

Green Ash – Elm Species – Common Hackberry Forest

Site Characteristics: This community is found along upper floodplain terraces of large and small alluvial or brownwater rivers; on low ridges, flats, and sloughs of first bottoms; terrace flats and sloughs; and in upland ravine bottoms. Soils are typically base-rich alluvial and moderately well-drained to poorly drained. This community is typically found between a wetter or earlier successional forest on the river side and upland forest or prairie communities on the landward side.

Vegetation Characteristics: This forest has an open to closed tree canopy. Species composition differs somewhat with geography and topographic position. The overstory is composed of deciduous trees with an uneven canopy. Dominant species in these forests are some combination of Green Ash, Hackberry, and American Elm. Characteristic canopy and subcanopy species include Overcup Oak, Bur Oak, Slippery Elm, Persimmon, Honey Locust, Red Maple, Box Elder, Silver Maple, Sycamore, Cottonwood, Black Willow, Pecan, Red Mulberry, Blue Beech, and Pawpaw. Occasionally, small occurrences of this community may be composed of almost pure Green Ash particularly on moist flats or in shallow sloughs; whereas occurrences on fronts are more likely to be dominated by Hackberry.

Common shrubs include Rough-leaved Dogwood, Blue Beech, Gray Dogwood, Red Mulberry, Hawthorn spp., Willow spp., and Red-osier Dogwood. Vines are especially common in these forests, and may include Poison Ivy, Riverbank Grape, Virginia Creeper, Green Brier, and Rydberg's Poison Ivy.

The forb and vine strata are abundant, especially in canopy gaps. Composition may vary somewhat with flooding regime and geographic location. Common herbaceous graminoid species include Virginia Wild Rye, Gray's Sedge, Hop Sedge, Bent Bracted Sedge, Great Bladder Sedge, as well as many other Sedge species. Common forbs in the herbaceous layer include Clearweed, Stiff Bedstraw, Butterweed, Violet spp., Swamp Milkweed, Spotted Joe-pye-weed, Boneset, Touch-me-not spp., and Wood Nettle. Ferns may also be present.

Range: This is a very widely distributed community.

Conservation Status: G4 - Apparently Secure

Management Considerations: In the leveed Mississippi River Alluvial Plain, this community typically succeeds from Black Willow Riverfront Forest away from the levee; from Sycamore - American Elm Bottomland Forest following repeated disturbance; and from Mixed Bottomland Oak Forest following repeated selective harvests. American Elm is abundant in some stands, but Dutch elm disease has reduced its presence across most of its range. In addition, due to this community's high ash component, the spread of the Emerald Ash Borer is a significant threat to this community.

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.

9/30/2009

FOREST, CENTRAL GREEN ASH - ELM - HACKBERRY

SCIENTIFIC NAME	COMMON NAME	STRATA	FUNCTIONAL GROUP	IA CofC	SEEDS/LB	STATE STATUS
Acer negundo	Box elder	Sub-canopy	TREE	0	11,360	
Acer rubrum	Red maple	Sub-canopy	TREE	*	22,720	
Acer saccharinum	Silver maple	Canopy, Associate	TREE	1	1,440	
Asclepias incarnata	Swamp milkweed	Herbaceous Layer	P-FORB	4	76,800	
Asimina triloba	Pawpaw	Sub-canopy	SHRUB	6	697	SC
Carex grayi	Common bur sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	7	19,200	
Carex intumescens	Greater Bladder Sedge	Herbaceous Layer	P-SEDGE, COOL SEASON			
Carex lupulina	Common hop sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	6	52,800	
Carex retroflexa	Bent bracted sedge	Herbaceous Layer	P-SEDGE, COOL SEASON	5		SC
Carex spp.	True Sedges	Herbaceous Layer	SEDGE, COOL SEASON			
Carpinus caroliniana	Blue beech	Sub-canopy	TREE	9	30,000	
Carya illinoensis	Pecan	Canopy, Associate	TREE	7	96	
Celtis occidentalis	Hackberry	Canopy, Dominant	TREE	2	96,000	
Cornus drummondii	Rough-leaved dogwood	Shrub Layer	SHRUB	6	15,700	
Cornus foemina	Gray dogwood	Shrub Layer	SHRUB	1	17,718	
Cornus sericea	Red-osier dogwood	Shrub Layer	SHRUB	7	18,400	
Diospyros virginiana	Persimmon	Sub-canopy	TREE	1	26,880	
Elymus virginicus	Virginia wild rye	Herbaceous Layer	P-GRASS, COOL SEASON	3	67,200	
Eupatorium maculatum	Spotted Joe-pye-weed	Herbaceous Layer	P-FORB	5	1,520,000	
Eupatorium perfoliatum	Boneset	Herbaceous Layer	P-FORB	6	2,560,000	
Fern spp.	Fern	Herbaceous Layer	FERN			
Fraxinus pennsylvanica lanceolata*	Green ash	Canopy, Dominant	TREE	1	14,320	
Galium aparine	Cleavers	Herbaceous Layer	A-FORB	1	500,000	
Galium tinctorium	Stiff bedstraw	Herbaceous Layer	P-FORB	7	500,000	
Geum canadense	White avens	Herbaceous Layer	P-FORB	2	400,000	
Gleditsia triacanthos	Honey locust	Sub-canopy	TREE, LEGUME	0	2,800	
Impatiens capensis	Spotted touch-me-not	Herbaceous Layer	A-FORB	3	64,000	
Impatiens pallida	Pale touch-me-not, jewel weed	Herbaceous Layer	A-FORB	5	25,600	
Impatiens spp.	Touch-me-not	Herbaceous Layer	A-FORB			
Juglans nigra	Black walnut	Canopy, Associate	TREE	4	40	
Laportea canadensis	Wood nettle	Herbaceous Layer	P-FORB	3	185,899	
Morus rubra	Red mulberry	Sub-canopy	TREE	4	344,667	
Packera glabella	Butterweed	Herbaceous Layer	A-FORB	*	450,000	SC

Iowa NRCS Plant Community Species Lists

Based on NatureServe Explorer Plant Community Alliances and Associations

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Parthenocissus vitacea	Woodbine	Vine Component	W-VINE	1		
Pilea pumila	Clearweed	Herbaceous Layer	A-FORB	3	273,413	
Platanus occidentalis	Sycamore	Canopy, Associate	TREE	5	192,000	
Populus deltoides	Cottonwood	Canopy, Dominant	TREE	1	425,000	
Quercus lyrata	Overcup oak	Canopy, Associate	TREE	10	140	
Quercus marilandica	Blackjack oak	Canopy, Associate	TREE	4	700	
Quercus muehlenbergii	Chinquapin oak	Canopy, Associate	TREE	7	400	
Ribes missouriense	Wild gooseberry	Shrub Layer	SHRUB	3	163,163	
Salix nigra	Black willow	Canopy, Associate	TREE	3	2,500,000	
Smilax tamnoides	Greenbrier	Vine Component	W-VINE	4	19,147	
Symphoricarpos occidentalis	Wolfberry, buckbrush	Shrub Layer	SHRUB	0	75,033	
Tilia americana	Basswood, American linden	Canopy, Associate	TREE	5	4,765	
Toxicodendron radicans	Poison ivy	Vine Component	W-VINE	0	30,442	
Toxicodendron rydbergii	Rydberg's poison ivy	Vine Component	SHRUB, W-VINE	0		
Ulmus americana	American elm	Canopy, Dominant	TREE	2	68,000	
Ulmus rubra	Red elm, slippery elm	Sub-canopy	TREE	2	41,000	
Viola spp.	Violet	Herbaceous Layer	P-FORB			
Vitis riparia	Riverbank grape	Vine Component	W-VINE	1	15,200	
Zanthoxylum americanum	Prickly ash	Shrub Layer	SHRUB	3	31,720	

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