

Deer and Turkeys: Getting along just fine in the northeast

Doug Little, NWTf Regional Biologist

I was watching over a beech stand in fall 2006 during the rifle deer season and had not seen a deer in the first couple of hours of shooting light. It wasn't a picture perfect morning but the wind was in my favor and the two scrapes had been worked over since my last visit to the area a couple days prior. I was hopeful that the buck responsible for making them would either slip in to check them or work downwind of the beech stand checking for does. If he did either or both, I was going to be in good position. The morning was made more interesting when a small flock of turkeys worked through the beech stand, scratching for the nuts that were attracting a host of critters on the hill behind my house. The four acre beech stand in the big woods otherwise dominated by maple, ash and oak had fresh sign from deer, bear, squirrels and turkeys, not to mention the blue jays and other birds working the area over. The flock of 21 turkeys worked nervously through the leaves to consume enough beech nuts to be satisfied while not hanging out too long in one place. Shortly after watching them move off, an average sized doe appeared in the beech stand. I wasn't sure where she came from since I was focused on the turkeys, but needless to say my day was turning out to be a good one. If I had a tag that allowed me to shoot a doe at the time, I would have been happy to take her. Instead I waited to see if a buck would come by to check her out. The remainder of the day came and went with no visit from a racked deer.

I am sure that many of us have been able to observe turkeys working through a section of woods or fields while we were deer hunting. However, I have heard from deer hunters on multiple occasions suggest that deer numbers are dwindling recently because of growing turkey populations. Some have asked what I thought about deer numbers and if turkeys could cause the decline, which is a reasonable question, while others have flat-out told me that it happens.

These concerns seem to stem from the misconception that turkey flocks will work through an area and eat everything in their path like vacuum cleaners on tasty legs, leaving nothing left for deer to feed on. While turkeys and deer may feed on similar food sources during particular times of the year depending on what is available, no study has ever found turkeys to limit the ability of deer to obtain adequate nutrition. Turkeys and deer have coexisted for a very long time without one being directly detrimental to the other. In fact, the concern some folks in the northeast have about turkeys limiting deer numbers is rarely heard in areas where turkeys have been re-established for a longer period of time. In the few cases where someone was concerned about turkeys impacting deer, the turkey population was only recently established meaning they are drawing conclusions based on a coincidence in timing and/or habitat issues rather than facts. Biologists rarely hear hunters express concerns about deer and turkeys competing in states where turkeys never disappeared.

When hunters get together at the deli and talk about places with lots of deer, Pennsylvania, Alabama, Missouri and Iowa typically enter the discussion. Those are states that also have fantastic turkey numbers and hunting opportunities. That indicates how well deer and turkeys can coexist. If it is the winters of the northeastern states that make some believe differently, we should not forget about our neighbors to the north in Canada. Deer are found throughout Canada but wild turkeys do not exist throughout most of the prairie provinces, or in parts of Ontario and Quebec. If turkeys were able to out-compete deer in the northeastern states, why are they not able to do so throughout most of Canada?

The fact is that deer and wild turkeys have co-existed for a long time, long before European settlement of this continent. If one were less fit than the other, it would have disappeared before the first humans occupied this continent. Deer and turkeys were all but gone for a relatively brief period of time because of uncontrolled market hunting and unmanaged timber harvesting for wood products and agriculture. Today, deer and turkey hunting has been made possible again because of responsible, active forest management, landscape scale habitat changes, harvest regulations and wildlife restoration efforts by state, federal and provincial wildlife agencies along with volunteer organizations such as the National Wild Turkey Federation and others.

Wild turkeys are opportunistic feeders and throughout the year their diet is quite diverse. As the seasons change so do available food sources for turkeys and other wildlife. During the spring and summer, young poults are feeding heavily on protein rich insects such as grasshoppers while adult hens and gobblers will feed on seeds, green vegetation and

insects. During this time of year, deer are feeding on lush green vegetation and succulent new growth of browse, not grasshoppers and crickets. While deer and turkeys may occupy the same fields during summer/early fall, they are likely feeding on completely different items of the field. In the fall, turkeys and deer will feed on soft mast that may be available, such as the fruit of dogwood, crabapple and hawthorn, hard mast such as beech nuts and acorns and waste grain in ag fields. Deer may also consume browse, clover and other lush vegetation still available. Mast, such as dogwood fruit, acorns, beech nuts, etc., are a major food source for a number of wildlife species. Every one of those species use alternative foods for times when mast is scarce. When mast is abundant, they all use it heavily.

During the winter, cold temperatures and deep snow push deer into yarding areas and the main food source for deer is browse. When deer enter these yards in sub-par condition because of poor habitat, which is typically caused by a lack of active forest management and high deer densities, they are susceptible to starvation in winter. Deer yards are typically found on south facing slopes as well so turkey flocks may be seen in deer wintering areas. While they are observed in the same area in winter, it is because the warmer temperatures and the conifers that catch snow before it accumulates on the ground, which means less snow to walk through than in the open hardwoods and less energy is spent on a daily basis.

When deer numbers do decline over a short time period in northern areas, the combination of poor habitat and severe winters are usually the culprits. We cannot control the weather, but deer densities being too high for the area can cause poor habitat. When too much browse pressure on regenerating forests create park-like settings with no understory and the tell-tale browse line, deer numbers in the area are ripe for being impacted by a severe winter. Since wild turkeys do not browse, the lack of regeneration cannot be pinned on them. Active management of our forests can help to some extent by creating gaps in the forest canopy that allow enough sunlight to the forest floor which can help regeneration. Without timber harvest operations, mature forests with closed canopies do not allow enough sunlight to the ground to promote regeneration. Over-mature, closed canopy forests are beneficial to very few species of wildlife, including both game and non-game species.

We should also consider the amount of food consumed by deer and turkeys in a day. Food intake studies on wild turkeys indicate they will consume about a half-pound on average. Of course large gobblers may consume upwards of a full pound. The average is the essential number for this discussion we will assume the average is three-quarter pounds of food intake for turkeys. In New England, we are most likely to have turkey densities of fifteen birds per square mile, which will consume about twelve pounds of food. Keep in mind that these densities are used as an annual average so a large flock of one hundred seen in the winter on one farm may have birds that moved greater than five to ten miles to get there and will move that far in spring time. Ten deer per square mile will consume about seventy pounds of food per day, which means an average of seven pounds per deer. So deer eat significantly more food per day and, as I mentioned earlier, deer are browsers during the most critical times and since turkeys do not browse there is no direct competition there.

Another point is that turkeys do scratch the forest floor to expose food items, but as they feed they are often on the move and leave plenty of food items for the next critter that comes along. The turkeys I watched in hunt I described were no different. They just didn't seem to want to stay in one place for too long even though a good beech crop was available to them. If turkeys actually consumed all the food in an area before moving on you would never see turkeys revisiting a site where they had fed before.

Hopefully this information is useful in dispelling the myths that turkeys have direct impacts on deer numbers. The restoration of both species are remarkable achievements for wildlife agencies whose funding comes primarily from hunters. Without the collective efforts of sportsmen and women who pursue the ruffed grouse, wild turkey, deer, bear, etc., and join local fish and game clubs and volunteer for their preferred organization such as NWTf that are very important we would not even be in the position to debate these topics. If you are not already a part of one or more of these groups please join at least one and help them help us all.