# Scientist-To-Scientist Conversation

William Porter
PROFESSIONAL MEMBER
Boone and Crockett Club
Professor
Michigan State University

**It's often said that the secret to effective leadership is being in position to influence the change when the stars align. The Boone and Crockett Club is among the most successful leaders in conservation because it recognizes this principle. A remarkable change may be about to occur on an issue deeply important to the Club and because of the leadership positioning we have done with our university programs, we may have significant influence.**

At the North American Wildlife and Natural Resources meeting this past March, I shared lunch with a high-level scientist from the National Park Service. He commented that the park service was re-examining its policy regarding big game management, and he would have input to those decisions. He spent his career working with elk and bison issues, and I've spent mine studying whitetail deer. He was interested in sharing lunch because he wanted to talk, scientist to scientist, about the challenges the park service was facing with deer in the East. From what he understood, the park service had become highly successful with its deer management programs, but those programs were expensive, so he wanted some perspective.

The causes for the problems posed by whitetail deer are similar to elk and bison in many ways. Just as western parks are not large enough to contain the seasonal migrations of elk and bison, eastern parks are small relative to the seasonal movements of many deer. Elk and bison find an enriched habitat outside of parks because of the investment ranchers make to improve the nutritional quality of their range. In the East, the landscape surrounding national parks is a mixture of forest and farmland that provides habitat of exceptional quality for deer, or, the surrounding land is a suburban environment where highly fertilized lawns, ornamental shrubs, and artificial feeding by residents provide attractive habitats. Just as bison are learning to take advantage of the larger landscape in Paradise Valley north of Yellowstone National Park, deer at Valley Forge National Historical Park have learned to use the habitat of the surrounding farms and communities.

The deer problems began to get the attention of the National Park Service in the 1980s. Deer populations were growing across much of the East in the 1950s, but there were very few deer, so populations grew slowly. By the late 1970s, deer were much more abundant. Research has shown that such growth begins to slow at higher abundance levels because survival and reproduction are constrained by nutritional limitations. However, the improving nutritional quality of agricultural crops and mixed suburban environments fostered still further growth in deer populations. Fawns were surviving at higher rates and maturing early. To a wildlife biologist, the combination of high abundance, high survival of fawns and early maturation is an ideal prescription for a population eruption. By the late 1980s and '90s, that eruption was occurring throughout the East, including the national parks.

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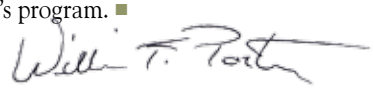
These eruptions meant profound impacts on the vegetation in the parks. Many of the national parks in the eastern U.S. were established to commemorate important historical events: Saratoga National Historical Park memorializes the pivotal battle of the American Revolution; Gettysburg National Military Park records the turning point of the Civil War. Congress established these parks, directing the park service to portray the scene at the time of the battle with as much realism as possible. To do that meant re-establishing the vegetation that played an important role in the event. Deer populations in the parks were simply overwhelming the vegetation, precluding the development of the interpretive scenes.

The park service responded with a series of landmark scientific studies that set the stage for active management of deer populations. Through interagency coordination, state agencies increased harvest of deer on the public and private lands surrounding the park, and the park service instituted sharpshooter culling programs within the parks. These programs proved exceptionally effective in reducing deer numbers. While there were political and legal challenges, the park service sustained its management programs because of the strong scientific foundation it had established and because it had built an extensive set of monitoring programs to measure changes in deer and vegetation.

As I sat with the park service scientist, I wondered if the moment was arising for a new policy approach to big game management in national parks. Was there now broad agreement within the park service that active management of wildlife was necessary in parks? If so, then did that shift in thinking, coupled with financial burden of culling and monitoring, mean that the stars were aligning for a fundamental change in policy? Was there a way hunting could be included within park service policy? I wondered if that scientist-to-scientist conversation might prove to be a significant return on investment for the Boone and Crockett Club's efforts in developing leadership through its professor's program. ■



**As Boone and Crockett Professors, we teach courses about wildlife policy and leadership. We show students that policy issues are complicated because of the need to consider not just the biology, but also the economics and politics. We help them recognize that establishing new policy is often a long process, but that the stars can align quickly. These lessons dovetail with leadership classes, where teach students about the importance of positioning an organization to be prepared to seize that moment.**