

## THREATENED AND ENDANGERED SPECIES

Several of Idaho's fish species have been listed or are candidates for listing under the 1973 federal Endangered Species Act. Species are listed when population levels drop so low that they are at high risk of extinction. Species already listed under the ESA as either Threatened or Endangered are protected from any form of "take". While overharvest has been a factor for some resident species, for the most part, these fish are in trouble because their habitat has been damaged or destroyed. IDFG encourages land and water management agencies to make decisions that will benefit fish and wildlife. However, the Idaho Fish and Game Commission's authority is restricted to either regulating harvest or stocking fish, so these are the only tools IDFG has to restore depleted populations or, in some cases, preserve future options.

### Anadromous Salmon and Steelhead

Nearly all of Idaho's naturally-produced anadromous (ocean-going) salmon and steelhead are listed as Threatened or Endangered under the ESA. Naturally produced spring/summer and fall Chinook salmon and steelhead are listed as threatened. Sockeye salmon produced in Alturas, Pettit, and Redfish lakes in the Stanley Basin are listed as endangered. It is against state and federal law to fish for, harass, or harvest these listed natural fish. They are protected to conserve their critically low populations. As the figure on the next page illustrates, adult returns of natural salmon and steelhead are only a fraction of returns of the 1960s. Snake River coho salmon were declared extinct in the mid-1980s, but coho salmon have since been reintroduced into the Clearwater River. Neither natural spring Chinook salmon nor re-introduced coho salmon in the Clearwater drainage are listed under the federal ESA, but are protected by state law.

Numbers of salmon and steelhead returning to Idaho vary in response to conditions in freshwater and the ocean. Construction of dams and reservoirs on the lower Snake and Columbia rivers has been the primary human-caused factor in the decline of Idaho's wild salmon and steelhead. Dams and reservoirs have created unfavorable migration conditions, especially for smolts, the young salmon and steelhead going to the ocean. Rebuilding endangered and threatened runs of salmon and steelhead will be affected by how dams and reservoirs on the migration route from Idaho to the ocean are operated. More normative river conditions are needed to improve juvenile survival from Idaho to the ocean. Because management of the migration corridor affects survival, IDFG and the State of Idaho participate in decision-making about future conditions of the lower Snake and Columbia rivers to improve migration conditions and increase survival. IDFG is

also active in helping address other factors that affect salmon and steelhead such as harvest, spawning and rearing habitat degradation, negative interactions with hatchery fish, bird predation on smolts in the estuary and marine mammal predation on adult salmon in the lower Columbia River.

An additional anadromous species in Idaho is the Pacific lamprey which is classified by the state as Endangered. A petition to list all populations of Pacific lamprey in the Pacific Northwest as Endangered under ESA was not warranted due to insufficient scientific information.

**Angler Be Aware!** Idaho steelhead harvest is restricted to only steelhead with a clipped adipose fin (ad-clipped) to help maximize harvest opportunity for hatchery produced fish without causing unacceptable loss of naturally produced steelhead. This approach, begun in 1987, has allowed anglers to keep an annual average of 40,000 hatchery steelhead for the last 10 years. This approach is also used for hatchery Chinook salmon, allowing limited angling opportunity for hatchery Chinook salmon in Idaho while protecting naturally produced fish. Idaho has not had a fishery for wild Chinook salmon since 1978.

You may encounter threatened and endangered salmon and steelhead in Idaho's anadromous waters. Avoid fishing or boating in riffle areas where salmon and steelhead are seen or are likely to spawn. Carefully and quickly release any wild anadromous salmon or wild steelhead unintentionally caught. Please help preserve threatened and endangered salmon and steelhead and also preserve your privilege to fish for other fish in waters used by federally protected anadromous salmon and steelhead.

**Know the Difference:** Refer to the illustrations on page 17 to make sure you can distinguish between a small Chinook (which may not be harvested) and a juvenile rainbow. Small sockeye (not illustrated) will be bright silver when found in the Salmon River in the spring or early summer and must also be released immediately. Because of their similarity to resident rainbow trout, most streams with populations of wild, juvenile steelhead have special rules to protect them, such as catch and release rules in the Middle Fork of the Salmon River drainage.

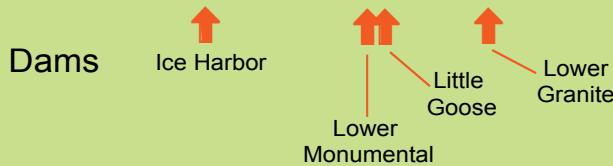
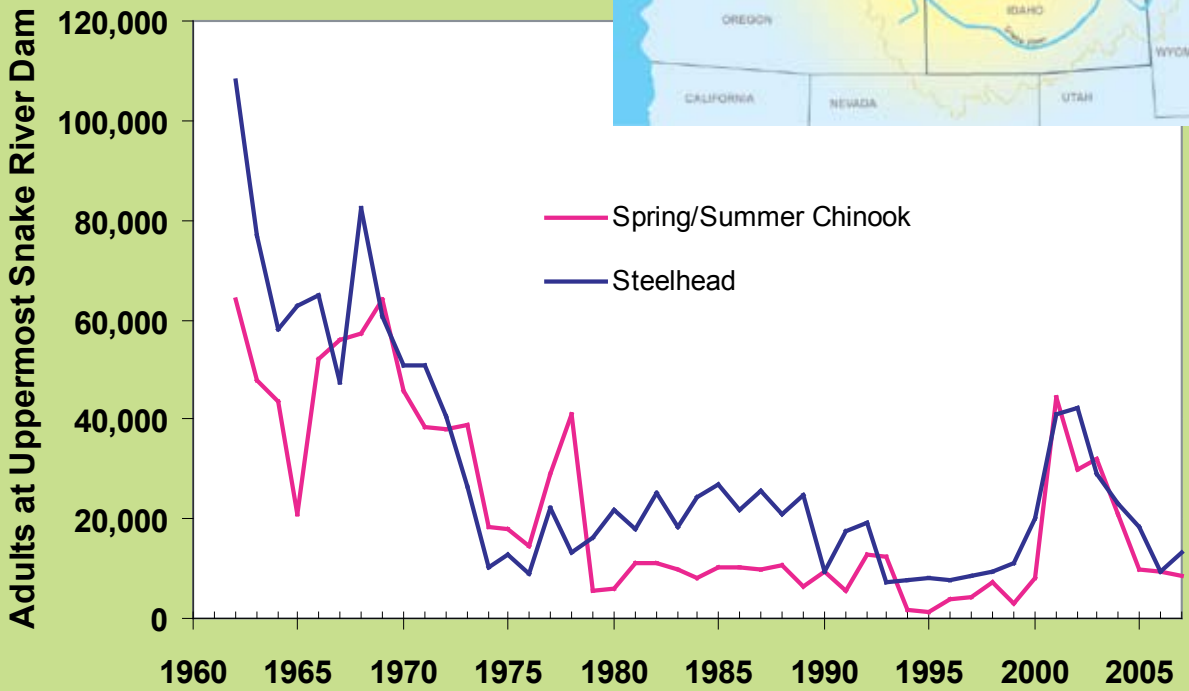
## WHEN AND WHERE YOU CAN EXPECT TO SEE LISTED/PROTECTED SALMON AND STEELHEAD IN IDAHO

Sockeye	Spring & Summer Chinook	Fall Chinook	Steelhead
July - September	April - September	August-November	August-May
<ul style="list-style-type: none"> <li>Snake River below Hells Canyon Dam</li> </ul>	<ul style="list-style-type: none"> <li>Snake River below Hells Canyon Dam</li> </ul>	<ul style="list-style-type: none"> <li>Snake River below Hells Canyon Dam</li> </ul>	<ul style="list-style-type: none"> <li>Snake River below Hells Canyon Dam</li> </ul>
<ul style="list-style-type: none"> <li>Salmon River</li> </ul>	<ul style="list-style-type: none"> <li>Salmon River &amp; tributaries</li> </ul>	<ul style="list-style-type: none"> <li>Clearwater River</li> </ul>	<ul style="list-style-type: none"> <li>Clearwater River</li> </ul>
<ul style="list-style-type: none"> <li>Redfish Lake and Creek</li> </ul>		<ul style="list-style-type: none"> <li>Lower Salmon River</li> </ul>	<ul style="list-style-type: none"> <li>Salmon River</li> </ul>
<ul style="list-style-type: none"> <li>Alturas Lake and Creek</li> </ul>			<ul style="list-style-type: none"> <li>Large tributary streams to these rivers</li> </ul>
<ul style="list-style-type: none"> <li>Pettit Lake and Creek</li> </ul>			

### Returning Steelhead and Chinook Salmon to the Snake River



### Natural Fish



## Idaho's Resident Fish Species

**Bull Trout:** Bull trout were listed as a threatened species under the ESA in June 1998. Historically, the range of bull trout in Idaho included the Snake River and most tributaries upstream to Shoshone Falls, the Little Lost River and nearly all northern Idaho waters. Today, bull trout are found primarily in streams north of and including the Salmon River, in upper reaches of the Boise, Payette and Weiser rivers, in the Little Lost River and in some large, cold-water lakes. A tiny population also persists in a Bruneau River tributary. Spawning, egg incubation, and early rearing of bull trout are confined to upper-elevation streams. Large rivers and lakes provide habitat for migration and adult rearing. Declines in population numbers and habitat have been attributed to overharvest, competition and hybridization with introduced species, construction of migration barriers, and degradation of habitat.

Under its authority to set fishing rules, the Idaho Fish and Game Commission in 1993 declared bull trout may no longer be harvested. Since the Commission does not have the authority to regulate land or water management activities that might alter bull trout habitat, it has directed IDFG to assist and cooperate with management agencies to design practices which will not harm bull trout habitat.

**Know The Difference:** The ability to identify bull trout and closely related species is important in rebuilding Idaho's bull trout population. In most streams and lakes, IDFG encourages anglers to keep brook trout (an introduced species) by offering a bag limit of 25.

- Brook and bull trout look alike to many anglers. However, there are two easily recognizable differences:
  - Brook trout have dark spots or marks on the dorsal (top) fin, and they have three colors in the lower fins (a white leading edge, followed by a black band, and an orangeish color in the rest of the fin).
  - Bull trout have no dark spots in the dorsal fin, and only two colors on the lower fins.
  - See illustrations on page 16 for comparison.
- Bull trout and lake trout are present together in a few Idaho lakes. They can also be identified by the color of their spots:
  - Lake trout have only light-gray colored spots on their bodies and fins.
  - Lake trout have a deeply forked tail fin.

- Bull trout have red, orange or yellow spots primarily on their bodies or tail. Some light spots may be visible on the dorsal fin or tail.
- See page 16 to note these differences.

**Sturgeon and Burbot (ling):** The white sturgeon, found in the Snake, Salmon and Kootenai rivers, is the largest of all North American freshwater fish. They are extremely long lived. They take over 20 years to mature and then may only spawn every few years. This, combined with major losses of the free-flowing river habitat they require, has made it necessary to prohibit all harvest. The Kootenai River is completely closed to fishing for sturgeon.

The Kootenai River, in the northeast corner of the Idaho Panhandle is home to a genetically distinct population of white sturgeon and to the only freshwater member of the cod family, the burbot (ling). Populations of both have declined. In 1972, when Libby Dam was completed upstream it reduced productivity and drastically changed the river's flows. Spawning conditions for sturgeon and burbot were changed. In 1994, after IDFG attempts to convince the dam operators to alter flows and thereby avert listing failed, the Kootenai River white sturgeon was listed as Endangered under the ESA. However, since then mitigation efforts by the Corps of Engineers have improved spawning conditions, but young sturgeon are still not surviving well enough to recover the population. The burbot is classified by the State as Endangered, and was petitioned for listing under the ESA. It was not listed because it is common in other northern states. Burbot are now very rare in Kootenai River.

### **Protected fish must be released immediately, unharmed.**

**Other Species:** Other Idaho fishes at risk include all five native species and subspecies of cutthroat trout and redband (native rainbow) trout. Several are under consideration for federal ESA listing. Rare but not coming under ESA scrutiny are Bear Lake whitefish, Bonneville whitefish, Bonneville cisco, and several small fish seldom seen because of their small size and secretive nature (leatherside chub, sand roller, Bear Lake sculpin, Wood River sculpin and Shoshone sculpin).