



Dalmatian toadflax *Linaria dalmatica*

What it is

Introduced into the western United States as an ornamental in 1874, Dalmatian toadflax is a noxious weed originally from the Mediterranean region of Europe (including the Dalmatian Coast of the Adriatic Sea) that has since spread throughout the West.

How to spot it

If it's not in bloom, you can identify the 2- to 3-foot-high plant by its small, rubbery, blue-green leaves that clasp the stem and have a waxy coating. In summer, look for the showy bright yellow flowers that resemble those on snapdragons.

Where it's found

The plant has spread throughout western, southern, and central Montana, especially in semiarid climates and coarse, dry soils. It thrives in disturbed areas like housing and road construction sites, overgrazed rangeland, and cleared lots and fields.

Illustration by Liz Bradford

How it spreads

This invasive plant spreads via abundant seeds (up to half a million) and aggressive lateral roots. The seeds, which can remain viable in the soil for up to 10 years, are moved around by wildlife, dogs, hikers, mountain bikers, and mechanized mowers.

Why we hate it

Like most noxious weeds, Dalmatian toadflax crowds out native vegetation and is far less edible and useful as nesting and hiding habitat for native birds and other wildlife. Cattle generally will not eat the plant, resulting in reduced livestock production.

How to control it

Hand pulling or digging can work on small infestations. But in larger patches, neither method works because any root fragments resprout. Clipping, bagging, and disposing of flowers will reduce seed spread. Chemical control can work, but only by experts. Some beetles, weevils, and other biocontrols have shown promise in controlling infestations.

Learn more at mtweed.org.

THE MICRO MANAGER

“Connectivity”

A quick look at a concept or term commonly used in fisheries, wildlife, or state parks management.

All fish and wildlife species need to move from one place to another during the year to find the best places to feed, raise their young, and survive winter. Movements that cover long distances between summer and winter habitats, known as “migrations,” can be epic. For instance, FWP fisheries biologists recorded sauger swimming more than 150 miles from Fort Peck Reservoir upstream to spawning areas near the Fred Robinson Bridge. Movements within a season can be relatively short, like a Columbia spotted frog that may hop only a few hundred feet from a stream edge to a forest opening and back during the summer.

The degree to which a landscape allows for movements and migrations is called “connectivity.” Many constructed objects, like barbed-wire fences on pronghorn range and diversion dams in trout tributary streams, reduce connectivity. As a result, fish and wildlife can't reach the spawning, nesting, rearing, wintering, and other seasonal habitats they have adapted to use, lessening survival. Barriers or habitat fragmentation can also isolate populations, like the freeways that block grizzly bear movement, leading to

inbreeding and the loss of genetic variability.

FWP works with private landowners and other land management agencies to identify barriers that impede critical fish or wildlife movement and find ways to remove the obstacles or modify them so animals can continue on their journeys. ■



Hydropower dams and irrigation diversion structures like Gibson Dam on the upper Sun River (above) reduce connectivity by blocking upstream and downstream fish migration.