

## APPENDIX O



# Specific Management Recommendations for Rio Grande Turkeys

**R**io Grande turkeys are present along a few riparian areas in Jeff Davis, Presidio, and Brewster counties, while they are widely distributed in Pecos and Terrell counties and in every county in the western Edwards Plateau. There is a general increase in numbers from

west to east. Turkey populations in Jeff Davis and Brewster counties currently support a spring only season, while turkeys in Pecos and Terrell counties provide fall and spring hunting.

Although turkeys are non-migratory resident species, they have large home ranges that change with the season of year. Turkeys tend to be widely dispersed during the spring and summer nesting/brood-rearing period. Nesting and brood-rearing habitat is similar to that required for quail, but on a larger scale -- scattered thickets of low growing brush, patchy residual herbaceous vegetation, and a diverse grass/forb plant community that produces seeds and insects.

After the breeding season, numerous smaller flocks that were widely dispersed during the summer tend to congregate into large winter flocks. The ranges of winter flocks are closely associated riparian areas (the floodplains of large creeks and rivers) that have moderately dense stands of brush and tall, full canopied trees. These winter flocks will disperse several miles from their riparian area roost sites on daily feeding forays. Turkeys are attracted to feeders and supplemental food plantings provided for deer and quail. The presence of turkeys on a ranch in the winter months is determined by the availability of a food source and the distance of the property from the winter roost site.

Like any other species, wild turkeys require quality food, water, and cover. The manner in which these key habitat components are distributed on the property are extremely important to the overall quality of the habitat. Turkeys require water daily and can obtain water from foods or free water (ponds, creeks, rivers, etc.) Grassy or brushy nesting and brood-rearing cover is probably the most important cover requirement. Food availability for turkeys can be increased by the following activities: (1) light to moderate livestock stocking rates (2) deferred rotation grazing system (3) control white-tailed deer numbers by harvesting does (4) prescribed fire can control brush encroachment (especially cedar and mesquite) and increase the production of grasses, legumes and other forbs, and promote fruit or mast production. In summary, range management activities that increase the diversity of grasses, forbs, shrubs, trees, and

vines improve the habitat for the wild turkeys. These same management practices are also beneficial to deer, quail, and many other wildlife species.

Protection of roosting sites is a key factor in the long-term maintenance of a turkey population. Turkeys also need moderately dense escape cover to travel to and from roosting sites. Mature trees used as roosting sites include sycamore, cottonwood, most large oaks, hackberry, pecan, western soapberry, and large mesquite. Dense brush thickets or large block clearings are generally detractors of quality turkey habitat. It is critical during brush management projects to leave strips of woody vegetation (especially along riparian habitats) between large cleared areas. When clearing brush, avoid removing hardwood trees such as the various species of oaks, hackberry, or large mesquite. Many wildlife/livestock managers implement brush management programs that establish irregular-shaped, cleared strips that follow the contour of the land. By removing brush only from the deeper soil below the rocky, shallow-soiled ridges (while staying away from riparian areas), brush management projects are more efficient and cost-effective in that they are achieving the greatest forage and herbaceous cover response per dollar invested. This "contour" or "mosaic" pattern provides a good mix of forage and cover that allows turkeys and other wildlife species to select the optimum arrangement that best satisfies their requirements.

High-energy supplemental feeds such as corn and sorghum provided during January through mid-March can help increase winter survival. Beginning in March, a gradual shift to high-protein pellets (20%) can also improve the reproductive performance of turkey hens. Supplemental plantings (wheat, oats, alfalfa) may be even more valuable in that they provide Vitamin A (required for egg production) and tend to harbor an abundance of protein-rich insects as the weather warms. Generally, supplemental plantings are applicable only in the eastern portion of the region, and in most years rainfall is insufficient to allow germination or adequate growth. During the infrequent year that rainfall is abundant, it is possible to successfully establish supplemental plantings. However, the rangeland forage conditions are normally so good during these years that the plantings are of little value. In the rare circumstance where irrigation is possible, plantings can be extremely valuable. During drought or even average rainfall years, irrigated plantings can provide a green "buffet" of nutrients that are otherwise scarce.

With regard to harvest, approximately 20% of the turkey population (estimated in late summer) can be harvested annually. Adjustments in the harvest can be made on an annual basis. These adjustments will depend upon the nesting success and range conditions.

For more information, refer to TPWD publication PWD RP W7100-263, *Rio Grande Turkey Habitat Management*, by George W. Litton and Fielding Harwell.