



Mammalian predators like this skunk invade a turkey nest, roll the eggs around to crack them and then eat the contents.

In the scheme of nature, relationships revolve around one animal eating another animal. It's eat or be eaten. This food web begins with microscopic plants, extends through various levels of animals, depending on the ecosystem, and results in a series of predator-prey relationships. A predator lives by killing and eating other species which are called prey. Wild turkeys eat insects and other small animals, so they are predators, in a sense, but they become the prey of other birds, reptiles or mammals.

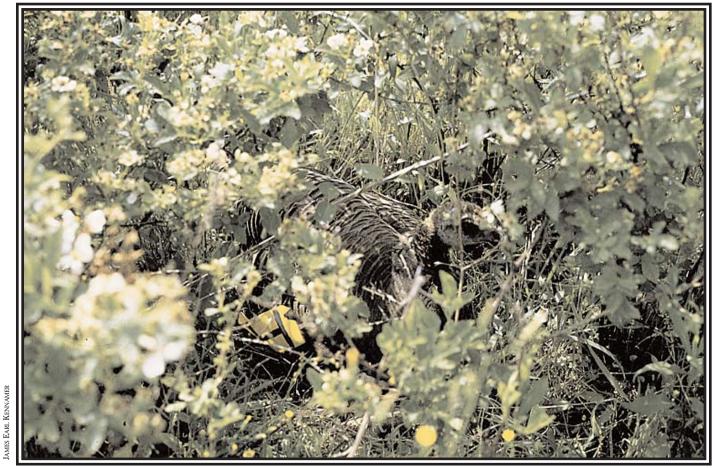
PREDATOR-PREY RELATIONSHIPS

Predator-prey relationships have evolved over thousands of years. Predators are usually opportunistic feeders. They look for the easiest way to a meal. They usually have target species they prefer, but will take other species if given the opportunity. Prey species also have to produce many more offspring than will survive, to offset the multitude of predators that use them for food.

Over half century ago, man deduced that if he killed the predators it would mean more of the species in which he was interested would survive. He also quickly found predator-prey relationships were more complicated than he realized. For example, killing cougars in the Southwest in the 1930s resulted in deer populations exploding beyond the carrying capacity of the land or its ability to maintain habitat quality indefinitely, and thousands of deer died from starvation.

Populations of a prey species maintain themselves because of the collective interests of the group, not by the survival of specific individuals. That means the individuals who are less suited to survive are cropped from the breeding population as well as those that are old, sick or diseased, assuring the population survives. Fit individuals maintain a healthy breeding population which is the result of selection pressure by predators.





This marked hen has laid her eggs in dense undercover where her natural coloring benefits her ability to hide.

WHERE DO TURKEYS FIT?

Now let's see how wild turkeys fit into the picture with their many predators. From the time an egg is laid, there is a predator looking for a readymade omelette. Snakes of all descriptions, skunks, crows and ravens, opossums, raccoons, rodents, dogs and coyotes, to name a few, are on the lookout for a nest

and an easy lunch. About half of the turkey nests make it to hatching.

If the eggs in the nest survive to hatching, things don't get any easier. The above listed predators, along with hawks, owls, foxes, and other large predators like cougars and eagles in some parts of the country, love to find a brood from which they can grab a young unsuspecting poult. The point to remember is that all of these predators will take turkey eggs, poults, or under the right circumstances, adults; but most of their diet consists of small birds, rodents and rabbits.

ROLE OF HABITAT

Habitat quality is also an important part of how a species survives pressure from the predators. Early successional plant stages, or those that follow a habitat disturbance and need full sunlight, provide shelters for high numbers of small mammals, including rats and mice, which are the normal diet of many predators. This benefits

When the hen leaves the nest to feed, the eggs are vulnerable to predators such as snakes, opossums or even feral dogs.



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A normal hatched turkey nest shows evidence of the poults chipping a complete break around the large end of the egg during the hatching process.

wild turkeys. The location of these habitats, and their plant diversity, can mean life or death to individual wild turkeys. Case in point: If the ground-level vegetation is sparse, the hen and poults become vulnerable to predators. On the other hand, if suitable habitat with good cover is available to the brood group, the poults have a better chance of living. This is the essence of what Aldo Leopold realized in the 1930s when he wrote that game management was "the art of making land produce sustained annual crops of wild game for recreational use." How we manage the plant communities, and where they are located, is critical to wildlife populations – and it doesn't matter whether you are dealing with song birds or wild turkeys. Habitat quality and its distribution is more important than the number of predators.

PREDATOR CONTROL

Controlling predator populations has always been a controversial issue. There are situations where it may have a place, such as an area with a newly established population of a rare species. However, making an impact on a predator population is very expensive and labor intensive. Even after going to the trouble of removing hundreds of wild turkey predators from an area over several years, it is doubtful that you would see a significant increase in the numbers of wild turkeys. This is due in part to the movement of more predators from surrounding habitats into the area.

There are situations where man has assumed the role of predator. Deer populations throughout the U.S. historically were controlled by large predators such as the cougar and the wolf. Man's activities and unwillingness to coexist with these

The remains of a predator destroyed nest show scattered pieces of irregularly broken egg shell.





Even at his immature age, this fox is on the lookout for young unsuspecting poults who survived to hatching.

predators now requires that we control deer herds by managing them with a variety of strategies, including selective harvest through hunting. The well-being of the herd is important, so deer are maintained in numbers below what the habitat can sustain, assuring that the population and associated plant communities remain healthy.

Predators are important components of the ecosystem and really benefit the prey species in the long run. Wild turkey numbers have increased dramatically over the last 2 decades, while at the same time predator populations have also increased. While certain predators may need to be controlled in specific instances, the long-term solution to maintaining wild turkey populations at huntable levels will be dependent not on the predator control but on man's activities and good habitat management.