

WHAT ARE NOXIOUS WEEDS?

Per the California Food and Agricultural Code: **Noxious weed** means any species of plant that is, or is liable to be, troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate.

A common characteristic of all noxious weeds is their ability to outcompete and displace other plants. Other results of noxious weed infestation can include:

- Injury to humans and livestock
- Damage to equipment and infrastructure
- Reduced crop yields
- Decreased populations of native plants and animals
- Enhanced fire danger
- Enhanced transmission of pests and disease
- Lower property values

A full list of regulated noxious weed species can be found in Title 3 of the California Code of Regulations, Section 4500.

How did they get here?

Noxious weeds are not native to California. Some species entered in contaminated shipments of seeds, hay, nursery stock, and other seemingly innocuous items. Other species, such as fertile capeweed and tree of heaven, were intentionally introduced as landscape or ornamental plants and later escaped from nurseries and gardens.



A San Mateo County agriculture inspector checks an incoming shipment for pests and weeds.

MANAGEMENT AND CONTROL STRATEGIES

Noxious weeds are inherently difficult to manage and control. Early detection is key, as infestations are best eradicated by pulling or digging when populations are small and plants are young. Once established, noxious weeds can only be managed through long-term integrated strategies which combine biological, chemical, cultural, and physical control methods.

What can you do?

- Manage disturbed areas by replanting with native vegetation
- Report noxious weed sightings to your local Agriculture Department
- Don't buy, sell, or distribute noxious weeds
- Buy certified weed-free seeds and forage
- Consult with agricultural officials before transporting plants into the state
- Check to make sure no seeds have adhered to your clothing, vehicle, equipment, or pet before leaving an infested area.
- Remove noxious weeds on your property

Please note—

If using pesticides, including herbicides, always follow the manufacturer's label and all applicable laws and regulations.

Questions?

Contact the San Mateo County Department of Agriculture at (650) 363-4700 or on the web at <https://agwm.smcgov.org/>

Contact the University of California Extension Office at (650) 726-9059 or on the web at <https://cesanmateo.ucanr.edu/>

SAN MATEO COUNTY WEED MANAGEMENT AREA

The San Mateo County Weed Management Area (WMA) is a regional consortium of government agencies, private landowners, agricultural businesses, and environmental organizations committed to improving the economic, aesthetic, and environmental health of San Mateo County by minimizing the negative effects of invasive plant species. The WMA promotes, coordinates, and funds activities that prevent the introduction, establishment, and spread of noxious weeds in San Mateo County.

OUR PARTNERS

County of San Mateo:

Agricultural Commissioner
Parks and Recreation
Public Works

California Department of Food and Agriculture
California Department of Transportation (CalTRANS)
California State Parks
California Native Plant Society
City of Brisbane
Creekside Science
Friends of Edgewood Nature Preserve
Golden Gate National Recreation Area
Grassroots Ecology
Green Foothills
Midpeninsula Regional Open Space District
Pacifica Land Trust
Pacific Beach Coalition
Peninsula Open Space Trust
San Bruno Mountain Watch
San Francisco Public Utilities Commission
San Gregorio Environmental Resource Center
San Mateo County Farm Bureau
San Mateo Resource Conservation District
University of California Cooperative Extension

FOR MORE INFORMATION

San Mateo County WMA Website:

<https://www.cal-ipc.org/solutions/wmas/san-mateo-wma/>



NOXIOUS WEEDS IN SAN MATEO COUNTY

A SERIOUS THREAT TO OUR
ENVIRONMENT

Noxious weeds threaten agricultural production, enhance fire danger, and damage property.



Photo by Luigi Rignanesi

Photo by Richard Spellenberg

YELLOW STARThISTLE

Centaurea solstitialis

PURPLE STARThISTLE

Centaurea calcitrapa

Origin: Both yellow starthistle and purple starthistle are native to southern Europe.

Yellow starthistle is a spiny annual that arrived in California during the Gold Rush and currently occupies over 14 million acres statewide. Yellow starthistle invades native grasslands and pasture throughout San Mateo County. Deep roots allow it to outcompete other plants for scarce water, sometimes creating an impenetrable thicket of thorned flowerheads. Ingestion of this plant by horses causes an often fatal equine neurodegenerative disorder known as “chewing disease.” Purple starthistle is similar in appearance to yellow starthistle, but the stems are not winged and the flowers are light purple in color.



Photo by Eric Wrubel

WOOLLY DISTAFF ThISTLE

Carthamus lanatus

Origin: Native to Mediterranean Europe.

An erect annual thistle with a bright yellow flower, woolly distaff thistle can grow up to three feet tall. Distaff thistle plants exist as a rounded rosette until stems develop in the late spring. Stems are pale yellowish-white to light green and have fine hairs near the top which resemble spider silk. Long, deeply-lobed leaves protrude from the stem and droop downward. Both leaf tips and flowerheads have long spines. Distaff thistle is highly competitive and can displace most rangeland and grain crop species. The spines on the leaves and flowerheads have been known to injure humans and livestock.



PURPLE LOOSESTRIFE

Lythrum salicaria

Origin: Native to western Asia and eastern Europe.

Purple loosestrife is a perennial wetland herb that can grow up to ten feet tall. Loosestrife plants produce multiple four or six-sided purple or green stems from each rootstock. Characteristic showy purple flowers are densely clustered on a long spike at the tip of each stem. Purple loosestrife grows in freshwater and brackish wetland areas. Each purple loosestrife plant can produce between 100,000 and 2,000,000 seeds. Purple loosestrife stands expand aggressively and are unpalatable to grazing animals. Loosestrife growth has been known to clog irrigation systems and degrade native wetland habitats.



Photo by Franck Le Driant

BARBED GOATGRASS

Aegilops triuncialis

Origin: Native to Mediterranean Europe and western Asia.

Barbed goatgrass is an annual gray-green grass over two feet tall with multiple stems from the base and thickened seedheads with three bristles. The high drought tolerance of this grass allows it to form large monocultures in dry grassland areas, creating an elevated fire danger. Goatgrass seeds can be viable for several years and disperse by adhering to humans, animals, equipment, and vehicles. Barbed goatgrass is unpalatable to most grazing livestock, and can injure animals by lodging in their eyes or mouths.



FERTILE CAPEWEED
Arctotheca calendula

Origin: Native to southern Africa.

A rosette-forming herbaceous plant up to one foot tall, fertile capeweed has yellow daisy-like flowers and deeply lobed gray-green leaves with a wooly underside. A similar infertile capeweed species, *Arctotheca prostrata*, is widely cultivated as an ornamental groundcover. Fertile capeweed flowers have darker centers than those of the infertile species. Fertile capeweed propagates via seed or through creeping stolons, forming dense mats which prevent the development of other vegetation. In San Mateo County, fertile capeweed has only been found in the Pescadero/Bean Hollow area.



JUBATA GRASS
Cortaderia jubata
PAMPAS GRASS
Cortaderia selloana

Origin: Jubata grass is native to Bolivia, Peru, Chile, and Ecuador. Pampas grass is native to Argentina, Brazil, and Uruguay.

Both are large perennial grasses with long slender sharply serrated leaves rising from a tufted base, with plumes that can grow 6-23 feet tall. Jubata grass plumes are deep violet when immature and pinkish or tawny creamy-white when mature. Pampas grass plumes are light violet to silvery-white. Both grasses colonize areas disturbed by landslides, fire, erosion, and development. Infestations throughout the county threaten sand dunes, rocky outcrops, and coastal plant communities.



TREE OF HEAVEN
Ailanthus altissima

Origin: Native to East Asia.

A perennial deciduous tree, Ailanthus can reach heights of up to 100 feet. Mature trees have 1-4 foot long leaves with pairs of opposite lance-shaped leaflets, generally 3-5 inches long. Seeds are wing-shaped and hang in dense clusters through the winter. All parts of the tree give off a pungent odor when crushed. It outcompetes other plants by producing an allelopathic toxin, and its extensive root system can damage infrastructure and other trees. Ailanthus is the preferred host of



Adult spotted lanternfly

Photo courtesy Pennsylvania Department of Agriculture

the spotted lanternfly (*Lycorma delicatula*), an invasive insect pest which poses a significant threat to agricultural production.



J. E. (Jed) and Bonnie McClellan © California Academy of Sciences

CAPE IVY
Delairea odorata

Origin: Native to the mountain forests near the Cape of Good Hope in South Africa.

Cape ivy is a perennial vine with shiny, five- to six-pointed leaves, and yellow flowers. Foliage is green to yellow-green and has a distinct odor when crushed. Plants have extensive waxy stolons running above and below ground. Cape ivy grows over and chokes out other vegetation, including large trees, and currently occupies over 500,000 acres in California. Its extensive spread along hillsides and stream banks can hinder erosion and flood control efforts. The alkaloid compounds produced in the leaves of cape ivy can be toxic to animals.



Photo by Gary McDonald

FRENCH BROOM

Genista monspessulana

SCOTCH BROOM

Cytisus scoparius

Origin: French broom is native to Mediterranean Europe and the Azores. Scotch broom is native to central and southern Europe and northern Africa.

Both French and Scotch broom are large evergreen shrubs with pea-like yellow flowers. The stems of French broom are round, while the stems of Scotch broom are five-sided and ridged. Both species produce pea-like seed pods. Broom species thrive in disturbed areas and displace native plant and forage species. French and Scotch broom foliage and seeds are toxic to livestock, causing indigestion and sometimes paralysis. Broom foliage is highly combustible and enhances wildfire frequency and intensity.



GORSE

Ulex europaeus

Origin: Native to central and western Europe.

Gorse is a dense, yellow flowering shrub that grows up to seven feet tall. This perennial plant is native to Western Europe. Due to their thorny impenetrability, gorse hedges were planted in Scotland as fences for livestock. Gorse propagates by stump sprouting and by seed that can lay dormant for decades. It displaces intact plant communities, and is extremely flammable. Gorse is primarily found around San Bruno Mountain with smaller populations found on the south coast. Gorse populations rebound quickly after fire or mechanical removal of foliage, making long-term integrated strategies necessary for control of established thickets.



SKELETONWEED

Chondrilla juncea

Origin: Native to southern Europe.

A herbaceous rosette-forming perennial with lobed reddish basal leaves, skeletonweed has small yellow dandelion-like flowers and multiple stems which can grow up to five feet tall. Stems are generally leafless and typically have dense downward pointing hairs at the base. Skeletonweed taproots can reach depths of up to ten feet, making the plants highly competitive for water and nutrients. The dandelion-like seeds are wind-dispersed and can lower crop yields and damage harvest machinery in grain and forage crop fields.



Skeletonweed rosette



STINKWORT

Dittrichia graveolens

Origin: Native to southern Europe.

Stinkwort is a bush-like annual with thin, light green lance-shaped leaves and small yellow flowers. Stinkwort flowers in fall and mature plants take on a shaggy pyramidal shape up to three feet tall. Stinkwort leaves are hairy, sticky, and have a powerful aroma of camphor. The oils found in stinkwort foliage are poisonous to livestock and can cause contact dermatitis in humans.



Stinkwort infestation in rural San Mateo County