Pink Salmon

Oncorhynchus gorbuscha

Average size: 3.5 to 4 lbs, up to 12 lbs
Other names: humpie, humpback salmon
Adult male pink salmon develop a very pronounced, laterally flattened hump on their backs.

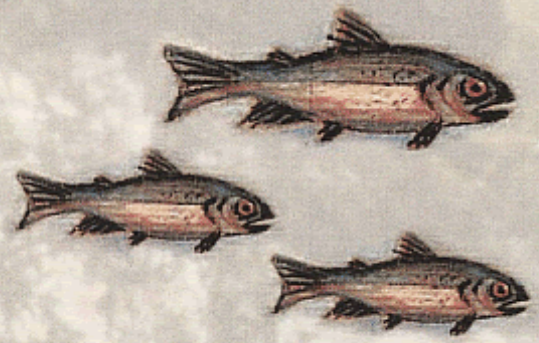
During the egg stage, respiration and excretion of metabolic waste products take place through the egg wall. These processes are facilitated by the presence of moving water surrounding the eggs. Oxygen is brought to the egg surface while carbon dioxide and nitrogenous wastes are removed due to variations in concentrations at the eggs surface in the surrounding water.

Adult pink salmon enter Indian River to spawn between early August and late September. Most spawn within a few miles of the coast, within the intertidal zone, and mouth of the stream. The female pink salmon carries 1,500 to 2,000 eggs. She digs a nest, or redd with her tail and releases the eggs into the nest. They are immediately fertilized by one or more males and then covered by further digging action by the female. After spawning, both males and females soon die, usually within two weeks.

Pink salmon mature in two years which means that odd-year and even-year populations are essentially unrelated.

During early to mid-winter, eggs hatch. After hatching, the alevin, or sac fry, lie among the intergravel spaces, unable to swim, feeding off the food supply contained in the yolk sac. At this time repiration and excretion slowly begin to occur across the gill structures of the fry, facilitated by the presence of water which delivers oxygen to the gills and carries waste away.

An adult fish returning to coastal waters is bright steely blue on top and silvery on the sides with many large black spots on the back and entire tail fin. Its scales are very small and the flesh is pink. As the fish approaches the spawning streams the bright appearance of the male is replaced by brown to black above with a white belly; females become olive green with dusky bars or patches above and a light-colored belly. By the time the male enters the spawning stream, it has developed the characteristic hump and hooked jaws.



Unlike most Pacific salmon, pink salmon fry move downstream to the estuary immediately after emerging. Therefore, the closer they are to saltwater the better. The shorter journey reduces predation and increases survival. Pink fry have no spots, which provide camouflage in streams, but are bright chrome for open water.

As the yolk sac is absorbed, fry grow, becoming free-feeding, free-swimming, pre-emergent fry, totally dependent on their gills for respiration and excretion of waste gases. Shortly after this last stage of intergravel development, fry work their way to the surface of the gravel where they emerge and migrate to the ocean.

Following entry into saltwater, the juvenile pink salmon move along the beaches in dense schools near the surface, feeding on plankton, larval fishes, and occasional insects. Predation is heavy on the very small newly emerged fry, but growth is rapid. By fall, at an age of about 1 year, the juvenile pink salmon are 4 to 6 inches long and are moving into the ocean feeding grounds in the Gulf of Alaska and Aleutian Islands area.