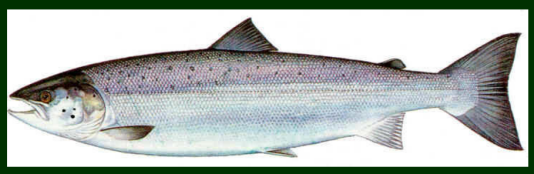
January 2011

Invasive Species of the Month

Atlantic salmon
(*Salmo salar*)



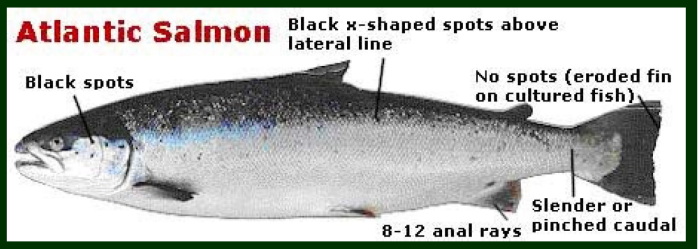
Atlantic salmon pictures courtesy of Fisheries and Oceans Canada (left) and Galloway Fisheries Trust (upper right).

What can you do?

• Be on the lookout for this fish and report suspected invaders to 1-866-INVADER or www.oregoninvasiveshotline.org.
• If you catch an Atlantic salmon (except for Hosmer and East Lakes in the Oregon Cascades), please keep the fish and report it, as noted above. Do not clean the fish in any water body.
• Never move live fish from one water body to another. It is a violation of Oregon state law.

What? Atlantic salmon are native to eastern North American coastal drainages from northern Quebec to the Housatonic River, Connecticut (possibly formerly to Delaware); inland to Lake Ontario, where they are now extinct (though restoration efforts are ongoing). They also are native to Europe from the Arctic Circle to Portugal. Unsuccessful attempts were made in the early 20th Century by Canadian and United States federal agencies to introduce Atlantic salmon to Pacific waters. The release of Atlantic salmon smolts, for the purpose of establishing runs in Washington, occurred in 1951, 1980, and 1981. These releases failed to establish Atlantic salmon in Washington State. The growth of the farmed Atlantic salmon industry in the past 20 years has severely impacted the West Coast commercial salmon industry by driving down prices and shifting the market share. Concerns regarding Atlantic salmon effects on wild salmon stocks include disease transfer, pollution from net pen facilities, and ecological impacts from escaped salmon. A major concern in recent years has been the potential impact on wild salmon stocks of sea lice (*Lepeophtheirus* sp.) originating from net pens in British Columbia. Sea lice can kill juvenile fish, even at low infestation levels. Atlantic salmon that have escaped from hatcheries show up as adults in commercial and recreational catches in Washington, British Columbia, and Alaska.

Where? The Oregon Department of Fish and Wildlife stocks Atlantic salmon in Hosmer and East Lakes in the Cascades, as these are "closed" systems with no water outlets. Atlantic salmon is not farm raised off the Oregon coast or stocked anywhere else in the State of Oregon. Atlantic salmon are raised along the Washington and British Columbia coasts; escapes from these aquaculture operations concern fishery biologists and others working to restore native Pacific Northwest salmon runs.



Lookalike? The key distinguishing feature of Atlantic salmon is the black spots on the gill covers and back, but no black spots on the tail. Atlantic salmon also have black x-shape spots above the lateral line, a slender or pinched caudal fin, and 8-12 rays on the anal fin. Native Pacific Northwest salmon have 11-13 anal rays.