

## Ornate 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: Changed from NSS4 in 2005 due solely to changes in the matrix.

### Introduction

The native distribution of Ornate 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 Ft 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). Ornate Box Turtles are primarily terrestrial and have hinged plastrons that close completely. Ornate 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. Ornate 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). Ornate 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). Ornate Box Turtles may be declining in numbers and extent in their North American range (Redder et al. 2006).

### Habitat

Ornate Box Turtles favor prairies and sandy, treeless grasslands, but also occurs 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). Ornate 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

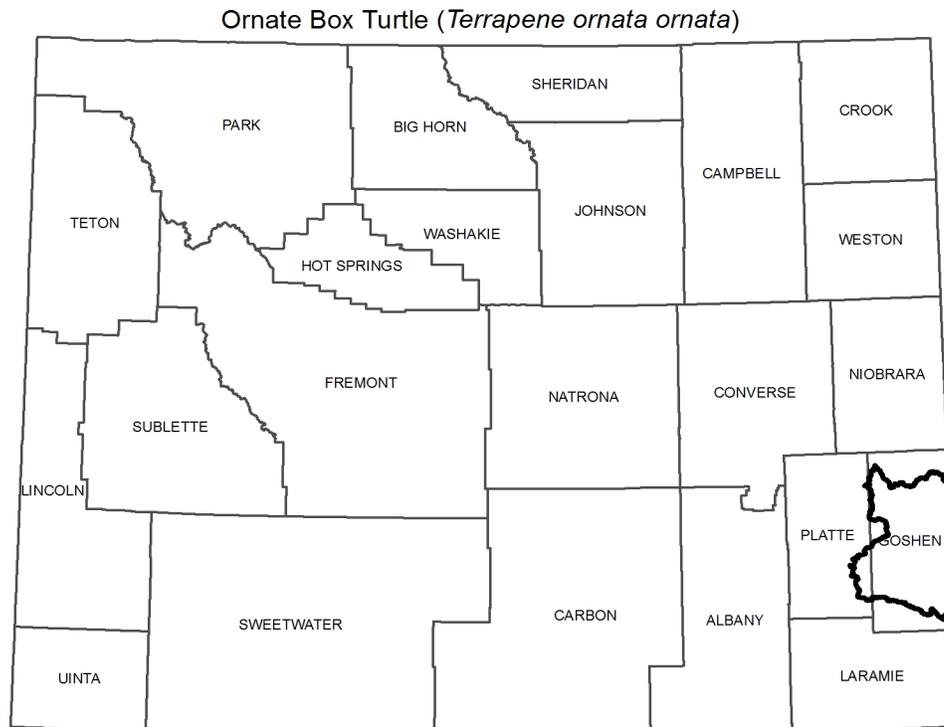
Conduct baseline surveys to gain a better understanding of Ornate Box Turtle distribution in Wyoming.

### Recent Developments

Reptiles have received increased attention in Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

## References

- 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.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Houghton Mifflin Company, Boston. 336 pp.
- 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.



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 heavy black lines indicate outermost boundaries of possible occurrence. There were too few occurrence points to construct a distribution model. Collection of additional occurrence locations is necessary for assessment of potential distribution in Wyoming.