

Plains Box Turtle - *Terrapene ornata ornata*

Abundance: Unknown

Status: NSSU

NatureServe: G5T5 S1

Population Status: Restricted distribution, population numbers and threats are unknown. It has been suggested that this species is already extirpated from the state (Redder et al. 2006).

Limiting Factor: Habitat: limited habitat. This species only inhabits vegetated sandhills.

Comment: Common name changed from Ornate Box Turtle to Plains Box Turtle.

Introduction

The native distribution of Plains Box Turtles in Wyoming is probably confined to the Sandhill region in Goshen County near the state line and near the North Platte River as far west as Fort Laramie (Baxter and Stone 1985). However, the species has also been introduced throughout the state as a result of the pet trade (Baxter and Stone 1985). Plains Box Turtles are primarily terrestrial and have hinged plastrons that close completely. Plains Box Turtles are usually active from April to mid-October (Ernst et al. 1994); they lay eggs in clutches of 2 to 8 eggs from May to June or July (Baxter and Stone 1985). Eggs usually hatch in 59 to 70 days with hatchlings emerging in August and September. Some hatchlings may overwinter in the nest. Plains Box Turtles are primarily carnivorous, though captives eat vegetable matter (Ernst et al. 1994). They feed on insects (grasshoppers, dung beetles, caterpillars, etc.), earthworms, crayfish, eggs, carrion, cactus, fruits, and leaves (Baxter and Stone 1985, Stebbins 2003). Plains Box Turtles construct burrows in deep sandy soils to escape mid-day heat and for hibernation (Redder et al. 2006). This species usually hibernates alone (Ernst et al. 1994). Plains Box Turtles may be declining in numbers and extent in their North American range (Redder et al. 2006).

Habitat

Plains Box Turtles favor prairies and sandy, treeless grasslands, but also occur in open woodlands (Baxter and Stone 1985, Ernst et al. 1994, Stebbins 2003). They will seek areas with loose soils suitable for burrowing (Stebbins 2003). Plains Box Turtles usually construct their own burrows or forms (Ernst et al. 1994); they also may be found under larger cover objects (Stebbins 2003). Preferred nesting sites are open, well-drained, and have a soft substrate (Ernst et al. 1994).

Problems

- h This species has restricted habitats in the state, therefore disturbance to these areas may affect the range of the species in Wyoming.
- h In some areas, this species may have been over harvested for the pet trade (Ernst et al. 1994).
- h Automobile mortality may also be a significant threat for this species (Baxter and Stone 1985, Ernst et al. 1994).
- h There is some debate on the possible extirpation of this species in the state.
- h Lack of basic information on the species presence, distribution, and ecology in Wyoming.
- h Due to their long lives and low reproductive output, Ornate Box Turtle populations are especially threatened by the loss of reproductive-age females (Redder et al. 2006).

Conservation Actions

- h Survey and monitor population distribution, status, and habitat associations.
- h Develop management recommendations based on resulting data.

Monitoring/Research

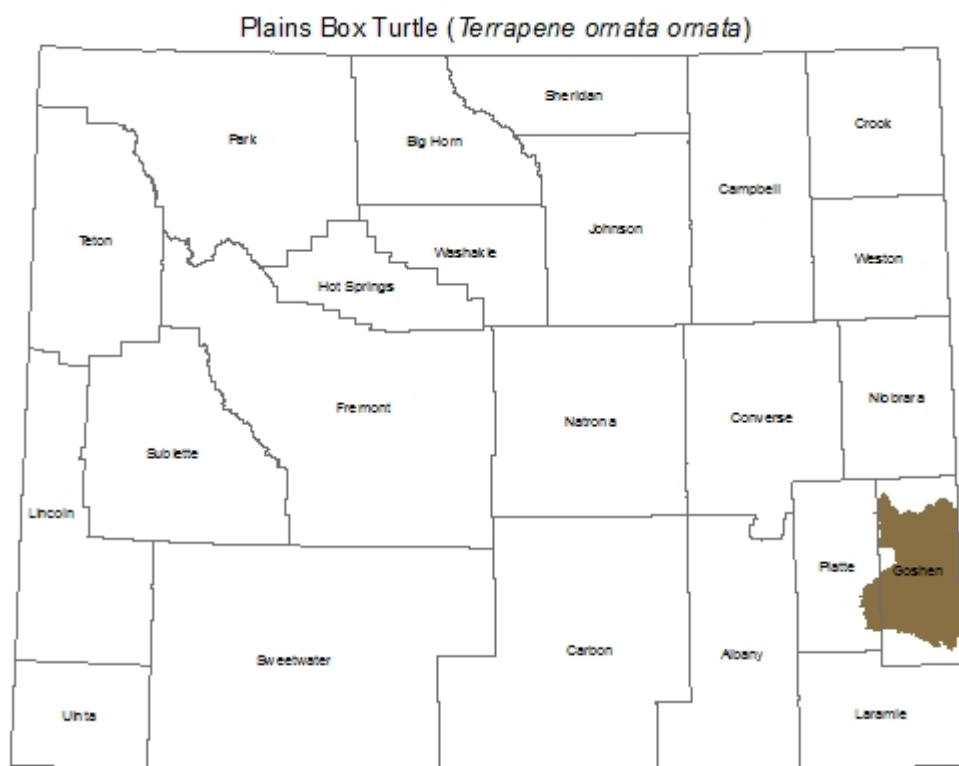
Conduct baseline surveys to gain a better understanding of Plains Box Turtle distribution in Wyoming.

Recent Developments

Baseline reptile and amphibian surveys were conducted in southeast Wyoming in 2011 and 2012 (Snoberger and Walker 2013). Unfortunately, no Plains Box Turtles were documented during these surveys. Reptiles have received increased attention in Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

References

- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Houghton Mifflin Company, Boston. 336 pp.
- Redder, A.J., C.K. Dodd, Jr., and D. Keinath. 2006. Ornate Box Turtle (*Terrapene ornata ornata*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region.
- Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second Edition. Wyoming Game and Fish Department, Cheyenne. 137pp.
- Ernst, C.H., J.E. Lovich, and R.W. Barbour. 1994. Turtles of the United States and Canada. Smithsonian Institution Press, Washington and London. 578pp.
- Snoberger, C.E. and Z.J. Walker. 2013. Southeast Wyoming reptile and amphibian surveys 2011-2012. 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.