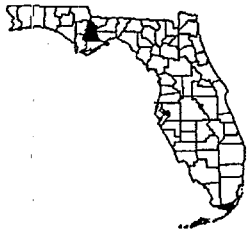
United States Environmental Protection Agency

Pesticides and Toxic Substances (7506C)

EPA/735/F-93-071
September 1993

Protecting Endangered Species



Interim Measures

Liberty County, Florida

The Federal Endangered Species Act (ESA) protects plants and animals listed as "endangered or threatened" by the U.S. Fish and Wildlife Service (USFWS). Because the U.S. Environmental Protection Agency (EPA) regulates pesticide use, it is also responsible under ESA to insure that pesticides will not cause harm to these species or their habitat. To provide this protection, EPA may limit the use of certain pesticide products within the species' habitats. In Florida, pesticide protection programs for these species are implemented cooperatively by EPA, USFWS and the Florida Department of Agriculture and Consumer Services.

In Liberty County, ESA protects the threatened Eastern Indigo snake and the endangered Bald Eagle, Chapman's Rhododendron, Harper's Beauty, Red-Cockaded Woodpecker and Florida Torreya.

For now, this bulletin covers only the pesticide protection plan for the Florida Torreya in Liberty county. Updated bulletins on the Torreya and other plants and animals will be available as the state of Florida implements EPA's Endangered Species Protection Program. Pesticide products that are affected by EPA's Endangered Species Protection Program will include a toll-free telephone number. By calling this number you will hear a list of counties for which Interim protection measures to protect species are available, and the most recent publication date for each bulletin. While this program is voluntary at this time, you may call the Florida Department of Agriculture and Consumer Services number listed on page 2 if you have any questions.

Florida Torreya

Description

- 5-to-40-foot-high evergreen tree
- flat, needle-like leaves with strong resinous odor
- male and female cones on separate trees
- found on slopes of ravines and bluffs (steepheads) in hardwood-pineforests in or near the Apalachicola River

Potentially Harmful Pesticides

- EPA and USFWS have determined that the pesticides listed on page two may harm the Florida Torreya.
- Pesticide applicators are responsible for determining if pesticide products contain any of the active ingredients listed on page two.
- This bulletin is an extension of each product's label, so failure to follow pesticide use limitations herein violates the product's label.

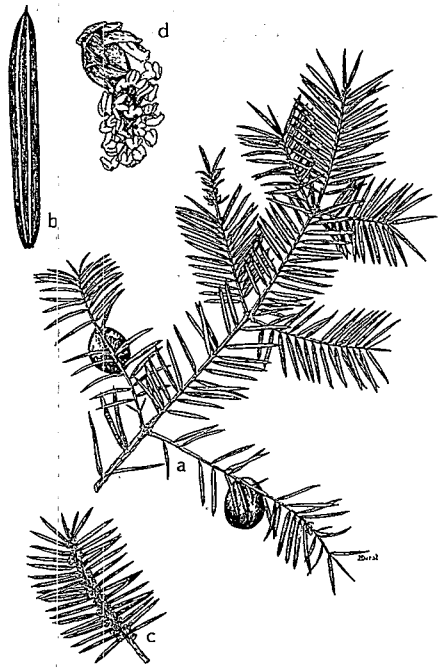


Fig. 1i. Torreya taxifolia: a, branch with mature ovulate cones; b, leaf enlarged (lower surface); c, branchlet with immature male cones; d, male cone at anthesis.

Used with permission of Dr. Robert K. Godfrey *Shrubs and Woody Vines of Northern Florida and Adjacent Alabama* 1988, page 60.

How to Use this information

1) On the county map, find the specific shading patterns that cover the area where you will apply pesticides.
2) Read the Shading Key for those patterns to identify the specific area involved.
3) In the "Table of Active Ingredients", locate the active ingredients in the pesticide you intend to apply.
4) Locate the code to the right of the active ingredients and Sample Trade Name Products and under the shading patterns that apply to you.
5) When using the pesticide, you should follow the limitations indicated for those codes described under "Pesticide use limitations".
6) If you are applying more than one listed active ingredient or applying a listed active ingredient in an area with more than one shaded pattern (species), multiple codes may apply. If so, you should follow the most restrictive limitation.

Table Of Active Ingredients

Active Ingredients	Sample Trade Names	Shading Pattern Code
amitrole	Amitrole, Herbizole	AA
ammonium sulfamate	Ammate, Ortho Brush Killer	AA
atrazine	Aatrex, Atrazine, Conquest, Atratol	AA
cacodylic acid	Phytar 560, Montar	AA
dalapon	Dowpon	AA
dazomet	Cosans, Mogul, AMA, Grazon, Nalcon	AA
dicamba	Banvel, Trimec	AA
dichlobenil	Casoron, Banzil	AA
dichlorprop	Brush and Weed Killer	AA
diphenamid	Enide, Formula GH	AA
EPTC	Eptam, Sytazine, Chacon, Genate, EPTC	AA
fosamine ammonium	Krenite Brush Control	AA
glyphosate	Roundup, Rondo, Rodeo	AA
hexazinone	Velpar, Pronone, Buckshot	AA
paraquat	Paraquat, Gramoxone	AA
picloram	Tordon	AA
simazine	Simazine, Princep	AA

Code Pesticide Use Limitations

AA Use tree injection only in ravines and bluffs (steepheads).
AA Use ground application along margins of ravines and bluffs (steepheads).
AA Maintain a 100-foot buffer strip from ravines and bluffs during aerial liquid applications and a 50-foot strip during aerial granular applications.

NOTE — Enforcement of use limitations in this County Bulletin begins when your pesticide product contains a statement directing you to follow the endangered species protection measures found in this publication.

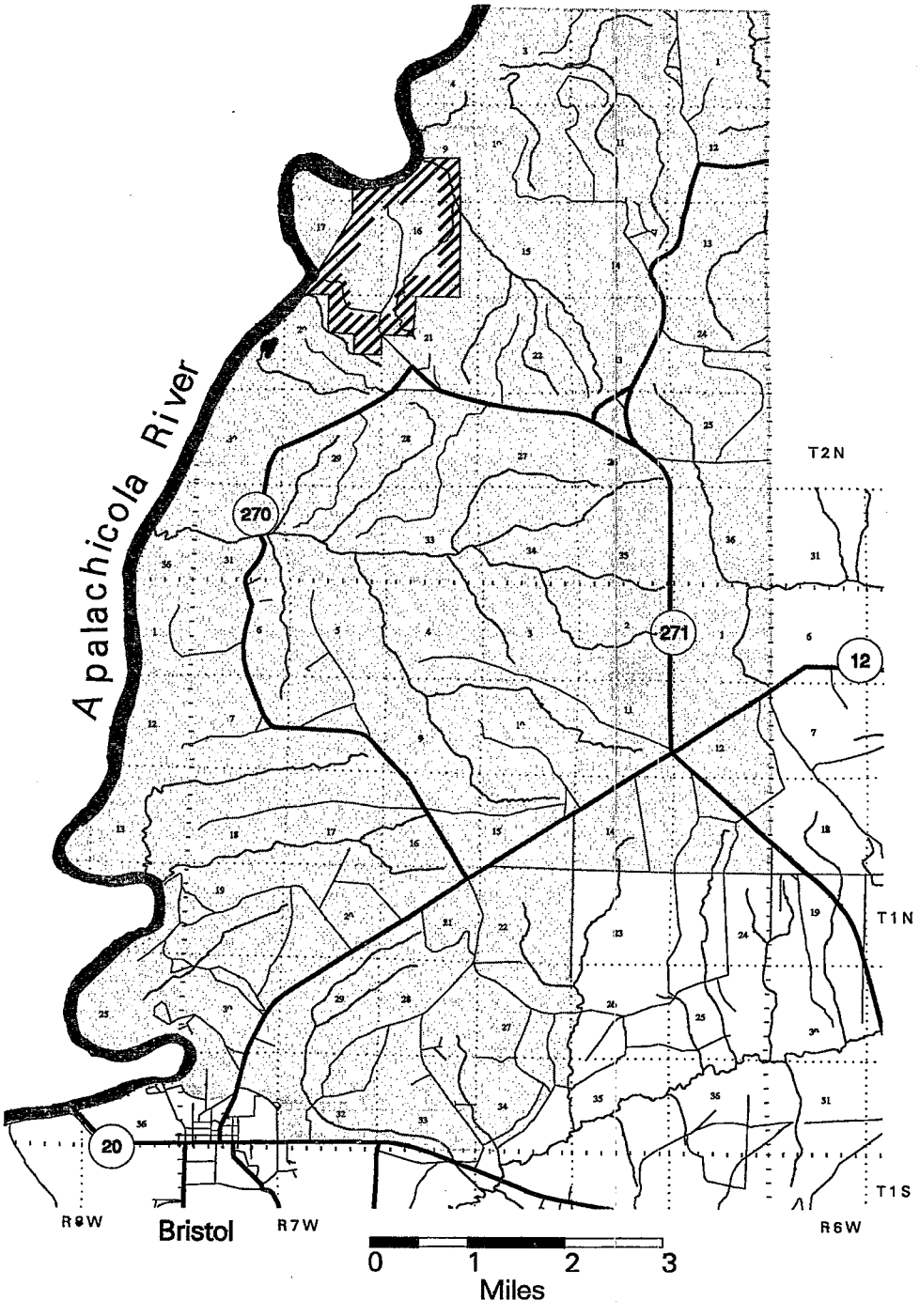
For Further Information Contact:
Endangered Species Coordinator
Florida Department of Agriculture and Consumer Services
Room 174, Doyle Conner Building
3125 Conner Boulevard
Tallahassee, Florida 32399-1650
904-487-0532

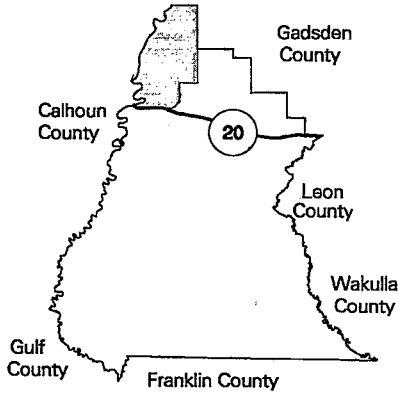
You may also contact:
Interim Endangered Species Protection Program (7506C)
U. S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Florida Torreya

Legend

- Florida Torreya habitat found within this area
- Bodies of water
- Torreya State Park
- Streams
- Major highways
- Paved roads
- Township & Range
- Sections
- 1 Section Numbers





Please Note:
The shaded areas on this map indicate the range of the particular endangered or threatened species. Pesticide use restrictions apply only in those portions of the range which meet the habitat description given.

Habitat Descriptions:
Florida Torreya
Slopes of ravines and bluffs (steepheads) within hardwood-pine forests in or near the Apalachicola River area (see index map).

Reducing Runoff and Drift

Careful use of pesticides can diminish harm to the environment and reduce exposure of endangered and threatened species to pesticides. Using pesticide runoff and drift measures may be helpful in keeping more of the applied pesticide on the field and may also lower your costs of pesticides.

Runoff

Where possible, use methods which reduce soil erosion, such as limited till and contour plowing; these methods also reduce pesticide runoff.

Where feasible, use application techniques such as T banding and in-furrow techniques, which incorporate the pesticide into the soil.

Pesticides with ground water warning labels are more likely to enter ground and surface water than those without such warnings. When possible, use a pesticide that does not contain a ground water warning label.

Keep Informed about changing weather conditions, and try to avoid pesticide application when heavy rainfall is expected.

Drift

Wind direction, speed, and evaporation are important factors in reducing drift. Most importantly, pesticides should be applied when the wind direction is away from areas of concern; try to avoid application during periods of high winds. Avoiding applications during the hottest part of the day, when evaporation is highest, will further reduce drift.

When high winds and excessive evaporation are not present, a drift retardant may be useful for aerial applications.

Using the largest droplet size compatible with the pesticide coverage will reduce drift. Typically, higher spray volumes will also result in less drift.

For the Protection of Your Land, Always Read and Follow Label Directions

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