
Idaho Giant Salamander

Dicamptodon aterrimus

Amphibia — Caudata — Dicamptodontidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Vulnerable (G3)
Statewide: Vulnerable (S3)
ESA: No status
USFS: Region 1: No status; Region 4: No status
BLM: Regional/State imperiled (Type 3)
IDFG: Protected Nongame

BASIS FOR INCLUSION

Potentially declining population trends throughout its range; isolated populations in parts of Idaho.

TAXONOMY

This species was formerly called *Dicamptodon ensatus*, but a taxonomic revision of this species resulted in the recognition of *D. aterrimus* as a distinct species (Good 1989).

DISTRIBUTION AND ABUNDANCE

The Idaho giant salamander occurs in portions of northern and central Idaho, including parts of the Coeur d'Alene, Clearwater, and Salmon river drainages. Elsewhere the species has been reported to occur only in extreme western Montana. The southernmost populations, found in the Salmon River drainage, appear to be isolated from populations to the north by approximately 40 kilometers.

POPULATION TREND

Populations in the Clearwater and South Fork Salmon River drainages may be declining. Carstens et al. (2005) were unable to detect the species at 7 historically occupied sites.

HABITAT AND ECOLOGY

Populations are associated with habitat in mesic coniferous forests. Adults are terrestrial and seek cover under logs, bark, rocks, and other surface debris, most often in the riparian zones of streams and lakeshores but also in other moist upland environments. Undercut stream banks and other structure at the terrestrial-aquatic interface serve as oviposition sites (Nussbaum 1969). Larvae are aquatic, occurring in stream pools and lakes under rocks or plant debris. Larval densities in streams are positively correlated with cover availability (Carstens et al 2005).

ISSUES

Habitat destruction and fragmentation from logging are threats to riparian habitat, particularly in the Lochsa and North Fork Clearwater drainages. Carstens et al. (2005) attributed the absence of larval giant salamanders in logged tributaries of these rivers to

reduced cover availability. Logging operations can decrease available cover, increase sedimentation, and affect bank undercutting necessary for successful breeding (Parker 1991).

Water pollution, particularly from pesticides, is a potential threat. Carstens et al. (2005) suggested that DDT use during the 1960s may have affected Lochsa River populations.

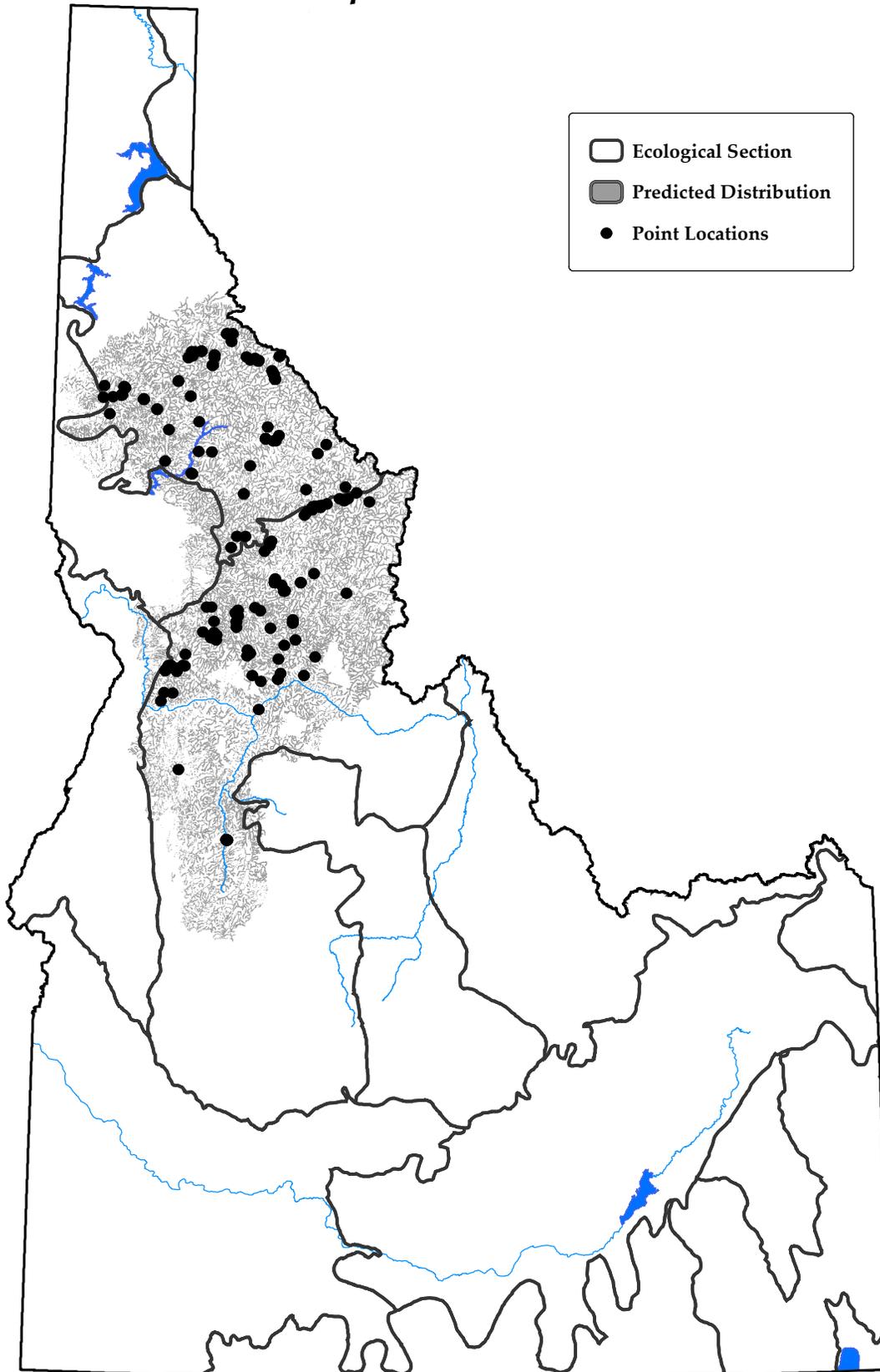
RECOMMENDED ACTIONS

Expanded survey efforts are needed to evaluate the distribution and status of populations. Previous survey efforts have been opportunistic or limited in scope, and the distribution and abundance of this species remains poorly known. Long-term monitoring data to evaluate population trends are also needed. Such data could be gained through a regional amphibian monitoring effort.

Habitat protection is needed throughout the occupied range. Actions designed to maintain water quality and protect riparian habitat should include consideration of occupied sites as well as interconnecting riparian corridors. The species reportedly recolonizes disturbed areas if habitat improvements are made, suggesting habitat restoration can be an effective conservation strategy in degraded areas.

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Map created on September 19, 2005

and prepared by Idaho Conservation Data Center.

Sources: Point data are from Idaho Conservation Data Center, Idaho Department of Fish and Game (2005). Predicted distribution is from the Wildlife Habitat Relationships Models (WHR), A Gap Analysis of Idaho: Final Report. Idaho Cooperative Fish and Wildlife Research Unit, Moscow, ID (Scott et al. 2002).

Predicted distribution is approximate (for more information, go to http://www.wildlife.uidaho.edu/idgap/idgap_report.asp).

