

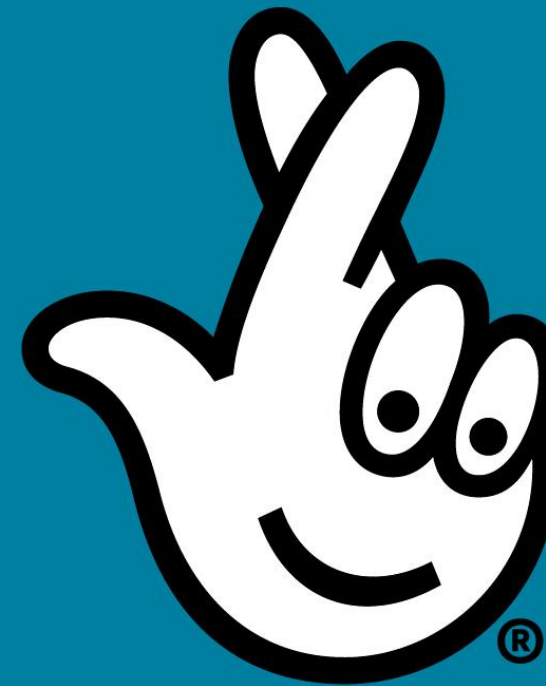
Carse of Gowrie Orchards: People for Pollinators

Neil Clapperton
Conservation Officer



Thanks to
National
Lottery
players

Made possible with



Heritage
Fund

Project Funders



A huge thank you to the funders for their support with this project!



MW
Topps



Walter Craig
Charitable Trust

Northwick Trust



Who is Buglife



We are the only organisation in the UK concerned with the conservation of ALL invertebrates.

Our Vision

Is a wildlife-rich planet where other species thrive alongside people.

Our Mission

Is stopping the extinction of invertebrates and achieving sustainable populations.



Green Tiger Beetle (*Cicindela campestris*)
© Suzanne Burgess

What Buglife does



Through our conservation work and projects we aim to:

- Inspire others
- Raise awareness
- Shape policy
- Get involved in practical conservation



Invertebrate Services



Invertebrates provide us with a number of free and ecologically important services.



There are over 6,000 species of insect pollinator in the UK!



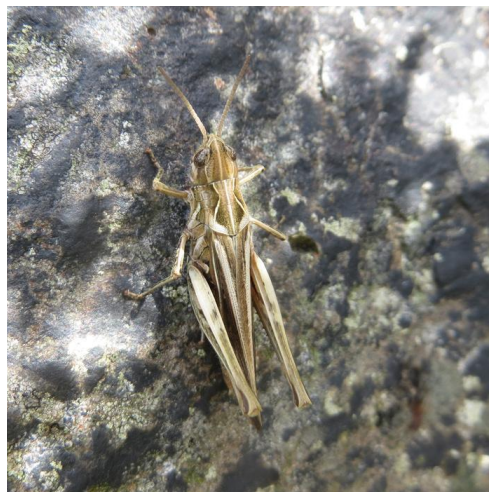
Spiders are important pest controllers-feeding on flies and aphids.



Many beetles are natural predators of pest species-such as the Black Snail Beetle!



Earthworms create natural fertiliser by toiling through soil and organic matter.



Invertebrates are an important food source for a range of animals and humans too!



Dung beetle *Trypocopris pyrenaicus*
© Steven Falk

Dung beetles help break down manure, recycling nutrients back into the soil.

UK Insect Pollinator Diversity

Many of our insect pollinators are in decline and threatened with extinction due to the loss of habitat.

- Insect pollinators include
 - Flies e.g. hoverflies, soldierflies, tachinid flies, bee-flies, green bottles.
 - Hymenoptera- bumblebees, solitary bees, sawflies, wasps.
 - Beetles (ladybirds, flower beetles, some long horns and chafers).
 - Lepidoptera- butterflies and moths.

- A huge diversity!



There are 25 species of bumblebee in the UK and 1 species of honeybee.



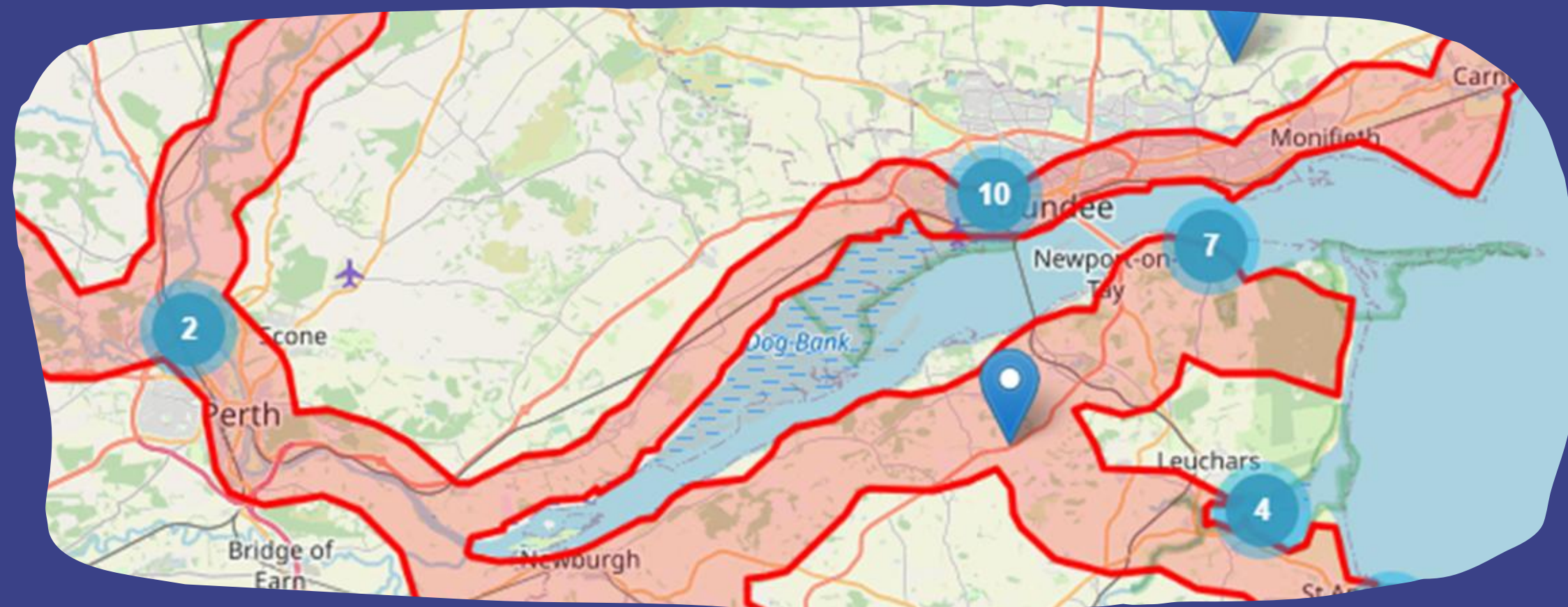
There are thousands of wasp species in the UK- only 9 are social!



Importance of the Carse of Gowrie



- Area is rich in history- heritage value of the orchards and the varieties of fruit trees in the Carse.
- Loss of traditional orchards - only 22 of the 51 known historical orchards survive in the Carse, many as remnants.
- Habitats within orchards support a range of wildlife- forage, dead wood etc.



Carse of Gowrie Orchards: People for Pollinators



- Partnership project with Scottish Apple Producers Group, Orchard Revival and Tayside Biodiversity Partnership.
- A main aim is to engage with landowners, community groups and others to assess the health of the known historical orchards (22 sites), as well as newer orchards in the Carse of Gowrie area.
- To find out how the orchards are used and the condition of habitats present.
- Habitat connectivity – hedgerows, Rights of Way, paths, pows & railway lines

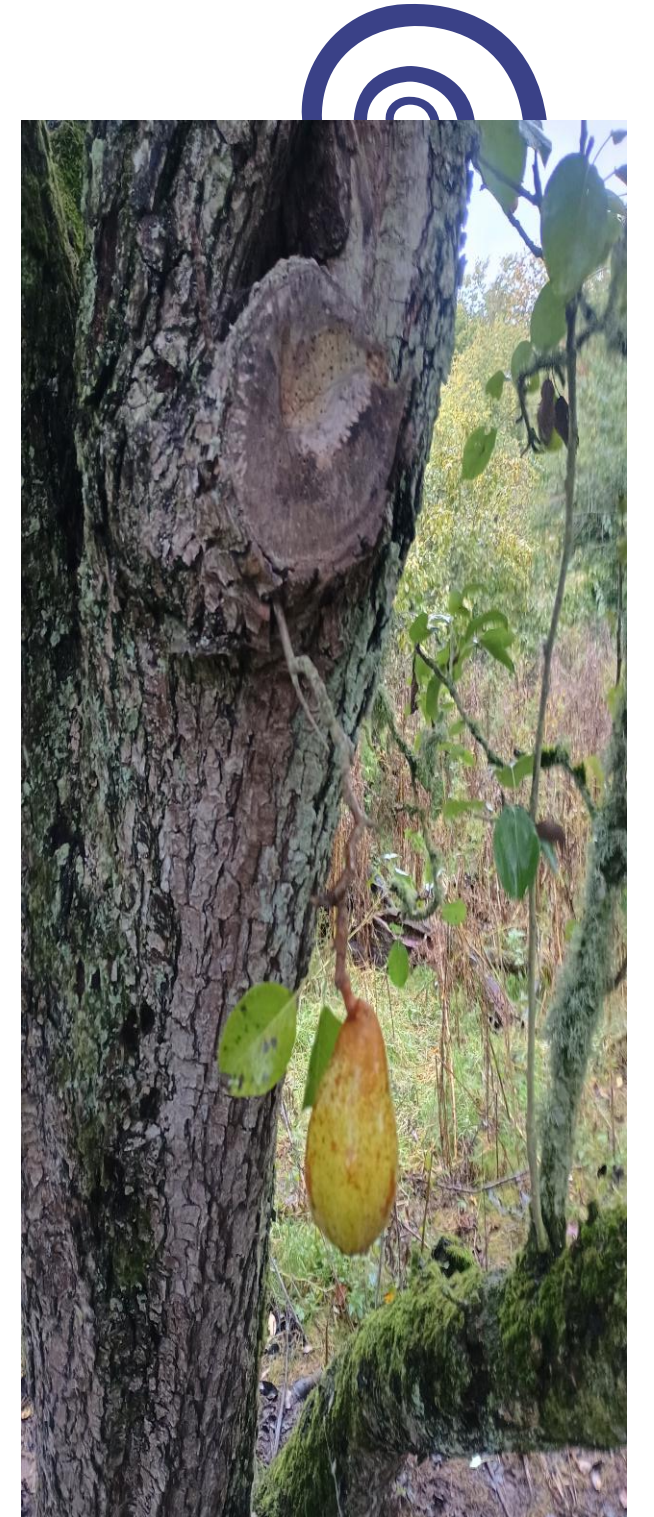
Carse of Gowrie Orchards: People for Pollinators



- Regenerative agriculture and the importance of wild zones.
- Farmer and public engagement, confidence, understanding, knowledge & skills.
- Challenges: linking with urban communities and orchards, joining up with B-Lines in Strathmore and Fife, and with those networks and communities underground – fungi, nematodes, annelid worms, and beetles.
- Collaborations – Scotland Food & Drink, Naturalist Societies, Royal Society of Edinburgh, James Hutton Institute, SRUC and others

Why Traditional Orchards?

- Refuge for vast array of beetles, bugs, bees, butterflies, hoverflies and spiders.
- Multi-layered and mosaic habitats, like woodland fringes, hybrid between grassland and forest.
- Veteran trees – some with hollowtrunks, standing deadwood, holes and crevices, lichens and wood litter
- Physical and historical continuity, launch pad and colonising space.



Project Aims- Restore habitat



- Restore and improve the management of 10 hectares of habitat in orchards within the Carse of Gowrie- to create and enhance a network for pollinators and other wildlife to move through the landscape.
- Delivery of habitat restoration events with communities (9 events).
- Management plans agreed with all landowners to help with long-term management of sites.
- A best practice guide for managing orchards for invertebrates to be produced.



Project Aims- Events



- At least **15 community events** delivered across the Carse and to communities in Dundee and Perth.
- To include bumblebee & blossom days, school sessions, nature walks, talks.
- Deliver fun and educational sessions that will raise awareness on- how insects pollinate flowers; the importance of orchards; why we need a diversity of insects to pollinate our crops; what we can all do to help our pollinators.

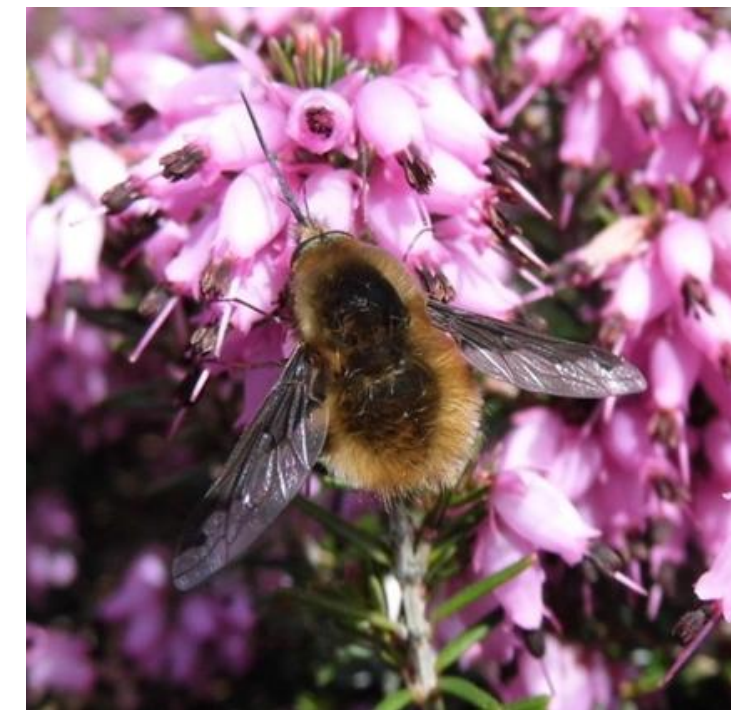


Project Aims- Training

- Training delivered via workshops (at least 6).
- People trained in how to: identify insect pollinators; record wildlife via iRecord; fruit tree grafting; managing orchards; monitor sites; complete surveys for pollinators via the UK Pollinator Monitoring Schemes (PoMS) FIT counts and other appropriate surveys e.g. BeeWalks.
- Training aims to increase confidence in wildlife recording and increase wildlife records for the area.



Davies Colletes
(Colletes daviesanus)



Dark-edged Beefly
(Bombylius major)

Project Aims- Volunteers

- Recruit volunteers (at least 6) to assist in the monitoring at sites restored through the project and feedback results to landowners to help support the long-term management of sites for pollinators.
- Volunteers will have improved skills (e.g. identification skills, risk assessment, engaging with landowners etc.) with training and support provided in the monitoring.



Come and help us



- Volunteering includes
 - Replanting with fruit trees
 - Sowing or planting wild-flowers
 - The creation of bee banks
 - Help us carry out entomological surveys of orchards involved in restoration works- before and after work.
 - Help create wood piles for saproxylic insects and bug hotels.
 - Buglife will cover travel and expenses





Contact us

Neil Clapperton

Conservation Officer

Neil.clapperton@buglife.org.uk

Call, text or WhatsApp 07765 196379

 [buglife.org.uk](https://www.buglife.org.uk)

 07880 316031

Find us on:

