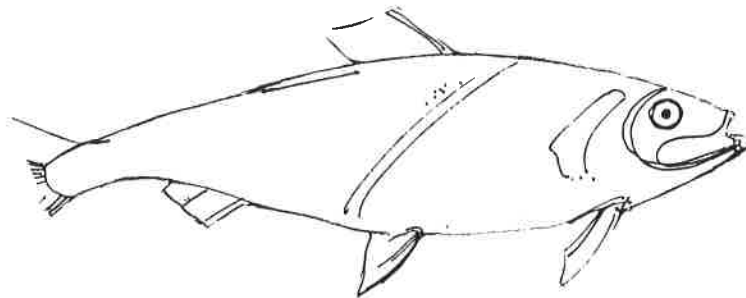


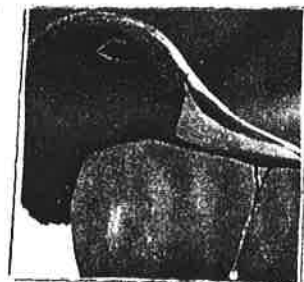
C.A.M.I.
FOR CONSULTATION

WILDLIFE SPECIES
ON THE
MAGDALEN ISLANDS

**WILDLIFE SPECIES
OF
THE MAGDALEN ISLANDS**



The following information was compiled by Rachelle Clark
while on the Challenge Project 1994/95



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SPORT FISHING

In Quebec and other parts of eastern Canada, the general public has access to a variety of sport fishing activities.

As stipulated in the regulations, sport fishing may be carried out only for the personal use and the pleasure of the person taking the fish.

It goes without saying, then, that fish caught by sport fisherman cannot be brought or sold, not even on a limited scale.



SKIN-DIVING FISHING

Current regulations on skin-diving fishing in eastern Canada tidal waters are very restrictive.

Skin diving fishing for any commercial species in salt is strictly forbidden.

In Quebec, there is one exception to this general prohibition : a limited issue of experimental licenses to take sea urchins by skin-diving fishing .

Keep in mind that, since skin-diving fishing in salt water is prohibited under the federal Fisheries Act, violations are subject to prosecution, which may result in heavy fines and confiscation of the equipment used in committing the offence.

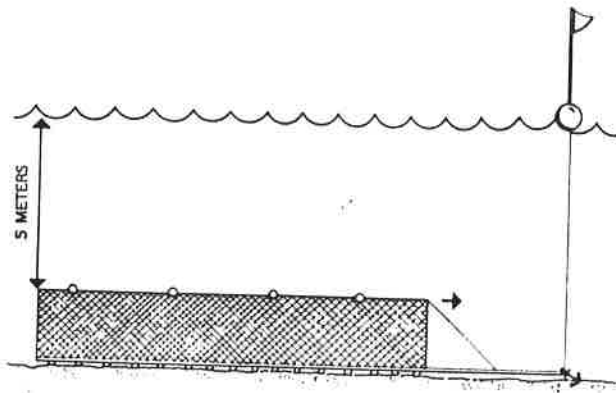
FISHING FOR GROUND FISH

Fishing for groundfish is very demanding. To be successful, fisherman must work for hours under very difficult conditions. Despite the rigours of their trade, fishermen are usually well-meaning people who understand the limits involved in harvesting an exhaustible resource.

Current regulations try to safeguard the resource as well. They determine close times, restrictions on the mesh size of fishing gear, the type of gear that can be used and how it is to be set.

The type of fishing gear which can be used is specified on each licence. Close times can vary according to the annual quotas for each area.

Once an area is closed, the fisherman affected will be formally notified.



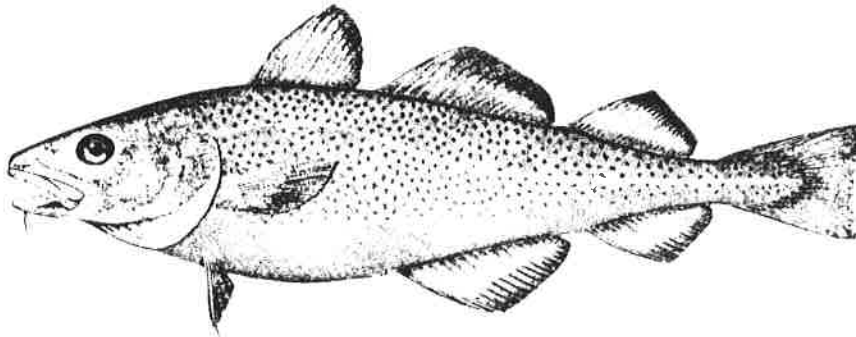
A groundfish gill net must be set so that the floats are more than five (5) metres below the surface of the water.

The mesh size of a groundfish net must be at least 140 mm.

ATLANTIC COD

deeper than it is thick, with an iridescent steel-blue or greenish-blue back and silvery sides and The **Atlantic Cod** (*Gadus morhua*) is one of 59 species of the family Gadidae. The cod family is the most numerous and best represented of fish in the Canadian area. A marine fish which occurs mainly in cool waters in northern seas, the cod is soft-rayed, has three dorsal fins on its back and two anal fins behind its whitish-coloured belly, and generally has an elongated hair-like projection called a "barbel" on its chin. It is generally grey or green but may be brown or reddish, depending upon the habitat into which its colour will generally blend. The scales are small and smooth. The mouth is large with a projecting upper jaw and the gill openings are wide. The latera line of the cod is pale, and the tail is slightly concave, almost square.

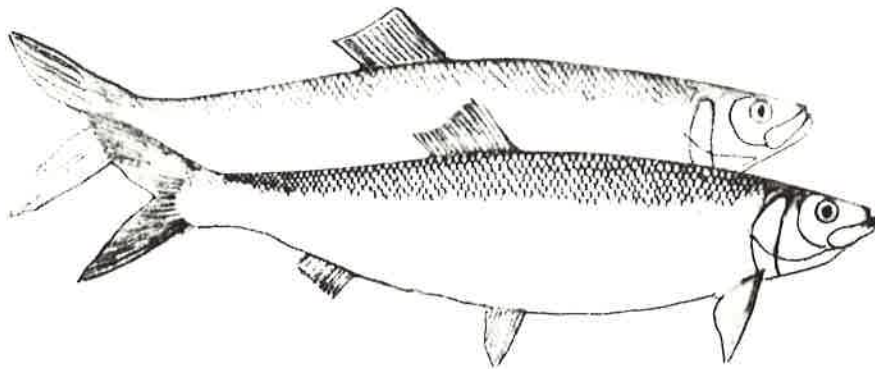
Generally cod average 2 to 3 kg. in weight and about 60 to 70 cm. in length. They usually do not exceed 30 kg, but there is record of one that weighed about 96 kg and was more than 180 cm long.



ATLANTIC HERRING

The **Atlantic herring** (*Clupea Harengus*) is one of the best known open sea fish on Canada's east coast. It is a member of the Clupeidae family found in many parts of the world, including some species living in inland lakes. Among Clupeidae on Canada's east coast are the blueblack herring, the gaspareau or alweife, the shad and the menhaden.

The **Atlantic herring** has a streamlined, elongated body, much belly that provide excellent camouflage in the open sea. It has a deeply-forked tail, large loosely-attached scales and a single dorsal fin on back.



MACKEREL

Prized in Europe and Asia, but virtually unknown in North America. This has been the fate of one of Canada's most abundant species, **Atlantic Mackerel**. Strange that Americans who eat more tuna than any other fish have never developed a taste for one of tuna's closest relatives. **Mackerel** have a splendid deep flavor that is perfect for grilling or smoking.

Atlantic Mackerel are sleek, compact and streamlined, resembling bullets with bluish-green skin and vertical, black wavy lines across the top of the body. Like their tuna cousins, **Mackerel** are pelagics, migrating north in the spring and south in the winter. They are strong schooling species, the schools usually made up of fish of similar sizes. **Mackerel** are small, fast fish ranging in size from 11 to 20 inches and weighing between 3/4 and 1 1/2 pounds. They are also abundant. There are two populations of **Mackerel**, one residing in the Gulf of Maine, the other in the Gulf of St. Lawrence; in 1991, scientists estimated the biomass of the northern population at a very healthy two million tonnes.

Mackerel are caught by gillnets, traps, purse seines, and jigging by inshore and offshore fishermen. Unlike the large European **Mackerel** fishery which is prosecuted by freezer trawlers equipped with sophisticated fish-finding systems and highly selective mid-water trawls, the Canadian **Mackerel** fishery is predominantly conducted using purse seines in the inshore waters in Newfoundland and New Brunswick.

REDFISH OCEAN PERCH

Gertrude Stein is famous for saying "a rose by any other name would smell as sweet." so surely, a fish should taste as good whether its called bergylt, norway, haddock, rosefish, **redfish**, saeperch, redbream or **ocean perch**. The story behind the name "**ocean**" **perch** is yet another example of both the ingenuity and pragmatism of fish marketers, who responded to a shortage in the 1930s of freshwater yellow perch by substituting redfish fikkets which are similar in colour and less than half the price.

Ocean perch ia a close cousin to the 68-odd Pacific rockfish species. The Atlantic sebastes family has three primary members: *S. marinus*, the largest of the three, is more orange than red, has a blunt beak and small eyes, and is found in the water less than 120 fathoms; *S. mentella* is a brighter red and smaller, deep-water species, predominating on Georges Bank and in the Bay of Fundy. All species are extremely slow-growing, slow-moving, intensely schooling, and easily caught. All three are considered a single unit by governments, and marketers, and consumers.

Ocean perch is a small fish yielding small fillets. Because the majority of Canadian redfish are processed into frozen , skin-on fillets or lowend retail markets in the United States, the fish has not had much exposure to an upscale clientele. **Ocean perch** has a high oil content and self life is shortened by the skin-on format; frozen, it can be kept four to six months while fresh lasts about ten days from time of processing. Japan is a good and growing consumer for whole dressed redfish which are served one per plate, deep fried with spines up and fins out. In 1992, Canada exported 2,500 tonnes of whole dressed ocean perch, up 218 per cent from 1991 exports.

WHALES

THE ST. LAWRENCE BELUGA 4.5m: ENDANGERED

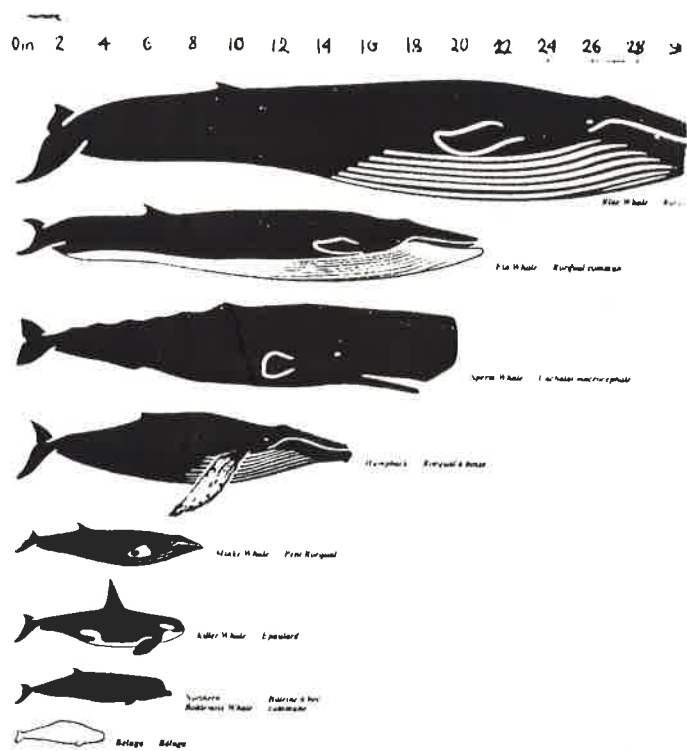
The **Beluga Whale** of the St. Lawrence travels in the estuary throughout the year. It migrates seasonally between the St. Lawrence River and the Saguenay River. Disturbance, together with contamination, can affect this population, which does not seem to increase despite the total protection that has been ensured for several years.

THE ATLANTIC BLUE WHALE 25.9m: RARE

The **Blue Whale** can be observed at all latitudes, from the tropics to arctic regions. In summer, the **Blue Whale** feeds among the north shore of the river and the Gulf of St. Lawrence, sometimes reaching the mouth of the Saguenay River in April or May. This species has been protected in the Atlantic Ocean since 1955, and all countries ceased hunting it in 1960.

THE ATLANTIC HUMPBACK WHALE 11-16m: ENDANGERED

Most **Humpback** whales feeding in summer off the east coast of Canada to the Gulf of St. Lawrence migrate to the west Indies in winter. Certain populations decreased to critical levels due to whaling. The recovery of the population seems to be under way.



SHARK



Several of the most ferocious species can be found in the Gulf including the "**Mako**" a close relative to the "**Great White Shark**" but even faster. The "**Mako**" is greatly appreciated by fishing enthusiasts for once struck it puts up a ferocious fight. Having an average

weight of between 40 and 80 kg (90 to 175 lbs.), this shark can easily exceed 200 kg (450 lbs.) and measure over 3.6 metres (12 ft.) in length.

Found in abundance in our waters... You will also encounter the "**Blue Shark**" of the carcharhinidae family which includes the greatest number of man-eaters. Weighing from 50 to 225 kg (110 to 500 lbs). This shark can also exceed 3.6 metres (12 ft.) in length.

Of the same family as the "**Blue Shark**," but much smaller, the "**Dogfish**" is equally voracious and combative.

The presence of the "**Great White Shark**" has been repeated on several occasions by fisherman. However, we have no indications as to its abundance in the Gulf.

The route which the captain will take to reach shark areas sometimes passes near Brion Island, an ecological reserve, and you will be able to observe numerous seals basking in the sun on the rocks at water level.

THE GREY SEAL- EASTERN CANADA

At birth, the young weigh about 16 kg and long greyish-white coats. They fatten quickly on the rich milk produced by their mothers, and by three weeks of age have grown to average 58 kg. They lose their natalcoat in the process and develop a short stiff hair coat similar to that of the adult.

At this time the young females and males show the difference in coat patterns which characterize them as adults. The female moult is silver grey in colour, with small scattered dark spots. The males are a plush dark grey with silver grey spots. Towards the end of their first year these distinctive patterns are lost, and juveniles of both sexes become a uniform dark grey or sandy colour.

The adult male is the largest of the Canadian seals, and when fully grown weighs up to 450 kg and averages 235 cm in length. His most striking feature is the long arched "Roman Nose" which is the reason for its Latin name *Halichoerus Grypus* (the hooked-nose sea pig) and the vernacular "horse head." The shoulders are heavy and folded, with the overall bulk supplemented by a buildup of scar tissue from fighting on the breeding grounds. His coat is dark grey, almost black, with lighter grey on the sides. The overall effect is very dark.

The adult female is smaller, up to 270 kg with an average length of 200 cm. She can easily be recognized by a much shorter and narrower nose, but particularly by the cream-coloured throat, chest and flanks, with irregular chocolate-brown splotches. The back is covered by smoky grey hair. Both sexes show a curious "wrong way" growth of the back hair from tail to head, resulting in an irregular demarcation line where it meets with the hair on the flanks.

The grey seal is essentially a coastal species, though it appears to spend part of its time at sea feeding on shallow offshore fishing banks. Like many seals, it is an opportunistic feeder and will take any of the various species of fish as they occur. They appear to eat once each day, and consume between 4.0 and 6.0 percent of their body weight.



HARP SEAL

The harp seal (*Phoca Groenlandica*) is a marine mammal belonging to the Suborder Pinnipedia (fin-footed animals) and the Family Phocidae (true seals lacking external ears). The fossil remains of **harp seals** indicate they existed during the middle Miocene age, approximately 20 million years ago. They apparently originated in the northern hemisphere and are derived from a stock of land-based flesh-eating mammals. The Norwegian name for the **harp seal**, selhund, which means Sea Dog, and the French name, loup-marin, or sea wolf, aptly reflect the evolutionary origin of the harp seal. Other common names for this species are the Greenland seal, the saddle seal and the saddle back seal.

Adult females are similarly patterned, except that the "**harp**", the head, and the tail are usually somewhat lighter in colour. Some adult females have irregular dark grey spots on the back with no clearly defined "**harp**." Occasionally very dark "smutty" seals are observed; these are generally males and are thought to be melanistic (dark pigmented) colour forms.

Males are only slightly larger than females; the average length (from the nose to the tip of the tail) of adult males is 169 cm, and of adult females 162 cm. Weight ranges from 85 to 190 kg depending on the time of year. Harp seals may live 35 years or more.



SHELLFISH

Shellfish are one of the most important groups in the animal kingdom. After insects, they comprise more species than any other animal subdivision, namely about 80,000 known species. A more appropriate term than shellfish is "Mollusc" which come from the latin word "Mollis" meaning "soft" (a soft body inside a hard shell.) | The following are the principal marine shellfish found along the coast of the St. Lawrence River and in Chaleur Bay.

The shellfish beds in the vast coastal area abound with clams and mussels. Local residents will be able to direct you to the best harvesting areas, and if you're lucky, they may even share their favourite recipes with you.

Clams bury themselves in the sand. By taking a close look at the surface, you can detect tiny holes, through which they filter water. Mussels are quite the opposite, as soon as the tide is low.

BIVALVES

Soft-shell clams, mussels, wedge clams, razor clams, bar clams, and scallops are the species comprising the class of bivalves. They are so-called because their shell is kept closed by two valves which are joined by an elastic-like ligament serving as a hinge.

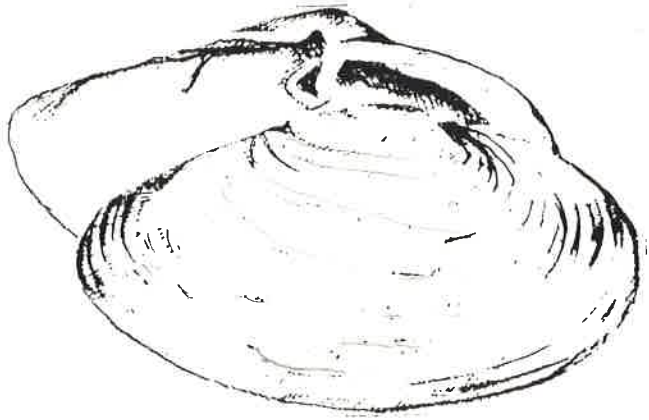
Bivalves feed by taking in water or sediments from their surroundings and then retaining the nutritive elements which may include *Gonyaulax Tamarensis*, the toxin responsible for paralytic shellfish poisoning.

GASTROPODS

Whelks, the greater clam drill (moon-shell) and periwinkles are the species making up the class of gastropods and are characterized by a single spiral-shaped shell.

Whelks and greater clamdrill (moon-shell) are carnivorous, feeding on fish and both living and dead shellfish. They become poisonous through eating toxic bivalves such as mussels. By contrast, periwinkles are herbivorous, feeding on macroscopic and microscopic algae.

SOFT SHELL CLAM



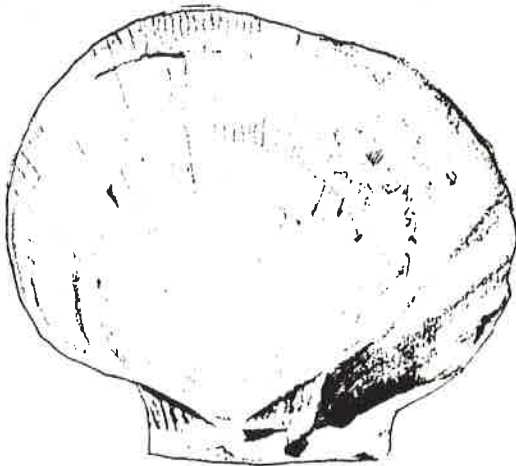
SIZE: Can reach up to 9 cm in length; however, a 16.5 cm specimen once has been found.

COLOR: Generally milky-white

SHAPE: More or less oval in shape, with uneven sides and valves.

FISHING METHOD: Manuel harvest

GIANT SCALLOP



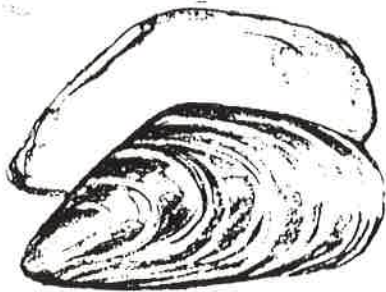
SIZE: Generally from 12.5-20 cm in length

COLOR: Interior sea-shell white, exterior greyish-yellow, greyish purple or white.

SHAPE: Almost circular in shape, and indented with foot-like opening

FISHING METHOD: Dredging

BLUE MUSSEL



SIZE: Can reach up to 10 cm in length

COLOR: Blue-violet, with a blueish-black thorny epidermus. The interior.

SHAPE: Varies in shape; could be straight, convex or concave

FISHING METHOD: Manuel harvest

COMMON RAZOR CLAM

SIZE: Can reach up to 25 cm in length, generally its length is six greater than its width

COLOR: Olive-green with triangular lavender-purple spacing



SHAPE: Razor-like

FISHING METHOD: Manuel harvest

COMMON PERIWINKLE

SIZE: Varies from 2.5 cm to 4.0 cm in length



COLOR: Olive-green with grey or yellowish-brown shading often striped with dark brown or red; the shell can also be completely black

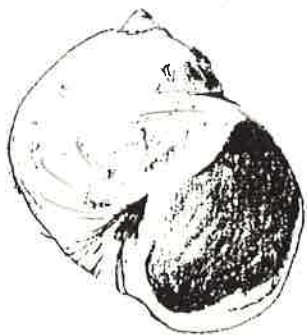
SHAPE: Spiral-like shape

FISHING METHOD: Manuel harvest

GREATER CLAM DRILL, MOON-SHELL

SIZE: Can reach up to 11 cm in length

COLOR: Creamy white to greyish brown



SHAPE: Spiral-like shape

FISHING METHOD: Manuel harvest

CRAB



The **Dungeness crab** often buries itself almost completely in sand. It accomplishes this feat by hairs located above water intakes located at the bases of its claws that keep the gill chamber free of sand grains. This crab finds and captures its prey, mainly animals living partly or completely buried, by probing its slender sensitive claws into the sand. One associates sideways movements with crabs, but they can walk in all directions. On occasion, **Dungenous crabs** can run quickly, at a rate to tire a pursuing scuba diver.

Relatively new in Quebec, **snow crab** fishing has considerable economic potential. Since it is so lucrative, fisherman have been quick to learn to adapt to these fishing techniques and equip themselves with more modern boats in order to catch more crab.

PIPING PLOVER

The **pip ing plover** (*Charadrius Melodus*) is a small shorebird which nests on sandy or gravelly beaches. Unlike most shorebirds, which breed at northern latitudes, the **pip ing plover** inhabits the temperate regions of North America, where much of the habitat that meets its very specific needs is being put to human uses. Historical population information on **pip ing plovers** is limited, with relatively few surveys having been carried out before the 1980s. Recent counts suggest that their numbers are dropping. Because of decreases in plover populations and threats posed by human use of its habitat and predation, the **pip ing plover** is now officially designated as "**Endangered**" in Canada.

On the beach, the **pip ing plover** blends well into its surroundings: its head and back are the color of dried sand, and it has a white rump, a partially black tail, a black band above its white forehead, and a single, black "belt" or breastband that contrasts with its white breast and abdomen. Its bright orange legs match its orange, black-tipped bill. Adults weigh between 45 kg and 65 kg and are about the size of a bluebird. Both sexes are similar in appearance; however, males tend to have broader and more distinct black bands on the head and breast than females. The adult **winter plumage**, which is indistinguishable from that of the **juvenile plumage**, lacks the black head and breast bands. The orange legs of this plover distinguish it from other plover species on the wintering grounds.

Piping plover may live as long as 14 years; however, most probably survive less than 5 years. They feed on aquatic and terrestrial invertebrates that they capture with their bill by alternately along river, lake, and ocean shores.

This plover is the rarest of six "belted" plover species found in North America. The most well known of these plovers is the "double-belted" killdeer *charadrius vociferus*, which many people associate with the broken wing act that it puts on when an enemy gets too close to its nest or young. The single band or "belt" of the smallest **pip ing plover** tends to be incomplete in interior birds. Some scientists have considered this feature to be the basis for dividing the **pip ing plover** into two subspecies; however, a recent genetic study does not support this opinion.



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