



# Nature Notes

*Why It Makes Sense to Hunt*

## Conserving the Environment with a Gun

By Jordan Price,  
associate professor of biology



*The path from Birkenstock-wearing vegetarian to camouflage-clad gun owner is much shorter than you might think, says St. Mary's biology professor Jordan Price, above.*

A twig snaps somewhere off to the left. You listen and, just barely, you can hear the sound of carefully placed footsteps on dry leaves, moving closer. You hear your own heartbeat too, as you carefully click the safety off. You are about to kill something sublimely graceful and beautiful. So why do you feel like you're helping the environment?

Environmentalism and hunting are often seen as opposing or even antagonistic issues. It is true that hunters and non-hunting environmentalists have sometimes found themselves on different sides of a picket line, as in response to the reintroduction of wolves to Yellowstone Park and the more recent reintroduction of wolf hunting seasons in surrounding areas. Such disputes are a relatively recent phenomenon, however, and historically these two interests have had a long and intimate relationship.

Nearly all of this country's early environmental advocates were also hunters, from John James Audubon to Aldo Leopold, and it is no coincidence that our most pro-environment president by far, Theodore Roosevelt, was an enthusiastic outdoorsman and stalker of big game. Even today, many of our most influential conservation organizations are run by folks who developed their respect for nature during young days spent afield with a gun. People may disagree over the morality of killing animals, but the conservation goals of most environmental activists and most hunters are largely the same.

Some of the most interesting conversations I've had with students have been about environmental conservation and animal welfare, and how these two concepts do not always agree. Certainly one of our main reasons for conserving natural areas is to protect the species that reside there, and habitat loss is the single greatest cause of species extinctions. But pollution and real estate development are not the only threats to habitats. Sometimes, the animals themselves are the threat, and such is the case with white-tailed deer.

Even my closest friends were surprised when I took up deer hunting a few years ago, and this later turned to amusement when I told them that, in stereotypical college professor fashion, I had learned how to hunt almost en-

tirely from books. I don't come from a hunting family, and only a few of my friends growing up had ever even held a gun. Indeed, during my teens and twenties, I considered myself somewhat of an animal-rights advocate who never imagined that someday he'd be looking at these gentle animals through the crosshairs of a rifle scope. But the path from Birkenstock-wearing vegetarian to camouflage-clad gun owner is much shorter than you might think.

The population of white-tailed deer in the United States has grown about a hundred-fold over the last century, from just a few hundred thousand in the early 1900s to over 30 million today. This has been a good thing for owners of auto body repair shops, but it has been catastrophically bad for many native forest species, especially plants. If you've tried to grow

a garden recently you know this well. Understory shrubs and saplings have all but disappeared from some areas along with the animals that relied on this vegetation for food and shelter, including certain birds. Studies comparing offshore islands in which deer have or have not been introduced provide striking evidence that such over-browsing has had devastating effects on overall biodiversity, and I've seen similar differences myself while working in northern Michigan. In areas where deer populations have experienced intense hunting pressure, such as on tribal reservations, or where deer are absent seasonally due to harsh weather, one can still find plant species that are rare elsewhere.

What caused this deer population explosion? Partly it's explained by the removal of predators that previously kept these herbivores in check. Ecologists refer to this as a "trophic cascade," in which the removal of one level of the food chain has cascading effects on other levels, from carnivores to herbivores to plants, with sometimes disastrous results. We can see the reversal of this process in Yellowstone Park today, where the reintroduction of wolves has reduced the elk population by half, causing the recovery of formerly over-browsed plants and leading to a variety of other positive effects.

For white-tailed deer, however, the absence of predators is only part of the story. Whitetails are considered an "edge species," which thrives on the boundaries between forested and open areas. Such edge habitats are becoming more and more common due to agricultural and residential development and the re-growth of forests in between these spaces. Thus, human development has largely increased the

population of deer in this country rather than simply encroached upon their former range, as many people assume. And areas like Southern Maryland, where food-rich agricultural fields are scattered between wooded residential areas, provide nearly ideal conditions for deer.

I jumped the picket line between environmentalist and hunter largely for environmental reasons, but there have been other benefits too. Nearly all of the meat my family eats these days is venison, and it feels good to provide them with food untainted by artificial hormones and which involves no carbon footprint other than the drive to and from my tree stand. I'm careful to ensure that every deer is taken in a humane way, and I'm comforted by the knowledge that each one had a much better life than any factory-farm raised cow or pig. In addition, last year I provided over 200 pounds of venison to like-minded colleagues, and I like to think that this caused a little less money to be spent supporting the beef and pork industries. I guess I'm still a bit of an animal-rights advocate after all.

But there is another thing, something beyond the satisfaction of providing my family with locally raised food while simultaneously helping our local environment. There is something indescribably rejuvenating about sitting quietly for hours in the woods, keenly aware of every rustling leaf, every smell, and every small change in the wind, learning each animal's patterns and trying to get close without them ever knowing I am there. It is why I sometimes go out to the tree stand just to be out there. It puts me in touch with the world around me like no other activity ever has. In fact, the hunting season may be the only time I ever feel truly human.

*Associate professor of biology Jordan Price has been teaching at St. Mary's since 2002. He also teaches a summer field course at the University of Michigan Biological Station on natural history and evolution.*