

Wood Frog - *Lithobates sylvaticus*

Abundance: Rare

Status: NSS2 (Ba)

NatureServe: G5 S1

Population Status: Vulnerable due to greatly restricted distribution, but extirpation is not eminent.

Limiting Factor: Habitat: habitat fragmentation and other anthropogenic factors have resulted in declines of habitat quality and resulted in increased mortality. No one factor can be attributed to species decline.

Comment: Formerly *Rana sylvatica*.

Introduction

In Wyoming, Wood Frogs may be found in the Medicine Bow and Bighorn Mountains. Both of these populations are considered glacial relict populations (Muths et al. 2005). General appearance of this species varies upon location. Medicine Bow populations exhibit a white dorsal stripe, while Bighorn populations remain uniform in dorsal coloration. Wood Frogs typically emerge and begin breeding shortly after the snow and ice melts from high elevation ponds and lakes. This often occurs mid June to early July (Baxter and Stone 1985). Breeding habitats primarily consist of ephemeral fishless pools, but may include slow moving streams and beaver ponds. Eggs are typically deposited in communal clusters. Each egg mass contains approximately 300-1,500 ova (Redmer and Trauth 2005). In Wyoming, larval metamorphosis is often completed by early August (Baxter and Stone 1985). Juvenile males mature in 1-2 years, while females mature in 2-3 years (Redmer and Trauth 2005). Wood Frogs feed on insects, worms, spiders, and other invertebrates. Wood Frogs are a freeze tolerant species, and are the northernmost distributed anuran in North America. This species typically overwinters terrestrially near the soil surface.

Habitat

Wood frogs prefer beaver ponds, slowly moving streams, small lakes, wet meadows, and willow thickets in the montane zones. Populations are usually found around 9,000 feet in elevation. Breeding habitats primarily consist of ephemeral fishless pools, but may include slow moving streams and beaver ponds. This species typically overwinters terrestrially near the soil surface.

Problems

- h Alteration of aquatic habitats needed for breeding may adversely affect populations.
- h Habitat changes and other factors may be adversely affecting this species, but lack of data precludes identification of specific problems and development of management recommendations.
- h Population status, distribution, habitat data, and disease status are lacking for some populations of this species.

Conservation Actions

- h A systematic study of this species should be conducted with respect to distribution, abundance, habitat associations, and disease status within Wyoming.
- h Continue efforts to educate landowners and the public about the importance of amphibians.
- h Develop management recommendations based on survey data.

Monitoring/Research

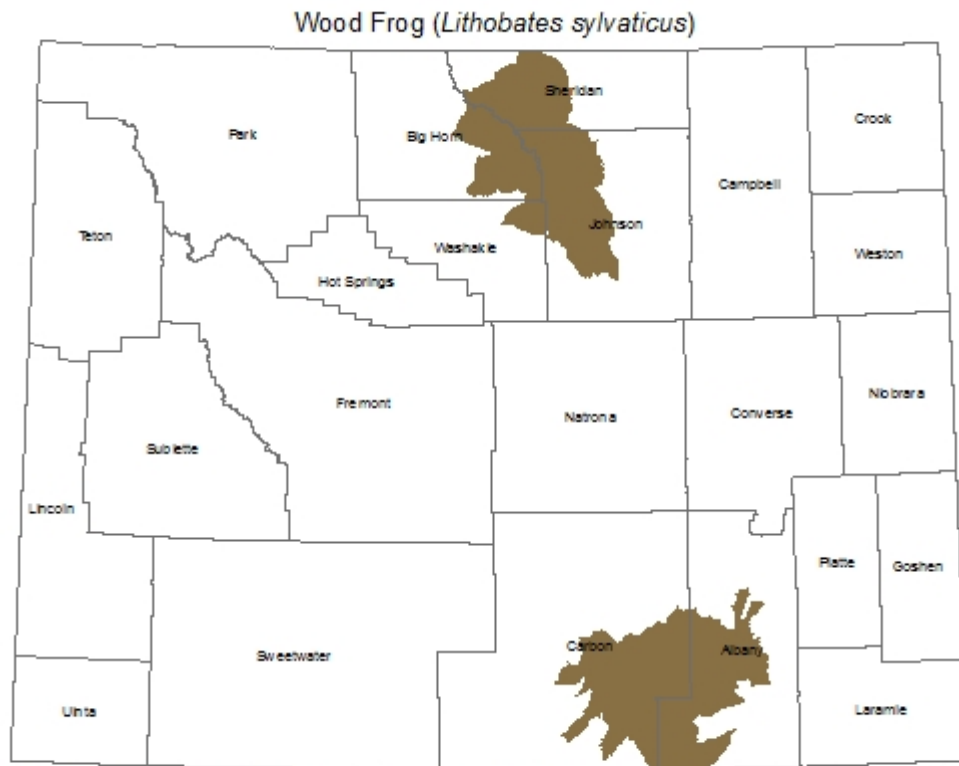
Conduct baseline surveys and test for chytrid fungus to gain better understanding of species distribution and disease status within the state. Monitor known populations of Wood Frog within Wyoming's northern and southern populations.

Recent Developments

Surveys were performed in the Bighorn Mountains in an attempt to verify historic Wood Frog observations (Estes-Zumpf et al. 2012). Annual monitoring has been conducted in the Medicine Bow National Forest at known Wood Frog populations. Amphibians have received increased attention within Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

References

- Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second Edition. Wyoming Game and Fish Department, Cheyenne. 137pp.
- Redmer M. and S. E. Trauth. 2005. *Rana sylvatica* LeConte, 1825 Wood Frog. Pages 590-593 in M.J. Lannoo (ed), Amphibian Declines: The Conservation Status of United States Species. University of California Press, Berkeley, CA.
- Muths, E., S. Rittman, J. Irwin, D. Keinath and R. Scherer. 2005. Wood Frog (*Rana sylvatica*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region.
- Estes-Zumpf, W.A., Z.J. Walker, and D.J. Keinath. 2012. Status and distribution of amphibians in the Bighorn Mountains of Wyoming. Wyoming Game and Fish Department Administrative Report. Cheyenne, Wyoming.



SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: February 2016. Wyoming Game and Fish Department. Note that brown indicates the current known range of the species.