

Invasive Forbs

Forbs are broadleaf herbaceous plants that usually reproduce by seed and can be perennial with flattened stems on the ground and root crowns that persist over winter. Control treatments are usually by foliar sprays of herbicides. Persistent seeds in the soil and underground stems and rhizomes make control a lengthy and exacting process for eradication and rehabilitation.

Alligatorweed



Alligatorweed [*Alternanthera philoxeroides* (Mart.) Griseb.] is a perennial, evergreen forb with hollow round stems and opposite leaves at nodes. When erect, stems produce stalked white cloverlike flowers in upper axils during summer but no fruit or seeds. Horizontal stems readily branch and root at nodes in water to 6.5 feet (2 m) deep or when next to soil. Deep mats prevent other plants from germinating in the spring and overtop aquatic and upland plants, damaging wetland wildlife habitats. Grows in both fresh-to-slightly brackish waters. It spreads rapidly by stem fragments moved by water that root at nodes. Resembles other *Alternanthera* species, both nonnative and native, which have similar flowers, but none are stalked like alligatorweed. Also resembles the many knotweeds (*Polygonum* spp.) that inhabit wet soils and shorelines that have alternate leaves.

Management strategies:

- Alligator flea beetles (*Agasicles hygrophila* Selman & Vogt) have been used successfully to control alligatorweed where mean winter temperatures exceed 50 °F (10 °C).
- Minimize disturbance within miles of where this plant occurs, and anticipate wider occupation when plants are present before disturbance.
- Water-level management in reservoirs must be timed to accommodate herbicide applications, treatment progressions, and to minimize floating mats to prevent spread.

Recommended control procedures:

- Thoroughly wet all leaves with one of the following herbicides in water: to minimize impacts to nontarget plants, apply Garlon 4 (Renovate 3 for aquatic sites) or a glyphosate herbicide (Rodeo for aquatic sites) as a 2-percent solution (8 ounces per 3-gallon mix) for good control above the water line. Apply Habitat* as a 0.5-percent solution (2 ounces per 3-gallon mix) in a 100-gallon per-acre mix in spring to protect dormant native plants and to let them respond to release from alligatorweed or, when foliage is emerged, Clearcast* as a 1-percent solution (4 ounces per 3-gallon mix).

* Nontarget plants may be killed or injured by root uptake.