

Where Do Our Wildlife Find Their Food?

Did you ever wonder what plants provide food for which wildlife species? And what kinds of food do they provide? For grazers and browsers there are three categories of food; browse (tree and shrub leaves), forbs (weeds and wildflowers) and grass. Other types of foods for various species are berries and fruits of all kinds, seeds, and insects.

Since junipers and hardwoods constitute the largest amount of biomass in our area, let's start there. Female junipers produce fleshy cones we usually call berries. These berries provide food for many different species of birds including cedar waxwings, mockingbirds and robins. Deer are also known to eat juniper berries, although it doesn't seem to be a large part of their diet. In areas of high deer density, the deer will even eat juniper leaves as well, although they would prefer almost anything else if it were available.

One thing about mast (acorns, berries, fruits, beans and prickly pear tunas) as a food source is that it is almost always seasonal and thus not a year-round food source.

Oaks of all kinds produce acorns which are a nutritious and favorite food for several species in the fall, including deer, squirrels and turkeys. Most of our omnivorous wildlife, including opossums, skunks, raccoons and foxes will also eat acorns. The nuts of native pecan and walnut trees also provide food for gnawing rodents as well as deer, although I can't imagine a deer trying to eat a little walnut, as small and hard as they are.

Oak leaves make up a large part of a deer's diet throughout the year, with live oak being particularly important in the winter. In fact, just about all of the large hardwood trees provide browse for deer, especially hackberry, escarpment black cherry, gum bumelia and cedar elm. The berries of the hackberry and escarpment black cherry are eaten by many bird species as well as small animals, as are the seeds of the cedar elm.

The many shrubs and small trees that we have in the Hill Country provide many species of wildlife with food. Most all berry- or fruit-producing shrubs provide food for birds, small animals and deer as well. Shrubs and vines such as Texas persimmon, possumhaw, yaupon, Carolina buckthorn, plums, sumacs, grapes, greenbrier, agarita, beautyberry, Blanco crabapple, and rough-leaf dogwood all produce berries or berry-like fruit that are eaten by almost all wildlife. In addition most of the leaves of these shrubs provide browse for deer.

Other shrubs and small trees are legumes that produce beans which are a great source of protein. A partial list includes mesquite, Texas redbuds, Eve's necklace and goldenball leadtree. These beans are eaten mostly by deer and small animals, although when the beans dry and split open, birds may eat them as well.

Many species of birds and most small mammals eat seeds produced by some trees and shrubs, many different forbs and all grasses. These are all good nutritious food sources that can last throughout the winter, either still on the plants or fallen on the ground. The plants produce many more seeds than necessary for propagation so there is plenty for the animals to eat.

Flowering plants of all kinds attract insect pollinators to their blooms as well as caterpillars and other chewing insects to their leaves. This not only propagates the species but increases the insect population. Insects are a main food source for both birds and some small mammals such as skunks, armadillos and rodents. So even species that do not eat the plants depend on the plants for the insects they do eat.

Vegetation of all kinds produces more than just food for wildlife, but also shelter, cover from predators, and a place to raise their young.

What I have just described is only a small part of the food web in which plants play a critical role. The main point is that without all of these plants, we would have no animals, and any healthy ecosystem has many different kinds of plants to provide different types of food in different seasons, all of which is essential to life on Earth as we know it. The more different species of plants in an area, the more different species of animals they can support, and the more species of animals, the more different plants they can pollinate and scatter their seeds. Nature is complex.

Until next time...

Jim Stanley is a Texas Master Naturalist and the author of the books "Hill Country Ecology," "Hill Country Landowner's Guide" and "A Beginner's Handbook for Rural Texas Landowners." He can be reached at jstmn@ktc.com. Previous columns can be seen at www.hillcountrynaturalist.org.