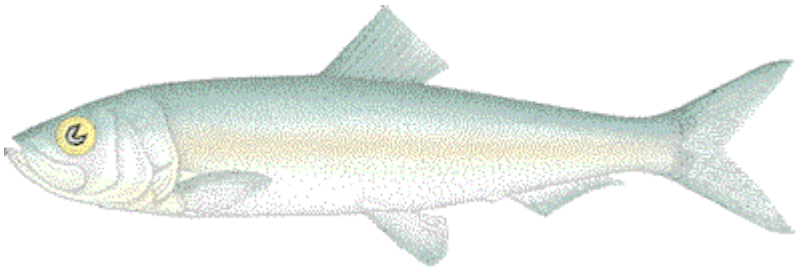
PACIFIC REGION

INTEGRATED FISHERIES MANAGEMENT PLAN

2005

SPAWN-ON-KELP HERRING



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Canada

This Integrated Fisheries Management Plan is intended for general purposes only. Where there is a discrepancy between the Plan and the regulations, the regulations are the final authority. A description of Areas and Subareas referenced in this plan can be found in the Pacific Fishery Management Area Regulations.

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1. CONTACTS FOR FURTHER INFORMATION

Commercial Information		(604) 666-2828
Observe, Record and Report		(800) 465-4336

Fisheries Management Branch

A/Regional Pelagics Coordinator	Rita Purdon	(604) 666-4775
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South Coast Herring/Salmon Resource Manager	Lorena Hamer	(250) 756-7196
North Coast Herring Biologist	Mark Potyrala	(250) 627-3457
South Coast Area Chief - Fisheries Management	Ed Lochbaum	(250) 756-7288
North Coast Area Chief - Fisheries Management	David Einarson	(250) 627-3426
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Fisheries Management Coordinator - Port Alberni	Alistair Thomson	(250) 720-4454
Fisheries Management Coordinator - Nanaimo	Gerry Kelly	(250) 754-0208
Fisheries Management Coordinator - Port Hardy	George Bates	(250) 949-6181
Fisheries Management Coordinator - Prince Rupert	Jim Steward	(250) 627-3421
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Fisheries Management Coordinator - Queen Charlotte City	Victor Fradette	(250) 559-4467

Conservation and Protection

Area Chief - South Coast	John Lewis	(250) 756-7159
Area Chief - North Coast	Scott Coultish	(250) 627-3402
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Science Branch

Pacific Biological Station Hammond Bay Road Nanaimo, B.C. V9R 5K6	Jake Schweigert	(250) 756-7203

Licensing

Pacific Fishery Licence Unit 200 - 401 Burrard Street Vancouver, B.C. V6C 3S4		(604) 666-0566

Pacific Fishery Licence Unit 417 2nd Avenue West Prince Rupert, B.C. V8J 1G8		(250) 627-3413
Pacific Fishery Licence Unit 60 Front Street Nanaimo, B.C. V9R 5H7		(250) 754-0400

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Web Sites

Fisheries and Oceans Canada Pacific Region: www.pac.dfo-mpo.gc.ca

Fisheries and Oceans Canada herring site: www.pac.dfo-mpo.gc.ca/ops/fm/Herring/default_e.htm

Herring Stock Status Reports: www.pac.dfo-mpo.gc.ca/sci/psarc/SSRs/pelagic_ssrs_e.htm

2. GLOSSARY

Area	A division of Canadian fisheries waters as described in the *Pacific Fishery Management Area Regulations*. http://laws.justice.gc.ca/en/F-14/SOR-82-215/index.html
closed pond	An area with artificially suspended aquatic plants surrounded by netting that does impound herring that have been captured live by a seine vessel. The herring are released after spawning.
FSC	Food, Social and Ceremonial fishery for First Nations
HCRS	Herring Conservation and Research Society: a non-profit society formed to promote and enhance the conservation of herring stocks on the west coast of Canada
IHHPC	Integrated Herring Harvest Planning Committee a representative cross-sectoral advisory process for integrated harvest planning and post-season review.
landed	Having offloaded catch onto land.
landing	The offloading of catch onto land.
observer	An individual who has been designated as an observer by the Regional Director General for Pacific Region pursuant to Section 39 of the *Fishery (General) Regulations* (see Section 6.2 for details).
on-grounds monitor	An individual that conducts the following activities: monitoring and documenting herring capture, impoundment activities, kelp harvest, the harvest of spawn-on-kelp (SOK) completion of Validation Logs, labelling of totes used to transport product, communicating fishery regulations to SOK operators and liaison between SOK operators, fishery managers and enforcement officers.
open pond	An area with artificially suspended aquatic plants that does not capture or impound herring but is often a site of natural spawning.
IQ	Individual Quota.
pelagic	Living in the surface or middle depths of the sea.
PSARC	Pacific Scientific Advice Review Committee
port monitor	An individual that conducts the following activities: monitoring all

	landings of SOK product, completion of Herring SOK Fishery Validation Forms, monitoring and control of export containers in processing plants, administering labels for export buckets, and data collection in processing plants.
recruit, recruitment	Herring spawning for the first time. Generally accepted by researchers to be three years old.
SOKOA	Spawn-on-Kelp Operators Association
spawn-on-kelp (SOK)	Marine kelp blades covered in herring eggs.
SOKIAB	Spawn on Kelp Industry Advisory Board: a consultative body made up of representatives elected from and appointed by SOK license holders
Subarea	A division of Canadian fisheries waters as described in the *Pacific Fishery Management Area Regulations*.
TAC	Total Allowable Catch
ton	Short ton, 2000 lbs., traditionally used as a unit of measure by British Columbia and United States fishers.
tonne	Metric tonne, 1000 kg, or 2204.6 lbs.
validated	The verification and recording of weight by an observer of a species of fish caught and landed.

3. INTRODUCTION

The 2005 Pacific Region Herring Spawn-on-Kelp Integrated Fisheries Management Plan (IFMP) encompasses the fishing period February 10, 2005 to June 30, 2005, with a focus on the SOK fisheries scheduled between the first week of March and the last week in April. For further information about the herring fishery, refer to the web page or in hard copy at any Fisheries and Oceans Canada office:

www.pac.dfo-mpo.gc.ca/ops/fm/Herring/default_e.htm

For additional information please see the Pacific Scientific Advice Review Committee (PSARC) Pelagic Subcommittee working papers. These working papers can be obtained from the PSARC Secretariat, Pacific Biological Station Nanaimo, V9R 5K0, or through the Fisheries and Oceans Canada's website at:

www.pac.dfo-mpo.gc.ca/sci/psarc/

Other IFMP's for Roe Herring, Herring Food and Bait, and Herring Special Use Fisheries can be found at:

www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm

4. DESCRIPTION OF FISHERY

The SOK fishery is conducted by suspending lines of kelp where herring spawn. *Macrocystis integrefolia* is the primary kelp species used, but *Laminaria saccharina* and *Egregia menziesii* are also permitted.

In closed ponding, herring in spawning condition are captured by seine vessel and placed in an enclosure with suspended lines of kelp. The herring in the closed pond are released after spawning, but there is a greater mortality associated with the increased handling. In the open ponding technique, the herring remain free in the ocean environment and kelp is suspended along the shoreline in an area where herring are expected to spawn.

After the herring spawn on the kelp, the SOK is harvested, trimmed, brined, and later processed in a processing plant. In the SOK fishery, whole fish are not the harvest objective; it is rather, the eggs on kelp after spawning has occurred. With either technique, the primary impact on the resource is the removal of eggs, which is accounted for in the herring allocation process.

The SOK fishery traditionally occurs in 4 of the 5 pacific herring stock assessment areas: Queen Charlotte Islands (QCI), Prince Rupert District (PRD), Central Coast (CC), and the west coast of Vancouver Island (WCVI). It does not occur in the Strait of Georgia (Gulf) because of the lack of macrocystis kelp.

SOK is a traditional food of British Columbia coastal First Nations. First Nations communities harvest herring SOK for food, social and ceremonial purposes under the authority of communal licences. First Nations coastal communities have traditionally harvested herring spawn by the open pond method or naturally on several different types of kelp, eel grass and tree branches.

There are currently 46 SOK licences operating in British Columbia which are held by both individuals and First Nation bands. 16 First Nation bands operate 25 licences and the remaining 21 licences are operated by individual First Nations and non-First Nations operators.

There are no recreational fisheries for herring SOK.

5. CONSULTATION

The Department has worked with the former SOK Technical Working Group and other herring stakeholders for over two years to establish a more stream-lined, cross sectoral advisory process for harvest planning and management.

As a result of this work, during the summer of 2004, SOK licence holders held a vote to elect representatives who will represent their interests on the SOK harvest planning committee. The result was the formation of a new SOK Industry Advisory Board (SOKIAB). The SOKIAB is a body that will serve as the primary source of advice and consultation on issues affecting the SOK fishers.

The Department has also established a new Integrated Herring Harvest Planning committee (IHHPC). The IHHPC will have membership available to First Nations, commercial roe HIAB representatives, the SOKIAB representatives, the recreational sector and environmental organizations. The IHHPC will be the venue for the Department for cross-sectoral communication and advice on issues related to Herring fisheries in the Pacific Region.

The IHHPC and associated structures/processes will be reviewed and evaluated by the Department and participants not later than 2006.

Information on the advisory process can be found through the herring advisory process website at:

www-ops2.pac.dfo-mpo.gc.ca/xnet/content/consultations/pelagics/herring/IHHAC_e.htm

6. STOCK STATUS

On a coast-wide basis, herring abundance decreased in 2004. The estimated pre-fishery biomass was 221,400 metric tonnes (t), (244,051 tons), which represents a 2% decrease over the 2003 stock level of 226,300 t (249,453 tons). The recruitment of the 2001-year class in 2004 was poor in the Queen Charlotte Islands, Prince Rupert District, and the Central Coast; poor to average in the west coast of Vancouver Island; and average to good in the Strait of Georgia. Abundance was stable in all areas except for a slight increase in the Central Coast and a moderate decline in the Strait of Georgia.

For the five major stock assessment regions in British Columbia, the forecast biomass for 2005 is 193,070 t (212,823 tons). Application of the 20% harvest rate policy results in a recommended yield of 37,540 t (41,381 tons). Forecast returns are above cut off levels in all areas except for the Queen Charlotte Islands where the forecast biomass is well below cut-off levels. Further information on the status of herring stocks in each of the stock assessment regions can be found on the web at:

www.pac.dfo-mpo.gc.ca/sci/psarc/ResDocs/res_docs_e.htm

The Pacific Scientific Advice Review Committee (PSARC) 2005 stock forecasts, cut off levels, and recommended yield t for each of the stock assessment areas follow:

Area	Recruitment	Forecast	Cut Off	Maximum Recommended Harvest
QCI	Poor	5,400	10,700	0

PRD	Average	27,390	12,100	5,480
CC	Average	33,880	17,600	6,780
Gulf	Average	97,420	21,200	19,480
WCVI	Average	28,980	18,800	5,800
Total		**193,070**		**37,540**

7. CONSERVATION LIMITS

Conservation limits are established to ensure that harvest proceeds in a precautionary manner and that sufficient biomass is available to replenish the stocks on an ongoing basis. The 20% harvest rate for Pacific herring was introduced in 1983 and cut off levels were added in 1986. The 20% harvest rate is based on an analysis of stock dynamics, which indicates this level will stabilize both catch and spawning biomass while foregoing minimum yield over the long term (Hall et al. 1988, Zheng et al. 1993). Cut off levels have been revised from time to time but have generally remained fixed since 1996.

The PSARC has reviewed the biological basis for target exploitation rate, considering both the priority of assuring conservation of the resource and allowing sustainable harvesting opportunities (Schweigert and Ware 1995). The review concluded that 20% is an appropriate exploitation rate for those stocks that are well above the cut off or minimum spawning biomass threshold levels for commercial fisheries (PSARC 1995). For those stocks which are marginally above cut off the following reduced catch level is recommended: catch = forecast run - cut off. This will provide for smaller fisheries in areas where the 20% harvest rate would bring the escapement down to levels below the cut off.

As part of the Objectives Based Fisheries Management (OBFM) initiative, the Department is currently reviewing the harvesting policy for pacific herring. Changes in harvest rates or cut off levels may occur in some areas as a result of these new analyses.

At this time there is no information available on the appropriate conservation limits for the ecosystem as it pertains to the herring stocks. It is recognized that herring play a critical role in the ecosystem and are a food source for a variety of species. The precautionary harvest rate of 20% of the mature biomass ensures that 80% of the adult population is available to predator species and to provide for future production. Additionally, since no harvest occurs on immature herring all of these fish are available to support ecosystem processes. Research is ongoing to better understand these ecosystem processes and the role herring plays in maintaining the integrity and functioning of the ecosystem.

8. RESEARCH

Research activities are focussed in the areas of: stock assessment; annual data collection and database management; stock identification; and the influence of habitat and climate factors on herring survival and recruitment.

Stock assessment related research activities consist of reviewing and evaluating the biological assumptions underlying the assessment models and adapting them to incorporate new findings about herring population biology. Recent contributions include reviews of adult natural mortality rate and descriptions of variations in size-at-age.

A considerable amount of effort and resources are being expended in the area of stock identification. Projects include microsatellite DNA analysis, coded-wire tagging, and herring metapopulation analysis. Two field surveys have been conducted for several years. The first is a summer survey of relative herring abundance along the southwest coast of Vancouver Island. The goal is to provide a recruitment forecast for the assessment of the west coast Vancouver Island (WCVI) herring stock. Beginning in 2003, a similar survey was initiated in the Hecate Strait/Queen Charlotte Sound area with the goal of providing similar information for Central and North Coast stocks.

A field survey examining the fall distribution of adult and juvenile fish in the Strait of Georgia continued in 2004. The distribution, abundance, food and feeding of juvenile herring and salmonids are examined to address the role of forage fish in an ecosystem. In 2002, a similar survey was conducted in the central coast on an exploratory basis and was continued for the third year in 2004.

Three projects are addressing the effects of habitat and climate issues on herring survival and productivity. One program is examining the influence of climatic variations and species interactions on WCVI herring recruitment and growth. The second project is investigating factors affecting the spawn index and age-at-maturity. The third project is monitoring euphausiid and copepod population biology to assess the effects of variation in their productivity on the population biology of WCVI herring.

9. LEGAL AUTHORITY

The commercial SOK fishery is managed under authority of the *Fisheries Act* and the regulations detailed in the following:

a) *Pacific Fishery Regulations, 1993;*
b) *Fishery (General) Regulations; and*
c) *Aboriginal Communal Fishing Licences Regulations.*

10. SPECIFIC MANAGEMENT OBJECTIVES AND PERFORMANCE MEASURES

SOK fisheries management in 2005 will be evaluated against the objectives and performance measurements listed below.

10.1. To ensure conservation and protection of pacific herring stocks through the application of scientific management principles applied in a risk averse and precautionary manner based on the best scientific advice available.

Conservation and protection of pacific herring stocks will be carried out by applying a conservative harvest rate to a maximum of 20% to each of the five stock assessment regions. Cut off levels are also established for each of the areas to ensure adequate spawning stocks are maintained.

10.2. To provide opportunities for First Nations access for food, social, and ceremonial purposes (FSC), in a manner consistent with the *Sparrow* decision.

Fisheries and Oceans Canada will consult with First Nations in order to determine FSC requirements. First Nations will be authorized to fish for FSC through the use of a communal licence.

10.3. Collect accurate and timely catch, and landing information by geographic location, gear type, and date.

Catch information will be obtained through an industry funded on-grounds and dockside monitoring program (DMP).

10.4. Collect accurate stock assessment information.

A herring industry funded test fishing program will collect biological samples and spawn survey information from all major stocks, as well as many minor stocks.

11. CURRENT MANAGEMENT ISSUES

11.1. Queen Charlotte Islands - Stock Status Concern

In the Queen Charlotte Islands Area, the forecasted biomass is well below the cut off. Five of the past eight year-classes have been poor resulting in the current low abundance level.

Since 2003, a precautionary fisheries management plan has been implemented to minimize potential impact on herring resources but the stock has shown no signs of recovery. No commercial fishery will take place in Area 2 East (Major stock assessment area), but fishing in Area 2 West (minor stock area) will proceed.

11.2. Fisheries in the Central Coast

Managing and coordinating successful fisheries for FSC, SOK, and roe herring within limited areas presents management difficulties. There will be pre-season and in-season consultation with all user groups.

11.3. Island Point

Island Point is located on the North side of Porcher Island is an alternate site for SOK operations in Area 4. This site usually accounts for a small portion of the harvest, as the Big Bay area is more productive. In 2004, this area received higher effort than normal. Operators are requested to exercise caution when harvesting at Island Point.

11.4. Imported Alaskan SOK Notification and Validation

In the past, SOK product from Alaska was imported without notification or validation requirements for Canadian transport vessels. In 2005, the conditions for importing SOK will include notification to the SOK Regional Coordinator and validation of the offload weight by a qualified third party service provider. An information package will be developed for importers. It can be obtained by contacting Steven Groves at (250) 627-3455 or a Fisheries and Oceans Canada Licencing Unit.

11.5. Licence Nomination

There currently is no process for SOK "J" licences to be nominated from one licence holder to another. The Spawn on Kelp Industry Advisory Board has requested that the Department review the existing policy with a view to removing this restriction. This has been initiated by Fisheries and Oceans Canada.

11.6. Objective Based Fishery Management

As part of the OBFM initiative, guidance on the level of risk associated with various harvest policy options are being investigated. Fishery management strategies that consider the associated risk will be developed through consultation over the next few years.

12. FINANCIAL RESPONSIBILITIES

The 37 SOK fishery licence holders, represented by SOKOA, contribute the funding required for a monitoring program that provides coverage on-grounds, at landing stations, and in processing plants. The program is administered by SOKOA, which hires an independent company to carry out monitoring activities. In 2004, 10 on-ground monitors and 8 port monitors were employed in seven locations covering landings to 13 different processors. Program costs vary but are anticipated to be between $150-200K annually. The 2005 SOK Fishery Monitoring program is expected to be reduced from the 2004 program back to 8 on-grounds monitors.

The Heiltsuk First Nation will participate in an alternative monitoring program for 2005 that provides coverage on-grounds, at the landing station and the processing plant.

13. COMMERCIAL PLAN

13.1. Management Changes for 2005

13.1.1. No fishery in the Area 2 East Major Stock Assessment Area

Due to continued low stock returns and the lowest forecast on record, the major stock assessment area which is all of Area 2E and up to Louscoone Inlet in the southern of Area 2W will be closed to all herring commercial activities.

13.1.2. Fee Waiver for QCI

This year due to concerns for low stocks in Area 2 East licence eligibility holders may elect not to fish. Licence Holders taking the option of zero quota, would still be responsible for applying for their licence to maintain their status for the upcoming years.

13.2. Location of the Fishery

Table 1: Number of licences by Area[1]

Geographic Area and Fisheries Management Area	Number of Licences
QCI	
Area 2 West	10
PR	
Area 3/4	7
Area 5	3
CC	
Area 6	3
Area 7	10
Area7/8 (Kwakshua)	2
Area 10	3
WCVI (Inside)	
Area 12	1
WCVI	
Area 27	3
Area 23/24/25	4
Total	**46**

SOK production for all areas, except Area 7, is 8 tons per licence. In Area 7, there is one 8 ton licence and 9 licences held by the Heiltsuk Tribal Council that have a total production tonnage of 120 tons.

13.3. Control and Monitoring of Fishing Activities

Catch monitoring and at-sea monitoring are essential to the successful management of the resource and the fishery. Fisheries and Oceans Canada will work with licence holders to ensure that appropriate catch monitoring arrangements are in place for the SOK fishery.

SOKOA members will continue to fund a program of on-grounds monitoring and plant validation. First introduced in 1996, this program includes both the monitoring of on-grounds fishing activity and the validation of landed and processed SOK by on-grounds and port monitors. In-season, all monitoring activities are directed by an independent program coordinator or by a Fisheries and Oceans Canada representative. JO Thomas and Associates have been retained by SOKOA to provide and coordinate the SOK monitoring program since 1996.

1 Subject to change.

On-grounds monitors will be in place to provide adequate coverage and will monitor in season SOK fishery activities. Duties of the on-grounds monitors include liaison between SOK operators, Fisheries and Oceans Canada fishery managers, enforcement officers and the SOKOA. Included in monitoring duties are monitoring and documenting herring capture, impoundment activities, kelp harvest, the harvest of SOK, completion of validation logs, labelling of totes used to transport product, and communicating fishery regulations and Conditions of Licence to SOK operators.

Port monitors will attend all landings at designated landing ports of SOK product.

Duties of the port monitor include: monitoring all landings of SOK product, completion of herring SOK fishery validation forms, monitoring and control of export containers and export validation labels and data collection in processing plants.

The Heiltsuk First Nation participates in an alternative monitoring program for 2005 that provides coverage on-grounds, at the landing station and the processing plant.

13.4. Knotless Web

In order to minimize handling mortalities to herring captured for SOK operations, the use of knotless web is mandatory for all seine net bunts. The bunt portion of any seine net used in the SOK fishery must be a minimum of 40 metres (20 fathoms) in length. In addition, it is a condition of the SOK licence that knotless web be used for all herring enclosures in which herring are impounded for SOK production.

13.5. Kelp Harvest

The harvest of macrocystis, egregia and laminaria kelp used in SOK operations is carried out under the authority of a marine plant harvest licence issued by the British Columbia Ministry of Agriculture, Food, and Fisheries. Conditions of Licence include area of harvest and quantity of kelp that may be harvested.

SOK operators must ensure that appropriate arrangements for harvest of kelp have been made prior to the fishery.

British Columbia Ministry of Agriculture, Food, and Fisheries license and enforce this fishery. Information regarding kelp harvesting and licensing is available from:

Ministry of Agriculture, Food, and Fisheries
Aquaculture and Commercial Fisheries Branch
2500 Cliffe Ave.
Courtenay, B.C. V9N 5M6
Phone: (250) 897-7540

Licensing
Kathy Evans
Phone: (250) 897-7541
Fax: (250) 334-1410

Management
Scott Pilcher
2500 Cliffe Ave
Courtenay, B.C. V9N 5M6
Phone: (250) 897-7549
Fax: (250) 334-1410

13.6. Notification Requirements

"J" and "FJ" licence holders must comply with the following in-season notification requirements.

Each SOK licence holder must notify the on-grounds monitor prior to commencing fishing operations and harvesting SOK product. This stipulation facilitates compliance with the requirements for monitoring of harvest activities and completion of the Herring Spawn-on Kelp Fishery Validation Form.

Each SOK licence holder must notify the port monitor's agent**,** prior to transporting SOK product, in order to ensure the timely deployment of a port monitor to each landing port. The SOK licence holder must provide the following information to the port monitor's agent:

a) "J" and/or "FJ" licence number.
b) Packer name.
c) Estimated time of landing.
d) Landing port.
e) Estimated weight of SOK product.
f) Number of totes.

Each SOK licence holder must notify the port monitor's agent 48 hours prior to initiating the processing of SOK (grading, brining and pailing) in a processing plant. This condition will facilitate the deployment of port monitors to monitor processing operations.

13.7. Designated Landing Ports

The landing of SOK product for SOKOA registered operators is restricted to the following designated landing ports only: Masset, Skidegate, Port Simpson, Prince Rupert, Port Edward, Waglisla, Klemtu, Port Hardy, Quadra Island (Quathiaski Cove), Tofino, Ucluelet, and Vancouver. The Heiltsuk First Nation will land product in Bella Bella only. For the purposes of this IFMP, the term "landing port" refers to the site at which product is drained and weighed.

13.8. Catch Validation and Fishery Validation Form

To ensure the continuity of catch information from the time of SOK harvest to delivery and processing, a Herring Spawn-on-Kelp Fishery Validation Form must be completed for each harvest operation. The on-grounds monitor will be responsible for documenting SOK harvest in the validation log, and the product weight is validated at the plant.

The original copy of the Herring Spawn-on-Kelp Fishery Validation Form must accompany the SOK product to the landing port and to the processing plant, where the port monitor will record the landed weight and processed weight on the log form.

13.9. Containers Used For Export of Product

To facilitate control of SOK product processed for transport to the Japanese market, a plastic container has been developed for use in the industry. The dimensions of the container are approximately 50cm x 35cm x 20cm, and product capacity is approximately 14 kg (30 lbs.). A limited number of containers (600) are available for issuance to each licence holder. The SOKOA monitoring program will maintain an inventory of containers from year to year. An industry contracted service provider will control the release and recovery of buckets.

In-season, the port monitors will monitor containers used in processing plants and ensure their appropriate disposition utilising the Herring Spawn-on-Kelp Pail Transfer Document. Fisheries and Oceans Canada will audit the quantities utilised by each licence holder.

13.10. SOKOA Logbook

SOKOA will provide members with a Spawn-on-Kelp Operators Logbook to keep a record of all activities relating to SOK operations and stock assessment.

13.11. Catch Reporting

The licence holder is responsible for completion of an accurate sales report after the SOK product has been sold. This form must be submitted to Fisheries and Oceans Canada Regional Data Unit no later than September 15, 2005 at the following address:

Fisheries and Oceans Canada
Regional Data Unit
#200 - 401 Burrard St
Vancouver, B.C. V6C 3S4
Fax: (604) 666-9008

13.12. Public Health

To ensure product quality, all herring SOK harvesters and companies processing SOK must adhere to the following requirements:

a) All herring SOK must be shipped to, graded, packed, labelled and exported from establishments possessing valid Federal Certificates of Registration as fish processing plants. The plant's QMP must include controls for the processing of herring SOK.

b) Containers must be used to collect and hold SOK during harvesting and for transporting to the processing plants. These must be constructed of approved materials, as per the Canadian Food Inspection Agency Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products. They must also be fitted with rigid covers when holding product to protect it from weather and contamination.
c) During the holding and transporting period, the product should be kept chilled to prevent quality loss.
d) For export of the product from registered processing plants, rectangular plastic pails with tight fitting lids are the most acceptable. These particular pails cause minimal damage to the product.
e) Export containers (pails), must be properly labelled to show the name of the product, the weight, a list of ingredients and the name and address of the processor or distributor. If a distributor's name and address is used, the processor's registration number must be on the label as well. The containers must also indicate the date on which the product was packed so that if there are any problems the product can be segregated into lots without having to hold or delay the entire shipment. Grades are not allowed unless provided for in regulations. The licence number and a decal numbered sequentially, as issued by Fisheries and Oceans Canada must also appear on each container.
f) Product certification for export will be carried out upon request. The product must be available for inspection at a federally registered fish processing plant at time of request. Requests for certification must be made four working days prior to last date available for inspection.

When the lot is ready for inspection, application in writing must be made to any of the following:

Canadian Food Inspection Agency
4250 Commerce Circle
Victoria, B.C. V8Z 4M2
Phone: (250) 363-3455
Fax: (250) 363-0336
Prince Rupert Inspector: (250) 627-3439.

2250 Boundary Road
Burnaby, B.C. V5M 4L9
Phone: (604) 666-4427
Fax: (604) 666-3650

To issue the export certificate, the following information will need to be included, and so applicants should include this in their application:

a) Product description.
b) Lot number or day code.
c) Number of buckets.
d) Weight per bucket and total weight.

e) Sequential numbers (from stickers issued by Fisheries and Oceans Canada).
f) Permit number (if more than one permit number, the amount for each).
g) Consignee.
h) Consignor.
i) Identifying marks (unique to shipment).
j) Date of shipment or last date available for inspection.
k) Method of shipment. (Specific vessel or flight must be stated).
l) Location of product.
m) Processor and registration number.
n) Country for export.

13.13. Enforcement Measures

Conservation and Protection (C&P) has the main responsibility for carrying out the Department's fisheries enforcement program. There are approximately 170 fishery officers stationed in the Pacific Region (which encompasses British Columbia and Yukon Territory). They are designated as "fishery officers" under Section 5 of the *Fisheries Act*. Their powers and responsibilities are outlined in the *Act*, the *Criminal Code of Canada* and the *Constitution Act*.

Some marine enforcement officers employed by the Canadian Coast Guard (CCG) also carry "fishery officer" designation and have the same powers and responsibilities as other departmental fishery officers. They are trained in enforcement duties and are armed.

A third component supporting enforcement is contract monitors and dockside monitors. They have limited enforcement training and may contribute to enforcement through observe, record and report activities. Some monitors have enhanced enforcement training, but they are not armed and do not have the powers to search or arrest.

The fourth component supporting enforcement is native fishery guardians and monitors. They wear the uniform of their Band or Tribal Group. Their main responsibilities are monitoring and catch validations. Some First Nations carry a "fishery guardian" designation, depending on training and the agreement between the Band and the Department.

C&P staff monitor fisheries, enforce the regulatory regime, and support the safe conduct of the fleet related to all herring fisheries in British Columbia. Monitoring and enforcement activities are dedicated to the identified priority fisheries in the Pacific Region.

First Nations FSC and commercial fisheries require C&P presence to ensure the opportunities occur for First Nations to meet their needs. Monitoring of these fisheries takes place in conjunction with the other roe herring and SOK fisheries. Regional priorities also determine the degree of effort which C&P allocate to the First Nations fisheries and other commercial fisheries.

13.14. Quota Allocations

13.14.1. Individual Quota

The majority of licences have an IQ of 8 tons of drained product, adjusted subject to the quota carry-over provision. The Heiltsuk First Nation holds 9 licences with a total IQ of 120 tons.

A port monitor will monitor all SOK harvested and landed. The weight of the SOK product to be applied against an IQ will be the total drained weight of SOK product validated at the landing port. A salt allowance, equal to 5% of the total drained weight, shall be applied to compensate for salt and entrained water (i.e., the total validated weight will equal the drained weight minus 5% of the drained weight).

The transfer of SOK product between licence holders operating in different stock assessment areas is not allowed. SOK product can be transferred on-grounds between licence holders in the same stock assessment areas. In-plant transfers of product between licence holders from the same stock assessment area can be carried out, subject to the prior approval of a Fisheries and Oceans Canada representative. In such cases a completed Herring Spawn-on-Kelp Product Transfer Document will be required.

13.14.2. Carry Over of Quota Overage and Underage

The carry-over program for quota overages or quota underages will continue in 2005. First introduced in 1996, this program allows the SOK licence holder to carry over reasonable IQ overages or IQ underages from one year to the next.

13.14.3. The Rules for Carry-Over of Individual Quota Underages

Licence holders whose product weight is under the IQ by 2000 lbs. or less**,** at the end of the season, will have the equivalent weight of the underage added to their IQ in 2005.

Licence holders whose product weight is under the IQ by more than 2000 lbs., at the end of the season, will have only 2000 lbs. added to the 2005 IQ and will forego the remainder.

13.14.4. The Rules for Carry Over of Individual Quota Overages

Licence holders, whose product weight is over their IQ by as much as 1000 lbs. at the end of the season, may retain the overage. Any product landed in excess of the quota may be seized and charges may result. The equivalent weight of any overage will be subtracted from the next licence year quota.

14. LICENSING

14.1. Licence Category

A SOK licence, category "J" or "FJ" is required to commercially harvest SOK. SOK licence eligibilities are limited entry and party based. SOK licences are issued for herring pond operations.

14.2. Licence Fees

"J" licence fees will be based on the following formula: $1,517 multiplied by the number of metric tonnes of herring SOK authorized to be taken under the licence, minus 40% of that fee calculated where the amount is less than $2,500.00, or minus $1,000.00 where the amount is $2,500.00 or more. The "J" licence fee is not affected by overages and underages from the previous year and typically is $10,009.00. There is no licence fee for "FJ" communal commercial licences.

14.3. Licence Application Requirements

SOK applications must be completed and submitted with the required fees to a Pacific Fishery Licence Unit (PFLU) by January 15 annually in order to maintain the licence eligibility, whether fishing will take place or not.

For SOK licences introduced for First Nations groups in 1991 and 1992, where all roe herring gillnet retirement obligations have not yet been met, the annual requirement to designate roe herring licences as inactive must be met by December 15. This deadline must be adhered to for both inactive and/or any roe herring gill net retirements as they may have an impact on quota allocations for the remainder of the roe herring gill net fleet.

The licence eligibility holder must sign the application. Where the licence eligibility holder is a First Nations group, only an authorized signing authority for the group may sign the application. The PFLU must have on record a copy of either a Confirmation of Signing Authorities or an Amendment to Confirmation of Signing Authorities advising who the signing authorities for the First Nations group are.

Prior to licence issue, the licence eligibility holder must ensure that:

a) any Ministerial conditions placed on the licence eligibility are met;
b) any conditions of the previous years' licence have been met; i.e. Landing and Sales Reports for the last year have been completed and submitted (for further information contact the Regional Data Unit at (604) 666-4654);
c) the application designates a registered commercial fishing vessel as the operating vessel (a maximum of three operating vessels may be designated);
d) proof of participation in a Department approved SOK monitoring program must be provided; and
e) seine vessels used to capture and impound herring must be registered as commercial fishing vessels with the PFLU but they do not require a vessel-based commercial fishing licence eligibility. If an operating vessel is not currently a registered commercial fishing vessel the following must be submitted or on record with the PFLU:

i. a completed Application to Register a Commercial Fishing Vessel and applicable fees of $50.00;
ii. ownership documents: if the vessel is licensed under the *Canada Shipping Act*, either the Bill of Sale or a copy of the vessel's Licence Certificate; if the vessel is registered under the *Canada Shipping Act*, either the Registered Bill of Sale or the amended Certificate of Registry;
iii. a marine surveyor's report dated after May 1, 1989 that has been conducted in accordance with Fisheries and Oceans Canada current Vessel Measurement Guidelines. The report must state the overall length, depth, and breadth of the vessel and contain current bow, stern and side profile photographs of the vessel signed and dated by the marine surveyor; and
iv. an approved Fish Hold Inspection Report (for a newly registered vessel).

A Vessel Registration Number (VRN) will be issued. The VRN must be affixed to the vessel according to the *Pacific Fishery Regulations, 1993*. For further details on registration requirements, please see the Application for Commercial Fishing Vessel Registration, available from a PFLU.

Pond set-up or harvesting is not permitted prior to licence issue.

14.4. Vessel Redesignation

Vessel redesignation after a licence is issued is permitted when required. A written request for vessel redesignation must be completed by the licence eligibility holder and submitted to a PFLU for approval. Licence eligibility holders must:

a) ensure all requirements for licence application detailed above are met with regard to the replacement vessel; and
b) return the current year commercial fishing licence and validation tabs with the redesignation application.

15. ATTACHMENTS

Appendix 1: 2005 Closed Pond Licence Conditions
Appendix 2: 2005 Open Pond Licence Conditions
Appendix 3: Fishing Vessel Safety

Appendix 1: Conditions of 2005 Herring Spawn-on-Kelp Licence (Closed Pond)

This example of conditions of licence is provided for your information only. These conditions of licence are generic and may not be the same as those provided when a licence is issued. The actual conditions of licence will be attached to the licence issued by a Pacific Fishery Licensing Office.

CONDITIONS OF 2005 HERRING SPAWN-ON-KELP LICENCE
(CLOSED POND)

Authority

The Department of Fisheries and Oceans has authority to set licensing conditions under subsection 22(1) of the Fishery (General) Regulations for the proper management and control of fisheries and the conservation and protection of fish.

Persons fishing under authority of this licence may only do so in accordance with the Conditions stated below.

Also, it is the responsibility of individual fishers to be informed of, and comply with, the Fisheries Act and the Regulations made thereunder, in addition to these Conditions.

For information on management of the herring spawn-on-kelp fishery obtain a copy of the 2005 Herring Spawn-on-Kelp Fisheries Management Plan from a Pacific Fishery Licensing Office. The Management Plan is intended for general information purposes only. Where there is a discrepancy between the Plan and the Regulations or Conditions, the Regulations and Conditions prevail.

Definitions

"Department" means Fisheries and Oceans Canada.

“kelp” means any of the following marine plants: Macrocystis integrefolia, Laminaria saccharina and Egregia menziesii.

“landed” or “landing” means the transfer of spawn-on-kelp product from a vessel in the water to land.

"observer" means a person who has been designated as an observer by the Regional Director-General for Pacific Region pursuant to section 39 of the Fishery (General) Regulations.

“validated” means spawn-on-kelp that has been weighed by an observer and the weight entered into section 2 of the Herring Spawn-on-Kelp Fishery Validation Form.

1. Species of fish permitted to be taken:

(1) Herring (Clupea harengus pallasi) for spawn-on-kelp production.

(2) Marine plants permitted for use as substrate are limited to the species Macrocystis integrefolia and Laminaria saccharina and Egregia menziesii.

2. Quantities permitted to be taken:

(1) The maximum quantity or quota of herring spawn-on-kelp authorized to be taken under this licence shall not exceed the quota set out in this licence.

(2) The weight of validated spawn-on-kelp will be the weight used to calculate the quantity taken.

(3) Spawn-on-kelp that has been salted shall be considered as harvested under authority of this licence and shall not be returned to the sea or separated without prior approval from a representative of the Department.

3. Type, size and quantity of fishing gear and equipment that is permitted to be used and the manner it which it may be used:

(1) Fishing gear permitted for capturing herring:

(a) Herring may be captured by purse seine net or by trap net.

(b) The bunt portion of any seine net used to capture herring must be made of knotless web and must be a minimum of 40 m in length.

(2) Fishing gear permitted for impounding herring:

(a) Enclosures may be used to impound herring for the production of spawn-on-kelp. All captured or impounded herring taken as part of the fishing operation authorized by this licence shall be released following harvest of the spawn-on-kelp except where specific arrangements have been made with a representative of the Department.

(b) Enclosures must be constructed so that the floating frame can support the weight of an impoundment net and enclosed herring without collapsing.

(c) Each enclosure must be marked with the Category J licence number under the authority of which it is operated. The numerals must be a minimum of 8 inches in height, black in colour, on a white background and visible above the water line.

(d) Any net used in a herring enclosure must be made of knotless web.

(e) The bottom of the herring enclosure net must be maintained so that the bottom of the net is a minimum of 3 m above the substrate under the enclosure at all times.

(f) Any net used to impound herring for spawn-on-kelp production must remain suspended in the water column for 21 days following the release of the impounded herring.

(3) Methods permitted for suspending kelp:

Floating lines and rafts are permitted for the suspension of kelp.

4. Spawn-on-Kelp Operators Logbook

(1) The vessel master shall keep a record of all activity carried out under authority of this licence in a Spawn-on-Kelp Operators Logbook. A Spawn-on-Kelp Operators Logbook is available from:

Spawn on Kelp Operators Association
25-4700 Francis Road
Richmond, BC V7C 4V6
(604) 862-2603

(2) All information shall be recorded in the Spawn-on-Kelp Operators Logbook by midnight on each day of fishing and harvesting activity.

(3) All recording in the Spawn-on-Kelp Operators Logbook shall be in ink. If an error is made while completing an entry, the entry shall be crossed out. Erasure of an entry in the Spawn-on-Kelp Operators Logbook is not permitted.

(4) The vessel master shall ensure prior to fishing that the Spawn-on-Kelp Operators Logbook is available for use and that sufficient pages are available to cover all fishing and harvesting activity.

(5) The Spawn-on-Kelp Operators Logbook shall be kept on board the vessel at all times and shall be made available for inspection upon request of an observer or a representative of the Department.

(6) The completed original logbook sheet(s) from the Spawn-on-Kelp Operators Logbook shall be provided to an observer or shall be forwarded within seven (7) days of the final landing date to:

J.O. Thomas & Associates Ltd
1370 Kootenay Street
Vancouver BC V5K 4R1
(604) 291-6340

5. Procedures for disposing of dead herring:

(1) Twenty-four (24) hours prior to disposing of herring killed in a spawn-on-kelp operation, the licence holder shall notify a local DFO manager or member of Conservation and Protection (fisheries officer) of the intent to dispose of the herring.

(2) Herring killed in a spawn-on-kelp operation shall be deposited only in a location designated by a representative of the Department.

6. Oral Reports:

(1) Prior to harvesting herring spawn-on-kelp:

Prior to commencement of harvest operations, the licence holder shall advise a spawn-on-kelp observer of the following:

(a) the date and time when spawn-on-kelp will be harvested; and
(b) the location at which spawn-on-kelp will be harvested.

(2) Prior to transporting spawn-on-kelp:

Prior to transporting spawn-on-kelp, the licence holder shall notify the spawn-on-kelp observer or call (800) 663-3344 and advise of the following:

(a) the name of the vessel that is to be used to transport the spawn-on-kelp;
(b) the name of the designated landing port and location therein where the spawn-on-kelp will be offloaded;
(c) the fish processor where the spawn-on-kelp is to be processed;
(d) the anticipated time of offloading; and
(e) the buyer to whom the spawn-on-kelp is to be sold.

(3) Prior to processing herring spawn-on-kelp:

Forty-eight (48) hours prior to processing spawn-on-kelp in a fish processing plant, the licence holder shall call (800) 663-3344 and advise of the following:

(a) the date and time when spawn-on-kelp will be processed; and
(b) the name and location of the processing plant at which spawn-on-kelp will be processed.

7. Locations permitted for the landing of spawn-on-kelp:

Spawn-on-kelp must be landed at one of the following ports:

Bella Bella	Port Edward	Quadra Island (Quathiaski Cove)	Vancouver
Bella Coola	Port Hardy	Skidegate	
Klemtu	Port Simpson	Tofino	
Masset	Prince Rupert	Ucluelet	

8. Type and labelling of containers:

(1) Containers used to pack and transport herring spawn-on-kelp shall be constructed of approved material, i.e. fibreglass, plastic or aluminium. Wood construction is not permitted.

(2) Unprocessed spawn-on-kelp leaving the grounds shall be packed only in containers of a type approved by the Department. The containers must be labelled with:

(a) the name of the product (i.e. spawn-on-kelp);
(b) the Category "J" licence number under the authority of which the spawn-on-kelp was collected;
(c) the shipment number;
(d) the date on which the product was packed;
(e) the container number;
(f) the harvest location;
(g) the destination of the shipment;
(h) the pond number of the licence holder; and
(i) a validation sticker approved by the Department.

(3) Processed spawn-on-kelp shall be packed only in containers of a type approved by the Department. The containers must be labelled with:

(a) the name of the product (i.e. spawn-on-kelp);

(b) the weight of the product;
(c) the name of the processor or distributor;
(d) the date on which the product was packed;
(e) the Category "J" licence number under the authority of which the spawn-on-kelp was collected; and
(f) a validation sticker approved by the Department.

9. Validation:

(1) The Herring Spawn-on-Kelp Fishery Validation Form shall remain at the harvest site while spawn-on-kelp is being harvested.

(2) Immediately upon completion of harvest and prior to transport of any spawn-on-kelp product, the licence holder shall have a spawn-on-kelp observer estimate the weight of harvested spawn-on-kelp and complete Section 1 of the Validation Form.

(3) A copy of the Validation Form shall accompany the spawn-on-kelp product to the port of landing and processing plant.

(4) At the time of weigh-out, the licence holder shall have a spawn-on-kelp observer complete Section 2 of the Validation Form. The weight recorded will be the harvested product weight used for validation.

(5) Following weigh-out, spawn-on-kelp may be drained for a period of not more than twelve (12) hours. After the drained product has been weighed, an allowance of 5% of the total remaining weight may be deducted to allow for remaining liquid and salt.

(6) Following processing, the licence holder shall have a spawn-on-kelp observer complete Section 3 of the Validation Form and record the processed weight. Any quota overage shall be separated, with the approval of a representative of the Department, from the total production on a prorated basis by product grade.

10. Sales Report:

An accurate written report shall be furnished in the form set out in the management plan of all spawn-on-kelp harvested and processed under the authority of this licence. The sales report must be completed and sent to the following address after the final sales have been made, or by September 15, 2005, whichever is earlier:

Fisheries and Oceans Canada
Regional Data Unit
Suite 200-401 Burrard Street
Vancouver BC V6C 3S4

Appendix 2: Conditions of 2005 Herring Spawn-on-Kelp Licence (Open Pond)

This example of conditions of licence is provided for your information only. These conditions of licence are generic and may not be the same as those provided when a licence is issued. The actual conditions of licence will be attached to the licence issued by a Pacific Fishery Licensing Office.

CONDITIONS OF 2005 HERRING SPAWN-ON-KELP LICENCE
(OPEN POND)

Authority

The Department of Fisheries and Oceans has authority to set licensing conditions under subsection 22(1) of the Fishery (General) Regulations for the proper management and control of fisheries and the conservation and protection of fish.

Persons fishing under authority of this licence may only do so in accordance with the Conditions stated below.

Also, it is the responsibility of individual fishers to be informed of, and comply with, the Fisheries Act and the Regulations made thereunder, in addition to these Conditions.

For information on management of the herring spawn-on-kelp fishery obtain a copy of the 2005 Herring Spawn-on-Kelp Fisheries Management Plan from a Pacific Fishery Licensing Office. The Management Plan is intended for general information purposes only. Where there is a discrepancy between the Plan and the Regulations or Conditions, the Regulations and Conditions prevail.

Definitions

"Department" means Fisheries and Oceans Canada.

“kelp” means any of the following marine plants: Macrocystis integrefolia, Laminaria saccharina and Egregia menziesii.

“landed” or “landing” means the transfer of spawn-on-kelp product from a vessel in the water to land.

"observer" means a person who has been designated as an observer by the Regional Director-General for Pacific Region pursuant to section 39 of the Fishery (General) Regulations.

“validated” means spawn-on-kelp that has been weighed by an observer and the weight entered into section 2 of the Herring Spawn-on-Kelp Fishery Validation Form.

1. Species of fish permitted to be taken:

(1) Herring (Clupea harengus pallasi) for spawn-on-kelp production.

(2) Marine plants permitted for use as substrate are limited to the species Macrocystis integrefolia and Laminaria saccharina and Egregia menziesii.

2. Quantities permitted to be taken:

(1) The maximum quantity or quota of herring spawn-on-kelp authorized to be taken under this licence shall not exceed the quota set out in this licence.

(2) The weight of validated spawn-on-kelp will be the weight used to calculate the quantity taken.

(3) Spawn-on-kelp that has been salted shall be considered as harvested under authority of this licence and shall not be returned to the sea or separated without prior approval from a representative of the Department.

3. Type, size and quantity of fishing gear and equipment that is permitted to be used and the manner it which it may be used:

(1) Herring may not be captured or impounded unless authorized in writing by a representative of the Department. Any captured or impounded herring taken as part of the authorized fishing operation shall be released following harvest of the spawn-on-kelp except where specific arrangements have been made with a representative of the Department.

(2) Fishing gear permitted for capturing herring:

(a) Herring may be captured by purse seine net or by trap net.

(b) The bunt portion of any seine net used to capture herring must be made of knotless web and must be a minimum of 40 m in length.

(3) Fishing gear permitted for impounding herring:

(a) Enclosures may be used to impound herring for the production of spawn-on-kelp. Enclosures must be constructed so that the floating frame can support the weight of an impoundment net and enclosed herring without collapsing.

(b) Each enclosure must be marked with the Category J licence number under the authority of which it is operated. The numerals must be a minimum of 8 inches in height, black in colour, on a white background and visible above the water line.

(c) Any net used in a herring enclosure must be made of knotless web.

(d) The bottom of the herring enclosure net must be maintained so that the bottom of the net is a minimum of 3 m above the substrate under the enclosure at all times.

(e) Any net used to impound herring for spawn-on-kelp production must remain suspended in the water column for 21 days following the release of the impounded herring.

(4) Methods permitted for suspending kelp:

Floating lines and rafts are permitted for the suspension of kelp.

(5) Nets may be suspended in the water to direct herring towards the open pond kelp. Suspended nets must meet the following specifications:

(a) nets must be constructed with knotless web;
(b) floating frames, used to suspend the nets, must be capable of supporting the weight of the net without collapsing;
(c) the bottom of any nets must be a minimum of 3 meters above the substrate at all times;
(d) the net must remain in the water a minimum of 21 days following the most recent herring spawn deposition; and
(e) each net must be marked with the category J licence number under the authority of which it is operated. The numerals must be a minimum of 8 inches in height, black in colour, on a white background and visible above the water line.

4. Spawn-on-Kelp Operators Logbook

(1) The vessel master shall keep a record of all activity carried out under authority of this licence in a Spawn-on-Kelp Operators Logbook. A Spawn-on-Kelp Operators Logbook is available from:

Spawn on Kelp Operators Association
25-4700 Francis Road
Richmond, BC V7C 4V6
(604) 862-2603

(2) All information shall be recorded in the Spawn-on-Kelp Operators Logbook by midnight on each day of fishing and harvesting activity.

(3) All recording in the Spawn-on-Kelp Operators Logbook shall be in ink. If an error is made while completing an entry, the entry shall be crossed out. Erasure of an entry in the Spawn-on-Kelp Operators Logbook is not permitted.

(4) The vessel master shall ensure prior to fishing that the Spawn-on-Kelp Operators Logbook is available for use and that sufficient pages are available to cover all fishing and harvesting activity.

(5) The Spawn-on-Kelp Operators Logbook shall be kept on board the vessel at all times and shall be made available for inspection upon request of an observer or a representative of the Department.

(6) The completed original logbook sheet(s) from the Spawn-on-Kelp Operators Logbook shall be provided to an observer or shall be forwarded within seven (7) days of the final landing date to:

J.O. Thomas & Associates Ltd
1370 Kootenay Street
Vancouver BC V5K 4R1
(604) 291-6340

5. Procedures for disposing of dead herring:

(1) Twenty-four (24) hours prior to disposing of herring killed in a spawn-on-kelp operation, the licence holder shall notify a local DFO manager or member of Conservation and Protection (fisheries officer) of the intent to dispose of the herring.

(2) Herring killed in a spawn-on-kelp operation shall be deposited only in a location designated by a representative of the Department.

6. Oral Reports:

(1) Prior to harvesting herring spawn-on-kelp:

Prior to commencement of harvest operations, the licence holder shall advise a spawn-on-kelp observer of the following:

(a) the date and time when spawn-on-kelp will be harvested; and
(b) the location at which spawn-on-kelp will be harvested.

(2) Prior to transporting spawn-on-kelp:

Prior to transporting spawn-on-kelp, the licence holder shall notify the spawn-on-kelp observer or call (800) 663-3344 and advise of the following:

(a) the name of the vessel that is to be used to transport the spawn-on-kelp;
(b) the name of the designated landing port and location therein where the spawn-on-kelp will be offloaded;
(c) the fish processor where the spawn-on-kelp is to be processed;
(d) the anticipated time of offloading; and
(e) the buyer to whom the spawn-on-kelp is to be sold.

(3) Prior to processing herring spawn-on-kelp:

Forty-eight (48) hours prior to processing spawn-on-kelp in a fish processing plant, the licence holder shall call (800) 663-3344 and advise of the following:

(a) the date and time when spawn-on-kelp will be processed; and
(b) the name and location of the processing plant at which spawn-on-kelp will be processed.

7. Locations permitted for the landing of spawn-on-kelp:

Spawn-on-kelp must be landed at one of the following ports:

Bella Bella	Port Edward	Quadra Island (Quathiaski Cove)	Vancouver
Bella Coola	Port Hardy	Skidegate	
Klemtu	Port Simpson	Tofino	
Masset	Prince Rupert	Ucluelet	

8. Type and labelling of containers:

(1) Containers used to pack and transport herring spawn-on-kelp shall be constructed of approved material, i.e. fibreglass, plastic or aluminium. Wood construction is not permitted.

(2) Unprocessed spawn-on-kelp leaving the grounds shall be packed only in containers of a type approved by the Department. The containers must be labelled with:

(a) the name of the product (i.e. spawn-on-kelp);
(b) the Category "J" licence number under the authority of which the spawn-on-kelp was collected;
(c) the shipment number;
(d) the date on which the product was packed;
(e) the container number;
(f) the harvest location;
(g) the destination of the shipment;
(h) the pond number of the licence holder; and
(i) a validation sticker approved by the Department.

(3) Unprocessed spawn-on-kelp leaving the grounds in Area 27 shall be packed only in containers of a type approved by the Department. The containers must be transported in a secure vehicle. The driver of the vehicle must carry documentation with the following information:

(a) the name of the product (i.e. spawn-on-kelp);
(b) the Category "J" licence number(s) under the authority of which the spawn-on-kelp was collected;
(c) the shipment number;
(d) an inventory of each container listing:
    (i) the container number;
    (ii) the date on which the product was packed into the container;
    (iii) the date on which the product was packed into the vehicle;
    (iv) the harvest location;
    (v) the destination of the shipment;
    (vi) the pond number of the licence holder;
(e) a validation approved by the Department.

(4) Processed spawn-on-kelp shall be packed only in containers of a type approved by the Department. The containers must be labelled with:

(a) the name of the product (i.e. spawn-on-kelp);
(b) the weight of the product;
(c) the name of the processor or distributor;
(d) the date on which the product was packed;
(e) the Category "J" licence number under the authority of which the spawn-on-kelp was collected; and
(f) a validation sticker approved by the Department.

9. Validation:

(1) The Herring Spawn-on-Kelp Fishery Validation Form shall remain at the harvest site while spawn-on-kelp is being harvested.

(2) Immediately upon completion of harvest and prior to transport of any spawn-on-kelp product, the licence holder shall have a spawn-on-kelp observer estimate the weight of harvested spawn-on-kelp and complete Section 1 of the Validation Form.

(3) A copy of the Validation Form shall accompany the spawn-on-kelp product to the port of landing and processing plant.

(4) At the time of weigh-out, the licence holder shall have a spawn-on-kelp observer complete Section 2 of the Validation Form. The weight recorded will be the harvested product weight used for validation.

(5) Following weigh-out, spawn-on-kelp may be drained for a period of not more than twelve (12) hours. After the drained product has been weighed, an allowance of 5% of the total remaining weight may be deducted to allow for remaining liquid and salt.

(6) Following processing, the licence holder shall have a spawn-on-kelp observer complete Section 3 of the Validation Form and record the processed weight. Any quota overage shall be separated, with the approval of a representative of the Department, from the total production on a prorated basis by product grade.

10. Sales Report:

An accurate written report shall be furnished in the form set out in the management plan of all spawn-on-kelp harvested and processed under the authority of this licence. The sales report must be completed and sent to the following address after the final sales have been made, or by September 15, 2005, whichever is earlier:

Fisheries and Oceans Canada
Regional Data Unit
Suite 200-401 Burrard Street
Vancouver BC V6C 3S4

Appendix 3: Fishing Vessel Safety

Vessel owners and masters have a duty to ensure the safety of their crew and vessel. Adherence to safety regulations and good practices by owners, masters and crew of fishing vessels will help save lives, protect the vessel from damage and protect the environment. All fishing vessels must be in a seaworthy condition and maintained as required by Transport Canada (TC), Workers Compensation Board of British Columbia (WCB) and other applicable agencies. Vessels subject to inspection should ensure that the certificate of inspection is valid for the area of intended operation. Before leaving on a voyage the owner, master or operator must ensure that the fishing vessel is capable of safely making the passage.

Critical factors for a safe voyage include the seaworthiness of the vessel, vessel stability, having the required carriage safety equipment in good working order, crew training, and knowledge of current and forecasted weather conditions.

Useful publications include TC publication TP10038 "*Small Fishing Vessel Safety Manual*" which can be obtained from TC or printed from the Internet at:

www.tc.gc.ca/MarineSafety/Tp/Tp10038/tp10038e.htm

On July 30, 2003 all crew with more than 6 months at sea will be required to have taken minimum Marine Emergency Duties (MED) training or be registered for such training. MED provides a basic understanding of the hazards associated with the marine environment; the prevention of shipboard incidents (including fires), raising and reacting to alarms, fire and abandonment situations, and the skills necessary for survival and rescue.

Fishers are reminded of the importance of paying close attention to current weather treads and forecasts during the voyage. Marine weather information and forecasts can be obtained on VHF channels 21B, Wx1, Wx2, Wx3, or Wx4. Weather information is also available from Environment Canada on the Internet at:

www.weatheroffice.ec.gc.ca/marine/region_03_e.html

Vessel stability is paramount for safety. Care must be given to the stowage and securing of all cargo, skiffs, equipment, fuel containers and supplies, and also to correct ballasting. Fishers must be familiar with their vessel's centre of gravity, the effect of liquid free surfaces on stability, loose water or fish on deck, loading and unloading operations and the vessel's freeboard. Know the limitations of your vessel; if you are unsure contact a reputable marine surveyor or the local TC Marine Safety office.

Vessel owners and masters should ensure that all crew are able to activate the Search and Rescue (SAR) system early rather than later by contacting the Canadian Coast Guard (CCG). It is strongly recommended that all fishers carry a registered 406 MHz Emergency Position Indicating Radio Beacon (EPIRB). These beacons should be

registered with the National Search and Rescue secretariat. When activated, an EPIRB transmits a distress call which is picked up or relayed by satellites and transmitted via land earth stations to the Joint Rescue Co-ordination Centre (JRCC), which will task and co-ordinate rescue resources.

Vessel owners and masters should monitor VHF channel 16 or MF 2182 KHz and make themselves and their crews familiar with other radio frequencies. All crew should know how to make a distress call and should obtain their restricted operator certificate from Industry Canada. However, whenever possible, masters should contact the nearest CCG Marine Communications and Traffic Services (MCTS) station (on VHF channel 16 or MF 2182 kHz) prior to a distress situation developing. Correct radio procedures are important for communications in an emergency. Incorrect or misunderstood communications may hinder a rescue response.

As of August 1, 2003 all commercial vessels greater than 20 metres in length are required to carry a Class D VHF Digital Selective Calling (DSC) radio. A registered VHF DSC radio has the capability to alert other DSC equipped vessels in your immediate area and MCTS that your vessel is in distress. Masters should be aware that they should register their DSC radios with Industry Canada to obtain an Marine Mobile Service Identities (MMSI) number or the automatic distress calling feature of the radio may not work.

A VHF DSC radio that is connected to a global positioning system (GPS) unit will also automatically include your vessel's current position in the distress message. More detailed information on MCTS and VHF DSC radio can be obtained from the Internet at:

www.pacific.ccg-gcc.gc.ca

Fishers must be knowledgeable of the *Collision Regulations* and the responsibilities between vessels where risk of collision exists. Navigation lights must be kept in good working order and must be displayed from sunset to sunrise and during all other times of restricted visibility. To help reduce the potential for collision or close quarters situations which may also result in the loss of fishing gear, fishers are encouraged to monitor the appropriate local Vessel Traffic Services (VTS) VHF channel, when travelling or fishing near shipping lanes or other areas frequented by large commercial vessels. Vessels required to participate in VTS include:

- Every ship twenty metres or more in length.
- Every ship engaged in towing or pushing any vessel or object, other than fishing gear.
- Where the combined length of the ship and any vessel or object towed or pushed by the ship is forty five metres or more in length.
- Where the length of the vessel or object being towed or pushed by the ship is twenty metres or more in length.

Exceptions include:

- A ship towing or pushing inside a log booming ground.

- A pleasure yacht **less than** 30 metres in length.
- A fishing vessel that is *less than* 24 metres in length and not **more than** 150 tons gross.

More detailed information on VTS can be obtained by calling (604) 775-8862, or from the Internet at:

www.pacific.ccg-gcc.gc.ca/mcts-sctm/index_e.htm

Fishers are encouraged to use the buddy system when transiting, and fishing as this allows for the ability to provide mutual aid. An important trip consideration is the use of a sail plan which includes the particulars of the vessel, crew and voyage. The sail plan should be left with a responsible person on shore or filed with the local MCTS. After leaving port the fisher should contact the holder of the sail plan daily or as per another schedule. The sail plan should ensure notification to JRCC when communication is not maintained which might indicate your vessel is in distress. Be sure to cancel the sail plan upon completion of the voyage.