

# Pampas grass is an invasive, prolific plant

## KIA'I MOKU

By Lissa Fox



In the early 1870s, an enterprising nurseryman in Southern California imported a tall, clumping grass with distinctive feathery plumes to his ranch. Over the next several decades, he created an entire industry for the plumes of the plant called pampas grass.

At the height of the plume boom, he was exporting 500,000 plumes a year throughout the United States and Europe, influencing Victorian-era fashion. By the close of the 19th century, pampas plumes were dyed different colors to fill vases, decorate women's hats and cover parade floats. Eventually the trend ended, but pampas has been used in landscaping ever since.

This invasive grass is anything but fashionable. Now, rather than topping hats and decorating parade floats, the 10-foot-tall feathery plumes top clumps of razor-sharp leaves throughout California. Pampas grass blocks beach access, fuels wildfires and invades native ecosystems. Introduced to Maui in the 1920s, pampas has proved invasive here as well.

Hawaii has two so-called "pampas grass" species: *Cortaderia selloana* and *Cortaderia jubata*. Both species of pampas grass have been planted widely in landscaping throughout California, where every backyard population is now a seed source for this invasive plant. Both species also are found on

Maui, and *jubata* has become extremely invasive. It finds a foothold in any bare soil or disturbed areas and has invaded many different ecosystems: from the dry rocky soil in Haleakala Crater, to the boggy rain forest of East Maui and the eroded cliffs of West Maui.

The Haleakala National Park staff of began control of *jubata* in 1989, and the Maui Invasive Species Committee, or MISC, has continued these efforts. Field crews attack pampas any way they can, hovering along cliffs with helicopters, camping in the rain forest for weeks, knocking on doors, and lining up across the slopes of Haleakala to search for the distinctive plumes.

But efforts to control the invasive *Cortaderia selloana* have been stymied by a confusion that began in California in the 1970s. When pampas grass first was recognized as being invasive, scientists thought *C. selloana* was only slightly weedy; whereas its cousin, *Cortaderia jubata*, was deemed to be an immediate and serious threat based on its ability to reproduce.

A single *jubata* plant readily can produce fertile seed with no need for pollination. The light, downy seeds float on the wind, and *jubata* quickly escapes garden plantings. The *selloana* plant, however, requires both a male and female plant to produce fertile seed. Resource managers thought that only female plants were on Maui, making *selloana* a safe landscaping alternative to *jubata* because it wouldn't be able to spread. But *C. selloana* turned out to be a wolf in plume's clothing. A keiki *selloana* was found on Maui in 2006; the



Above: Pampas grass plumes were once so popular they even decorated parade floats, such as this 1st prize winner in a parade in Colorado at the turn of the century. Denver Public Library, Western History Collection. photo.



Left: This stand of *Cortaderia jubata* plant, or pampas grass, was found in Haleakala Crater and removed in 2008. Pampas grass is an invasive species, and a variety thought not to be a local threat at one time has turned out to be one. Maui Invasive Species Committee photo.

identification was confirmed by genetic analysis of a sample sent to the University of California-Davis, establishing that *selloana* is reproducing here.

Given evidence from California, we can expect that *selloana* will be an even more aggressive invader than *jubata*. Over the past 60 years in California, the *selloana* population has expanded twice as fast as *jubata*. *Selloana* is increasingly able to invade native vegetation.

What was the "good" pampas in Maui backyards now is recognized as an invader lurking on the horizon. Please do not grow any kind of pampas grass on Maui. If you know of a

population of pampas grass, or have it on your property, please call the Maui Invasive Species Committee at 573-MISC to have it removed free of charge.

■ *Lissa Fox is public relations and education specialist for the Maui Invasive Species Committee. "Kia'i Moku," (Guarding the Island) is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life.*