

MIDWEST CATTAIL DEEP MARSH

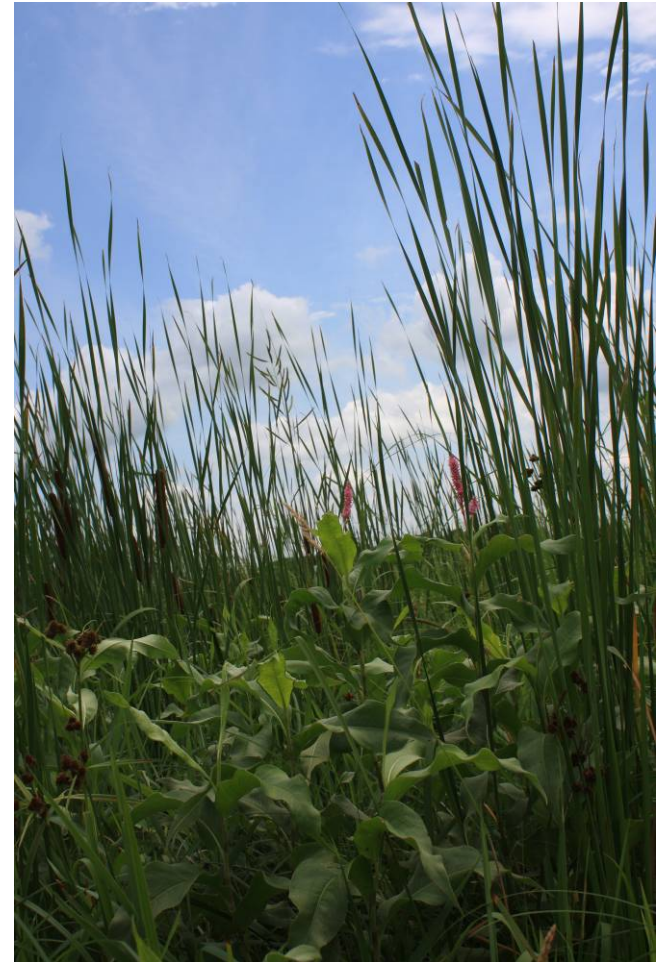
Site Characteristics: this community occurs in glacial potholes, river valleys, ponds, or on lake plains. This community forms along lake or pond margins, slow-moving ditches, in shallow basins, adjacent to stream or river channels in wet mud, oxbows, and occasionally in river backwaters. They are characterized by continuous inundation (semipermanent) and are considered a deep marsh. Water depth averages 12 to 24 inches, ranging from several inches to more than 3 feet for a significant part of the growing season. Seasonal flooding during winter and spring or flooding during heavy rains help maintain these marshes by causing water exchange which replenishes freshwater and circulates nutrients and organic debris. Soils which support this community can be mineral or organic but are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Soils are characterized by accumulations of organic matter over deposits of fine silt and clay, or loams, sandy loams, or coarse sand. Lacustrine examples of these marshes typically have a muck-bottom zone bordering the shoreline, where cattails are rooted in the bottom substrate, and a floating mat zone, where the roots grow suspended in a buoyant peaty mat.

Vegetation Characteristics: Stands may vary from a mosaic of emergents, submergents, and floating-leaved plants interspersed with areas of open water to dense stands of emergents in response to water depth, water chemistry, and natural forces. This community is dominated (30-80% cover) by perennial, coarse-leaved graminoid vegetation, although substantial areas of open water may occur. The vegetation may be dominated by relatively pure stands of either Common Cattail or Narrowleaf Cattail or both, and many associates could occur. Narrowleaf Cattail can grow in deeper water compared to Common Cattail, although both species reach maximum growth at a water depth of 50 cm. Forb cover is sparse, with 10-25% cover.

Range:

Conservation Status: G5 – Secure

Management Considerations: Many of the presettlement occurrences of this alliance have been drained and converted to cropland or destroyed by siltation, which greatly accelerates the natural successional process from shallow inundation to moist soil. This community may be a semi-natural type resulting from human disturbance to wetlands. Cattail species can colonize areas recently exposed by either natural or human causes. Pure Cattail stands, depending on site conditions, are perceived as degraded examples of this community, with Narrowleaf Cattail thought to be more typical of undisturbed marshes. Narrowleaf Cattail occupies inundated and disturbed grounds and can tolerate deeper water and higher alkalinity levels than Common Cattail. Cattail species are prolific seed producers, spreading rapidly to become the early colonizers of wet mineral soil and will persist under wet conditions. Roots



Iowa NRCS Plant Community Description

This community description is a compilation of the Community Association and its over-riding Community Alliance descriptions as provided by NatureServe (www.natureserve.org/explorer). Where necessary, community descriptions were adapted as recommended by Iowa plant community experts.

6/13/2013

and lower stems are well-adapted to prolonged submergence, but periods of draw-down are required for seed germination to occur. Purple Loosestrife is an aggressive exotic species that threatens this vegetation type in the Midwest. These are important wetland communities for many species of birds and waterfowl.

MIDWEST CATTAIL DEEP MARSH						
SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
<i>Asclepias incarnata</i>	Swamp milkweed	Herbaceous Layer	P-FORB	4	76800	
<i>Carex aquatilis</i>	Water sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	7	795776	
<i>Carex pellita</i>	Wooly sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	4	448000	
<i>Carex rostrata</i>	Northwest Territory sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	8	160000	
<i>Eleocharis</i> spp.	Spikerush	Herbaceous Layer	SEDGE, COOL SEASON			
<i>Epilobium ciliatum</i>	Northern willow herb	Herbaceous Layer	P-FORB	3	960000	
<i>Glyceria</i> spp.	Mannagrass	Herbaceous Layer	P-GRASS, COOL SEASON			
<i>Hibiscus laevis</i>	Halberd-leaved rose mallow	Herbaceous Layer	P-FORB	6	44800	
<i>Impatiens capensis</i>	Spotted touch-me-not	Herbaceous Layer	A-FORB	3	64000	
<i>Juncus</i> spp.	True Rush	Herbaceous Layer	P-SEDGE, COOL SEASON			
<i>Lemna minor</i>	Duckweed	Floating-Leaved	A-FORB	3		
<i>Mentha arvensis</i>	Wild mint	Herbaceous Layer	P-FORB	4	4800000	
<i>Polygonum amphibium</i>	Water smartweed	Herbaceous Layer	P-FORB	3	125000	
<i>Sagittaria latifolia</i>	Common arrowhead	Herbaceous Layer	P-FORB	4	128000	
<i>Schoenoplectus acutus</i>	Hard-stemmed bulrush	Herbaceous Layer	P-SEDGE, COOL SEASON	4	206400	
<i>Schoenoplectus americanus/pungens</i>	Threesquare	Herbaceous Layer	P-SEDGE, COOL SEASON	7	192000	
<i>Scutellaria lateriflora</i>	Mad-dog skullcap	Herbaceous Layer	P-FORB	6	2720000	
<i>Sparganium eurycarpum</i>	Common bur reed	Herbaceous Layer	P-FORB	6	8000	
<i>Thelypteris palustris</i>	Marsh fern	Herbaceous Layer	FERN	6		
<i>Typha angustifolia</i>	Narrow-leaved cattail	Herbaceous Layer, Dominant	P-FORB	1	2267962	
<i>Typha latifolia</i>	Common cattail	Herbaceous Layer, Dominant	P-FORB	1	7559873	
<i>Verbena hastata</i>	Blue vervain	Herbaceous Layer	P-FORB	3	1488000	

Iowa NRCS Plant Community Description

This community description is a compilation of the Community Association and it's over-riding Community Alliance descriptions as provided by NatureServe (www.natureserve.org/explorer). Where necessary, community descriptions were adapted as recommended by Iowa plant community experts.

6/13/2013