# Plant invaders

California has about 1,800 nonnative plant species growing in the wild, with about 200 of those considered threats to wilderness areas. Here's a sampling of plants that are considered severe threats to ecosystems in the state, according to the California Invasive Plant Council.

#### Pampas grass (Cortaderia jubata)

Description: Native to Latin America; grows in clumps 8 to 10 feet high; invades along the California coast. Introduced as an ornamental. Impact: Forms dense stands that crowd out native species. Notes: Produces millions of seeds that do not require fertilization.

Water hyacinth

(Eichhornia crassipes) Description: A free-floating freshwater plant; can range in size from a few inches to more than 3 feet tall. Introduced as an ornamental. Impact: Clogs waterways, kills fish by reducing oxygen in the water. Notes: In warm weather, it can double the area it covers every eight to 10 days.



Sources: Elizabeth Brusati, project manager, California Invasive Plant Council; UC Berkeley; UC Davis; Western Aquatic Plant Management Society; U.S. National Park Service; California Department of Food and Agriculture; U.S. Department of Agriculture; Washington State Noxious Weed Control Board

#### **Knapweeds**

(Centaurea maculosa and related species) **Description:** European weed that grows 1 to 3 feet tall. A recent arrival in California.

**Impact:** Large-scale infestations can reduce native grasses 60% to 90%.

**Notes:** Most likely introduced to North America in alfalfa seed in the 1890s.



# Scotch and French brooms

(Cytisus scoparius, Genista monspessulana)

**Description:** Can grow 5 to 10 feet tall; native to Europe and Africa; invades coastal hills and the Sierra foothills. Introduced as ornamental plants.

**Impact:** Increase the frequency and intensity of wildfires and prevent regeneration of trees after a fire.

**Notes:** At one time branches were used to make brooms.



## Saltcedar

(Tamarix ramosissima) **Description:** Shrub or small tree that grows to about 15 feet; native to Europe and Asia. Introduced as an ornamental.

**Impact:** Can lower the water table. Also concentrates salt in the soil.

**Notes:** Named for the Tamaris River in Spain.



## Atlantic cordgrass hybrids

(Spartina alterniflora x foliosa) **Description:** Perennial grass with 2- to 8-foot stems

**Impact:** Forms islands in parts of San Francisco Bay. By filling in mudflats, it removes feeding areas for shorebirds.

**Notes:** Atlantic cordgrass is considered beneficial along its native Atlantic and Gulf coasts.



### Yellow starthistle

(Centaurea solstitalis)

**Description:** Winter annual about 30 inches tall; native to Eurasia; grows in valleys, foothills, and mountain regions below 7,000 feet.

**Impact:** Major problem in native grasslands and pastures, where it is poisonous to livestock.

**Notes:** Believed to have spread from California ports; reported in Oakland in 1869.



#### Giant reed (Arundo donax)

**Description:** A large grass from India that can reach 20 feet.

**Impact:** Clogs waterways and increases fire danger because of the buildup of dead plant material.

**Notes:** Removal of giant reed along the Santa Ana River increased the nesting pairs of endangered least bell's vireo from 19 in 1986 to 413 in 2004.



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