life cycle . . . a movie on the computer.

Open House hours will be

Thursday, Sept. 18	
(school groups)	- 10:00 a.m. - 3:00 p.m.
Friday, Sept. 19	- 9:00 a.m. - 8:00 p.m.
Saturday, Sept. 20	- 9:00 a.m. - 8:00 p.m.
Sunday, Sept. 21	- 10:00 a.m. - 5:00 p.m.

REMEMBER: TODAY'S RESEARCH IS
TOMORROW'S TECHNOLOGY.

Kelly Francis
PBS

So long, Mom and Dad

When do we get going?



Ready to cast off, the essay contest winners were pictured aboard the John P. Tully. Alvin Loke and Julie Klassen were headed for the Beaufort Sea and Tuktoyaktuk -- a three-week learning adventure.

Photo: Mary Jean Comfort

Loaded with cameras, film and warm clothes, two beaming and not-a-bit teary students -- Julie Klassen and Alvin Loke -- walked up the gangplank of the CSS John P. Tully, waved goodbye to their parents, and settled in for a three-week trip to the Beaufort Sea.

In early May, when Fisheries and Oceans Minister Tom Siddon (MP for Richmond-South Delta) hosted students for a day aboard the Tully, he issued a challenge. He asked students to write an essay, the winning prizes for which would be a trip on the Tully.

Thirteen essays were received and were judged by four of the scientists who participated in the open house on the Tully and at the West Vancouver lab. All of the essays' showed thought and enthusiasm but two clear winners emerged: Julie Klassen, 17, of New Westminster Secondary School, and Alvin Loke, 16, of Steveston Secondary.

Once parental consent was received (all seemed as excited as the winners themselves), it was a matter of sorting out the details and making sure they had airline tickets in their hands and a few instructions about how to get home from Tuktoyaktuk.

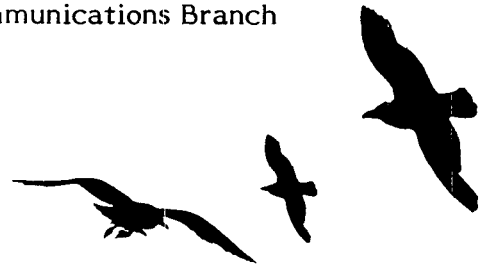
Julie and Alvin will be standing regular sea watches (four hours on and eight hours off) with the hydrographic personnel and will learn to operate the echo sounder, satellite positioning system, Loran C, and to assist in data logging and data processing procedures. They will also

be given the opportunity to stand watches with the ship's crew on the bridge.

The Tully sailed on July 7. When it arrives off Tuktoyaktuk, Julie and Alvin will be flown into Tuk and housed at the Polar Continental Shelf Project base camp. They'll have an opportunity to visit Tuk before they begin to make their way back to Vancouver.

Because the two winners have already demonstrated their writing and observation skills, we've asked them to provide us with impressions of their trip. So, stay tuned for first-person accounts.

Mary Jean Comfort
Communications Branch



F.C. Withler 1922-1986

Sounder has learned of the death of F.C. (Fred) Withler, past director of the Pacific Biological Station, in the Nanaimo Regional Hospital.

Withler was born in Kamloops on August 7, 1922. In 1942 he worked for the Fisheries Research Board as a seasonal employee. He obtained his bachelor's degree from UBC in 1945 and his master's in 1947. In that year he became a permanent staff member as an assistant biologist, working on the Skeena.

After a brief interval (1951-1952) of educational leave in Cambridge, England, he returned to his duties as an associate scientist in charge of the Babine Lake project, then as principal scientist in charge of Skeena Salmon Management. He became an assistant director (1960-1962) and, briefly, acting director in 1963.

His subsequent duties included leadership of several important projects (Salmon and Experimental Investigations, Special Salmon Projects, Salmon Hybridization and Stock Establishment and Improvement). He served again as acting director from 1977 to 1980 and retired in 1982, after 37 years of service.

The Optimape Odyssey *Part III*

You may remember, dear reader, that we left Tom (the fishery officer) and Mike (the biologist) drifting helplessly around Rince Poophard in search of the ever-elusive Optimape. As we pick up their story, our heroes are close to despair...

Things became so bad that sometimes they'd hear voices crying in the wind on a rainy Rince Poophard night.

"Total return?" the wind would shriek, "You're out of your skulls. Don't you know that the typical catch estimate for any given area fails to include salmon caught in interception fisheries in other areas? You must be blind not to see that this same estimate more often than not includes salmon bound for streams outside the area. Fools! You'll never be able to separate the catch in mixed fisheries. And you'll never, never be able to catch a real, live Optimape."

The clincher was a ghost in a tattered green uniform and big, black boots. He'd come fumbling into their room at night, falling over the chairs and groping about in the bedsheets to wake somebody up.

"I am the ghost of Personal Knowledge," the spook would moan, "come to show you the error of your ways. Follow me." There would be a nasty, shattering noise, since the ghost never remembered to open the window on these midnight excursions, and neither of our heroes was able to exit the room without his corporeal body. Tom (or sometimes it was Mike) would eventually find himself high in the air, staring down at 40 tangled miles of spawning and rearing habitat.

"Give me your personal assessment of the capacity of this system," the spectre would cackle. And Tom (or Mike) would remember how hopeless it is to estimate properly the carrying capacity of salmon habitat. They both knew, after a couple of these trips, that they didn't have a ghost of a chance of getting a real Optimape, no matter what the whizkid in the swivel chair said.

In the twenty-first year of their search, Tom and Mike regained a measure of hope. A district supervisor, known for the unbridled ferocity of his practical jokes, told them of a greatly skilled magician who claimed to have discovered a new, modern, and foolproof way of trapping Optimapes -- all without ever leaving the office. Stilborn (for this was the magician's name) was associated with a place called the School of Animal Husbandry in a remote and

generally inaccessible part of Vancouver, where there are few animals, most of them without spouses. Tom and Mike did not like the thought of becoming involved in the conjugal conduct of animals (you can see how far behind the times they were, after being so long on the road). But two weary years in Rince Poophard had persuaded them that anything was better than nothing.

The great magician was delighted to see them, and took them immediately to his workshop. This was a large subterranean room, filled with computers, computer printers, and computer printouts. There were black screens, and blue screens; there were orange screens, and green screens -- all glowing so violently they made your eyes hurt. On the screens were bar graphs, pie charts, scatter graphs, and line graphs, all preceded by terribly impressive formulas mixed up with tables and tables of fantastically impressive numbers. Tom and Mike were bemused.

"Thank all the saints in Victoria, and all their holy mothers," they murmured in unison, "for high technology and higher education."

The great mage himself brought them back to reality. "What I've done," said the great magician, "is apply Ludwig von Schtinker's theory of varying and residual multiple regression to an analysis of salmon escapement and catch statistics. It can't miss. You have to make a few assumptions about the raw data, of course, but nobody has ever given me reason to do otherwise."

Tom and Mike were stunned. Once again, they could hear the disembodied voice in the hallway of their apartment in Rince Poophard. The laughter of the old drunk rang in their ears, the wind whistled as of old, and they fully expected the ghost of dear old Personal Knowledge to come shambling through the door. No amount of electronic sorcery could banish the familiar demons. They left the workshop of the magician in great sorrow and misery.

Join us again in the next Souder to enjoy the final, thrilling chapter in this remarkable story.

Legal aid



"It's a really interesting time and place; there are issues here that you never encounter elsewhere."

That is the opinion of Jim Wallace, recently appointed as prosecutor for the department.

Jim came from the Justice Department as the second of two secondments to DFO, following Warren McCrimmon's arrival last fall. Whereas Warren's responsibility is to advise the department on property and contractual matters, Jim's function is to see that DFO has the best possible chance of winning in court.

Both appointments resulted from a request made by Wayne Shinnars during his tenure as director general. Wayne felt that the Department needed more direct legal services than it was getting under the system of the Justice Department assigning lawyers on a case-by-case basis. He asked for two lawyers, each seconded to the department for a two-year term.

Jim was working on conspiracy prosecutions for the Criminal Section of the Justice Department in Vancouver at the time and did not hear of the proposal until later. This spring, "looking around because there wasn't much variety left in what I was doing,"

Jim remembered hearing about these posts and found that the litigation position was still open. It offered something new.

Now that he has begun to really get into his new job, Jim agrees with Wayne's conviction that dedicated legal counsel is essential for DFO:

"With Fisheries the litigation plus their other interests -- contractual interests -- are so vast that you really can't do it from a distance; at least you can't coordinate it from a distance. If you were phoning the Justice Department and getting different lawyers giving different opinions; that leads to confusion."

Jim is coordinating efforts, supplying advice and expertise to field staff, advising senior management and overseeing the preparation of court cases.

Is the job offering the variety he was seeking?

"There are now a lot of lawyers over at Justice who think it would be great to work here. I guess because I enjoy it -- it's a lawyer's dream. There are issues here that you never encounter in private practice, or even at Justice."

The issues that the Department faces, in legal terms, involve resource matters and constitutional issues; everything from someone with a few undersize clams to native land claims. One of Jim's activities is to sift through all the relevant court decisions and see that new cases involve full use of such background. Many of us do not think about it, but judges do not know all the law; it is counsel's job to provide the precedents and present the legal arguments as well as the evidence in a given case. If the opposing lawyers do a better job of either of those two areas, the Department may lose the case. This means that the collecting of all relevant material for use in preparing cases is essential.

Jim has high praise for the efforts of Maurice Bogart in this direction:

"Over the years, he has taken an interest in the law and has become as proficient as many lawyers in understanding the constitutional issues. He has assembled a library of cases that I'm sure has to be unique in the country. Now when we service our agents around the province with this information it will be more easily accepted because I am a lawyer talking to other lawyers."

On the question of how well DFO has been faring in the courts, Jim feels that the record is

Cont.

Legal cont.

pretty good. There are, however, areas where we can strengthen our efforts. One is in the previously-mentioned area of providing all the legal arguments that may have a bearing on a given case. Another is in making sure that the judge really understands the seriousness of the issues.

"Judges just don't see the taking of undersize clams as being as serious as many other items on their case lists," Jim explains. He feels that one of the more essential elements of our case preparation will be the evidence, from fisheries officers and biologists, that proves that it is serious.

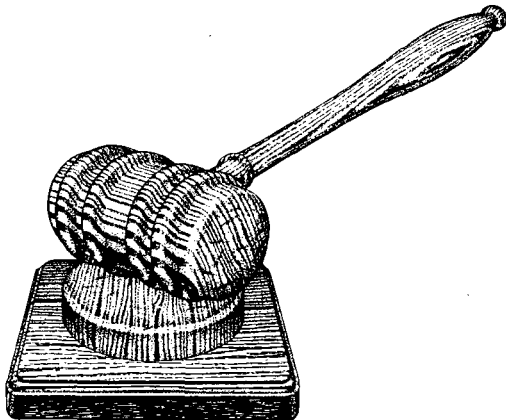
"We have to make it real to the judge," says Jim, "that a person fishing in a closed area is as serious an offence as fraud or theft -- it is theft." He also makes the point that judges can be persuaded that light penalties for such offences tend to have an impact on public attitudes.

"When it happens, and everyone knows it, that contributes to an aura of lawlessness."

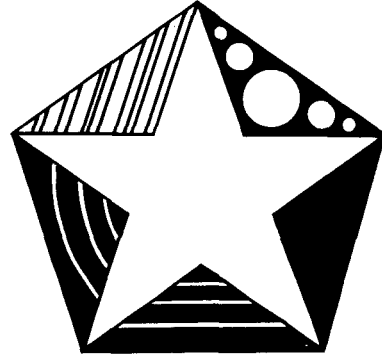
As well, Jim feels that the testimony of the fishery officer about the impact of an offence on the local situation and the resource in general is vital; judges feel more respectful towards the resource when they have this information. Public awareness and concern is necessary; when we can create that, the judges respond to it.

Also on the horizon are the native issues: "They demand resolution," says Jim. The Department will certainly be substantially involved in this area, too.

It seems very likely that Jim will continue to find this an interesting time and place.



A new star



Media stars are made by events; a hit record, a royal wedding, an outbreak of red tide - red tide?

That's right; since the outbreak occurred late in July, shellfish coordinator Rudy Chiang has been interviewed almost as often as Prince Andrew's ex-girlfriends. Rudy has been literally swamped with calls; CBC (Vancouver and Whitehorse), CKVU, Almanac, Barry Clarke, the Sun and Province, even Sounder.

"I haven't counted, but we must be getting about 20 to 30 calls a day from the public and the media," Rudy said on July 24.

Asked if all this media attention had interfered with his day-to-day work, Rudy responded, "For now, this is my day-to-day work!"

He noted, however, that it has been hard to attend to the rest of his duties. Red tide blooms sometimes come in bunches, and some shellfish can retain the toxins for months, so the issue will be a factor for some time yet. Rudy thinks he will be able to get off the phone and back to other activities soon, though. As he accurately observed, "The press will tire of it."

Rudy's media time has shown how quickly and thoroughly DFO reacts to a potential public health hazard, according to Communications Branch director, Jack Nightscales.

SEA

THE FUTURE

**The Global
Ocean Community**
September 12, 1986

**Ocean Technology and
Resource Development**
September 13 and 14, 1986

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The way it was

Historic Note: The following was published ten years ago in Sounder.

REPORT OF THE DEPUTY MINISTER WESTERN DIVISION

Following an investigation by the Biological Board, the sockeye hatcheries in British Columbia (with the exception of Cultus Lake where further study is being carried out) were closed as per Order in Council P.C. 518 dated March 2, 1936. Copy of the order follows:-

P.C. 518

CERTIFIED to be a true copy of a Minute of a Meeting of the Committee of the Privy Council, approved by the Deputy of His Excellency the Governor General on 2nd March, 1936.

In the light of the above [results], the following conclusion was reached by the Biological Board:-

"On the whole it may reasonably be concluded that in an area such as Cultus Lake, where a natural run of sockeye occurs with a reasonable expectancy of successful spawning, artificial propagation, for purposes of continuing the run to that area, is unnecessary and, if producing any additional results over natural spawning, these would not appear to be in any way commensurate with the cost.

"This conclusion may not apply to areas where there is no reasonable expectation of successful natural propagation."

The Minister observes that it was the hatching of sockeye salmon only that was in question, and the investigation does not reflect adversely on the hatching of trout and Atlantic salmon that is being carried on in different parts not only of Canada but of several countries in the world, the good effects of which so far as Canada is concerned, have already been reasonably established.

The following salmon hatcheries in British Columbia are being operated by the Department of Fisheries:-

Babine Lake and Lakelse Lake on the Skeena River; Rivers Inlet; Anderson Lake and Kennedy Lake on Vancouver Island; Cultus Lake-Smith's Falls, Pitt Lake, Harrison Lake and Pemberton on the Fraser River.

In light of the findings of the Board and as a natural run of salmon, with a reasonable expectancy of successful spawning occurs to all the areas in which the above named hatcheries are operated, the Minister, on the advice of the Deputy Minister of Fisheries, recommends that

when the present season's operations in the above named hatcheries are completed, they be closed, and disposed of to the best advantage, and that the employees therein be then retired under the conditions provided by law.

The committee concur in the foregoing recommendation and submit the same for approval.

(Sgd.) E.J. LEMAIRE,
Clerk of the Privy Council.

Tidings *Cont. from 16*

Maxine Glover (nee Haugen), president of Glover Business Communications, one-time DFO employee and founding editor of Sounder, has startled friends and clients with her decision to "retire." (There are those who aren't sure Maxine is old enough to drink yet, let alone retire.) Sounder's coeditor, Dixie Cutler, becomes general manager at GBC with special responsibility for client services (so, if you don't get your Sounder on time...) Maxine insists that her plans, at least for the next few months include "nothing, nothing, and more nothing." We are sure all her friends at DFO will be wishing Maxine the best of everything (or of nothing).

The following birth announcements reached Sounder recently:

Born to Greg Rahier and April Sweet, North coast enforcement unit, a son -- Benjamin Albert, weighing 3.85 kg (8 lbs. 11 oz.), on April 30, 1986 at 10:23 p.m.

Proud Aunties & Uncles are:

Little Ricky
The Rroyd
Hortnervetner
The Duck
The Mystery Moore
The Fert Clerk

Born to Lucia and Milan Kupr, fishery officer at Rivers Inlet, a daughter, on July 15, 1986; Samantha Amy is their first child.

Pacific Tidings



Diane Gillies won the competition for fish morphology technician, Scale Lab, Salmon Services, Vancouver.

Fred Nolte left DFO on June 19, 1986. Fred was the fish quality specialist for the Northern Inspection Division, FSB.

Harry Blodgett won the competition for fishery warden on a seasonal basis for the Lower Nass (Aiyansh) Area, North Coast Division. D. McIntyre, who formerly held this position, resigned.

Jan Pope resigned from the Department of Fisheries and Oceans, Licence Section, Vancouver.

Judy Roberts has accepted the program assistant position for the Licensing Unit, Vancouver.

Angeline Rashbrook won the competition for inspection clerk, Victoria, South Coast Division.

Sharon Johal won the competition for the Steveston Subdistrict clerk position, Fraser River Division.

Relocations of fishery officers:

Randy Brahniuk transferring from Qualicum Beach to Nanaimo; Bruce McDonald, from Surrey, B.C. to Whitehorse, Yukon; John Inkpen, from Vancouver to Prince Rupert; John MacDonald, from Kitimat to Qualicum Beach; Jerry Kozak, from Queen Charlotte City to Surrey; Ben Mitchell-Banks, from Prince Rupert to Bella Coola; Tim Young, from Whitehorse to Port Alberni; Gary Cardinal, from Surrey to Queen Charlotte City; Ray Sjolund, from Prince Rupert to Queen Charlotte City.

Wally Kowalzyk won the competition for fishery officer in Powell River, South Coast Division.

Kelly Bertrand transferred from New Westminster to accept the fishery officer position in the Surrey Subdistrict.

New fishery officer trainees joining the Department:

David Alger
Douglas Cowen
Brock Bailey
Michael Jones
Gary Miller
Richard Senger
Nancy Seigel

Elaine Douglas won the competition for Subdistrict clerk on a part-time basis in Masset, North Coast Division.

Willie McKenzie, extension officer, Native Affairs, has left DFO.

Denise Zinn has been offered the position of district clerk, District 7, Kitimat. She has been acting in this position since January, 1986.

Betty Ng, administrative assistant, Field Services Branch, Vancouver, has left the department to take a job with private industry.

Christine Stenecker, micom operator, Habitat Management, Vancouver, has transferred to the DFO/EPS Lab in West Vancouver.

Margaret Birch, head, Salmon Services Unit, Vancouver, has returned to work after a leave of absence.

Vilma Miller, supervisor, Operations Unit, Offshore Division, has returned to work after a leave of absence.

Catherine Ho, word processing operator, left DFO on June 13 for the better life of travel and sun.

Edith Tubana, word processing verifier/operator, will be returning from maternity leave July 18.

Colin Harrison is going to Eagle River as manager, leaving his position at Nitinat hatchery open.

Spilus Hatchery was officially opened on May 30.

Alex Rose, of Communications Branch, has signed to write a series of features for B.C. Business magazine on "any subject except fish." "I call it my Sunday writing," he said, "and it helps pay for my new computer."

The first article, in the July issue, was a profile of the successful Pastel food chain.

Look for more, on other subjects (not fish), in the next several months.

Ann Miller will be greatly missed by all when she retires from Information Technology and Systems Division on August 15.

Anne started to work for Fisheries when the division was known as Computer Services and had office space at Block Bros. She has survived several office moves, 3 chiefs and a division expansion from 4 to 20 people (including the group at PBS).

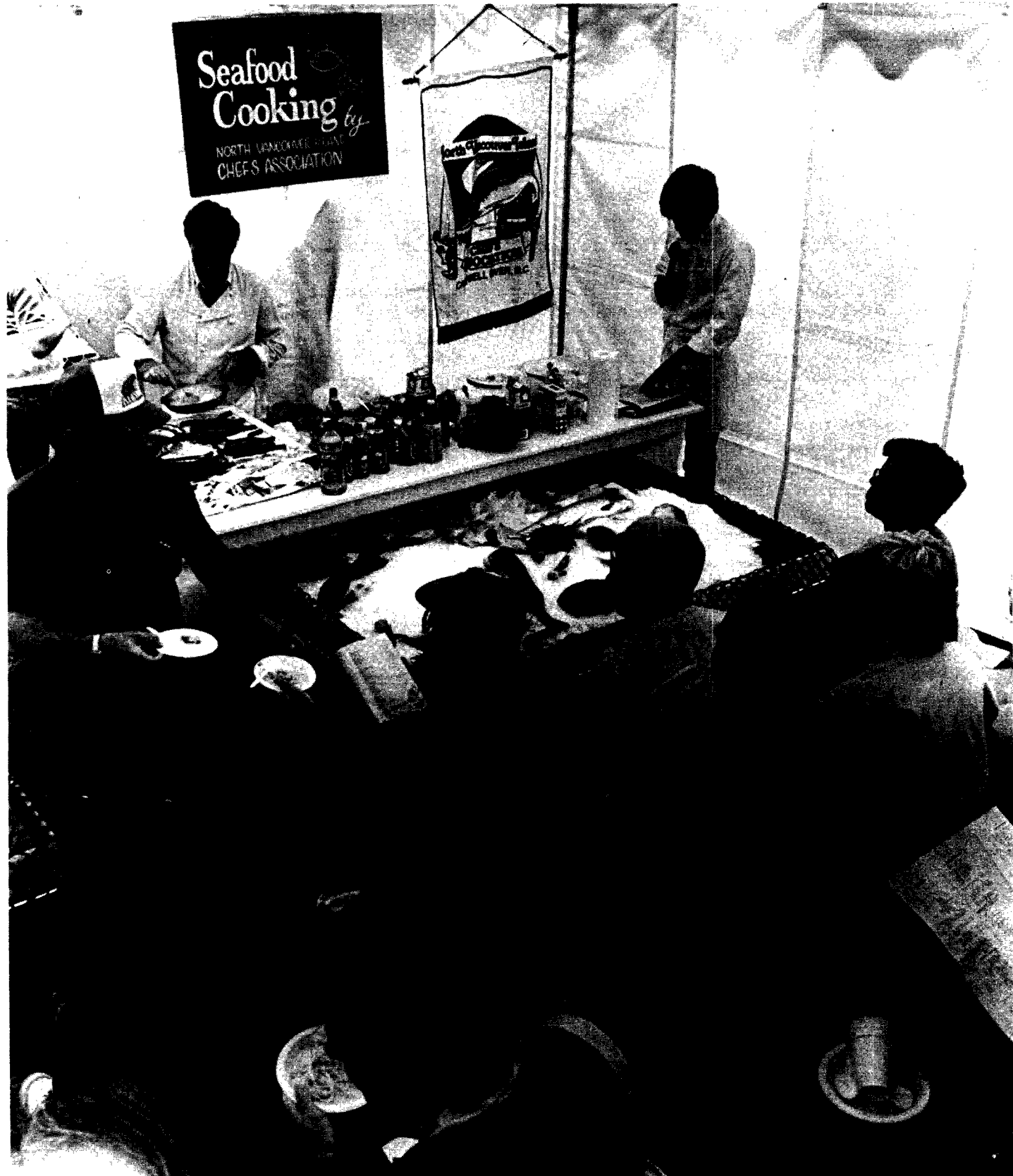
IT&SC chief, Mike Romaine, was MC at a surprise luncheon held in her honour on July 25.

Anne and hubby Fred plan on doing some travelling (first stop Hawaii) and then just some plain old relaxing.

SOUNDER

Volume XIV Number Six

September 1986



Our Resource at Campbell River and Port Hardy

Transplant committee

If you want to transplant a bush, there's not too much to worry about. If you want to transplant fish (including shellfish and crustaceans), that's another matter.

Fish are subject to diseases, often unique to one species, one stock or one water system, and to parasites. As well, each stock has its own particular genetic programming. While we do not understand fully the implications of all the genetic differences, we do know that fish from one water system might not do well in another. Transplanting fish from one place to another can also raise questions about predation (on the transplants or by them) and competition with native species.

These are serious and complex issues, but they do not altogether outweigh the benefits that can be obtained with transplants. Each situation must be considered individually. This is the reason for the joint federal-provincial transplant committee. The committee's function is to receive and evaluate all transplant applications and rule upon them. Transplant approval is required for imports of fish, except tropical aquarium species, as well as transplants of fish within B.C.

Applications may be approved, amended or rejected, depending upon the degree of risk represented by the planned transplant. The least problematical situation is where there is a request to transplant fish stocks that have been tested and found to be free of disease or parasites. In such a case there is very little danger of disease outbreaks or parasitic infections. Where the transplants will share water with native populations, however, the care taken is greater and the safeguards required are more stringent.

The two main concerns of the committee are the introduction and spread of disease and parasite spread. Other factors are also significant, but the committee does not have the time and resources to properly evaluate genetic or predation concerns. For this information, the committee relies upon the judgment of the fishery managers in the area involved. All applications must come to the committee bearing the approval of local fishery managers.

The workload is considerable and all committee members have their regular job obligations to fulfill. Some automatic exemptions do exist for transplanting of specified species of trout from particular hatcheries to lakes or streams where the species already exists. These transplants are carried out by employees of the provincial Ministry of Environment.

There are a few other transplants which do not require an application to the committee, but these are quite specialized. As a result, the committee has processed more than 2,300 applications since 1977.

While the majority of applications are approved, some are rejected (about two per cent) and others, which raise special concerns, are subject to conditions. In yet other cases, the application may leave questions in the minds of committee members. Such applications are then returned to their originators with a request for further information or clarification.

The committee is also responsible for setting up an appeals procedure and for developing transplant policy and guidelines which may eventually reduce the number of individual applications that must be processed.

With the current growth in the aquaculture industry, and ongoing enhancement efforts, it is likely that the function of the transplant committee will assume greater importance in the future.

Further information on the transplant committee can be obtained at the following phone numbers:

756-7057 (DFO Nanaimo)
758-3951 (MOE Nanaimo)
666-2417 (DFO New Westminster)
387-9589 (MOE Victoria)

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Cover

"Neptune Know-How" was a hit at the Campbell River awareness campaign. Three cooking shows per day for two days attracted more than 450. The 50-seat bleachers were full for every show, with standees as well.

The Optimape Odyssey *Part IV*

As we begin the final chapter of this story, we find Tom and Mike in a state of total confusion and fearful that they may never capture their quarry. They have been wandering for more than 20 years in search of the Optimape. Experts and wizards of every type have failed them. Read on for the startling ending to our saga . . .

This should have been the end of the matter, but it wasn't. Someone in Personnel insisted that Tom and Mike check things out with an even greater magician, one Tarkin by name. This was a guru whose fame was acknowledged among all the high priests of salmon management. His word was law, and his judgment on the quest would be final. Tom and Mike took a brief, 50-page summary of their search to him. Tarkin examined Stilborn's graphs with the look of a man who has discovered something unpleasant on the sole of his shoe, and then he pointed wordlessly to a definition pasted on the wall above his latest Certificate of Merit.

"Optimape" it read, "a pseudo-acronym often used in reference to optimum escapement -- i.e., a deliberate melding of biological, economic, social, and political values designed to produce the maximum benefit to society from stocks that are sought for human use, taking into account the effect of harvesting on dependent or associated species." Tom and Mike turned abjectly to the great Tarkin for enlightenment concerning the use of this awesome incantation.

On hearing the answer, Tom's heart sank to the bottom of his size 12 boots, and Mike's fell to the level of the floor below his sandals. "I really don't know," Tarkin murmured gently, "what the definition means. I'm sorry. I can't help you find an Optimape. I just don't believe in them anymore."

Well, how would you feel if you'd spent 25 years looking for a mythical beast and being misled all over the coast by all those fake specimens in the salmon files? Tom and Mike would have turned to drink if they hadn't been made of sterner stuff.

The Optimape Committee had drifted apart years ago, and their supervisors, gray-haired and more confused than ever, no longer remembered what the great quest was all about. Worse, nobody had ever bothered to read the reports over which they had laboured; the volumes of paper on which they had lavished so many gallons of ink were lost

forever, buried and moulding among the piles of forgotten documents stored in a dimly-lit basement.

Tom and Mike drifted for weeks through the Big Bender Street office, distraught and disoriented, forcing the story of the Odyssey down the throats of anyone they could corner. At last, their tale caught the attention of Balls McDick (He's the little round guy with the pipe -- you know, the one who comments on anything and everything in sight by drawing pointed and often obscene illustrations.). The Optimape Odyssey really set him off.

"Optimapes," he fumed over his glasses, "I hate them."

Encouraged to qualify and expound on this assessment, he continued lucidly, "I hate everything about them. I always hated them. I wish you'd take the whole thing away and bury it." Whereupon, he dashed off 14 pornographic cartoons, photocopied them, and put a copy on each of the 6,327 desks in the Great Puzzle Palace.

It's a shame more people didn't see his cartoons. Tom and Mike retired last year to a life of comfortable obscurity. To this day, nobody has every read their reports, and a lot of folks still happily believe in the Optimape. Faith like that is hard to shake.

This is the final instalment of The Optimape Odyssey. We want to compliment technical writer Mal Sharpe on his wit and imagination and thank Brian Richman for bringing this saga to our attention.

Editor

Sounder is the staff newsletter of Fisheries and Oceans, Pacific Region. **Sounder** is printed eight times per year.

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Government of Canada
Fisheries and Oceans

Shellbacks return

Those who have crossed the Arctic Circle are known as "shellbacks" and two members joined the club this July. Students Alvin Loke and Julie Klassen were the lucky winners of a DFO essay contest. The prize was a three-week trip into the Arctic aboard the CSS John P. Tully.

Did the shellbacks enjoy the experience?

"I want to go right back. Does that tell you how great it was?" Julie says.

"The people on the ship were really friendly; it felt just like being at home." says Alvin.

Those two sentences sum up much of the reaction that the travellers expressed when Sounder contacted them a few days after their return to the Lower Mainland.

The trip involved many experiences for the students; they were able to observe the scientific work aboard the Tully, take part in some of the research activities, watch the icebreaker Martha Black getting stuck in the ice and explore Tuktoyaktuk before heading home.

The trip did have a price tag of sorts; each of the students was required to turn in an essay giving impressions of the voyage. Some excerpts follow.

"Well, what was the purpose of sending some 40 people to the Pacific, where water met the sky in every possible direction? Obviously, to support the Canadian Hydrographic Service. Around the clock, more than 10 hydrographers were involved in collecting data that included ocean floor depths from echo soundings, bathythermographs (comparing sea temperature and depth) and the measure of the earth's magnetic field. All data were recorded with at least two systems monitoring the ship's position. I participated in gathering the data and was frequently lectured by the hydrographers about the theory behind the equipment.

"During the voyage, I travelled through many different waters while witnessing many different encounters. The wildlife was marvelous, especially the graceful whales, the swift Dahl porpoises and the long-range waterbirds. The anchorage at Point Barrows, Alaska and at Tuktoyaktuk, N.W.T. was a good chance to tour two typical Arctic communities -- a rare sight for city dwellers. The Tully's meandering through the ice was another magnificent experience."

Alvin Loke

"First, of course, hydrography. Under Mike Woods, hydrographer in charge, and my shift partners, Geoff Methuen and Carol Nowak, I was able to take a fairly active part in the GEBCO (General Bathymetric Chart of the Ocean) soundings. Because of this, I gained quite a bit of practical experience and of course, learned a lot.

"I'll use the remaining space to again thank everyone at DFO, IOS, Polar Continental Shelf Project, and especially everyone on board the Tully (sorry I couldn't put all your names in print, guys) for giving me what will probably be the best three weeks of my life!"

Julie Klassen.

Honoured



Dieter Abraham (right) was recently presented with an incentive award and congratulatory letter from the Deputy Minister by Kitimat hatchery manager Dave McNeil. Dieter is holding the "Kitimat Creeper Sweeper" for which he received the award.

The sweeper is a self-propelled baffle for cleaning rearing troughs. At a major production facility these cleaners eliminate significant manpower requirements and cause less stress to rearing fish than conventional cleaning practices because of their gentle action and slow movement. Dieter is a fish culturist at the Kitimat hatchery and enjoys a reputation as an expert angler.

Cam West
SEP Operations

Water workshops

The Department of Fisheries and Oceans has the mandate and has had the demand for many years to assess the impact of instream water use on fish and fish habitat. Several major studies have been carried out using a variety of techniques. The increasing competition for water over the last decade, particularly in the western United States, has produced many different methods for assessing instream flow requirements for fish.

To assist Pacific Region staff in acquiring the knowledge, field methods and analysis techniques required, a two-part workshop was held in March and October, 1985. The workshop was sponsored by the Water Use Unit and organized by a group of core and area Habitat Management staff, in cooperation with Research Branch and Provincial Fisheries Branch employees. A wide range of participants attended, including federal and provincial habitat biologists and technicians, research scientists, engineers and engineering technicians.

Four of the more than thirty recognized instream flow methods; the Tennant, Collings, Wetted Perimeter and Instream Flow Incremental Methodology (IFIM); were selected for discussion. Experienced staff explained all four methods in detail. These methods range from quite simple ones to complex methods involving extensive field data and computer simulations.

Lectures on background material such as hydrology (water sciences), hydraulics (motion of liquids), geomorphology (study of landforms) and the biological effects of flow changes were presented. Practical exercises in the application of the Tennant, Collings and Wetted Perimeter methods were carried out. Examples of instream flow problems were selected from three areas for use in the first practical exercise session. The streams chosen were Chapman Creek on the Sunshine Coast; Hixon-Or Creeks, tributaries to the Indian River and Buck Creek, a tributary to the Bulkley River. The second session was held in Parksville and on the Englishman River. It focussed on instrumentation and data collection techniques. Practical exercises using the field data collected on the Englishman River were carried out.

Guest speakers included Bob Newbury of the Freshwater Institute, Dick Lopaschuk of the Water Survey of Canada, Al Kohut of the Groundwater Section, B.C. Ministry of Environment and numerous specialists from Pacific and Provincial Fisheries. A complete



Pacific Region Habitat staff learning instream flow methods on the Englishman River.

reference binder was prepared, and copies are available from the Water Use Unit, Habitat Management Division, 3rd floor, 1090 West Pender Street, Vancouver.

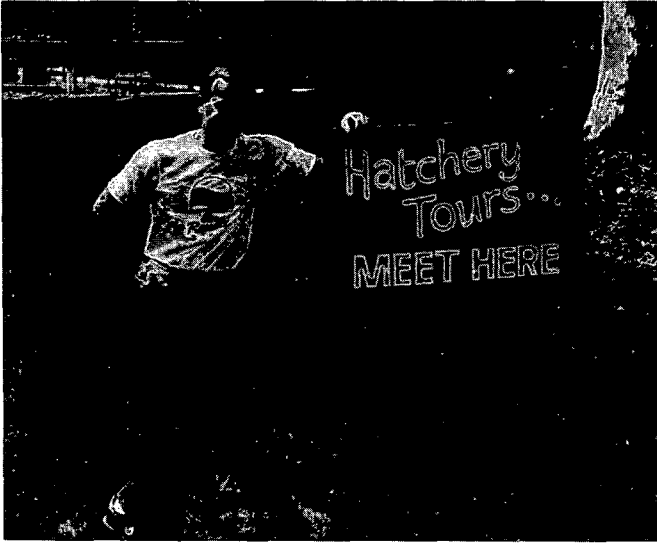
Where are we now, one year later, with the use of instream flow methods in the Pacific Region? The comparison of flow recommendations involving various techniques is currently being carried out on the Nechako River. The IFIM method has been applied by a consultant and DFO checked those recommendations using the Tennant and Wetted Perimeter methods and is continuing to scrutinize the results.

Comparisons of other working examples need to be carried out to gain experience in how the various methods may be applied. Modifications to the methods may eventually be necessary for Pacific Region streams, because of different species criteria or the wide range of water and weather conditions in British Columbia and Yukon.

The workshop recommended that the methods require calibration and may require modification for use in British Columbia. This should be a future priority for habitat research. Susan Blachut
Water Use Unit

Our Resource news

DFO's public awareness campaign has taken part in the Campbell River Salmon Festival for the past three years and is viewed by many people as "the best thing in the festival." It is an event that residents of the community have come to expect and enjoy. This year the Festival Society presented a certificate of gratitude to the department for its participation and assistance in making the festival an annual success.



Taking touring with ease, Dave Ewart takes a break while waiting for the next tour group for Quinsam hatchery. During the awareness campaign, six tours per day were conducted through the facility, attracting about 500 people over the three-day open house event.

Events were held on June 29, 30 and July 1, with DFO tying into the community's Canada Day celebrations. One highlight featured the "manager's tour," a special tour by invitation for local politicians, municipal officials, school principals, and other community leaders. Of 66 invited, 44 attended the guided tour of Quinsam hatchery.

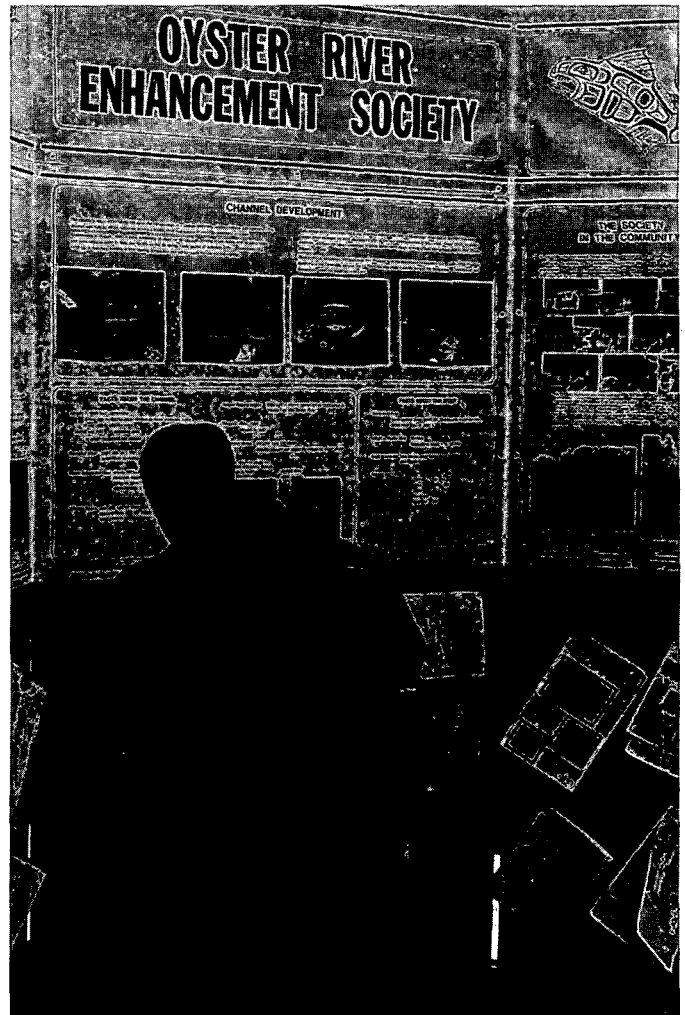
Participation by three local enhancement groups was seen as a particularly beneficial aspect of the 1986 campaign. The Quadra Island Salmon Enhancement Society, the Haig-Brown/Kingfisher Creek Society and the Oyster River Enhancement Society each set up displays explaining their work.

Media coverage before, during and after the campaign has been excellent. Coverage included print announcements; radio interviews with Jim Van Tine, hatchery manager, and Bryan Allen, community advisor; a television interview with Jim Van Tine; and local community TV coverage of the cooking shows

and the various fishery displays. The cooking show will be used on a popular program called "Let's Go Fishing." Campaign events and fisheries involvement in the community will be mentioned throughout the time period the cooking shows are used.

About 1,300 people toured the hatchery, browsed through the displays and watched the cooking demonstrations; even more have been reached through the newspaper and radio and television shows. In addition to reaching a local audience, public response cards indicate that DFO has reached audiences living outside B.C. and from out of the country.

Susan Stitt
DFO Campaign Coordinator



Boosting local awareness of fisheries related activities in the Campbell River area, the Oyster River Enhancement Society participated in campaign events with a display showing their nature trail, spawning channel and various community activities.



About 200 people entered the Heath tray contest to guess the number of eggs in this display at the Port Hardy awareness campaign. Entries came in from Chemainus to Holberg and as far away as Salt Lake City, Utah and Petaluma, California. Pictured here, as she greets visitors, is Cheryl Gunderson, a local high school student working at Quatse hatchery on the summer Challenge 86 program.

The first half of Port Hardy's awareness campaign attracted more than 2,000 during DFO's participation in the community's Filomi Days at the beginning of August.

Events included open houses on both the Chilco Post and the James Sinclair. By all accounts both open house days were highly successful. A fisheries booth, set up on the waterfront during the Filomi Days derby provided information on sport fishing regulations, promoted the sale of sport fishing licences, provided information on head recovery and gave lessons in salmon identification. Photos on local enhancement efforts were displayed and various brochures handed out. Personnel from Quatse hatchery, a CEDP-run facility, were on hand to help and fishery officer Dave Rekdal answered questions. The booth was located close to the weigh-in station for the derby and as a result attracted a lot of sport fishermen.

Other events included fisheries displays in a local shopping mall, a parade entry and other outside activities, such as the fish cleaning contest, on the Filomi Days site.

Susan Stitt
DFO Campaign Coordinator



He looks serious and determined, but local chef Eric Killops lost out in the fish cleaning contest. It was a huge success, mostly because fishery officer Dave Rekdal and community advisor George Bates dug in to help out.



Judges Dave Hall (Small Craft Harbours) and Dean Miller (Campbell River district office) had a hard time picking the tricycle parade winner on July 1.

Sports news



The champs!

The Department took first and second place in the Federal Government Three Pitch Softball League this season. The league is comprised of 19 teams from several federal departments. DFO's two teams, Fisheries and Oceans One (a.k.a. Montezuma's Revenge) and the 1090 Blues finished regular season play with impressive 8-4 and 9-3 records respectively. In its quarter-final game, Fisheries and Oceans One played a tight defensive game to avenge a humiliating 20-3 in-season loss. They defeated RCMP-Two 19-11. In their quarter-final game The Blues played an extremely close game against Indian Affairs. It was only in the last inning that a grand slam home run by Steve MacFarlane put the game out of reach for Indian Affairs. The final score was 15-9 for The Blues.

In semi-final action, Sam Gidora scored 4 home runs and 10 RBIs to lead Fisheries and Oceans One to a 24-12 win over Bank of Canada. The 1090 Blues, with traditional Blues spirit, fought back from a 7-0 first inning deficit and defeated Agriculture 17-13.

Above: The two fisheries teams relax together after the championship game.

For the final game, both DFO teams had to dig deep into the reserve lists to find enough players after the grueling season took its toll in pulled muscles and sprained ankles. Blues short-stop, Steve Johanson, put out a good performance even with a sprained ankle. Two Fisheries and Oceans One players were ill - Mary Hammond with the flu and Richard Jacobson with Beaver Fever. (Richard will be glad to tell you what that is. It's not what you think!) The game was a closely fought battle that ended in a 13-10 win for the Blues. The highlight of the game was the party afterwards, where the two teams celebrated DFO's successful ball season together.

Bill Masse
Economics (and sports reporter)

Team standings

DIVISION A

	<u>POINTS</u>	<u>WINS</u>	<u>LOSSES</u>	<u>TIES</u>
Marine Resources Branch (Victoria)	6	3	1	0
South Coast (Field Services)	6	3	1	0
Mariners (Ocean Sciences - Pat Bay)	6	3	1	0
Beavers (Field Services - South Coast)	6	3	1	0
1090 Blues (Vancouver)	2	1	3	0
Old Farts and Young Tarts (PBS)	2	1	3	0
Blues Batters (PBS and DG)	0	0	4	0

DIVISION B

Broccoli Stalkers (PBS)	7	3	0	1
Highliners (PBS)	5	2	1	1
Montezuma's Revenge (Vancouver)	5	2	1	1
Nanaimo Fish and Wildlife	4	2	2	0
Bio Mass (PBS)	2	1	3	0
Coho (PBS)	1	0	3	1

The Highliners outplayed all opposition to win the seventh annual Fisheries and Oceans Slo Pitch Tournament in Nanaimo. Fourteen teams in two divisions met on the August 9-10 weekend. Each team played four games to determine divisional standings. The two leading teams in each division played off to determine the finalists. The final game between the Highliners and the Broccoli Stalkers ended in a 15-6 win for the Highliners. The 1090 Blues from Vancouver won The Most Sportsmanlike Team award and Montezuma's Revenge, another Vancouver team, proved to be the best partiers. There was really no close competition in their sweep of the Saturday night award for the second year in a row. The Blues Batters won the traditional prune juice consolation prize.

As usual, the tournament was a success from many perspectives. There was some good action on the playing fields, a great time at the Saturday night dance, and some spirited fun in the stands. One competition that promises to escalate in future years was the waterfight. The Blues Batters bombed Marine Resources Branch in retaliation for attacks last year. This led to a lively battle between these two teams. When the Blues Batters launched an unprovoked attack on the crowd, however, they suffered a sneak commando raid, an allied effort by the 1090 Blues and Montezuma's Revenge.

All had a great time and we thank PBS and South Coast management for jointly organizing the tournament.

Bill Masse
Economics

Sign up, señors!



COME SWING IN THE SUN IN SAN JOSE DEL CABO, MEXICO. Nov. 16-22, 1986

We have entered a mixed slo-pitch team from DFO Vancouver in a tournament in Mexico and need more players to join in on the fun.

Airfare and seven nights accommodation for under \$850.00. Free extended holiday airfare to Mazatlan and Puerto Vallarta.

For further details, contact Marcia Miller, Regulations 666-2185.



A gift to last...



Your contribution of
\$4.00 or more deducted every payday
could help . . .

a sick child.

United Way

United Way underway

It's a chance to give. Once a year, DFO employees are asked to give a gift to the community through the United Way. United Way agencies help in virtually every situation in which you would help if you were there. Sick children, families undergoing a crisis, the handicapped, the elderly, the poor and the homeless are given assistance through the more than 500,000 local people who receive United Way support in the Lower Mainland, through 88 agencies.

This year, you might also win a gift for yourself when you support the United Way through the payroll deduction program. Lower Mainland Federal employees who donate just \$4.00, or more, deducted every pay period (or the cash equivalent), will be eligible for a variety of very attractive prizes. These include airline tickets for two to Hong Kong, lunch and dinner gift certificates, as well as other prizes. Eligibility tickets will be available through your United Way canvasser. Draw date is October 24.

Sign up -- even if you don't win, someone in your neighbourhood will receive your gift of help.

Showtime

Is one picture worth a thousand words?

It may be, if you are trying to explain the complexities of the Salmon Management Plan to employees, industry, interest groups or the general public.

The mixed stock fishery issue is easier to show than to explain, so Dave Barrett has produced a slide show that will make it all crystal clear. The slides and script were carefully developed and were even tested on some guinea pigs in Vernon last spring, so you know it tells the story.

If you are interested in arranging to use this program, contact Dave Barrett at 666-2570.

New look

You may have detected a change in Sounder's appearance this month. We have a new typeface, one that is a bit more modern in style.

Sounder has also been on a summer diet, but we expect it will gain the lost weight back in time for the October-November issue.

Marble fishway



Diverting the Marble River: Sven Svensen, John Rolof and Lynda Cooke at work.

The coho could hardly wait for the Marble Falls fishway to be finished.

They leaped in the pool below the falls, straining to spawn above them on the Marble River near Port Hardy.

The pool and weir fishway, now complete, was built to reduce severe injuries caused by seal predation and low water at Bear Falls, less than a mile from Marble Falls, where water flow is rapid.

The river is a spawning ground for chinook and some summer run steelhead, as well as coho.

The project was designed by SEP Engineering's Ed Woo and Lynda Cooke, who will enter second-year engineering at UBC this fall.

Work began at Bear Falls on August 7. Rock was presheared and excavated at Marble Falls, and the flow was sandbagged to allow concrete pouring, which was completed the week of August 25.

Lynda supervised the project, making the 30-minute hike to and from the site from Port Hardy daily. John Rolof and Sven Svensen of Hunter Construction, Courtenay, provided the muscle.

Heavy equipment -- a compressor and a small bulldozer -- were airlifted to and from the site by an Okanagan Helicopters Sikorsky. Concrete was airlifted from Port Hardy.

Close cooperation with local groups involved with SEP will result in the fishway being used to count adult passage and to catch brood stock for the Marble River hatchery.

Public Involvement Program community advisor George Bates worked closely with fishery officers Milan Kupc (now in Rivers Inlet), Joe Chambers and George Vardy of Port Hardy.

Pacific Tidings



Ottawa retirement

Dr. Neil John Campbell is retiring after 35 years in the Public Service, most of this time serving the Canadian oceanographic community. A retirement party is planned for Monday, September 29 from 3-6 p.m. at the
RCAF OFFICERS MESS
158 GLOUCESTER STREET
OTTAWA, ONTARIO.

Refreshments and a cash bar will be available. Any contributions to the festivities; financial, verbal, prose, etc. will be welcomed. Please contact G.L. Holland (613 - 990-0303) or S. Campbell (613 - 990-0359).

Ian Seaton was the successful candidate for the Big Qualicum GT-2 position (fish culturist).

Vern George has retired from his maintenance superintendent position at Puntledge hatchery.

Dave Celli was the successful candidate in the SEP competition for stock enhancement officer at Tenderfoot hatchery.

Mark Johnson, fish culturist at Tenderfoot hatchery, was married to Rosina Vescera on July 5, 1986.

Ken Wilson, management biologist, New Westminster, has accepted a position in Vancouver with Fisheries Research Branch, Salmon Stock Assessment Unit.

Captain Gordie Nelson, Ship Division, has returned to Vancouver to resume his duties as superintendent of Marine Operations after a two year secondment to Ottawa headquarters.

Welcome back to Dorothy Regnier who is working as a term secretary for Computer Services Division. Dorothy worked for Economics before she left the Department for her short-term early retirement.

Best wishes to Eileen Brade, licence program administrator, Vancouver, who is leaving the Department; she plans to resume her teaching career.

Barb Snyder has been appointed as Northern Panel support biologist, Prince Rupert. Barb previously worked for the Department on a term basis.

Elmer Fast, fishery officer, is transferring from Whitehorse to Lillooet.

Apologies:

To Denise Zinn who really works in Prince Rupert for Kitimat District and to Christine Stenecker who transferred to New Westminister Habitat not West Van. Lab.



"YOU'LL FIND THAT CONTRACT IN THE FILE CABINET BY THE WATER COOLER... AND MAY I REMIND YOU GUYS AGAIN THAT I RETIRED LAST MONTH?!"

Senate Committee here

The Standing Senate Committee on Fisheries will be on the West Coast in October for a series of meetings and public hearings.

The visit will begin on October 2 in Victoria where the committee plans to hold meetings with officials of DFO, the city and province. The afternoon is set aside for meeting with fishermen and fishing boat operators.

The committee moves to Nanaimo on October 3 to meet research staff and tour the biological research facilities.

For the remainder of the tour, the committee will visit the Sunshine Coast, Prince Rupert, Kamloops and Vancouver. They will meet salmon farmers, boat operators, processors, representatives of trading companies, the fishing industry, retailers and exporters. Native groups and representatives of the Yukon fisheries will also meet the committee during their stay.

Along with the meetings and discussions, the committee will have an opportunity to actually see some of the elements of the West Coast fishery. The itinerary calls for visits to salmon farms, a tour of the Capilano hatchery and a trip to observe the Adams River salmon run. There is also an official visit to Expo 86 slated for the evening of October 11 -- all in all, a very busy 12 days.

SOUNDER

Volume XIV Number Seven

October-November 1986



Progress report from West Vancouver

Canadian trade officers on tour

Gooseneck barnacles are wanted in Spain.

Dogfish present a problem because of price fluctuations, not to mention their name.

These are the kinds of problems that concern Canada's trade officers from around the world and they were discussed on September 4 during a tour through the backrooms of the Inspection laboratory in Burnaby and the Capilano hatchery in North Vancouver.



Here, it was the can lab -- where the cans themselves are inspected and the product subjected to smell and taste tests.



Surrounded by test tubes and retorts, the trade officers listened as Gin Farn explained the work done in the chemical lab.



Warm sunshine and the great setting of Capilano hatchery made it a very pleasant afternoon with host Eldon Stone. There was a lot to learn, too.

TRADE OFFICER: "Do the males go back to sea after spawning, then?"

ELDON: "No, they die, too."

TRADE OFFICER: "Well, I guess that's fair."

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Cover

What is going on here? Construction of the new lab facilities at West Vancouver, of course. See page 8.

Heated debate on smoking issue

Treasury Board and DFO have developed guidelines to minimize the effects of tobacco smoke in federal workplaces. (A guideline is a statement indicating an instruction which, while not mandatory, should be followed unless there is good reason not to do so.)

The regions are empowered to develop local directives on smoking policy.

In response to headquarters staff requests, our director general supports the development of a smoking policy for the new headquarters premises.

This policy will be developed using Treasury Board and DFO guidelines. It will attempt to reflect the desires and wishes of staff at regional headquarters as expressed in a recent survey.

Many staff have asked about the Vancouver city bylaw, which regulates smoking within workplaces in Vancouver. The bylaw will not immediately affect the headquarters worksite as the Crown is not subservient to municipal governments. It has been the Crown's position to be a good corporate citizen, however; whenever it is possible and feasible, the Crown cooperates.

Some results from and responses to the DFO survey follow:

1090 Smoking Survey

No. of surveys distributed: 350

No. of completed surveys returned: 262 (75%)

Smoking Status	Number of Replies	Per cent
Pipe or cigar smoker	8	3
Cigarette smoker	54	21
Ex-smoker	70	27
Never smoked	113	43
No response	17	6

Comments:

"A definite smoking policy needs to be developed so that this issue is not left up to involved individuals, which could create unnecessary tension in the workplace."

"All non-smokers, and most smokers agree that smoking is expensive, smelly, noxious/poisonous, irritating and bad for health."

"It appears that some smokers are not concerned with the effects on others and that voluntary measures will not work."

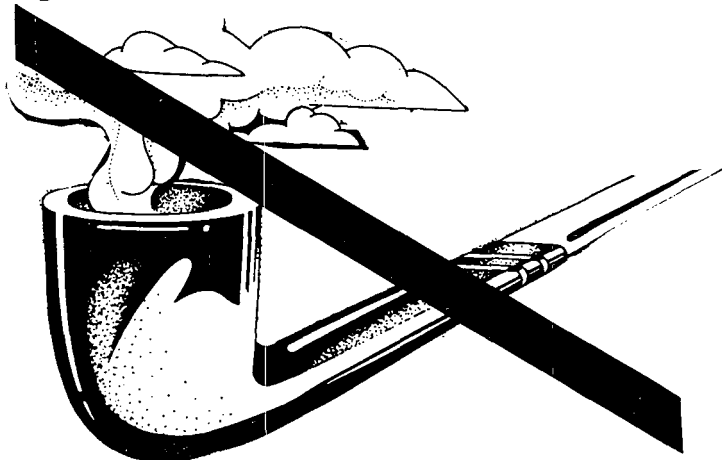
"How will the policy be enforced? What about visitors?"

"Most smokers are polite and will put out their cigarette if asked to do so politely. Some, however, are extremely rude and for this reason I believe some sort of policies are necessary."

"Would like a policy so that as a smoker my "Right to Smoke" is defined, i.e. where/when."

"What's next -- not allowed to wear cologne because it's offensive to someone's sense of smell?"

"Both smokers and non-smokers have rights and a method should be devised to protect those rights."



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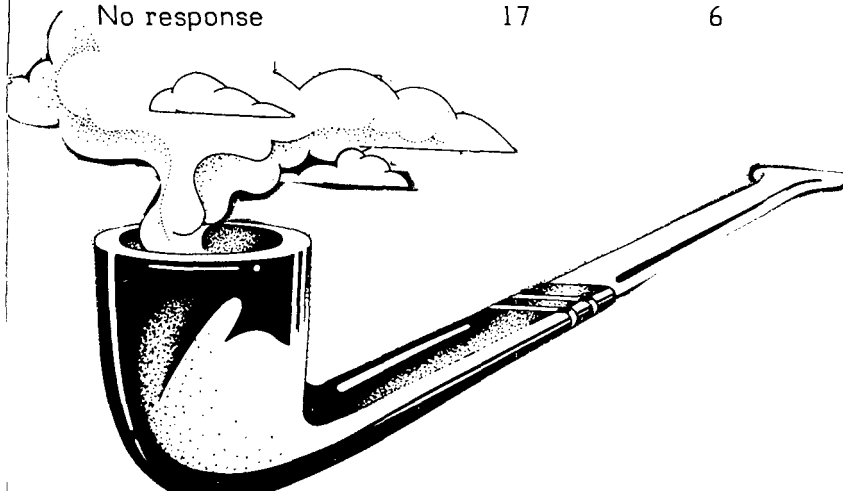
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Government of Canada
Fisheries and Oceans



Minister comments

Minister of Fisheries and Oceans Tom Siddon addressed the Ocean Forum at Sidney, B.C. on September 15. His comments included the following:

"Fisheries and oceans are combined in one federal department because an understanding of oceans is absolutely essential to the management of our fish stocks in the Canadian 200-mile zone. These fish stocks are the raw material base for a Canadian industry which now leads the world in the value of fish exports.

"The oceans also play a crucial role in the development of other industries. There's no question, for example, that we must eventually tap undersea energy reserves.

"I need not elaborate for this group. Neither do I need to tell you that the basis for meeting the challenges and opportunities on the ocean frontier already exists in Canada.

"A young, vigorous ocean manufacturing industry has grown up on both coasts -- it includes some 50 companies of the so-called "Bluewater Silicon Valley" around this institute. Some of these companies have developed world-class products and sold them to customers around the world.

"The developers of ocean equipment and the users of the ocean have the right to expect that public sector policies, laws and regulations grow out of a clear, coherent vision of Canada's ocean goals. They need the support of specialized public sector agencies that know their business. We have that. But we need better coordination of those services -- a window within the system through which government can see the whole picture.

"At least 12 federal government departments and agencies are involved one way or the other in ocean affairs: Fisheries and Oceans, Environment, Energy Mines and Resources, External Affairs, Canada Oil and Gas Lands Administration, Transport Canada, National Defence, National Research Council, Ministry of State for Science and Technology, the Department of Indian and Northern Affairs, the Department of Regional Industrial Expansion and Supply and Services Canada.

"We've made a start on coordinating their oceans-related efforts. A government-wide group -- The Interdepartmental Committee on Oceans -- has been formed. Its members represent all the organizations I just listed. Its chairman is Peter Meyboom and its range of interest is as wide as the ocean itself."

Letters

To: R.P. Smith
Director
Support Services Branch

From: B.G. Shepherd
New Projects Coordinator
SEP Enhancement Operations

Subject: DFO LIBRARY SERVICES

I understand that, as part of the general downsizing exercise, the library staff at 1090 West Pender will be laid off and Lower Mainland DFO library services will be 'consolidated'. As the present library services play an important role in supporting the scientific work that I and others are charged to do, I wish to register my concern and question how such services will be maintained.

Specifically:

- (1) Purchase/Cataloging of Books. Will we be allowed to directly purchase books of importance to our work? If we are, how will unnecessary duplication of purchases be avoided?
- (2) Reference Requests. Without the assistance of a trained librarian, will we be required to spend more time personally tracking down obscure references or (worse) ignoring them? The effects on productivity and credibility will no doubt have a negative impact on the scientific reputation of DFO that is so important to the Minister.
- (3) Disposition of Library Materials. Although our present library has its gaps, it has acted as a central repository for many internal, limited-circulation or obscure fisheries publications. Where will this tremendously valuable (but probably only to DFO) collection go? It would be extremely inadvisable to break the collection up or to increase the difficulty of access to the materials for DFO employees. The UBC library is too far away; the West Van Lab library has completely inadequate resources to handle such an increased workload, as well as being too far away; the Vancouver Public Library is unlikely to accept the collection, and will not maintain even the major fisheries publication series that we require.

I would hope that viable answers to these questions are forthcoming, prior to our library services actually being discontinued.

cc: Sounder

Letters

Re: Recent enforcement action and reaction

In July and August of this year fishery officers have been drawn into emotionally charged Indian fishery confrontations that have attracted a great deal of media attention.

Unfortunately, the media tend to take sides rather than report factually, and the perception may have been given that fishery officers are not fully supported in the difficult task that they were directed to carry out.

While most of the attention is generated by the fishing groups that seek support for their cause, comments are often provided from DFO that become distorted or taken out of context. At this point the damage is done and the opportunity to clarify the issue is rarely provided. In the recent controversy over the seizure of video tapes, the Minister made some comments to the Vancouver Sun that were widely quoted and expanded on. Realizing that he had been taken out of context, he attempted to meet the press and emphasize his support for the enforcement actions that had been taken on the Fraser River. Despite this attempt to clarify his position, the media ignored the main message and concentrated on the Minister's concern over the sidearms issue.

On August 29, 1986, the deputy minister called several members of the Vancouver media to give them the findings of the report he had received on seizure of video tapes, and made the following points:

1. Search warrants were legally obtained and executed.
2. This was a normal activity with 40 search warrants having been executed in the past year.
3. He was reluctant to interfere with fishery officer duties and obligations.
4. He believed fishery officers were right to obtain and execute these warrants.
5. He felt that the wearing of sidearms in this situation was not necessarily in accordance with proper procedures, however, he assumed the officers merely forgot to remove them.
6. No disciplinary action is intended.
7. The case is closed.

This supportive statement was reported in at least one newspaper.

With regard to sidearms, this Region has gone to great lengths to maintain the Region-wide issuance on the basis of the kinds of violent confrontations that we have experienced this year, and the commitment to maintain the use of discretion where risk of violence is minimal, within policy guidelines.

The purpose of this memo is to correct some of the perceptions that I believe have developed amongst field staff, that is, that senior management does not support the activities and actions of field personnel. I can assure you, however, that this is not the case. To the contrary, you have the support of senior regional management and, on numerous occasions, I have been advised by the director-general and the ADM of the deputy and Minister's full support. Unfortunately, there are always occasional situations when, because of inadequate forewarnings, unique circumstances, or biased reporting, senior management in Ottawa are not entirely aware of our activities and you get the impression that their support is lacking. Again, that is not the case.

Politically, this Government has made enforcement and resource management one of its highest priority areas, with the Minister expressing, on several occasions, more support for your activity area than most of his predecessors. As an "old" fishery officer, I understand how easy it is to become despondent as, for the most part, you are left on your own and start to feel that management perceive your activities in a negative light, however, I suggest that this is as a result of structure and the decentralized nature of Fisheries Branch and not a reflection of your activities.

You have not chosen an easy career. It is one of the toughest, most demanding and yet most satisfying I know of, and for those that make a long term career of it, I know it will be one you won't regret. As responsible and dedicated individuals, you have my support and I hope I have your confidence.

Garnet Jones, regional director
Fisheries Branch

Two million stars are born

This year when two million sockeye return to the Adams River, they will be recorded by film cameras from opposite ends of the globe. The BBC Natural History Unit of Britain and Nexia Media production/Japan Underwater Film of Japan are both planning one-hour documentary specials on the Adams River run.

The Japanese crew, headed by Shinzo Nishimori is focussing its attention on the run itself and following it from the mouth of the Fraser to the Adams. This program is intended to air in December, 1986 in Japan.

The BBC special is aiming at covering the entire lifecycle of the sockeye. All this will be from the salmon's eye view so the film will also include other species of salmon.

Freelance cameraman Rick Rosenthal has been working in B.C., Alaska, Washington and Oregon since July. He's been shooting a wide variety of footage including salmon in nets, both looking in and looking out, a practise dubbed by Alert Bay Fishery Officer John Lewis as "in-seine diving." Footage of fry emergence and smolt migration will be shot this spring, and of course, the Adams River run will figure prominently. BBC producer Richard Brock and production assistant Rita Morris will be at Adams River, too. (We can hardly wait to introduce Communications Branch's Rita Morris to BBC's Rita Morris.) The BBC production is expected to be aired as a Christmas special in 1987.

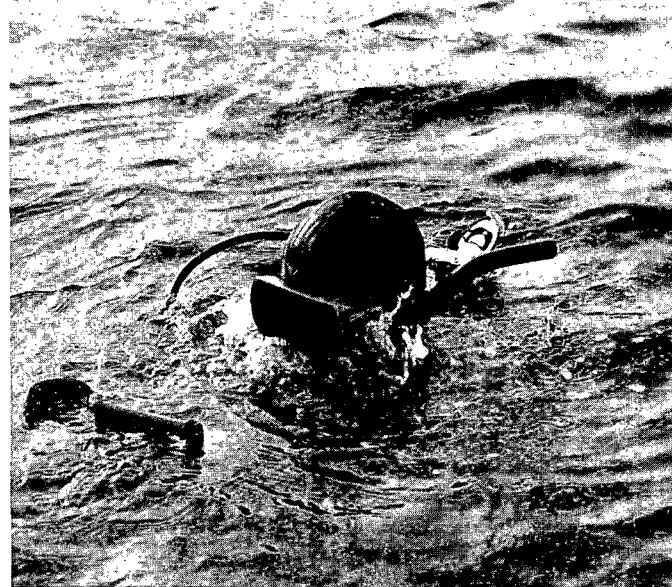
Mary Jean Comfort
Communications Branch



Here free-lancer Rick Rosenthal, one of that special breed of naturalist-photographers, prepares for another in his series of shots on the life of the Pacific salmon.



To do the job right, you have to get "close to your subject," so Rick spends a lot of his time in the water. It is a specialized job and requires special skills and equipment; Rick has to be both an expert camera operator and an experienced diver. His camera and waterproof housing must be carefully maintained -- can you imagine 400 feet of soggy film?



"Lights, camera, dive." At least Rick's subjects don't flub their lines or throw temper tantrums or worry about their "good side." The "in-seine" diver/photographer only has to avoid ending up as part of the catch.

Photos: Mary Jean Comfort.

Pacific Tidings



Bruce McDonald who comes from Inuvik, N.W.T. is joining the department as habitat biologist, Prince George.

Leaving the department, effective October 31, is Kevin Bates, management biologist, Prince Rupert. Kevin has accepted a job with Moore Clarke and will be selling fish feed to salmon farmers from his new base in Campbell River.

Sam Elder, fisheries inspection officer, Burnaby, is transferring to Inspection in Prince Rupert.

Dick Beamish, director, Fisheries Research Branch, Nanaimo has been appointed acting director-general, Fisheries and Biological Sciences Directorate in Ottawa.

Leo Margolis has been appointed acting director, Fisheries Research Branch in Nanaimo.

Recent births include:

Born to Karen and Sam Elder, fisheries inspection officer, Burnaby, their second son, Brodie John, weighing 3.91 kg (8 lbs. 10 oz.) on August 31.

Linda Sullivan, project coordinator, CEDP, SEP, and husband Phil have their first child, a boy, Michael Allen, born October 4 weighing 4.05 kg (8 lbs. 15 oz.).

Born to Scott Coultish, fishery officer, Salmon Arm, and wife Karen, their third child, Cynthia Heather Beverly, born October 2 at 8:12 a.m. weighing 4.13 kg (9 lbs. 2 oz.). Cynthia is a sister for Adam and Benjamin.

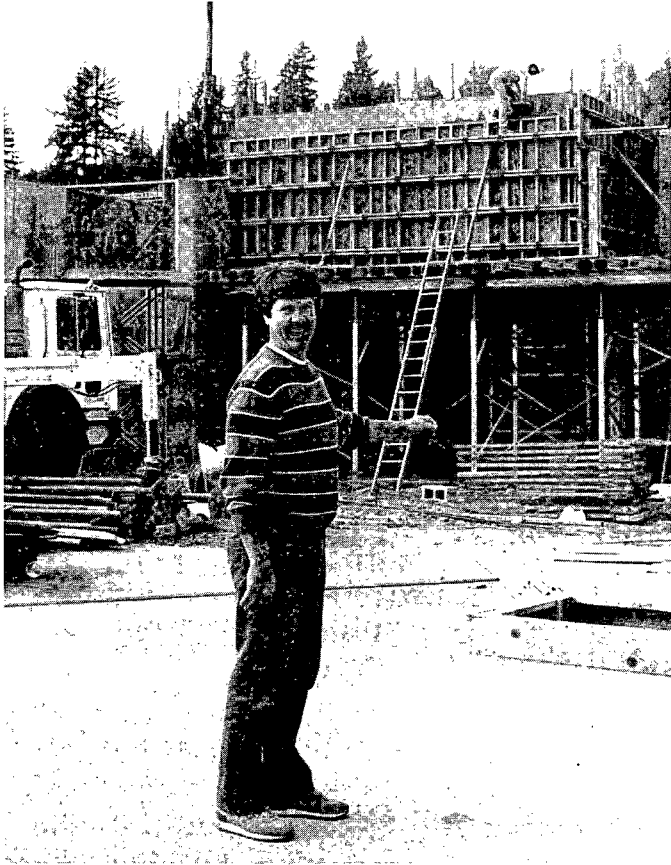
Bothered by bears?



Is it part of your job to travel in areas of B.C. where bears are common? Do you ever wonder just what the dangers are or how you should protect yourself?

A training course in protection from wild animals can be offered to Fisheries staff, if enough people are interested. If you would like to attend, or if you have any comments on this subject, please contact Lyn Peters, Regional Safety and Health Officer at 666-2150.

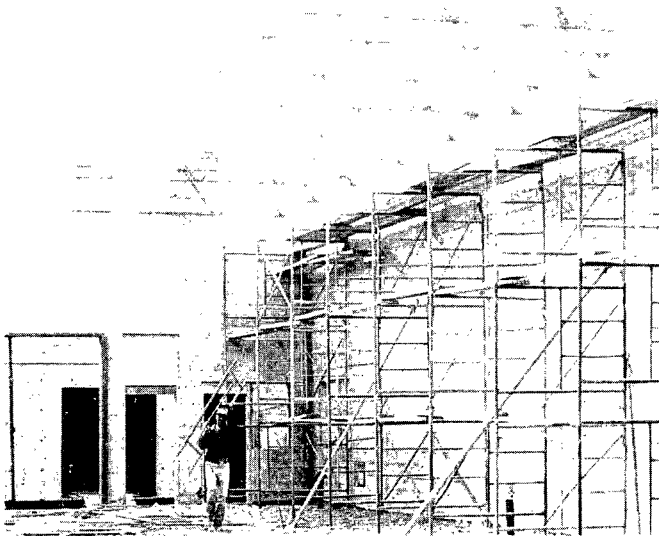
Progress report from West Vancouver



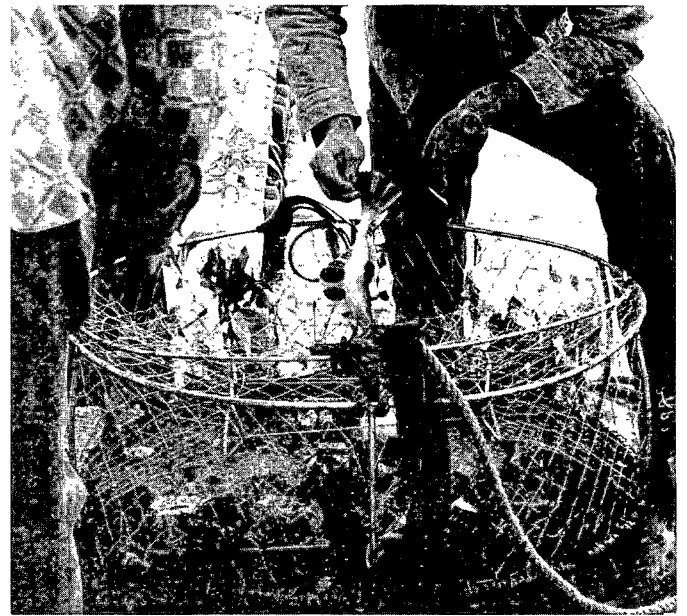
"Come on, I'll show you around." Dr. John Stockner looks more than a little pleased that the long-awaited facility is finally taking shape. The walls are up, final concrete work is underway, and the project is moving ahead as planned.



It takes a lot of "whatsis" and "widgets" to build a modern laboratory facility. Here John inspects one of them -- we were not quite sure which one, but the crew putting it all together will no doubt find the right place to install it when the time comes.



The warehouse will offer lots of space for storage -- something those who have seen the hallways in the present buildings should cheer.



Speaking of the construction crew, they seem pretty happy with the job. After all, how many construction sites offer lunches this fresh?



There are some very specialized installations around the site. This is the all-glass drain system. Not done for looks, although it does look pretty interesting, but to handle the acids from the lab work. Needless to say, no one wants to drop a wrench here.



Not the normal headgear for a biologist, perhaps, but the hard hat was standard issue for the tour. Incidentally, those are not drain pipes -- that's a water intake!

Tanu tykes

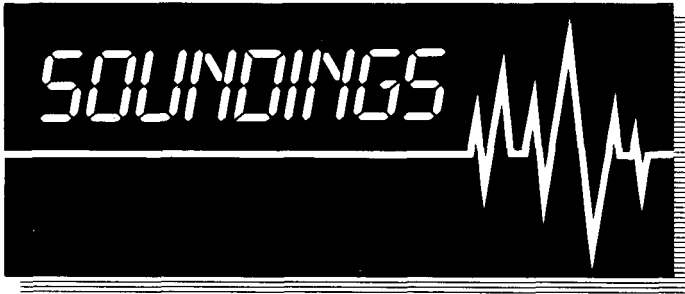


Note from Capt. A.J. Preston, Master, FPV Tanu:

I am enclosing some photographs taken during the open house on board the Tanu. The expressions on the faces of the children I found to be delightful; I'm sure you will, too.



Editor's note: Thank you, Captain, we certainly did, so much so that we wanted to share them with Sounder readers.



You may remember that there was a Soundings question in January/February about the application of conflict of interest guidelines to DFO employees wishing to work (on their own time) for private-industry aquaculture firms. Director-general Pat Chamut's reply indicated that, although no guidelines other than those in the published booklet had been made available, the question would be forwarded to DFO headquarters for further comment.

The following is from a memo from the director, Staff Relations and Compensation, Personnel Directorate:

"The director, Aquaculture and Resource Development has reviewed the issue and it is his opinion that these employees would be in conflict. To quote Mr. Pritchard:

"Given the nature of the aquaculture business, it is almost impossible for a DFO employee to become party to commercial activities without creating a conflict of interest, or certainly the perception of one, due to the concessions received from governments, and exclusive use benefits of leases, etc. The employee in question should sever his connections with the Department if he wishes to pursue the business plans identified."

Communication Notes

Photographers take note: the SEP annual report is looking for good photographs of people working on SEP projects. High-quality action shots are the target -- but anything you may have that shows activity would be greatly appreciated. This is a loan situation; your photos will be returned to you none the worse for wear after the publication is complete.

Salute to the sockeye. News from the Adams River run, now in full swing, will appear in the next issue of Souder. For those not able to see the event in person, we will try to capture some of the sights and impressions.

Communications for PIP: the 1985-86 directory of PIP projects is now available. The directory lists all PIP projects in B.C. and should be a valuable resource for volunteers and for DFO staff who need to locate such projects.

Dry again.

It's becoming a familiar theme; September arrives and the Vancouver newspapers carry stories of fish holding off the mouth of the Capilano River, unable to ascend because it's so dry.

Perhaps it is now time to check with the meteorology department to see if we are getting much dryer weather than Vancouver is noted for!

Congratulations to staff of the Mark Recovery Program; they processed a record number of tagged heads in 1985. The program provides information for use in fishery management and enhancement planning. It also meets the requirement to exchange information on interception catches which is vital to international fisheries management.

It's in the book

Coastal Fishes of the Pacific Northwest is just off the press. The highly informative volume was written by Andy Lamb and Phil Edgell.

The book's 224 pages list every species of fish encountered along the B.C. coastline. Better yet, the book was written and designed with the reader in mind.

The book starts with a section of Phil's excellent colour photographs. Each photo is numbered so that the reader can find the specimen within the text instantly. Once found, the species listing supplies a drawing (by Andy) which notes the distinguishing characteristics. Beneath the artwork Andy's text supplies the correct species name, the alternate names (with notes to tell you if one of those names is biologically incorrect), the maximum recorded size and distribution of the species.

The next section is the most innovative aspect of this reference book; a set of five symbols leads you to information of special interest to particular audiences. The groups are sport fishing enthusiasts, divers, commercial fishermen, beachcombers/hikers and gourmets.

Some sample notes follow:

Decorated warbonnet: (Sport fishing notes) "Although almost never caught and therefore unknown to most anglers, the elongate decorated warbonnet would be good live bait for rockfish and lingcod."

Arrow goby: (for divers) "The light grey, almost transparent goby flourishes along muddy tidal flats and adjacent tidepools or lagoons where very few divers prowl."

Saddleback gunnel: (Gourmet note) "Only a very desperate soul would consider eating the slender saddleback gunnel."

Andy Lamb and Phil Edgell met when both worked for the Vancouver Public Aquarium. Today, Andy is a fish culturalist at the West Van Lab and Phil is at Robertson Creek hatchery.

Their book (Harbour Publishing Co. Ltd.) is a pure delight and would be a welcome Christmas item for anyone who ventures near West Coast waters for any reason. Look for it soon at bookstores and dive and tackle outlets.



The waterfront at the West Vancouver lab provides a suitable background as co-author Andy Lamb examines a preview copy of Coastal Fishes of the Pacific Northwest.

From pages past

Souder of November–December 1976:

"In June of this year, the Canadian Government announced that it would be extending Canadian Fisheries jurisdiction to 200 nautical miles and that this extension would take place no later than 1st January, 1977."

"\$1,300 of the Public Involvement funds for Salmonid Enhancement has been spent on a stream clearance project at Morrison Creek near Courtenay."

"Fisheries and Marine Service will remain as it is. Hence all us regional folks are part of Fisheries Management, Pacific Region, Fisheries and Marine Service, Fisheries and Environment."

It's tough but we're here to help

No one would deny that it's rough when jobs are declared "surplus." No one likes it. It is unsettling to the employees affected directly and unnerving to coworkers who would like to help, but don't know how.

That's where the DFO regional redeployment centres fit into the picture. The centres were set up to assist employees in securing new jobs as quickly as possible. The redeployment centres, located in Vancouver and at PBS and IOS, offer counselling services, access to job hunting tools (phones, reference books, private work areas and resume typing services), job leads, information on the employee's rights and responsibilities and access to retraining if necessary.

DFO Pacific staff can also help; if you hear of a job opening, pass the information on to the redeployment centres at the phone numbers that appear at the end of this article -- it could be just the lead that someone is looking for. Another tip -- don't treat your fellow workers who have been declared surplus any different than you ever did. It is human to feel concerned and a bit awkward about it, but don't let discomfort create barriers. Continue to work just as you have in the past to make the next six months easier for everyone.

Those who have been affected are already aware of the services that are available; that was the first information they were given. For others, however, it may be reassuring to know about the advice and assistance being offered by redeployment centre manager Hilary Schwenk and redeployment counselling staff at Vancouver, IOS and PBS; it is solid, professional and well targetted to achieving full redeployment as soon as possible.

"We want to put ourselves out of business fast," Hilary says.

The redeployment staff prepared a package for each affected employee, containing a variety of information including options such as early retirement and "buy out" and the financial implications of the various options. An initial meeting was set up with each employee to begin the process of making decisions and taking action. Career choice/creative job search workshops were organized and held at all three locations and other services are being made available on an as needed basis.

Every effort has been made to make this program both complete and flexible so that the

needs of individual employees can be met. Professional job search consultants headed up the workshops and specialized counsellors are available if needed: "We know our own limitations," Hilary says.

The focus is clear: help the employees identify job possibilities and get suitable employment -- fast.

The effort is already showing positive results. A total of 122 Pacific region employees were given six months notice. Some chose early retirement or the buy out option. Others have been referred for positions in the department and other departments, some have accepted these job offers. As of October 7, 40 individuals fell into one of these categories.

"It is encouraging that those who could make the decision to retire or take the buy out option did so quickly," Hilary says. "It frees us up to give more concentrated efforts to others." This helps, because Personnel has a limited staff, too, and they still have their regular work. Hilary and regional personnel director Fred Iviney note that this has not kept the staff from giving it their best. "They are taking this very seriously -- they feel that our affected employees are really good, talented people and they deserve to get new jobs just as quickly as possible."

Everyone involved in redeployment is working with the same set of objectives:

1. find placements within DFO or other federal departments in the Pacific region
2. find placements within DFO or other federal departments elsewhere in the country
3. find placements in the private sector.

"One thing that really pleases us," Fred says, "is the very high level of cooperation we are getting from managers in Pacific region on this. They are quite receptive to placing people, even if it means some retraining will be needed."

The options for employees are, like everything about the program, being kept as flexible as possible so that individual needs can be met with regards to relocation or career changes. That includes scouting the private sector for suitable placements.

How serious are redeployment centre staff about all this?

Well, Souder's editor had not been in the office five minutes before being asked what job openings she knew of around the Lower Mainland! It seems that they are very serious indeed.

Phone numbers:

Vancouver/Nanaimo
Sidney

666-0389
656-8468



Difficult times produce stress for everyone involved. A consultant working with the redeployment centre offers Strategies for Stress Management. A few excerpts follow; you may find them useful.

PHYSICAL STRATEGIES (What you feel)

- (1) Deep Muscle Relaxation – Lower your physical tension by focusing on major muscle groups, and relaxing them.
- (2) Watch your Diet – Especially caffeine intake (coffee, tea, chocolate etc., which will raise your stress level). A well-balanced diet will improve your ability to cope.
- (3) Fitness Level – An exercise programme can help you in two ways.
 - (a) if you are in good physical shape you are better able to tolerate anxiety
 - (b) physical exertion when you are worried or anxious provides an emotional release of tension for most people, or will help you refocus your attention.
- (4) Sleep – Maintaining proper rest will help you cope with stress.
- (5) Cycles – Track (make note of) your body cycles to assist you in discovering if there is a pattern to your periods of feeling up or down.

PERCEPTUAL (What you see)

- (1) Focusing Attention – Learn to pay attention to what is relaxing for you and ignore what is disturbing.
- (2) Neutral Scene – When you find yourself getting uptight -- remember your neutral scene. Visualize it as completely as you can by focusing on what you are seeing, hearing, feeling and smelling.

- (3) Inversive Tactics – When you begin to feel uptight have some diversions at hand. Probably the only criteria here are that your diversive tactics be legal, cheap and non-fattening.

COGNITIVE (What you think)

- (1) Stop trying to be perfect – Look around --- do you see any perfect people?
- (2) Analyze your "shoulds" – Discover what your "shoulds" are and determine if they are realistic or necessary.
- (3) Illogical thinking – A lot of illogical statements we make to ourselves is the result of collecting poor data, or not checking the situation out fully enough. Don't fall into the trap.
- (4) Self-Reward – Increase your self-reward. Be good to yourself.

AFFECTIVE STRATEGIES (How you feel)

- (1) Learn to laugh at yourself and not take yourself or your actions so seriously.
- (2) Release Emotions – Get rid of those pent-up feelings in ways which are not destructive to anyone else.

SKILL STRATEGIES

- (1) Build up good skills – for anything. If you feel deficient find a way to fill the gap.
- (2) Use Learning Principles – Break down long term goals into smaller goal steps.
- (3) Time Management Skills – Learn how to manage time and priorities effectively.
- (4) Self Contracting – Make a contract with yourself or a "policeman" friend for something you want to do.

ENVIRONMENTAL STRATEGIES

- (1) Environmental Support – Request extra support and assistance from your family and friends to help you through anxious or stressful times or situations. It isn't necessary to be a martyr – your friends care about you.
- (2) Time Out – Take time out or private time from a stressful situation.



What is HEP?

Responsibility to assess the impact of man's actions on fish and fish habitats is part of the daily routine for Habitat Management staff and fishery officers within the Department of Fisheries and Oceans. Understanding these relationships requires knowing both the supply of habitat resources available and the life requirements of the species (Moen, 1973). Activities such as the habitat research programs and the Federal/Provincial Habitat Inventory Program are adding to this understanding, particularly for salmon species.

The unifying concept between habitat quality (i.e. the ability of a habitat to supply life requirements) and numbers of animals a habitat can support is carrying capacity (USFW Service, 1980). Carrying capacity integrates elements of habitat and population estimates and provides a potential basis for impact assessments. DFO has been carrying out impact assessments for years, ranging from rudimentary visual evaluations, through to large-scale multi-disciplinary empirical studies. Impact assessment methodologies are always under examination and evolving to provide additional tools to assist staff in habitat management. In fact, as part of the ongoing process to understand the interactions between habitat and fish populations, the Field Services and Fisheries Research Branches are investigating a number of methodologies, including an ecosystem evaluation approach as well as a habitat-based concept known as the Habitat Evaluation Procedures (HEP).

HEP is a habitat-based methodology currently in use by the U.S. Fish and Wildlife Service. HEP provides data that can be used in baseline and impact assessments, planning and management (mitigation, compensation, restoration), and other actions that anticipate a change in habitat quality or quantity. Basically, HEP is an accounting system. It is based on combining a measure of habitat quantity with an index of habitat quality to determine habitat values (units that can be quantified). The relationship, simply stated is:

$$\begin{array}{rcccl} \text{Habitat} & & \text{Habitat} & & \text{Habitat} \\ & & \times & & = \\ \text{Area} & & \text{Quality (HSI)} & & \text{Units (HUs)} \end{array}$$

from the literature. It has been summarized into a life cycle model and published for several species, including coho, chum and pink salmon.

In order to assess the utility of the procedures, a departmental workshop was held June 16-20, 1986 in Vancouver with USFW representatives, DFO staff from across Canada and other agency and non-governmental biologists. A major recommendation resulting from the workshop was that several pilot scale evaluations of the HEP procedures be conducted to investigate ease of use (including cost), applicability to DFO, and the suitability of models for use with salmon species in Pacific Region habitats. Accordingly, HEP is being tested as a forest harvesting impact assessment tool in the Conuma River drainage (South Coast Division). A study to test the coho and chum life cycle models against known population responses in Carnation Creek is also underway. These studies are scheduled for completion by January, 1987. The results of these, and other (e.g. Coldwater River Coquihalla Highway) HEP assessments, in conjunction with recommendations resulting from several Research Branch investigations, will be useful in formulating technical guidelines and procedures for evaluations required in impact assessment and other departmental activities.

Those interested in becoming more familiar with the HEP accounting system, the salmon HSI models and the associated software, should contact John Patterson (666-0524) or Tom Bird (666-0017) of the Habitat Management Division in Vancouver.

John Patterson
Habitat

The number of HUs gained or lost by a particular proposal or activity are quantified, and the procedure for their determination is documented. The habitat suitability index (HSI), or habitat quality measure, is determined

SETG hits decade

10 years of meeting the public

Next May will mark the 10th anniversary of the Salmonid Enhancement Program. When the concept of an enhancement program was first announced by the federal cabinet in March 1975, there was an emphasis on fostering a two-way exchange of information between the public and the government. This was in recognition of salmonids being a public or common property.

In 1976, public inquiries on SEP were conducted in 17 communities in the province. The response was overwhelmingly positive; SEP was needed. As well, the public clearly wanted a formal ongoing voice as to the Program's direction.

That voice is still being heard through the Salmonid Enhancement Task Group (SETG) which predates the official inception of SEP and celebrates its 10th anniversary on October 23.

Four times a year, the SEP director and program managers meet with the SETG members and provide them with updates on the performance of the various components of SEP and with information on planned initiatives. This direct access to public input enables SEP managers to incorporate public aspirations into SEP planning.

Members of the SETG include representatives of commercial, sport, and Native food fisheries, the processing industry, mining, forestry, tourism, B.C. Hydro, municipal governments, education, conservation and the media.

The next Task Group meeting will be held on the first weekend of November. It will include a retrospective on the first ten years of SEP and discussion of what the future holds for the program.

Harold Swan, acting director of SEP, will be joined by former directors Ron MacLeod, Les Edgeworth, and Ward Falkner in helping the SETG celebrate its decade of commitment to the resource.

A charter member of the SETG acknowledges the cooperation of DFO in this advisory process: "To my knowledge, the Department is the only common-resource management agency that has an advisory group that truly conveys the opinions of the general public rather than the desires of a vested-interest beneficiary."

Sam Watanabe



Sam Watanabe, a longtime employee of the Department, passed away after a lengthy illness on September 3, 1986 at the age of 59.

Sam joined the Engineering Section of the Department of Fisheries in February, 1964 as a draftsman after completing nine years service in the same capacity with the Department of National Defence. Between 1964 and 1981, Sam worked on a number of projects including the Pinkut Creek and Fulton River spawning channels, the Meziadin River fishway and the Big Qualicum project.

In 1981, Sam was promoted to an Engineering Technician with the Salmonid Enhancement Program.

In 1983, Sam was seconded to the SEP Job Creation Program for a period of ten months where he was involved in a number of job creation projects including the Chehalis Band project, Kanaka Creek and various projects in the Kamloops area.

Subsequent to 1983, he worked on pilot salmonid enhancement projects at Stuart River, Shuswap River and Finn Creek.

Sam was very innovative in his work and was responsible for the design and development of enhancement techniques that continue to be used in existing facilities.

Sam will be missed by his many friends associated with Fisheries throughout the province.

Pacific Region Update

Salmon Commission appointments

William L. (Bill) Matthaei of Tacoma, Washington, was appointed deputy executive secretary to the Pacific Salmon Commission, effective September 15.

Mr. Matthaei's background includes 11 years of corporate administration with the Roman Meal Company of Tacoma, a grain milling and marketing company.

He possesses a BA Economics (University of Washington), and an MBA (University of Denver) and has a nearly complete Master of Marine Affairs (Institute of Marine Studies, University of Washington) specializing in anadromous fish management and policy development.

Mr. Matthaei will provide the initial point of contact between panels, committees and the commission and will carry out executive secretary Ian Todd's duties in case of absence.

Canadian appointments, announced on October 6, were: Alternates Joe Gosnell (Nishga Tribal Council), Jack Nichol (United Fishermen and Allied Workers' Union) Stephanie Hewlitt (Vancouver Public Aquarium) and Garnet Jones (DFO).

Commissioners, named earlier, are: Cliff Atleo, Patrick Green, Bob Wright and Wayne Shinnars.

Provincial reorganization

Most DFO staff are aware of the shift of the Marine Resources Section of Ministry of Environment, Fisheries Branch, to the Ministry of Agriculture. This involves Gordon Halsey, Trevor Proverbs, Del McCaw, Charlie Twaddle, Mike Coon, Ed Black and Larry Nielson. If these are people you normally have to contact, you should also know that they will continue to occupy the same building and have the same phone numbers at least until January, 1987.

Those changing ministries are involved with aquaculture development, commercial fishing statistics and commercial licensing of buyers and inspectors.

The provincial officials remaining with Ministry of Environment include David Narver, Ron Thomas and Art Tautz.

Auxiliary program

A news release from Saint John provided the following information on a new program there:

Atlantic Canada's first auxiliary fishery officer program was established on a pilot basis in four counties of southwestern New Brunswick. The program was a cooperative endeavour between the Department of Fisheries and Oceans and the New Brunswick Wildlife Federation. Five auxiliary fishery officers will assist the Department of Fisheries and Oceans in the counties of Saint John, Kings, Albert and part of Westmorland.

"It is anticipated that the program will facilitate community involvement in fish and habitat conservation by creating an avenue for direct involvement in fisheries protection," said Hugh Trudeau, Fisheries and Oceans' Area Manager for southwest New Brunswick.

The five persons participating in the program receive no pay for their services, only reimbursement for their expenses. A two-day Fisheries and Oceans training program emphasized fundamentals of fisheries enforcement. This was followed by on-the-job training. The auxiliaries will accompany fishery officers on regular inland patrols, give assistance during peak periods and provide additional support during emergencies. The auxiliary officers will wear uniforms while working with a fishery officer, but will be distinguished by a special shoulder insignia inscribed with the word "auxiliary."

"The auxiliary fishery officer program, sponsored by the New Brunswick Wildlife Federation, indicates the keen interest this group has in protecting the area's marine resources" Mr. Trudeau said. He added: "In addition to providing a valued service to Fisheries and Oceans, the auxiliary officers are providing a service to the community. The officers themselves will also benefit through the direct experience they receive from various assignments."

SOUNDER

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The caption on this poster reads: These fish are happy because their water is litter-free! (So give a hoot, and don't pollute!)

The poster was submitted to the Port Hardy *Our Resource* campaign by Tucky (Michelle) Taylor, a Grade 7 pupil at Fort Rupert Elementary School.

Library

The last issue of *Sounder* carried a copy of a letter to R.P. (Bob) Smith, director, Support Services, asking about the closure of the headquarters library. With Bob's permission, we are now able to offer this reply:

Memo from: Director,
Management Services Branch
Subject: Downsizing and the RHQ Library

There have been several letters and phone calls to the Director-General and to myself concerning the impending closure of the library at 1090 West Pender, and I thought it would be useful to let you know what might emerge.

First, the decision to close the library is final, and I have confirmed that with the Director-General. Second, we are now in the early stages of planning the actual shut-down, and assessing what, if any, options we have. For example, we are reviewing what key journals are required, how they might be obtained; we are also looking at a "reading room" capability in the new building, and not least, we are examining the disposition of the current collection.

Part of this planning process will involve discussion with user groups or representatives, but I must emphasize that our options are severely limited and our resources will not enable us to provide a library "substitute".

As these plans develop we will let you know what can be done. I would appreciate if you could circulate this to your staff members in order that they might be kept informed.

R.P. Smith

Letters

The following letter was written and delivered at the Adams River.

A word to congratulate the cooperation of government agencies and community groups to share this experience with so many public so effectively.

The display materials are first rate - good explanations - well written text - and consistently helpful guides.

You will be tired by the end of the run - not unlike the fish - but you have spawned an

understanding and love of nature with a lot of people.

Bravo!

Ann Garneau
Tyrrell Museum of Palaeontology
Drumheller
Alberta Pavilion, Expo '86



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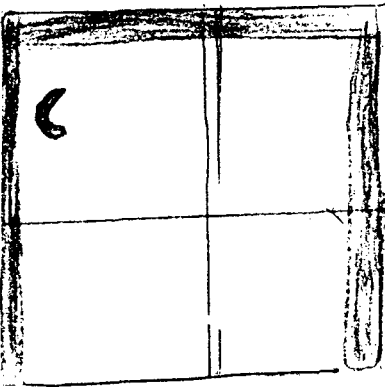


Fisheries
and Oceans

Pêches
et Océans

Never too young to learn

Once, DFO dealt almost exclusively with people engaged in fishing, mostly adults. Then SEP developed an education program for children and the Department acquired a whole new audience. As community advisor Dennis Demontier has been discovering, that audience provides a different view of the world. It is a view that he thought we might like to share, so he sent along a collection of children's comments on sportfishing from Stuart Wood Elementary School. What follows are some excerpts. (All spelling and punctuation is original -- very original.)



"My dad has fished the Dean river. It is neat. He cought two 11 pounder stealhead and one twenty seven pounder spring. The biggest fish I ever cought was a 15 pounder it was a sockeye. To fish you have to have patients."

"The film was excellent and watching a fish be disceted was very interesting and a little yucky! My dad likes to fish when the weather is nice. He fishes almost every Monday."

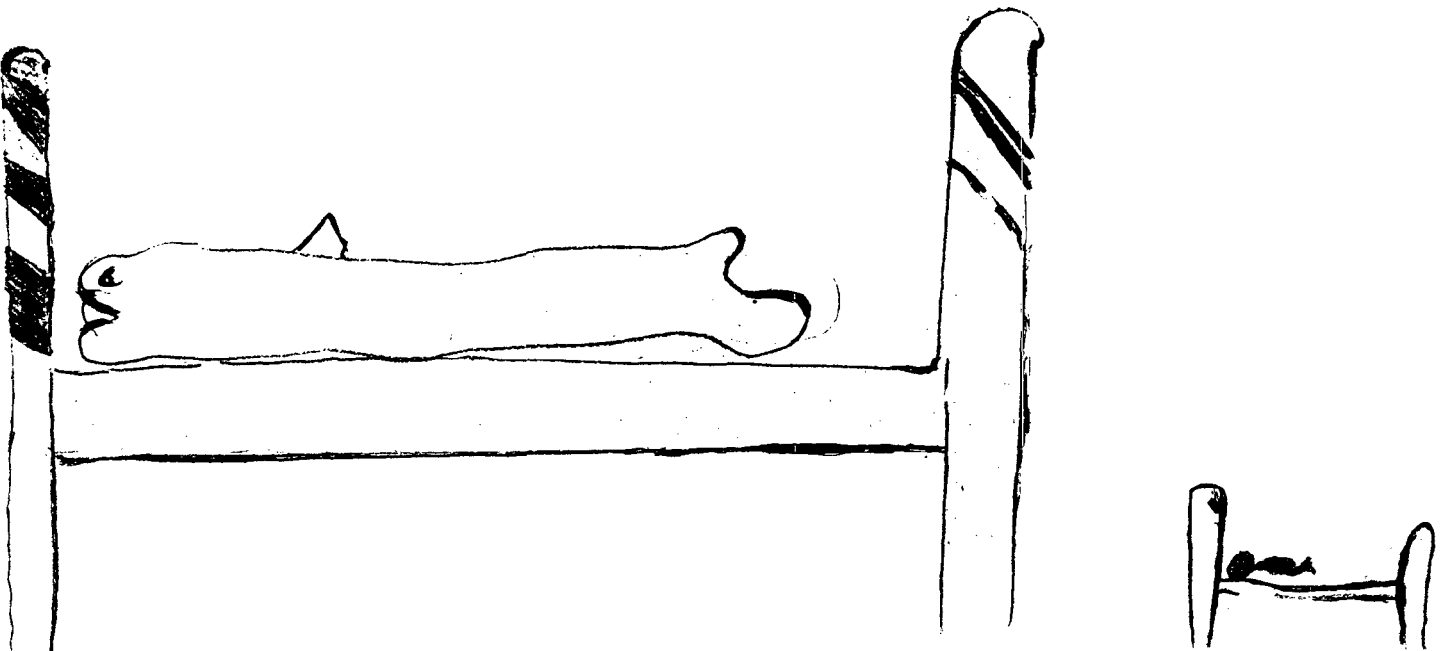
"I went fishing a year ago. I cote one fish. The next time i cote a stick. I enjoyed the flim."

"When I go fishing with my Gampa I think the fish is going to eat me. I don't like the way they taste very muct."

"I always let my fish go. I don't like killing fish I just like catch fish."

"I liked to watch last year the little eggs grow. It was fun when we went to let the fish go."

Why is SEP involved in education? Because as you can see, these elementary school children are the biologists, fishing enthusiasts and conservationists of tomorrow. Why, there's even a future community advisor in the group!



Finding those new jobs

In the last issue of Sounder, we told you about the redeployment centre that has been set up to handle those displaced by downsizing. The number of employees then retired, opting for buy-out, appointed or referred and awaiting decisions stood at 40.

Now, approximately one month later, the number in those categories is 92. Hilary Schwenk and the staff have obviously been working effectively.

As well as those mentioned above, there are 12 secondments and another 12 waiting for suitable referrals. The remaining individuals are not available for new positions at this time.

Those are statistics; jobs are really about people. With that in mind, Sounder asked if one or two of those affected would be willing to share their feelings about how the redeployment centre helped them.

Bill MacKay is leaving DFO and the New Westminster Marine Repair Depot after 14 years. When he starts his new job, Bill will move from a staff of ten to a staff of 103 in the Materiel Management Division of Customs and Excise.

"I'm looking forward to this," says Bill. "Like any new job, it's a challenge, but one I figure I can handle. I'll be working in the area of getting office equipment organized and helping to set up office accommodations."

Bill says the redeployment centre worked for him:

"I got a call and went for an interview. I was impressed with him and I guess he was impressed with me. I got the offer. It all just happened boom, boom!"

The paperwork went well, too. Bill says that his resume was already there when he went for the interview.

"I'm quite enthused and happy with what's happened," Bill says. "It worked out well for me."

Stuart Hills, with Ships in Prince Rupert, is pleased with how the staff at redeployment helped him, too. He will remain with DFO.

"I got my notice in September," says Stuart, "but it was only a short time before they let me know that I would be redeployed to Northern Relief. They were absolutely fantastic; Hilary was really super to me and everyone in Marine Division was great. I want to thank them all."

It hasn't been an easy time, but as Bill and Stuart found out, redeployment is working.

Alcan update Pounds and pounds of preparation

The exchange of pleadings between the Department of Fisheries and Oceans and the Aluminum Company of Canada Limited (Alcan) now appears to be closed. Alcan's pleadings fall into two broad categories: a constitutional challenge and a technical challenge.

Under the constitutional challenge Alcan alleges that Section 20(10) of the Fisheries Act is ultra vires the Parliament of Canada, invalid, and of no force and effect in respect of Alcan, and that any direction based upon the opinion of the Minister of Fisheries and Oceans pursuant to Section 20(10), is therefore invalid. In addition Alcan takes the alternative position that the Minister exceeds his constitutional jurisdiction whenever he orders flows in rivers beyond that necessary for the safety of fish or beyond that flow which would occur "naturally". These are direct challenges to the Minister's authority under the Fisheries Act and if Alcan succeeds could set a precedent which would have serious implications for fisheries management across Canada. Section 20(10) appears to be the only piece of legislation in Canada which specifically addresses instream fish flow needs. Constitutional challenges of this kind strike at the heart of what the Department believes to be its jurisdiction over fish and fish habitat.

Under the technical challenge, Alcan pleads that even if the Minister has the authority under Section 20(10) to order Alcan to release fish protection flows, the Minister has failed to determine the quantity of water sufficient for the safety of fish.

As part of the technical challenge, Alcan has specified in the Alcan pleadings a flow regime that it says is sufficient for the protection of fish. The Department has responded by defining in its pleadings an absolute minimum flow regime below which unacceptable risks to fish will occur. The DFO flow regime incorporates the needs of resident salmonids as well as chinook and sockeye salmon.

In order to properly prepare for trial the Department has set up a Nechako River project team headed by Rod Bell-Irving who reports directly to the Regional director-general. This approach takes the burden of this Departmental priority off any individual Branch. Working under the guidance of legal counsel, the team,

which consists of in-house and other experts, has been given responsibility for all phases of the Department's preparation for trial. This includes preparing for trial by collecting and reviewing all relevant documents, marshalling evidence in support of the Department's position, critically assessing Alcan's position, conducting additional field studies, and preparing expert reports.

In addition to these activities, several other significant developments have taken place in the Court since the last article in the Sounder.

Parties to Litigation:

A number of parties have been added to the litigation. The Province of B.C. was joined on its own motion and by consent of the parties as a co-defendant. The Province so far has taken no position on the technical issues of the case but has taken the constitutional position that the Province rather than the Federal Government has exclusive jurisdiction to the use and flow of fresh water.

The Indian people (Edward John and others of the Carrier Sekani Tribal Council) have been joined as co-plaintiffs. Giving the Indians party status enables them to allege their claim to aboriginal title and rights in the area which includes the Nechako River system. The Indians also allege that both the Industrial Development Act and the agreement made between Alcan and the Province are invalid, that Alcan is trespassing on and interfering with the aboriginal rights and title of the Indian people; and that both Alcan and the Crown in Right of Canada must operate the Kemano Power House and Nechako Dams and regulate water flow in the Nechako River to protect and restore Indian interests including those interests in the fishery based on aboriginal title.

An environmental coalition which is made up of representatives from the B.C. Wildlife Federation, the Steelhead Society of B.C., the Nechako Neyenkut Society, the Save the Bulkley Society, the Gulf Trollers Association, the United Fishermen and Allied Workers Union, and the Canadian Association of Smelter and Allied Workers also applied for status as intervenors. The B.C. Wildlife Federation was granted intervenor status for the sole purpose of raising the issue of the validity of the Industrial Development Act.

Discovery Process

The process of Discovery of Documents between the Department and Alcan began in

February, 1986 and is nearing completion. So far Alcan has disclosed a total of 1,368 documents and the Department has disclosed a total of 1,750 documents. More recently the Attorney General of British Columbia has delivered to the Department a 117-page list of documents detailing 1,510 items.

Examination for Discovery between Alcan and the Department began in June, 1986. Rod Bell-Irving acted as deponent for the Crown. He was initially examined for two weeks. Bill Rich, Vice-President for British Columbia of the Aluminum Company of Canada was initially examined by Departmental counsel for one week.

A second round of Examination for Discovery was conducted in August. Further Discoveries have been conducted during the months of October and November, 1986. No plans have been made yet with respect to Discoveries involving the Indians or the Province.

Trial

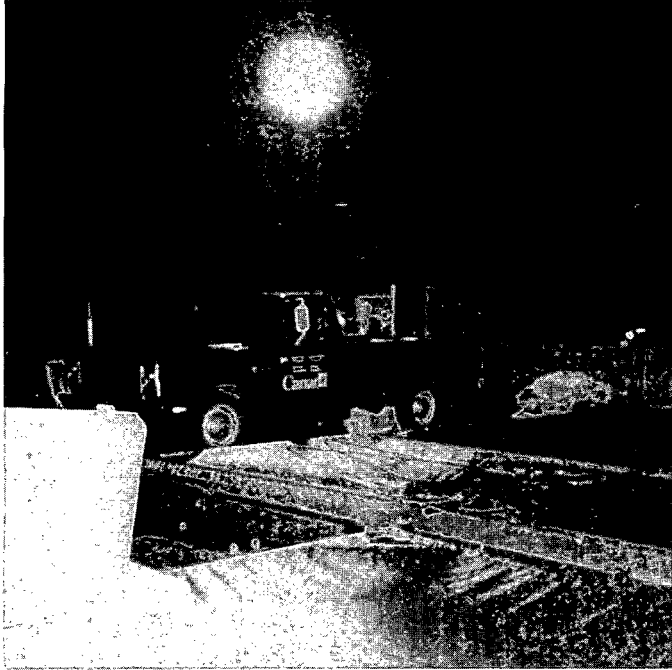
The addition of the Indian people as a Plaintiff party has greatly expanded the scope of the Trial. As a result it is not certain if the trial will proceed as scheduled on March 30, 1987. Four pretrial conferences have been held so far. At the last Pretrial Conference Alcan's legal counsel indicated that Alcan may make an interlocutory application to the Court in early December asking for an order to split the trial into "Indian land claim" issues and "fish" issues. If Alcan succeeds in such an application there is a strong possibility that the trial will proceed as scheduled at least as to the "fish" issues.

L. Dutta
Nechako River Project Team



6 Only once in a hundred years

Rebuilding the Capilano chinook



When the stork came to Capilano hatchery on November 3, it looked suspiciously like a pickup truck.

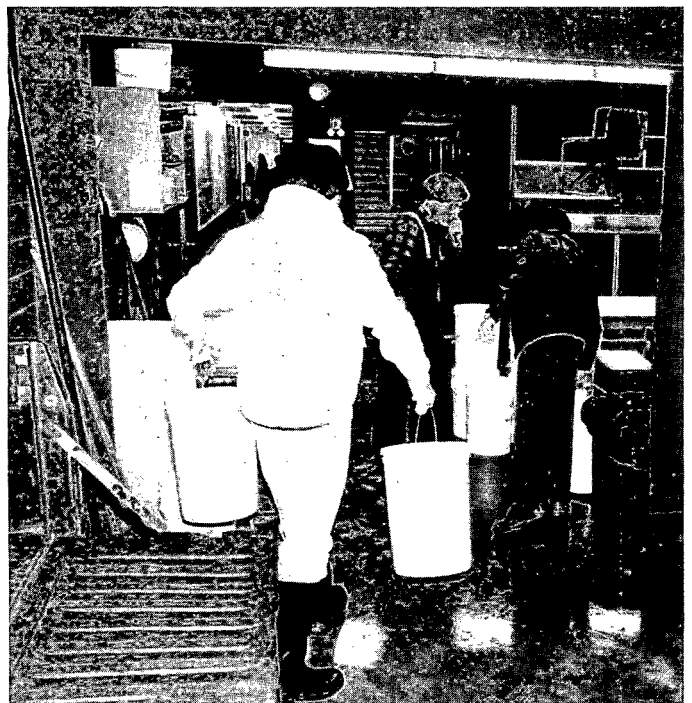
Day after day, Vancouver basked in sunshine. August gave way to September, then October, and still it didn't rain. While tennis players, beach freaks, tourists and Expo officials were smiling, Capilano hatchery manager, Eldon Stone, was concerned. Sports fishing enthusiasts at the mouth of the river were reaping a bountiful harvest; a few kilometres upstream at the hatchery, there were some hardy coho but no chinook. The situation caused growing concern for Eldon and his staff as time dragged on and still it didn't rain.

A previous dry spell in 1985 produced similar worries and attempts were made to beach seine enough fish for brood stock. The crew was rewarded with some coho, but the chinook just couldn't, or wouldn't, be caught. When 1986 brought a prolonged version of the same weather pattern, Eldon knew the chances of seining brood stock would be either slim or nil. As well, all indications were that there just weren't as many chinook as there should be. Something had already lowered the ocean survival. The hatchery had enough coho, but only 24 of the 2,000 chinook they had expected. The Capilano chinook run, established in 1971, had been shattered.

By late October they knew; it was time to start over. Arrangements were made to go back to Big Qualicum hatchery on Vancouver Island to obtain eggs for 1986 incubation. Big Qualicum had been the source of Capilano's original chinook stock and a regular source of supply to supplement the river's own returns over the years.

So, on November 3, Eldon and a crew assembled in the dusk to await the truck. They faced a hard evening's work; over 700,000 chinook eggs to be fertilized, water hardened, disinfected and stacked in the incubation room.

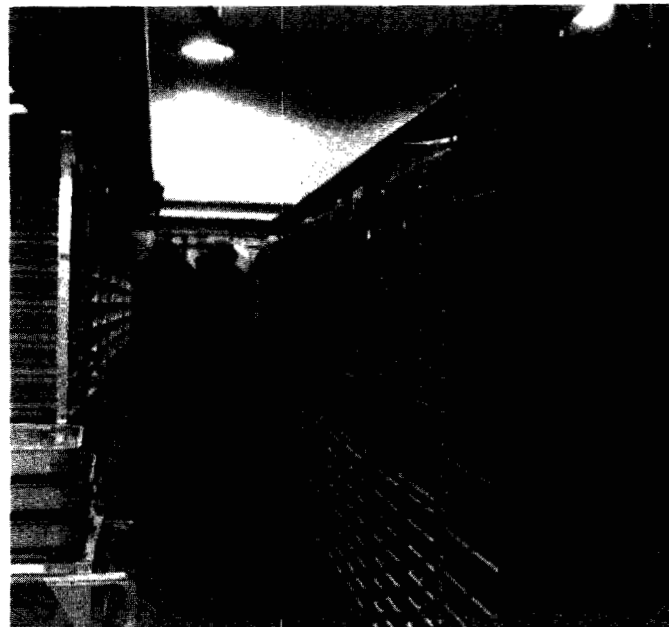
All-female sperm was used to fertilize some of the eggs. That will ensure a high proportion of females among returns from the 1986 brood and will aid the hatchery in rebuilding its prized stocks quickly. Igor Solar from the West Vancouver lab was there to oversee that part of the effort along with Ian Baker. When the all-female sperm concept was being developed it was probably far from anyone's mind that it would be needed for the Capilano, but unexpected developments are a normal risk when you work with a living resource.



The first order of business was just to get the eggs into the work area. The crew hauled bucket after bucket from the truck to the egg-take area before they got down to the task of fertilizing the eggs.



Tubs, measures and clipcharts were all essential equipment for (left to right) Igor Solar, Ian Baker, Bob Stanton and hatchery manager Eldon Stone.



It was a long evening, and many trips into the stacks of trays were needed before the precious eggs were all safely put away.



Batch after batch of eggs was carefully measured and placed in the Heath trays.

The operation went smoothly enough. Bucket after bucket of eggs was unloaded from the truck and brought into the work area. Sperm arrived in zip-lock bags packed in styrofoam coolers. Four vats of disinfectant stood beside the work table and everyone knew what to do. Code numbers from the sperm were recorded and test batches from each fertilized group of eggs were placed into divided trays to allow staff to monitor progress of the various groups.

Each small plastic tub, contained about 5,500 eggs. Batch after batch was fertilized, water hardened, volume measured and placed into Heath trays. When a stack was ready, it was lowered into the disinfectant for a 10-minute bath before being transferred to the incubation room.

Like many hatchery activities, this is hard work. Your feet soon get cold standing in the water and disinfectant, but the cargo is too precious to be put at risk so everyone just keeps working as fast as they can. Lift, open, fertilize, stir, add water, stir, lift, measure, pour, lift, dip, lift and stack; over and over until the whole cargo is safely settled.

The process began as the sun went down. By the time Sounder left, it was pitch black outside and the crew, framed in the lighted doorway, still had about half the eggs to process.

When Mother Nature turns sulky, people work twice as hard.

Reorganization: what it will mean

Change is inevitable. In a progressive country change is constant.

-- Benjamin Disraeli, Edinburgh, Oct. 1867

If we are going to live with change, we are going to have to change.

-- Garnet Jones, Whistler, May, 1986

For Pacific Region, reorganization is part of change. It is change that helps the region remain progressive. The official announcement in September had two components; reorganization and downsizing of the Department.

"If it were not for the impact of downsizing on people, the picture created by this reorganization would be seen in a more positive way," says director-general, Pat Chamut.

"Although change is frequently threatening, this one allows us to bring together all our science expertise (oceans and fisheries) and foster a multi-disciplinary approach to our needs and problems. I think it will also improve the level and visibility of our science program."

Pat explains that the change produced by this reorganization is relatively confined. Many areas of Pacific Region will be virtually unchanged. The major impact will be felt in the consolidation of our science activities, ship maintenance and regional support services.

The downsizing was a consequence of the government's deficit reduction program, and would have occurred with or without reorganization. The fact that these two events occurred together allowed Pacific Region to go about the downsizing in a rational way. Operations are being integrated and in some cases centralized for greater efficiency. Every effort has been made to avoid reductions in our operational programs and minimize adverse effects on delivery of service to our clients.

The major change sees the department's science activities consolidated under one Director of Science, Dr. John Davis, who will report directly to the DG. Ships will be centralized at Pat Bay. Finance, Administration, Materiel Management and Support and Personnel branches will be integrated as part of the creation of one Pacific Region encompassing both fisheries and oceans. Satellite services for local support will remain at IOS and PBS.

Other areas of the department will remain largely unchanged in structure and reporting relationships.

Fisheries Branch (previously Field Services) and Planning & Economics will remain the same, although Planning will have a somewhat smaller staff. Pacific Region will continue to have SEP, the Communications Branch, Small Craft and Native Affairs. Inspection will remain, but will now report directly to the director-general.

Approvals of senior positions that have been identified under reorganization have been delayed. When one considers the number of changes that are happening across Canada in DFO alone and understands that all senior appointments must get approval either from DFO headquarters or Treasury Board, it is not surprising that this is taking time. To date, however, Dr. John Davis as director of Science and Garnet Jones as director of Fisheries Operations have been confirmed. Other confirmations are expected as the backlog of paperwork is cleared up.

For most staff in Pacific Region the worst is over. The staff reductions were, for the most part, taken in one hard lump. It was painful and difficult, but there will be no "waiting for the other shoe to drop" for most people. The paperwork associated with confirming appointments and realigning services is proceeding and staff will be able to concentrate on their real work again.

Pat has some thoughts about that, too:

"I've been very impressed with the support of this staff for the work of the department. There is a strong commitment and dedication to the resource, which was recognized and applauded in the auditor-general's report. Our people spend an awful lot of themselves without compensation. I feel very strongly about it; I don't think there's anything else like it in government."



A G. comments

For those who have not read the full auditor-general's report, the following excerpts may be interesting:

We concentrated our audit work on the management of the two most valuable species groups in the Pacific fishery -- salmon and herring. These represent about 80 per cent of the value of the fishery.

We reviewed the regulatory framework of the Pacific fishery and particularly the efforts of the Department and the government to improve the management of the fishery.

We reviewed the quality of information that regional managers have at their disposal to make decisions on who should fish, where and for how long.

We assessed how the Region was monitoring the effectiveness of SEP and its progress on cost recovery.

Finally, ... we audited the planning and budgeting systems of the Region and the management practices of various administrative and technical support functions.

The overcapacity of the fishing fleet ... has caused the participants in the fishery to put pressure on the Department to allocate a larger portion of the available fish to them. It has also made fisheries management more difficult, complex and expensive.

The Region has done a creditable job of managing the fishery, given the complexity and difficulty of the job.

In our field visits to the various fisheries, we noted the dedication and commitment of fishery officers to the proper management of the fisheries and the extensive efforts that they made to consult with and keep representatives of fishing groups informed of their decisions with respect to the fishery.

The lack of accurate and timely information reduces the ability of fisheries managers to protect the resource.

We found that much of the (communication) equipment was not installed or maintained properly. As a result, the current departmental communications system does not support efficient resource management or enforcement.

Due to lack of preventative maintenance, the unavailability of spare parts, and insufficient technical support, boat equipment has had long periods of down-time during peak periods.

Because of the experimental nature of enhancement as well as the natural uncertainties associated with the salmon resource, the program (SEP) continues to be faced with a number of concerns.

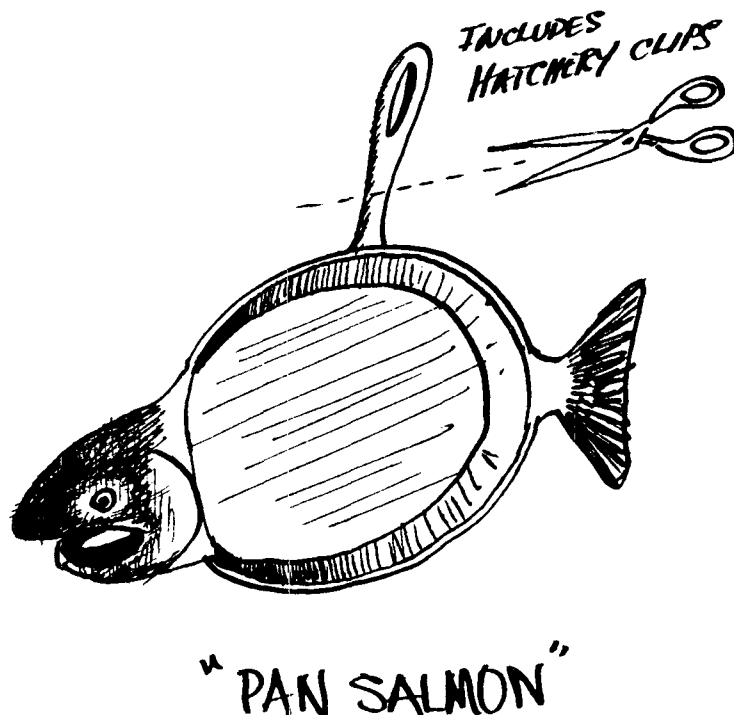
Asked for his comments on the report, Al Wood, Planning and Economics, said he felt that it was a fair report:

"That's why our responses were generally positive. They reported fairly and identified issues correctly. It is highly likely that the Region will be acting on many of the suggestions and some are already underway. Funding the dollar issues will be a bit more challenging. Major funding cannot currently be found within the Region."

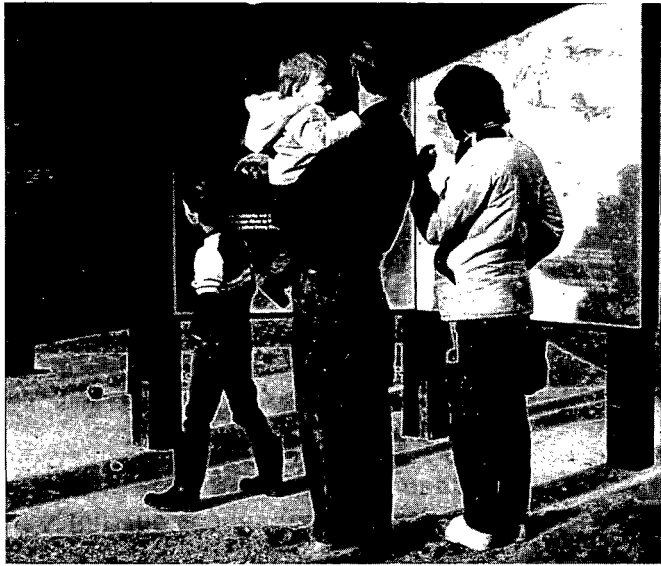


For the individual who read the Christmas party menu and asked: "What is a Pacific Pan Salmon?" Sounder reproduces the following diagram. We hope that this will clear up any confusion as to the biology of the species.

Thanks to Hugh McNairnay.



Adams River: Salute to the sockeye



Once every four years, a miracle happens at the Adams River. The peak cycle of the sockeye run brings millions of brilliant red and green fish back to their river of birth to spawn. It also brings a growing number of human visitors to witness this marvel. The total count of visitors for 1986 was between 240 and 250 thousand. That's about one spectator for every ten fish!

There are problems associated with the event's growing popularity, however. Representatives from the various agencies involved; DFO, the Fisheries Council of B.C. and the Ministry of Environment and Parks are already looking ahead to 1990 and wondering how many visitors the riverbank can withstand.

"The fish must always come first," says Joe Arseneault, DFO's Mister Adams River since 1960.

Joe supports the value of the spectacle as an educational experience however, saying, "Nothing; no pictures, no film, no television program, has the same impact on people as when they really see it for themselves."

There is no denying that impact. People line the banks, growing slowly quieter as the minutes go by. Even children tend to become less active, more solemn. It may be the knowledge that these fish have travelled some 480 kilometres against the currents of the Fraser and Thompson rivers. It may be the sheer numbers that tint much of the river crimson or it may be the knowledge that all of these magnificent specimens will soon lie lifeless along the riverbank. Whatever the reason, people who see the Adams are affected. They no longer just know that salmon fight their way upstream to spawn and die; they feel it.

With that kind of emotional impact, the Adams offers a unique opportunity to get many British Columbians to appreciate the resource, its majesty and its value.

The display area near the viewing platform has become nature's classroom. Signs and displays give visitors a chance to learn a great deal. Films are shown, too. As well, there are souvenir stands where mementos can be purchased and this year the native people offered a smoked salmon and bannock snack that was greatly appreciated.

Concerns about how to retain public access and still protect this environment are genuine. Four years between peak cycles is not long enough to allow vegetation to reestablish a footing. Trees must be cut if there are to be trails and erosion is a real and constant threat. But the tradeoff is worth making, if damage can be controlled. The knowledge and understanding that people acquire in a few hours at the Adams goes a long way toward making sure that B.C. waters will be protected for these fish, and all Pacific fishes, on through 1990, 1994, 1998 and beyond.



Adams visitor: SEP community advisor Gary Taccogna took this photo of Natalie Fobes from Seattle as she prepared to put camera (in aquarium) into the river for underwater photography. Natalie is researching for a book on salmon under a grant from the Elisha Patterson Foundation. Cameras are a constant at the Adams, from the simple Kodak disc to the most sophisticated in still, film and video equipment. The sockeye bring out the photographer in everyone.

Salute to the staff



Adams regulars Miles King (Left) and Robin Kent share a laugh during the Adams run.

People who come to the Adams River are moved by what they see. This would no doubt be true if governments made no effort at all; if visitors just walked the riverbank alone.

Governments do make an effort, however, and visitors learn a great deal. The signs and film showings certainly help, but the biggest educational resource on site is the people. People like Robin Kent, Miles King and, of course, Joe Arseneault. Joe has made the Adams his particular "thing" over the years. His commitment to the salmonid resource has found a focus in this run and people who have met him there have responded to that commitment.

Joe's last official duty for DFO was the 1986 Adams River Salute to Sockeye; a duty he has carried out every four years since 1960. That made it possible for the Minister of Fisheries and Oceans to thank Joe from the department and on behalf of all the thousands of Adams visitors who have learned to care a little bit more because of Joe Arseneault.

The plaque on the Marj Trim photo Joe received reads:

to
Joe Arseneault
in recognition of his service
and dedication to the Department
of Fisheries and Oceans
1959-1986
Tom Siddon, P.C., M.P.
Minister.

The inscription is repeated in French.

Joe is certainly not the only dedicated member of the Adams River team. Robin Kent, who recently transferred to DFO from the IPSFC, has also been a regular at the event since 1960. He, too, is a source of knowledge and understanding about this remarkable salmon run.

To tour the site with Robin is to observe what educators call "the teachable moment" being put to full use at every opportunity.

Children and adults alike quickly identify Robin as "someone who knows." They crowd around with questions, "How far have they travelled?" "How many are there?" "How many come in the other years?" Some of the questions are easy (How do you tell the males from the females?) and others are almost impossible (Why do they die after spawning?). Robin does his best with them all, often cheerfully answering the same question ten times over a walk of as many yards.

He says that one of the interesting aspects of the Adams is the way that people tend to come back.

"On their first visit, they generally don't stay long. They will look at the displays, see the film and spend an hour or so at or near the viewing platform. When they come back again in four years, or eight, they tend to stay longer. They will wander off to some quieter part of the site and just sit, watching one pair. They will stay for several hours. I've met some people here who are back for the third or fourth time. They say that they learn more every time they come."

One reason they do is Robin Kent himself.



Minister of Fisheries and Oceans, Tom Siddon, congratulates Joe Arseneault on a long career of service to the department, the Adams and the resource.

Adams Cont

Another element in the Adams picture is the tagging. Without it, we would be unable to give more than an educated guess as to the number of fish actually on the spawning grounds.

Tagging is a demanding job. The fish are netted on the lakeside near the mouth of the river. One by one they are pulled from the water, hefted onto the canvas table and tagged. The number on each disc and the time of the tagging must be noted. Later, when the river is lined with dead sockeye, the crew will deadpitch the fish, looking for tags to tell them where the fish spawned. Using a predetermined calculation, the crew can tell, from the number of fish that were tagged, almost exactly how many were in the river. That estimate has been checked and found to be 95 per cent accurate.

Of course, it does mean tagging a lot of fish. The day Sounder was there, a woman asked if they tag them all.

"No," replied Miles, "We've only tagged about 21,000 so far. Of course, we do tag them one at a time."

Credit for the success of the Adams as an educational event should be shared with many others who helped. From within DFO they included: Constance Desjardin, Anne Gillespie, Susan Baird, Rita Morris and Danny Tanaka at the site. Mary Jean Comfort and James Boland worked with Jack Nightscales planning the displays.

From outside DFO: Rick Howie and the staff of Visitor Services, B.C. Parks in Kamloops and Harvey Wright of the Fisheries Council of B.C. were involved. Jack Ferry and Betty Fitzsimmons also deserve credit for their efforts at creating awareness and interest long before the first fish ever entered the Fraser.

A special acknowledgement should also go to the people who documented this year's run: cameras from CBC, BBC and Japan Television were in evidence. The Japanese special was to be aired in November. Jack Nightscales saw some of that footage and says it was spectacular. Hopefully, Canadian audiences will get to see it for themselves. The BBC special, which began following the Adams River sockeye out at sea, will be on the air in December 1987. If you find yourself in Britain then, you may be asked a lot of questions about the Adams River sockeye run.



Mid-life no crisis for Tanu

On October 6, the Tanu entered Allied Shipyard, North Vancouver, to commence her mid-life refit after 18 years, one month of service to the Department and fishing industry on the West Coast. During that time she travelled 503,032 nautical miles, and carried out patrols between the mouth of the Columbia River and the Pribilof Islands in the Bering Sea, under the command of the following officers:

Captain R.D. McLellan
 Captain R. Watts
 Captain H.F. Monks
 Captain A.J. Preston
 Captain A.B. Nilssen
 Captain R.M. Myerscough
 Captain E.W. Storzer
 Captain Ted Childs
 Captain J.P. Farley

Of the original crew, only Captain A.B. Nilssen, (who joined as a deck hand), and Mr. E. Auclair, cook, remain. I joined the vessel as second officer one month after she was commissioned at Yarrows Shipyard, Esquimalt, in September, 1968.

Since being designated a "multi-tasked" vessel for search and rescue purposes in August, 1978, Tanu has participated in 256 search and rescue incidents. These have involved assisting vessels that ranged in size from a two-person kayak to a 55,000 ton freighter.

One aspect of Tanu's service, and one which has brought much credit to the Department, is her reputation as an excellent training vessel for deck and engineer officers. The number of personnel who have attained ship's officer qualifications after serving on Tanu is truly substantial; indeed, many of our present ship's officers and masters began their seafaring careers as unlicensed personnel on the Tanu.

A mid-life refit is an important event in the life of a vessel. Apart from upgrading machinery, electronic equipment, and safety arrangements, it is a time when, after much thought, a great deal of paper, many meetings, and a lot of 'crystal ball gazing,' attempts are made to outfit the vessel in order that she can continue to fulfill her role with increased efficiency using 'state of the art' equipment.

A.J. Preston
 Master FPV Tanu
 Red Crew



From pages past

The end of one year and the beginning of the next is a time for looking back.

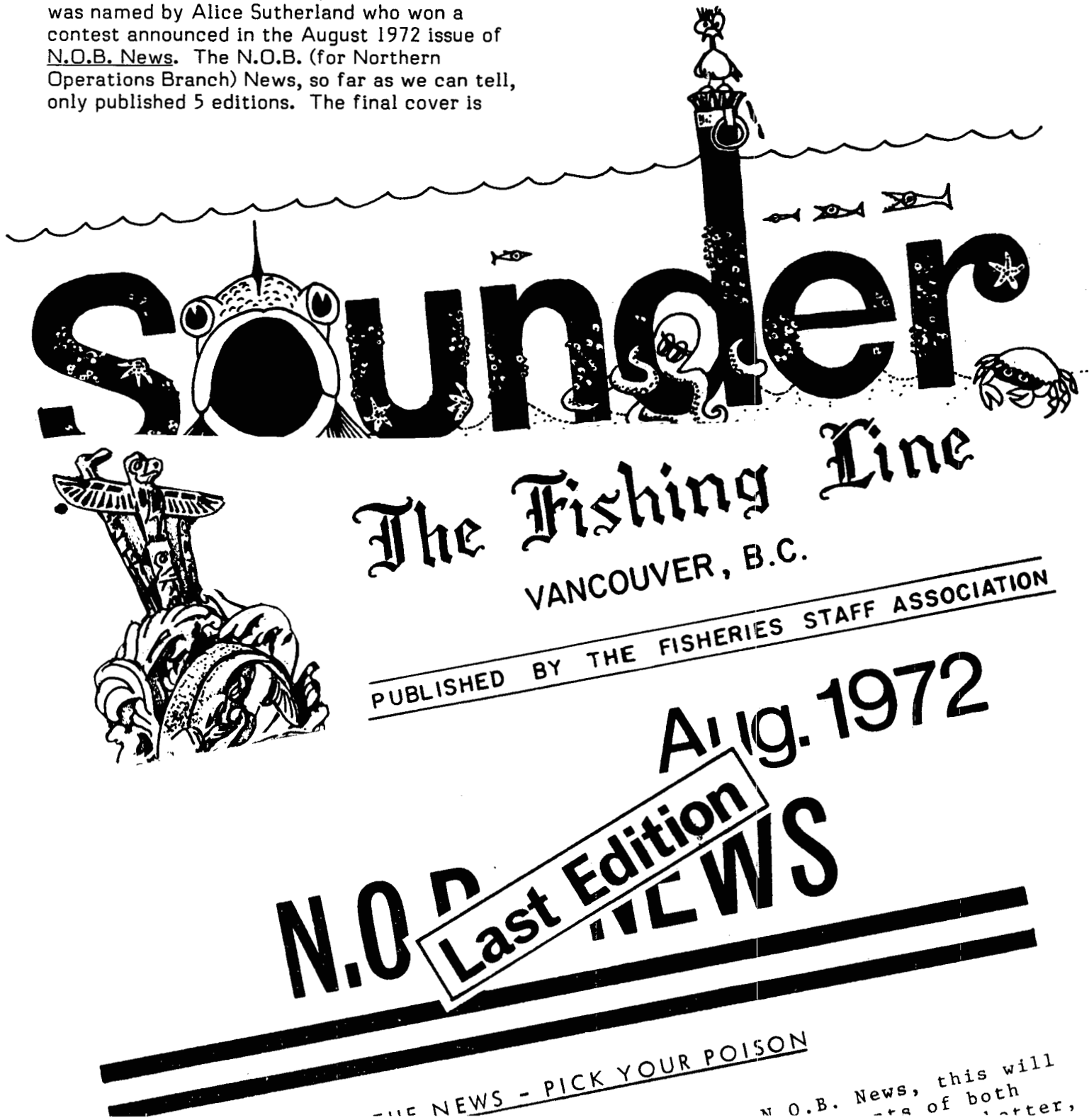
One of the things that Sounder's editor looked back at this year was the history of Sounder itself.

Our more dusty files reveal the following:

Sounder was born in September 1972. It was named by Alice Sutherland who won a contest announced in the August 1972 issue of N.O.B. News. The N.O.B. (for Northern Operations Branch) News, so far as we can tell, only published 5 editions. The final cover is

reproduced here along with Vol. 1, No. 1 of "The Fishing Line" which preceeded it. The Fishing Line is represented in our collection by this one issue only. This appears to have been printed around 1970. The editor was Joe Arseneault.

How's that for Auld Lang Syne?



N.O.B. News, this will be of both interest,

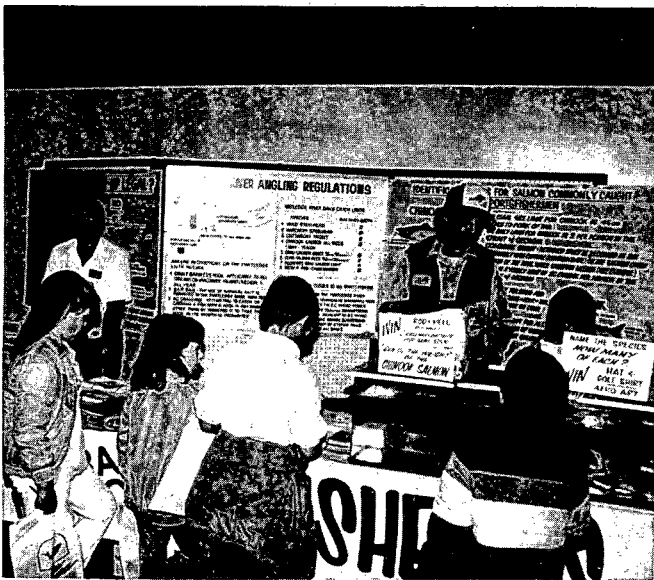
Campaign '86 wraps up

Awareness on the Island

"Awesome fisheries officers, real babes, and it was cool," describe the reactions of at least one audience group to the Comox Awareness Campaign.

The last month of 1986 brings with it the close of this year's DFO Public Awareness Campaign and to highlight this event in their area, the City of Courtenay and the Town of Comox officially declared October 19 to 25 Fisheries Awareness Week.

The week's activities included tours and an open house at Puntledge hatchery, and demonstrations and displays in Driftwood Mall, Courtenay.



Puntledge hatchery declared two days for Seniors Guided Tours and issued personal invitations to the various Comox Valley Senior's group homes. These same groups were also taken to view the mall displays. It was a successful venture -- five seniors' groups attended and one adult handicapped group. This small program allowed special attention to be given to the needs of seniors and the handicapped who would not be able to tour the facility as well when it is open to the general population.

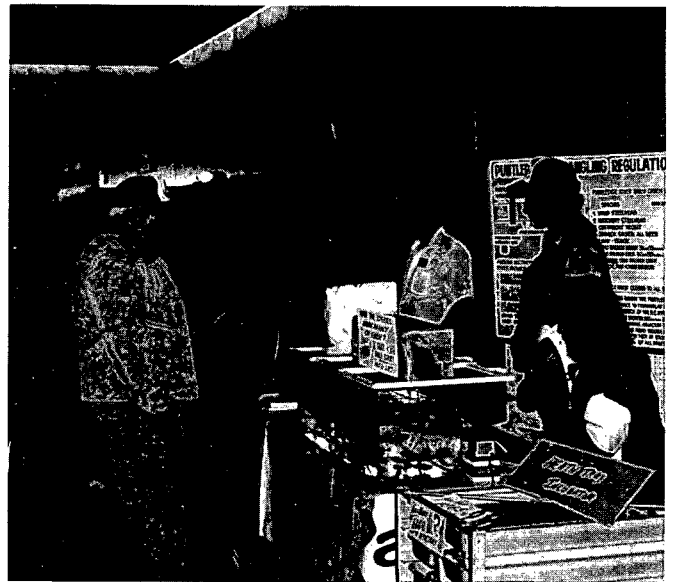
Guided tours for the general public were scheduled six times daily on October 24 and 25. It, too, was a popular event -- over 1,100 people came to look and learn -- plus 600 extra the next day when no tours had been advertised or scheduled!

Awareness at the Driftwood Mall took up the entire public area with DFO displays, user and enhancement groups' displays, and "Neptune Know How" cooking displays.

Success of this four-day event was overwhelming with over 2,500 people viewing the displays. So successful was it, that the mall administration has asked specifically to have DFO displays again next year.

Displays included Fish Inspection, which drew lots of interest from the children touching and feeling the specimens; Mark Recovery and Fish Tagging; an enforcement display on do's and don'ts for the sports fisherman; a large map showing all community SEP projects; a count the eggs in the heath tray contest; Small Craft Harbours; Hurricane/Zodiac Boat display; and a static display depicting different aspects of the maritime patrols of C.F.B. Comox Maritime Reconnaissance VU 33 Squadron.

About 175 volunteers from the user and enhancement groups participated with booths and displays; in particular, the Union Bay Oyster Enhancement Project, the Oyster River Enhancement Society and the Comox Valley Search and Rescue.



Displays in shopping malls are one of the most often-used and successful Our Resource activities. It gives the Department a chance to "go to where the people are" with a message about resource enhancement and protection.

Displays may be as simple as a table full of pamphlets and a wall covered in posters, or they may involve touch tanks and aquaria filled with salmonids and groundfish.

The greatest virtue of the mall display is that it gets our message out to people who may rarely visit dock areas. Such an audience is more in need of the information than commercial and recreational fishers.

Pacific Region Update

And in Port Alberni . . .

Robertson Creek hatchery has been the key player in the Our Resource campaign since last August.

They kicked off with DFO displays, aquariums, maps, and support materials at the August Salmon Festival, and went on to take part in Port Alberni's fall fair in September. An estimated 27,000 people attended both the festival and the fair; the majority of them visiting the DFO display areas.

A "tourists' world map," with pins, was provided for visitors to both events -- showing guests from Hawaii, Holland, West Germany, Finland, Sweden and the United Kingdom.

Demonstrations in fly-casting and tying were part of the activities during Rivers Day (also in September); the highlight was a cooking demonstration.

More than 2,000 people caused a few traffic jams at the Robertson Creek hatchery open house in October, but it was worth it. The day was a tremendous success with tours; adult sorting, egg-takes and male-milting demonstrations; video presentations of "Fishing is Fun" and "River of No Return;" SEP project maps; DFO panel displays and a delicious salmon barbeque.

Some comments from the public:

- very pleasant staff
- it was fantastic
- a worthwhile time spent and worth our tax dollars
- keep up the good work



It was like Christmas morning November 5 for Information, Technology and Systems Division.

The Region's new computer facility was formally introduced with a ribbon-cutting ceremony at the Richmond offices of Digital Equipment of Canada.

The VAX 11/785 computer and related equipment is a key foundation block upon which the department is building its Regional information system.

The computer currently houses Regional fisheries management, operational and administrative data.

Electronic mail is also provided by the system which links offices within the Regional headquarters as well as with the districts.

During the coming fiscal year, additional data will be added to the system and work will be undertaken to improve links with district and sub-district offices as well as with other Regional centres such as the Pacific Biological Station in Nanaimo.

*Mike Romaine
Computer services*

Happy Holidays



the **DG's** comment

I would like to wish all Fisheries and Oceans staff -- from Sooke to Haines Junction -- a very happy Christmas and New Year.

Christmastime, coincidental to year's end, always seems a time for reflection -- a look back and a look ahead. For 1986, there is much to reflect on for us all. Regionally, we went through a very good commercial season, witnessed the best Adams River run since 1913 and survived the extra demands of a World Fair on our doorstep. We also launched the W.E. Ricker into scientific service, put in place a new habitat policy, and took the first steps towards implementing a new regional structure.

There are, of course, issues that will carry forward into 1987 -- for example, allocation between and among different kind of fishers, Native concerns, stock conservation and management, a newly-created consultative process to be set on track, a determination of SEP funding and the further integration of science. The placement of some of our colleagues and friends, declared surplus as a result of reorganization and streamlining, will take more effort in the early months, and continue to be a priority for regional management.

Indeed, 1987 will be a year full of challenges and opportunities. The new organization -- bigger, because it now incorporates the ocean sciences and hydrography sector of the department and better, because it will be fully integrated -- will result in a union of disciplines and programs that benefit resource management and the department's whole mandate. We will be opening the "new" West Vancouver laboratory in 1987 and watching with interest as the new Aquaculture Centre rises adjacent to PBS at Departure Bay.

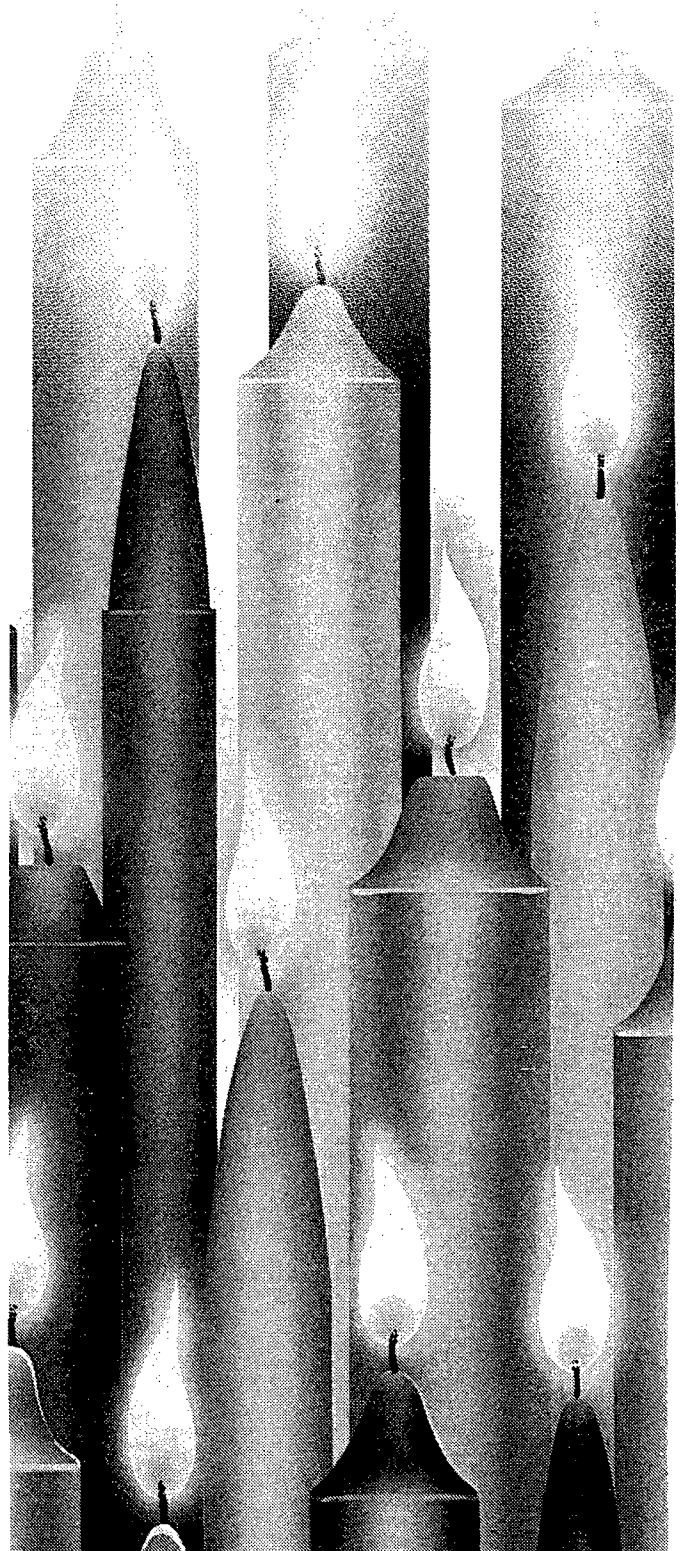
When 1987 draws to a close, we will anticipate being "at home" in our new regional headquarters in the Sears building. Currently, great care is being taken to ensure a good work environment.

I thank you for your support and dedication in the past year. Again, my best wishes.



Pat Chamut

Peace
on Earth



Management of estuaries: the Squamish model

Estuaries are an essential habitat in the salmonid life cycle. Work in Squamish offers lessons for estuary management throughout B.C.

The Squamish Estuary Management Plan was initiated by the B.C. Minister of Environment and Canada's Minister of Fisheries and Oceans in May 1979.

The goal is to provide a decision-making framework to guide land and water use in the Squamish estuary, with flexibility for refinement in later years.

Implementation of the Management Plan is guided by a seven-member Coordinating Committee and an Implementation Coordinator. The following groups are represented:

Department of Fisheries and Oceans (by Forbes Boyd), Ministry of Environment and Parks, Ministry of Lands and Forests, Ministry of Economic Development, Environment Canada, District of Squamish, and British Columbia Railway Company.

The Coordinating Committee is responsible for interacting with government, the private sector and the public; for developing or recommending overall policies related to the Squamish estuary and for encouraging agency and industrial conformance to the intent of the plan.

The environmental impact review process is guided by the Squamish Environmental Assessment Committee, comprised of representatives from Environmental Protection Service, Environment Canada; Canadian Wildlife Service, Environment Canada; Fisheries and Oceans, and the B.C. Ministry of Environment and Parks.

In addition to the two standing committees, three project-specific work groups have been formed: Area Designation Refinement, Log Management and Habitat Restoration Options.

An Information Bank has been established at the Squamish Public Library to provide information on implementation of the Management Plan.

The Management Plan includes a review process for determining the environmental impact of projects proposed within that part of the Squamish estuary covered by the Plan.

The level of review given to proposals is based on the nature of the project and the degree to which it conforms to the Management Plan's guidelines regarding location, management objectives, and design and operational procedures. There are two levels of review: use of the existing inter-agency

referral process to provide information and receive agency comments on straightforward projects, and use of the Management Plan's environmental impact assessment process for projects requiring further information and analysis.

Recommended area designations for the Squamish estuary were included in the Management Plan. Areas were designated as either "Conservation" or "Industrial/Commercial" or, where agreement could not be reached, as "Planning Assessment."

It was recognized that broad-brush application of the three designations caused some areas to be inappropriately designated. Responding to the need to review and refine area designations, the Environmental Assessment Committee, with support from technical specialists, conducted field inspections in July 1985 and July 1986.

Storage, handling and use of logs is a predominant activity in the Squamish estuary. It was recommended in the Management Plan that a log handling and storage strategy be prepared because it has been difficult to find both operationally feasible and environmentally suitable sites to accommodate these activities. The Coordinating Committee requested that a work group of agency and industry representatives be formed. This group was established in February 1986.

The Management Plan also identified a number of opportunities for restoring habitat areas in the estuary which have been degraded by development. Examples include restoration of the dredge spoil site adjacent to the river training wall, installation of water control structures in the river training wall and reconnection of isolated tidal channels. Additional suggestions have been made in situations where habitat compensation is considered as part of proposed project developments.

The first year of Management Plan implementation was a learning experience for those involved. In an effort to respond to some of the difficulties that have been encountered, a joint workshop of the Coordinating and Environmental Assessment Committee was held on May 1, 1986. As a result, a number of administrative adjustments were made, roles and responsibilities clarified and future actions planned.

Forbes Boyd
Habitat Management Division



What, no water?

Salmon and trout eggs are now being incubated without water. Well, almost. SEP's Small Projects Unit has been working on a "moist" incubator and it looks very promising.

Small Projects Unit (SPU) was set up to develop new, innovative and more cost-effective methods of enhancement. SPU also works on improving or modifying more conventional fish culture technologies to overcome problems at existing hatcheries or for use in areas which may not lend themselves to standard designs or methods. This was how, in 1983, SPU biologists and engineers began working on an incubator which did not require flowing water.

Actually, the technique is an old one -- the theory older still. Incubators which kept eggs damp but not flooded were used in hatcheries in Russia in the 1920s. Even in the last century, eggs were transported in containers using damp cotton and melting ice. A few years ago, Rheel Finnigan, senior engineer, SPU, found a few eggs left in a bucket following an egg-take. He fertilized them, took them home and put them in two small bowls with some water in his refrigerator. The eggs survived to the eyed stage although forgotten for some time and partly dried when re-discovered.

This is certainly not unique. Many fish culturists have observed the same thing in one way or another. But the idea was attractive. One of the problems facing SEP in 1983 was the slow development and late ponding time of chinook at small hatcheries in the north. So the idea was dragged out of the "strange" file and developed.

The primary concerns during incubation generally are: to keep temperatures low (but not freezing); to ensure adequate dissolved oxygen; and to remove the buildup of waste products (mostly ammonia) from around the eggs. If the eggs could be kept in a cool, moist environment, would not the oxygen dissolving from the air into the film of water around each egg be enough for its development? Temperatures could be varied easily (and inexpensively) either by heating the water used to dampen the eggs, or by warming the surrounding air. The only concern remaining would be how (or whether) to remove the buildup of waste products.

The theory was tested with the help of Tenderfoot and Inch Creek hatcheries. The incubators worked by suspending the eggs in open trays in an insulated container. The container filled with water that flooded the eggs for a period, then drained, leaving a small

reservoir in the bottom to maintain humidity. Ammonia removal was addressed in two ways. In one prototype, fresh water was used for each flooding. In the other, water was recirculated, but passed through a filter containing two types of volcanic rock which removed ammonia from the water. The results were very promising. Survivals to hatch for coho and steelhead eggs ranged from 56 percent to 78 percent; not significantly different from control groups incubated in heath trays.

Upon hatching, the experimental groups were transferred to heath trays to the "button-up" stage. The resulting fry compared very well in quality with those from the controls.

With the help of published articles, reports, information from workers at PBS and in Alaska and staff ingenuity, several improvements have been made. The ammonia removal component has been better designed. The flooding/drainage cycle has been shortened to roughly 20 minutes flooded and three hours, 40 minutes moist. The system has been adapted for remote locations with a 12-volt battery system. A "production" design has been worked out for certain hatcheries. It can be made of wood or aluminum using a pass-through or recirculating system. Each unit has a capacity of up to 200,000 eggs.

These are now being used at Bella Bella, Fort Babine, Kennedy River and Sechelt. Survivals to the advanced eyed stage have been around 95 percent.

Of course there is still room for improvement. The incubators in use will be further modified to meet load requirements and other methods are being investigated; Robertson Creek hatchery staff are developing a system using Capilano troughs.

If evaluation indicates that the technique is sound, it may have special applications in situations where:

- speeding or slowing of development in eggs is desirable,
- silting problems are associated with fall and winter freshets,
- hatcheries are at a remote location, or it is advantageous to incubate eggs off-station,
- therapeutic chemical treatment of eggs over an extended period of time is too costly when using conventional incubation systems.

Mel Sheng
SPU



United Way

Thanks and congratulations DFO

Mr. P.S. Chamut
Director General

Dear Pat:

Federal Public Service 1986 United Way Campaign

In December you will be receiving the standard letter going to all the Regional Directors-General providing the final results of the Federal Public Service 1986 United Way Campaign. That letter will describe the campaign as the most successful ever undertaken by the Public Service in the greater Vancouver area, having exceeded the target of \$405,000 by a substantial margin. (As of October 31st over \$421,000 has been raised, with more to come.)

This letter relates to the DFO role in the campaign. As you know, it was our turn to chair the campaign and I want to draw your attention to the fine work done by many of our employees in the overall campaign as well as in DFO's fund raising efforts.

The first of these is Dennis Deans. I pressed Dennis into the role of Group Leader (responsible for a half dozen Departments) when another Group Leader fell by the wayside. Dennis, in his usual fashion, tore into the task and produced the results expected.

The second is Howard Smith. You named Howard as the departmental coordinator and he planned and organized a great campaign within the Department as demonstrated by the fact that our participation rate rose from 43% to 53% and our dollar pledges of \$23,000 were 43% above our target of \$16,000!

The third is Bev Bowler of SEP, Special Projects Division. Bev's design talents resulted in the creation of the Federal Public Service series of posters based around the theme "A Gift to Last" which were the envy of all other campaign organizers.

Fourth and fifth are Pam Boland and Flo Van Alstyne of my office. Both have had the unenviable task of supporting my efforts as Chairman and handling the 1001 details that come with a campaign of this magnitude covering 47 separate Departments or Agencies and over 12,000 employees.

Finally, we can be very proud of all of the canvassers in the Department who entered into

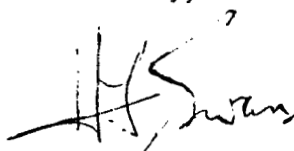
the spirit of the United Way - and there was a new spirit evident in the Federal Public Service Campaign this year. In most Departments people began to see it not just as a necessary chore but as a source of enjoyment - having fun while doing something worthwhile. Thus we had departments offering incentives for participation such as a week's use of the Director-General's parking spot; car washes performed by various Directors, free sail boat rides, etc. I hope next year DFO will pick up on some of these ideas.

Perhaps there is another reason why public servants enjoyed the campaign. Most of us work in very complex, and at times uncertain, environments. It is kind of nice to work on something with a clear cut objective where we can fully exercise our abilities to plan, organize, motivate and control, and in a relatively short time see the results of our actions.

Government departments rotate the task of Chairmanship of the United Way; next year the Department of Public Works takes over the task. Fisheries' turn will not come again until sometime in the 1990's. In the meantime, we can take pride in having set an example for others to shoot at. More importantly, we can take pride in having made a significant contribution to the vital work carried out by United Way agencies.

Because I would like to see the widest possible recognition of the special efforts made this year by DFO employees, I would like your approval to consider this an "open letter" and have it published in the "Sounder".

Sincerely,



Harold Swan
Chairman
Federal Public Service
1986 United Way
Campaign



EDITOR'S NOTE: As of December 1, total from Public Service campaign was over \$450,000.

Pacific Tidings



Leigh Snow, engineer, Petrel Rock, Prince Rupert, and Terry Frost, oiler, James Sinclair, Victoria, have both left the Department as have Alvin Lesberg, groundskeeper, Cultus Lake facility, and Dee Sloan. Bob McIlwaine, Fisheries Development Program, UBC, has left the Department and will be doing private consulting.

Retiring from government after many years of service are:

Bud Bogart, legal research officer, Field Services, Ken Jones, engineering technician, Special Projects, SEP, and Joe Arsenault, habitat management technician, New Westminster. Gordon Putsey has retired from Small Craft Harbours and Jack Hargraves, Ship Division, has retired from the New Westminster Marine Base where he was an engine fitter.

Staff changes at 1090:

Judy Gwin previously secretary, Materiel Management Division, has accepted a position as word processing operator with Program Planning and Development.

Debbie Jones has accepted another position in Finance as an accounts payable clerk.

Laurie Eakins, clerk, Communications Branch, has transferred to a clerical position in Licencing.

Staff changes at PBS:

Pat Bolton has accepted a position as materiel management officer; he is presently head, Materiel & Office Services. Stephanie Koggins, presently senior buyer has accepted a position as purchasing and finance clerk. Maureen Palmer, supervisor, Publications Service, has accepted a position as purchasing/finance clerk. Bob Williams, superintendent, Buildings and Grounds Maintenance, has accepted a position as building and grounds maintenance tradesman.

Moves from PBS to 1090:

Brenda Reynolds and Yvonne Varga are transferring from Accounts Payable positions in Nanaimo to Vancouver.

Alex Rose has been seconded for three days per week until the end of March to work as writer/editor on Peter Pearse's freshwater fish study for the Canadian Wildlife Federation.

Jack Nightscales, director, Communications Branch, and wife Pat left on November 14 for an extended trip to London, Bombay, Singapore, and Hong Kong. The trip includes a stop in Bangkok where Jack plans to visit with Wally Johnson. Kate Glover will be A/director during Jack's holiday leave.

The Company of Master Mariners, at their recent national meeting in North Vancouver, presented W.E. Ricker skipper Al Ranger with marine binoculars for attaining the highest marks in Canada on his examination for foreign-going master.

Ed Britton, A/support biologist, North Coast Unit, has accepted a position as a hatchery manager in the private aquaculture industry.

Dawn Merrick, Fish Ops receptionist/typist has accepted a position with the MICOM services, 6th Floor.

Recently married:

Edie Preugschat, staffing officer, Personnel, to Steve Macfarlane, biologist, Habitat Management Division, HQ, on November 7.

Heather Rennie, Accounts Payable, Vancouver, to Bill Johnson on November 15.

Leaving DFO:

John MacArthur, Staff Relations, Personnel, has left the Department effective November 21 to accept a position with the US Consulate.

Mary Hammond, Library, Vancouver, has left the Department for a job with the Open Learning Institute in Richmond.

Lyn Peters, Facilities Management Division, has left the Department for a position at UBC.

Marian McGavin, Licencing, has left the Department to resume her teaching career.

The following have also left the Department:

Vilma Miller, supervisor, Operations Centre; Jeannine Rousseau, clerk, Facilities Division; Hope Adair, receptionist, Special Projects, SEP; Roni McMillan, micom operator, SEP; and Michelle Nadeau, clerk, Support Services Branch. Bruce Wright, Special Projects Division, SEP, is leaving the Department to go into private business as is George Hunter, regional aquaculture coordinator PBS.

