



The Fight to Save Saguaros



This young saguaro took 15 years to grow to this size. Overwhelmed by buffelgrass, it doesn't stand a chance of surviving a wildfire.

Saguaro National Park is located in the scenic southwest Sonoran Desert. Today, visitors from around the globe are drawn to the park's iconic southwestern landscape, characterized by the park's namesake, the regal saguaro cacti. Yet the park's landscape and the plants and animals that depend upon it for their existence, are becoming increasingly threatened by buffelgrass (*Pennisetum ciliare*), an invasive grass from Africa. Buffelgrass was introduced with the best of intentions, primarily to increase forage for livestock and for erosion control. In recent years, buffelgrass has spread exponentially across southern Arizona. It has the potential to dominate the natural landscape of the park and surrounding areas in less than a decade. The National Park Service can't afford to wait and watch this happen. To preserve and protect its namesake and its unique habitat, Saguaro National Park is fighting back.

The Problem

Buffelgrass, listed as a state noxious weed in 2005, is spreading rapidly across Arizona's deserts and poses an immediate threat to the integrity of the Sonoran Desert. Buffelgrass alters natural ecological processes of the desert ecosystem, competes with and excludes native plants, reduces critical habitat for unique desert wildlife, and introduces fire into the ecosystem.

Buffelgrass and the ensuing threat of fire are a concern not only to the park but other land management agencies such as the US Forest Service, Bureau of Land Management, and Arizona State Parks. In addition to expanding into natural areas, buffelgrass has invaded the City of Tucson and neighboring communities, carrying fires

into the wildland-urban interface where they threaten lives, homes, and businesses.

Saguaro National Park estimates 2,000 acres of buffelgrass have invaded the park, primarily in remote, pristine wilderness areas, across rugged terrain, with patches ranging from a few individuals to greater than 20 acres. Current projections suggest buffelgrass infestations are doubling approximately every two years. At this rate it is estimated that more than 60% of park's desert ecosystem will contain buffelgrass by 2018. Many scientists believe that local extinctions of saguaros will occur and the Sonoran Desert vegetation and wildlife will be changed forever.



Dense stands of buffelgrass (left) fuel devastating wildfires (top) that destroy saguaros (bottom) and other native plants and wildlife like the desert tortoise (middle).

Fire in the Sonoran Desert

Fires are infrequent in the Sonoran Desert. When natural fires do occur (about once every 250 years), they are small and short lived because they are unable to spread through the sparsely dispersed native vegetation. Many desert species, including the giant saguaro cactus, desert tortoise, and gila monster are damaged or killed by fire. Buffelgrass can produce three times more fuel than the native vegetation and promotes intense wildfires that race across thick continuous infestations.

The Partners

Over the past few years local, regional, and national media have helped spotlight the buffelgrass crisis. Increased education and eradication efforts are still needed.

On February 9, 2007, more than 120 representatives from state and federal agencies, county and municipal governments, academia, and private conservation organizations from across Southern Arizona joined concerned

citizens at the Buffelgrass Summit. A full spectrum of private and public organizations have come together to develop a county-wide buffelgrass strategic plan, but they lack



Public outreach campaigns aim to create awareness and generate volunteer support.



A healthy forest of saguaro cacti.

the resources and funds to adequately implement the plan and address the crisis. With each passing year, the cost to control buffelgrass increases as does the loss of Sonoran Desert vegetation and wildlife.

The Need

Saguaro National Park uses a variety of methods to control buffelgrass, including hand pulling and herbicides. In 2007, the park treated 150 acres with herbicide and volunteers contributed over 750 hours hand pulling buffelgrass. Hand pulling the grass is substantially more expensive and strenuous and may not always be effective. Despite these efforts, increased and continued support is urgently needed.

Buffelgrass control is difficult, but it is not impossible. New and innovative technologies are available that will give the park a fighting edge. Saguaro National Park is joining forces with the US Forest Service and other cooperating agencies to develop cost effective control programs and maximize efficiencies.

Ongoing funding and support for personnel, equipment, supplies, education, mapping, and research will help ensure that buffelgrass can be controlled before it impairs the park and its natural resources. Only with this support will the saguaro, the national icon of the desert southwest, stand tall.

To learn more about buffelgrass, visit:

Buffelgrass podcast
www.npca.org/media_center/podcasts/saguaro.html

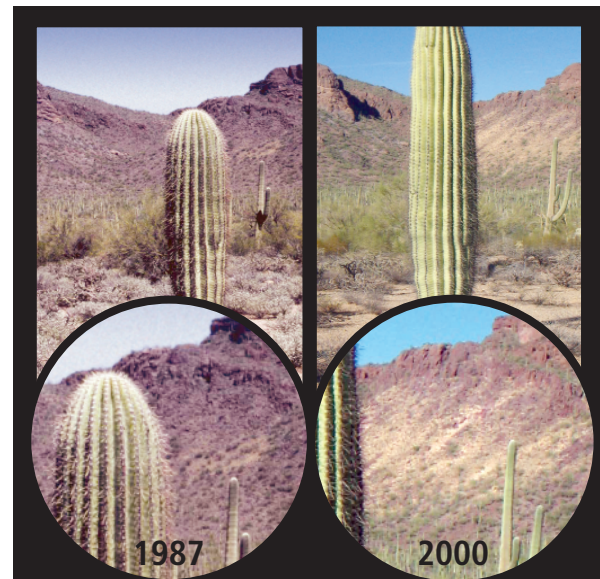
Buffelgrass fuel loads in Saguaro NP increase fire danger and threaten native species
www.nature.nps.gov/ParkScience/index.cfm?ArticleID=44

University of Arizona Desert Laboratory – Buffelgrass Eradication and Outreach
www.paztcn.wr.usgs.gov/buffelgrass/

Southern and Central Arizona Buffelgrass Response Center
www.buffelgrass.org

Arizona-Sonora Desert Museum: Invaders of the Sonoran Desert Region - Buffelgrass
www.desertmuseum.org/invaders/invaders_buffelgrass.htm

Visit Saguaro National Park website at www.nps.gov/sagu



Rate of Infestation

A photo taken in 1987 shows a small patch of buffelgrass first getting established in the background slope. Thirteen years later a photo from the same perspective not only shows the slow steady growth of the saguaro in the foreground but also reveals an entire mountain side dangerously infested with buffelgrass.

It is important to understand that each area treated requires a minimum of three years of sustained effort to eliminate the vast quantities of viable seeds that remain in the soil.



Buffelgrass invading the unique & complex Sonoran Desert ecosystem.