

Hybrid Cattails

(*Typha x glauca*)

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Fun Fact:

An emergent plant is a plant that grows with roots in standing water and its flowering part above the water.



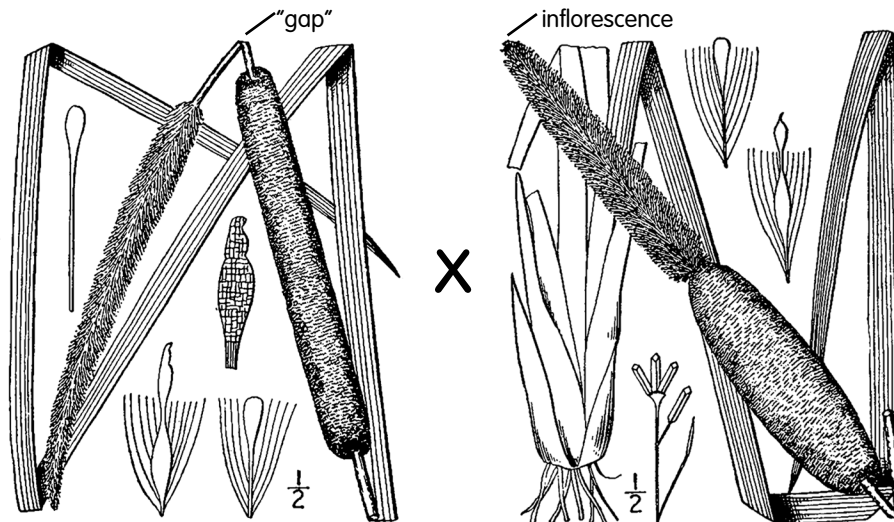
Photo of hybrid cattails on the Erie Canal
by Matt Distler

What are hybrid cattails?

Hybrid cattails are tall, emergent plants with long flowering heads, or inflorescences. The “gap” between the long **involucres** is a visual way to sort the hybrid and parental species. Parental species have either a large gap or no gap, while hybrid cattails have a small gap.

Hybrids occur when two different species combine to create a new species. Hybrid cattail is a combination of native broadleaf cattail (native to the Great Lakes region) and the non-native narrowleaf cattail. Hybrids often display a combination of traits from both parent species, although new characteristics may develop as well. Some hybrids are much better adapted to their surroundings than their parent species and are often able to grow in places where the parent species could not. This is true with hybrid cattails, which can survive deeper water and longer periods of flooding better than its parents.

Hybrid cattails are like many other hybrids; they are less able to reproduce from seeds than parental species. This may seem like a problem for most plants, but not hybrid cattails. Clones are produced from a continuously expanding root system that can result in thick stands of hybrid cattails.



Typha angustifolia, narrowleaf cattail

Typha latifolia, broadleaf cattail

Hybrid Cattails



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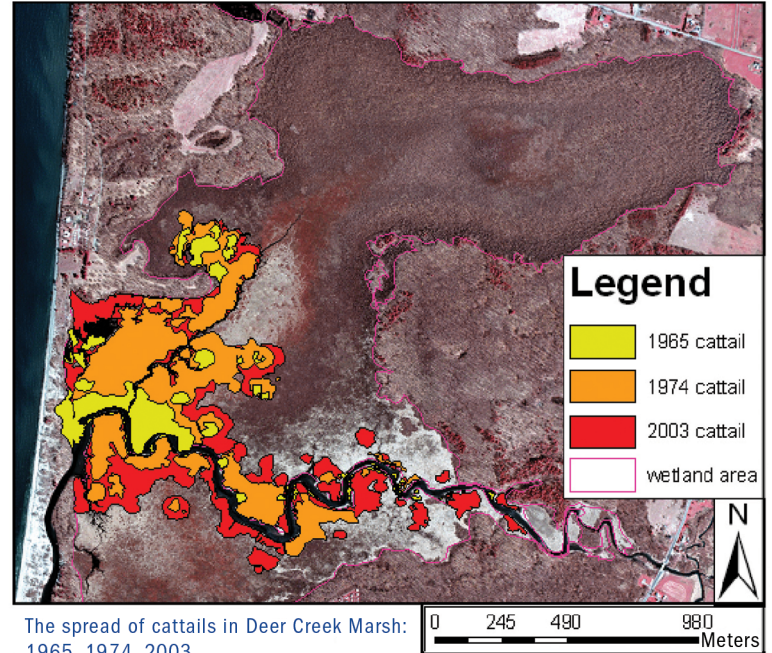
Where do hybrid cattails live?

Hybrid cattails are found in the freshwater wetlands of the Great Lakes, like the ones protected by the eastern Lake Ontario sand dunes. They are also found in brackish wetlands, which is where fresh and salt water mix such as in the Hudson River estuary. Hybrid cattails favor disturbed or **eutrophic** (nutrient rich) wetlands.

Illustration courtesy of Matt Distler

The story of hybrid cattails

There is growing evidence that hybrid cattails are especially aggressive in Lake Ontario wetlands. Since the damming of the St. Lawrence River in 1960, the water levels of Lake Ontario wetlands have not varied much (fewer high highs and low lows). In past centuries, occasional floods and droughts would allow other species to sprout from seeds that were buried beneath the wetland. That natural cycle promoted species diversity in wetlands. Analysis of aerial photos from the last half century (right) shows how these cattails have spread in an eastern Lake Ontario wetland (Deer Creek Marsh), as they have in other Great Lakes wetlands.



Why should we care?

Where hybrid cattails grow, they create a **monoculture**, which literally means “one culture.” Their dense live stems and thick layers of dead stems shade out other species of plants, including rare and endangered wetland plants. As these cattails spread to new areas, they lower the biodiversity of eastern Lake Ontario wetlands. For this reason, researchers are investigating ways to manage this plant and stop its invasion into diverse wetlands.

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