

INVASIVE PLANTS OF OHIO

Fact Sheet 11

Narrow-leaved and Hybrid Cattail

Typha angustifolia, T. x glauca



DESCRIPTION:

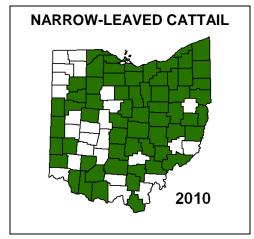
Narrow-leaved cattail is an introduced species which hybridizes with the native common cattail (T. latifolia), shown at right in the photo. The hybrid produced is also an invasive, T. x glauca. All three aquatic/wetland perennials may grow to a height of 10 feet and produce a velvety brown spike of flowers. The hybrid and narrow-leaved cattail flower spikes have a gap of 1 to 4 inches between the male and female flowers, while there

is no gap between the flowers of the native cattail. The leaves originate at the base of the stem and spread outward as they rise into the air. The invasive species and its hybrid have leaves that are ¼ to ¾ inches wide; the native cattail leaves are ½ to 1 inch. Below ground, starchy rhizomes anchor the plant to the soil. If the plants are growing in a colony, their rhizomes may become intertwined and form a dense mat.

Narrow-leaved cattail is believed to have been introduced to the Atlantic seaboard from the dry ballast of European ships. It has spread westward and occurs throughout much of the United States. The hybrid cattail may occur wherever both the native and the narrow-leaved species are present. All three taxa are found throughout Ohio. The native cattail's frequency and distribution is shrinking due to the spread of narrow-leaved and hybrid cattails.

HABITAT:

Cattails can be found in damp soil or shallow water where sufficient nutrients are available. They are commonly found along expressways, in artificial ditches and shallow ponds, at the edges of calm waters, in consistently damp patches of rural and suburban yards, in marshes as well as brackish and polluted waters to a depth nearing 3 feet. These taxa also invade fens, wet meadows, wet prairies, and beach swales.

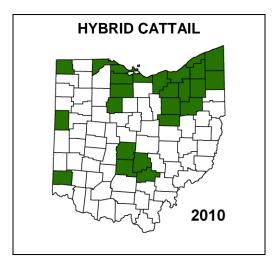


INVASIVE CHARACTERISTICS:

Narrow-leaved and hybrid cattail establish dense stands and may be allelopathic, producing chemicals which discourage growth of other plants. Cattails reproduce both vegetatively by rhizomes and sexually through massive amounts of seeds. The flower head of the parent plant can produce 250,000 seeds, which are wind-dispersed. Seeds may remain viable in the seed bank for up to 100 years. Cattail seeds prefer freshwater, and will not germinate unless saturated in at least 1/2 an inch of water.

CONTROL:

Mechanical: Manipulation of water levels can kill cattails by inhibiting airflow from the cattail shoots to the roots. Removing dead leaves and submerging the shoots in early spring will eliminate gas diffusion and will eventually "suffocate" the plant. It is critical to remember that even if dead leaves from the previous year are completely removed, aerobic conditions will be restored to the rhizome as soon as the new growing shoot penetrates the water surface. Even if water levels are sustained at only a few inches above the tops of the growing shoots, oxygen is prevented from reaching the rhizomes. Burning and disking are not effective for these species due to the extensive rhizomes.



<u>Chemical</u>: Foliar application of systemic herbicides such as Accord, Rodeo, Glypro, AquaNeat, and Habitat/Polaris can be very effective. A non-ionic surfactant should be added to the herbicide in wet areas. Herbicides can be applied aerially, using low and high volume spraying, and hand-wicking for smaller populations or those mixed with native wetland vegetation (to minimize treatment of non-target species). Treatment in late summer or early fall is most effective. Re-treatments are usually necessary due to the extensive rhizome system.

<u>Biological</u>: Population levels of ten muskrats per acre, when combined with high spring-time water levels, can nearly eliminate the emergence of cattails within a span of two years. Water levels in the range of four to five feet also favor the wintertime survival of muskrats in flooded areas. Grazing on seedlings and young cattails without extensive rhizomes can reduce the stem density of the colony. For mature plants, grazing combined with water-level management reduces survival rates.

Credits and additional information:

Plant Conservation Alliance-Alien Plant Working Group Ohio Department of Natural Resources, www.ohiodnr.gov The Nature Conservancy, Ohio Chapter Wisconsin DNR, www.dnr.wi.gov OIPC website, www.oipc.info

Note: Maps of species' ranges are based on records as of 2010.