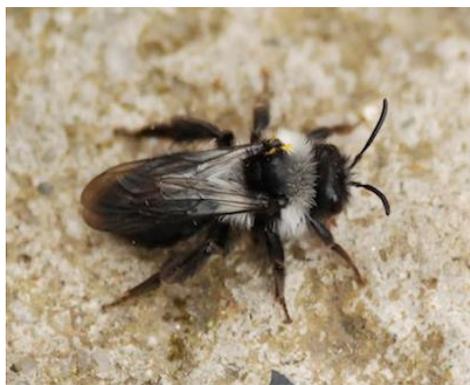


SOLITARY BEE MONITORING 2018



Andrena cineraria



Andrena fulva © Sam Connolly

What is it?

In 2017, we launched a small scheme to monitor aggregate nesting bees. Some of our solitary bee species nest in small groups or aggregations - this scheme aims to monitor those nest sites. It asks participants to count the number of active nest holes once a year. Data on the number of nest holes and additional information about the site is submitted to the Data Centre. In 2017, volunteers monitored 17 nesting aggregations (sites).

What species are monitored?

It is useful to monitor any species that can be positively identified. The following are the more easily recognisable aggregate nesting species: *Andrena cineraria*, *Andrena fulva*, *Osmia rufa* (now *O. bicornis*) & *Halictus rubicundus*. With the exception of *A. fulva*, these are common species that are very important wild pollinators. Many suitable nesting areas contain more than one species. Where that is the case, volunteers are asked to count the total number of nesting holes and **roughly** estimate those belonging to each species.



Halictus rubicundus



Osmia bicornis

FAST FACTS 2018

23

That's the total number of solitary bee nesting aggregations (sites) that were monitored in 2018

17

That's the total number of sites where data was submitted on *Andrena cineraria* in 2018

3

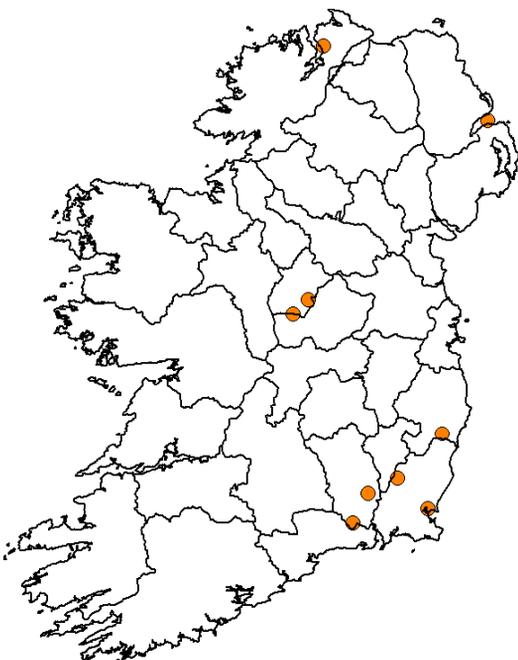
That's how many sites had more than 1,800 nest holes!

Why is it important?

One third of Ireland's 99 bee species are threatened with extinction. The All-Ireland Pollinator Plan 2015-2020 was published to address these declines. It is very important that we monitor both honeybees and wild pollinators within the landscape. Not only to provide us with an early warning system, but to track if the Pollinator Plan is working. For wild pollinators, one important way we do this is through the citizen science All-Ireland Bumblebee Monitoring Scheme. Solitary bees are more difficult to identify and therefore harder to monitor outside professional surveys. This scheme makes an important contribution by monitoring some of our distinctive solitary bee species at their nesting areas. While it is only a small subset of solitary bees, it does include the most important wild pollinators. Collecting this data is important in better understanding annual fluctuations in solitary bees in Ireland but also in tracking real change in the longer term.

Nesting areas monitored in 2017 - 2018

SiteName	Main species monitored	Recorder	Total number of nest holes observed 2017	Total number of nest holes observed 2018
Ballinamorrhagh, Curraclloe	<i>Andrena cineraria</i> , <i>Andrena clarkella</i>	Jonathan Derham	125	40
Ballygunner GAA	<i>Andrena cineraria</i> , <i>Andrena scotica</i> , <i>Andrena nigroaenea</i>	Tomás Murray	252	Not counted
Baurleigh, Bandon	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Adam Warner	1587	1830
Camolin Woods	<i>Andrena cineraria</i>	Janet Whelehan	50	Not counted
Carriganore	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Una FitzPatrick	212	180
Glen Lake	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i> , <i>Andrena clarkella</i>	Áine Fenner	150	150
Glenglass Garden	<i>Andrena cineraria</i>	Joanna Hodghton	45	69
Gorteenclareen	<i>Andrena haemorrhoa</i>	Áine Fenner	60	6
Hurtle	<i>Andrena cineraria</i>	Oisín Duffy	21	Not counted
Killanne Graveyard	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Joanna Hodghton	1992	7000
Killeen Lane, Killanne	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Joanna Hodghton	35	65
Kittys lawn, Ballyera	<i>Halictus rubicundus</i>	Barry O' Sullivan	830	Not counted
Newtown Bank	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Joanna Hodghton	27	53
Newtown Gateway	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i> , <i>Andrena scotica</i>	Joanna Hodghton	20	112
Portglenone Forest Park	<i>Andrena cineraria</i>	Una FitzPatrick	15	Not counted
Quarry, Teernacreeve Esker	<i>Andrena haemorrhoa</i>	Áine Fenner	50	Not counted
The Limit, Front Garden	<i>Andrena fulva</i>	Sam Connolly	83	25
Ballyagan Road	<i>Andrena cineraria</i>	Donna Rainey		120
Ballygub	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i>	Lynda Weekes		102
Bangor	<i>Andrena cineraria</i>	Dave Wall		6
Buncrana	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i> , <i>Andrena clarkella</i> , <i>Colletes succinctus</i>	George McDermott		600
Gortigrenane	<i>Halictus rubicundus</i>	Rodney Daunt		48
Gurteen garden	<i>Andrena haemorrhoa</i> , <i>Halictus rubicundus</i>	Áine Fenner		35
Knocktober	<i>Andrena cineraria</i>	Ian Edwards		79
Knocktober	<i>Halictus rubicundus</i>	Joanna Hodghton		97
Movanagher Road	<i>Andrena cineraria</i>	Donna Rainey		5000
Tinnakilly	<i>Andrena cineraria</i>	Ian Edwards		26
Tullydush, Buncrana	<i>Halictus rubicundus</i> , <i>Colletes succinctus</i>	George McDermott		30
Wildlife Bank, Killanne	<i>Andrena cineraria</i> , <i>Halictus rubicundus</i> , <i>Andrena haemorrhoa</i>	Joanna Hodghton		57



Map showing the hectads within which nesting aggregations were monitored in 2018

Thank you

Huge thanks to all of you who have contributed to the scheme in 2018. It is hard to emphasise how valuable the data is in contributing to the future conservation of our pollinators.

What happens to the data?

The full dataset is stored internally within the Data Centre in the dedicated web portal as monitoring data and can be added to year upon year. Volunteers can request a copy of their own data at any time.

How will it be used?

The true value of these data are in the longer term trends that they will provide. If annual counts are carried out on the nesting areas into the future it will provide early warning signs of threats and will help track changes in wild pollinators over time. It will also help improve the accuracy of future conservation assessments of the species. It is the intention of the Data Centre that this is a longer term data stream to support solitary bee conservation in Ireland.

Plans for 2019

It is hoped to continue the scheme again in 2019 and to try to ultimately reach a target where at least 20 nesting areas of each species are monitored annually. We have made a good start. Across 2017-2018, 21 nesting areas of *Andrena cineraria* were monitored.

Can I monitor other species?

Yes, if you are aware of nesting areas of other species that you are able to identify it would be useful to monitor these. Just get in touch if you want to do this as it will be necessary for me to add other species manually to the online system so that you can submit data.

Can I take part?

We would be very grateful for new volunteers. If you know of an area near you where solitary bees nest and you would be willing to count those nests once a year please get in touch to join the scheme ufitzpatrick@biodiversityireland.ie



2018 honourable mention goes to Joanna Hodgton who counted 7,000 nest holes from an old graveyard in Co Wexford!