

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: None.

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 five years of age (Travsky and Beauvais 2004). Maturity may not be attained until ten 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. Monitor known populations and begin to assess population trends.

Recent Developments

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, a study was implemented to model Midget Faded Rattlesnake habitat, gene flow, and possible impacts of ongoing energy development (Spear et al. 2011). In 2009, a graduate project was implemented through the University of Wyoming to look at the effects of roads on reptile species within the lower Green River valley (Hubbard 2011). Baseline surveys were conducted to look at reptile distribution and abundance in southwest Wyoming in 2009 and 2010 (Snoberger and Walker 2012). Several Midget Faded Rattlesnakes were documented during these surveys and detailed habitat data was collected at each of these locations (Snoberger and Walker 2012). This project focused on better defining the Midget Faded Rattlesnake range north of Interstate 80, in the White Mountain area (Snoberger and Walker 2012). A Midget Faded Rattlesnake sampling protocol was created for energy companies working in the lower Green River Valley. Reptiles have received increased attention within Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

References

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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.