

## Turkey

### Natural History

Arizona has two native subspecies of turkeys, Merriam's and Gould's. The Merriam's race of wild turkey (*M. g. merriami*) is found throughout the western United States, primarily in the ponderosa pine forests of Colorado, New Mexico, and northern Arizona. This turkey has also been transplanted into the pine forests of Utah, Idaho, Washington, Oregon, California, Montana, Wyoming, and South Dakota. The Gould's turkey (*M. g. mexicana*) is only found in Arizona and New Mexico. In Arizona, wild turkeys can be found not only in ponderosa pine forests but also in riparian deciduous forests and other vegetation types at elevations ranging from 3,500 to 10,000 feet. The best populations of Merriam's, however, occur in the ponderosa pine forests north of the Gila River. The Gould's occupy the sky island habitats in southeastern Arizona.

In the spring, 2-year-old and older males weigh about 18 pounds on average, and yearling males or "jakes" weigh about 13 pounds. Hens more than a year old weigh between 8 and 12 pounds, depending partially on the contents of the crop, which may weigh up to a pound. As springtime temperatures warm, the onset of breeding is heralded by the commencement of gobbling. Gobbling may start as early as late February or early March, with a second peak of gobbling occurring in early May with some "toms" continuing to gobble into June. Hens mate once and lay between 8 and 12 eggs that take 28 days to incubate. The young are precocial and move from the nest soon after hatching.

Both hens and poults spend the rest of the summer eating, loafing, and gaining weight. As winter approaches, they begin to form flocks with other family groups. The flocks will usually spend the winter as high up on the mountain as snow permits. The gobblers, too, have a defined wintering area in which they will flock together. During the winter, turkeys congregate in the pinyon pine-oak habitats just below the interface with the ponderosa pine forest. Following the snow line, both hen and tom turkey flocks work their way upslope to where gobbling toms attempt to accrue a harem of several hens. After mating, the hens often continue upslope into denser habitats to lay and incubate their eggs. Toms and hens are not usually seen together during the remainder of the year, although they may both frequent similar habitats.

During the summer months, the hens and poults spend much of their time searching for bugs and seeds in small meadows and forest openings. As winter approaches, the turkeys feed increasingly on acorns, pinyon nuts, and other mast crops. Later, with the onset of winter, the birds follow pine stringers downslope to snow-free areas where they feed on the seeds of ponderosa pine, junipers, pinyons, and other plants.

### Hunt History

Wild turkeys have been classified as big game since 1913 when the first state legislature established a bag limit of three birds to be taken between October 1 and December 15. Turkey populations appeared to hold up fairly well, at least in northern Arizona, as the season was still a month long and the bag limit was only reduced to two in the new "game code" of 1929. After World War II, however, hunt pressure gradually increased, and hunt regulations became more stringent. Fall hunting was the only turkey hunting allowed, and by 1950 a hunter had to draw a

permit to even hunt turkeys. Annual harvests ranged from a few hundred birds to more than 1,300.

Turkey populations were fairly robust in the early 1960s, and the permit requirement was dropped in 1963; tag sales jumped from 8,050 in 1962 to 17,479 in 1963, but the turkey harvest only increased from 1,363 to 1,462. The first spring gobbler hunt was authorized in 1965 (100 permits), and by 1969 the annual turkey harvest had climbed to 2,480 birds, with another 138 turkeys taken earlier that spring. That number remains an annual high.

Wild turkey populations have since been in a general decline. Current estimates number the population between 15,000 and 20,000 birds, depending on conditions. Fall hunting is again by permit-only, and in the spring the number of gobblers taken is equal to or greater than the fall harvest.

Management Needs

Research Needs

## Turkey Operational Approaches

Below are approaches for guiding the management of Arizona Game Species. In all the approaches listed below, annual harvest objectives were derived from past harvest estimates and recent habitat conditions. In all cases, these harvest objectives are well within the range of sustainable harvest.

1. Provide hunter recreation opportunity based on turkey population status and habitat quality (1.A.1, 1.B.1-1.B.3).
2. Maintain annual harvest of 2,200 or greater (1.B.1-1.B.3, 1.B.6-1.B.7).
3. Provide recreational opportunity for 10,000 or more hunters per year (1.B.1-1.B.3).
4. Provide 35,000 hunter days or greater each year (1.B.1-1.B.3).
5. Maintain existing occupied habitat, with emphasis on retention of medium and high quality habitat and maintain linkages between habitats (1.A.1-6).
6. Maintain the range of all subspecies in Arizona by repopulating historical range through translocations; emphasize reintroduction of Gould's turkey, specifically within the Catalina, Santa Rita, Pinaleno, Chiricahua, and Galiuro mountain ranges. Sources for these reintroductions would be established populations within the habitats of Region V. Evaluate the Hualapai Mountains for suitability and translocate appropriate turkey subspecies. Continue Merriam's turkey translocations into Mingus Mountain, the Verde River, and Pine Mountain areas. Sources for these translocations would be Regions I, II, and VI. Continue translocations of Rio Grande turkeys from Utah into Black Rock Mountain and other suitable habitats north of the Colorado River in Region II (1.A.1-1.A.6).
7. Establish self-sustaining populations at all new translocation sites (1.A.1-1.A.6).
8. Use the turkey habitat scorecard to identify and priority rank where efforts are needed to improve habitat quality in cooperation with land management agencies, property owners, and lessees; manage from a landscape perspective. Implement habitat improvement where appropriate (1.A.1-1.A.6, 2.D.1-2.D.3).
9. Provide hunter recreation that stresses the hunting experience and junior's hunt opportunity ((1.A.1-1.A.6).1.B.1-1.B.3).
10. Use population status evaluations to determine hunt structure and permit numbers (1.A.1-1.A.6).

