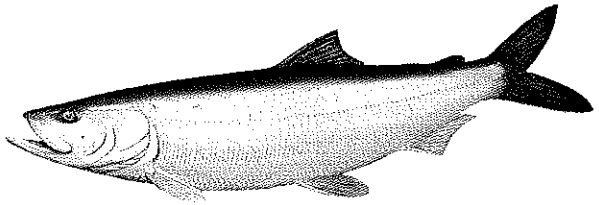
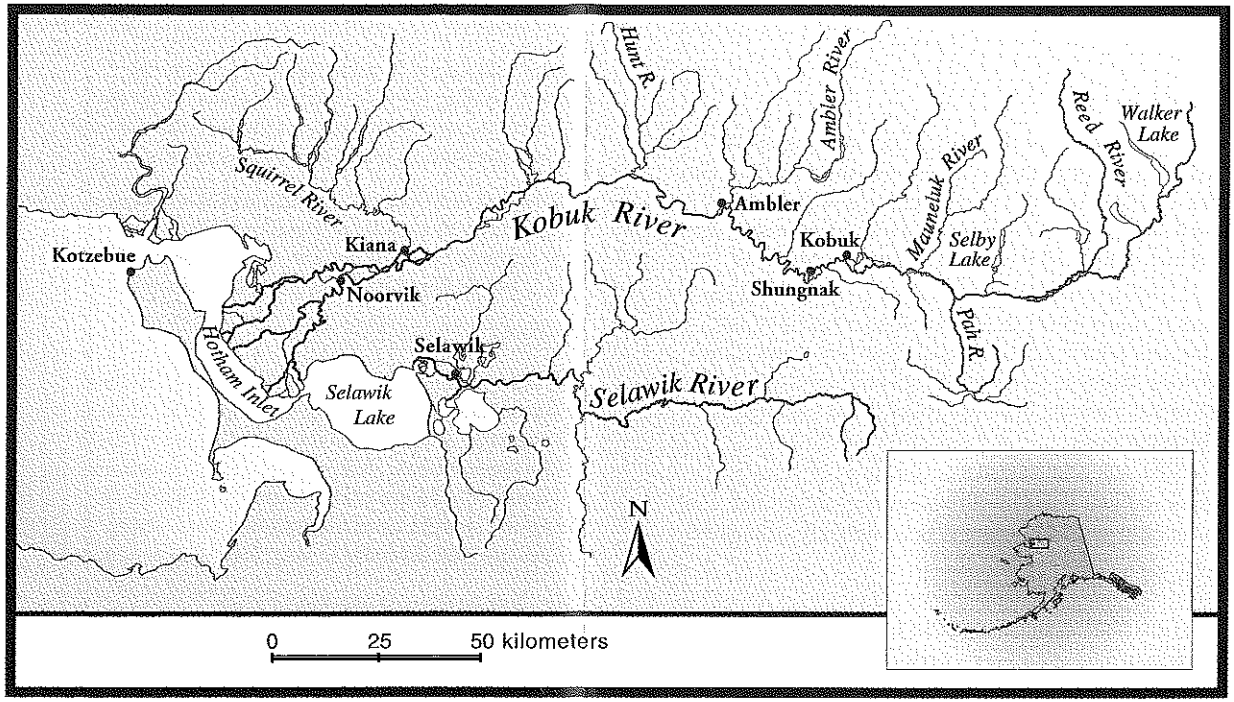
It is important that visitors acknowledge and respect these traditions by observing careful catch-and-release practices as outlined here, and by discarding any fish remains on land—where they can be utilized by fox and other natural scavengers. ❑



SHEEFISH *(Stenodus leucicthys)*



The Kobuk River is 360 miles (576 km) long and drains 12,000 square miles (31,000 sq km) of the western Brooks Range. It flows through federal, state, private and Native corporation lands. Public lands comprise the entire river corridor below mean high water. Many Native allotments along the river are not marked, but structures such as tent frames or fish racks indicate use by local people. Local residents rely on these traditional sites for fishing, hunting, and gathering of traditional foods. When you select a campsite, be sensitive to these local uses; camp in an area away from obvious traditional use sites. If you see local people along the river, ask them where to camp so you will not interfere with their activities. ❑

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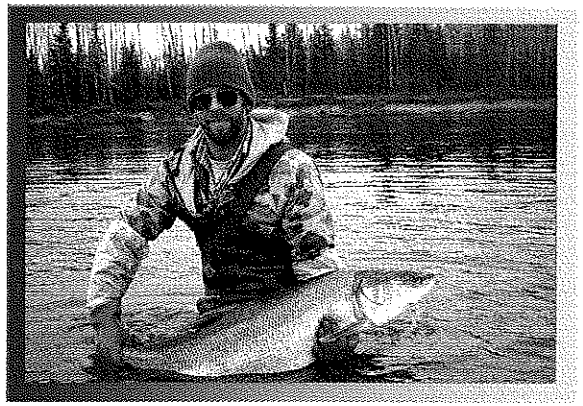
Sheefish Catch & Release



Alaska Department of Fish and Game
Sport Fish Division
1300 College Road
Fairbanks, Alaska 99701-1599

and

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Gates of the Arctic
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THE SHEEFISH *(Stenodus leucicthys)* is a large predatory whitefish distributed throughout the vast Arctic and subarctic drainages of Siberia and North America. In Russia it is known as 'nelma,' in Canada as 'inconnu,' and in Alaska as 'sheefish.' Although sheefish also occur in the Yukon and Kuskokwim rivers, the Kobuk River is Alaska's premier destination for anglers seeking to catch this unique species.

Sheefish Catch & Release

Sheefish Life History

Sheefish spawn during fall in the upper reaches of the Kobuk River. A large female may produce 400,000 eggs, which are broadcast at water's surface while the male fertilizes them below as they sink through the water column. The young sheefish emerge in spring and are swept downstream by spring floods to the lower river or estuary, where they begin feeding on plankton but soon switch to a diet of small fish. Sheefish grow rapidly; males reach sexual maturity at about 30 inches in 8 years, and females become mature in 9 years at about 34 inches.

The spawning migration begins soon after spring breakup. Sexually mature fish move gradually upstream and gather on the spawning grounds in early August. Spawning is usually completed by late September (although not all sheefish spawn every year), and spent fish migrate downstream to winter in Hotham Inlet. Sheefish in the Kobuk River can live 20 years or more and reach weights of 50 pounds (23 kg). The largest sheefish are females, carrying many eggs.

More than 20,000 sheefish spawn in the Kobuk River each year, presenting a good opportunity for anglers seeking this species. However, the large migration and potentially high catch rates dictate proper handling techniques to ensure survival of released fish to spawn and maintain the population.

Sport Fish Hooking Mortality

In a 1997 hooking mortality study, where sheefish were captured with treble- or single-hook lures then held in an enclosure for 48 hours, we found that overall mortality was low. But an interesting finding of this study was that mortality from treble-hook lures (3.2%) was twice that of single-hook lures (1.6%). The sheefish that died in this study were all hooked in the gills and bleeding heavily. This study was conducted by trained technicians, and it is likely that hooking and handling mortality by the average sport angler would be even higher. We recommend the following techniques to minimize unnecessary catch-and-release mortality for sheefish on the Kobuk River.

Tackle

1. *Use a single-hook lure.* Do not just clip off two of the hooks from a factory supplied treble-hook lure—replace it with a large (size 4/0 or larger) single-hook lure. The large hook will not usually be taken as deeply as a smaller, clipped treble-hook.

2. *Pinch down the barb with pliers.* A barbless hook is much easier to remove than a barbed hook. Although a barbless hook may penetrate deeper, the hooking injury is usually less severe because additional damage does not result from backing out a barbless hook.

3. *Do not play the fish to exhaustion.* Use a heavy rod and line (15–20 pound test) so the fish can be brought to hand before it is completely exhausted.

Handling Your Catch

1. *Do NOT* drag the sheefish up onto the gravel beach if fishing from shore; ***keep the fish in the water.*** Stand in the water to release fish.

2. *Use a landing net*—preferably one with soft woven mesh.

3. *Do NOT* grasp the fish tightly around its belly, and *Do NOT* put your fingers up under its gill cover.

4. *Do NOT* grasp the fish by its eyes. Control the sheefish by grasping its lower jaw, with your thumb inside its mouth.

5. *Keep the fish in the water.* If you need a photo, grasp the base of the tail in one hand and cradle the fish under the belly with the other, until the photographer is ready, then lift the fish partly from the water for the brief time it takes to snap the photo, before releasing it.

Hook Removal

Use needle-nosed pliers or a hemostat to grasp and gently remove the hook while stabilizing the fish in the water by its lower jaw.

If the fish is hooked in the gills and bleeding heavily, consider killing it for a meal.

Reviving Your Catch

After unhooking it, point the sheefish into the current, holding it by the base of the tail. If all the previous recommendations are followed, the fish will not be exhausted, and will swim away briskly.

If the fish is exhausted (the fish will not remain upright, lays on its side, or cannot maintain itself in slow current), cradle it upright, facing into the current, until it has the strength to swim away on its own.

Redirect Your Effort

If, after fishing a few days, you find your personal desire to catch a sheefish has been satisfied, consider shifting your effort toward the other species available on the upper Kobuk. Arctic grayling, chum salmon and northern pike are common along the banks, in spring-fed sloughs or in tributary streams. These species can add diversity to your fishing experience.

The Traditional Perspective

The Kobuk River valley is home to hundreds of Native Alaskans. Inupiat Eskimos have long harvested sheefish, and many local residents are concerned about the number of sheefish that will be injured and may die as a result of improper catch-and-release fishing practices.

The Inupiat culture does not approve of catch-and-release fishing or disposal of fish backbones, heads and entrails in the river. Local residents feel these practices are disrespectful to fish and therefore conflict with their traditional ethics. These ethics teach that when animals are mistreated, the natural order becomes disrupted and people risk future food shortages. If disrupted, the fish will move and may never return to their river.

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