

## MHn47 Northern Rich Mesic Hardwood Forest Pollinator Resources

Mesic hardwood forests on well-drained to somewhat poorly drained, rich loamy soils on glacial drift and till in areas of undulating to hummocky topography.

Examples of insect pollinators (and their associated host plants in parentheses) that use MHn47 include:

**Bees:**

*Andrena melanochroa* (Rosaceae)  
*Andrena persimulata* (Cornus [Swida])  
*Colletes simulans* (Solidago)

**Butterflies:**

*Euphyes dion* (Carex)  
*Oeneis macounii* (*Oryzopsis asperifolia*)  
*Polygonia progne* (Ribes)  
*Argynnis atlantis* (Viola)

**Moths:**

*Lithophane innominata* (*Acer saccharum*)  
*Dichomeris bilobella* (*Solidago flexicaulis*)  
*Christoneura fumiferana* (*Abies balsamea*)



*Colletes simulans* (spine-shouldered cellophane bee) uses *Solidago* (goldenrod) species as a host plant. Photo: Heather Holm

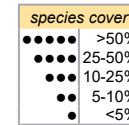


*Oeneis macounii* (Canada Arctic) uses *Oryzopsis asperifolia* (roughleaf ricegrass) as a host plant. Photo: Kyle Johnson

# MHn47 Northern Rich Mesic Hardwood Forest

## Pollinator Resources Table

MHn47 Class Factsheet. Based on 112 plots. November 2024



| Forbs  | species frequency in NPC (%) | species cover (when present) | Compatibility | Longevity | Clonality | Principal Pollen Vector | Pollinator requirements                       | Pollination Index |
|--|------------------------------|------------------------------|---------------|-----------|-----------|-------------------------|---|-------------------|
| Lady fern ( <i>Athyrium filix-femina</i> )                                   | 91                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Clayton's sweet cicely ( <i>Osmorhiza claytonii</i> )                        | 84                           | ●                            | D             | Perennial | Absent    | insects                 | Generalist                                    | 5                 |
| Hairy Solomon's seal ( <i>Polygonatum pubescens</i> )                        | 79                           | ●                            | UNK           | Perennial | Present   | insects                 | Somewhat specific insect                      | 4                 |
| Wild sarsaparilla ( <i>Aralia nudicaulis</i> )                               | 78                           | ●●                           | D             | Perennial | Present   | insects                 | Generalist                                    | 4                 |
| Rose twistedstalk ( <i>Streptopus roseus</i> )                               | 78                           | ●                            | UNK           | Perennial | Present   | insects                 | Early spring insect                           | 4                 |
| Canada mayflower ( <i>Maianthemum canadense</i> )                            | 74                           | ●                            | SI            | Perennial | Present   | insects                 | Early spring insect                           | 5                 |
| Rattlesnake fern ( <i>Botrychium virginianum</i> )                           | 74                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Jack-in-the-pulpit ( <i>Arisaema triphyllum</i> )                            | 73                           | ●                            | SI            | Perennial | Present   | insects                 | Early spring insect, Somewhat specific insect | 5                 |
| Large-flowered bellwort ( <i>Uvularia grandiflora</i> )                      | 70                           | ●●                           | SI            | Perennial | Present   | insects                 | Early spring insect                           | 5                 |
| Large-leaved aster ( <i>Aster macrophyllus</i> )                             | 69                           | ●                            | A             | Perennial | Present   | insects                 | Generalist                                    | 2                 |
| Rugulose or Yellow violet ( <i>Viola canadensis</i> or <i>V. pubescens</i> ) | 67                           | ●                            | Varies        | Perennial | Present   | insects                 | Varies  | Varies            |
| Wood anemone ( <i>Anemone quinquefolia</i> )                                 | 65                           | ●                            | UNK           | Perennial | Present   | insects                 | Early spring insect                           | 4                 |
| Sweet-scented bedstraw ( <i>Galium triflorum</i> )                           | 61                           | ●                            | UNK           | Perennial | Present   | insects                 | Generalist                                    | 3                 |
| American spikenard ( <i>Aralia racemosa</i> )                                | 60                           | ●                            | UNK           | Perennial | Present   | insects                 | Generalist                                    | 3                 |
| Bluebead lily ( <i>Clintonia borealis</i> )                                  | 56                           | ●                            | SI            | Perennial | Present   | insects                 | Generalist                                    | 4                 |
| Starflower ( <i>Trientalis borealis</i> )                                    | 54                           | ●                            | SI/sc         | Perennial | Present   | insects                 | Generalist                                    | 3                 |
| Wild ginger ( <i>Asarum canadense</i> )                                      | 53                           | ●                            | SC            | Perennial | Present   | insects                 | Early spring insect, Somewhat specific insect | 3                 |
| Spinulose shield fern or Glandular wood fern*                                | 51                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Red baneberry ( <i>Actaea rubra</i> )  | 48                           | ●                            | SC            | Perennial | Present   | insects                 | Early spring insect                           | 3                 |
| Zigzag goldenrod ( <i>Solidago flexicaulis</i> )                             | 44                           | ●                            | SI            | Perennial | Present   | insects                 | Generalist                                    | 4                 |
| Blue cohosh ( <i>Caulophyllum thalictroides</i> )                            | 44                           | ●                            | SC/SI         | Perennial | Present   | insects                 | Early spring insect                           | 4                 |
| Common oak fern ( <i>Gymnocarpium dryopteris</i> )                           | 43                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Round-lobed hepatica ( <i>Anemone americana</i> )                            | 43                           | ●                            | SC            | Perennial | Present   | insects                 | Early spring insect                           | 3                 |
| Dwarf raspberry ( <i>Rubus pubescens</i> )                                   | 40                           | ●                            | SC            | Perennial | Present   | insects                 | Generalist                                    | 2                 |
| Nodding trillium ( <i>Trillium cernuum</i> )                                 | 39                           | ●                            | A             | Perennial | Present   | insects                 | Early spring insect                           | 3                 |
| Common false Solomon's seal ( <i>Smilacina racemosa</i> )                    | 38                           | ●                            | UNK           | Perennial | Present   | insects                 | Early spring insect                           | 4                 |
| Groundpine ( <i>Lycopodium dendroideum</i> or <i>L. hickeyi</i> )            | 31                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Pale bellwort ( <i>Uvularia sessilifolia</i> )                               | 30                           | ●                            | SI            | Perennial | Present   | insects                 | Early spring insect                           | 5                 |
| Bloodroot ( <i>Sanguinaria canadensis</i> )                                  | 29                           | ●                            | SC            | Perennial | Present   | insects                 | Early spring insect                           | 3                 |
| Early meadow-rue ( <i>Thalictrum dioicum</i> )                               | 27                           | ●                            | SI            | Perennial | Present   | wind                    | Generalist                                    | 0                 |
| Alpine enchanter's nightshade ( <i>Circaea alpina</i> )                      | 26                           | ●                            | SC            | Perennial | Present   | insects                 | Generalist                                    | 2                 |
| Ostrich fern ( <i>Matteuccia struthiopteris</i> )                            | 24                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| Wild leek ( <i>Allium tricoccum</i> )  | 23                           | ●                            | SC            | Perennial | Present   | insects                 | Generalist                                    | 2                 |
| Maryland black snakeroot ( <i>Sanicula marilandica</i> )                     | 23                           | ●                            | UNK           | Perennial | Absent    | insects                 | Generalist                                    | 4                 |
| Meadow horsetail ( <i>Equisetum pratense</i> )                               | 21                           | ●                            | SC            | Perennial | Present   | wind, water             | Generalist                                    | 0                 |
| <b>Grasses and Sedges</b>  |                              |                              |               |           |           |                         |   |                   |
| Pennsylvania sedge ( <i>Carex pensylvanica</i> )                             | 76                           | ●●●                          | SC            | Perennial | Present   | wind                    | Generalist                                    | 0                 |

|  |    |      |     |           |         |         |                          |   |
|--|----|------|-----|-----------|---------|---------|--------------------------|---|
| Mountain rice grass ( <i>Oryzopsis asperifolia</i> ) | 74 | ●    | UNK | Perennial | Absent  | wind    | Generalist               | 0 |
| Long-stalked sedge ( <i>Carex pedunculata</i> )      | 64 | ●●   | SC  | Perennial | Present | wind    | Generalist               | 0 |
| Dewey's sedge ( <i>Carex deweyana</i> )              | 33 | ●    | UNK | Perennial | Present | wind    | Generalist               | 0 |
| Drooping wood sedge ( <i>Carex arctata</i> )         | 32 | ●    | SC  | Perennial | Present | wind    | Generalist               | 0 |
| Bearded shorthusk ( <i>Brachyelytrum erectum</i> )   | 27 | ●    | UNK | Perennial | Present | wind    | Generalist               | 0 |
| <b>Shrubs</b>  |    |      |     |           |         |         |                          |   |
| Beaked hazelnut ( <i>Corylus cornuta</i> )           | 69 | ●●   | Di  | Perennial | Present | wind    | Generalist               | 0 |
| Fly honeysuckle ( <i>Lonicera canadensis</i> )       | 69 | ●    | SC  | Perennial | Absent  | insects | Somewhat specific insect | 4 |
| Chokecherry ( <i>Prunus virginiana</i> )             | 67 | ●    | SI  | Perennial | Present | insects | Early spring insect      | 5 |
| Mountain maple ( <i>Acer spicatum</i> )              | 63 | ●●   | SI  | Perennial | Absent  | insects | Early spring insect      | 6 |
| Prickly gooseberry ( <i>Ribes cynosbati</i> )        | 51 | ●    | SI  | Perennial | Present | insects | Generalist               | 4 |
| Pagoda dogwood ( <i>Cornus alternifolia</i> )        | 49 | ●    | UNK | Perennial | Present | insects | Generalist               | 3 |
| Leatherwood ( <i>Dirca palustris</i> )               | 42 | ●    | SC  | Perennial | Absent  | insects | Somewhat specific insect | 4 |
| Swamp red currant ( <i>Ribes triste</i> )            | 21 | ●    | SI  | Perennial | Present | insects | Generalist               | 4 |
| <b>Tree Canopy</b>                                   |    |      |     |           |         |         |                          |   |
| Sugar maple  | 98 | ●●●● | D   | Perennial | Absent  | insects | Early spring insect      | 6 |
| Basswood   | 93 | ●●●  | SI  | Perennial | Absent  | insects | Generalist               | 5 |
| Yellow birch   | 43 | ●●●  | Di  | Perennial | Present | wind    | Generalist               | 0 |
| Paper birch  | 24 | ●●   | Di  | Perennial | Present | wind    | Generalist               | 0 |
| Northern red oak                                     | 19 | ●●   | SI  | Perennial | Present | wind    | Generalist               | 0 |
| Black ash  | 19 | ●●   | D   | Perennial | Absent  | wind    | Generalist               | 0 |
| Ironwood   | 18 | ●●   | UNK | Perennial | Present | wind    | Generalist               | 0 |
| White cedar  | 10 | ●●   | UNK | Perennial | Absent  | wind    | Generalist               | 0 |
| Red maple  | 9  | ●●   | D   | Perennial | Absent  | insects | Early spring insect      | 6 |
| Green ash  | 9  | ●●   | D   | Perennial | UNK     | wind    | Generalist               | 0 |
| Balsam fir   | 6  | ●    | UNK | Perennial | Absent  | wind    | Generalist               | 0 |
| Quaking aspen  | 5  | ●●   | D   | Perennial | Present | wind    | Generalist               | 0 |
| White pine   | 4  | ●●●  | SI  | Perennial | Absent  | wind    | Generalist               | 0 |
| American elm   | 4  | ●    | Di  | Perennial | Absent  | wind    | Generalist               | 0 |
| <b>Tree Subcanopy</b>                                |    |      |     |           |         |         |                          |   |
| Sugar maple  | 96 | ●●●● | D   | Perennial | Absent  | insects | Early spring insect      | 6 |
| Basswood   | 54 | ●●   | SI  | Perennial | Absent  | insects | Generalist               | 5 |
| Yellow birch   | 15 | ●●   | Di  | Perennial | Present | wind    | Generalist               | 0 |
| Paper birch  | 6  | ●    | Di  | Perennial | Present | wind    | Generalist               | 0 |
| Northern red oak                                     | 8  | ●    | SI  | Perennial | Present | wind    | Generalist               | 0 |
| Black ash  | 12 | ●    | D   | Perennial | Absent  | wind    | Generalist               | 0 |
| Ironwood   | 54 | ●●●  | UNK | Perennial | Present | wind    | Generalist               | 0 |
| White cedar  | 4  | ●    | UNK | Perennial | Absent  | wind    | Generalist               | 0 |
| Red maple  | 11 | ●    | D   | Perennial | Absent  | insects | Early spring insect      | 6 |
| Green ash  | 4  | ●    | D   | Perennial | UNK     | wind    | Generalist               | 0 |

|                         |    |      |     |           |         |         |                     |   |
|-------------------------|----|------|-----|-----------|---------|---------|---------------------|---|
| Balsam fir              | 10 | •    | UNK | Perennial | Absent  | wind    | Generalist          | 0 |
| Quaking aspen           | -  | -    | D   | Perennial | Present | wind    | Generalist          | 0 |
| White pine              | -  | -    | SI  | Perennial | Absent  | wind    | Generalist          | 0 |
| American elm            | 9  | ••   | Di  | Perennial | Absent  | wind    | Generalist          | 0 |
| <b>Tree Shrub Layer</b> |    |      |     |           |         |         |                     |   |
| Sugar maple             | 97 | •••• | D   | Perennial | Absent  | insects | Early spring insect | 6 |
| Basswood                | 78 | •    | SI  | Perennial | Absent  | insects | Generalist          | 5 |
| Yellow birch            | 13 | •    | Di  | Perennial | Present | wind    | Generalist          | 0 |
| Paper birch             | 3  | •    | Di  | Perennial | Present | wind    | Generalist          | 0 |
| Northern red oak        | 48 | •    | SI  | Perennial | Present | wind    | Generalist          | 0 |
| Black ash               | 41 | •    | D   | Perennial | Absent  | wind    | Generalist          | 0 |
| Ironwood                | 67 | ••   | UNK | Perennial | Present | wind    | Generalist          | 0 |
| White cedar             | -  | -    | UNK | Perennial | Absent  | wind    | Generalist          | 0 |
| Red maple               | 19 | •    | D   | Perennial | Absent  | insects | Early spring insect | 6 |
| Green ash               | 13 | •    | D   | Perennial | UNK     | wind    | Generalist          | 0 |
| Balsam fir              | 47 | •    | UNK | Perennial | Absent  | wind    | Generalist          | 0 |
| Quaking aspen           | 16 | •    | D   | Perennial | Present | wind    | Generalist          | 0 |
| White pine              | 4  | •    | SI  | Perennial | Absent  | wind    | Generalist          | 0 |
| American elm            | 38 | ••   | Di  | Perennial | Absent  | wind    | Generalist          | 0 |

\* Spinulose shield fern or Glandular wood fern (*Dryopteris carthusiana* or *D. intermedia*)