

# Minnesota Bees—A Preliminary List

This list is under development. Species are expected to be added or removed as surveys are completed and specimen identifications are confirmed. The state species list of bees documented in Minnesota now stands at 455 species.

The list is the result of many contributors and support from the Minnesota Environment and Natural Resources Trust Fund (ENRTF). Existing information was obtained from 11 museum collections and 16 additional sources, including personal collections, student theses, informal reports, published literature, and recent survey data from collaborators. New records were obtained from field surveys by staff of the Minnesota Biological Survey, Department of Natural Resources. Identifications were confirmed by bee experts, Joel Gardner and Zack Portman, at the University of Minnesota. A special thanks goes to the numerous collection managers who provided access to historical specimens, in particular, the University of Minnesota Insect Collection, University of Minnesota Duluth, American Museum of Natural History, Illinois Natural History Survey, North Dakota State Insect Reference Collection, Wisconsin Insect Reference Collection, Iowa State Insect Collection, and Severin-McDaniel Insect Research Collection at South Dakota State University.

All information on flight season, nesting, sociality, and host plants/bees was provided by John Ascher, Research Scientist at the American Museum of Natural History.

## Description of Categories

**Flight Season:** Numbers indicate months when a species is known to fly across its entire range. These data are not specific to Minnesota. For example, Minnesota has a shorter flight season than more southern states and bees do not fly prior to April. Brackets indicate atypical months.

**Nest:** Categories include Burrow, Cavity, Hive, Pithy Stems, Soil, and Wood.

**Sociality:** Categories include Solitary, Communal, Subsocial, Eusocial, and Parasite.

**Plant [or Insect] Host:** Some bees—including species called oligoleges—collect pollen from only certain plant taxa, which are listed here. Some bees parasitize other bee species and their host taxa are listed in brackets.

# Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest [parasitic]	Sociality	Plant [or Insect] Host	
					Family	Genus
<b>Family Colletidae --Plasterer, Yellow-faced Bees</b>						
<i>Colletes</i>	<i>aberrans</i>	6-8	Soil	Solitary		
<i>Colletes</i>	<i>albescens</i>					
<i>Colletes</i>	<i>americanus</i>					
<i>Colletes</i>	<i>andrewsi</i>					
<i>Colletes</i>	<i>brevicornis</i>	3-6	Soil	Solitary		
<i>Colletes</i>	<i>compactus</i>					
<i>Colletes</i>	<i>consors</i>	4-8	Soil	Solitary		
<i>Colletes</i>	<i>hyalinus</i>	4-10	Soil	Solitary		
<i>Colletes</i>	<i>impunctatus</i>	6-7	Soil	Solitary		
<i>Colletes</i>	<i>inaequalis</i>	3-7 [8-9]	Soil	Solitary		
<i>Colletes</i>	<i>kincaidii</i>	6-9	Soil	Solitary		
<i>Colletes</i>	<i>latitarsis</i>	3-9	Soil	Solitary	Solanaceae	<i>Physalis</i>
<i>Colletes</i>	<i>mandibularis</i>					
<i>Colletes</i>	<i>nudus</i>					
<i>Colletes</i>	<i>phaceliae</i>	6-9	Soil	Solitary		
<i>Colletes</i>	<i>robertsonii</i>	6-8	Soil	Solitary		
<i>Colletes</i>	<i>rufocinctus</i>	8-9	Soil	Solitary		
<i>Colletes</i>	<i>simulans</i>	1, 5-11	Soil	Solitary	Asteraceae	
<i>Colletes</i>	<i>solidaginis</i>	7-9	Soil	Solitary		
<i>Colletes</i>	<i>susannae</i>	7-8	Soil	Solitary		
<i>Colletes</i>	<i>validus</i>					
<i>Colletes</i>	<i>willistoni</i>					
<i>Colletes</i>	<i>wilmattae</i>	6-9	Soil	Solitary		
<i>Hylaeus</i>	<i>affinis</i>	4-10	Cavity	Solitary		
<i>Hylaeus</i>	<i>annulatus</i>	4-10	Cavity	Solitary		
<i>Hylaeus</i>	<i>basalis</i>	5-8	Cavity	Solitary	Rosaceae	
<i>Hylaeus</i>	<i>fedorica</i>	6-7	Cavity	Solitary		
<i>Hylaeus</i>	<i>floridanus</i>	4-10	Cavity	Solitary		
<i>Hylaeus</i>	<i>illinoisensis</i>					
<i>Hylaeus</i>	<i>leptocephalus</i>					
<i>Hylaeus</i>	<i>mesillae</i>	4-10	Cavity	Solitary		
<i>Hylaeus</i>	<i>modestus</i>	5-9	Cavity	Solitary		
<i>Hylaeus</i>	<i>nelumbonis</i>					
<i>Hylaeus</i>	<i>rudbeckiae</i>	5-10	Cavity	Solitary		
<i>Hylaeus</i>	<i>saniculae</i>	6-8	Cavity	Solitary		
<i>Hylaeus</i>	<i>sparsus</i>					
<i>Hylaeus</i>	<i>verticalis</i>	4-8	Cavity	Solitary		
<b>Family Andrenidae --Mining Bees</b>						
<i>Andrena</i>	<i>accepta</i>					
<i>Andrena</i>	<i>algida</i>					

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					Family	Genus
<i>Andrena</i>	<i>aliciae</i>	7-9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>allegghaniensis</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>andrenoides</i>	3-8	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>arabis</i>					
<i>Andrena</i>	<i>asteris</i>	8-10	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>barbilabris</i>	3-7 [8-9]	Soil	Solitary		
<i>Andrena</i>	<i>bisalicis</i>	2-9	Soil	Solitary		
<i>Andrena</i>	<i>bradleyi</i>	3-9	Soil	Solitary	Ericaceae	
<i>Andrena</i>	<i>brevipalpis</i>	5-10	Soil	Solitary		
<i>Andrena</i>	<i>canadensis</i>	8-10	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>carlini</i>	3-7 [8]	Soil	Solitary		
<i>Andrena</i>	<i>carolina</i>	4-7	Soil	Solitary	Ericaceae	<i>Vaccinium</i>
<i>Andrena</i>	<i>ceanothi</i>	5-6	Soil	Solitary		
<i>Andrena</i>	<i>chromotricha</i>	7-9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>clarkella</i>	3-8	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>colletina</i>					
<i>Andrena</i>	<i>commoda</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>crataegi</i>	3-8	Soil	Solitary		
<i>Andrena</i>	<i>cressonii</i>	3-8	Soil	Solitary		
<i>Andrena</i>	<i>distans</i>					
<i>Andrena</i>	<i>dunningi</i>	2-7 [8]	Soil	Solitary		
<i>Andrena</i>	<i>erigeniae</i>					
<i>Andrena</i>	<i>erythrogaster</i>	2-7	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>erythronii</i>	3-6	Soil	Solitary		<i>Erythronium</i>
<i>Andrena</i>	<i>forbesii</i>	4-6	Soil	Solitary		
<i>Andrena</i>	<i>fragilis</i>					
<i>Andrena</i>	<i>frigida</i>	2-7	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>geranii</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>haynesi</i>					
<i>Andrena</i>	<i>helianthi</i>	7-9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>helianthiformis</i>					
<i>Andrena</i>	<i>hippotes</i>	4-6	Soil	Solitary		
<i>Andrena</i>	<i>hirticincta</i>	8-10	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>illinoensis</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>imitatrix</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>integra</i>	5-8	Soil	Solitary	Cornaceae	<i>Cornus (Svida)</i>
<i>Andrena</i>	<i>krigiana</i>	3-7	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>lupinorum</i>	5-8	Soil	Solitary		
<i>Andrena</i>	<i>macoupinensis</i>					
<i>Andrena</i>	<i>mandibularis</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>mariae</i>	4-7	Soil	Solitary	Salicaceae	<i>Salix</i>

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					Family	Genus
<i>Andrena</i>	<i>melanochroa</i>	3-7	Soil	Solitary	Rosaceae	
<i>Andrena</i>	<i>milwaukeeensis</i>	3-8	Soil	Solitary		
<i>Andrena</i>	<i>miranda</i>	5-8	Soil	Solitary		
<i>Andrena</i>	<i>miserabilis</i>	1-7 [8-9]	Soil	Solitary		
<i>Andrena</i>	<i>nasonii</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>nigrae</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>nigrihirta</i>	3-8	Soil	Solitary		
<i>Andrena</i>	<i>nivalis</i>	2-8	Soil	Solitary		
<i>Andrena</i>	<i>nubecula</i>	7-10	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>peckhami</i>	9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>perplexa</i>					
<i>Andrena</i>	<i>persimulata</i>	4-7	Soil	Solitary	Cornaceae	<i>Cornus (Svida)</i>
<i>Andrena</i>	<i>placata</i>	7-9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>platyparia</i>	5-7	Soil	Solitary	Cornaceae	<i>Cornus (Svida)</i>
<i>Andrena</i>	<i>polemonii</i>					
<i>Andrena</i>	<i>quintilis</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>regularis</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>robertsonii</i>	4-8	Soil	Solitary		
<i>Andrena</i>	<i>rudbeckiae</i>	6-8	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>rufosignata</i>	4-8	Soil	Solitary		
<i>Andrena</i>	<i>rugosa</i>	3-6	Soil	Solitary		
<i>Andrena</i>	<i>runcinatae</i>	7-10	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>salictaria</i>	3-6	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>sigmundi</i>	5-7	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>simplex</i>	7-9	Soil	Solitary	Asteraceae	
<i>Andrena</i>	<i>spiraean</i>	6-8	Soil	Solitary		
<i>Andrena</i>	<i>surda</i>					
<i>Andrena</i>	<i>thaspia</i>	4-8	Soil	Solitary		
<i>Andrena</i>	<i>tridens</i>	3-7	Soil	Solitary		
<i>Andrena</i>	<i>vernalis</i>					
<i>Andrena</i>	<i>vicina</i>	3-7 [8-9]	Soil	Solitary		
<i>Andrena</i>	<i>virginiana</i>	6-8	Soil	Solitary		
<i>Andrena</i>	<i>wellesleyana</i>	3-7	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Andrena</i>	<i>wheeleri</i>	4-7	Soil	Solitary		
<i>Andrena</i>	<i>wilkella</i>	4-9	Soil	Solitary		
<i>Andrena</i>	<i>wilmattae</i>	5-7	Soil	Solitary		
<i>Andrena</i>	<i>w-scripta</i>	2-9 [10]	Soil	Solitary		
<i>Andrena</i>	<i>ziziae</i>	4-6 [7, 9]	Soil	Solitary		
<i>Calliopsis</i>	<i>andreniformis</i>	4-10	Soil	Solitary	esp. Fabaceae	
<i>Calliopsis</i>	<i>coloradensis</i>	6-10	Soil	Solitary	Asteraceae	
<i>Calliopsis</i>	<i>nebraskensis</i>	6-9	Soil	Solitary	Verbenaceae	<i>Verbena</i>

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					Family	Genus
<i>Perdita</i>	<i>albipennis</i>	6-9	Soil	Solitary	Asteraceae	<i>Helianthus</i>
<i>Perdita</i>	<i>bequaerti</i>	7-10	Soil	Solitary	Asteraceae	
<i>Perdita</i>	<i>bruneri</i>					
<i>Perdita</i>	<i>fallax</i>					
<i>Perdita</i>	<i>gerhardi</i>					
<i>Perdita</i>	<i>halictoides</i>					
<i>Perdita</i>	<i>ignota</i>					
<i>Perdita</i>	<i>maculigera</i>	3-7	Soil	Solitary	Salicaceae	<i>Salix</i>
<i>Perdita</i>	<i>octomaculata</i>	7-10	Soil	Solitary	Asteraceae	
<i>Perdita</i>	<i>perpallida</i>	7-8	Soil	Solitary		<i>Petalostemon</i>
<i>Perdita</i>	<i>swenki</i>	7-9	Soil	Solitary	Asteraceae	
<i>Protandrena</i>	<i>bancrofti</i>					
<i>Pseudopanurgus</i>	<i>aestivalis</i>	8-9	Soil	Solitary	Asteraceae	
<i>Pseudopanurgus</i>	<i>albitarsis</i>					
<i>Pseudopanurgus</i>	<i>andrenoides</i>	8-10	Soil	Solitary	Asteraceae	
<i>Pseudopanurgus</i>	<i>labrosus</i>	7-9	Soil	Solitary	Asteraceae	
<i>Pseudopanurgus</i>	<i>parvus</i>					
<i>Pseudopanurgus</i>	<i>pauper</i>	7	Soil	Solitary	Rhamnaceae	<i>Ceanothus</i>
<i>Pseudopanurgus</i>	<i>renimaculatus</i>					
<i>Pseudopanurgus</i>	<i>rudbeckiae</i>					
<i>Pseudopanurgus</i>	<i>simulans</i>		Soil	Solitary	Asteraceae	
<i>Pseudopanurgus</i>	<i>solidaginus</i>					
<b>Family Halictidae–Sweat Bees</b>						
<i>Agapostemon</i>	<i>sericeus</i>	4-10	Soil	Solitary, Communal		
<i>Agapostemon</i>	<i>splendens</i>	4-8	Soil	Solitary, Communal		
<i>Agapostemon</i>	<i>texanus</i>	4-9	Soil	Solitary, Communal		
<i>Agapostemon</i>	<i>virescens</i>	5-10	Soil	Solitary, Communal		
<i>Augochlora</i>	<i>pura</i>	4-10	Wood	Solitary		
<i>Augochlorella</i>	<i>aurata</i>	4-10	Soil	Eusocial		
<i>Augochlorella</i>	<i>persimilis</i>	3-9	Soil	Eusocial		
<i>Augochloropsis</i>	<i>metallica</i>	3-11	Soil	Solitary		
<i>Augochloropsis</i>	<i>sumptuosa</i>					
<i>Dieunomia</i>	<i>heteropoda</i>	6-10	Soil	Solitary, Communal	Asteraceae	<i>Helianthus</i>
<i>Dieunomia</i>	<i>triangulifera</i>	8-10	Soil	Solitary, Communal		
<i>Dufourea</i>	<i>marginata</i>	6-9	Soil	Solitary	Asteraceae	
<i>Dufourea</i>	<i>maura</i>					
<i>Dufourea</i>	<i>monardae</i>	7-8	Soil	Solitary	Lamiaceae	<i>Monarda</i>
<i>Dufourea</i>	<i>novaeangliae</i>					
<i>Halictus</i>	<i>confusus</i>	4-10	Soil	Eusocial		
<i>Halictus</i>	<i>ligatus</i>	1-12	Soil	Eusocial		
<i>Halictus</i>	<i>parallelus</i>	3-8	Soil	Eusocial		

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					Family	Genus
<i>Halictus</i>	<i>rubicundus</i>	3-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>abanci</i>					
<i>Lasioglossum</i>	<i>achilleae</i>					
<i>Lasioglossum</i>	<i>acuminatum</i>	4-10	Soil	Solitary, Communal		
<i>Lasioglossum</i>	<i>admirandum</i>	3-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>albipenne</i>	5-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>anomalum</i>	5-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>athabascense</i>	4-10	Soil	Solitary, Communal		
<i>Lasioglossum</i>	<i>atwoodi</i>					
<i>Lasioglossum</i>	<i>birkmanni</i>	4-9	Soil	Solitary		
<i>Lasioglossum</i>	<i>bruneri</i>					
<i>Lasioglossum</i>	<i>callidum</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>cattellae</i>					
<i>Lasioglossum</i>	<i>cinctipes</i>	3-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>coeruleum</i>	3-10	Wood	Eusocial		
<i>Lasioglossum</i>	<i>comagenense</i>	6-7	Soil	Eusocial		
<i>Lasioglossum</i>	<i>coreopsis</i>					
<i>Lasioglossum</i>	<i>coriaceum</i>	3-10	Soil	Solitary, Communal		
<i>Lasioglossum</i>	<i>cressonii</i>	3-10	Wood	Eusocial		
<i>Lasioglossum</i>	<i>divergens</i>					
<i>Lasioglossum</i>	<i>dreisbachi</i>	5-8	Soil	Eusocial		
<i>Lasioglossum</i>	<i>ellisiae</i>		Soil	Eusocial		
<i>Lasioglossum</i>	<i>ephialtum</i>	6-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>fattigi</i>					
<i>Lasioglossum</i>	<i>floridanum</i>					
<i>Lasioglossum</i>	<i>foveolatum</i>					
<i>Lasioglossum</i>	<i>foxii</i>	4-9	Soil	Solitary		
<i>Lasioglossum</i>	<i>gotham</i>					
<i>Lasioglossum</i>	<i>hartii</i>	5-8	Soil	Eusocial		
<i>Lasioglossum</i>	<i>heterognathum</i>	4-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>hitchensi</i>					
<i>Lasioglossum</i>	<i>illinoense</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>imitatum</i>	4-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>inconditum</i>		Soil			
<i>Lasioglossum</i>	<i>katherineae</i>					
<i>Lasioglossum</i>	<i>laevissimum</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>leucomum</i>	5-8	Soil	Eusocial		
<i>Lasioglossum</i>	<i>leucozonium</i>	5-10	Soil	Solitary, Communal		
<i>Lasioglossum</i>	<i>lineatulum</i>	4-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>lustrans</i>					
<i>Lasioglossum</i>	<i>macoupinense</i>	6-7	Soil	Solitary		

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					Family	Genus
<i>Lasioglossum</i>	<i>michiganense</i>					
<i>Lasioglossum</i>	<i>nelumbonis</i>	3-11	Soil	Solitary	Nymphæales	
<i>Lasioglossum</i>	<i>nigroviride</i>					
<i>Lasioglossum</i>	<i>novascotiae</i>					
<i>Lasioglossum</i>	<i>oblongum</i>	3-10	Wood	Eusocial		
<i>Lasioglossum</i>	<i>obscurum</i>	4-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>oceanicum</i>	4-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>paradmirandum</i>	4-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>paraforbesii</i>	4-10	Soil	Solitary, Communal		
<i>Lasioglossum</i>	<i>pectorale</i>	3-11	Soil	Solitary		
<i>Lasioglossum</i>	<i>perpunctatum</i>					
<i>Lasioglossum</i>	<i>pictum</i>	4-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>pilosum</i>					
<i>Lasioglossum</i>	<i>planatum</i>					
<i>Lasioglossum</i>	<i>platyparium</i>	10-11	[Soil]	Parasite	[Halictidae]	[ <i>Lasioglossum</i> ]
<i>Lasioglossum</i>	<i>pruinatum</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>quebecense</i>	3-9	Soil			
<i>Lasioglossum</i>	<i>rozeni</i>					
<i>Lasioglossum</i>	<i>rufulipes</i>					
<i>Lasioglossum</i>	<i>sagax</i>					
<i>Lasioglossum</i>	<i>seillean</i>					
<i>Lasioglossum</i>	<i>semicaeruleum</i>	8	Soil	Eusocial		
<i>Lasioglossum</i>	<i>smilacinae</i>					
<i>Lasioglossum</i>	<i>subversans</i>					
<i>Lasioglossum</i>	<i>subviridatum</i>					
<i>Lasioglossum</i>	<i>succinipenne</i>		Soil	Eusocial		
<i>Lasioglossum</i>	<i>swenki</i>		Soil	Solitary		
<i>Lasioglossum</i>	<i>taylorae</i>					
<i>Lasioglossum</i>	<i>tegulare</i>					
<i>Lasioglossum</i>	<i>tenax</i>					
<i>Lasioglossum</i>	<i>testaceum</i>	7	Soil	Eusocial		
<i>Lasioglossum</i>	<i>texanum</i>	4-12	Soil	Solitary, Communal	Onagraceae	<i>Oenothera</i>
<i>Lasioglossum</i>	<i>timothyi</i>					
<i>Lasioglossum</i>	<i>truncatum</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>versans</i>	4-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>versatum</i>	4-11	Soil	Eusocial		
<i>Lasioglossum</i>	<i>vierecki</i>	4-9	Soil	Eusocial		
<i>Lasioglossum</i>	<i>viridatum</i>					
<i>Lasioglossum</i>	<i>weemsi</i>					
<i>Lasioglossum</i>	<i>zephyrum</i>	3-10	Soil	Eusocial		
<i>Lasioglossum</i>	<i>zonulum</i>	4-10	Soil	Solitary, Communal		

## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Nomia</i>	<i>nortoni</i>					
<i>Nomia</i>	<i>universitatis</i>	6-9	Soil	Solitary, Communal		
<i>Sphecodes</i>	<i>atlantis</i>	5-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>banksii</i>	4-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>clematidis</i>					
<i>Sphecodes</i>	<i>confertus</i>	3-8	[Soil]	Parasite		
<i>Sphecodes</i>	<i>coronus</i>	6-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>cressonii</i>	1, 4-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>davisii</i>	5-10	[Soil]	Parasite		
<i>Sphecodes</i>	<i>dichrous</i>	4-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>fattigi</i>	4-8	[Soil]	Parasite		
<i>Sphecodes</i>	<i>galerus</i>					
<i>Sphecodes</i>	<i>heraclei</i>					
<i>Sphecodes</i>	<i>illinoensis</i>	5-10	[Soil]	Parasite		
<i>Sphecodes</i>	<i>johnsonii</i>					
<i>Sphecodes</i>	<i>levis</i>	5-8	[Soil]	Parasite		
<i>Sphecodes</i>	<i>mandibularis</i>	5-8	[Soil]	Parasite		
<i>Sphecodes</i>	<i>minor</i>					
<i>Sphecodes</i>	<i>prosporus</i>	5-9	[Soil]	Parasite		
<i>Sphecodes</i>	<i>ranunculi</i>	4-7	[Soil]	Parasite		
<i>Sphecodes</i>	<i>solonis</i>	5-8	[Soil]	Parasite		
<b>Family Melittidae --Melittid Bees</b>						
<i>Macropis</i>	<i>nuda</i>	6-8	Soil	Solitary	Primulaceae	<i>Lysimachia</i>
<i>Macropis</i>	<i>patellata</i>					
<i>Macropis</i>	<i>steironematis</i>	6-7	Soil	Solitary	Primulaceae	<i>Lysimachia</i>
<b>Family Megachilidae --Leaf-cutter, Mason Bees</b>						
<i>Anthidium</i>	<i>manicatum</i>	6-10	Cavity	Solitary		
<i>Anthidium</i>	<i>oblongatum</i>	6-10	Cavity	Solitary		
<i>Anthidium</i>	<i>psoraleae</i>	7	Cavity	Solitary		
<i>Anthidium</i>	<i>tenuiflorae</i>					
<i>Ashmeadiella</i>	<i>bucconis</i>					
<i>Coelioxys</i>	<i>alternatus</i>	6-10	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>banksi</i>	4-9	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>bisoncornus</i>	7-9	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>funerarius</i>	5-9	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>immaculatus</i>					
<i>Coelioxys</i>	<i>modestus</i>					
<i>Coelioxys</i>	<i>moestus</i>	5-9	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>octodentatus</i>	5-10	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>porterae</i>	6-9	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>rufitarsis</i>	4-10	[Cavity]	Parasite		



## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Coelioxys</i>	<i>sayi</i>	3-10	[Cavity]	Parasite		
<i>Coelioxys</i>	<i>sodalis</i>	4-9	[Cavity]	Parasite		
<i>Dianthidium</i>	<i>pubicum</i>					
<i>Dianthidium</i>	<i>simile</i>	7-9	Cavity	Solitary		
<i>Heriades</i>	<i>carinata</i>	4-9	Cavity	Solitary		
<i>Heriades</i>	<i>leavitti</i>					
<i>Heriades</i>	<i>variolosa</i>	4-9	Cavity	Solitary		
<i>Hoplitis</i>	<i>albifrons</i>	5-8	Pithy stems	Solitary		
<i>Hoplitis</i>	<i>pilosifrons</i>	4-7	Pithy stems	Solitary		
<i>Hoplitis</i>	<i>producta</i>	4-7	Pithy stems	Solitary		
<i>Hoplitis</i>	<i>spoliata</i>	4-8	Pithy stems	Solitary		
<i>Hoplitis</i>	<i>truncata</i>	4-8	Pithy stems	Solitary		
<i>Megachile</i>	<i>addenda</i>					
<i>Megachile</i>	<i>brevis</i>	3-12	Cavity	Solitary		
<i>Megachile</i>	<i>campanulae</i>	2-11	Cavity	Solitary		
<i>Megachile</i>	<i>centuncularis</i>	5-9	Cavity	Solitary		
<i>Megachile</i>	<i>dakotensis</i>	7-8	Ground?	Solitary		
<i>Megachile</i>	<i>fortis</i>	7-8		Solitary		
<i>Megachile</i>	<i>frigida</i>	6-9	Cavity	Solitary		
<i>Megachile</i>	<i>gemula</i>	4-8	Cavity	Solitary		
<i>Megachile</i>	<i>inermis</i>	6-9	Cavity	Solitary		
<i>Megachile</i>	<i>lapponica</i>	6-8	Cavity	Solitary		
<i>Megachile</i>	<i>latimanus</i>	5-10	Soil	Solitary		
<i>Megachile</i>	<i>melanophaea</i>	5-8	Soil	Solitary		
<i>Megachile</i>	<i>mendica</i>	5-10	Cavity	Solitary		
<i>Megachile</i>	<i>montivaga</i>	4-9	Cavity	Solitary		
<i>Megachile</i>	<i>parallela</i>					
<i>Megachile</i>	<i>perihirta</i>					
<i>Megachile</i>	<i>pugnata</i>	6-9	Cavity	Solitary	Asteraceae	
<i>Megachile</i>	<i>relativa</i>	5-10	Cavity	Solitary		
<i>Megachile</i>	<i>rotundata</i>	6-9	Cavity	Solitary		
<i>Megachile</i>	<i>rugifrons</i>					
<i>Megachile</i>	<i>sculpturalis</i>					
<i>Megachile</i>	<i>texana</i>	6-8	Cavity	Solitary		
<i>Osmia</i>	<i>albiventris</i>	5-7	Cavity	Solitary		
<i>Osmia</i>	<i>atriventris</i>	4-7	Cavity	Solitary		
<i>Osmia</i>	<i>bucephala</i>	4-6	Cavity	Solitary		
<i>Osmia</i>	<i>collinsiae</i>	4-6	Cavity	Solitary		
<i>Osmia</i>	<i>conjuncta</i>	4-7	Cavity	Solitary		
<i>Osmia</i>	<i>cyaneonitens</i>					
<i>Osmia</i>	<i>distincta</i>	5-6	Cavity	Solitary		

## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Osmia</i>	<i>felti</i>	6	Cavity	Solitary		
<i>Osmia</i>	<i>lignaria</i>					
<i>Osmia</i>	<i>nigriventris</i>		Cavity	Solitary		
<i>Osmia</i>	<i>proxima</i>					
<i>Osmia</i>	<i>pumila</i>	4-7	Cavity	Solitary		
<i>Osmia</i>	<i>simillima</i>	5-8	Cavity	Solitary		
<i>Osmia</i>	<i>subarctica</i>					
<i>Osmia</i>	<i>tersula</i>	5-7	Cavity	Solitary		
<i>Osmia</i>	<i>virga</i>	4-7	Cavity	Solitary	Ericaceae	
<i>Paranthidium</i>	<i>jugatorium</i>	7-9	Soil	Solitary		
<i>Stelis</i>	<i>coarctatus</i>	6-8	[Cavity]	Parasite	[Megachilidae]	
<i>Stelis</i>	<i>foederalis</i>	5-7	[Cavity]	Parasite	[Megachilidae]	
<i>Stelis</i>	<i>labiata</i>					
<i>Stelis</i>	<i>lateralis</i>	3-7	[Cavity]	Parasite	[Megachilidae]	
<i>Stelis</i>	<i>nitida</i>					
<i>Stelis</i>	<i>submarginata</i>					
<i>Trachusa</i>	<i>zebrata</i>					
<i>Stelis</i>	<i>lateralis</i>	3-7	Cavity	Parasite	[Megachilidae]	
<i>Stelis</i>	<i>nitida</i>					
<i>Stelis</i>	<i>submarginata</i>					
<i>Trachusa</i>	<i>zebrata</i>					
<b>Family Apidae --Cuckoo, Digger, Bumble, Honey Bees</b>						
<i>Anthophora</i>	<i>bomboides</i>	3-8	Burrow	Solitary		
<i>Anthophora</i>	<i>terminalis</i>	5-9	Wood	Solitary		
<i>Anthophora</i>	<i>walshii</i>	7-8	Soil	Solitary		
<i>Apis</i>	<i>mellifera</i>	1-12	Hive	Eusocial		
<i>Bombus</i>	<i>affinis</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>auricomus</i>	5-10	Hive	Eusocial		
<i>Bombus</i>	<i>bimaculatus</i>	2-9	Hive	Eusocial		
<i>Bombus</i>	<i>bohemicus</i>	5-10	[Hive]	Parasite	[Apidae]	[ <i>Bombus</i> ]
<i>Bombus</i>	<i>borealis</i>	5-10	Hive	Eusocial		
<i>Bombus</i>	<i>citrinus</i>	5-10	[Hive]	Parasite	[Apidae]	[ <i>Bombus</i> ]
<i>Bombus</i>	<i>fervidus</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>flavidus</i>					
<i>Bombus</i>	<i>fraternus</i>					
<i>Bombus</i>	<i>frigidus</i>					
<i>Bombus</i>	<i>griseocollis</i>	2-10	Hive	Eusocial		
<i>Bombus</i>	<i>huntii</i>					
<i>Bombus</i>	<i>impatiens</i>	1-11	Hive	Eusocial		
<i>Bombus</i>	<i>insularis</i>	3-10	[Hive]	Parasite	[Apidae]	[ <i>Bombus</i> ]
<i>Bombus</i>	<i>melanopygus</i>					

## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Bombus</i>	<i>pennsylvanicus</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>perplexus</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>perplexus</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>rufocinctus</i>	2-10	Hive	Eusocial		
<i>Bombus</i>	<i>sandersoni</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>suckleyi</i>			Nest-parasite		
<i>Bombus</i>	<i>ternarius</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>terricola</i>	4-10	Hive	Eusocial		
<i>Bombus</i>	<i>vagans</i>	5-10	Hive	Eusocial		
<i>Bombus</i>	<i>variabilis</i>					
<i>Ceratina</i>	<i>calcarata</i>	3-10	Pithy stems	Subsocial		
<i>Ceratina</i>	<i>dupla</i>					
<i>Ceratina</i>	<i>mikmaqi</i>					
<i>Epeolus</i>	<i>ainsliei</i>					
<i>Epeolus</i>	<i>autumnalis</i>	7-10 [6]	[Soil]	Parasite	[Colletidae]	[ <i>Colletes</i> ]
<i>Epeolus</i>	<i>bifasciatus</i>	2-9	[Soil]	Parasite	[Colletidae]	[ <i>Colletes</i> ]
<i>Epeolus</i>	<i>interruptus</i>					
<i>Epeolus</i>	<i>lectoides</i>					
<i>Epeolus</i>	<i>minimus</i>					
<i>Epeolus</i>	<i>pusillus</i>					
<i>Epeolus</i>	<i>scutellaris</i>	6-10	[Soil]	Parasite	[Colletidae]	[ <i>Colletes</i> ]
<i>Eucera</i>	<i>albata</i>					
<i>Eucera</i>	<i>atriventris</i>	3-8	Soil	Solitary		
<i>Eucera</i>	<i>dubitata</i>	3-6	Soil	Solitary		
<i>Eucera</i>	<i>hamata</i>	4-8	Soil	Solitary		
<i>Eucera</i>	<i>kansensis</i>	6-9	Soil	Solitary	[Cucurbitaceae]	[ <i>Cucurbita</i> ]
<i>Eucera</i>	<i>pruinosa</i>					
<i>Holcopasites</i>	<i>calliopsidis</i>	5-10	[Soil]	Parasite	[Andrenidae]	
<i>Melissodes</i>	<i>agilis</i>	5-11	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>bidentis</i>	7-8	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>bimaculatus</i>	2-10	Soil	Solitary		
<i>Melissodes</i>	<i>boltoniae</i>	7-11	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>confusus</i>	8	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>coreopsis</i>	6-10	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>denticulatus</i>	5-10	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>dentiventris</i>					
<i>Melissodes</i>	<i>desponsus</i>	6-10	Soil	Solitary	Asteraceae	<i>Cirsium</i>
<i>Melissodes</i>	<i>druriellus</i>	5-11	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>grindeliae</i>		Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>illatus</i>	7-9	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>menuachus</i>	7-10	Soil	Solitary	Asteraceae	

## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Melissodes</i>	<i>niveus</i>	7-10	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>rivalis</i>	5-10	Soil	Solitary	Asteraceae	<i>Cirsium</i>
<i>Melissodes</i>	<i>snowii</i>					
<i>Melissodes</i>	<i>subagilis</i>			Solitary	Asteraceae	
<i>Melissodes</i>	<i>subillatus</i>	6-9	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>tinctus</i>	8-12	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>trinodis</i>	7-10	Soil	Solitary	Asteraceae	
<i>Melissodes</i>	<i>wheeleri</i>	4-10	Soil	Solitary	Asteraceae	
<i>Nomada</i>	<i>aquilarum</i>	7-8	[Soil]	Parasite		
<i>Nomada</i>	<i>arenicola</i>					
<i>Nomada</i>	<i>articulata</i>	5-7	[Soil]	Parasite	[Halictidae]	[ <i>Agapostemon</i> ]
<i>Nomada</i>	<i>australis</i>	4-6	[Soil]	Parasite	[Halictidae]	[ <i>Agapostemon</i> ]
<i>Nomada</i>	<i>banksi</i>					
<i>Nomada</i>	<i>bella</i>	3-4	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>bethunei</i>					
<i>Nomada</i>	<i>composita</i>					
<i>Nomada</i>	<i>cressonii</i>	4-7	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>cuneata</i>	6 [10]	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>denticulata</i>					
<i>Nomada</i>	<i>fervida</i>	6-8	[Soil]	Parasite	[Halictidae]	[ <i>Agapostemon</i> ]
<i>Nomada</i>	<i>gracilis</i>	4-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>graenicheri</i>					
<i>Nomada</i>	<i>illinoensis</i>	4-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>imbricata</i>	4-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>lehighensis</i>	4	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>lepida</i>	5-7	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>louisianae</i>	5	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>luteoloides</i>	4-7	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>maculata</i>	4-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>obliterata</i>	5-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>ovata</i>	5-6	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>pygmaea</i>	4-6 [8]	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>rubicunda</i>	5-7	[Soil]	Parasite		
<i>Nomada</i>	<i>sayi</i>	4-7	[Soil]	Parasite	[Andrenidae]	[ <i>Andrena</i> ]
<i>Nomada</i>	<i>superba</i>					
<i>Nomada</i>	<i>tiftonensis</i>					
<i>Nomada</i>	<i>vegana</i>					
<i>Nomada</i>	<i>vicina</i>					
<i>Nomada</i>	<i>vincta</i>	7-9	[Soil]	Parasite		
<i>Nomada</i>	<i>xanthura</i>					
<i>Nomada</i>	<i>vegana</i>					

## Preliminary List of Minnesota Bees

Scientific Name		Flight Season	Nest	Sociality	Plant [or Insect] Host	
					Family	Genus
<i>Nomada</i>	<i>vicina</i>					
<i>Nomada</i>	<i>vincta</i>	7-9	Soil	Parasite		
<i>Nomada</i>	<i>xanthura</i>					
<i>Svastra</i>	<i>obliqua</i>	4-11	Soil	Solitary		
<i>Triepeolus</i>	<i>concauus</i>	5-10	[Soil]	Parasite	[Apidae]	[ <i>Svastra</i> ]
<i>Triepeolus</i>	<i>ressonii</i>	6-10	[Soil]	Parasite		
<i>Triepeolus</i>	<i>distinctus</i>	5-10	[Soil]	Parasite	[Halictidae]	[ <i>Dieunomia</i> ]
<i>Triepeolus</i>	<i>donatus</i>	7-10	[Soil]	Parasite		
<i>Triepeolus</i>	<i>helianthi</i>	6-10	[Soil]	Parasite	[Apidae]	[ <i>Melissodes</i> ]
<i>Triepeolus</i>	<i>lunatus</i>	3-10	[Soil]	Parasite		
<i>Triepeolus</i>	<i>obliteratus</i>	7-10	[Soil]	Parasite		
<i>Triepeolus</i>	<i>occidentalis</i>					
<i>Triepeolus</i>	<i>pectoralis</i>	5, 7-11	[Soil]	Parasite		
<i>Triepeolus</i>	<i>remigatus</i>					
<i>Triepeolus</i>	<i>rhododontus</i>	8	[Soil]	Parasite		
<i>Triepeolus</i>	<i>simplex</i>	7-8	[Soil]	Parasite	[Apidae?]	[ <i>Svastra?</i> ]
<i>Triepeolus</i>	<i>tanneri</i>					
<i>Xeromelecta</i>	<i>interrupta</i>		[Soil]	Parasite	[Apidae]	
<i>Xylocopa</i>	<i>virginica</i>		[Soil]	Parasite	[Apidae]	