

Invasive Alien Plant Species of Virginia

Alligatorweed (*Alternanthera philoxeroides*)

Description

Alligatorweed, a member of the pigweed family, is a herbaceous perennial. Its leaves are opposite, elliptical, one-quarter to three-quarters of an inch in length with a very short or absent leaf stem. Alligatorweed roots on shore or shallow water. An emergent, which can also be partially or wholly terrestrial, its trailing stems form dense mats which grow out over the water's surface in thick interwoven mats. Hollow stems allow the plant to float. The mats may be up to three feet thick and may spread out over hundreds feet on the surface of the water. Flower spikes bearing very small flowers arise from leaf axils. No seedlings have been reported in the United States; it appears that reproduction here is vegetative. Stem nodes separated from the plant rapidly root and develop new complete plants.

Habitat

Alligatorweed invades aquatic or very wet habitats. It tolerates a wide variety of environmental conditions from fresh to slightly brackish water and is found in canals, ditches, blackwater rivers, stream edges, and sloughs. It usually requires some disturbance to become established.

Distribution

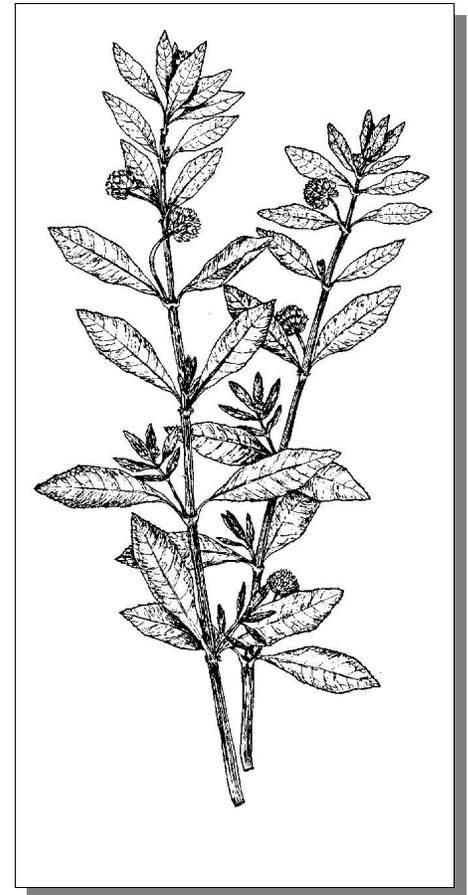
Native to South America, alligatorweed is believed to have been introduced to the United States as a "stowaway" in the ballast of a ship. It was first documented from Mobile, Alabama, in 1897. It is found in coastal states from Virginia to Texas, the Tennessee Valley and Puerto Rico. In the west, it is also a pest plant in California.

Threats

Alligatorweed forms dense tangled mats that float on the surface of a body of water. It overtops native aquatic vegetation and outcompetes it for sunlight, thus replacing desirable native species. It grows rapidly and spreads easily; stem fragments can float downstream and establish a new mat. The mats can block waterways, alter aquatic and riverine ecology, and increase breeding habitat for mosquitoes.

Control

Mechanical methods of control are expensive and ineffective. They may actually hasten the spread of alligatorweed since stem fragments propagate the plant. Biological control efforts using insect predators brought from the plants native region



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have been successful in the south. However, the insects are not cold tolerant and are not effective in Virginia.

Use of glyphosate and other herbicides have been shown to control the spread of alligatorweed. Glyphosate herbicides are recommended because they are bio-

For more information, contact the Department of Conservation and Recreation or the Virginia Native Plant Society.



217 Governor Street, Richmond, Virginia 23219
(804) 786-7951
<http://www.state.va.us/~dcr/vaher.html>



Virginia Native Plant Society
Blandly Experimental Farm
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degradable. However, glyphosate is a nonselective systemic herbicide that affects all green vegetation. To be safe and effective herbicide use requires careful knowledge of the chemicals, appropriate concentrations, and the effective method and timing of their application. For more information on native plant conservation, contact the Virginia Native Plant Society at the address below. For information on Virginia's natural areas and natural heritage resources, contact the Virginia Department of Conservation and Recreation's

Division of Natural Heritage (see address below).

Illustration from *Common Weeds of the United States*, by the United States Department of Agriculture, Dover Publications. Used with permission.

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Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

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