

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

UPLAND WILDLIFE HABITAT MANAGEMENT

(acre)

Code 645

Texas Supplement, Zone 4

Eastern Wild Turkey

The eastern wild turkey is a large game bird native to the forested regions of America. Turkeys are agile and adept at running or flying. Of the five subspecies of wild turkeys, three occur in Texas. The Rio Grande turkey is the most abundant and widely distributed, occurring in about a 400 mile east to west band in the central portion of the state. The Merriam's turkey is of limited distribution and occurs in the mountainous regions of the Trans-Pecos in Ponderosa Pine habitat. The eastern wild turkey occupies the humid forests of Eastern Texas.

Before settlement by European immigrants, eastern turkeys were very abundant. But extensive land clearing and relentless hunting for market virtually eliminated the bird from eastern forests by 1900. An ambitious restoration program has restocked the eastern turkey in East Texas.

Habitat Requirements

Food

Eastern turkeys are opportunistic and utilize a wide variety of foods. During the spring and summer, food items are green grasses and forbs, buds, flowers, seed, fruits and insects. Poults' diets during their first two weeks of life is 90% insects. Fall and winter foods include seed, green grasses, and forb shoots, acorns, and agriculture crops such as corn, grain sorghum, soybeans, and wheat.

Cover

Mature timber provides good roosting sites and shelter from weather. Since turkeys depend upon their keen eyesight to avoid predators, large open timber stands are preferred. Younger forests or mature forests with a brushy mid-story are avoided. During the reproductive season (April-June), knee high herbaceous vegetation is critically important to nesting and brood rearing success. Ideal eastern turkey habitat simply defined is a 60%:40% mosaic of mature open forest to grassy openings.

Good habitat includes a variety of mast producing hardwoods, with a moderate, to open understory cover of a variety of mast producing plants such as American Beautyberry and dogwood. Open fields are important "bugging" areas.

Water

Turkeys require water daily. The distance to water is an important consideration of nesting hens and poults.

Habitat Management

Maintenance of openings, especially native grass and forb fields is important. Tall native grasses provide nesting and poult rearing sites. A managed tract should contain at least 10 % of the area in openings. Openings from 2 to 20 acres are preferred.

Supplemental food planting and watering sites can enhance turkey habitat. Legume (clovers and vetches) planting provides

bugging areas and green leaf/seeds for turkeys.

Habitat Size

Eastern turkeys have large home ranges. A minimum of 5,000-acres of contiguous suitable habitat is needed to maintain healthy flocks. The most successful eastern turkey releases in East Texas are in areas that have tall native grass fields (Conservation Reserve Program), bottomland hardwoods, and cropland fields of soybean, corn or milo.

Habitat Management Techniques

1. Native grass fields should be managed to leave at least half of the grass as two-year-old plants to provide nesting sites and cover. Strips of grass can be prescribed burned on a rotational basis. Fields should be moderate to lightly grazed by livestock.
2. Pine and pine hardwood stands should be thinned and prescribe burned on a rotational basis. Burning on a three to five year cycle is advantageous.
3. The protection or establishment of travel corridors between open areas is needed. Forest buffers on open field borders and streams provide cover and food.
4. Cropland (corn, milo, soybean, wheat, oats, etc.) fields should have the stubble left after harvesting for as long as possible. Strips of unharvested crops along edges can be left for supplemental food supplies.
5. Food plots can be planted that will provide for several species of wildlife including turkey. Summer plots are preferred because they offer both bugging and foraging sites for turkeys.
6. Hardwood bottomlands that are to be harvested should be done in a way to provide an uneven age stand of timber. Streamside Management Zones (SMZ's) should be left on all major drains, streams and rivers. These zones should be a minimum of 180 feet in width. Narrower SMZ's can brush up from sunlight

penetration to the forest floor and become too thick for turkeys to utilize.

7. Restoration of bottomland hardwood stands in large open tracts will aid in the establishment of turkey habitat. The Wetland Reserve Program of USDA, East Texas Wetland Projects of Ducks Unlimited, and the Partners Program of USFWS may aid in restoration efforts.

8. If turkeys are being fed using feeders, the feeds used must be free of aflatoxin. Pelleted rations used in late winter and early spring may increase egg production. "Fly Up" type feeders are a good method for feeding turkeys. They can be easily "coon proofed".

9. Hay cutting operations can significantly impact nesting success. Mowing hay fields just before fall dormancy will prevent hens nesting in meadows in the spring. Leaving 50 yard wide hay field borders, especially along wood lines, until after May 24 will protect the majority of first nesting attempts.

Reference

Dickson, J. G, 2001, Wildlife & Recreation Study Guide 4404, Wildlife Alliance for Youth, pp. 51-53.

Table 1 Important Native and Naturalized Eastern Turkey Food Plants**Woody Plants and Vines**

Oaks
 Pecan
 Hackberry
 Prickly Ash
 Elm
 Rusty Blackhaw
 Possumhaw
 Red Mulberry
 Pine
 Wild plum
 Black cherry
 Blackgum
 Ash
 Persimmon
 Sumac
 Grapes
 Dewberry/blackberry
 American beautyberry
 Beech
 Dogwood
 Blueberry/sparkleberry

Forbs

Ragweed
 Crotons
 Clovers
 Vetches
 Lespedezas
 Bundleflowers
 Pokeberry
 Spurges
 Sunflowers
 Smartweeds

Grasses

Rescuegrass
 Wildrye
 Florida paspalum
 Brownseed paspalum
 Eastern gamagrass
 Indiangrass
 Switchgrass
 Johnsongrass
 Green sprangletop
 Crabgrass
 Texas Panicum

**Table 2. Planting Information for Commercially Available Seed
Used for Food Plots or to Enhance Eastern Wild Turkey Food Supply**

Seed Rate Lbs/Acre		Planting Dates	Planting Depth In.	Comments
Broadcast				
Cool Season Annuals				
Elbon Rye	40-80	"	1	Does well in sandy sites
Oats	40-80	"	1	Well drained not deep sand
Wheat	40-80	"	1	Well drained not deep sand
Hairy vetch	10-20	"	1/4-1/2	Will grow on deep sands
Singletary Pea	10-20	"	1/4--1/2	Adapted to wet sites - bottoms
Warm Season Annuals				
Cowpeas	20 - 40	April-June	1/2	Iron/Clay best combo with deer
Soybeans	40-60	"	1	
American Jointvetch	10-20	"	1/4	Deer may over browse - Plant in combination with Iron/clay pea 40/10
Rape	10	"	1/4	
Milo	10	"	1/2 - 1	Best if rowed and cultivated
Partridge pea	6-10	"	1/4	
Sesame	10	April - May	1/4	Plant old open podded variety
Browntop millet	10-20	April - June	1/4	Excellent seed producer
Common Sunflower	10-20	Fall	1/2-1	Best to plant in fall
Perennial Grasses				
	[pure live seed]			
Illinois bundleflower	10	April - May	1/4-1/2	
Indiangrass	4.5	"	1/4	
Switchgrass	2 - 3.5	"	"	
Little bluestem	3.4	"	"	
Big bluestem	6	"	"	

Approval

/s/ Gary Valentine, State Wildlife Biologist

March 26, 2003