

Beware of the ravenous Ravenna: Management of the highly invasive exotic Ravenna grass (*Saccharum ravennae*) in Colorado River Parks

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Ravenna grass (*Saccharum ravennae*) is a large ornamental bunchgrass introduced from Eurasia that threatens sensitive riparian areas in the desert Southwest. This grass is highly invasive and competitive as it produces large quantities of seeds that are wind and water dispersed and germinate quickly and easily in a variety of soil and canopy conditions. Ravenna grass is of special concern to land managers as it has the ability to displace and out-compete important native species and create dense patches that become impenetrable and result in monocultures that exclude all other species. In this poster, we discuss Ravenna grass control efforts by the National Park Service at Glen Canyon, Grand Canyon and in Southern NV, and emphasize our successes, failures and lessons learned. Glen Canyon staff have been actively controlling this species for the past ten years, with thousands of plants removed, but dense patches still occur in a few side canyo

n riparian zones around Lake Powell. The species has recently been observed invading springs that support rare and endemic native plants. Grand Canyon National Park staff has been surveying for, controlling, and monitoring populations of this invasive grass since the 1990's. Park employees and volunteers have hand-dug over 25,000 individual plants from Lees Ferry to Diamond Creek and have seen a significant decrease in the population over the past two decades. Populations have also been treated at Moapa NWR in Southern NV and few individuals near the Virgin River in Arizona have been observed. For small patches or individual plants, control techniques involve clipping and bagging seed heads and digging up the root mass, placing the plants high and dry to wither and die. However, larger populations may require the use of foliar herbicide. Public awareness and education in identifying and controlling Ravenna grass is essential for preserving native ecosystems.