*The following is a list of pollinators that are known or suspected to be at-risk in Minnesota compiled by MN DNR and U of MN Bee Lab staff. Where genera, rather than species, are listed there is insufficient data available to evaluate the status of individual species. Experts suspect some members of these genera are likely at-risk due to habitat loss. Planting suggestions under the "Notes" column are not exhaustive, and are meant to help guide applicants in the plant selection process. Other site-level considerations, such as soil type(s), shade and moisture levels, and geographic location will ultimately dictate the most effective and ecologically appropriate species list. Unfortunately planting a suggested plant species does not guarantee that an at-risk pollinator taxa will occupy or locate a habitat installation. In general the best way to ensure a habitat planting can support the pollinators that may occupy it is to plant as many species from as many plant families as feasible, and to ensure the community of planted species are providing pollen and nectar from spring through fall.

## At Risk Pollinator Species in Minnesota

Updated 9/28/21

| Number | Genus | Species | Common Name | MN State Listed | Fed Listed | SGCN | Regions | Residential | Description |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Bombus | affinis | Rusty Patched Bumble Bee | no | endangered | yes | Historically E and Central MN. | yes | **Requires diverse pollen and nectar resources from the spring through fall to complete its lifecycle.** In decline across its range due to a number of different factors (habitat loss, disease, pesticides). Like several bumble bee species they can be found in residentially developed areas as well as natural areas. Recent records isolated to the metro and outlying counties in the E and SE. |
| 2 | Danaus | plexippus | Monarch | no | candidate | yes | Statewide | yes | The population that occupies Minnesota requires milkweeds (Asclepias) as its larval host and diverse nectar resources in the late summer to begin its migration south. Late summer nectar plants that support monarchs and other pollinators include blazingstars (Liatris), great blue lobelia (Lobelia siphilitica), and goldenrods (Solidagos). Candidate species for listing under the endangered species act. Numerous drivers in its decline, including habitat loss, pesticides, and climate change. Found statewide, but counties in the SE, SW, and NW have been designated as part of the north core conservation unit by the USFWS. |
| 3 | Bombus | pensylvanicus | American Bumble Bee | no | pensylvanicus petitioned for ESA | yes | NW, SW, SE; Metro | yes | Requires diverse pollen and nectar resources from the spring through fall to complete its lifecycle. As with other bumble bees, native spring flowering forbs, such as prairie smoke (Geum triflorum) or virginia waterleaf (Hydrophyllum virginianum), and shrubs such as wild plum (Prunus americana) or native currant (Ribes) are critical to supporting queens emerging from winter diapause and establishing new colonies. In decline across its range, but particularly in the upper midwest, due to habitat loss and agricultural intensification. Historically found in developed or residential areas, but may be declining in these areas presently. |
| 4 | Macropis | nuda | Nude Yellow Loosestrife Bee | no | no | no | Likely statewide | Possibly | **A solitary bee specialized on native loosestrife(Lysimachia), meaning it requires the pollen of loosestrife to provision its young and complete its lifecycle.** 3 species of Macropis are known to the state. All are liklely at-risk due to declining host plant abundance and habitat availability in the landscape. Historic range data is limited but suggest it likely ranged statewide. |
| 5 | Argynnis | | Greater Fritillaries | special concern | 1 species of concern | 1 species | Statewide | Possibly, depends on species | Species include the special concern, prairie endemic regal fritillary and the great spangled fritillary. **Both require native violets (Viola) as larval host plants;** loss of violets and intact remnant prairie habitat have impacted the regal fritillary distribution. Great spangled fritillary are found statewide, including in residential or developed areas. Regal fritillary are found in the NW, SW, and SE intact prairies and may not tolerate habitat within residential or highly developed areas. |
| 6 | Bombus | terricola | The Yellow-Banded Bumble Bee | no | no | yes | NW, NE, Central; metro | yes | **Like all bumble bees it requires diverse pollen and nectar resources from the spring through fall to complete its lifecycle.** A species of greatest conservation concern in Minnesota. Historically found in the Northern half of the state and parts of the metro. A few plant species found in the northern and forested regions state that may benefit this and other bumble bee species include Labrador tea (Rhododendron groenlandicum), native blueberry and its relatives (Vaccinium), native currant or gooseberries (Ribes) and harebell (Campanula rotundifolia). Records suggest the species may be experiencing a decline. |
| 7 | Bombus | fervidus | The Golden Northern Bumble Bee | no | no | yes | SE, SW, NW; metro | yes | **Requires diverse pollen and nectar resources from the spring through fall to complete its lifecycle.** A species of greatest conservation concern in Minnesota. Records suggest the species is experiencing a decline. Plants that produce plentiful nectar such as native lance leaf figwort (Scrophularia lanceolota), lousewort (Pedicularis), bee balm (Monarda), or hyssop (Agastache) are beneficial to this and other bumble bee species. Likely present throughout the state historically, but there are few contemporary records in theNE region. |
| 8 | Andrena | | Mining bees | no | no | no | statewide | Possibly, depends on species | A diverse group of mid-sized bees that as their name implies nest underground. Some species are among the first pollinators to emerge in the spring. Many specialized species are found within this genus. Some species may range statewide. Host plants that can be planted to support both generalists and specialists include native willows (Salix), dogwood (Cornus), wild geranium (Geranium maculatum), spring beauties (Claytonia virginica), alexanders (Zizia). Spring blooming species like these are also critical to other early emerging bees, such as bumble bee queens. Mid-to-late season species that can support miner bees and many other pollinators include prairie clovers (Dalea), leadplant or false indigo (Amorpha), and the goldenrods (Solidago and Oligoneuron). |
| 9 | Melissodes | | Longhorn bees | no | no | | Statewide | Possibly, depends on species | The longhorn bees are distinctive bees that range statewide. Females store pollen in hairy "chaps" on their hind legs. Males have very long antennae used in courtship, lending this group their common name. Many species are specialized on asteraceae. Some of these specialists are known to the metro, but many may require large areas of intact or restored prairie. Plant native coneflowers (Ratibida), sunflowers (Helianthus) , black eyed susans (Rudbeckia), rosinweeds (Silphium), iron weed (Vernonia) and late blooming asters (Symphyotrichum) to support these and many other species of pollinator. |
| 10 | Megachile | | Leafcutter bees | no | no | | Statewide | Possibly, depends on species | Robust bees with powerful mandibles ("Megachile" derives from the Ancient Greek mégas, "big"+ kheîlos, "lip") that are used to cut leaves to layer their brood cells. Several species may be in decline. A few species may be specialized on plants in the pea family (fabaceae) or aster family (asteraceae). Planting mid-season flowering native fabaceae such as prairie clovers (Dalea), lead plant (Amorpha), milkvetch (Astragalus), and vetchlings (Lathyrus), or native asteraceae such as tickseed (Coreopsis), fleabane (Erigeron), and sunflowers (Helianthus) will potentially benefit these and other summer-flying native pollinators. |

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| 11 | Svastra | obliqua | Sunflower bee | no | no | | SE, SW, Central, likely NW; metro | Possibly | The sunflower bee or oblique longhorn is a specialist of coneflowers and other asters closely related to the Melissodes longhorn bees. Records are predominantly in the southern half of MN. Planting native coneflowers (Ratibida), sunflowers (Helianthus), black eyed susans (Rudbeckia), rosinweeds (Silphium), narrow-leaved purple coneflower (Echinacea angustifolia), and late blooming asters (Symphyotrichum) to support the longhorn bees, and many other pollinators. |
| 12 | Colletes | | plasterer, polyester, or cellophane bees | no | no | | Statewide | Possibly, depends on species | An interesting group of bees that sometimes nest in aggregations and line their nest cells with a cellophane-like secretion. Similar to the mining bees, some species emerge in the early spring and rely on early flowering trees or shrubs to native willows (Salix) and plums (Prunus). A few species are specialists of certain plant familes, such as native asters (asteraceae), like the goldenrods (Solidago or Oligoneuron), or legumes (fabaceae), the prairie clovers (Dalea). While these species may not be found statewide, nor necessarily in developed areas such as cities or towns, planting their host plants will support are large number of other pollinators, like bumblebees, solitary bees, and hover flies. |
| 13 | Duforea | | Shortfaced bees | no | no | | NW, SE, SW; metro | Yes | The shortfaced bees are small members of the sweat bee family (Halictidae). One species requires the pollen of native bee balm (Monarda) to complete its life cycle. Monarda is also a key nectar resource of numerous other bee groups, including the bumble bees. |

**Metadata**

| column | explanation |
|---|---|
| number | running tally of potential species; does not reflect prioritization |
| genus | genus name |
| species | species name |
| common name | common name, if one exists |
| MN state listed | Minnesota state listing status; threatened, endangered, special concern, not listed; state listed species can be referenced here: https://files.dnr.state.mn.us/natural_resources/ets/endlist.pdf |

**Metadata**

| column | explanation |
|---|---|
| fed listed | Federal listing status; threatened, endangered, candidate, not listed |
| SGCN | Yes or No; is species listed as a species of greatest conservation need (SGCN) in the 2015-2025 state wildlife action plan (SWAP)? Full list of SGCN species can be referenced here: https://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/mnwap/appendix_c.pdf |
| regions | Where the species is found in Minnesota; NE, NW, SW, SE, Central; based upon best available data. |
| notes | Notes about the species or genus biology, range, rationale for inclusion, and specific host plant requirements, or plant species or families that are beneficial to the taxa. Plant genus and species names are given in parentheses after common names. |