

Which is More Important, Plants or Animals? Answer, Both

A while back I was giving a talk to a group of people about the condition of our Hill Country habitat when a woman, obviously peeved about my suggesting the overabundant population of deer was damaging the habitat and needed to be reduced, blurted out, "Well, you just like plants more than animals." My initial thought was that it was just a reflex response to my suggestion that some of her beloved deer should be shot.

On further reflection, I think that at least part of her response was based on her view that deer were important, but plants were not. Well, that is a bit like saying chickens are important but eggs are not (or vice versa if you wish). It is not either/or, it has to be both.

Many years ago, Aldo Leopold observed that animals can't live in a habitat that provides "only kitchens or only bedrooms" anymore than we could. Stating what should be the obvious, you can't have animals without plants which provide both food and shelter.

Plants came into existence before animals, and it is true that a few plants can live without animals, but in fact most plants need animals for the species to survive. Most terrestrial plants need soil to grow in, and healthy soil contains micro-organisms (bacteria and fungi) as well as macro-organisms (earthworms, beetles, other animals), which are essential for the functioning of the roots and the health of the soil.

In addition, most flowering plants require animals of one kind or another in order to reproduce either by providing pollination (birds, bats, bees, butterflies, moths as well as other animals) or transport of the seeds. All animals that eat seeds contained in fruit, berries or beans then transport the seeds to other locations where the seeds are deposited in their droppings. Animals that carry acorns or nuts from under the trees to other locations are also responsible for propagating the plant species. And it is not just squirrels that do this, rats, mice and even occasionally woodpeckers disperse acorns as well.

Finally, some plants benefit from being grazed or browsed lightly because it helps remove or prevent excessive buildup of dead leaf-litter.

So plants need animals, and it is obvious that no animals would exist without plants. It is, therefore, a fallacy to think about only plants or only animals as if they could exist without the other.

One of the most fundamental principles of modern biology is the idea that an ecosystem is made up of multiple individuals of multiple species and that each individual coexists with all of the others and there are innumerable interactions among the individuals.

These interactions mean that all individuals are interconnected and are dependent upon each other for the health and well-being of the ecosystem as a whole.

Put another way, the deer are dependent on all of the plants that provide them food, shelter and cover. If too many deer eat too much of the plants, then the deer will suffer as well as the plants. If there are too few deer, then their least favorite plants may crowd out their favorites, again to the detriment of the deer.

Modern wildlife biology and range science looks at the entire ecosystem as a whole, never at just one species or one class of individuals. Ranching is not just raising cattle, but is equally concerned with growing grass and harvesting it prudently by using the cows as harvesters. Raising deer is not just providing food, but managing a habitat that provides them with all of the requirements for a healthy population.

Raising animals without consideration of the condition of the habitat is essentially maintaining a feed lot or a zoo, the difference between the two being mainly the density of animals. Most of us would rather see a proper, healthy population of ALL wildlife living in a healthy natural habitat.

It turns out that a healthy habitat is also the best at growing abundant vegetation and of capturing rainwater and preventing erosion. In other words, what is good for plants and animals is also good for soil and water and therefore for us humans as well. It is not either or, it is all of us.

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.