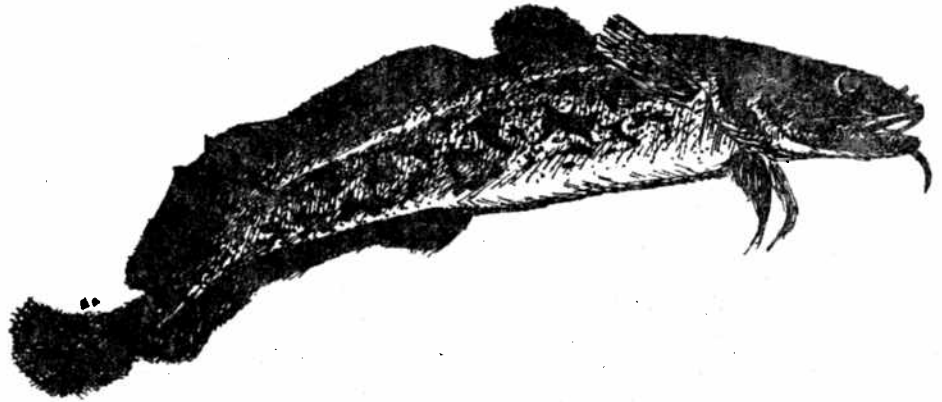


# the **BURBOT** in Alaska

Alaska Department of Fish and Game  
Wildlife Notebook Series



THE BURBOT (*Lota lota*) is one of the most unusual appearing freshwater fishes native to Alaska. If a fish ever was maligned for its looks, then the burbot can take top honors. The external features of burbot are quite unattractive, and have been responsible for the prejudices against it. However, behind this facade of homely looks is a valuable food and recreational fish. Burbot bite readily on baits of all kinds and are becoming very popular to winter ice-fishing enthusiasts. Burbot are excellent table fare.

The burbot is the only representative of the codfish family in freshwater. All its relatives prefer to live in marine waters. Burbot are known by a variety of names, and are commonly called ling, freshwater lush and eelpout. The scientific name is *Lota lota*, from the old French "Lotte" which is equivalent in English to "pout."

**GENERAL DESCRIPTION:** Two features distinguish burbot from other freshwater fishes of Alaska. On the underside of the chin near the tip there is a single, prominent barbel, or "chin whisker," and it also has two dorsal fins. Dorsal fins are the fins occurring along the back of a fish. The dorsal and anal fins run from the middle of the body almost to the tail, which is rounded rather than square or forked.

Burbot are characterized by their eel-like body shape and olive-black skin coloration interspersed with yellow mottles. Burbot appear to be scaleless but actually have small, almost microscopic scales.

**DISTRIBUTION:** The burbot is found throughout Interior Alaska. It is also common in Canada, the Great Lakes Basin and the northern Rocky Mountain states. The same species also exists in Siberia and Northern Europe.

Burbot generally prefer cool, deep waters of lakes and have been reported at depths of 700 feet. In Alaska they are common in many streams and are found in lakes of all sizes.

Some of the large lakes in the Glennallen area, such as Crosswind, Lake Louise, Lake Tyone and Lake Susitna—to mention a few—boast large burbot. A burbot recently caught from this area weighed 17 pounds, 10 ounces and was 42 inches long . . . big enough to provide an Alaskan-sized fish fry for the largest family.

**LIFE HISTORY:** In Alaska, burbot become sexually mature when they reach a length of 12 to 18 inches and at this time may be four to seven years old. Spawning occurs during February-April and may take place in lakes or rivers under ice cover.

In performing the spawning act, mature burbot mill together. As this squirming mass of fish moves through shallow water, eggs and milt are discharged. The fertilized eggs then sink to the bottom where they remain until they hatch. Very little is known about the first few years in the life of the burbot. The fry and fingerlings feed on plant material and small aquatic animals. As the fish grow larger, other fish become part of their diet. By the time a burbot has reached a length of 12 inches, its diet consists almost entirely of other fish.

Burbot grow slowly (their first growth rate is very similar to that of the lake trout) and a 20-inch fish may be eight years old. Sixteen-year-old burbot are not uncommon.

When viewed in the water, the burbot appears to be sluggish but it is a fast swimmer, especially when feeding.

Once the burbot has captured food such as fish, it is reluctant to give it up. This is partly due to the large number of small teeth present at the anterior portion of the upper and lower jaws. These teeth are slanted back toward the throat and while food slips easily into the mouth, it does not come out readily.

Studies have indicated that burbot have no special food preference but take what is most available. The whitefish (*Coregonus sp.*) is the most common food of the burbot in Alaska because of its great abundance. Burbot have no qualms about eating their own kind if the occasion arises.

**ANGLING:** Burbot fishing can be enjoyed by all ages and is simpler and cheaper than most other angling. Equipment consists of an ice chisel or auger, some chalk line or heavy fishing cord, a few sticks, large single hooks, weights and bait. Holes are generally dug through the ice close to shore where the depths do not exceed 15 feet. It is wise to set the lines in a straight line, or some other pattern—this makes them easier to find them after dark. Lines should be checked often, especially in the evening, as burbot are more active during the hours of darkness.

Alaska fishing regulations provide that burbot may be taken year round without limit and with up to 15 hooks except in Area II where the set line season is from Oct. 15 through May 15.

The regulations further provide that each line must be identified with the angler's name, address and sport fish license number and that the lines be checked at least once every 24 hours.

Fishing for burbot is generally confined to the winter months. The fish take bait on a set line quite readily. Although burbot will take lures on occasion, they are not commonly used. The best bait is the head or tail of another fish such as smelt, whitefish or lake trout. Single hooks, three-quarters of an inch or larger from point to shank, are required by regulation and are very successful. Alaska fishing regulations also require the hook on a set line to be on the bottom. This actually improves the opportunity of catching burbot since they habitually feed on or near the bottom.

The flesh of the burbot is white and firm. When cooked, the meat is flaky and a gourmet's delight. Many persons filet burbot, but because of its large bones, this is not necessary. The fish are delicious either deep or pan fried. Some prefer boiling or poaching the burbot and then covering with melted butter or a cream sauce.

Fred Williams  
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*Range of the Burbot  
in Alaska  
(shaded area)*

