Habitat, It is Where We All Live

Most non-migratory animals grow up, live and die in the same general area in which they were born. If that area was not capable of providing food, water, shelter and a place to reproduce, then the parent of the animal would not have survived to live there and reproduce in the first place. So, by definition, if a non-migratory species exists for multiple generations in a given area, then that area must be providing suitable habitat for that species.

Migratory animals, in general, travel from areas of low quality or unsuitable habitat to areas of better habitat on a seasonal basis. But even migratory species tend to return to the areas where they were born in order to raise their own young.

But habitats are not unchanging. An area that provides good habitat for some species in good rain years may be much less suitable, or even completely unsuitable in dry years. Humans causing the elimination of wolves and greatly reducing the number of mountain lions has greatly increased the number of deer in the Hill Country. This in turn has allowed them to overbrowse and greatly reduce the available food sources, thus reducing the quality of the habitat for themselves and for other species as well.

Secondary plant succession, where one group of plants takes over dominance in a given area from the previous group of plants, can change the nature of the habitat. This can happen with the introduction of invasive exotics such as Arundo donax (giant reed) in riparian areas, Chinese tallow in areas around Houston, or buffelgrass in the coastal plain.

It can also happen when conditions change such as when European settlers displaced native Americans and fought wildfires which had previously kept grasslands free of cedar. In a fire-free environment, native cedar can crowd out other native vegetation, creating a less suitable habitat for most animal species.

As humans we have destroyed native habitat to create farmland, roads, houses, parking lots, shopping centers, school grounds and parks. Homeowners destroy native habitats by cutting down trees and shrubs, removing native grasses and forbs and replacing them with non-native lawns which are not good habitat for much of anything.

The smaller the animal the less food and water it needs to survive and thus the less the habitat has to provide for its survival. Animals that are highly mobile can travel long distances to satisfy their needs and thus food and water sources can be spread out over long distances. Animals that are not very mobile require all of their needs to be met in a smaller area.

For an area to be suitable habitat for an insect-eating bird, the area must provide roughly 10 pounds of insects for every pound of insectivorous birds. Therefore, for an area to be suitable habitat for insectivorous birds, it must also be suitable habitat for 10 times as many pounds of insects as well. Thus, an area routinely sprayed with insecticide will not be habitat for the birds and lizards that need to eat insects. And if the birds and lizards can't live there, then the higher predators that normally prey on birds and lizards will not find the area suitable either, and so on and so on…

Of course. the food web in nature is much more complicated than the simplistic descriptions I just gave, but the point is that any alteration in a natural, well-functioning native habitat can have repercussions far beyond the specific species in question. Remember in the early 1960's when we discovered that spraying DDT to kill mosquitoes was killing bald eagles? We know a lot more now than we did back then, but we are still a long way away from being able to predict all of the long-range effects of our actions.

But we know enough to know that the less we tamper with nature and the better we are as good stewards of the land and protect diverse, natural, healthy habitats, the greater the number of species we will be protecting and the less likely we are to do any harm.

Ideally, we would all work to improve the wildlife habitat around us. We can do this by planting native shrubs and flowers that attract pollinators and other insects, provide clean, safe water for birds and small animals and provide supplemental bird food and nest boxes. We can also refrain from using insecticides outside.

Nature may be able to get along without us, but we couldn't get along without nature.

Until next time…

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