## Central Tallgrass Fen

*Site Characteristics:* This seepage fen occurs in saturated areas on mid to low slopes of hillsides and stream terraces. The soils are classified as hydric or show evidence of low oxygen availability during the growing season, are continually saturated to the surface, have a water table near the surface, and may be temporarily flooded at some point during the growing season. The soils are deep peat (0.5-1.5 m) or muck often mixed with sand. The groundwater of these fens is moderately (pH 6.0-6.9) to strongly (pH 7.0-8.4) minerotrophic and subsurface recharge may occur through localized artesian conditions. The peat often creates uplifted mounds and mounded groundwater discharge zones are common features of these fens.

*Vegetation Characteristics:* Vegetation zonation is often conspicuous and related to hydrologic regime and species composition is variable between sites and is likely related to factors such as depth and composition of organic soils, water chemistry, and level of disturbance. The vegetation consists of very dense stands of hydrophytic graminoids and forbs between 0.5 and 1 m tall. Woolly sedge, true rush species (*Juncus spp.*), and softstem bulrush dominate this community. Other herbaceous species include riverbank sedge, porcupine sedge, prairie star sedge, three-way sedge, bottlebrush sedge, dark green bulrush, sensitive fern, marsh fern, white turtlehead, boneset, and swamp milkweed. Shrubs (primarily willow species) are occasionally present.

## Range:

Conservation Status: G1 - Critically Imperiled

*Management Considerations:* Many sites are threatened by ditching, herbicide sprays, and grazing. Loss of artesian flow can occur from off-site development.

## 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

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SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
Asclepias incarnata	Swamp milkweed	Herbaceous Layer	P-FORB	4	76,800.00	
Carex emoryi	Riverbank sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	6		
Carex hystericina	Porcupine sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	5	480,000.00	
Carex interior	Prairie star sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	7	624,000.00	
Carex lurida	Bottlebrush sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	5	192,000.00	SC
Carex pellita	Wooly sedge	Herbaceous Layer, Dominant	P-SEDGE, COOL SEASON	4	448,000.00	
Carex sterilis	Fen star sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	10	1,040,000.00	SC
Chelone glabra	White turtlehead	Herbaceous Layer	P-FORB	8	1,472,000.00	
Cicuta maculata	Water hemlock	Herbaceous Layer	B-FORB	7	192,000.00	
Dulichium arundinaceum	Three-way sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	9	624,000.00	
Eleocharis spp.	Spikerush	Herbaceous Layer	SEDGE, COOL SEASON			
Eupatorium maculatum	Spotted Joe-pye-weed	Herbaceous Layer	P-FORB	5	1,520,000.00	
Eupatorium perfoliatum	Boneset	Herbaceous Layer	P-FORB	6	2,560,000.00	
Juncus spp.	True Rush	Herbaceous Layer, Dominant	P-SEDGE, COOL SEASON			
Leersia oryzoides	Rice cut-grass	Herbaceous Layer	P-GRASS, COOL SEASON	2	544,000.00	
Lycopus americanus	Water horehound	Herbaceous Layer	P-FORB	4	2,080,000.00	
Onoclea sensibilis	Sensitive fern	Herbaceous Layer	FERN	6		
Salix discolor	Pussy willow	Shrub Layer	SHRUB	3	1,417,476.00	
Salix spp.	Willow	Shrub Layer				
Schoenoplectus tabernaemontan	Soft-stemmed bulrush	Herbaceous Layer, Dominant	P-SEDGE, COOL SEASON	3	496,000.00	
Scirpus atrovirens	Dark green bulrush	Herbaceous Layer	P-SEDGE, COOL SEASON	1	7,360,000.00	
Scirpus or Schoenoplectus spp.	Bulrush	Herbaceous Layer, Dominant	P-SEDGE, COOL SEASON			
Thelypteris palustris	Marsh fern	Herbaceous Layer	FERN	6		
Typha latifolia	Common cattail	Herbaceous Layer	P-FORB	1	7,559,873.00	
Viola nephrophylla	Bog violet	Herbaceous Layer	P-FORB	8		

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