

Invasives: The High Cost of Indifference

By Mark Pfof and Kurt VerCauteren

At one time, wildlife professionals may have been blissfully ignorant about invasive species, classifying “plants” as lawn grass, flowers, trees, or weeds, and putting animals into two groups: species with bag limits and everything else. But those days of ignorance are long past. We see how invasives threaten local, even global, ecosystems, and we need to help create greater awareness about the scope of the problem.

Wildlife professionals must not only prepare to deal with how seven billion people, climate change, and habitat loss will affect native species and habitats, but also how those species and habitats will be affected by a host of invasive plants, animals, and pathogens. While we try to sort out the science, we must also lead by educating a public that may be indifferent.

Most citizens probably have some idea of what invasive species are, but the concept may be more abstract than real. We need to change that. Many ranchers already get the “real”: They find leafy spurge and automatically understand that this invasive plant leads to degraded rangeland, less forage, and lost income. The person who watches a cat cross from farmhouse to pasture and makes the connection—dead meadowlark—also gets it. The sooner we get society to *see* such invaders and make ecological connections, the better.

Aldo Leopold wrote, “A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.” This certainly applies to invasive species, because biological intrusions of non-native species *tend otherwise*. Wildlife biologists, now and in the future, may therefore need to spend inordinate amounts of time trying to eradicate, control, or manage what seems to be an ever-increasing number of invasive species.

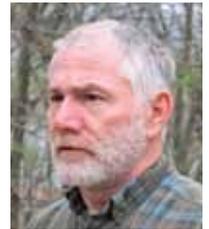
Many of us have been engaged with these efforts throughout our careers. A quick email poll of members of The Wildlife Society’s Wildlife Damage Management Working Group revealed that 91 percent of respondents now work with invasive species, spending an average of 26 percent of their time so

engaged. They deal with any number of invasives—whether plants, invertebrates, or vertebrates—doing hands-on control, studying and teaching about invasives, or developing related policy.

Likewise, members of TWS’ Invasive Species Working Group work with many invasive taxa. Some deal with mammals such as nutria, Gambian pouched rats, feral hogs, or commensal rodents. Others may work to control reptiles or amphibians (such as bullfrogs, spiny iguanas, and brown tree snakes), or avian species such as monk parakeets or starlings. The majority of working group members may direct their efforts toward invasive plants (such as phragmites, garlic mustard, reed canary grass, and kudzu), while some may work with pathogens (such as West Nile virus, chytrid fungus, or *Geomyces destructans*).

It’s important for our working groups and for TWS in general to take leadership on the issue of invasives because of their high cost, both ecologically and economically. The public needs to understand that controlling invasive species costs U.S. taxpayers billions of dollars each year in prevention, management, eradication, and lost ecological services, and that it’s cheaper to prevent invasions than to turn them back. Fewer dollars could have been spent keeping constrictors out of the Everglades, for example, than it will cost to eradicate them now. We either pay now, *or we will pay more later*.

In the fight against invasives, wildlife professionals are adapting a “One Health” philosophy that recognizes the ecological, economic, legal, and aesthetic interconnectedness of all life. Each ecosystem—with its unique assemblage of flora and fauna—also has a historic connection to the land in which it evolved. Allowing invasive species to degrade, denude, or destroy native species is tantamount to knocking over an ink well on our nation’s founding documents and not caring enough to wipe off the ink. We need to ensure that no one—citizen, policymaker, or politician—can remain blissfully ignorant of the connections between invasive species and the environmental health of each unique landscape. ■



Courtesy of Mark Pfof

Mark Pfof is Chair of The Wildlife Society’s Invasive Species Working Group and is a Partners for Fish and Wildlife Biologist at Necedah National Wildlife Refuge.



Credit: Justin Fischer

Kurt VerCauteren is Chair of The Wildlife Society’s Wildlife Damage Management Working Group and Leader of the Rabies Management and Ungulate Disease and Damage Projects at the National Wildlife Research Center of USDA-APHIS Wildlife Services.