Management

-------- Reduce seed production by integrating available tools--------

Physical control

Prescribed burns can reduce aboveground vegetation and eliminate seed production, but re-growth from the crown is likely. Burning may stimulate a flush of seedlings, so follow-up treatment is necessary. Goats can be used to remove above ground vegetation and seedling growth. Planting native perennial grasses and annual forbs helps to increase competition and restore ecosystem functions, but effective control of French broom is necessary for revegetation to be successful.

Photo: Pamela Beitz

Look at that pile! Volunteers make a major impact by mechanically removing French broom.

Biological control

There are currently no approved insects or pathogens available to attack French broom.

Mechanical control

As a perennial, French broom will grow back from the root crown, unless the taproot is removed. A weed wrench type tool can be used to remove plants, ideally before seed has been produced. Cutting, particularly following the dry season, is effective to remove vegetation, but regrowth is likely. Mowing or using a propane torch to remove seedlings is effective but impractical on a large scale. Mulching following removal may help reduce regrowth.

Chemical control

Chemicals can be a useful tool when combined with non-chemical methods in an integrated approach. Consideration for species of concern and non-target plants must be taken.

Get involved!

Want to play a role in the management of noxious weeds in your parklands? Inquire with your local EBRPD park staff about the possibility of setting up a work day for your organized group or visit http://www.ebparks.org/getinvolved/volunteer/operations for more information and to register for volunteer opportunities. See you in the parks!

Text and design: Courtney Glettner
Cover photo: Wilde Legard
Back photo: Pamela Beitz

This brochure is provided as a public service of the Stewardship Department of the East Bay Regional Park District.

East Bay
Regional Park District

2950 Peralta Oaks Court, Oakland, CA 94605
1-888-EBPARKS • www.ebparks.org

French Broom

East Bay
Regional Park District

How did it get here?

French broom (*Genista monspessulana*), native to the Mediterranean region, was introduced to the United States in the mid-1800's as an ornamental plant. It was also used for erosion control because of its rapid growth and ability to form dense stands. However, those same qualities allowed it to escape and flourish in coastal plains, mountain slopes and generally disturbed areas in California.

Identification

French Broom is a shrub, 3- to10-feet tall, with clusters of small, bright-yellow flowers March through May. It is evergreen in the Bay Area, with bright green leaves covered in soft, silver hairs. A perennial plant, which means it lives for more than three years, French broom rapidly grows from April through July. A single plant can live for an average of10-15 years and up to 30 years.

Photo: Nancy Brownfield

A dense stand of French broom at Miller/Knox Regional Shoreline. A noxious weed is a plant that has been designated by the Federal, State or county government to be threatening to public health, agriculture, recreation, wildlife, or property.

Adapted to grow and grow…and grow

French broom has many qualities that make it a weedy species. It is leguminous, or is associated with special nitrogen fixing bacteria that provide the plant with nutrients, allowing it to flourish even in nutrient poor, marginal soils. French broom grows rapidly and has prolific seed production, forming dense stands and displacing native species. It is estimated than an average sized plant can produce 8,000 seeds per year, which, when they have matured, are ejected from the pods feet away from the parent plant. These small seeds are then further dispersed by water, insects, birds, and mammals, where they can remain viable in the soil for up to 30 years.

A carpet of French broom seedlings, as shown on the right, demonstrates its ability to create a monoculture, or stand of a single species. New seedlings germinate in December and continue through July, which contributes to management challenges by complicating treatment timing.

What's the big deal?

If left unmanaged, these plants can grow to dense monocultures, creating a nuisance for recreation, inhibiting wildlife movement, and increasing fire hazards. The exclusion of all other vegetation by French broom alters the functioning of the ecosystem. Loss of native forbs impacts native pollinators, like bees, as well as other species that rely on a diverse ecosystem. Native grasses and trees provide habitat and play an important role in carbon sequestration and surface water infiltration. Such ecosystem services are lost with an invasive monoculture. French broom leaves and seeds have toxins that can impact humans and livestock.

Photo: EBRPD staff