

Hofmann, M., and S. S. Renner. Bee species recorded between 1992 and 2017 from green roofs in Asia, Europe, and North America, with key characteristics and open research questions. *Apidologie*. Online supporting material, Tables S1 and S2

Table S1: Overview of green roof (= GR) studies involving wild bee species assessment

Location	Time span	Roof type	Survey method	Species level ID (Y/N)	# species	Research Question(s)	Reference
European Studies							
Baden-Wuerttemberg, Germany	1990 - 1992	“Pflegetloses Pflanzendach” experimental extensive roof (only one layer, no drainage)	Pan traps	Y	19	Green roofs as secondary habitat	(Riedmiller 1991; Schneider & Riedmiller 1992; Riedmiller & Schneider 1993)
Berlin (7 roofs) and Neubrandenburg (5 roofs), Germany	April-September 2013	Green roofs of different ages (n=12)	Pan traps	Y (list not provided)	51	Influence of the number of plant species on the number of bee species	(Köhler 2014)
Bingen, Germany	July-September 2014 and June-August 2015	Extensive GR (n=5) and gravel roofs (n=4)	Observation	N	N/A	Comparison of insect abundance, density/m ² and diversity	(Hietel 2016 summarizing information from Kaiser 2014; Kuhlmann 2015)

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Böblingen/ Sindelfingen, Germany	mainly May- August 1992	Extensive to intensive GR (n=4)	Netting and hand capturing (two days each, 1-2h)	Y	49	Assessment of the arthropod spectrum on differently planted GR	(Mann 1994)
Böblingen, Germany and Linz, Austria		Extensive (n=4) and intensive (n=3) GR	Pan traps and Netting	Y (list not provided)	N/A	Faunistic assessment on different roof types	(Mann 1996a, 1996b)
Basel, Luzern, St Gallen, Zurich, Switzerland	2004 - 2005	Extensive GR (n=18)	Pan traps and observation	Y	77	Wild bees on extensive GRs; no comparison to ground-level habitats (reference samples lost due to disturbance)	(Brenneisen 2005)
St Gallen, Tessin, Vallis, Switzerland	2011 - 2013	GR (n=8), spontaneous GR (n=1), non-GR (n=3)	Observation, Netting (max 4x per year, 30 min each)	Y	44	Feasibility of nesting aids for ground-nesting species on GRs	(Brenneisen et al. 2014, summarizing information from Kälin 2005; Kessler 2010; Käppeli 2010; Zehnder 2011)

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Hannover, Germany	June-July 2015	GR (n=10): extensive <i>Sedum</i> -roofs (n=3), some shrubs (n=2), intensive roofs	Netting, 1x June and 1x July	Y	28	Wild bees and wasps on GRs	(Witt 2016)
London, UK	Summer-Autumn 2004	GR (<i>Sedum</i> , n=3) and brown/biodiverse roofs (n=2)	Pan traps	Y	22	Invertebrate conservation and habitat mitigation; Comparison of green (<i>Sedum</i>) roofs, brown/biodiverse roofs and brownfields	(Kadas 2006)
London, UK	N/A	Extensive GR (n=8)	Suction sampler	Y	N/A 9 hymenopterans	Invertebrate survey	(Jones 2002)
Northern France	11 April - 7 June 2011	Moss/ <i>Sedum</i> , herbaceous layer and shrubs (roofs (n=115))	Hand-sampling with pill bottles	Y	18	spider, true bug, beetle and hymenopteran abundance and species richness	(Madre et al. 2013)
Stuttgart, Wuerzburg, Germany	June-July 2005	Intensive (n=1) and extensive (n=2) GR	Pan traps	N	4	Height limitation of invertebrates on skyscrapers	(Mann 2005)

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Vienna, Austria	March – September 2014	Intensive and extensive GR (n=9)	Netting	Y	91	Species composition and abundances on GR, influence of vegetation and surrounding area	(Kratschmer 2015)
Zurich, Switzerland	May - September 2010	Extensive GR (n=40)	Pan traps, non-directional traps	Y (list not provided)	126	Habitat connectivity by GR for taxa of different mobility	(Braaker et al. 2014, 2017)
North American Studies							
Chicago, US	June – October 2008	GR dominated by native plants (n=2) or Sedum (n=4)	3x 15 min observation, netting, pan traps	Y	18	Comparison of GR with tallgrass prairie and city-park green spaces	(Tonietto et al. 2011)
Chicago, US	Three month	N/A (n=3)	Pan traps	N	N/A	Pollen limitation on GR compared to ground-level sites	(Ksiazek et al. 2012)
Chicago, US	2 years	Intensively maintained to extensive roofs (n=7)	Pan traps	Y	26	Species composition on GRs	(Ksiazek et al. 2014)
Halifax, Nova Scotia, US	May – October 2009	Established (>8) intensive roofs (> 30 cm growth medium)	Pan traps	N (only morpho-species)		Comparison of GR and ground-level habitats	(MacIvor & Lundholm 2011)

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Halifax, Nova Scotia, US	June-August 2014	Native planted GR (n=2)	Netting	Y	24	Comparison of green roof, urban and coastal barrens habitats	(Walker 2016)
Michigan, US	June – July 2010	<i>Sedum</i> GR (n=2)	Netting	Y	1	Arthropod survey of Michigan	(O’Brien, Swanson, & Monsma, 2012)
Toronto, Canada	2004 – 2006	Actively seeded (n=1) and passively seeded (n=1) GR	Pan traps	Y	79	Diversity and abundance of bees on GR in comparison to ground-level sites	(Colla et al. 2009)
Toronto, Canada	5 days in June and July	Green Roof Innovation Testing Lab (University of Toronto)	Netting	Y	17	Pollen analysis of urban bees visiting <i>Sedum</i> on green roofs	(MacIvor et al. 2015)
Toronto, Canada	2011 - 2013	Vegetated and non-vegetated roofs (n=29)	Trap nests	Y	11	Nesting activity of bees on GR depending on building height	(MacIvor, 2016)
Upper Midwest Great lakes (MI, OH), US	July - August 2004	Extensive (n=1) and intensive (n=1) roof	Netting	N	59 morpho-species of insects	Rapid biodiversity assessment from presence-absence and relative abundance data	(Coffman & Waite 2011)

Other studies

Chiba City, Japan	May- November 2010	150 m ² biotope roof, 8 years	Observation Y (7 x 3h), netting, pan traps	3	Plant development and invertebrate colonization after 8 years	(Nagase & Nomura 2014)
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Table S2: Alphabetical list of species reported on green roofs

Species	Location
European records	
<i>Andreas fulva</i>	Basel, CH
<i>Andrena bicolor</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, St Gallen, CH; London, UK
<i>Andrena blüthgeni</i>	Vienna, AT
<i>Andrena chrysoceles</i>	Böblingen/Sindelfingen, DE; Luzern, St. Gallen, CH
<i>Andrena cineraria</i>	Basel, CH
<i>Andrena combinata</i>	Tessin, CH
<i>Andrena curvungula</i>	Böblingen/Sindelfingen, DE
<i>Andrena danuvia</i>	Vienna, AT
<i>Andrena denticulata</i>	Hannover, DE
<i>Andrena dorsata</i>	Baden-Württemberg, DE; Hannover, DE; Vienna, AT
<i>Andrena flavipes</i>	Basel, Luzern, St. Gallen, Tessin ZH, CH; Böblingen/Sindelfingen, DE; Hannover, DE; London, UK; Northern France, FR; Vienna, AT

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<i>Andrena fucata</i>	Böblingen/Sindelfingen, DE
<i>Andrena fulva</i>	Böblingen/Sindelfingen, DE; London, UK
<i>Andrena gravida</i>	Böblingen/Sindelfingen, DE; Vienna, AT
<i>Andrena haemorrhoa</i>	Basel, St Gallen, CH; Böblingen/Sindelfingen, DE
<i>Andrena labialis</i>	Böblingen/Sindelfingen, DE
<i>Andrena labiata</i>	Böblingen/Sindelfingen, DE
<i>Andrena minutula</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, Tessin, CH; Hannover, DE; London, UK; Vienna, AT
<i>Andrena minutuloides</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, CH
<i>Andrena mnigroaena</i>	London, UK
<i>Andrena nigroaenea</i>	Vienna, AT
<i>Andrena nitida</i>	St Gallen, ZH, CH
<i>Andrena nitidiuscula</i>	Baden-Württemberg, DE
<i>Andrena ovatula</i>	Vienna, AT; Tessin, CH
<i>Andrena pandellei</i>	Böblingen/Sindelfingen, DE
<i>Andrena pilipes</i>	Vienna, AT

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<i>Andrena scotica</i>	London, UK; St Gallen, CH
<i>Andrena spec.</i>	Basel, Luzern, St. Gallen, ZH, CH
<i>Andrena strohmeilla</i>	Böblingen/Sindelfingen, DE
<i>Andrena subopaca</i>	Basel, St Gallen, CH; Böblingen/Sindelfingen, DE
<i>Andrena tibialis</i>	Vienna, AT
<i>Andrena trimmerana</i>	London, UK
<i>Andrena varians</i>	Böblingen/Sindelfingen, DE; Vienna, AT
<i>Andrena viridescens</i>	ZH, CH
<i>Anthidium spec.</i>	Würzburg, DE
<i>Anthidium punctatum</i>	St Gallen, CH
<i>Anthidium strigatum</i>	St Gallen, CH; Vienna, AT
<i>Anthophora crinipes</i>	Vienna, AT
<i>Anthophora furcata</i>	Basel, CH
<i>Anthophora plumipes</i>	Vienna, AT
<i>Anthophora quadrimaculata</i>	Böblingen/Sindelfingen, DE; Hannover, DE; Vienna, AT
<i>Anthophora spec.</i>	Basel, CH

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<i>Bombus alpestris</i>	St. Gallen, CH
<i>Bombus bohemicus</i>	Vienna, AT
<i>Bombus campestris</i>	St. Gallen, CH
<i>Bombus hortorum</i>	Böblingen/Sindelfingen, DE; St. Gallen, Tessin, CH; Vienna, AT
<i>Bombus humilis</i>	Böblingen/Sindelfingen, DE; Luzern, St. Gallen, Tessin, CH; Vienna, AT
<i>Bombus hypnorum</i>	Basel, Luzern, St. Gallen, ZH, CH; Northern France, FR; Hannover, DE; Vienna, AT
<i>Bombus lapidarius</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, Luzern, St. Gallen, ZH, CH; Hannover, DE; London, UK; Northern France, FR; Stuttgart, DE; Vienna, AT
<i>Bombus lucorum</i>	Hannover, DE; London, UK; Vienna, AT
<i>Bombus pascuorum</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Luzern, St Gallen, Tessin, ZH, CH; Hannover, DE; Northern France, FR; Vienna, AT
<i>Bombus pratorum</i>	Böblingen/Sindelfingen, DE; St Gallen, CH; Vienna, AT
<i>Bombus ruderatus</i>	Northern France, FR
<i>Bombus rupestris</i>	Vienna, AT
<i>Bombus soroeensis</i>	Basel, St Gallen, CH

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<i>Bombus spec.</i>	St Gallen, CH
<i>Bombus spec.</i>	Würzburg, DE
<i>Bombus sylvarum</i>	Northern France, FR
<i>Bombus sylvestris</i>	Basel, St Gallen, CH; London, UK
<i>Bombus terrestris</i>	Böblingen/Sindelfingen, DE; Hannover, DE; London, UK; Northern France, FR; St. Galle, Wallis, CH; Vienna, AT
<i>Ceratina cyanea</i>	Tessin, CH
<i>Chelostoma campanularum</i>	St. Gallen, CH
<i>Chelostoma florissomne</i>	Vienna, AT
<i>Chelostoma rapunculi</i>	Böblingen/Sindelfingen, DE; St. Gallen, CH; Vienna, AT
<i>Coelioxys aurolimbata</i>	Baden-Württemberg, DE
<i>Coelioxys echinata</i>	Vienna, AT
<i>Coelioxys elongata</i>	Hannover, DE; Vienna, AT
<i>Coelioxys haemorrhhoa</i>	Vienna, AT
<i>Coelioxys mandibularis</i>	Vienna, AT
<i>Colletes daviesanus</i>	Hannover, DE; Vienna, AT; ZH, CH

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<i>Colletes spec.</i>	St. Gallen, CH
<i>Dasypoda hirtipes</i>	Tessin, CH
<i>Eucera nigrescens</i>	Basel, Luzern, Tessin, CH; Vienna, AT
<i>Halictus aff. eurygnathus</i>	Basel, CH
<i>Halictus kessleri</i>	Vienna, AT
<i>Halictus maculatus</i>	Vienna, AT
<i>Halictus rubicundus</i>	St. Gallen, Tessin, CH
<i>Halictus scabiosae</i>	Luzern, CH; Northern France, FR
<i>Halictus seladonius</i>	Vienna, AT
<i>Halictus simplex</i>	Böblingen/Sindelfingen, DE; Tessin, CH; Vienna, AT
<i>Halictus spec.</i>	St Gallen, CH
<i>Halictus subauratus</i>	Basel, Tessin, CH; Northern France, FR; Vienna, AT
<i>Halictus tumulorum</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, Luzern, St. Gallen, CH; Hannover, DE; Vienna, AT
<i>Heriades crenulatus</i>	Vienna, AT
<i>Heriades rubicola</i>	Vienna, AT

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<i>Heriades truncorum</i>	Hannover, DE; St. Gallen, CH; Vienna, AT
<i>Hylaeus brevicornis</i>	Böblingen/Sindelfingen, DE; St. Gallen, CH
<i>Hylaeus cardioscapus</i>	Vienna, AT
<i>Hylaeus communis</i>	Basel, Tessin, CH; Hannover, DE; Vienna, AT
<i>Hylaeus confusus</i>	St. Gallen, CH
<i>Hylaeus dilatatus</i>	Hannover, DE
<i>Hylaeus gredleri</i>	Vienna, AT
<i>Hylaeus hyalinatus</i>	Hannover, DE; Tessin, CH; Vienna, AT
<i>Hylaeus imparilis</i>	Vienna, AT
<i>Hylaeus leptcephalus</i>	Böblingen/Sindelfingen, DE
<i>Hylaeus nigritus</i>	Böblingen/Sindelfingen, DE; Basel, Luzern, St. Gallen, CH
<i>Hylaeus pictipes</i>	Vienna, AT
<i>Hylaeus punctatus</i>	Wallis, CH
<i>Hylaeus sinuatus</i>	Vienna, AT
<i>Hylaeus spec.</i>	Würzburg, DE
<i>Hylaeus styriacus</i>	Basel, CH; Vienna, AT

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<i>Hylaeus taeniolatus</i>	Basel, CH
<i>Lasioglossum albipes</i>	Basel, Luzern, St. Gallen, ZH, CH
<i>Lasioglossum calceatum</i>	Baden-Württemberg, DE; Basel, Luzern, St. Gallen, ZH, CH; Hannover, DE; London, UK; Vienna, AT
<i>Lasioglossum fulvicorne</i>	Basel, Luzern, St. Gallen, Tessin, ZH, CH; Hannover, DE
<i>Lasioglossum laticeps</i>	Basel, Luzern, St. Gallen, ZH, CH; Hannover, DE; Vienna, AT
<i>Lasioglossum lativentre</i>	Basel, CH; London, UK
<i>Lasioglossum leucopus</i>	Basel, CH; Böblingen/Sindelfingen, DE; Hannover, DE; London, UK
<i>Lasioglossum lucidulum</i>	Tessin, CH
<i>Lasioglossum malachurum</i>	Northern France, FR; Vienna, AT; St. Gallen, ZH, CH
<i>Lasioglossum marginatum</i>	Vienna, AT
<i>Lasioglossum minutissimum</i>	Basel, CH; London, UK
<i>Lasioglossum minutulum</i>	Vienna, AT
<i>Lasioglossum morio</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, Luzern, St. Gallen, Wallis, ZH, CH; Hannover, DE; London, UK; Vienna, AT
<i>Lasioglossum nigripes</i>	Vienna, AT

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<i>Lasioglossum nitidulum</i>	Böblingen/Sindelfingen, DE; Hannover, DE; Vienna, AT
<i>Lasioglossum parvulum</i>	St Gallen, Wallis, CH
<i>Lasioglossum pauxilium</i>	Basel, Luzern, St. Gallen, Tessin, CH; Böblingen/Sindelfingen, DE; Hannover, DE; Vienna, AT
<i>Lasioglossum politum</i>	Baden-Württemberg, DE; Basel, Tessin, Wallis, CH; Northern France, FR; Vienna, AT
<i>Lasioglossum sabulosum</i>	Vienna, AT
<i>Lasioglossum smeathmanellum</i>	Basel, Luzern, CH; London, UK
<i>Lasioglossum zonulum</i>	St. Gallen, Tessin, CH
<i>Megachile apicalis</i>	Vienna, AT
<i>Megachile circumcincta</i>	Böblingen/Sindelfingen, DE
<i>Megachile ericetorum</i>	Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Northern France, FR; Vienna, AT
<i>Megachile lagopoda</i>	Vienna, AT
<i>Megachile leachella</i>	Vienna, AT
<i>Megachile pilidens</i>	Northern France, FR; Vienna, AT
<i>Megachile spec.</i>	Würzburg, DE

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<i>Megachile versicolor</i>	Vienna, AT
<i>Megachile willughbiella</i>	Baden-Württemberg, DE; Basel, St. Gallen, Tessin, CH; Hannover, DE; Northern France, FR; Vienna, AT
<i>Melecta albifrons</i>	Vienna, AT
<i>Melitta haemorrhoidalis</i>	Vienna, AT
<i>Melitta leporina</i>	Vienna, AT
<i>Nomada fabriciana</i>	Böblingen/Sindelfingen, DE; London, UK
<i>Nomada flava</i>	Böblingen/Sindelfingen, DE
<i>Nomada fucata</i>	Böblingen/Sindelfingen, DE
<i>Nomada goodeniana</i>	Vienna, AT
<i>Nomada spec.</i>	St Gallen, ZH, CH
<i>Nomada sheppardana</i>	Hannover, DE
<i>Nomada striata</i>	St Gallen, CH
<i>Nomada succincta</i>	Böblingen/Sindelfingen, DE
<i>Osmia adunca</i>	Basel, Wallis, CH; Vienna, AT
<i>Osmia aurulenta</i>	Böblingen/Sindelfingen, DE

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<i>Osmia bicolor</i>	St. Gallen, CH
<i>Osmia bicornis</i>	Hannover, DE
<i>Osmia caerulescens</i>	Tessin, CH
<i>Osmia cornuta</i>	Basel, CH; Vienna, AT
<i>Osmia leucomelana</i>	St Gallen, CH; Vienna, AT
<i>Osmia mitis</i>	St. Gallen, CH
<i>Osmia rufa</i>	Basel, Luzern, St. Gallen, ZH, CH; Böblingen/Sindelfingen, DE; Vienna, AT
<i>Panurgus calcaratus</i>	Basel, CH
<i>Sphecodes albilabris</i>	Vienna, AT
<i>Sphecodes ephippius</i>	Böblingen/Sindelfingen, DE; St. Gallen, CH
<i>Sphecodes ferruginatus</i>	St. Gallen, CH
<i>Sphecodes monilicornis</i>	Tessin, CH; Vienna, AT
<i>Sphecodes niger</i>	Böblingen/Sindelfingen, DE
<i>Sphecodes ruficrus</i>	Vienna, AT
<i>Sphecodes schenckii</i>	Tessin, CH

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Stelis punctulatissima Vienna, AT

Xylocopa violacea Basel, CH

Records from both Europe and North America

Anthidium manicatum Baden-Württemberg, DE; Basel, Luzern, St. Gallen, CH; Chicago, IL; Toronto, ON; Vienna, AT

Anthidium oblongatum Baden-Württemberg, DE; Chicago, IL; Northern France, FR; Vienna, AT; Wayne Co, Kent Co., Washtenaw Co., MI

*Apis mellifera** Baden-Württemberg, DE; Böblingen/Sindelfingen, DE; Basel, Luzern, St. Gallen, Tessin, Wallis, ZH, CH; Chicago, IL; Halifax, NS; London, UK; Böblingen/Sindelfingen, DE; Northern France, FR; Stuttgart, DE; Toronto, ON; Vienna, AT

Halictus rubicundus Böblingen/Sindelfingen, DE; Chicago, IL; Halifax, NS; Luzern, St. Gallen, CH; Toronto, ON; Vienna, AT

Hylaeus leptcephalus Chicago, IL; Toronto, ON; Vienna, AT

Hylaeus punctatus Chicago, IL; Toronto, ON; Vienna, AT

Lasioglossum leucozonium Basel, St. Gallen, Tessin, CH; Böblingen/Sindelfingen, DE; London, UK; Toronto, ON; Vienna, AT

Lasioglossum villosulum Basel, Luzern, S. Gallen, CH; Böblingen/Sindelfingen, DE; London, UK; Northern France, FR; Toronto, ON; Vienna, AT

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<i>Megachile centuncularis</i>	Basel, Tessin, CH; Chicago, IL; London, UK; Toronto, ON; Vienna, AT
<i>Megachile rotundata</i>	Baden-Württemberg, DE; Basel, CH; Chicago, IL; Hannover, DE; Northern France, FR; Toronto, ON; Vienna, AT
<i>Osmia caerulescens</i>	Toronto, ON; Tessin, CH; Vienna, AT

North American records

<i>Agapostemon virescens</i>	Chicago, IL; Toronto, ON
<i>Andrena ceanothi</i>	Halifax, NS
<i>Andrena commoda</i>	Toronto, ON
<i>Andrena crataegi</i>	Halifax, NS
<i>Andrena milwaukeensis</i>	Halifax, NS
<i>Andrena nasonii</i>	Toronto, ON
<i>Andrena nivalis</i>	Halifax, NS
<i>Andrena regularis</i>	Halifax, NS
<i>Andrena vicina</i>	Toronto, ON
<i>Andrena wilkella</i>	Halifax, NS; Toronto, ON

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<i>Andrena w-scripta</i>	Halifax, NS
<i>Anthidiellum notatum</i>	Toronto, ON
<i>Augochlorella aurata</i>	Chicago, IL; Toronto, ON
<i>Bombus bimaculatus</i>	Halifax, NS; Toronto, ON
<i>Bombus griseocollis</i>	Toronto, ON
<i>Bombus impatiens</i>	Halifax, NS; Chicago, IL
<i>Bombus perplexus</i>	Toronto, ON
<i>Bombus rufocinctus</i>	Halifax, NS; Toronto, ON
<i>Bombus terricola</i>	Halifax, NS
<i>Bombus vagans</i>	Toronto, ON
<i>Calliopsis andreniformis</i>	Chicago, IL
<i>Caratina calcarata</i>	Toronto, ON
<i>Ceratina dupla dupla</i>	Toronto, ON
<i>Coelioxys sayi</i>	Toronto, ON
<i>Halictus confusus</i>	Chicago, IL; Toronto, ON
<i>Halictus ligatus</i>	Chicago, IL; Halifax, NS; Toronto,

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	ON
<i>Heriades carinata</i>	Toronto, ON
<i>Hoplitis affinis</i>	Toronto, ON
<i>Hoplitis cressoni</i>	Toronto, ON
<i>Hoplitis producta</i>	Toronto, ON
<i>Hylaeus affinis</i>	Chicago, IL
<i>Hylaeus mesillae</i>	Chicago, IL; Halifax, NS
<i>Hylaeus modestus</i>	Toronto, ON
<i>Lasioglossum anomalum</i>	Chicago, IL
<i>Lasioglossum coriaceum</i>	Toronto, ON
<i>Lasioglossum cressonii</i>	Halifax, NS; Toronto, ON
<i>Lasioglossum divergens</i>	Toronto, ON
<i>Lasioglossum ellisiae</i>	Chicago, IL; Toronto, ON
<i>Lasioglossum ephialtum</i>	Toronto, ON
<i>Lasioglossum fattigi</i>	Toronto, ON
<i>Lasioglossum foxii</i>	Toronto, ON

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<i>Lasioglossum illinoense</i>	Chicago, IL
<i>Lasioglossum imitatus</i>	Toronto, ON
<i>Lasioglossum laevissimum</i>	Toronto, ON
<i>Lasioglossum lineatulum</i>	Toronto, ON
<i>Lasioglossum mitchelli</i>	Chicago, IL
<i>Lasioglossum paradmiraandum</i>	Toronto, ON
<i>Lasioglossum pectorale</i>	Chicago, IL
<i>Lasioglossum perpunctatum</i>	Toronto, ON
<i>Lasioglossum perspicuum</i>	Toronto, ON
<i>Lasioglossum pilosum</i>	Chicago, IL; Toronto, ON
<i>Lasioglossum rohweri</i>	Toronto, ON
<i>Lasioglossum smilacinae</i>	Chicago, IL
<i>Lasioglossum spec.</i>	Chicago, IL
<i>Lasioglossum spec.</i>	Chicago, IL
<i>Lasioglossum tegulare</i>	Toronto, ON
<i>Lasioglossum zephyrum</i>	Chicago, IL; Toronto, ON

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<i>Lasioglossum zophops</i>	Chicago, IL
<i>Lasioglossum oblongum</i>	Toronto, ON
<i>Megachile brevis brevis</i>	Toronto, ON
<i>Megachile campanulae</i>	Toronto, ON
<i>Megachile dentiventris</i>	Toronto, ON
<i>Megachile frigida</i>	Halifax, NS
<i>Megachile illata</i>	Toronto, ON
<i>Megachile latimanus</i>	Toronto, ON
<i>Megachile melanophaea</i>	Halifax, NS
<i>Megachile pugnata</i>	Toronto, ON
<i>Megachile texana</i>	Toronto, ON
<i>Melissodes bimaculata</i>	Chicago, IL
<i>Melissodes desponsa</i>	Chicago, IL; Toronto, ON
<i>Osmia lignaria</i>	Toronto, ON
<i>Osmia pumila</i>	Toronto, ON
<i>Pepoapis pruinosa</i>	Toronto, ON

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Sphecodes spec. Toronto, ON

Sphecodes spec. Chicago, IL

Xylocopa virginica Toronto, ON

Asian records

Apis cerana jaopnica Chiba City, Japan

Xylocopa appendiculata circumvolans Chiba City, Japan
