



NOVA SCOTIA SPECIES SPOTLIGHT: ATLANTIC POLLOCK (*Pollachius virens*)

FISHERY

A directed fishery for Atlantic pollock takes place in the Northwest Atlantic Fisheries Organization (NAFO) areas 4VWX5.

Pollock is targeted by inshore and offshore vessels using gillnets and otter trawls.

The total allowable catch (TAC) in 2022 for the western Scotian Shelf (4X5) was 4107 t, and 660 t on the eastern Scotian Shelf (4VW).

The total landed value of pollock from NS in 2021 was \$3.3M.

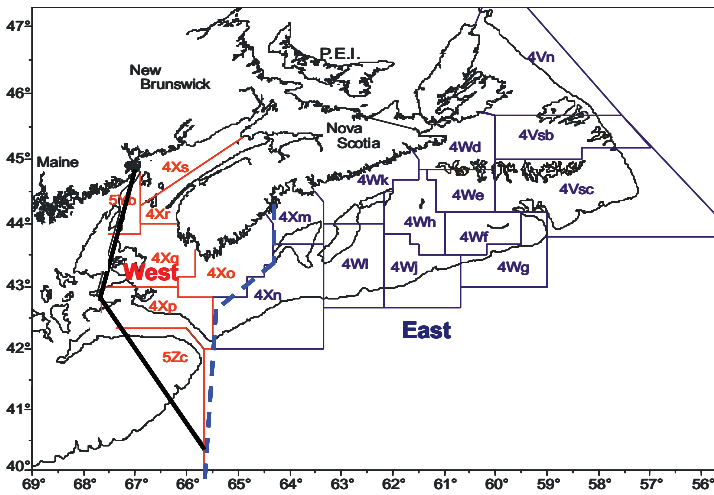


Figure. Fishing areas for Atlantic pollock on the eastern and western Scotian Shelf

BIOLOGY

Pollock is a demersal (bottom-dwelling) species, and a member of the Gadidae family, known as the codfishes. They prefer sandy, muddy, rocky, and vegetative environments like seaweed beds.

Pollock grow to 30 - 110 cm in length, and weigh from 7 - 32 kg.

Juvenile pollock are found inshore, whereas adults are found mostly offshore. They are found at depths from 35 to 550 m, and prefer bottom temperatures from 5 to 8 °C.

Juveniles feed on small crustaceans like krill and small fish including herring and sand lance. Adults also feed on krill, herring, and sand lance, as well as squid and silver hake.

Pollock is preyed upon by cod, monkfish, as well as both grey and harbour seals.

LIFE CYCLE

Pollock reach sexual maturity between 3 and 6 years of age.

Spawning occurs in the western Gulf of Maine, from November through February. Pollock spawn multiple times per season.

Once fertilized, eggs rise to the surface and recently hatched larvae spend a short period feeding on plankton before settling back to the ocean bottom.

Pollock reach commercial size by age 3 and can live up to 25 years.





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MANAGEMENT AND CONSERVATION

The 4VWX5 unit is managed by Fisheries and Oceans Canada. The TAC is set annually based on the outcomes of research surveys, and is evaluated against stock reference points established using the precautionary approach to fisheries management.

General management strategies for groundfish focus on areas of fishery productivity, impact on biodiversity and habitat, access for traditional culture and sustenance, and overall prosperity.

Management tactics include setting an annual TAC, implementing small fish area protocols, size selectivity through gear modifications and restriction, bycatch limits, permitted and mandatory release of designated species, retention limits for fixed gear, marine protected areas, and fleet sector quota allocations.

Compliance with management objectives include inspections by fishery officers, observer coverage on vessel, dockside monitoring programs, vessel monitoring systems, hail in/out requirements, and maintaining logbooks.

SEAFOOD LABELLING

	Terminology	Description
Common Name	English: Pollock, Pollack, Big-eye, Coalfish, Boston Bluefish, Saithe French: Goberge, Lieu	Accepted common name(s) for <i>Pollachius virens</i>
Production Method	Wild	Harvested from the ocean
Product Forms	Fillets	Strips of flesh cut parallel to the central bone of the fish
	PBI/PBO	Pin Bone In/Out
	Boned	Has gone through a boning process, but bones may remain
	Boneless	Has been boned, and any remaining bones are removed
Process Description	Fresh	Not previously frozen
	Refreshed / Previously Frozen	Thawed and sold fresh
	Single Frozen / Twice Frozen	Refers to number of times the product has been frozen in its production

PROCESSING/HANDLING

Process Yield

Dressed (Head-On): **79 - 86%**

Dressed (Head-Off): **60 - 72%**

Fillets (Skin-off): **30 - 40%**

Primary Products

Whole, Dressed, Fillets

Post-harvest primary processing

Receiving » Washing » De-scaling
» Butchering (evisceration, de-heading, filleting, trimming) »
Packaging » Freezing » Storage »
Transportation

By-Products

Heads, Viscera, Frame

CHEMICAL COMPOSITION

	Proportion (g / 100 g)	
	Raw	Cooked
Moisture	78.20	72.00
Protein	19.40	24.9
Fat	0.98	1.26
Carbohydrate	0.00	0.00
Ash	1.41	1.81

USDA Nutritional Database ID: 15065 (Raw), 15205 (Cooked)



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STORAGE

Dressed pollock keep in optimal condition for 5 to 6 days, begin to develop off flavours after 9 days, and are spoiled after 15 days stored in melting ice.

Dressed pollock intended to produce frozen fillets should not be stored on ice for more than 7 days. Dressed pollock intended to be frozen and processed later should not be stored on ice for more than 2 days.

Frozen whole pollock keep in good condition for 6 months when stored at -30 °C. Beyond this time, a loss of flavour and discolouration is detectable. If stored at -20 °C, these changes may occur in as soon as 3 months.

KEY FOOD SAFETY AND QUALITY CONCERNS

Pollock begin to spoil immediately upon landing on the deck of the vessel, in a manner like haddock and cod. Tissue softening and microbial growth during iced storage, and tissue toughing during frozen storage are the primary mechanisms of deterioration.

Pollock is susceptible to bruising if not adequately bled. Discolouration of the flesh can occur if bleeding is delayed by as little as 30 minutes. Bleeding, by cutting either the gills or tail, should be followed by at least 30 min in ice-cold water.

Pollock fillets intended to be frozen, should be chilled and frozen as quickly as possible, otherwise tissues may become discoloured that will give fillets an unattractive appearance.

Whole pollock produces a darker slime than other groundfish and should always be segregated from other species.

Pollock may contain small round worms, also called nematodes, or parasites. The occurrence of nematodes in fish is a natural phenomenon which cannot be prevented and is not indicative of mishandling or spoilage (CFIA, 2019). Candling should be performed to detect and remove worms in fresh fillets, though freezing and storing to a temperature of -20 °C or below for at least 7 days, or to -35 °C or below for at least 15 hrs, and cooking to 70 °C will kill them.

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