

PACIFIC SALMON LIFE CYCLE HEXAFLEXAGON

Salmon, the king of the fish, are one of the great natural resources of the Pacific Northwest. For Northwest Indian tribes, they hold special religious meaning. For all of us in the Northwest, they are a part of our culture and recreation.

These beautiful creatures have one of the most unusual life cycles in the animal world. They are born in freshwater streams many miles from the Pacific Ocean. When they are strong enough, they swim to the ocean, sometimes traveling hundreds of miles to get there. Fish that are born in freshwater and then migrate to saltwater are called anadromous fish.

Salmon spend their adult lives in the ocean, from one to five years depending on the species. During this time, they may swim as far north as the gulf of Alaska or south to the coastline of California. Then something amazing happens.

In the vast ocean, they manage to find the mouth of the Columbia River. They enter the estuary and head up the Columbia River. With unerring instinct, these majestic fish leap water falls and jump up fish ladders at dams to get back to the exact stream where they were born. Once they reach their birth place, they build nests called redds. Here they lay eggs and spawn, before dying. As the eggs hatch, a new generation of fish will take their place.

The Bonneville Power Administration is working hard to protect these fish at all stages of their life cycle so that future generations can enjoy our majestic salmon. This hexaflexagon uses a special geometric form to show the stages in the salmon's life. It also presents the migration paths of five different species of Pacific salmon: chinook, coho, sockeye, pink and chum.

For additional information call 230-3478 in Portland; or toll free 1-800-622-4519

To Assemble the Pacific Salmon Life Cycle Hexaflexagon:

Items Needed to Assemble: ruler, scissors, clear tape

1. Place drawing with printed side up on a table. Place ruler on paper to connect point A to point A. Using the long edge of one scissors blade, press the scissors on paper and move along the line from point-to-point to make an indent/mark. (This is known as scoring.) Be careful not to cut through paper. Accurate scoring and folding is essential for easy manipulation of the finished hexaflexagon.
2. Repeat Step #1 for point B to point B, C-C, through point F-F. When done, A-A through F-F will be vertically scored.
3. Repeat Step # 1 for point G-G, H-H, I-I, through P-P. These lines are diagonally placed.
4. Cut out the hexaflexagon along the far OUTSIDE border.
5. With the printed side up, fold all vertically scored lines face-to-face. (A-A through F-F). Then, straighten out each fold.

6. Fold all diagonally scored lines (G-G through P-P) so they are back-to-back. Then straighten out each fold.
7. Hold the hexaflexagon with the printed side down and the beak-like flap pointed towards you. Bring the "cycled egg" section to fit over Triangle II. Align and tape open edges.
8. Bring the "alevin" section over Triangle III. Align and tape.
9. Bring the "fertilized egg" section over Triangle IV. Align and tape upper one-half of section only. Leave two beak-like flaps free.
10. Take Triangle VI and align over Triangle I and tape together. Place top-half of beak-like flap showing "fertilized egg" over Triangle VI and place beak-like flap showing "migration" over Triangle V. Align flaps and tape in place.
11. Turn hexaflexagon, checking for any open edges. Tape all open edges to allow for maximum use and durability.

