

Category A—High

Fountaingrass (*Pennisetum setaceum*)



Photo credit: J.M. DiTomaso



Photo credit: J.M. Randall



Photo Credit: Starr Environmental

Origin

Native to northeastern Africa and west Asia

Description

Initially planted as a perennial ornamental grass, fountaingrass grows in dense clumps with erect stems that can reach a height of 4 feet. Florets grow in feathery, spikelike clusters that appear red to purple and are 6-15 inches long. Leaves are narrow and 8 to 13 inches in length and appear folded or flat and can be smooth or with short sparse hairs. The ligules, however, have a fringe of white hairs and the collar margins are ciliate with long white hairs.



Photo credit: E. Guinter

Biology

Fountaingrass is fire-adapted for warm climates and can grow in disturbed sites, roadsides, and in shrublands and canyons. It is tolerant of drought, light shade, and most soil types, but does not survive prolonged freezing periods. It can grow in crevices, but is not tolerant of saline conditions. Seeds disperse in late spring through wind and by clinging to fur and clothing. Seeds have been known to survive for about six years and individual plants can live for up to 20 years or more (DiTomaso et al. 2013).

Locations

No known populations have been documented on the Navajo Nation, but some have been noted in neighboring parts of Arizona and New Mexico.

Ecological Threat and Management Concerns

Fountaingrass has been noted in the conversion of shrublands to grasslands. Its prolific and hardy seeds allow it to establish quickly and recur over time. As a fire-adapted species, fountaingrass can alter fire regimes in areas, especially in remote canyons and rangelands, where they can quickly replace native vegetation following disturbance. Seeds can also travel long distance through animal migration, wind, or water transport (USFS 2005).

Key ID Tips

- Smooth leaves with hairs on the ligule and collar margins.
- Long, feathery, spikelike florets that appear purple to red.
- Grows in tall clumps up to 4 feet in height

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Additional safety measures and limitations may apply to each method. Refer to the [Navajo Nation Integrated Weed Management Plan](#) for more information.

Mechanical/Manual Removal

Hand removal can be effective by uprooting plants. Large tools, such as picks, shovels, or mattocks are recommended to uproot large plants over 6 inches in diameter. When removing, inflorescence should be cut and bagged to prevent seeds from spreading. Manual treatments should be repeated over 1 to 2 month. Mowing and tilling are not effective control methods.

Biological

No biological control organisms are available.

Cultural Control

While animals may eat fountaingrass, grazing has not been shown to effectively control it. Fire is not recommended as fountaingrass can recover quickly and spread after a burn.

Chemical

Use of herbicides can be effective. Refer to the product labels for application rates, timing, and approved application methods.

Recommended herbicides include:

- Fluazifop-P-butyl
- Glyphosate
- Imazapyr

References

DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center. University of California. 544 pp.

U.S. Forest Service. 2005. Final Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds. U.S. Forest Service Southwestern Region. 601 pp.

USDA, NRCS. 2023. PLANTS Database. Available at <https://plants.sc.egov.usda.gov/>. National Plant Data Team, Greensboro, NC 27401-4901 USA



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