

FISH TALK by Bill Hauser - Lampreys (continued)

When the eels -- Arctic lampreys, to be precise -- pass through a village, fishermen rush to the river to dip their nets and "eel sticks" through holes in the ice, pulling the fish out by the hundreds. Baked or canned, eels are considered a rich delicacy.

Ah ha. Lampreys. Not eels, "to be precise". Okay. What is the difference between a lamprey and an eel? And what is a "lamprey eel"? The last question is the easiest. To be precise, there is no such thing. People often use the term "lamprey eel" when they are referring to a lamprey.

A lamprey is a "primitive, jawless" fish; which means that they evolved millions of years ago and have survived as a species until today. Their mouth is a round, sucking disk that is rimmed with small tooth-like structures. Otherwise, they have no bones other hard body parts. Lampreys have seven pore-like gill openings on each side of their head region.

There are five species of lampreys in Alaskan waters. Of these, the Pacific lamprey may be the most well-known. Pacific lampreys attach to other fishes by their mouth and use their blunt, rough tongue to rasp through the skin so they can suck the body fluids as food.

An eel is a "true fish" that evolved more recently. They have jaws, a bony skeleton, and scales (although these are small, embedded in the skin and seemingly invisible). Eels have one gill opening on each side of their head. There are many families, genera and species of eels – mostly marine. The most recognizable eel may be the moray eel, but the only truly freshwater eel is the American eel that is found on the Atlantic coast of North America (similar species are found in Europe and Japan). Both eels and lampreys have long, cylindrical bodies; both "squiggle and squirm" and both are "slimy".

Some Alaskan natives enjoy and appreciate lampreys. *"They're good, but pretty rich," Johnson said. Some people feed eels to their dogs in small doses. The high oil content is good for the animals' coats. A Pitkas Point resident said that most families bake them in cake pans, but her father pressure-cooked them in jars. "They taste just like sardines," she said. "We had them all winter. Eels, known locally as nemeryaq, contain so much oil they can't be boiled or fried, and they don't even last long in the freezer, Drake said. Most families cut off the heads and tails, then bake them in a cake pan, pouring off the oil that bubbles out.*

American eels are harvested commercially and they are enjoyed as food fish... although they are not appreciated as much in the United States as in Europe and Japan.

Fish and Game has little biological information on the Arctic lamprey, known to scientists as lampetra japonica, Yukon fisheries biologist Steve Hayes said. But they're definitely oily, he acknowledged. Samples taken in the late 1970s showed 38 percent of an adult lamprey's weight is oil.

Lampreys have a round mouth and a circle of teeth, which they use to latch onto salmon and other fish at sea. They suck blood and body tissue for several hours, usually not enough to kill their host, until they drop off a few hours later. A similar species, the Pacific lamprey, migrates as far north as the Kuskokwim River.

They're a mystery fish in Alaska, Hayes said. No one knows how many eels swim up the Yukon every fall, how far they travel or where they spawn.

Lampreys are different from American eels in another way. The lampreys swim "beneath the river ice to spawn and die. Like salmon...". In other words, Pacific and Arctic lampreys are anadromous. American eels are

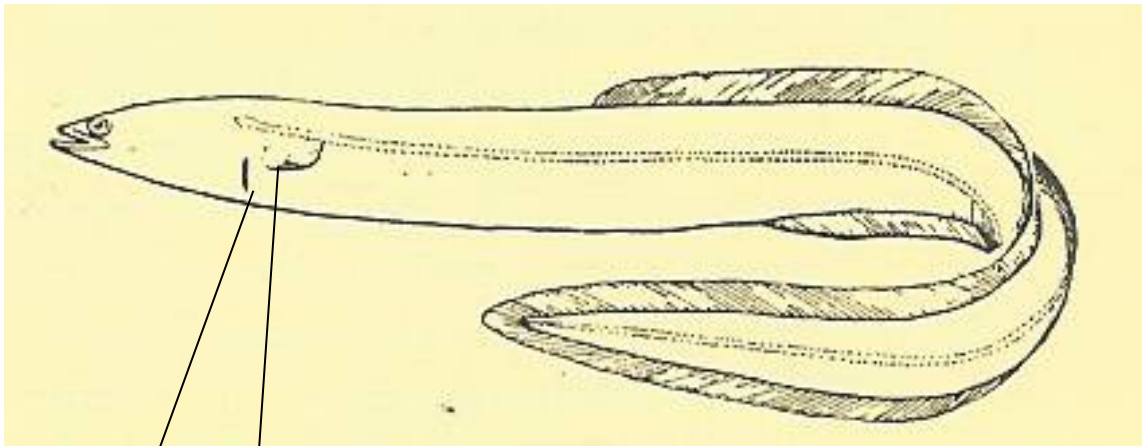
catadromous... just the opposite from anadromous. Mature, adult American eels migrate from freshwater to spawn in the ocean – in the Sargasso Sea (in the south-central region of the North Atlantic Ocean). The feeble, larval American eels migrate (actually, they drift) westerly, then northerly in the Gulf Stream until they encounter a river mouth and migrate upstream where they grow and mature before they return to the ocean to spawn and die.

Both the Pacific and Arctic lampreys are found in Cook Inlet drainages as well as some limited populations of the Alaskan brook lamprey. The Alaskan brook lamprey is not anadromous, and it is not parasitic. They are small. The largest is only about 6 or 7 inches long. These guys, along with immature stages of the anadromous Pacific and Arctic lampreys, sift quiet, muddy stream bottom materials for organic matter to ingest.

Adult lampreys spawn in pits that they excavate in stream riffles by picking up stones with their mouth and moving them. Each female will lay thousands of tiny eggs.

So, there you have it. Lampreys and eels are totally different creatures.

American eel



Gill opening Pectoral fin

Pacific lamprey

