## Creating Nesting Areas

Eastern Box Turtles in the northeast primarily nest in open-canopy, upland habitat with well drained soil. These conditions occur both naturally and anthropogenically in the form of powerline right-aways, gravel pits, and fields with sparse vegetation.

#### Recommendations for Managing Nesting Habitat

- Survey and determine active or potential nesting habitat using ground surveys and aerial imagery.
- If vegetation clearing is deemed necessary, this should be restricted to 1 November through 31 March during the box turtles inactive season.
- Monitor vegetation growth and use of nesting sites.

#### Creating Nesting Habitat

Expose any existing sand-gravel substrate or bring in washed soil to create mounds 10-12 inches in depth. Retain or provide 5-25% native vegetation cover. Remove non-native plants. Remove woody or herbaceous plants if they cover >50% of the site. Remove shrubs taller than 24" in height.





#### Eastern Box Turtle Habitat

Eastern Box Turtles are an upland species. In early spring, they emerge from subterranean overwintering locations within forests and move toward open canopy habitats to increase body temperatures. During late spring, females use early successional habitat for nesting. After nesting season, most turtles move back to forests or into shallow wetlands. In the fall, most turtles will be seen gathering in areas with open canopies before heading back to the forest to overwinter.

#### Observe an Eastern Box Turtle?

If you discover an Eastern Box Turtle, take photographs, note the location, and report your sighting to your state wildlife agency. Unless a box turtle is in immediate danger (on a roadway) it is best not to move the individual. If the turtle must be moved, carefully pick it up and move it across the road in the direction it was headed.

Report Suspicious Activity. If you suspect someone is involved in the illegal collection of wild turtles, report it to the U.S. Fish and Wildlife Service's tip line (1-800-FWS-TIPS)

https://www.americanturtles.org/

http://northeastparc.org/







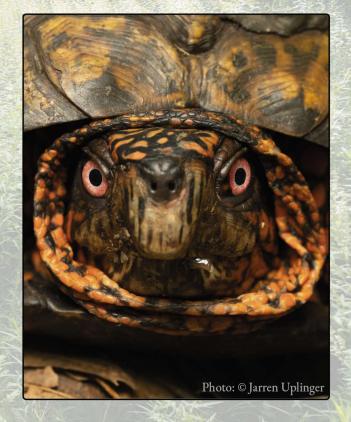


Supported by U.S. Fish and Wildlife Service Regional Conservation Needs Grant

# Management Guidelines for the Eastern Box Turtle

(Terrapene carolina carolina)

| Nesting Areas        | Prescribed<br>Fires |
|----------------------|---------------------|
| Timber<br>Harvesting | Mowing              |



#### Prescribed Fires



Adult survivorship is crucial to maintaining stable Eastern Box Turtle populations and fire has the potential to negatively affect survivorship. Fire also has the potential to be used as a conservation tool to improve nesting and foraging habitat. The following recommendations will help reduce the risk of turtle mortality during fire events.

#### Recommendations for prescribed fires

- Utilize visual surveys and radio telemetry to better understand seasonal habitat use.
- Restrict burns to 1 November through 31 March.
- Use single-front fires to allow turtles to escape to fire-breaks or other cover.
- Burn slowly at a low intensity.
- Burn in smaller rotational units.
- Maintain refugia areas with woody debris, undergrowth, and leaf litter.
- Exclude a 30m (~100ft) forest edge from fire.

### Timber Harvesting

Deciduous and mixed forests are critical habitat for the Eastern Box Turtle. They are used for overwintering, summer refuge, and foraging grounds. Timber harvesting can lead to death by crushing and interfere with thermal and microhabitat conditions. While there is no perfect time for forest management, these recommendations will help to reduce the risk to turtles during such events.



# Recommendations for timber harvesting

- Restrict use of motorized vehicles to 1 November through 31 March.
- Minimize the frequency and total area where vehicles are used.
- Leave microhabitat refugia such as fallen logs, leaf litter, and a vegetated wetland buffer.
- Limit clear-cuts to large forests and restrict clearing to 0.5-5 ha.

#### Active Period in the Northeast



# Mowing



The Eastern Box Turtle depends on various early successional habitats such as fallow fields for foraging and nesting. While it is important to manage this habitat with mowing, mower blades and tires can cause high mortality in Eastern Box Turtles.

#### Recommendations for mowing

- Restrict mowing to 1 November through 31 March.
- If mowing must be done during the active season, restrict mowing to July and August
- Leave a 5m (~15 ft) unmowed edge until 15 October.
- Mow once every 2-3 years or mow smaller portions of an area each year.
- Avoid using flail mowers or other mowers with heavy guide bars that roll along the ground.
- Raise mower blades to >18cm (7 in). In areas were the blades need to be lowered, do so during the inactive season.
- Mow at a slower pace from the middle of the field outward.