

SIMPLE GUIDE TO SOLITARY BEES IN IRELAND

PART 2

Guide to species

GUIDE TO SPECIES

These are NOT keys. They are simply intended as a guide to help make the group more accessible to beginners. They refer only to species currently known from Ireland

Special thanks to Josef Dvořák who has very kindly allowed his photographs of pinned specimens to be used in this guide.

<http://www.biolib.cz/en/gallery/dir388>

The following websites provide excellent information and photographs of solitary bees

The screenshot shows the BWARS (Bees, Wasps & Ants Recording Society) website. The header includes navigation links for Home, Latest content, Forum, Register, and Login, along with a search bar. The main navigation menu lists: Bees, Wasps & Ants, About BWARS, ID Help & Recording, Projects & Research, and Resources. A sidebar on the left contains links for About bees, wasps and ants, Species, Information Sheet Downloads, Observations, UK Guides, and List of species. The main content area displays a simple alphabetical list of all species on the BWARS site, including *Arachnospila spissa* (Schmidt, 1837), *Bombus ruderarius* (Müller, 1776), *Bombus ruderatus* (Fabricius, 1775), *Bombus rufus* (Fabricius, 1793), *Bombus soroeensis* (Fabricius, 1777), *Bombus subterraneus* (Linnaeus, 1758), *Bombus sylvarum* (Linnaeus, 1761), *Bombus sylvestris* (Lepelletier, 1832), *Bombus terrestris* (Linnaeus, 1758), *Bombus vestalis* (Geoffroy, 1785), *Calladurgus fasciatus* (Spinola, 1808), *Cephalonomia formiciformis* Westwood, 1833, *Cephalonomia hammi* Richards, 1939, *Ceratina cyanea* (Kirby, 1802), *Cerceris arenaria* (Linnaeus, 1758), *Cerceris quadricincta* (Panzer, 1799), *Cerceris quinquefasciata* (Rossi, 1792), *Cerceris ruficornis* (Fabricius, 1793), *Cerceris rybyensis* (Linnaeus, 1771), *Cerceris sabulosa* (Panzer, 1799), *Ceropales maculata* (Fabricius, 1775), *Ceropales variegata* (Fabricius, 1798), *Chelostoma campanularum* (Kirby, 1802), *Chelostoma florisomne* (Linnaeus, 1758), *Chrysis angustula* Schenck, 1856, *Chrysis bicolor* (Lepelletier, 1805), *Chrysis fulgida* Linnaeus, 1761, *Chrysis gracillima* (Förster, 1853), *Chrysis ignita* (Linnaeus, 1758), *Chrysis ignita sensu lato*, and *Chrysis illigeri* Wesmael, 1839. The list is paginated with links for first, previous, 1, 2, 3, 4, 5, 6, 7, next, and last. The footer includes Acknowledgements, Site map, Privacy, and a copyright notice for Bees Wasps & Ants Recording Society 2013.

Fantastic site with maps, photographs and profiles of Bees from Britain & Ireland

<http://www.bwars.com>

Steven Falk > Collections > Insects > Hymenoptera (bees, wasps, ants and relatives)



Apoidea (bees)

Welcome to the BRITISH BEES ON FLICKR site. This collection covers all 275 species of bee on the British and Irish list (including the Channel Islands) acting as a virtual field experience and virtual museum collection. Special thanks are due to the Natural History Museum, London and the Oxford University Museum for allowing me to photograph specimens that were lacking in my own collection and to other photographers for allowing me to host their images.

The collection is organised as alphabetically arranged genera containing alphabetically-arranged species 'albums'. Photos within individual species albums are arranged in a set sequence: males (living), males (pinned and microscopic views), females (living), females (pinned and microscopic views), habitat(s), key forage plants, any special parasites/hosts.

Once in a species album, hover your cursor over the top of page to view the species accounts that have been prepared for every species. These often contain live hyperlinks to other websites relating to that species (this facility may not work on all browsers - try Chrome)

If you double click on individual photos you will find often useful notes, especially for microscopic shots, explaining diagnostic features and differences from similar species. Click once more and the photo will get bigger and reveal more detail.



Andrena (mining bees)
59 albums



Andrena s.g....
10 albums



Anthidium (wool-carder...)
2 albums



Anthophora (flower bees)
6 albums



Apis (honey bees)
1 album



Bombus (bumblebees)
32 albums



Ceratina (small...)
1 album



Chelostoma (scissor bees)
2 albums



Coelioxys...
8 albums



Excellent publicly available flickr account with photographs and profiles of Bees from Britain & Ireland

Steven Falk – flickr account

BioLib.cz SEARCH

• SYSTEM • LOCALITIES • BIOTOPES • GALLERY • ENCYCLOPEDIA • LINKS • FORUMS • HELP • SHOW INFO

Gallery

- Gallery
- New images
- Undetermined images
- Taxon profile
- Images waiting for confirmation
- Gallery - not confirmed

Others

- Featured author galleries
- Image sets
- Galleries by tags

User






- Login
- Forgotten password
- Participate in BioLib
- Settings

Gallery

<< Go one directory up

Apoidea

Directories

<p>Ampulicidae - cockroach wasps</p> 	<p>Andrenidae</p> 
<p>Apidae - bees</p> 	<p>Colletidae - plasterer bees</p> 
<p>Crabronidae</p> 	<p>Dasypodaidae</p> 
<p>Halictidae - sweat bees</p> 	<p>Megachilidae - mason bees</p> 
<p>Melittidae</p> 	<p>Sphecidae</p> 

Undetermined images (94)

BioLib is an international encyclopaedia of plants, fungi and animals. It has excellent photographs of solitary bees.

<http://www.biolib.cz/en/gallery/dir388/>



+ Biodiversity inventory

+ Invasive species

+ Irish Pollinator Initiative

IPI aims and updates

+ Pollination

+ All-Ireland Pollinator Plan

+ Bees

+ Hoverflies

+ Get involved

Events

ID guides

Submit records

Contact

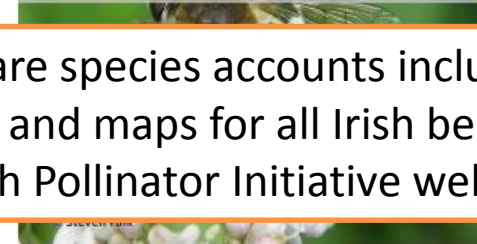
Irish Pollinator Initiative

Driving pollinator conservation through better data

Bees Species Accounts



Syrphids Species Accounts



There are species accounts including photos and maps for all Irish bees on the Irish Pollinator Initiative website

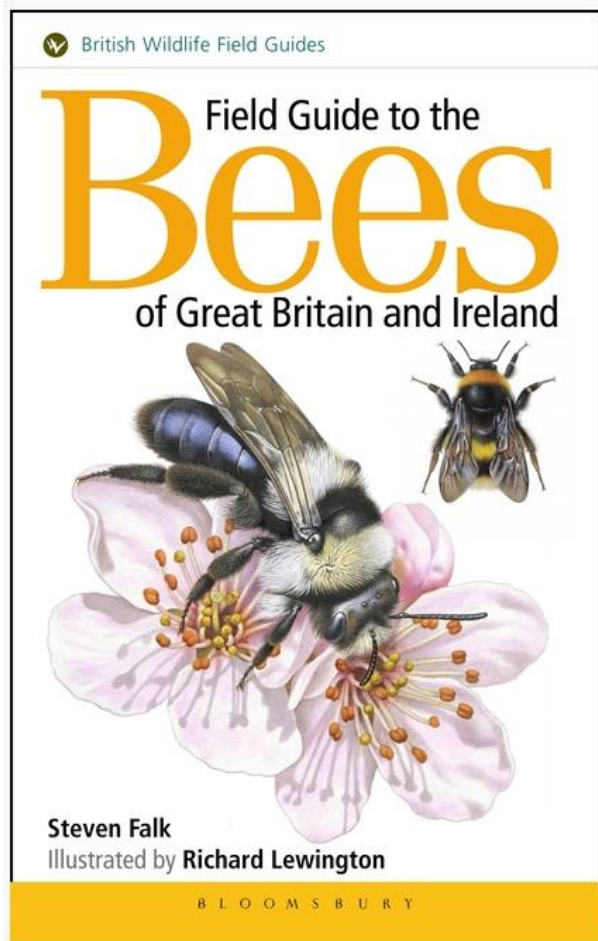
Get Involved



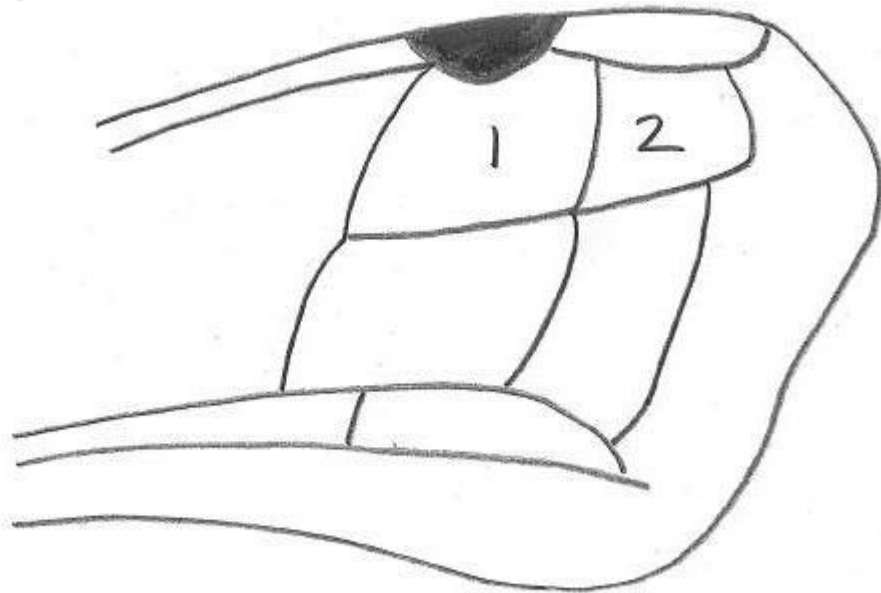
ID Guides



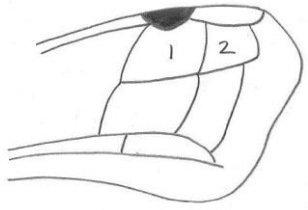
RECOMMENDED GUIDE TO SOLITARY BEES:



BEES WITH TWO CELLS IN THEIR WINGS



- *Osmia*
- *Anthidium*
- *Megachile*
- *Coelioxys*
- *Hylaeus*



2 cells in wing

Very simple key to the genera known from Ireland

Underside of abdomen with dense hairs

Underside of abdomen not hairy

Feet with prominent pad between claws



Feet without a pad between claws

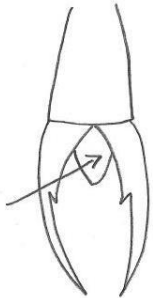
Eyes hairy. Abdomen with pointed tip

Eyes not hairy. Small black bee, face with yellow/white markings

Osmia

Coelioxys

Hylaeus



Yellow markings on sides of abdomen, head & legs

No yellow markings on sides abdomen, head & legs

Anthidium

Megachile

Osmia (Mason bees)

- ✓ 2 Irish species
- ✓ Chunky bee with large rounded abdomen
- ✓ *O. aurulenta* is coastal and nests only in empty snail shells. It is only found along the east and southeast coast.
- ✓ *O. bicornis (rufa)* is rare & known only from cities: Dublin, Belfast, Waterford & Cork. It may have been deliberately introduced (commercially available in UK as a garden pollinator).

It can be possible to spot *Osmia aurulenta* in action in coastal sites along the east coast – check snail shells

- ✓ medium sized solitary species (7-12mm)
- ✓ females have ginger hairs on the thorax, and ginger hair bands on the abdomen which are most obvious at the tip





Osmia aurulenta (Panzer, 1799)



Osmia rufa (Linnaeus, 1758)

Anthidium (Wool carder bee)

Anthidium manicatum female

© Steven Falk <https://www.flickr.com/photos/63075200@N07/>

- ✓ 1 Irish species: *Anthidium manicatum*
- ✓ Large bee (8-12mm)
- ✓ Distinctive yellow markings on the sides of the abdomen, head & legs
- ✓ Stores pollen on the underside of its abdomen
- ✓ First recorded in Wexford in 2015



Could be identified
in the field

Megachile (Leaf cutter bees)

✓ 5 Irish species

Megachile centuncularis

Megachile ligniseca

Megachile maritima

Megachile versicolor

Megachile willughbiella

✓ Large, chunky bee

✓ Stores pollen on the underside of its abdomen

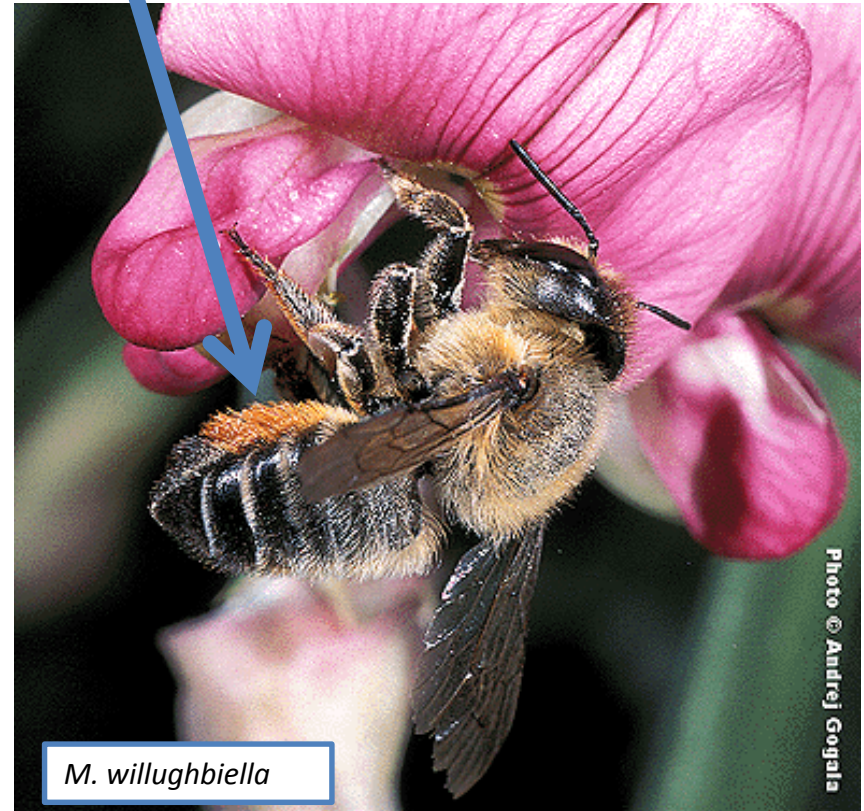
✓ Leaf cutter bees cut out leaves/petals and use these to build nests

✓ Found in a range of habitats

✓ Good key is available: *Identification of Leaf-cutter bees British Wildlife August 1999; 390-393.*

✓ When pinning it is important to pin out the jaws as the teeth are used in identification

Underside of abdomen
hairy – to store pollen

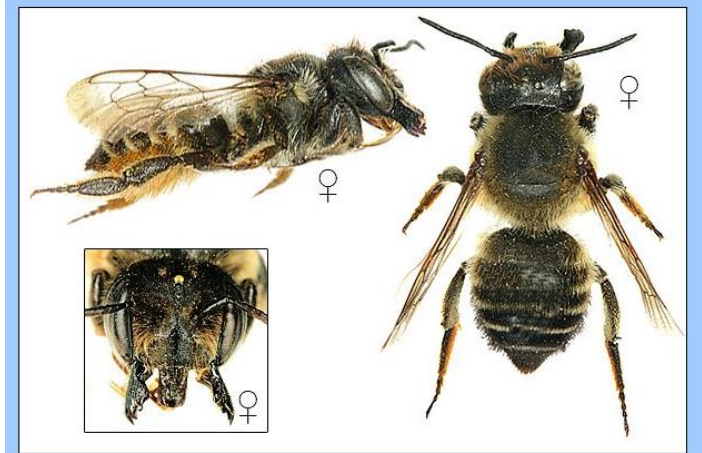


M. willughbiella

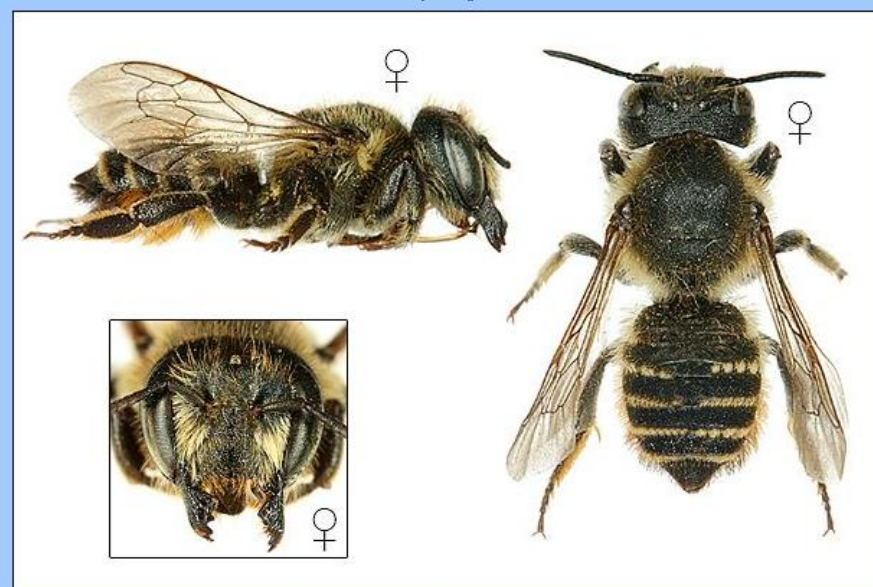
Photo © Andrej Gogala



Megachile centuncularis (Linnaeus, 1758)



Megachile willughbiella (Kirby, 1802)

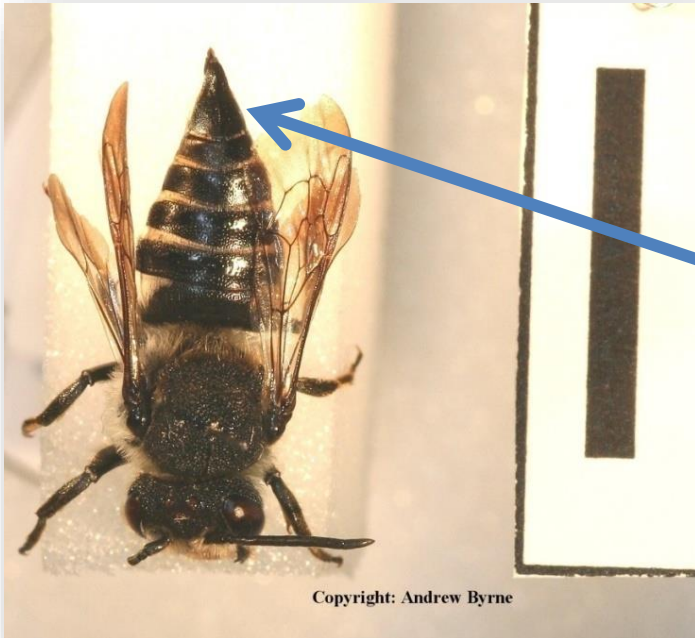
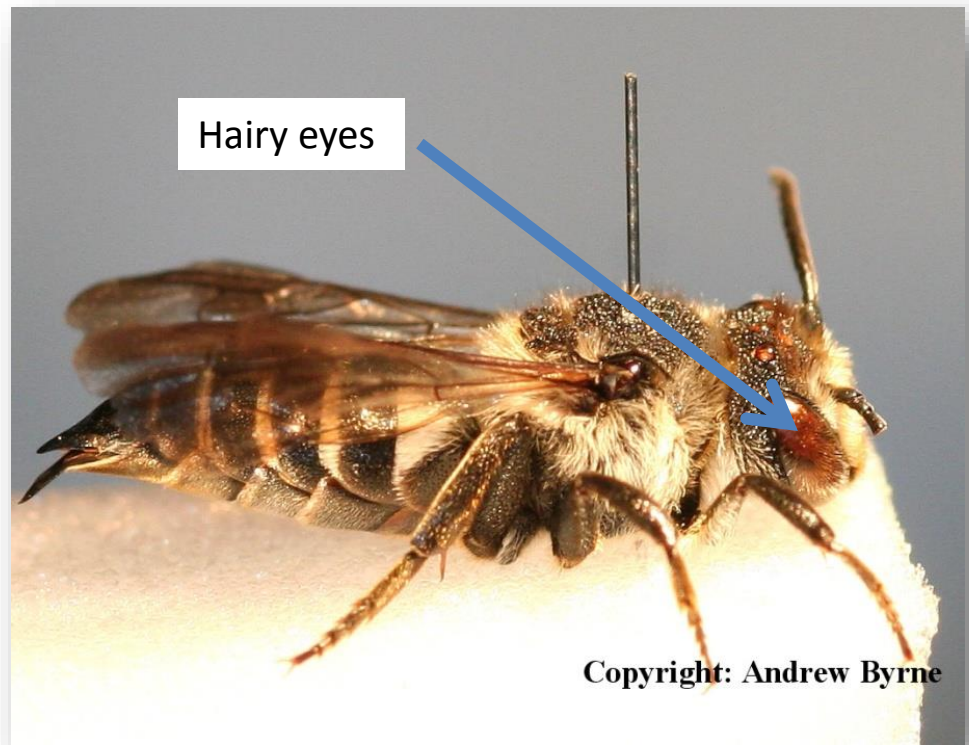


Megachile versicolor Smith, 1844

To positively ID *Megachile* to species you have to take a lethal sample and use microscope facilities

Coelioxys (Sharp tailed bees)

- ✓ 2 Irish species (*C. inermis* & *C. elongata*)
- ✓ Eyes hairy
- ✓ Medium sized bee (9-15mm)
- ✓ Tapered abdomen, particularly females
- ✓ Rare but found in a range of habitats
- ✓ Cuckoo bees – they parasitise *Megachile* nests



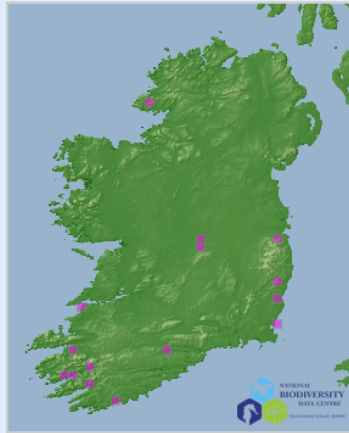
Sharply tapered abdomen,
particularly females

Coelioxys elongata

Common name : Not available

Conservation status : ENDANGERED

ENDANGERED



Click map for live map

Currently
No
Image

Coelioxys inermis

Common name : Not available

Conservation status : Data deficient - poorly recorded



Click map for live map



About the species

Flight period: June-September

Preferred environment: Rare. Most often recorded in open habitats, but precise habitat associations unclear.

Nesting biology: Cleptoparasite of *Megachile* species

Flowers visited: Polylectic - *Lotus*, *Trifolium*, *Knautia*, *Solidago*

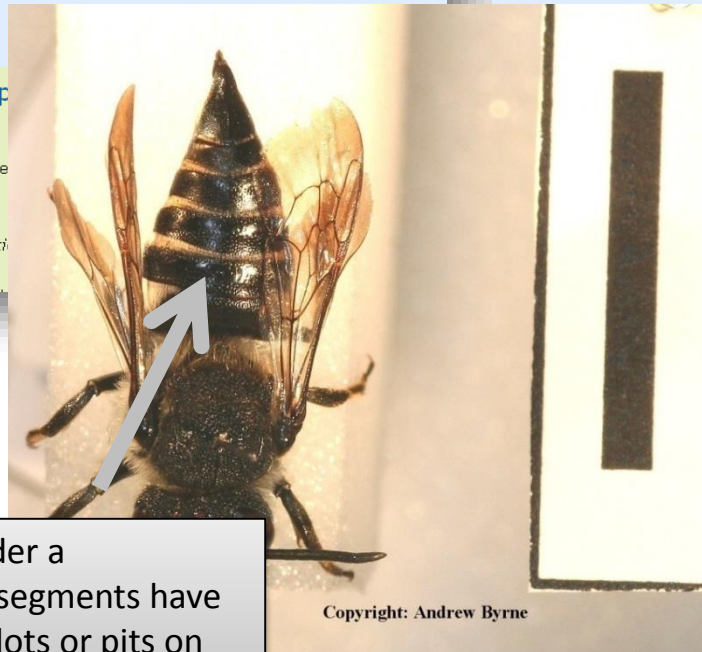
About the species

: Rare. Habitat associations unknown. It is a parasitic species of *Megachile* species. It is polylectic - *Lotus*, *Trifolium*, *Knautia*, *Jasione*, *Scabiosa* etc. It is found throughout Europe, up to 66°N, including Britain and Ireland

Notes:

It is a recorded cleptoparasitic solitary species (9-14mm)

It is distinguished from *C. elongata* by its lack of pale hair bands and is extremely pointed at the tip in females



FEMALES: When viewed under a microscope, the abdominal segments have much denser punctuation (dots or pits on surface) in *C. elongata* than in *C. inermis*.

It is useful to get records of *Coelioxys* at the genus level – the tapered abdomen is distinctive



BWARS

Bees, Wasps & Ants
Recording Society

 Search

Identification guides to download

Bees

A visual guide for the identification of British Coelioxys bees - Rhian Rowson & Mark Pavett (2008).

BWARS members Rhian Rowson and Mark Pavett have produced this photo-guide to aid the identification of British *Coelioxys* bees.

Test Key for Hylaeus bees - Alan Stubbs (2007).

BWARS member Alan Stubbs has produced this test key. Please read the introduction before using this key.

Wasps

The British Potter and Mason Wasps - Michael Archer (1996).

BWARS President, Michael Archer has kindly made the key from his Handbook available as a free download.

Paper and Social wasps of central Europe - Libor Dvořák & Stuart Roberts (2006)

Keys in Czech and English. Lavishly illustrated. Includes all British species.

Ants

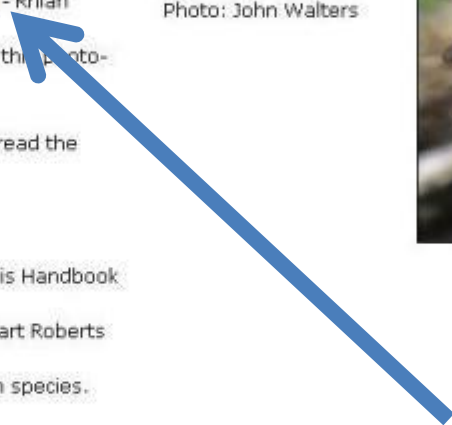
3 Myrmica species - Phil Attewell (2011): *Part 1* and *Part 2* aids to help separate *Myrmica scabrinodis*, *sabuleti* and *speciodes*.

Stenamma worker ants - Mike Fox (2009).

BWARS ant record coordinator, Mike Fox has produced this photographic guide to distinguishing UK *Stenamma* worker ants.

Eumenes coarctatus - a potter wasp.

Photo: John Walters



A good key is available on the BWARS website

Hylaeus (White faced bees)

✓ 4 Irish species

Hylaeus brevicornis

Hylaeus communis

Hylaeus confusus

Hylaeus hyalinatus

✓ Small, black bees (5-7mm)

✓ Face with yellow or white markings

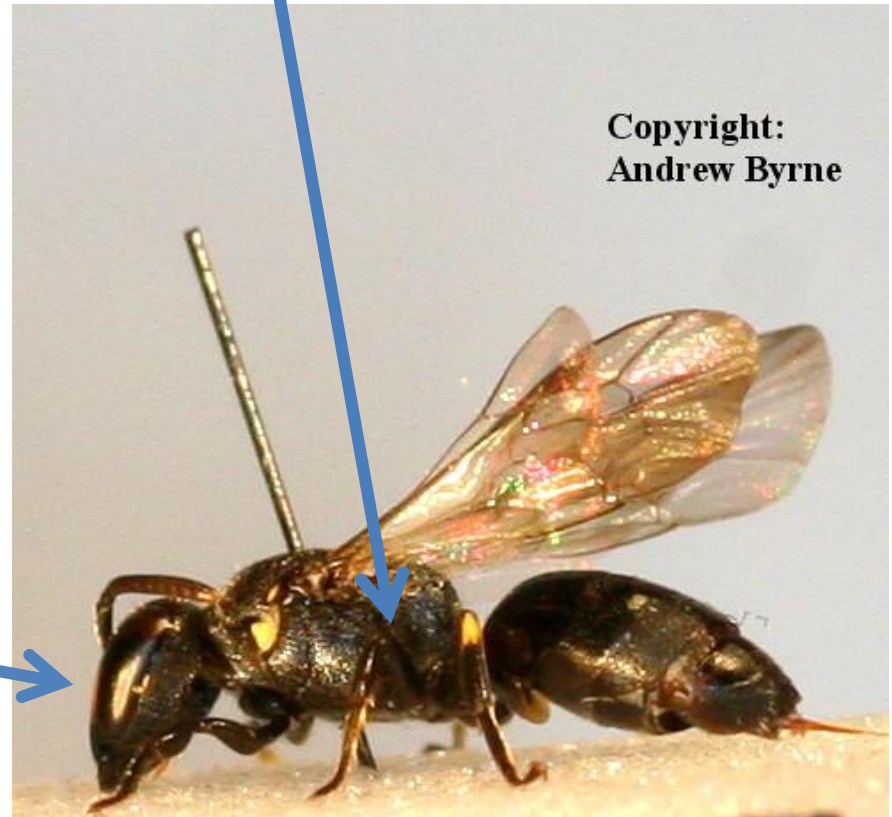
✓ Almost hairless

✓ Found in a range of habitats

Small, black body, almost
hairless

Copyright:
Andrew Byrne

Face with yellow or white
markings



Hylaeus males – have a look at the face



If the face has yellow curling around the antennal sockets it is *Hylaeus communis*



If the mandibles are partly yellow-white it is *Hylaeus confusus*



If the mandibles are black it is either *Hylaeus hyalinatus* or *Hylaeus brevicornis*

©Josef Dvořák: <http://www.biolib.cz/en/gallery/dir388>

***Hylaeus* females – have a look at the antennae**



If the antennae is entirely black it is either ***Hylaeus communis*** or ***Hylaeus confusus***

If the antennae is not entirely black (pale on the underside) it is either ***Hylaeus hyalinatus*** or ***Hylaeus brevicornis***



BWARS

Bees, Wasps & Ants
Recording Society

Search

Bees, Wasps & Ants About BWARS ID Help & Recording Projects & Research Resources

Identification guides to download

Bees

A visual guide for the identification of British Coelioxys bees - Rhian Rowson & Mark Pavett (2008).

BWARS members Rhian Rowson and Mark Pavett have produced this photo-guide to aid the identification of British *Coelioxys* bees.

Test Key for Hylaeus bees - Alan Stubbs (2007).

BWARS member Alan Stubbs has produced this test key. Please read the introduction before using this key.

Wasps

The British Potter and Mason Wasps - Michael Archer (1996).

BWARS President, Michael Archer has kindly made the key from his Handbook available as a free download.

Paper and Social wasps of central Europe - Libor Dvořák & Stuart Roberts (2006)

Keys in Czech and English. Lavishly illustrated. Includes all British species.

Ants

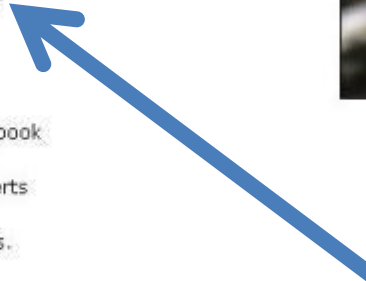
3 Myrmica species - Phil Attewell (2011): *Part 1* and *Part 2* aids to help separate *Myrmica scabrinodis*, *sabuleti* and *speciodes*.

Stenamma worker ants - Mike Fox (2009).

BWARS ant record coordinator, Mike Fox has produced this photographic guide to distinguishing UK *Stenamma* worker ants.

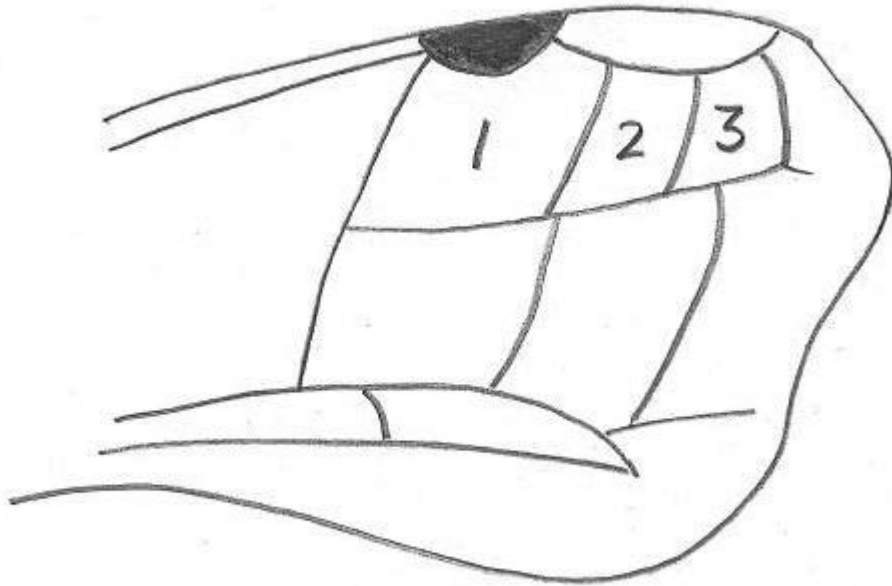
Eumenes coarctatus - a potter wasp.

Photo: John Walters



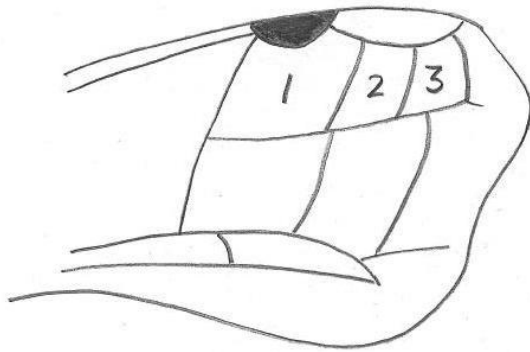
A good key is available on the BWARS website

BEEES WITH THREE CELLS IN THEIR WINGS



- *Xylocopa*
- *Sphecodes*
- *Colletes*
- *Halictus*
- *Lasioglossum*
- *Nomada*
- *Andrena*

Very simple key to the
genera known from Ireland



3 cells in wing

Two genera are very distinctive

Xylocopa

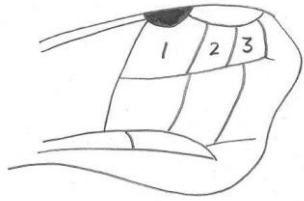


Very large entirely black bee
with dark wings

Sphecodes



Almost hairless, black & red abdomen

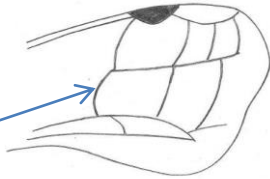


3 cells in wing

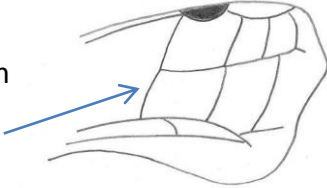
Very simple key to the genera known from Ireland

Not *Xylocopa* or *Sphecodes*

This line arched



This line smooth or with gentle curve



Very obvious hair bands on abdomen

Hair bands absent or not obvious

Lasioglossum

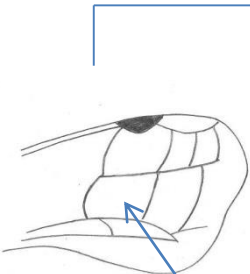
Hairy

Andrena

Almost hairless

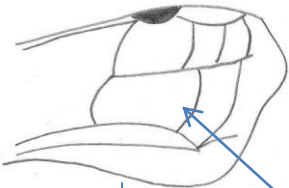
Nomada

Wasp like – abdomen with yellow, black or red bands



Cell on left similar to one on right

Colletes



Cell on left larger than one on right

Halictus

Xylocopa (Carpenter bees)

- ✓ 1 species: *Xylocopa violaceae*
- ✓ Very large black bee
- ✓ Not unlike a giant black blue bottle!
- ✓ Nests in dead wood
- ✓ Only 1 record – Waterford City in 2007



Wikimedia Commons

Could be identified
in the field

Sphecodes (Cuckoo sweat bees)

✓ 7 Irish species

Sphecodes eppippius

Sphecodes ferruginatus

Sphecodes geoffrellus

Sphecodes gibbus

Sphecodes hyalinatus

Sphecodes monilicornis

Sphecodes pellucidus

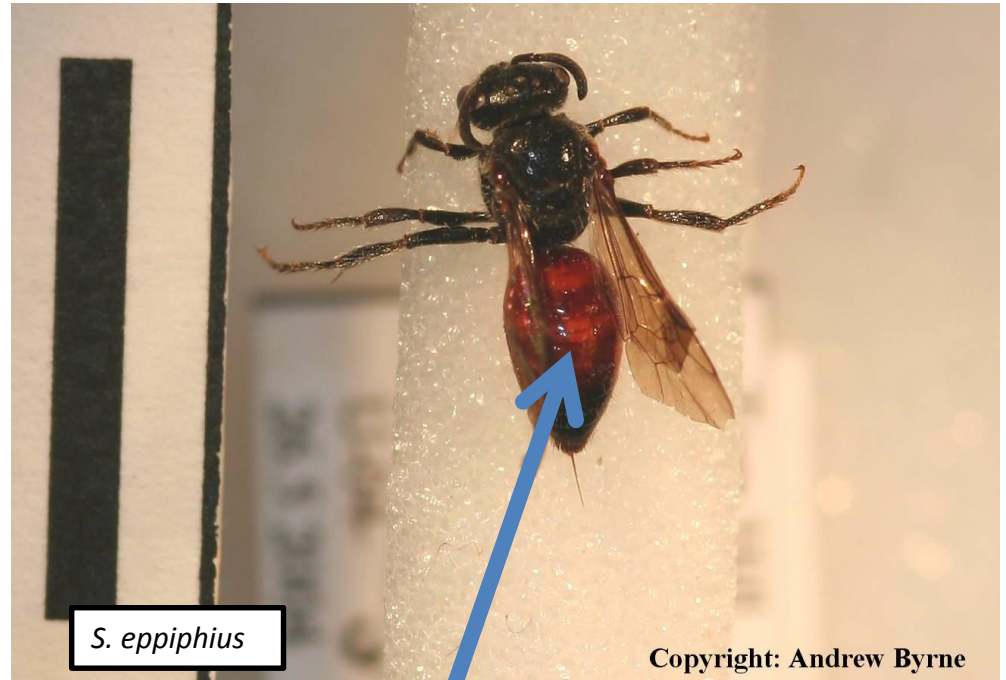
✓ Small to medium sized bees (6-12mm)

✓ Black with red on the abdomen

✓ Parasite of *Halictus/Lasioglossum* and found in a variety of habitats

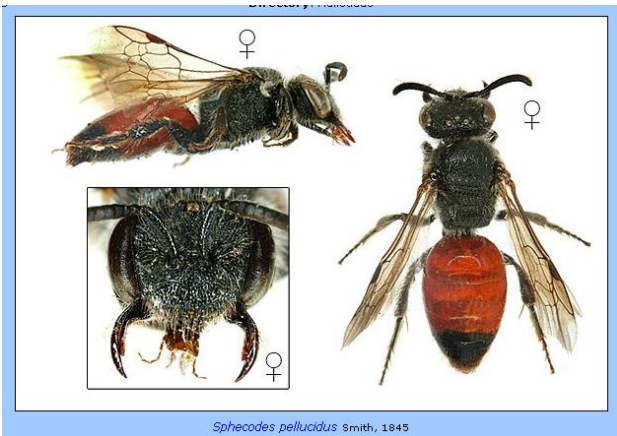
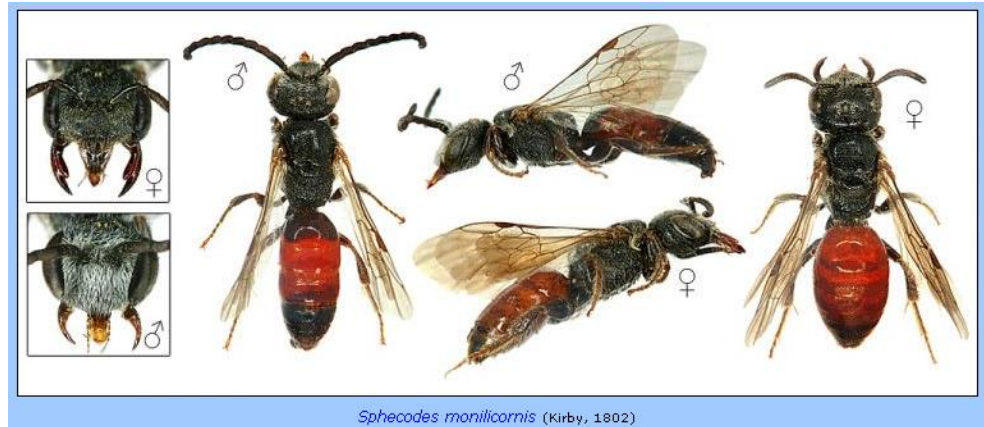
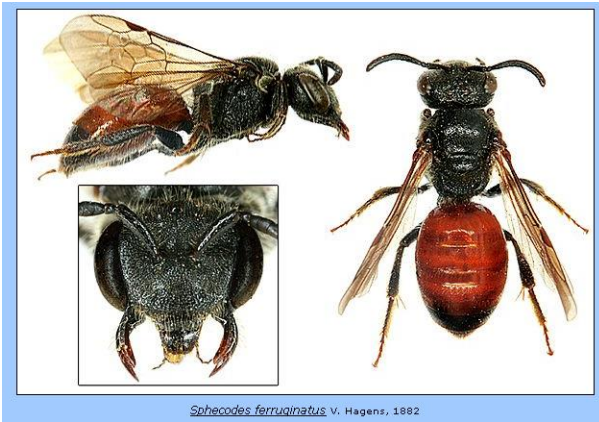
✓ Difficult to identify to species level

✓ When pinning it is important to pin out genitalia & jaws



Copyright: Andrew Byrne

Red on the abdomen is distinctive of the genus



Requires lethal sampling.
Difficult to identify to species

Colletes

✓ 4 Irish species

Colletes daviesanus

Colletes floralis

Colletes similis

Colletes succinctus

✓ Medium sized bee (8-13mm)

✓ Distinctive bands of white hair on the abdomen

✓ *C. floralis*, *C. similis* and *C. daviesanus* (v. rare) are all coastal

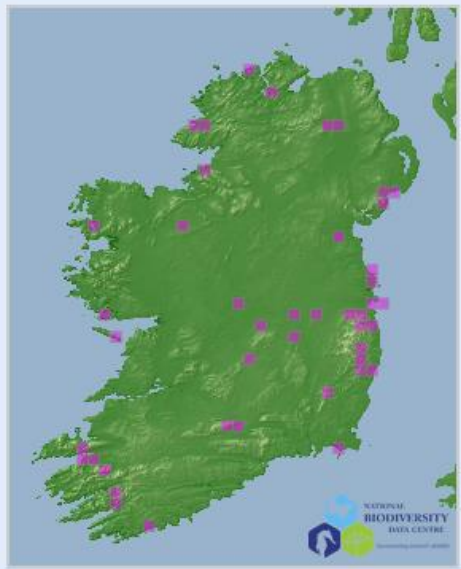
✓ Ireland holds a significant proportion of the world population of *C. floralis*

✓ *C. succinctus* occurs only on bog/heath and is a late summer species

Distinctive white hair bands
on the abdomen



© Emily Davis



Colletes succinctus (Linnaeus, 1758)

Colletes succinctus

- ✓ medium sized solitary species, but largest *Colletes* species in Ireland (10-13mm)
- ✓ thorax with reddish hair (fades with age)
- ✓ both males and females with prominent bands of white hair on the abdomen
- ✓ Recorded from June-September
- ✓ Occurs on bogs/heaths where it feeds on heathers
- ✓ Nests in large aggregations

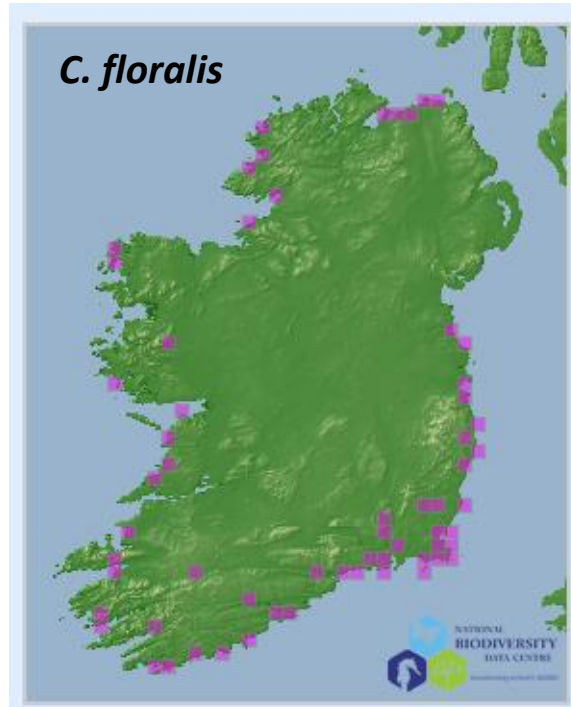
©Josef Dvořák: <http://www.biolib.cz/en/gallery/dir388>

With care females can be identified in the field. Look in the right habitat for a solitary species with white hair bands on the abdomen

Colletes – coastal species



Currently found only on east and south east coast



Rare and only found on sandy cliffs in Ireland

Colletes – coastal females



The three species look superficially similar.

If the punctures (dots or pits on surface) of the first abdominal segment are separated by a puncture width or more it is *C. floralis* or *C. daviesanus*

If the punctures (dots or pits on surface) on the first abdominal segment are separated by considerably less than a puncture width it is *C. similis*

This is obviously difficult to determine this without reference specimens – as are many other features used in solitary bee identification

Coastal females can only be positively identified by lethal sampling

Halictus (Sweat bees)

✓ 2 Irish species

Halictus rubicundus

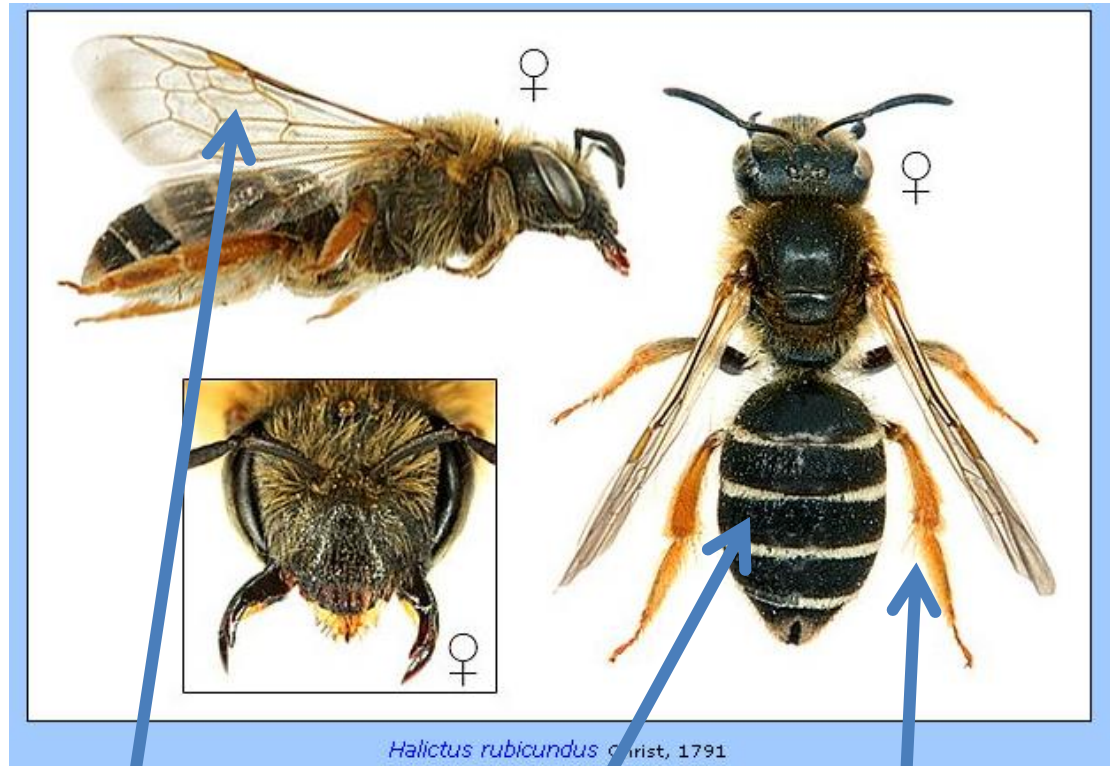
✓ medium sized solitary species (9-12mm)

✓ females have ginger hairs on thorax, obvious white hair bands on the abdomen and orange hind legs

✓ males are smaller and have hairier faces and a more elongate abdomen

✓ very common

With care females can be identified in the field



Cell on the right larger than the adjacent cell on the left (=Halictus)

Obvious hair bands on abdomen

Orange legs

Halictus tumulorum

- ✓ small sized solitary species (6-8mm)
- ✓ rarely recorded
- ✓ females have a shiny abdomen with thin white hair bands and dull orange/brown hind legs
- ✓ males are smaller and have a more elongate abdomen
- ✓ can be confused with the smaller *Lasioglossum* species.



Halictus tumulorum (Linnaeus, 1758)

Can only be positively
identified by lethal
sampling

Lasioglossum

- ✓ 11 Irish species
- ✓ Mainly small bees, often black
- ✓ Three of the 11 species look metallic
- ✓ Found in a variety of habitats
- ✓ Can be difficult to identify to species



Metallic (3)

L. leucopus (5-6mm)

L. smeathmanellum (5-7mm)

L. cupromicans (6-7mm)



The metallic colouring is not always this obvious

Non metallic (8)

L. albipes (7-10mm)

L. calceatum (7-10mm)

L. fratellum (7-9mm)

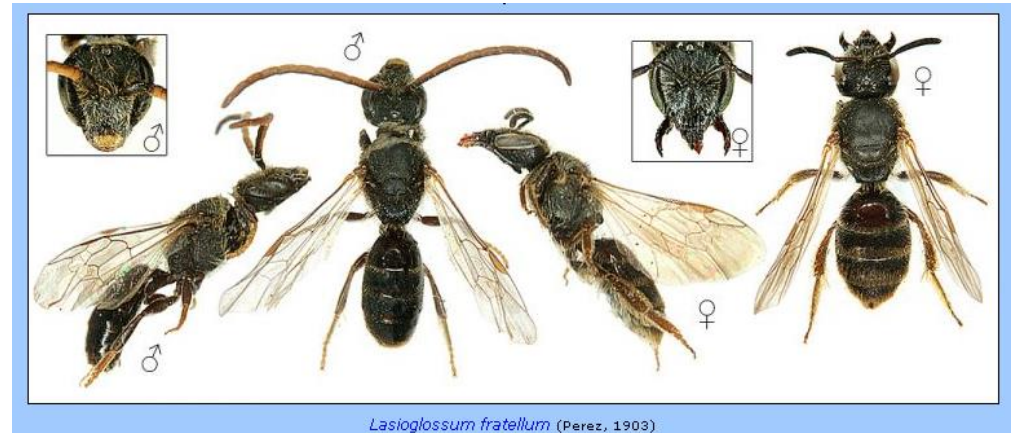
L. lativentre (7-9mm)

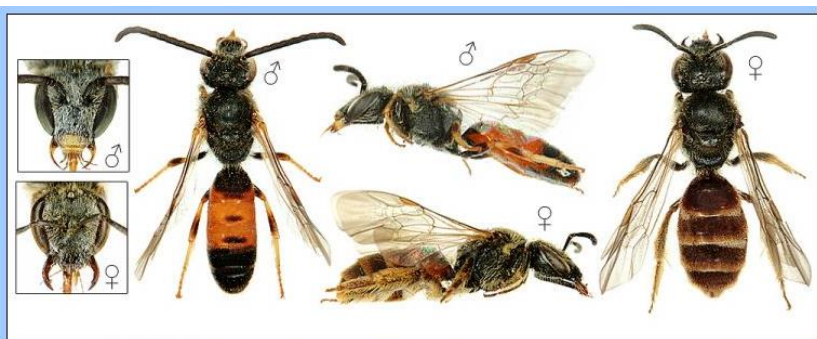
L. nitidiusculum (6-7mm)

L. punctatissimum (6-7mm)

L. rufitarse (7-8mm)

L. villosulum (6-7mm)

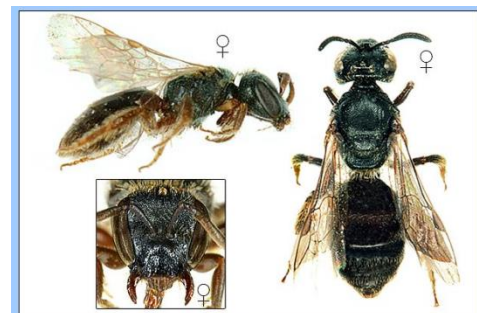




Lasioglossum albipes (Fabricius, 1781)



Lasioglossum lativentre (Schenk, 1853)



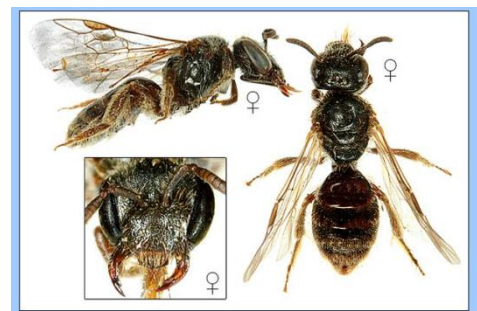
Lasioglossum punctatissimum (Schenk, 1853)



Lasioglossum calceatum (Scopoli, 1763)



Lasioglossum rufitarse (Zetterstedt, 1838)



Lasioglossum villosulum (Kirby, 1802)



Lasioglossum fratellum (Perez, 1903)

Requires lethal sampling. Can be difficult to identify to species

Nomada (Cuckoo bees)

✓ 12 Irish species

Nomada argentata

Nomada fabriciana

Nomada flavoguttata

Nomada goodeniana

Nomada leucophthalma

Nomada marshamella

Nomada obtusifrons

Nomada panzeri

Nomada ruficornis

Nomada rufipes

Nomada sheppardana

Nomada striata

✓ Can resemble wasps – often have black, yellow or red stripes on abdomen

✓ Cuckoo bees – they parasitise *Andrena* nests



Three *Nomada* species have females that can be identified in the field. These species have an abdomen that is black and yellow only (no red markings)

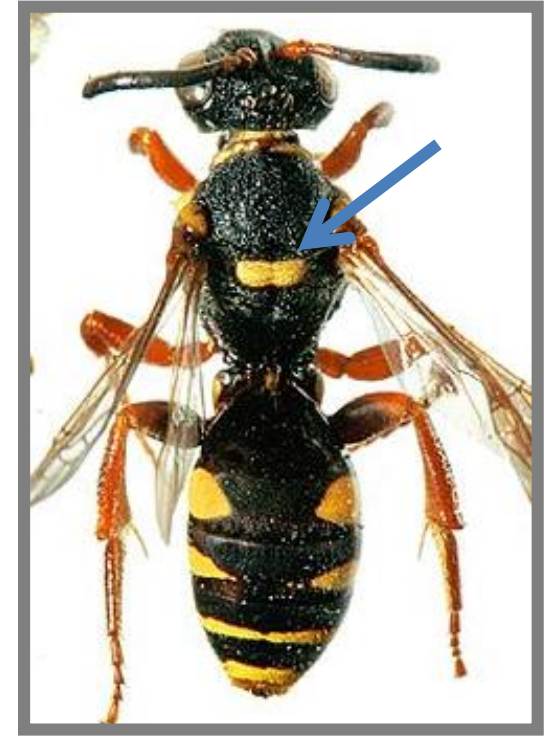
N. marshamella (9-13mm)



N. goodeniana (9-13mm)



N. rufipes (8-10mm)



Orange/brown legs and antennae. Second yellow band on abdomen is entire in *N. goodeniana* (not broken in the centre) whereas in *N. marshamella* it is broken

Scutellum a single yellow mark. Yellow bands on abdomen widely broken in *N. rufipes*

The female of *N. fabriciana* (7-11mm) also has two distinctive features



1. Females have a distinctive two tone antennae- the tip and lower half are red/brown separated by black segments in between.



2. Bidentate (two teeth)

Andrena (Mining bees)

- ✓ 26 Irish species
- ✓ Very variable in form and occur from large species to very small
- ✓ Found in a variety of habitats
- ✓ The solitary bee most often spotted by most people



Andrena angustior
Andrena apicata
Andrena barbilabris
Andrena bicolor
Andrena cineraria
Andrena clarkella
Andrena coitana
Andrena denticulata
Andrena fucata
Andrena fulva
Andrena fuscipes
Andrena haemorrhhoa
Andrena humilis
Andrena lapponica
Andrena marginata
Andrena minutula
Andrena nigroaenea
Andrena pilipes
Andrena praecox
Andrena rosae
Andrena semilaevis
Andrena scotica
Andrena subopaca
Andrena tarsata
Andrena trimmerana
Andrena wilkella

Three *Andrena* species have females that can be identified in the field



Andrena cineraria

- The females are black, and have two distinctive grey hair bands across the thorax (there are no other solitary bees like this known from Ireland)
- Large sized species (13-16mm)
- It is a spring species and is generally observed between March – June. The earliest it has been recorded in Ireland is 22nd March (2011).
- Widespread. It is found in a range of habitats, but in Ireland it often relies on Willow as an early forage source
- It nests in the ground. The nest entrances will be surrounded by a volcano-like mound of excavated spoil. Nests are often in dense aggregations

Three *Andrena* species have females that can be identified in the field



Andrena haemorrhoa

- The females are black, with a ginger thorax, orange hind legs, and distinctive red hairs at the tip of the abdomen (there are other *Andrena* species that look similar but none with a red tipped abdomen).
- Medium sized solitary species (11-13mm)
- It emerges in spring, and can be seen from March – August
- Common and widespread. It is found in a range of habitat types, including parks and gardens

Three *Andrena* species have females that can be identified in the field

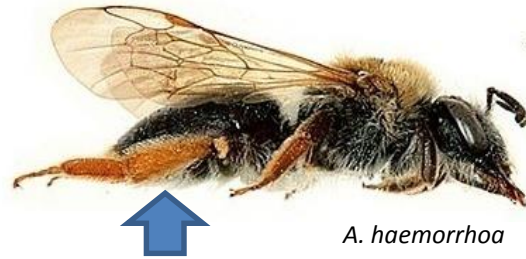


Andrena fulva

- *A. fulva* was last recorded in Kilkenny in 1925, and was assumed extinct in Ireland until 2012.
- In 2012 it was recorded in two locations: Co. Kilkenny (close to its 1925 location) and Co. Wicklow.
- Females are very distinctive with bright red hairs on the thorax and abdomen.
- Medium-large sized solitary species (12-14mm).
- It is a spring species (March – June).
- It nests in the ground. The nest entrances will be surrounded by a volcano-like mound of excavated spoil.

Three *Andrena* species have females that have an orange hind leg

©Josef Dvořák: <http://www.biolib.cz/en/gallery/dir388>



A. haemorrhoa

Orange hind leg (both **leg** and hairs are orange)

Andrena tarsata

- ✓ Medium sized (8-11mm)
- ✓ Mandible with 3 teeth
- ✓ Feeds only on *Potentilla*
- ✓ Summer flight period (June- August)

* *Andrena haemorrhoa* also has an orange hind tibia (photo above)



Andrena clarkella (Kirby, 1802) - Clark's Mining Bee

***Andrena clarkella*:**

- ✓ Large (11-15mm)
- ✓ Tail hairs dark. Abdomen hairy
- ✓ Spring flight period (March-June)
- ✓ Feeds only on willow



Andrena wilkella (Kirby, 1802)

***Andrena wilkella*:**

- ✓ Large (10-12mm)
- ✓ Tail hairs golden. Abdomen bald
- ✓ May - August
- ✓ Found in a range of habitats

Three *Andrena* species have females that have an abdomen with red markings
(all very rare)



Andrena marginata

- ✓ Tail red
- ✓ Summer flight
- ✓ Grassland species (Feeds on *Scabiosa*, *Succisa*, *Knautia*)
- ✓ Very rare



Andrena rosae

- ✓ Tail black
- ✓ Summer flight period (July-September)
- ✓ Very rare (last recorded 1896)



Andrena stragulata

- ✓ Tail black
- ✓ Spring flight (March-April)
- ✓ Very rare (last recorded 1977)

Three *Andrena* species are very small (6-8mm)

Andrena semilaevis

Andrena subopaca

Andrena minutula



Reference specimens

Having reference specimens for comparison is important for accurate solitary bee identification. It is the intention of the National Biodiversity Data Centre to maintain a reference collection of Irish species which will be available for public use during office hours.

Grateful thanks are expressed to BWARS for help in establishing this reference collection.

Submit records

Please submit your records of solitary bees to the National Biodiversity Data Centre

http://records.biodiversityireland.ie

NATIONAL BIODIVERSITY DATA CENTRE
Documenting Ireland's Wildlife

Record Submission

[Home](#) [Download Records](#) [Report Errors](#) [FAQ](#) [Links](#) [Tutorial](#) [Get A Grid Reference](#)

Species Forms

- Amphibians & Reptiles
- Bumblebees
- Butterflies
- Dragonflies
- Garden Birds
- General
- Grasshoppers, Crickets & Earwigs
- Invasive Species
- Ireland's Birds
- Irish Macro Moths
- Ladybirds
- Mammals
- Shieldbugs
- Solitary Bees
- Syrphids
- Vascular Plants

Site Based Forms

- Birds of Waterways
- BumbleBees
- Butterflies
- Dragonflies
- Garden Birds
- Ireland's Birds
- Irish Macro Moths
- Ladybirds
- Shieldbugs
- Vascular Plants(Advanced)
- Vascular Plants(Basic)

Record Statistics

Records submitted since June 2012

25720

Record Statistics

Records by group:

Group	Count
flowering plant	11259
bird	6329
terrestrial mammal	2540
insect - butterfly	1695
insect - dragonfly (Odonata)	796
insect - hymenopteran	700
fungus	435
fern	302

Records per week for 2013

Record Statistics

Solitary Bees

* Fields marked with an asterisk are mandatory.

Species*	<input type="text"/>
Location name*	<input type="text"/>
Grid reference*	<input type="text"/>
County*	<input type="text" value="v"/>
Vice County	<input type="text" value="-- Select county first --"/>
Name of observer*	<input type="text"/>
Email†	<input type="text"/>
Record date*	<input type="text"/>
Habitat type	<input type="text" value="v"/>
Comment	<input type="text"/>
Record image	<input type="text" value="Choose File No file chosen"/>
Sex	<input type="text" value="v"/>
No. seen	<input type="text" value="v"/>
Survey method	<input type="text" value="v"/>

All records are validated before being loaded into Biodiversity Maps

Thanks to all those who have
contributed photographs to the Data
Centre and made development of this
guide possible

