

Freshwater Mussels



Western Pearlshell mussels (*Margaritifera falcata*) are naturally camouflaged to look like rocks in streams and lakes. They usually appear as vertically implanted black shells with breather holes that close if disturbed, or they may be found lying horizontally on top of the substrate. Open shells indicate a dead mussel. Adult colonies are found in the main channels of streams, but often migrate to protected areas around logs and large rocks. Juvenile mussels live in the shoreline area.

Freshwater mussels have important functions in stream health. They filter impurities as they ingest food and provide nutrients for other stream creatures. They can live in compact colonies, which stabilize streambeds, and they are an indicator species for the health of the stream because pollution and siltation will kill them.

The life cycle is dependent upon a fish host (usually a salmonid), in which larvae, called glochidia, released by the mussels, attaches to the gills of migrating fish. This method gives them free transport to other areas. In a short time the glochidia drop off the fish and implant in the shoreline areas, later moving to the stream channels as adults.

Margaritifera falcata can live more than 100 years. They are known to have been part of Western regional streams for at least 2000 years. Archeological sites indicate they were a food source of indigenous tribes, which left mussel shell "middens" (piles of shells) at campsites.

According to the U.S. Fisheries & Wildlife Service there are about 300 species of freshwater mussels in the United States, of which 70% are extinct or endangered due to many factor associated with urbanization. Seven species inhabit areas west of the Rockies, with only three of those species found in Western Washington. *Margaritifera falcata* is one of the most common of these species still found in Western streams, although it also appears to be disappearing rapidly due to urbanization.

If *M. falcata* or other freshwater mussels are sighted, it is very important not to disturb them in any way. Please note their location and document them in your report. Report

both living and dead mussels. Report mussel sightings to Water Tenders. For more information on freshwater mussels, go to: <http://www.kingcounty.gov/services/environment/animals-and-plants/freshwater-mussels.aspx> or <http://www.watertenders.org>

	
<p>Western Pearlshell (<i>Margaritifera falcata</i>)</p>	<p>Oregon Floater (<i>Anodonta oregonensis</i>)</p>
<p>Most common mussel found in local streams</p> <p>Dark brown to black in color</p> <p>May look like a dark rock</p> <p>Oblong in shape, up to 5" long</p> <p>In gravel or sandy bottoms</p> <p>Partially buried vertically or laying flat horizontally</p> <p>Inside of shell usually purple or pearl white</p>	<p>Found in Lakes</p> <p>Found in sediment</p> <p>Olive to pale brown in color</p> <p>Oval to trapezoidal in shape, up to 3" long</p> <p>Very thin fragile shell</p> <p>Inside of shell usually white</p>

Adapted from King County Freshwater Mussels Identification Card, from Water Tenders, and the King County Water Quality Fund.