

unting remains a time-honored tradition in West Virginia. Many of our families have at least one member who hunts on a regular basis. Every year, more than 380,000 hunters take to West Virginia's woods, enjoying some of the best hunting in the eastern United States and contributing significantly to the state's economy. In 2006, expenditures from hunting in West Virginia brought in nearly \$300 million to the state's economy from the sale of food, lodging, transportation and hunting equipment. During the current times of economic lows, hunting is especially valuable, considering the amount of revenue generated in some of our state's most rural areas. So hunters definitely help the state's economy, but what role do hunters play in conservation?

Since its formation in the late 1800s, the West

Virginia Division of Natural Resources has been responsible for the management, conservation and protection of the state's wildlife resources. Throughout this endeavor, the DNR Wildlife Resources Section has responded to both a changing public and the needs of the state's fish and wildlife resources. The DNR is staffed by highly trained and dedicated professionals committed to the state's wildlife resources. These professionals design wildlife programs for the responsible management of all wildlife, not just the few species that are lawfully hunted. Hundreds of non-game species, such as songbirds and small animals that make the outdoors experience more enjoyable for us are under this stewardship. Who pays the majority of the bills for these wildlife programs? Hunters and anglers do.

The DNR Wildlife Resources Section derives its operating revenue largely from the sale of hunting



and fishing licenses, which amounts to \$16 million annually. According to state and federal law, these funds can only be spent on activities related to fish and wildlife programs. The financial contribution

of hunters, however, goes way beyond licensing fees. At the urging of hunters and conservationists, Congress passed the Federal Aid in Wildlife Restoration Act (commonly known as the Pittman-Robertson Act) in 1937. Under this act a manufacturer's excise tax was placed on hunting equipment, including firearms,

ammunition, bows, arrows and accessories. The revenue generated from this excise tax is apportioned among state wildlife agencies through the U.S. Fish and Wildlife Service's Federal Aid Program based on the number of hunting license holders and the state's surface area. The significance of this program was tremendous — state wildlife agencies finally had a secure funding source, allowing the implementation

> of activities such as habit management, land acquisitions and research. This work was previously thought impossible, but has ultimately led to today's wildlife

> > management success stories.

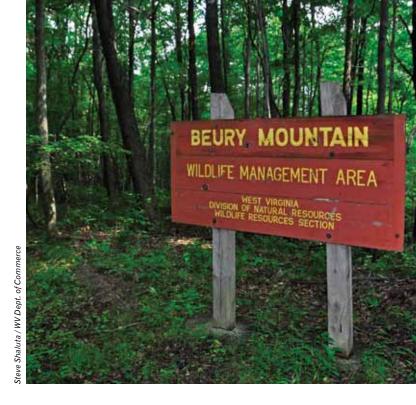
The federal aid program reimburses states for wildlife restoration projects totaling approximately \$335 million

annually nationwide. In West Virginia, annual apportionments average slightly more than \$4 million. Since the program was initiated in 1939, hunters have contributed nearly \$100 million to many of West Virginia's successful wildlife programs. The wild turkey restoration program, black bear studies,

white-tailed deer management, management of 1.6 million acres of public land, and hunter education, represent a few of the programs supported by federal aid. A critical stipulation of the Federal Aid in Wildlife Restoration Act is that proceeds may not go to a state wildlife agency which turns over ANY of its sportsmen revenue (license revenue or federal aid money) to other state programs. This has prevented a number of state legislatures over the years from diverting hunting and fishing money into a state's general revenue funds.

During the 1988 legislative session, West Virginia hunters and anglers prevailed upon their state delegates and senators to pass the Conservation Stamp Program. Through this legislation, everyone purchasing a hunting or fishing license is required to buy a Conservation Stamp. Revenue from the stamp enables the DNR to purchase additional land for public use and improve access for hunting, fishing and other wildlife recreational opportunities. This program is necessary because of the continued degradation of wildlife habitats and the decline in public access to private lands. Since the DNR implemented the Conservation Stamp 20 years ago, tens of thousand of acres have been purchased, creating 35 new wildlife management areas and expanding existing areas. Although the purchase and management of these wildlife management areas is totally funded by hunters and anglers, their preservation and management benefit all wildlife species and are enjoyed by other wildlife enthusiasts. Additional protection of the state's funding sources for fish and wildlife management was enacted in 1997. Using language similar to the Federal Aid in Wildlife Restoration Act, an amendment to the state constitution was proposed. It stated that license fee money and federal aid funds could only be spent "for the conservation, restoration, management, educational benefit, recreational use and scientific study of the state's fish and wildlife"

From an ecological point of view, how does hunting



benefit wildlife? A given parcel of habitat can support only a limited number of wildlife. These limits depend on the quantity and quality of habitat. This habitat limit, called the biological carrying capacity, is the number of individuals that a habitat can support in good physical condition over an extended period. When wildlife populations exceed this limit, habitat quality decreases, physical conditions of the animals decline, and mortality occurs because of starvation, disease or parasitism.

In addition, the importance of compatibility between land-use practices and wildlife populations in urban areas justifies considerations of another aspect of carrying capacity. "Cultural carrying capacity" is the maximum population size of a wildlife species that can coexist compatibly with local human populations. This limit is dependent on local land-use practices, local wildlife densities, and the attitudes and priorities of local human populations. Excessive wildlife/vehicle collisions, agricultural damage, and animal nuisance complaints indicate problems with high population levels. As development continues in certain areas of West Virginia, the importance of cultural carrying capacity as a management consideration will increase.

Left, Beury
Mountain WMA
was purchased
through a
combination of
funds, including
Conservation
Stamp revenues,
hunting license fees
and a donation
from the National
Wild Turkey
Federation.

Right, the revenue generated from the excise tax on firearms and other hunting equipment is used for such activities as habitat management, land acquisitions and research.



Wildlife biologists use hunting as a management tool to keep wildlife populations in balance. Wildlife management plans are developed to ensure that each year's harvest does not exceed a population's long-term capacity to recover. This is the biological concept of sustainable yield — a guiding principle for setting hunting seasons and bag limits. Regulated hunting in the United States has not caused any wildlife species to become extinct, endangered or threatened. In fact, many species of wildlife that are hunted are not only secure today, but are far more numerous than they were before the turn of the century.

As previously mentioned, hunting in West Virginia provides substantial benefits to both the state's environment and economy. One of the most important benefits from hunting, however, is the immediate human contact with natural resources. Hunting helps create active conservationists. The contact hunters experience with the outdoors fosters a caring attitude toward the environment, leading to a better understanding of ecology, and strengthening a personal commitment toward conservation. Youngsters who are exposed to hunting and its traditions tend to be more knowledgeable and appreciative of wildlife,

and more passionate about protecting wildlife habitats than youngsters lacking those experiences. This interest extends beyond huntable wildlife. In fact, hunters often spend as much time and money on nonconsumptive wildlife activities as they spend on hunting. They are often involved in organizations that work for the improvement of all natural resources. The National Wildlife Federation, for example, is the largest non-governmental conservation organization in the world, Membership includes many hunters and anglers, but also includes birdwatchers, wildlife photographers, campers, and others concerned about the environment.

Whatever attracts you to nature, your interests are shared by many hunters. It's through their contributions that wildlife agencies are able to wisely manage our wildlife resources. With the continued degradation of our natural resources, conservationists, whether having an interest in hunting or not, must recognize the contributions made by hunters. It's through this understanding and cooperation that wildlife will prosper for the enjoyment of future generations.

Scott Warner is the Federal Aid Coordinator for the Wildlife Resources Section stationed in South Charleston.

Fall 2010 17