

“Wild Turkeys and Mast”

by Sally Cureton

With the holiday seasons approaching, it is perhaps time to talk turkey - Eastern Wild Turkey - that is. There are 5 distinct subspecies of this bird found in the United States. The Eastern Wild Turkey is the most widely distributed, abundant and hunted of them. It inhabits most of the eastern half of the country from New England and southern Canada down to northern Florida, and has been transplanted to California, Oregon and Washington. The Wild Turkey gets its name from the domestic turkey which descends from those brought alive from Mexico to Spain in 1630. The name was attached due to a misconception of where it actually originated, Turkey. Others in its early history also thought it came from India. When the early settlers on American shores arrived, they must have been confused to find these birds already here.

Wild Turkey numbers dwindled over the decades that followed the arrival of Europeans due to hunting, habitat loss and diseases spread by domestic poultry. By 1973, there were only 1.3 million wild turkeys in the entire country. That year the National Wild Turkey Federation was founded in Fredericksburg, Virginia. Thanks to their work with state, federal and provincial wildlife agencies there are now more than seven million of these birds here. The male turkey, or Tom, can weigh up to 18-24 pounds and stand up to 4 feet tall. Hens will weigh about 8 to 12 pounds. They are non-migratory and not territorial. They will travel over 4-5 square miles during the year. Active during the day, they frequently roost at night in a small tree or shrub. As adults 90% of their diet is plant food, the rest insects.

Wild Turkey habitat is in mature deciduous and deciduous/conifer forests, and open woodlands, especially in the mountains. Nests consist of shallow depressions in the ground lined with a few dead leaves and grass. They will usually be concealed in a grassy area or in shrubs. The female will lay 8-15 eggs which hatch in about 28 days. She will often abandon a nest if disturbed during incubation. During this time she will turn the eggs about once an hour. When they begin to hatch, she will begin making soft clucks at random. This is a form of communication with the hatchlings which imprints them to the hen. The vocal communication between mom and the little ones is critical to their survival. It happens only at this time and cannot be reversed. Once the babies hatch, they are fully dry and coordinated and able to follow the hen away from the nest within 12 to 24 hours.

Then by the second day out of the nest, wild turkey poults are able to feed and groom themselves. In the second week they are able to fly short distances. The chicks roost under the body, wings and tail of mom until

they are about 4 weeks old. These young turkeys will stay in their family groups through the winter months. Individual family groups will mix with other such groups into flocks that will total 40-50 birds. There is a definite social order within these flocks. Males and females have their own separate hierarchies. This is a somewhat unique social structure.

One of the things that these turkeys depend on during the winter months for food is what is called **mast**. The term was probably first used to describe a food source for domestic livestock. The dictionary says that it was an Anglo-Saxon word for the fruit of oak or beech and served as food for hogs, deer and grouse. Frequently it includes the winged seeds of trees such as maple, elm and ash, and the nuts or seeds of pines. In this area, we also have hickory nuts. All of these are an important source of food for many wildlife species. Acorns, the most commonly eaten mast, are rich in starch, fat and vitamins. Until about 50 years ago, chestnuts were a major source of food for much of the wildlife in the eastern United States. These trees have since been destroyed by the blight introduced from Asia.

Mast is often described as hard or soft. Hard mast is the hard shelled nuts and seeds that can last a long time on the forest floor. These are typically high in fat, carbohydrates and protein. They are a food source that is high in energy content and available during the winter months. Soft mast is fleshy, perishable fruit that is usually high in sugar, vitamins and carbohydrates. It is available only seasonally, but may be a vital source of moisture for some wildlife and their young. It can also be a critical energy source for wildlife during migration. Examples of soft mast include black cherries, persimmons, crabapple, wild grape and blackberries.

In our area, of course, oak and hickory trees are excellent sources of hard mast for the forest animals. Acorns from trees in the red oak group (red, black, scarlet, and pin oak) will be bitterer than those from the white oak group (white, chinquapin and chestnut oak). So what happens is that the acorns from the white oak group are eaten during the fall months, and the red oak acorns will be eaten during the late winter when little else is available. Some oaks only produce large seed crops every 4 or 5 years. The theory is that they do this to conserve energy so that in a given year they can produce more seeds than the seed predators can possibly eat. Then, many will remain on the forest floor to sprout and become new trees. Interesting how nature has its little tricks to make sure all species continue.