Facts about Pinks

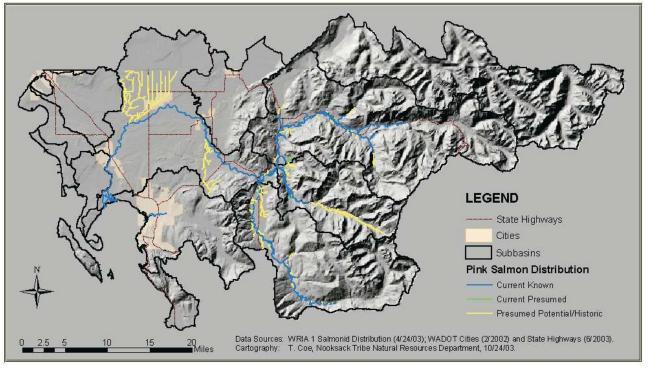
Description

Pink salmon (Oncorhyncus gorbuscha), the smallest of the Pacific salmonids, are also referred to as "humpies" because of the pronounced hump that forms on the back of spawning males. The average pink is only two to five pounds and 20 to 30 inches long.

Juvenile pinks are entirely silver in color and exhibit none of the parr marks (spots) seen in other juvenile salmon, due to their limited time in freshwater where parr marks would be required for camouflage. While in the ocean, pink salmon are a bright steely blue on top with many large spots on the sides and tail. They have small scales and pink flesh.



A male pink salmon in his spawning colors; note the enlarged hump along the back (Photo: Manu Esteve)



There are two stocks of odd-year pink salmon in the Nooksack basin. One odd-year stock spawns in the North and Middle Forks of the Nooksack River, as far upstream as Nooksack Falls in the North Fork and the City of Bellingham diversion dam in the Middle Fork. Thompson Creek, a tributary to Glacier Creek in the North Fork, and the City of Bellingham diversion dam in the Middle Fork. Thompson Creek, a tributary to Glacier Creek in the North Fork, and the City of Bellingham diversion dam in the Middle Fork. Thompson Creek, a tributary to Glacier Creek in the North Fork, and Peat Bog and Bear Creek on the Middle Fork are particularly productive. The other odd-year stock spawns in the South Fork and its tributaries, including Hutchinson, Skookum, Cavanaugh, Deer and Plumbago Creeks.

Distribution

The South Fork also hosts a small population of even-year pink salmon.

The North American distribution of pink salmon ranges from northern California to the Arctic Ocean.

Life Cycle and Reproduction

After spending 18 months at sea, mature two-year-old pinks return to their freshwater habitat for spawning. The Nooksack basin has the earliest return of pinks in the Puget Sound region, with river entry beginning in early July and lasting through September.

The female pink carries approximately 1,500 to 2,000 eggs depending on her size. She digs a redd (nest) and deposits the eggs, which are immediately fertilized by one or more males. Using her tail, she then covers the redd and repeats the process until she has deposited all of her eggs.

The fertilized eggs will develop in the gravel for one to two months, and will hatch as alevins. The alevins will remain in the gravel until they have consumed their attached yolk sac. They emerge from the gravel as fry between February and April, and immediately migrate downstream, generally in schools traveling at night to avoid predation.

Pinks spend little time in the estuary. Once in the ocean, they swim close to the beach, moving just below the water's surface in large schools. At one year of age, the young pinks move farther out to the ocean waters for feeding and growing until they return as two-year-olds to spawn in their natal rivers.

Habitat Needs

Spawning pink salmon prefer moderately fast currents, with pools and riffles that have clean, medium to coarse gravel covered by about 15 cm of water. Nooksack pinks will use less optimal habitats if preferred habitats are not available, although egg survival is likely to be lower. Spawning in the Nooksack basin tends to drop off when water temperatures begin to exceed 16°C (60°F), and dewatering of redds can occur during September if tributary stream flows decrease after spawning is completed. Because pinks migrate immediately downstream after emergence, they are less affected by river conditions than other salmonids that rear in fresh water.

Economic Value

Pink salmon have historically been the most abundant of the salmonids throughout the North Pacific region, and have been used primarily as a fish for canning. However, in the Nooksack region, sports fishing is currently the primary fishery, with limited commercial effort due to low prices.

Current Status

Odd-year runs in the North Fork Nooksack are listed as healthy.

Listing under the Endangered Species Act is "not warranted" for the pink salmon of this region because sufficient numbers are returning to spawn within each two-year cycle to keep the population at sustainable levels.

WRIA1 SALMON RECOVERY PROGRAM

Sources

Anchor Environmental, LLC. 2003. Fish Periodicity in WRIA 1. Anchor Environmental, LLC. 2000. Marine Resources of Whatcom County. National Marine Fisheries Service. 1996. Status Review of Pink Salmon from Washington, Oregon, and California. Pacific States Marine Fisheries Commission. 1996. Pink Salmon (http://www.psmfc.org/habitat/edu_pink_facts.html).

Smith, Carol. 2002. Salmon and Steelhead Limiting Factors in WRIA 1.