

FDc12 Central Poor Dry Pine Woodland Pollinator Resources

Dry jack pine woodlands on level, sandy lacustrine and outwash deposits in northcentral Minnesota. Crown fires and surface fires were common historically.

Examples of insect pollinators (and their associated host plants in parentheses) that use FDc12 include:

Bees:

Andrena melanochroa (Rosaceae)
Protandrena aestivalis (Asteraceae)
Andrena hirticincta (Solidago)

Butterflies:

Callophrys polios (*Arctostaphylos uva-ursi*)
Satyrium titus (*Prunus*)
Boloria eunomia (*Viola adunca*)

Moths:

Hemileuca nevadensis (*Populus tremuloides*)
Eulithis explanata (*Vaccinium angustifolium*)
Hemaris aethra (*Diervilla lonicera*)



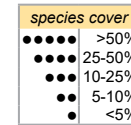
Andrena hirticincta uses *Solidago* (goldenrod) species as a host plant. Photo: Heather Holm



Callophrys polios (Hoary Elfin) uses *Arctostaphylos uva-ursi* (bearberry) as a host plant. Photo: Bob Dunlap

FDc12 Central Poor Dry Pine Woodland Pollinator Resources Table

FDc12 Class Factsheet. Based on 25 Plots. November 2024



Forbs	species frequency in NPC (%)	species cover (when present)	Compatibility	Longevity	Clonality	Principal Pollen Vector	Pollinator requirements	Pollination Index
Northern bedstraw (<i>Galium boreale</i>)	100	●●	SI	Perennial	Present	insects	Generalist	4
Common strawberry (<i>Fragaria virginiana</i>)	88	●	SC	Perennial	Present	insects	Early spring insect	3
Canada mayflower (<i>Maianthemum canadense</i>)	88	●	SI	Perennial	Present	insects	Early spring insect	5
Field or Variable pussytoes (<i>Antennaria neglecta</i> or <i>A. neodica</i>)	81	●	A	Perennial	Present	wind	Generalist	0
Spreading dogbane (<i>Apocynum androsaemifolium</i>)	77	●	SI	Perennial	Present	insects	Generalist	4
Balsam or Prairie ragwort (<i>Senecio pauperculus</i> or <i>S. plattensis</i>)	77	●	UNK	Varies	Present	insects	Generalist	Varies
Smooth blue aster (<i>Aster laevis</i>)	73	●	SI	Perennial	Present	insects	Generalist	4
Harebell (<i>Campanula rotundifolia</i>)	69	●	± SI	Perennial	Present	insects	Generalist	4
Hoary puccoon (<i>Lithospermum canescens</i>)	65	●	H	Perennial	Absent	insects	Somewhat specific insect	6
Veiny pea (<i>Lathyrus venosus</i>)	62	●	SI	Perennial	Present	insects	Somewhat specific insect	5
Lindley's aster (<i>Aster ciliolatus</i>)	54	●	UNK	Perennial	Present	insects	Generalist	3
Cow wheat (<i>Melampyrum lineare</i>)	50	●	SC	Annual	Absent	insects	Somewhat specific insect	5
Wood betony (<i>Pedicularis canadensis</i>)	38	●	UNK	Perennial	Present	insects	Buzz pollination	5
Wood anemone (<i>Anemone quinquefolia</i>)	38	●	UNK	Perennial	Present	insects	Early spring insect	4
Hairy goldenrod (<i>Solidago hispida</i>)	38	●	SI	Perennial	Present	insects	Generalist	4
Gray goldenrod (<i>Solidago nemoralis</i>)	38	●	SI	Perennial	Present	insects	Generalist	4
White rattlesnakeroot (<i>Prenanthes alba</i>)	38	●	UNK	Perennial	Absent	insects	Somewhat specific insect	5
Heart-leaved alexanders (<i>Zizia aptera</i>)	35	●	SC	Perennial	Absent	insects	Generalist	3
One-sided pyrola (<i>Pyrola secunda</i>)	31	●	UNK	Perennial	Present	insects	Somewhat specific insect, Facultative buzz pollination	4
Two-flowered Cynthia (<i>Krigia biflora</i>)	31	●	UNK	Perennial	Present	insects	Generalist	3
Pale vetchling (<i>Lathyrus ochroleucus</i>)	31	●	SI	Perennial	Present	insects	Somewhat specific insect	5
Sand or Dog violet (<i>Viola adunca</i> or <i>V. conspersa</i>)	31	●	Varies	Perennial	Present	insects	Varies	Varies
American vetch (<i>Vicia americana</i>)	31	●	SI	Perennial	Present	insects	Somewhat specific insect	5
Bracken (<i>Pteridium aquilinum</i>)	27	●●●	SC	Perennial	Present	wind, water	Generalist	0
Gaywings (<i>Polygala paucifolia</i>)	27	●	CH and CL	Annual or perennial	Absent	insects	Somewhat specific insect	6
Kalm's hawkweed (<i>Hieracium kalmii</i>)	27	●	UNK	Perennial	Absent	insects	Generalist	4
Round-leaved pyrola (<i>Pyrola rotundifolia</i>)	23	●	UNK	Perennial	Present	insects	Buzz pollination	5
Fireweed (<i>Epilobium angustifolium</i>)	23	●	SC	Perennial	Present	insects	Generalist	2
Wood lily (<i>Lilium philadelphicum</i>)	23	●	SI	Perennial	Present	insects	Generalist	4
Large-leaved aster (<i>Aster macrophyllus</i>)	19	●	A	Perennial	Present	insects	Generalist	2
Upright bindweed (<i>Calystegia spithamea</i>)	19	●	UNK	Perennial	Present	insects	Generalist	3
Early goldenrod (<i>Solidago juncea</i>)	19	●	SI	Perennial	Present	insects	Generalist	4
Sticky hawkweed (<i>Hieracium scabrum</i>)	19	●	UNK	Perennial	Absent	insects	Generalist	4
Grasses and Sedges								
Sharp-pointed rice grass (<i>Oryzopsis pungens</i>)	77	●	UNK	Perennial	Absent	wind	Generalist	0

False melic grass (<i>Schizachne purpurascens</i>)	46	●	UNK	Perennial	Absent	wind	Generalist	0
Fringed or Kalm's brome (<i>Bromus ciliatus</i> or <i>B. Kalmii</i>)	46	●	SC	Perennial	Absent	wind	Generalist	0
Big bluestem (<i>Andropogon gerardii</i>)	38	●●	SI	Perennial	Present	wind	Generalist	0
Poverty grass (<i>Danthonia spicata</i>)	35	●	SC/si	Perennial	Absent	wind	Generalist	0
Pennsylvania sedge (<i>Carex pensylvanica</i>)	27	●	SC	Perennial	Present	wind	Generalist	0
Yellow panic grass (<i>Panicum xanthophysum</i>)	23	●	UNK	Perennial	Present	wind	Generalist	0
Slender wheatgrass (<i>Elymus trachycaulus</i>)	23	●	UNK	Perennial	Weakly	wind	Generalist	0
Mountain rice grass (<i>Oryzopsis asperifolia</i>)	15	●●	UNK	Perennial	Absent	wind	Generalist	0
Low Shrubs								
Lowbush blueberry (<i>Vaccinium angustifolium</i>)	96	●●●●	± SC	Perennial	Present	insects	Somewhat specific insect, Facultative buzz pollination	3
Wintergreen (<i>Gaultheria procumbens</i>)	92	●●●	SC	Perennial	Present	insects	Somewhat specific insect	3
Bearberry (<i>Arctostaphylos uva-ursi</i>)	88	●●●●	SC	Perennial	Present	insects	Early spring insect, Somewhat specific insect	3
Pipsissewa (<i>Chimaphila umbellata</i>)	38	●	SC	Perennial	Present	insects	Somewhat specific insect	3
Red raspberry (<i>Rubus idaeus</i>)	23	●	SC	Perennial	Present	insects	Generalist	2
Trailing arbutus (<i>Epigaea repens</i>)	19	●	GD	Perennial	Present	insects	Early spring insect, Somewhat specific insect	5
Shrubs								
Sand cherry (<i>Prunus pumila</i>)	65	●	SI	Perennial	Present	insects	Generalist	4
Juneberries (<i>Amelanchier</i> spp.)	62	●	Varies	Perennial	Present	insects	Early spring insect	Varies
Prickly or Smooth wild rose (<i>Rosa acicularis</i> or <i>R. blanda</i>)	42	●	SC	Perennial	Present	insects	Generalist	2
Prairie willow (<i>Salix humilis</i>)	38	●	D	Perennial	Present	insects	Early spring insect	5
American hazelnut (<i>Corylus americana</i>)	31	●●	Di	Perennial	Present	wind	Generalist	0
Beaked hazelnut (<i>Corylus cornuta</i>)	31	●	Di	Perennial	Present	wind	Generalist	0
Chokecherry (<i>Prunus virginiana</i>)	31	●	SI	Perennial	Present	insects	Early spring insect	5
Bush honeysuckle (<i>Diervilla lonicera</i>)	27	●●	SC	Perennial	Present	insects	Somewhat specific insect	3
Snowberry or Wolfberry (<i>Symphoricarpos albus</i> or <i>S. occidentalis</i>)	27	●●	SC	Perennial	Present	insects	Generalist	2
Bush juniper (<i>Juniperus communis</i>)	15	●	D	Perennial	Absent	wind	Generalist	0
Tree Canopy								
Jack pine	77	●●●●●	UNK	Perennial	Absent	wind	Generalist	0
Red pine	31	●●●	UNK	Perennial	Absent	wind	Generalist	0
Paper birch	4	●	Di	Perennial	Present	wind	Generalist	0
Quaking aspen	-	-	D	Perennial	Present	wind	Generalist	0
White spruce	-	-	UNK	Perennial	Absent	wind	Generalist	0
Tree Subcanopy								
Jack pine	42	●●●●	UNK	Perennial	Absent	wind	Generalist	0
Red pine	35	●	UNK	Perennial	Absent	wind	Generalist	0
Paper birch	-	-	Di	Perennial	Present	wind	Generalist	0
Quaking aspen	4	●	D	Perennial	Present	wind	Generalist	0
White spruce	4	●	UNK	Perennial	Absent	wind	Generalist	0

Tree Shrub Layer

Jack pine	42	••	UNK	Perennial	Absent	wind	Generalist	0
Red pine	23	•	UNK	Perennial	Absent	wind	Generalist	0
Paper birch	8	•	Di	Perennial	Present	wind	Generalist	0
Quaking aspen	15	•	D	Perennial	Present	wind	Generalist	0
White spruce	19	•	UNK	Perennial	Absent	wind	Generalist	0