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Distribution, Relative Abundance, and Habitat Associations of Amphibians and Reptiles on Craig Mountain, Idaho

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SUMMARY

The primary goal of this project was to determine the distribution, abundance and habitat associations of the amphibian and reptile species on Craig Mountain (CM), Idaho. This study is important because little was known about the amphibian and reptile species in the Craig Mountain area and concern about the local and global decline of amphibian populations. Craig Mountain is a very good area to monitor because it contains almost 50% of the total amphibian and reptile species that occur in Idaho.

The Craig Mountain topography is characterized by a high elevation, coniferous and wet meadow "plateau" at 5100 ft. (1555 m) with steep elevational breaks down to the Snake and Salmon Rivers at 800 ft. (244 m). Because of the many habitat associations and ecological diversity of the amphibian and reptile species on the CM, we used a variety of sampling techniques. These included drift fences with pitfall and funnel traps, visual surveys of ponds and streams, road driving, visual terrestrial searches, and calling surveys.

The most important amphibian and reptile findings from the project include:

1. We found 17 species of amphibians and reptiles on CM . There were seven new Nez Perce County and six new Lewis County records.

2. Five amphibian species and five reptile species, such as the Spotted Frog and Common Garter Snake, were found to occur at the higher elevation habitat.

3. Five species of amphibians and nine species of reptiles, such as the Spadefoot and Western Rattlesnake, were found at the warmer, drier low elevation sites.

4. Spotted Frogs and Long-toed salamanders were the most abundant breeding amphibians at the upper elevation and were closely associated in breeding ponds. Spotted Frogs and Long-toed Salamanders bred in ponds with emergent vegetation. Long-toed Salamanders also bred in slow moving areas of creeks.

5. Western Toads were the most abundant breeding amphibian along the Snake and Salmon Rivers.

6. At low elevation habitat along the Snake River, populations of Spotted Frog tadpoles were found in two temporary ponds in July 1995.

7. Western Toads and Bullfrogs were the only amphibians found breeding in ponds with fish. Only adult Spotted Frog were in these ponds.

8. Amphibian and reptile species of concern include: Tailed Frog (USDI-FWS Category 2 Candidate Species for T & E Species Status, BLM sensitive species), Ringneck Snake (IDFG Species of Special Concern and BLM sensitive species), and Spotted Frog (C2 candidate species).

9. One adult and two juvenile Bullfrogs (an introduced species) were found along the Salmon River.

10. Two isolated Tailed Frog populations with many individuals were found in old-growth Grand Fir habitat with cold water and 75-90% canopy coverage.

11. The number of amphibian sites (including human-influenced ponds) has probably increased because of the building of roads through meadows and draws.

12. The information gained from this project will aid land mangers in preserving amphibian and reptile biodiversity in the Northwest. Our recommendations for future activities include:

A. Continue to survey pond and wetland sites for breeding amphibians. Also, continue monitoring the two Tailed Frog populations (Eagle and South Fork Captain John Creek).

B. Bullfrogs should be eliminated from Craig Mountain when observed. They are an introduced species that has the capability of altering native amphibian populations.