MHs39 Southern Mesic Maple-Basswood Forest Pollinator Resources

Rich mesic hardwood forests on loamy soils derived from calcareous till or wind-deposited silt over bedrock. Present on sites that have been historically protected from fires on hummocky stagnation moraines, on till plains along rivers, and on middle or lower slopes of bedrock bluffs.

Examples of insect pollinators (and their associated host plants in parentheses) that use MHs39 include:

Bees:

Andrena uvulariae (Uvularia) Andrena geranii (Hydrophyllum virginianum) Lasioglossum lusorium (Onagraceae)

Butterflies:

Satyrium titus (Prunus) Papilio cresphontes (Zanthoxylum americanum) Satyrium caryaevorus (Carya cordiformis)

Moths:

Lithophane innominata (Acer saccharum)
Phyllonorycter lucetiella (Tilia americana)
Cucullia convexipennis (Solidago flexicaulis)



Andrena geranii (waterleaf mining bee) uses Hydrophyllum virginianum (Virginia waterleaf) as a host plant. Photo: Heather Holm



Satyrium caryaevorus (hickory hairstreak) uses Carya cordiformis (bitternut hickory) as a host plant. Photo: Bob Dunlap



MHs39 Southern Mesic Maple-Basswood Forest Pollinator Resources Table

MHs39 Class Factsheet. Based on 110 plots. November 2024





							• <5%	
Forbs	species frequency in NPC (%)	species cover (when present)	Compatibility	Longevity	Clonality	Principal Pollen Vector	Pollinator requirements	Pollination Index
Virginia waterleaf (Hydrophyllum virginianum)	85	•••	SC	Perennial	Present	insects	Somewhat specific insect	3
Bloodroot (Sanguinaria canadensis)	85	•	SC	Perennial	Present	insects	Early spring insect	3
Rugulose or Yellow violet (Viola canadensis or V. pubescens)	77	•	Varies	Perennial	Present	insects	Varies	Varies
Large-flowered bellwort (Uvularia grandiflora)	75	•	SI	Perennial	Present	insects	Early spring insect	5
Wild leek (Allium tricoccum)	74	•	SC	Perennial	Present	insects	Generalist	2
Blue cohosh (Caulophyllum thalictroides)	72	•	SC/SI	Perennial	Present	insects	Early spring insect	4
Early meadow-rue (Thalictrum dioicum)	67	•	SI	Perennial	Present	wind	Generalist	0
Cleavers (Galium aparine)	66	•	SC	Annual	Absent	insects	Early spring insect	5
Clayton's sweet cicely (Osmorhiza claytonii)	66	•	D	Perennial	Absent	insects	Generalist	5
Zigzag goldenrod (Solidago flexicaulis)	60	•	SI	Perennial	Present	insects	Generalist	4
Jack-in-the-pulpit (Arisaema triphyllum)	60	•	SI	Perennial	Present	insects	Early spring insect, Somewhat specific insect	5
Wood nettle (Laportea canadensis)	59	•••	UNK	Perennial	Present	wind	Generalist	0
Lady fern (Athyrium filix-femina)	55	•	SC	Perennial	Present	wind, water	Generalist	0
Common false Solomon's seal (Smilacina racemosa)	53	•	UNK	Perennial	Present	insects	Early spring insect	4
Wild ginger (Asarum canadense)	52	••	SC	Perennial	Present	insects	Early spring insect, Somewhat specific insect	3
Common enchanter's nightshade (Circaea lutetiana)	49	•	SC	Perennial	Present	insects	Generalist	2
Sharp-lobed hepatica (Anemone acutiloba)	47	•	SC	Perennial	Present	insects	Early spring insect	3
Maidenhair fern (Adiantum pedatum)	45	•	SC	Perennial	Present	wind, water	Generalist	0
Wood anemone (Anemone quinquefolia)	45	•	UNK	Perennial	Present	insects	Early spring insect	4
Erect, Smooth, or Illinois carrion-flower (Smilax spp.)*	44	•	D	Perennial	Present	insects	Somewhat specific insect	5
Dutchman's breeches (Dicentra cucullaria)	44	•	SI/sc	Perennial	Present	insects	Early spring insect, Somewhat specific insect	4
Rattlesnake fern (Botrychium virginianum)	41	•	SC	Perennial	Present	wind, water	Generalist	0
White avens (Geum canadense)	41	•	UNK	Perennial	Present	insects	Generalist	3
Kidney-leaved buttercup (Ranunculus abortivus)	40	•	SI	Perennial	Present	insects	Early spring insect	5
Honewort (Cryptotaenia canadensis)	40	•	SC	Perennial	Present	insects	Generalist	2
Stemless blue violets (Viola spp.)*	38	•	Varies	Perennial	Present	insects	Varies	Varies
Blue phlox (Phlox divaricata)	36	•	SI	Perennial	Weakly	insects	Early spring insect, Somewhat specific insect	5
Cut-leaved toothwort (Cardamine concatenata)	36	••	UNK	Perennial	Present	insects	Early spring insect	4
Wild geranium (Geranium maculatum)	35	•	SC	Perennial	Present	insects	Early spring insect	3
White trout lily (Erythronium albidum)	30	•••	SC	Perennial	Present	insects	Early spring insect	3
Red baneberry (Actaea rubra)	30	•	SC	Perennial	Present	insects	Early spring insect	3
Lopseed (Phryma leptostachya)	29	•	UNK	Perennial	Present	insects	Somewhat specific insect	4
Touch-me-not (Impatiens spp.)	28	•	SI/SC	Annual	Absent	insects	Somewhat specific insect	6
Drooping trillium (Trillium flexipes)	27	•	Α	Perennial	Present	insects	Early spring insect	3
Sweet-scented bedstraw (Galium triflorum)	26	•	UNK	Perennial	Present	insects	Generalist	3
Two-leaved miterwort (Mitella diphylla)	25	•	UNK	Perennial	Present	insects	Early spring insect	4
False rue anemone (Enemion biternatum)	25	••	SC	Perennial	Weakly	insects	Early spring insect	3

Nodding trillium (Trillium cernuum)	25	•	Α	Perennial	Present	insects	Early spring insect	3
Gregarious black snakeroot (Sanicula gregaria)	22	•	UNK	Perennial	Absent	insects	Generalist	4
Hairy Solomon's seal (Polygonatum pubescens)	22	•	UNK	Perennial	Present	insects	Somewhat specific insect	4
Grasses and Sedges								
Pennsylvania sedge (Carex pensylvanica)	34	•	SC	Perennial	Present	wind	Generalist	0
Starry sedge (Carex rosea)	27	•	UNK	Perennial	Present	wind	Generalist	0
Long-stalked sedge (Carex pedunculata)	27	•	SC	Perennial	Present	wind	Generalist	0
Bland sedge (Carex blanda)	26	•	UNK	Perennial	Present	wind	Generalist	0
Bottlebrush grass (Elymus hystrix)	25	•	UNK	Perennial	Absent	wind	Generalist	0
Climbing Plants								
Virginia creeper (Parthenocissus spp.)	50	•	SC	Perennial	Present	insects	Generalist	2
Canada moonseed (Menispermum canadense)	25	•	D	Perennial	Present	insects	Generalist	4
Shrubs								
Prickly gooseberry (Ribes cynosbati)	81	•	SI	Perennial	Present	insects	Generalist	4
Chokecherry (Prunus virginiana)	58	•	SI	Perennial	Present	insects	Early spring insect	5
Pagoda dogwood (Cornus alternifolia)	45	•	UNK	Perennial	Present	insects	Generalist	3
Prickly ash (Zanthoxylum americanum)	31	•	D	Perennial	Present	insects	Generalist	4
Missouri gooseberry (Ribes missouriense)	28	••	SI	Perennial	Present	insects	Generalist	4
Red-berried elder (Sambucus racemosa)	27	•	UNK	Perennial	Present	insects	Generalist	3
Tree Canopy								
Sugar maple	91	••••	D	Perennial	Absent	insects	Early spring insect	6
Basswood	90	•••	SI	Perennial	Absent	insects	Generalist	5
Northern red oak	55	•••	SI	Perennial	Present	wind	Generalist	0
Red elm	35	•••	Di	Perennial	Absent	wind	Generalist	0
American elm	35	••	Di	Perennial	Absent	wind	Generalist	0
Ironwood	35	•	UNK	Perennial	Present	wind	Generalist	0
Bitternut hickory	25	••	UNK	Perennial	Present	wind	Generalist	0
Black ash	25	•	D	Perennial	Absent	wind	Generalist	0
Green ash	16	••	D	Perennial	UNK	wind	Generalist	0
Blue beech	-	-	UNK	Perennial	Present	wind	Generalist	0
Tree Subcanopy								
Sugar maple	87	••••	D	Perennial	Absent	insects	Early spring insect	6
Basswood	46	•	SI	Perennial	Absent	insects	Generalist	5
Northern red oak	-	-	SI	Perennial	Present	wind	Generalist	0
Red elm	20	••	Di	Perennial	Absent	wind	Generalist	0
American elm	18	•	Di	Perennial	Absent	wind	Generalist	0
Ironwood	67	•••	UNK	Perennial	Present	wind	Generalist	0
Bitternut hickory			UNK	Perennial	Present	wind	Generalist	0
bitternut nickory	31	••	OIVIX					
Black ash	31 12	•	D	Perennial	Absent	wind	Generalist	0
								0 0

Tree Shrub Layer								
Sugar maple	88	•••	D	Perennial	Absent	insects	Early spring insect	6
Basswood	57	•	SI	Perennial	Absent	insects	Generalist	5
Northern red oak	37	•	SI	Perennial	Present	wind	Generalist	0
Red elm	33	••	Di	Perennial	Absent	wind	Generalist	0
American elm	22	•	Di	Perennial	Absent	wind	Generalist	0
Ironwood	39	•	UNK	Perennial	Present	wind	Generalist	0
Bitternut hickory	75	•	UNK	Perennial	Present	wind	Generalist	0
Black ash	18	•	D	Perennial	Absent	wind	Generalist	0
Green ash	28	•	D	Perennial	UNK	wind	Generalist	0
Blue beech	15	••	UNK	Perennial	Present	wind	Generalist	0

^{*} Erect, Smooth, or Illinois carrion-flower (Smilax ecirrata, S. herbacea, or S. illinoensis); Stemless blue violets (Viola sororia, V. nephrophylla, and similar Viola spp.)