

Ravenna Grass

Tripsidium Ravennae



FAMILY	Poaceae - grasses	ORIGIN	Eurasia, Northern Africa
LIFE CYCLE	Perennial	OTHER NAMES	Elephant grass, Italian sugarcane, Plume grass, Giant cane, Hardy pampas grass.

QUICK FACTS

- Originally introduced as an ornamental plant in the United States in the 1920s, Ravenna grass has become a noxious weed, **crowding out native species**, particularly in riparian and wetland areas. It spreads quickly via wind-dispersed seeds and root fragments, making it challenging to control.
- Ravenna grass is a significant **fire risk**, particularly in areas where it forms dense stands. The dry, dead vegetation it leaves behind in the summer months can easily **catch fire**, exacerbating wildfire risks in riparian habitats.
- This grass not only out-competes native vegetation but also disrupts ecosystems by **blocking water flow** and harming infrastructure. Its extensive root system can **damage concrete structures**, such as sidewalks and parking lots.

Ravenna grass was once the belle of the garden ball, admired for its towering plumes and enduring presence in American gardens since the 1920s. Native to the Mediterranean and Eurasia, this ornamental grass has since revealed a more sinister side. It has escaped cultivated areas and become a noxious weed in various parts of North America. Rapid growth and seed production allow it to outcompete native vegetation, posing challenges to local ecosystems. While it may have started as an easy-to-grow addition to gardens, Ravenna grass now plays the role of an unwelcome intruder in many landscapes.

What does it look like?

Ravenna grass is a large perennial bunchgrass, similar to sugarcane, reaching 14 feet in height and 7 feet in diameter. It has large, flowering plumes that resemble other cane inflorescences. Long basal leaf clumps (tussocks) form at the base while leaved stems continue upward, culminating in a large plume. Similar species include pampas grass and jubata grass. They are distinguished by sparser plumes of Ravenna grass, hairs on the leaf undersides, and a thick, white vein down the center of the blades.



oscarbraun, inaturalist.org



mircogruppi, inaturalist.org



The Nature Conservancy, Bugwood.org

Plant: Tall, upright stems emerge from a fluffy tussock, grow 5 to 13 feet tall, and are about 0.4 inches wide. Stems may be reddish or other colors during flowering. There are yellow hairs on the lower stem segments, which disappear near the top of the stem.

Roots: A dense and diffuse root system allows the grass to spread via rhizomes.

Leaves: The basal leaves are long and slender, reaching lengths of 3 to 4 feet and widths of 0.5 to 1 inch. A distinctive white midvein contrasts with their medium gray-green color. The upper side of the leaves near the base is densely covered in long, fuzzy yellow hairs, which often conceal the upper surface of the blade base. On the flowering stems, the leaves are shorter and extend up to the base of the inflorescence.

Flowers: Ravenna grass produces large, feathery flower heads in late summer to fall, forming airy, branched panicles that rise above the foliage. Plumes are 9.5-24 inches tall and 4-6 inches wide. The individual flowers are small and initially purplish-pink or lavender, fading to silvery white as they mature, with silky hairs that give the plumes a soft, fluffy texture. Flowers are wind-pollinated and form light, airy seeds that are dispersed by wind and water.

Seeds: Each seed is attached to a delicate, silky tuft of hair, which helps with wind dispersal. The seeds are typically tan or light brown and have a slender, elongated shape.

Impact and Management

Ecosystem Health

Ravenna grass displaces native plants, resulting in a substantial loss of biodiversity. This may reduce forage availability and habitat for songbirds and waterfowl. The dense thickets this weed creates can provide a habitat for rodents while excluding desirable wetland creatures.

Infrastructure Issues

Ravenna grass's roots are capable of lifting concrete as they grow. This ability allows the plant to undermine the stability of areas such as parking lots, sidewalks, and driveways, leading to costly repairs and maintenance.

Fire Hazard

Older stands of Ravenna grass can leave behind large amounts of dry, dead vegetation throughout the hot summer months. The dry foliage can quickly catch fire, which becomes more likely as it forms a monoculture. Because of its riparian proximity, this species can bring wildfires to riparian habitats that would otherwise be less susceptible to devastating fires.

When managing Ravenna grass, early detection and control are crucial for effective management. The perennial grass spreads rapidly through seeds and rhizomes, often invading riparian areas. Mechanical control, such as mowing before flowering, can reduce seed production but may not wholly eradicate it because of prolific regeneration from roots. Herbicides are most effective during active growth, although timing is crucial for optimal results. Preventing the spread of weeds should involve cleaning equipment to avoid transporting seeds and properly disposing of plant material. Long-term management should combine mechanical, chemical, and cultural methods, promoting competitive native vegetation to suppress its growth.

DO's

- For small infestations, manually remove plants by digging up the entire root system. Ensure all root fragments are extracted to prevent regrowth.
- After removal, collect all plant material, especially seed heads, and dispose of them securely by incineration or in sealed bags to prevent seed dispersal.
- Replant areas with native species to outcompete any remaining Ravenna grass and restore ecological balance.

DON'Ts

- Avoid using fire or grazing animals as control methods. These can stimulate regrowth and don't effectively eliminate the plant.
- When moving soil or plant material, ensure it's free from Ravenna grass seeds or roots to prevent spreading to new areas.
- Burn or graze: Simply cutting or mowing Ravenna grass is insufficient. These methods don't address the root system, leading to regrowth.



For more information on managing Ravenna grass, please visit www.nmweeds.org

