

## Invasive Species

Invasive Species are non-indigenous animal and plants species that become established in natural communities and wild areas, replacing native plants and animals.

Controlling non-native plant species in Blue Sky preserves its natural beauty and supports a diverse group of native animals for future generations. Here in California many of the invasive plants also increase the potential for fire.

Volunteers meet on the second Saturday of each month for a two hour period to eradicate invasive plants. This ongoing effort prevents invasive species replacing native species. However, due to the prevalence of some of these plants in surrounding areas, they continue to get reintroduced into previously cleared areas. Thus continual monitoring is required.

All of the plants listed below are State listed weeds. This list represents many of the types of weeds that are present and the worst of the ones we have found so far. More information on invasive weeds can be found at [www.cal-ipc.org](http://www.cal-ipc.org) . Pictures of plants can be found at [www.calflora.org](http://www.calflora.org) .

- **Fennel** (*Foeniculum vulgare*) - This is the garden vegetable that has escaped into the wild. Some people have even planted it to provide for Anise Swallowtail not realizing that there are native plants that are better larval hosts. This is a perennial that goes dormant after seeding leaving dead stalks at the end of the summer just in time for fire season.
- **Pampas Grass** (*Cordylina selloana*) - One of six members of this genus. This perennial is well established throughout California. The plant produces gorgeous flowers, makes great nesting places for rats and burns very well. If left unchecked it tends to push everything else aside.
- **Fountain Grass** (*Pennisetum setaceum*) - A warm weather perennial that has been disbursed by CalTrans and also escaped from home gardens. This plant forms dense stands in disturbed places and fills spaces in healthy vegetation greatly increasing the fire potential of an area.
- **Fox Tails** (*Bromus* spp) - There are several species of *Bromus* that have been introduced and some natives. Where they form grasslands they do have habitat value. We strive to remove the non-native species in the Reserve to make way for more of the native grasses.
- **Mexican Fan Palms** (*Washingtonia robusta*) - These perennials are often spread by animals feeding on their fruit. Our local fire agency refers to them as torches.
- **Tocalote Star Thistle** (*Centaurea melletensis* and *sulphurea*) - This name refers to either of the two less harmful species. These annual or biennials take over

disturbed places. They die at the end of the summer leaving plenty of dry fuel just in time for fire season.

- **Italian Thistle** (*Carduus pycnocephalus*) - This is a slender annual that threatens to take over the creek bed. Once established it tends to crowd out native annuals. It is another plant that dies and adds dry fuel for fire season.
- **Artichoke** (*Cynara cardunculus*) - This vegetable plant rarely produces edible buds in our dry climate. For a while it was somewhat popular as a garden plant because of its blue flowers. Though a perennial, it goes dormant after blooming leaving dry prickly leaves and flower stalks. It has escaped into the wild and if left unchecked it will displace other vegetation. This plant burns very hot leaving the soil bare for a year or two after a fire.
- **Bull Thistle** (*Cersium vulgare*) - A coarse biennial. It is much like the Italian Thistle with respect to habitat loss and fire risk.
- **Milk Thistle** (*Silybum marianum*) - A summer annual that can form dense stands. It is much like the Italian Thistle with regard to habitat loss and fire risk.
- **Eucalyptus, Blue Gum** (*Eucalyptus globus*) - A perennial tree that will take over vast areas creating a monoculture. The tree tends to drop branches making it unsuitable for any place where people may gather. It is hard to ignite but contributes to the spread of fire. The plant has loose shedding bark that accumulates around the tree. When a brush fire passes by the trees this bark becomes embers that are blown ahead of the fire. Following the 2003 fire most of Scripps Ranch was left with ash from multiple embers per square foot.
- **Castor Bean** (*Ricinus communis*) - A perennial bush to small tree, this is a garden escapee. Thousands of these plants have been removed from Blue Sky. Care should be taken with this highly toxic plant.
- **Salt Cedar** (*Tamarix*)- There are several species of this plant, all from Eurasia or Africa. They are all considered weeds in North America. The US government lists *Tamarix* as the worst weed in the western half of the country. All of the species reproduce from seed by runners, and by branch rooting (up to a million per plant per year). All of the species extract salt and concentrate it in sacrificial limbs. The salt makes the soils unusable by any other species. The dead limbs create a fire risk.
- **Tree Tobacco** (*Nicototiana glauca*) - This is a South American perennial shrub to small tree. They tend to occur in disturbed places where they can form monolithic stands.
- **Black Acacia** (*Acacia melanoxylon*) - Several acacia have escaped from gardens.
- **Curley Dock** (*Rumex crispus*) - Several docks occur in the Reserve and are hard to distinguish. Curly dock has noticeable wrinkled leaves. It is an erect perennial that goes dormant in the summer leaving a dry seed stalk.

- **Horehound** (*Marrubium vulgare*) - This is a short lived perennial member of the mint family. It tends to occupy areas where native sages would grow.
- **Filaree** (*Erodium* spp) - There are four species known to occur in our area. Three have been identified at Blue Sky and all are weeds of disturbed places.
- **Pimpernel** (*Anagallis arvensis*) - An old world, low growing, annual that occupies spaces where things like our native violets once grew.
  
- **Mustard** - There are several including some native species. They all have flowers with four pedals. The flowers are most often yellow. The native species tend to occur in the stream or high on the shady hillsides. The weeds tend to grow along the road and other disturbed areas. Most are escaped vegetable crops which originated in the old world. They are annuals or biennials. Some have pods with what is described as a beak.
  - **Birdsraps Mustard** (*Brassica rapa*) - This bush grows to four feet. Seeds may be in bird seed mixes. The leaves have a clasping base, that is, it wraps around the stem.
  - **Black Mustard** (*Brassica nigra*) - This plant can grow to eight feet. Some have long narrow pods
  - **Tumble Mustard** (*Sisymbrium altissimum*) has fruits two to four inches long that tend to grow upward.
  - **Oriental Hedge Mustard** (*Sisymbrium orientale*) - This plant has pods that are 1.5 to 1.75 inches long. The leaves are sort of like a dandelion's.
  - **London Rocket** (*Sisymbrium irio*) - Tends to be narrow and upright. The leaves are dandelion like and hairless. The fruits are 1.5 to 1.75 inches and may be slightly curved.
  - **Sahara Mustard** (*Brassica tournefortii*) - This plant is about 3 feet tall with most leaves in rosette. The pods are long and tend to be held out at right angle to the stem. You may be able to see all of the little seeds as tiny bumps along the pod. This mustard is the only Class A weed!
  - **Tansy Mustard** (*Descurainia sophia*) - This plant has very indented leaves.
  - **Shortpod Mustard** (*Herschfeldia incana*) – This plant is distinguished by short pods held close to the stem.
  - **White Mustard** (*Sinapis alba*) - This plant has upwardly curved pods with white seeds.
  - **Wild mustard** (*Sinapis arvensis*) - This plant has medium length pods that tend to grow upward.

- **Rapeseed Mustard** (*Brassica napus*) - These have robust pods reminiscent of wild radish. This is the source of canola oil.
- **Shepherd's Purse** (*Capsella bursa-pastoris*) - This plant has heart shaped pods.
- **Hairy Whitetop** (*Cardaria pubescens*) - These plants have roundish pods on short stems. The flowers are white.
- **Wild Radish** (*Raphanus sativus*) - This is a small bush which develops pods shaped like small carrots. The flowers can be yellow, white pink, or violet.