

Turkey Food Habits in West Texas

Compiled by Steve Nelle, NRCS, San Angelo

Sterling, Reagan Co. TPWD, 1977 ¹

Insects	29%
Grass	33%
Woody	19%
Forb	15%
Grains/Crops	4%

Grass

Rescuegrass	20%
White tridens	4%
Switchgrass	3%
Vine-mesquite	1%
Planis bristlegrass	1%
Sand dropseed	T
Little barley	T
Tobosagrass	T
Reverchon bristlegrass	T
Flat sedge	T
Cedar sedge	T
Texas wintergrass	T
Johnsongrass	T
Slim tridens	T
Texas cupgrass	T

Woody Plants

Bumelia berries	6%
Tasjillo fruit	5%
Hackberry fruit	2%
Pricklypear fruit	2%
Lotebush fruit	1%
Juniper berries	1%
Mesquite beans	1%
Algerita berries	T
Ephedra fruit	T
Wolfberry fruit	T
Old mans beard	T
Littleleaf sumac	T
Live oak acorns	T
Catclaw acacia beans	T

Forbs

Peavine	3%
Filaree	2%
Ground cherry	2%
Bladderpod	2%
Wild onion	1%
Tallow weed	T
Broomweed	T
Gaura	T
Primrose	T
Croton	T
Noseburn	T

Haskell, Throckmorton Co. Texas Tech, 1972 ²

Insects	30%
Grass	23%
Woody	38%
Forb	7%
Grains/Crops	2%

Grass

Slim tridens	10%
Bristlegrass	7%
Texas cupgrass	4%
Gramma grass	1%
Bottlebrush squirreltail	T
Sand dropseed	T
Texas wintergrass	T

Woody Plants

Pricklypear fruit	14%
Pecans	11%
Bumelia berries	5%
Skunkbush sumac fruit	3%
Tasajillo fruit	3%
Mesquite bean	1%
Littleleaf sumac fruit	1%
Black walnut	T
Mexican buckeye	T

Forbs

Wild onion	4%
Silver nightshade	2%
Wild mercury	T
Indian mallow	T
Bloodberry	T
Giant ragweed	T



Texas Panhandle Texas Tech, 2006 ³

Insects	9%
Grass	13%
Woody	52%
Forb	5%
Grains/Crops	21%

Grass

Unknown grasses	5%
Western wheatgrass	3%
Sand dropseed	1%
Bristlegrass	T
Hooded windmill	T
Rescuegrass	T
Japanese brome	T
Wildrye	T
Bermudagrass	T

Woody Plants

Hackberry fruit	25%
Bumelia fruit	10%
Wild plum fruit	7%
Soapberry fruit	6%
Shin oak acorns	2%
Pricklypear fruit	1%
Red mulberry fruit	T
Skunkbush sumac	T
Poison ivy fruit	T
Red berry juniper	T

Forbs

Bladderpod	6%
Western ragweed	2%
Mexican sagewort	T

Crops

Peanuts	11%
Corn	8%
Grain sorghum	2%
Wheat	T

T – Trace. These items made up less than 1% of the yearlong diet but may be a significant food source during certain seasons or brief periods.

Summary and Management Implications

It is clear from these diet studies that turkey are opportunistic feeders and can make use of a wide variety of food items based on availability.

This summary describes the yearlong average of the diet. It must be understood that the seasonal diet is critically important, especially during the reproductive season. In all studies, insects were an extremely important food item during spring and summer, often making up nearly half of the diet. It is probably safe to say that insects would be the preferred food item any time they are available. An abundance of insects often means a good hatch and a lack of insects usually means a poor hatch, or poor survival of poults.

In 2 of the 3 studies, the fruit of woody plants was the most important yearlong food item. This emphasizes the need to retain a variety and abundance of woody plants in the landscape for good turkey habitat.

The top 3 woody plants used by turkey in these studies were hackberry, bumelia, and pricklypear. The fruits of these plants often made up about half of the diet during certain seasons. Other important woody plants vary by location, but include pecan, sumacs, tasajillo, plum and soapberry.

Brush management efforts must be carefully planned and carried out to retain these and other key woody plants if turkey is an important goal of the landowner. The use of selective mechanical methods of brush thinning (sometimes called “brush sculpting”) is conducive to maintaining good plant diversity. The widespread use of picloram is likely be detrimental to turkey habitat since it is harmful to many species of woody plants and forbs, especially hackberry, sumac, pricklypear and tasajillo.

Turkey are also significant grass eaters, consuming both the seed heads and leafy material of many species. Turkeys are known to “strip” the seeds off of grass seed heads, rather than pecking individual seeds. Important seed head grasses eaten by turkey include tridens, bristlegrass, brome, cupgrass, panicum, paspalum, Indiangrass, grama, wheatgrass, dropseed, and sedges. Grasses which provide green succulent leaf for grazing include annual cool season grasses such as rescuegrass, Japanese brome, little barley and domestic small grain such as wheat and oats.

Cropland can provide a very important component of the turkey diet, where available. Seed and grain crops such as grain sorghum, wheat, corn or peanuts are heavily used. Keeping waste grain and crop residue on the soil surface rather than plowing them under is an important practice to retain seed availability. Small grain, such as wheat or oats is important both as a turkey grazing crop in the winter and a seed crop later in the year. Food plots with grains or leafy crops can be integrated into turkey habitat management. Food plots and cropland can also provide a secondary source of insects.

Forbs are also eaten by turkey, and are often referred to as “greens”. Parts eaten include leaves, flowers, fruit and seed. A large variety of forbs are also necessary for supporting the insect populations which are needed by young turkeys.

To create or maintain the best turkey habitat possible, good plant diversity is important, including trees, shrubs, vines, cactus, grass, forbs and crops. Taller vegetation is preferred for nesting cover, while scattered open areas are desirable for young poults. Taller trees, especially in riparian areas are needed for roosting sites. Conservative grazing management, rotational grazing, prescribed burning, selective brush management, water development, riparian management and food plots can all be used to improve land for turkey.

¹ Food Habits of the Rio Grande Turkey in the Permian Basin of Texas, George Litton, TPWD, 1977, Technical Series No. 18

² Rio Grande Turkey Diets and Brush Control Effects, Kent Montei, Texas Tech Univ. Texas Chapter, The Wildlife Society Annual Meeting, 1973

³ Rio Grande Wild Turkey Diets in the Texas Panhandle, Brian Petersen, Master’s Thesis, Texas Tech Univ. 2007