

## Midget Faded Rattlesnake - *Crotalus oreganus concolor*

Abundance: Extremely rare

Status: NSS1 (Aa)

NatureServe: G5T4 S1

Population Status: Imperiled due to greatly restricted numbers and distribution, extirpation is possible.

Limiting Factor: Habitat: species is only found in the Flaming Gorge Region. Habitat has undergone significant loss. Additional habitat loss is ongoing due to energy development.

Comment: Due to increasing habitat loss associated with energy development. Populations are also at risk due to anthropogenic factors. Scientific name changed from *Crotalus viridis concolor*. All subspecies of the Prairie Rattlesnake except for *C. viridis viridis* were moved to the species *C. oreganus*.

### Introduction

In Wyoming, the Midget Faded Rattlesnake can be found in the Lower Green River Valley (Baxter and Stone 1985). The majority of this species' range extends southward from the cities of Rock Springs and Green River. The active period for this snake is typically from late April through September. Breeding occurs in July and August (Travsky and Beauvais 2004). Gravid females will give ovoviviparous birth to 3-7 neonates the year following breeding, from August to September. During gestation, gravid females are typically found near hibernacula at thermally preferred communal rookeries (Duvall et al. 1985). It is estimated that females do not become sexually mature until at least 5 years of age (Travsky and Beauvais 2004). Maturity may not be attained until 10 years of age. Females probably breed every 2-4 years. After general emergence, Midget Faded Rattlesnakes typically move to shedding habitat (Parker 2003). Rattlesnakes often use the same locations for ecdysis in successive years (Redder 1994). Following ecdysis, non gravid snakes will travel extensive distances to summer activity ranges. In Wyoming, this species has been documented preying upon lizards, small mammals, and birds (Parker 2003). Midget Faded Rattlesnakes hibernate in rock outcroppings alone or in small aggregations. Venom of this species is considered more potent than other closely related species (Baxter and Stone 1985).

### Habitat

The Midget Faded Rattlesnake is found in sagebrush communities in the plains zone (Baxter and Stone 1985). This species requires an abundance of south-facing rock outcroppings and exposed canyon walls (Travsky and Beauvais 2004). Rocky outcrops are essential for cover, variable thermal conditions, and hibernation.

### Problems

- h Human disturbances (deliberate killing and hibernacula destruction) may be causing declines in the population or will cause declines in the future.
- h In some parts of the country, this species has been the target of collection for the pet trade.
- h Little is known about this species in Wyoming. Lack of information regarding populations, distribution, and habitat associations directly impact the ability to manage for this species.
- h Increased oil and gas development will likely lead to habitat alteration or loss.

### Conservation Actions

- h Develop management recommendations based on resulting data.
- h Survey and monitor population distribution, status, and habitat associations.
- h Bring increased attention to this species when planning future energy development within its range.

### Monitoring/Research

Conduct baseline surveys to gain better understanding of species distribution within the state. Complete ongoing projects regarding this species. Monitor known populations and begin to assess population trends.

### Recent Developments

Reptiles have received increased attention within Wyoming. Incidental observations are encouraged to be reported to the herpetology program. In 2009, a study was implemented to model Midget Faded Rattlesnake habitat, gene flow, and possible impacts of ongoing energy development. In 2009, a study was implemented to look at the effects of roads on reptile species within the lower Green River valley. In 2006, baseline studies were conducted to look at reptile distribution and abundance in the lower Green River Valley south of the cities of Green River and Rock Springs (Walker and Turner 2010). In 2009, baseline studies were conducted to look at reptile distribution and abundance in the lower Green River Valley north of Interstate 80. A Midget Faded Rattlesnake sampling protocol was created for energy companies working in the lower Green River Valley.

#### References

Walker Z. and W. Turner. 2010. Comparison of standardized survey methods for reptiles in the Flaming Gorge region of Wyoming. Wyoming Game and Fish Department Fish Division Administrative Report.

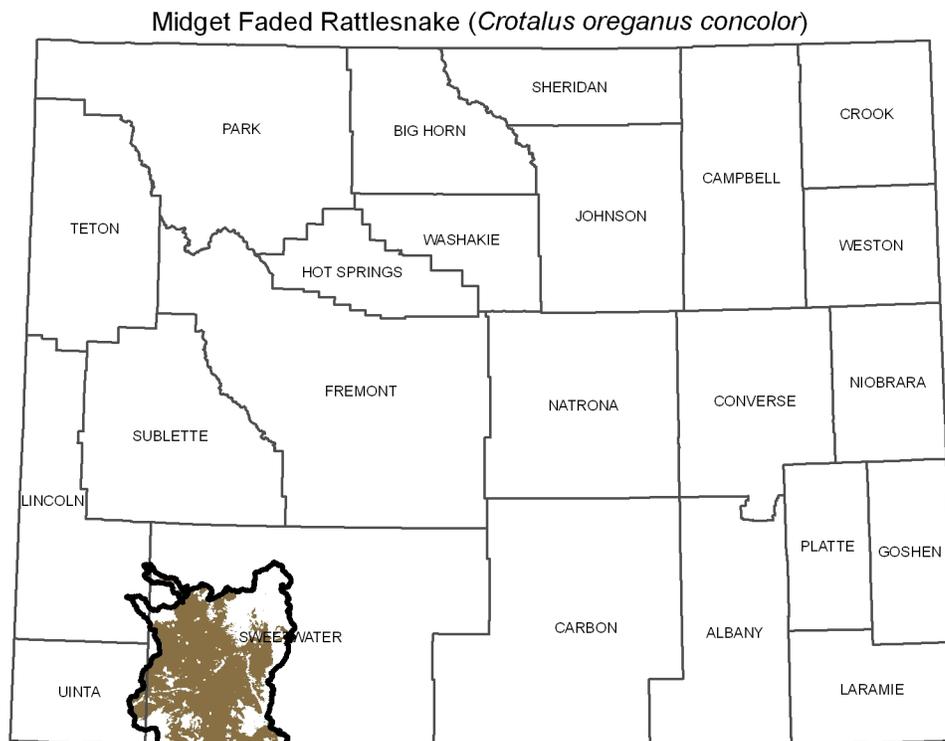
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SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.