

Bees on Farms and Floodplains

Out of a total of 114 species, 60 were recorded only on farms, 24 were encountered during both farm and floodplain forest sampling, while 30 were only observed in floodplain forests in Columbia County. This comparison is potentially (our data are still incomplete) interesting because it makes two points: first many of the species that may later be on-farm pollinators, kick off their year in natural areas like floodplain forests, where early-season pollen and nectar resources are available; second, there are nonetheless some bees which rarely if ever appear in adjacent field habitats later in the year (e.g., some of the *Andrena* species, whose short spring flight season may be spent mostly in floodplain forests).

Species registered only from floodplains are denoted by “ff”, those found only on farms are indicated by a “farm” designation, and finally those found at both sites are described as “farm & ff”.

| Species | Habitat | Species | Habitat | Species | Habitat |
|------------------------------------|---------|-------------------------------------|-----------|---------------------------------|-----------|
| <i>Agapostemon texanus</i> | farm | <i>Lasioglossum nymphaeorum</i> | farm | <i>Lasioglossum planatum</i> | farm & ff |
| <i>Andrena alleghaniensis</i> | farm | <i>Lasioglossum pectorale</i> | farm | <i>Lasioglossum quebecense</i> | farm & ff |
| <i>Andrena carlini</i> | farm | <i>Lasioglossum perpunctatum</i> | farm | <i>Lasioglossum rohweri</i> | farm & ff |
| <i>Andrena cressonii</i> | farm | <i>Lasioglossum pilosum</i> | farm | <i>Lasioglossum tegulare</i> | farm & ff |
| <i>Andrena fragilis</i> | farm | <i>Lasioglossum subviridatum</i> | farm | <i>Lasioglossum versans</i> | farm & ff |
| <i>Andrena nuda</i> | farm | <i>Lasioglossum truncatum</i> | farm | <i>Lasioglossum zephyrum</i> | farm & ff |
| <i>Andrena pruni</i> | farm | <i>Lasioglossum viridatum group</i> | farm | <i>Osmia pumila</i> | farm & ff |
| <i>Andrena</i> sp. 11 male | farm | <i>Lasioglossum zonulum</i> | farm | <i>Sphecodes</i> sp. A, female | farm & ff |
| <i>Andrena</i> sp. E, female | farm | <i>Lasioglossum zophops</i> | farm | <i>Andrena erigeniae</i> | ff |
| <i>Andrena wilkella</i> | farm | <i>Megachile latimanus</i> | farm | <i>Andrena</i> sp. 1 ,male | ff |
| <i>Anthidium oblongatum</i> | farm | <i>Megachile mendica</i> | farm | <i>Andrena</i> sp. 10 ,male | ff |
| <i>Apis mellifera</i> | farm | <i>Megachile montivaga</i> | farm | <i>Andrena</i> sp. 12 ,male | ff |
| <i>Augochlora pura</i> | farm | <i>Megachile relativa</i> | farm | <i>Andrena</i> sp. 2 ,male | ff |
| <i>Augochloropsis metallica</i> | farm | <i>Megachile rotundata</i> | farm | <i>Andrena</i> sp. 3 ,male | ff |
| <i>Bombus bimaculatus</i> | farm | <i>Melissodes bimaculata</i> | farm | <i>Andrena</i> sp. 4 ,male | ff |
| <i>Bombus citrinus</i> | farm | <i>Osmia lignaria</i> | farm | <i>Andrena</i> sp. 5 ,male | ff |
| <i>Bombus fervidus</i> | farm | <i>Paranthidium jugatorium</i> | farm | <i>Andrena</i> sp. 7 ,male | ff |
| <i>Bombus impatiens</i> | farm | <i>Peponapis pruinosa</i> | farm | <i>Andrena</i> sp. 8 ,male | ff |
| <i>Bombus pensylvanicus</i> | farm | <i>Perdita halictoides</i> | farm | <i>Andrena</i> sp. 9 ,male | ff |
| <i>Bombus vagans</i> | farm | <i>Sphecodes heraclei</i> | farm | <i>Andrena vicina</i> | ff |
| <i>Calliopsis andreniformis</i> | farm | <i>Sphecodes</i> sp. C, female | farm | <i>Andrena violae</i> | ff |
| <i>Holcopasites calliopsisidis</i> | farm | <i>Xylocopa virginica</i> | farm | <i>Bombus perplexus</i> | ff |
| <i>Hoplitis producta</i> | farm | <i>Agapostemon virescens</i> | farm & ff | <i>Colletes inaequalis</i> | ff |
| <i>Hoplitis spoliata</i> | farm | <i>Andrena crataegi</i> | farm & ff | <i>Lasioglossum atlanticum</i> | ff |
| <i>Hylaeus affinis</i> | farm | <i>Andrena nasonii</i> | farm & ff | <i>Lasioglossum carlini</i> | ff |
| <i>Hylaeus mesillae</i> | farm | <i>Augochlorella aurata</i> | farm & ff | <i>Lasioglossum laevissimum</i> | ff |
| <i>Hylaeus</i> sp. 1 | farm | <i>Bombus ternarius</i> | farm & ff | <i>Nomada bidentate</i> sp. A | ff |
| <i>Hylaeus</i> sp. 2 | farm | <i>Ceratina calcarata</i> | farm & ff | <i>Nomada bidentate</i> sp. B | ff |
| <i>Hylaeus</i> sp. 3 | farm | <i>Ceratina dupla</i> | farm & ff | <i>Nomada bidentate</i> sp. C | ff |
| <i>Lasioglossum admirandum</i> | farm | <i>Ceratina strenua</i> | farm & ff | <i>Nomada depressa</i> | ff |
| <i>Lasioglossum anomalum</i> | farm | <i>Halictus confuses</i> | farm & ff | <i>Nomada white spine</i> 1 | ff |
| <i>Lasioglossum brunneri</i> | farm | <i>Halictus ligatus</i> | farm & ff | <i>Nomada wt sp.</i> 2 | ff |
| <i>Lasioglossum cinctipes</i> | farm | <i>Halictus rubicundus</i> | farm & ff | <i>Nomada wt sp.</i> 3 | ff |
| <i>Lasioglossum crossoni</i> | farm | <i>Lasioglossum cattellae</i> | farm & ff | <i>Osmia atriventris</i> | ff |
| <i>Lasioglossum foxii</i> | farm | <i>Lasioglossum coriaceum</i> | farm & ff | <i>Osmia bucephala</i> | ff |
| <i>Lasioglossum leucozonium</i> | farm | <i>Lasioglossum cressonii</i> | farm & ff | <i>Osmia cornifrons</i> | ff |
| <i>Lasioglossum lineatulum</i> | farm | <i>Lasioglossum imitatum</i> | farm & ff | <i>Sphecodes</i> sp. B female | ff |
| <i>Lasioglossum macoupinense</i> | farm | <i>Lasioglossum obscurum</i> | farm & ff | <i>Sphecodes</i> sp. D female | ff |