

fisheries information

THE FISHING INDUSTRY OF PRINCE EDWARD ISLAND

The fishing industry is of major economic importance to the Prince Edward Island economy, which is not surprising since the province's location is so near to the rich fishing grounds of the Gulf of St. Lawrence. The landed value of the catch, which is made up of a number of species, fluctuates annually — up to \$30-million. The province's small population is unable to absorb this production and therefore much of it is marketed within Canada or exported to international markets.

Processing the catch increases the value significantly. The total economic return to the province from the fishing industry, including employment in processing and related service industries, increases the value by up to three times the landed value.

The fishing industry is third in importance to the P.E.I. economy following closely behind agriculture and tourism. Although statistics show P.E.I. with the lowest provincial share of the total Atlantic fisheries landings, one should not assume that it is not of similar economic importance. The small share the province has of these landings is due to a variety of reasons — the small size of the province; the correspondingly low number of fishermen to share the catch; and the high percentage of species such as lobsters and scallops which command higher prices per pound than in the other provinces. The landed value of the P.E.I. fishery per fisherman compares very favorably with the other Atlantic provinces.

P.E.I. fishermen have good access to the fishing grounds of the Gulf of St. Lawrence and the Northumberland Strait as well as a number of bays and rivers within

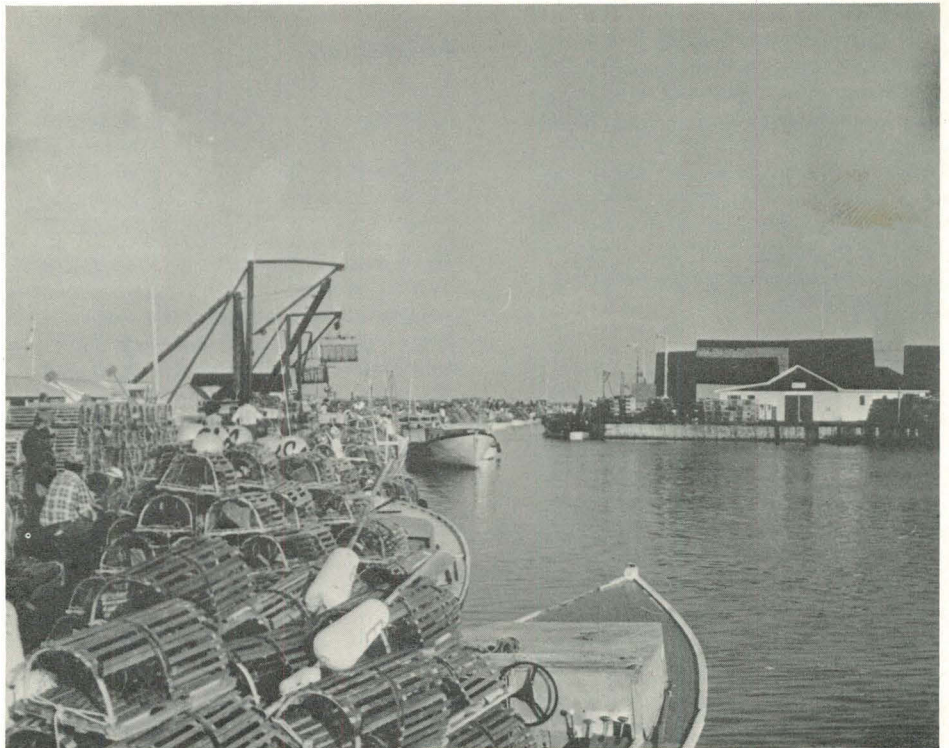
the province. These fishermen however, have limited access to the offshore fishing grounds of the Atlantic due to distances involved and seasonal ice conditions within the Gulf for several months in the winter. The P.E.I. fishing industry has thus mainly developed into an inshore fishery with fishermen centering their fishing activities within a day's sailing of their home port and normally within visual distance from the coastline.

There is also a provincial fleet of mid-sized vessels which operates further from the coastline in the deeper waters of the Gulf

of St. Lawrence. Their number is, however, small in size.

Vessels

The P.E.I. sea fishing fleet is made up of approximately 1,600 vessels, most being the smaller wooden type, between 9.1 to 15.2 meters (30 and 50 feet). These inshore boats are multi-purpose in design, and constructed to suit the highly diversified fishery of P.E.I. The deck space and equipment aboard these vessels can be altered in minimum time to permit fishermen easy conversion between fisheries.



Vessels prepared to take traps to the fishing grounds.



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The vessel design has evolved through the centuries to meet the diversified nature of the fishery and to accommodate advancements made to fishing equipment and techniques. Most of the vessels are shallow draft, with gasoline or diesel engines. There is a broad working deck aft used for storing equipment and the catch and also for fishing, setting and hauling gear.

Vessels operating out of harbours along the Northumberland Strait differ in construction and design from those operating out of harbours along the Gulf of St. Lawrence. The Northumberland Strait vessels, so named because they operate in the Northumberland Strait, are designed for the choppy strait waters, while those in the other areas are designed to operate in the less choppy Gulf waters. The majority of the vessels are constructed in P.E.I. boat shops.

Harbours

There are some 82 harbours scattered along the P.E.I. coastline, situated mainly in the numerous inlets which shelter the vessels from the sea. A number of these harbours offer little more than shelter for the fleet and a landing point for the fishermen's catch. There are 20 major harbours on P.E.I. which, along with offering shelter, provide complete services for the fishing fleet.

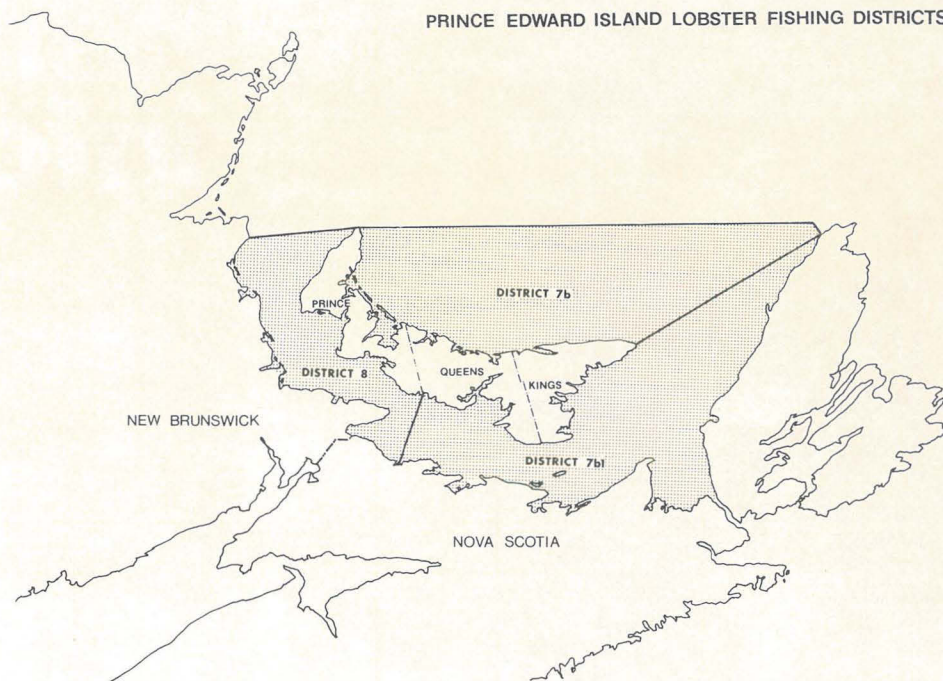
These harbours have modern vessel berthing areas, bait and equipment facilities, slips to launch and haul up vessels, vessel building and repair shops, fishing equipment supply stores, ice and cold storage facilities, fish-landing equipment, and modern plants to process the catch. All of these harbours service the inshore fleet. One major harbour, Souris, however, services both the inshore and the larger trawler fleet.

Fishermen

There are over 2100 fishermen engaged in commercial fishing activities on P.E.I. Few fishermen engage in the commercial fishery for the full 12-month period because ice surrounds the province for a period of between four and five months yearly. In most years, the fishing grounds and harbours are ice covered between December and May.

Fishermen, not fishing in winter months, either seek employment on shore, or are busy at tasks related to their fishing activities during this period. There are nets and traps to be repaired and replaced, vessels and engines to be repaired, and other tasks to prepare the fishermen for the next year's fishing season. These tasks are very important to the fishing operation. If equipment and vessels are not in top condition when the fishing season opens, lost days and lost income will result.

PRINCE EDWARD ISLAND LOBSTER FISHING DISTRICTS



Processors

Approximately 38 registered processing facilities on P.E.I. handle all the species landed in the province. There are processing facilities located in most major harbours and representatives of the firms in other harbours to buy the catch.

Fishermen usually sell their total catch to a single processing firm where they also get their daily supplies such as bait, fuel and materials to repair their gear. Some fishermen belong to co-operatives which purchase the fish, as well as provide supplies and a variety of other services to their membership.

Processors on P.E.I. sell most species of fish in either a fresh or processed state. The products include fresh lobster, oysters, scallop, cod, flounder, plaice, hake, eel, herring, haddock, redfish, mackerel, smelt, tuna, quahaugs, clams, (both soft shelled and surf) silversides, whelks (escargot), and marine plants. Most of these species are also processed for export in one or more of the following forms: chilled or frozen, smoked, canned, marinated, and some canned in soups, chowders or in other products. The province has also developed a significant aquaculture industry which now produces and markets mussels, and more recently, trout.

Lobsters

The lobster fishery is the major source of income for P.E.I. fishermen. Almost every inshore vessel, operating out of the province, engages in the lobster fishery. It represents a higher percentage of the per capita income of the fishermen than in any other province with a commercial fishery. P.E.I. fishermen catch approximately 25% of the annual Maritime landings of lobsters. Lobsters account for some two-third to three-quarters of the annual P.E.I. fishing income.

The Island lobster fishery is divided into two districts, each with its own separate season. There is a spring season for all of the North side of the province (from North Cape to East Point), plus the South side of Kings and Queens county (from East Point to Victoria). On the West side of Prince County (from Victoria to North Point), there is an autumn season.

The lobster catch is divided into two groups: "markets" and "canners", depending on their size. Market lobsters are the large-sized lobsters and must be above $3\frac{3}{16}$ inches Carapace length. Carapace length is the standard legal measure of lobster size and it is the measured distance from the rear of the eye socket to the end of the body shell, excluding the

tail. Canner lobsters are lobsters between $2\frac{1}{2}$ and $3\frac{3}{16}$ inches carapace length.

The smaller lobsters under canner size are not of legal size and must be released into the sea. It is also illegal for fishermen to retain "berried" lobster — those females with eggs on the undershell. These "berried" lobster are in stages of reproduction and therefore are protected by law and must be returned to the water.

The lobsters, cannery and markets, are weighed and stored separately. In most P.E.I. ports the number of canner lobsters far outnumber market lobsters. Canner lobsters are given their name because the majority of these smaller lobsters are canned. Most canner lobsters, are first cooked in the shell. The meat is then removed and either processed as thermal canned lobster or as frozen canned lobster meat.

Market lobsters were named so because many New England states, historically the main importers of live lobster, prohibit their importation unless they are at least $3\frac{3}{16}$ inches carapace length. These market lobsters are, after being landed at the docks, "banded" (rubber bands placed over the lobster's claw) to prevent injury to lobster marketed live and also cannibalism. They are then placed in pounds or tanks for storage and transported in refrigerated trucks or by air to market. The main markets are still in the United States and Canada. Air shipment of live and processed lobsters to European and Japanese markets have however dramatically increased within the past few years.

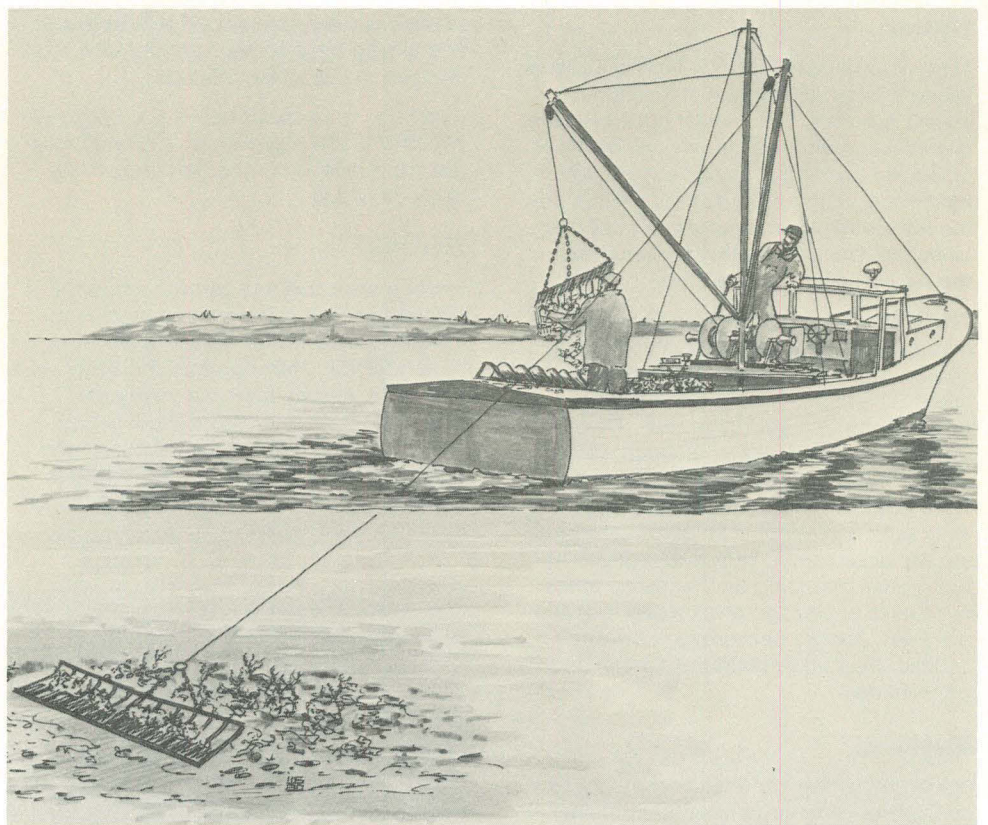
Each P.E.I. lobster fisherman is permitted to fish the species for a two-month period. Fishermen therefore, must engage in other fisheries in addition to the lobster fishery to complete their yearly income. This will vary and depend on the opportunities available, something which will change from year to year and from area to area.

Irish Moss

Irish Moss, *Chondrus Crispus*, together with the associated seaweed, *Furcellaria*, have provided Island fishermen with a valuable harvest. With landings throughout the province, P.E.I. is the Canadian leader in moss production.

On P.E.I. the industry is centered at Minnegash on the western shore of Prince County, where major buyers have drying and packaging plants. A large percentage of the province's Irish Moss production comes from this part of Prince County.

Most of the Irish Moss in Prince County, is taken by drag rakes towed behind ordinary lobster boats, converted for this purpose. Up to six rakes are towed by each boat. Most fishermen sell their wet moss to companies with mechanical dryers, although some still dry it in the sun as part of a family operation.



Irish Moss harvesting.

Large quantities of Irish moss mixed with *Furcellaria* are washed ashore during northeast and easterly gales in Kings County. Both fishing and non-fishing families gather this "storm-tossed" moss, either picking it up from the shore or scooping it from the tidal wash. Storm-tossed moss is also significant in Prince and Queens Counties.

Groundfish

Groundfish, including such bottom feeding species as cod, hake, redfish and flounder compete with Irish Moss annually for second place in the Island fishing industry. Despite what might seem like a relatively large portion of groundfish taken in midshore waters, P.E.I. has a small number of boats fishing these grounds. They are all groundfish draggers, ranging in length from 19.5 to 37.2 meters (65 to 124 feet) working the Gulf of St. Lawrence from the south coast of Newfoundland to the Magdalen Islands. These vessels catch mostly cod and redfish (ocean perch), along with lesser amounts of plaice, hake, flounder and haddock. The catch is mainly marketed as frozen fillets for the U.S. market.

Cod and hake, the main inshore groundfish species, are taken mostly with gillnets and handlines. There is also some small-boat dragging for groundfish by inshore fishermen. The main species caught is flounder. A large number of P.E.I. fishermen take part in the gillnet fishery. P.E.I. gillnet fishermen normally string three or

four nets together. The string is set near bottom, where it is held vertical in the water between a buoy and anchor at each end. Fishermen tend an average of 30 nets or in some cases even a higher number.

Longlining (or trawl-lining) is another method of fishing cod and hake. This method of fishing is not as common on P.E.I. as in some other areas of the Atlantic coast. A longline is simply that, a long line, which is set near bottom with baited hooks attached at intervals.

Much of the inshore groundfish catch is split, salted and dried, so that it keeps without refrigeration and is sold on the salt fish market.

Scallops

Scallop fishing is an increasingly important fishery on P.E.I. Scallops occur mainly along the south and western side of the Island, on grounds shared by Nova Scotia and New Brunswick fishermen.

There are two major scallop-fishing areas; one in the Northumberland Strait section of lobster district 8; the other in the southern shore of Kings and Queens County in lobster district 8. In both areas it provides off-season employment for many lobster fishermen.

Scallop fishing is conducted from converted lobster boats dragging four or five "Digby style" scallop drags.

Oyster

Many people associate the Prince Edward Island oyster fishery with cultivation on leased grounds. The largest portion of the Island's annual oyster harvest is, however, taken in non-leased, public waters, where fishermen, rather than oyster farmers, do the harvesting. These fishermen operate from small vessels pulling oysters from the seabed with toothed tongs.

There are two seasons in public waters — a spring fishery in contaminated waters and an autumn season in pure water areas. The bulk of the oyster catch is taken during the spring season. These oysters are then trucked to clean water areas for purification. Export shipping from P.E.I. is not permitted until mid-August except by special permit, thus ensuring an adequate cleansing period. Active oyster cleansing and shipping areas are found in western and throughout central P.E.I. A large percentage of Island oysters are sold in restaurant, hotel and party trades.

Mackerel

Mackerel fishing occurs along most of the coast, providing large numbers of fishermen with a part-time income. Three types of mackerel fishing are important on P.E.I.: purse seining, gill netting and jig fishing. In good years, purse seiners take by far the biggest portion of the catch.

The North Side of Prince County, has perhaps the largest seiner fleet, although mackerel purse seining is important along the whole North Shore, and to a lesser extent, along the South Shore of the province. These boats encircle mackerel with the seine which has a line running through the weighted bottom of the net. The line is then hauled, drawing the bottom of the seine together and thus "pursing" the net.

Jigging is important in the northern Kings County mackerel fishery. In this fishery, up to six men work from a single boat using lines with five or six hooks attached. Gill net fishing is common throughout the province.

Some of this fish is canned and sold on the international market. Some is split and salted or filleted and frozen. At certain times of the year much of the catch is retained and sold for bait primarily in the autumn lobster fishery in P.E.I. and the winter lobster fishery in Nova Scotia. Much of the mackerel taken in gill nets and by jigs is used as lobster bait by the fishermen landing the catch.

Bluefin Tuna

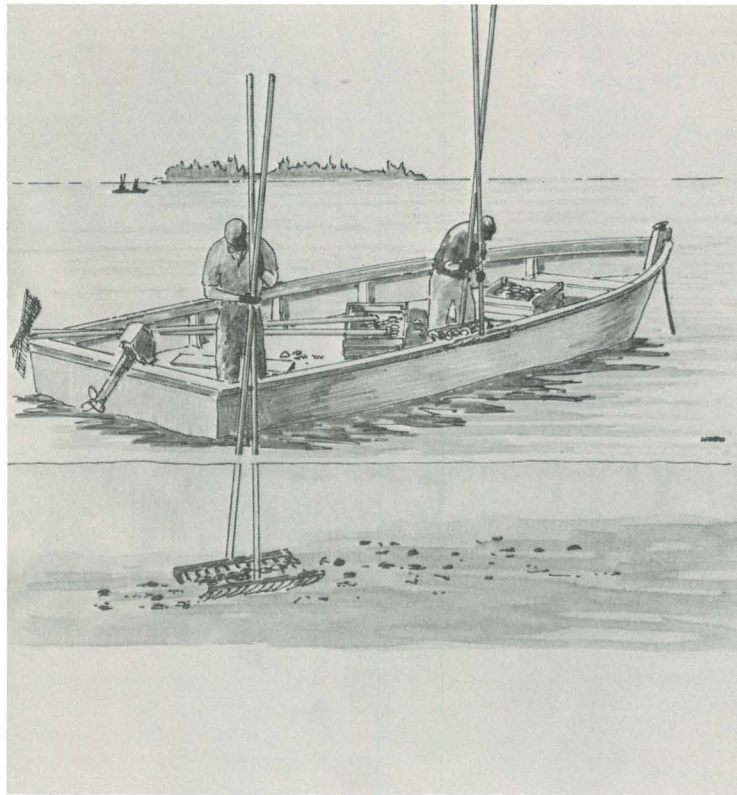
In P.E.I. the bluefin tuna fishery is limited to rod and reel gear. Fishermen charter their boats to sport fishermen or, in some areas of the province, vessels engage in the fishery on a strictly commercial basis, not taking charters. Once brought aboard,

the fish is the property of the boat owner, and is sold fresh to local buyers. It is then shipped to Japanese markets.

Typically, tuna caught off P.E.I. weigh between 800 and 900 pounds (360-400 Kilograms), however, higher landings have been recorded.

Herring

Herring are caught in varying amounts throughout P.E.I. The main fishery is in Prince County in the waters of Northumberland Strait. Herring enter the Strait waters in the spring, after the yearly ice break up. Fishermen from P.E.I. set gill nets near their own shores or nearer the coast of New Brunswick. The herring is either sold for bait or to the local processing firms for the food market.



Oyster tonging.

Fisheries Information Bulletins

are issued by the Department of Fisheries and Oceans to describe specific aspects of the fishing industry of Canada.

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Fisheries & Oceans
Communications Division
Halifax, Nova Scotia

Published by:

Communications Division
Department of Fisheries & Oceans
Halifax, Nova Scotia B3J 2S7

S.F. FSI-81-001E