

WE THE PEOPLE: DIFFERING APPROACHES TO ENGAGING THE CITIZENRY IN COMBATING NON-NATIVE SPECIES

Introduction

It seems almost too self-evident to say that the people most concerned about a problem are those who live with it. They would therefore seem to be potential resources in combatting the problem. However, on the issue of non-native species management, governments have not always done a good job of combatting the problem with meaningful civic engagement.

I. The Burmese Python in the Everglades

A report released January 30, 2012, noted a marked decline in mammal sightings in Everglades National Park.¹ Raccoon sightings were down 99.3%, opossum sightings dropped 98.9%, and white-tailed deer sightings fell by 94.1% from 1997.² These declines coincided with a 582% increase in Burmese python imports into the U.S.³--and their subsequent release into the park by overmatched pet owners⁴--and the python reaching "established" status in the park.⁵ Today, there are anywhere between 30,000 and 100,000 of the snakes in the park.⁶ The Burmese python originates from Southeast Asia, where it subsists on small mammals.⁷ The report hypothesized that the non-native python caused the disappearance of the small mammals in the Everglades, where they would conceivably be food for this growing population.⁸ What is known for sure is that the pythons are eating endangered animals, such as the Key Largo woodrat, along with two species of special concern, the limpkin and white ibis.⁹ The pythons are not limiting themselves to their traditional fare, either. There have also been reports of the pythons attempting to eat animals at the top of the native food chain, including alligators,¹⁰ and they have been known in their native lands to eat leopards, which may signal danger for the Florida panther.¹¹ Though to a lesser extent, the python also logically threatens the economy, as decreased wildlife could make the Everglades a less appealing tourist destination.

Despite the growing problem, there has been little done to engage citizens in managing the python population. Perhaps most puzzling is why the state has not done more to enlist hunters to help fight the problem. In 2009, Florida allowed just 19 hunters to assist in the fight by offering them permits to take the animals.¹² The state expanded its program in 2010, opening it up to the general public.¹³ But the rules of the program make it unlikely that hunters will be able to make a dent in the population. The permits are limited to Floridians who have experience capturing wild snakes and handling constrictors.¹⁴ Hunters must photograph and mark the GPS coordinates of any snakes they capture, photograph and describe the stomach contents of any euthanized snakes, and file a report within 36 hours of capture.¹⁵ Of course, this assumes that hunters are able to catch any snakes within the rules, which limits hunters to using only nets, snares, or their bare hands rather than traps or guns.¹⁶ These rules obviously restrict just how much hunters can do to fight the problem, and in turn limit the results.

Rather than encouraging community activity, the U.S. Fish and Wildlife Service and its other state and federal agency

partners have spent more than \$6 million trying to find other ways to fight the problem.¹⁷ Their solutions include increasing public awareness, studying snake movement, developing traps, exploring the use of infrared-equipped drones, and training dogs to search for the snakes.¹⁸ But while the affected governments and their agencies have spent millions of dollars and passed regulations banning the import of the snakes and their eggs,¹⁹ they have not adequately engaged in their citizens in helping to combat the problem. In the first paper advocating management of the Burmese python, the only citizen-based solutions included “discourage[ing] friends from keeping giant snakes,” and helping people find new homes for exotic pets they can’t take care of.²⁰

However, if the state is serious about fighting the spread of Burmese pythons, there are many obvious steps that could be taken, especially in the removal realm. For one, the hunting process could be opened to more than just Florida residents; already there are reports of people from as far away as Australia interested in getting in on the hunts.²¹ The state could also allow additional means of taking the animals, beyond mere nets and hands. Or the state could expand the hunting season beyond the current six-week window. While there are certainly several safety and environmental concerns officials must take into consideration when setting hunting rules, it can hardly be argued that the relevant governments are doing all that they can to empower citizens to fight the problem.

II. Southern Arizona’s Fight Against Buffelgrass

The threat that Arizona faces from buffelgrass is not as immediately apparent as that facing the Everglades. Indeed, no one has ever premised a horror film on a buffelgrass invasion of an airplane. But the threat from this non-native species is real. Originally an African plant, it was brought to the United States in the 1930s to feed livestock.²² Its presence in Arizona was not widely noted until 1994, when researchers investigating a fire in Saguaro National Park became aware of it.²³ Its danger comes in large part from the way it can fuel and carry fires.²⁴ Increased range of wildfire is an obvious threat not only to the plants and animals in its path, but also to the houses and people that may be there as well. Not only is it flammable year-round, but the plant actually survives and spreads with fire.²⁵ This presents a less obvious problem. Buffelgrass competes with local, native vegetation for what little water there is in the desert.²⁶ It competes so ferociously that it is able to take out even the majestic saguaro cactus.²⁷ It also kills the plants that provide habitat to the desert tortoise and mule deer.²⁸

To combat this threat, the affected governments have acted decisively. Saguaro National Park initially adopted a plan to use herbicides on the plant.²⁹ However, because the herbicide only works in the six-week window when the plant is green, the park had to look to other means to supplement its efforts.³⁰ As a result, the park enlisted volunteers to work alongside park staff to remove buffelgrass by hand.³¹ This partnership demonstrated tremendous results. In 2010, more than 300 acres of buffelgrass were cleared by hand, nearly as much as were cleared by herbicide.³² In 2008, the civic engagement to combat the non-native threat was taken a step further with the foundation of the Southern Arizona Buffelgrass Coordination Center. The group is made up of federal, state, municipal, and Native American governments as well as academic communities who are similarly threatened by buffelgrass’s presence.³³ In addition to researching and coordinating on strategic responses, it engages local citizens in the fight. For example, Pima County equips and transports a group known as the Sonoran Desert Weedwackers to sites once a month, where it has been successful in clearing large swaths of land.³⁴ There exist many more citizen groups in Southern Arizona with the same mission. While there is still a ways to go in eradicating buffelgrass, these groups seem to be embraced by affected governments and supported in their efforts. Given the productivity they have shown in eradicating large swaths of buffelgrass in Saguaro National park and on varying other projects, it only makes sense to continue harnessing the local citizenry to combat this effort.

Conclusion

Admittedly, Burmese pythons and buffelgrass are different organisms that propose different threats, both in the potential damage they do to their environments and the potential harm that may come to people enlisted to combat them. But the governments in Florida have not done much to even try to utilize and engage citizens to combat their problem. Given the successes demonstrated by a motivated citizenry in Southern Arizona, however, it is easy to say this is an error, and they should do what they can to seriously allow citizens to help fight their Burmese python problem.

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