
Columbia River Tiger Beetle

Cicindela columbica

Insecta — Coleoptera — Cicindelidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Imperiled (G2)
Statewide: Critically imperiled (S1)
ESA: No status
USFS: Region 1: No status; Region 4: No status
BLM: Rangewide/Globally imperiled (Type 2)
IDFG: Not classified

BASIS FOR INCLUSION

Reduced and limited distribution.

TAXONOMY

The beetle was described by Hatch in 1938 (Shook 1981).

DISTRIBUTION AND ABUNDANCE

When first described in 1938, this beetle was distributed on sand bars from The Dalles, Oregon, eastward to Lewiston, Idaho, but damming of the Columbia River destroyed much of that habitat (Shook 1981). The first discovery of the tiger beetle in Idaho was in 1962 on the lower Salmon River in Idaho County (Rumpp 1967). More recently, Shook (1981) found populations within the lower Salmon River Canyon but found none on the Snake River from the mouth of the Salmon River to Heller's Bar, Washington.

During a survey of populations on the lower Salmon River, Shook (1981) estimated the 2 largest colonies to be 200 and 400 beetles, each on sandbars that exceeded 40 ha in area.

POPULATION TREND

No data are available to suggest population trend for Idaho populations. Populations occurring on the Columbia River in Washington and Oregon are thought to have declined precipitously or to have been extirpated.

HABITAT AND ECOLOGY

Populations occur exclusively on river sandbars and riparian sand dunes (Shook 1981, LaBonte 1995). LaBonte (1994) considered riparian habitat to be the primary habitat and referred to the beetle as a "highly stenotopic riparian species."

ISSUES

Threats include over-collection and habitat loss. In 1986, Columbia River tiger beetle specimens were being marketed for \$50 (G. Shook, pers. comm. to IDCDC, 1986). LaBonte (1995) substantiated the threat of collecting, noting the popularity of tiger beetles and the demand for rare and infrequently available species. Because Columbia

tiger beetle populations are localized in small patches of suitable habitat, over-collecting could have important consequences for population viability.

The apparent loss of appropriate sandbars and riparian habitat in the Columbia River suggests that damming and water management have been important as, at least, historical threats.

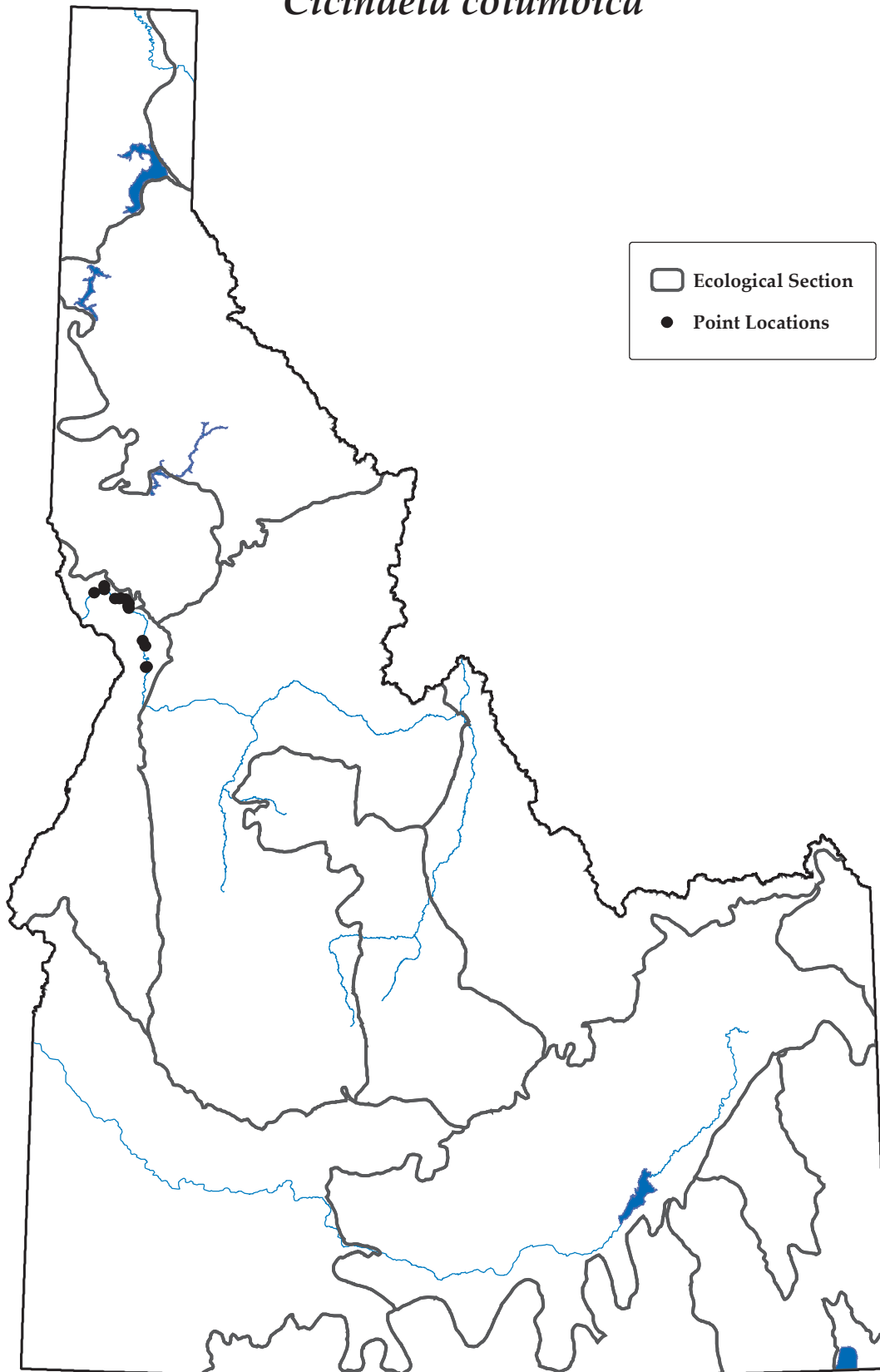
RECOMMENDED ACTIONS

The U. S. Fish and Wildlife Service (1988) was petitioned in 1979 to list this species under the ESA. USFWS found the petition to be unwarranted, basing their decision on lack of a threat—i.e., that damming the Salmon River was no longer being proposed.

The preservation of suitable riparian sandbars and beaches should be considered for land and water development projects that would affect water levels, flow characteristics, and sediment deposition patterns within the range of this species.

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0 20 40 80 Kilometers

0 20 40 80 Miles

2 September 2005

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

