## RECOGNIZE THE THREAT

Buffelgrass (*Pennisetum ciliare*), a fire-prone grass introduced from the African savannah, has gained a foothold in central and southern Arizona. Left uncontrolled, it will irrevocably alter the Sonoran Desert.



Buffelgrass grows in dense stands, crowds out native plants, and can fuel frequent and devastating fires in what has generally been a fireproof desert. Competition for water weakens and kills desert plants, even large trees and cacti, while dense roots and ground shading prevent germination of native seeds. Buffelgrass can kill or exclude native plants by these means alone; wildfires only hasten the process.

The buffelgrass invasion has been the subject of considerable outreach and extensive media coverage. Despite this increased awareness, the heroic efforts by a few volunteers, and growing public agency engagement, control activities have yet to keep pace with the spread of buffelgrass.

Because this spread is exponential – populations of this grass and the costs of controlling it may be doubling every year – time is of the essence. Collaborative and decisive action is needed now.

### STAY VIGILANT

The control of buffelgrass and fountain grass will take constant vigilance. The seeds may live in the soil for several years and will continue to germinate when conditions are suitable. Areas once cleared may be reinfested with seeds from adjacent lands. Watch for new grass sprouts and pull them out.

#### **HELP YOUR NEIGHBORS**

Start by setting a good example by removing invasive grasses from your yard. Then encourage your neighbors and friends to do the same.

### **VOLUNTEER**

Join one of the organized volunteer groups that work to control buffelgrass and fountain grass in parks and environmentally-sensitive public lands. Trained volunteers are available to work with community groups on the identification, mapping, and removal of invasive grasses.

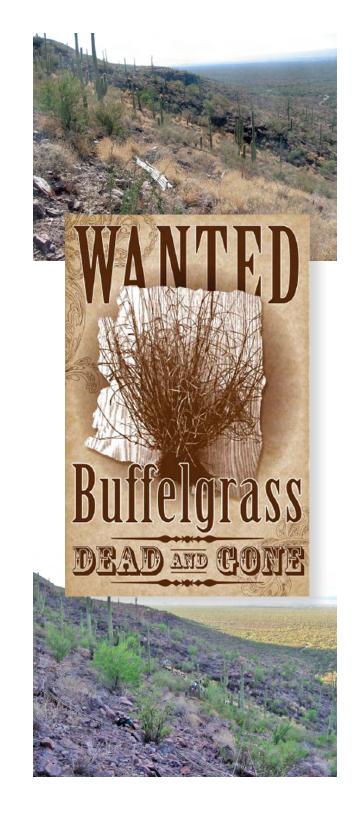
### **KNOW THE INVADERS – GROW NATIVES**

Not all grasses are bad. There are many varieties of beneficial grasses that belong in the Sonoran Desert.

### **GET ADDITIONAL INFORMATION**

For contacts, events, and information on volunteering, or to schedule a group presentation call (520) 615-7855 or visit www. buffelgrass.org





# IDENTIFY INVASIVE GRASSES

## ERADICATE THE PROBLEM

### **BUFFELGRASS**

Buffelgrass spreads aggressively by seed that forms dense stands and crowds out native plants. The dense growth supports hot fires that kill saguaros and other signature plants of the Sonoran Desert.

To identify buffelgrass look for:

- A shrubby grass that grows up from a central root crown.
- Stems that branch above ground like shrubs, giving clumps a messy appearance.
- Bottlebrush-shaped flower stalks with a reddish hue or a sandy brown color when the stalk sets seed.
- After the seeds have dispersed the central stem (called a rachis) is very rough to the touch.
- There will be long, whitish hairs on the node where the leaf blade clasps the grass stem.

• Each leaf blade is 1/4 inch wide with tiny hairs along the edges of the leaf blade.

### **FOUNTAIN GRASS**

Fountain grass is another non-native invasive grass that competes with native plants for vital nutrients and can cause a fire hazard. This grass has been used as an ornamental plant in landscaping.



Fountain Grass:

- Is a symmetrically-shaped perennial grass that can grow up to 3 feet high.
- Has slender green blades with unbranched stems.
- Turns brown if water is scarce, but retains its characteristic fountain shape.
- Has bottlebrush-shaped flower stalks with a pink or purple hue, turning to brown when the stalks set seed.

Left: Detail of green and dry buffelgrass stems.

Left below: Dry buffelgrass plant.

Center: Detail of the hairy ligule on the stem of buffelgrass.

Below: Green buffelgrass plant.



Eliminating invasive grasses is best done as a team:

- 1) Poke digging bar in the grass to check for snakes.
- 2) With gloves on, gather the grass clump, pull it together, and be ready to tug.
- 3) Jab the soil with digging bar at the base of the grass clump, moving around the plant to loosen the soil.



- 4) The person holding the grass clump will feel the roots give way.
- 5) Remove the root ball along with the grass stems.
- 6) Put the grass clump with the root ball into a large trash bag.
- 7) Dispose of bagged grass in the landfill.

### HERBICIDE CONTROL

Pulling out buffelgrass and fountain grass can be done any time of the year. Herbicide control is an effective way to kill invasive grasses, but must be done when at least 50 percent of the grass's leaves are green.

Glyphosate herbicides such as Roundup Pro or Kleenup Pro in a 2 percent solution are non-selective, post-emergent herbicides and can kill non-target grasses and broad-leaf plants and have no effect on seeds. If you are spraying in or around water, use an aquatic-approved glyphosate product such as Rodeo.

ALWAYS follow the product instructions. It is important to spray each individual plant, covering it with the herbicide just to the point when the herbicide starts dripping off the plant.

