

---

## **Western Pearlshell**

### *Margaritifera falcata*

---

Bivalvia — Unionida — Margaritiferidae

#### **CONSERVATION STATUS / CLASSIFICATION**

Rangewide: Apparently secure (G4)  
Statewide: Vulnerable (S3)  
ESA: No status  
USFS: Region 1: No status; Region 4: No status  
BLM: No status  
IDFG: Not classified

#### **BASIS FOR INCLUSION**

Reduced distribution rangewide; habitat degradation.

#### **TAXONOMY**

Frest (1999) considered the population in the Pahsimeroi River to be an undescribed species endemic to Idaho. Specific data supporting the recognition of this taxon are needed. No subspecies is recognized.

#### **DISTRIBUTION AND ABUNDANCE**

Historically, this freshwater mussel occurred from “southern Alaska to central California and eastward to western Montana, western Wyoming, and northern Utah” (Taylor 1981). The Idaho historical range includes sites in the Snake, Coeur d’Alene, Lost, and Salmon River drainages (Frest and Johannes 1997, Frest 1999). Populations are thought to persist in north Idaho in the Coeur d’Alene, St. Joe, and St. Maries rivers. In central Idaho, populations are thought to be extant in the Pahsimeroi, Lost, Lower Salmon, and Little Salmon rivers and in Hells Canyon. In south Idaho, populations are thought to be extant in the upper tributaries of the Snake River, including the Blackfoot River (Frest and Johannes 1997, Frest 1999). However, there is no current and detailed distributional information within these river systems.

#### **POPULATION TREND**

According to Frest (1999) the area occupied, the number of sites occupied, and population sizes have decreased. Populations formerly existed in the middle Snake River, but Frest (1999) was unable to find live individuals in this reach.

#### **HABITAT AND ECOLOGY**

Western pearlshell populations occur in cold, clear streams and rivers, often in reaches having fast current and coarse substrate. This species is intolerant of heavy nutrient loads, siltation, and water pollution (Frest 1999).

Larval western pearlshells are fish parasites that attach to the fins or gills of host fish. Host species include Chinook salmon, rainbow trout, brown trout, brook trout, and speckled dace (Frest 1999).

**ISSUES**

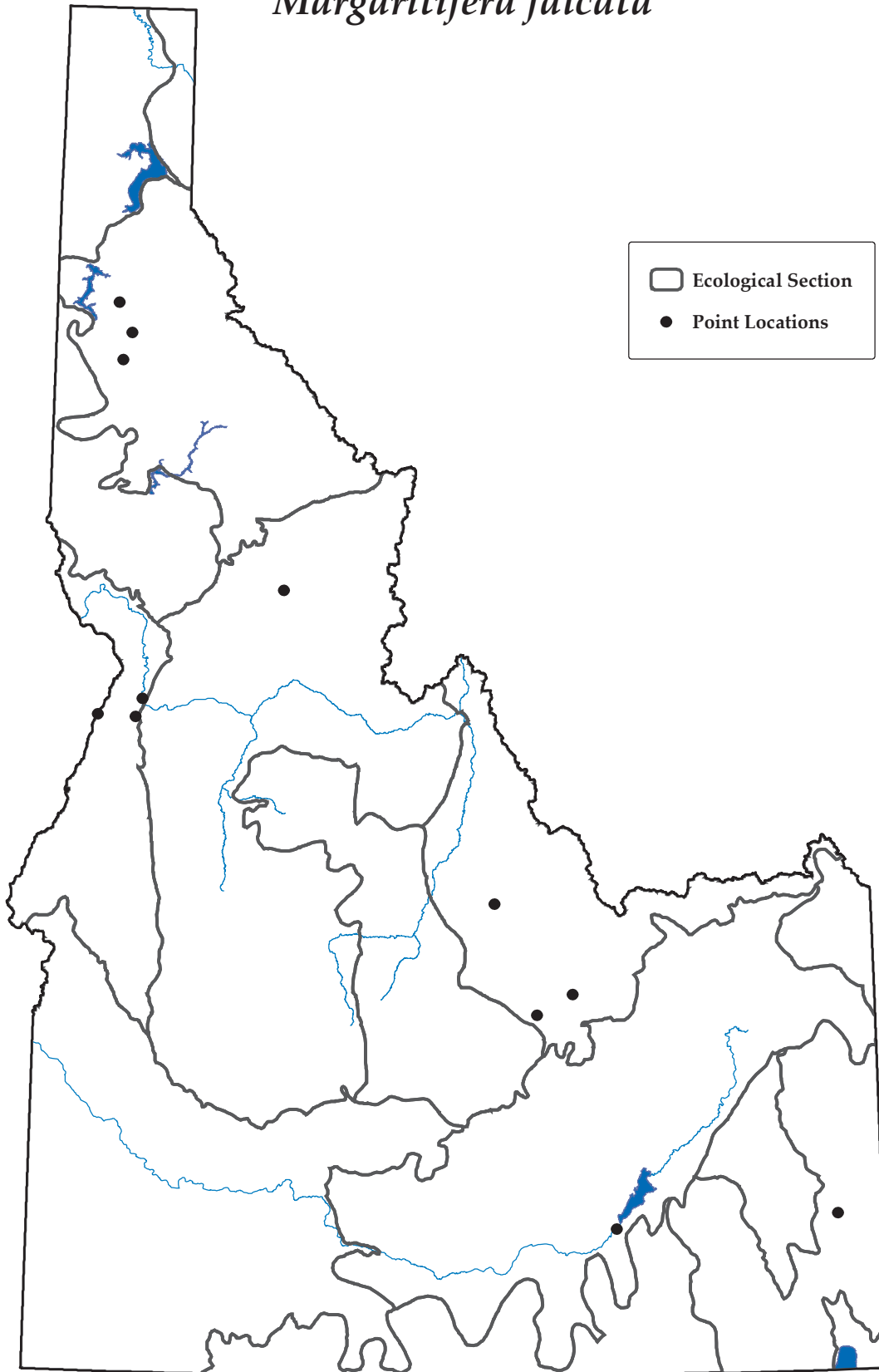
Populations are sensitive to changes in water quality; livestock, agricultural runoff, housing or industrial development, and mining are potential causes of degraded water quality. Small dam construction and extensive diversions may also impact aquatic habitats. The loss of appropriate host fish populations is also a threat (Frest 1999).

**RECOMMENDED ACTIONS**

Research is necessary to determine current distribution, population sizes, and population trends throughout the state. Efforts are also needed to evaluate and prioritize site-level threats and conservation needs.

# Western Pearlshell

*Margaritifera falcata*



1 August 2005  
Point data are from Idaho Conservation Data Center,  
Idaho Department of Fish and Game.

