Plants to REMOVE

*Larundo donax* - Arundo grass/giant reed

Arundo grass is a tall grass from Europe, and can grow more than 20 feet tall. This non-native invasive grass has been used in the past for bank stabilization, and found to be extraordinarily invasive, choking out wetlands and rivers. In upland areas, it can be very flammable as it dries out.

The Invasive Species Specialist Group ([http://www.iucngisd.org/gisd/species.php?sc=112](http://www.iucngisd.org/gisd/species.php?sc=112)) lists the following methods for removal:

**Physical removal:** Hand pulling may be effective at removing small infestations of Arundo donax, but care must be taken to remove all rhizomes (underground stems and roots) to prevent re-establishment. **Cutting is not recommended unless the rhizomes are also dug up, as tiny rhizomes can grow into new colonies.** Burning is not recommended either as it has been demonstrated to aid the growth of *Arundo donax* because it regrows 3-4 times faster than native plants (PIER, 2008; Ambrose & Rundel, 2007).

**Chemical control:** The use of systemic herbicides such as glyphosate or flunizopop applied after flowering either as a cut stump treatment or foliar spray have been found to control *Arundo donax*. Caution should be taken when using such herbicides around water or in wetlands (Benton et al, 2005; PIER, 2008).

**Biological control:** In many areas of California the use of Angora and Spanish goats is showing promise for controlling *A. donax*. Also an unidentified stem-boring sawfly that appears similar to *Tetramesa romana* has been demonstrated to cause significant damage to *A. donax*, and it is being tested in quarantine as a candidate biocontrol agent for it (McWilliams, 2004; Dudley et al, 2006).

**Integrated management:** A popular approach to treating giant *Arundo donax* has been to cut the stalks and remove the biomass, wait 3 to 6 weeks for the plants to grow about 1 m tall, then apply a foliar spray of herbicide solution. The chief advantage to this approach is less herbicide is needed to treat fresh growth compared with tall, established plants, and coverage is often better because of the shorter and uniform-height plants. However, cutting the stems may result in plants returning to growth-phase, drawing nutrients from the root mass. As a result there is less translocation of herbicide to the roots and less root-kill. Additionally, cut-stem treatment requires more time and personnel than foliar spraying and requires careful timing. Cut stems must be treated with concentrated herbicide within 1 to 2 minutes of cutting to ensure tissue uptake. This treatment is most effective after flowering. The advantage of this treatment is that it requires less herbicide and the herbicide can be applied more precisely. It is rarely less expensive than foliar spraying except on very small, isolated patches or individual plants (McWilliams, 2004).

*Giant Reed, Arundo donax* photos from: [https://www.fs.fed.us/database/feis/plants/graminoid/arudonall.html](https://www.fs.fed.us/database/feis/plants/graminoid/arudonall.html)
Plants to REMOVE

Grevillea

This ornamental Australian shrub does well in a watered landscape, but burns readily. Removal should be easy by cutting the bush to the ground and taking away materials. According to the Hawaiian Ecosystems at Risk project (HEAR), “These plants have been shown to be highly flammable and should not be planted or allowed to remain inside your house’s Building Protection Zone within 10 [yards]). They should be used with discretion in the Fuel Modified Zone. (10 to 50 yards). Move these plants away from your house and replace them with less flammable plants.” (http://www.hear.org/Pier/wra/pacific/grevillea_rosmarinifolia_htmlwra.htm)

Grevillea rosmarinifolia

http://www.hear.org/Pier/images/starr-090430-6900.jpg
Plants to REMOVE

Scotch and French Brooms (*Cytisus scoparius* and *Genista monspessulana*)

Both Scotch and French broom are common invasive species. They choke out native shrubs, and create a dense thicket of flammable materials. They need to be removed by their roots in order to prevent regrowth, and then the area has to monitored for several years after removal to keep removing seedlings. The seed bank can contain thousands of seeds. The small plants can easily be pulled when the ground is wet. Best to remove the plants before the seed pods mature. Large weed pullers can be borrowed from several local groups, including the Ukiah Valley trail group.

**Scotch Broom (*Cytisus scoparius*)**

![Scotch Broom Image]

**French Broom (*Genista monspessulana*)**

[Image of French Broom]
Plants to REMOVE

Conifers (Douglas fir, junipers, redwoods, deodar cedars, and other conifers in our oak woodlands)

While Douglas firs are native to this area, they historically don’t occur in oak woodlands in large numbers. Rogina Heights is largely composed of blue oak woodlands, a fire resistant tree that typically occurs in hilly grasslands. Conifers pose a higher fire risk, and should be avoided in landscaping where possible. Conifers encroaching into the oak woodlands increase the risk of catastrophic fires. Check with the Mendocino Resource Conservation District to see if your property can qualify for a grant for conifer removal.

The University of California Agriculture and Natural Resource Division states that: “The loss of deciduous oak woodlands to native conifer encroachment is a major conservation concern in northwestern California and across much of the Pacific Northwest, resulting in associated losses of wildlife habitat, cultural uses, biodiversity, and other ecosystem services. These losses have drawn increasing attention in recent years, and oak woodland conservation and restoration efforts have gained momentum throughout the ranges of Oregon white oak (Quercus garryana) and California black oak (Quercus kelloggii), the two species most afflicted by encroachment.” [Link to University of California website]

Deodar cedar (Cedrus deodara)

Photos from: [Link to ornamental-trees.co.uk]

Juniper

Photos from: [Link to woodlandessence.com]

Douglas Fir (Pseudotsuga douglasii)

Photos from: [Link to oregonstate.edu]