

Citizen Science in your Community

A guide to getting involved

What is Citizen Science?

Citizen Science is a term used to describe public participation in scientific research. Across the world, volunteers gather a wide range of information vital to protecting and improving our environment and to expand our knowledge of the world around us. The Scotland Counts project aims to ensure that every individual and community in Scotland has the opportunity to develop skills and confidence to understand their local environment through Citizen Science.



Why is it important?

Taking part in a Citizen Science survey is one of the most useful ways you can help the environment and expand our scientific knowledge. Information gathered by Citizen Scientists is vital to scientists across the UK in understanding how the environment is doing and where more action is needed, so by getting involved you really can make a difference.

Nearly 90% of all the species and habitat records collected in the UK, come from Citizen Scientists; the data collected by volunteers is essential for understanding our environment and making decisions about how to protect and improve it. Environmental monitoring of the natural world around us by Citizen Scientists, such as rainfall patterns and river flood levels has supported our knowledge of the cycles of nature for centuries. New media technologies have opened up a host of opportunities for input of vital data from casual and dedicated observers alike.

What are the benefits?

Citizen Science is much more than just science. Getting involved is fun, helps develop skills and connection with others. It improves health and wellbeing and helps us all feel more connected to the environment around us. It also enables communities to:

- Be more active outdoors
- Bring people of different ages together
- Work together around a central activity, locally focussed projects
- Develop and share local skills and knowledge
- Work together to tackle environmental or social justice issues
- Gather knowledge about the environment to inform community based environmental projects
- Gather knowledge about the environment to support scientific research and environmental management decisions



How do we get involved?

This guide hopes to inform, enthuse, inspire and support anyone who wants to try out Citizen Science in their Community. We provide:

- Information about community based Citizen Science initiatives across the world
- A summary of Citizen Science initiatives in the UK that are suitable for community groups
- A menu of UK based Citizen Science projects suitable for community groups
- Case studies of 6 community based projects
- Recommendations for getting started with Citizen Science in your own community

Rural and urban landscapes are filled with wild spaces and green places where nature has made a home. We hope to inspire you and your community to get involved in the recording of the nature on your doorstep. You can also measure the physical environment, so weather, air quality and even stars can all be surveyed by Citizen Scientists through interesting and innovative projects.

Community based Citizen Science across the world

Over the last two decades, there has been a substantial increase in community based monitoring projects, with the USA, Australia, Canada and India leading the field.

Community based environmental groups have included monitoring as part of their wider activities, sometimes supported by other organisations such as conservation charities, universities or government agencies.

Examples include the Waterkeeper Alliance, which has programmes in 15 nations, the community based air quality monitoring programme run by the Global Community Monitor and local species monitoring projects run in response to concern about reduction in population of particular species.

Community based Citizen Science in the UK

Although there are few examples of formally established community based Citizen Science projects in the UK, there are plenty of Community groups getting involved in Citizen Science through:

- participation in a national survey
- involvement with local records centres
- participating in monitoring projects set up by local rangers, biodiversity officers or reserve managers
- training and participation with local wildlife NGOs

The following sections provide detail of surveys that are particularly suitable for community groups to participate in. There are many organisations that can support, train and inform the public to become Citizen Scientists. All these organisations are always looking for new volunteers to join in with their surveying and other practical work required. They value the input of ideas and energy new volunteers can bring to their organisation and many stay long term to become a vital and integral part of their function.

They commonly employ citizen science techniques that allow good quality environmental records to be collected that they can use to improve their knowledge based conservation work. The projects are fun, interesting and educational and cover a wide range of interests and abilities.

Working with existing local monitoring projects

Close to you, there will be a Local Nature Reserve, managed through the Local Authority Ranger Service or an area of parkland, woods, moorland or a stretch of river or coast managed by a charity such as the Scottish Wildlife Trust, Woodland Trust or RSPB. Monitoring activities at these sites will help to identify how well the species on the site are doing and will link in with the aims of the Local Biodiversity Action Plan. Community groups and individuals can join in with both the monitoring activities and practical site improvement work.

Carrying out Citizen Science at a local Nature Reserve gives you the opportunity to get involved with a local area that has already been identified as valuable for wildlife. Your activity will contribute to the aims for the reserve that have been defined in a Management Plan. As well as monitoring there are likely to be other activities to join in with, such as getting involved in habitat management or improving access.



Working with the guidance of a local ranger or reserve manager will provide you with training, encouragement and a knowledgeable source of expertise. Tools and equipment are also likely to be provided. A map of Local Nature Reserves and contacts can be found [here](#).

It's not just wildlife recording you can help with. The monitoring of the physical environment is equally as important and through existing and developing programmes every science discipline offers opportunities for Citizen Science engagement. For example; Communities can participate in monitoring of rainfall with [SEPA](#), river levels through [Scottish Flood Forum](#) and local weather through programs such as the [Met Office Weather Observation Site](#).

Working with local Biological Record Centres

Local Biological Records Centres collect, collate and disseminate information about the wildlife and provide objective, independent wildlife information for people and organisations. The services that Record Centres provide are funded by Scottish Natural Heritage and Local Authorities and can receive income from contract work, projects and voluntary contributions.

Record Centres are the focal point for recording of local wildlife (biological recording) and regularly run training and surveys that locals can join in with. Their staff are extremely experienced and provide support to submit records and develop identification skills. They are also at the heart of a local network of knowledgeable local 'recorders'. Through your local Records Centre you can link up with experienced Citizen Scientists keen to share their expertise. You can also develop your identification skills through participating in your local Records Centre programme of events. Local Record Centres also are a good source of support for [Bioblitz](#) activities that Community Groups can use to survey, celebrate and promote their local greenspaces. A full list of Record Centres can be found at the end of this document.



National surveys suitable for use by Community Groups

Many conservation charities have established UK wide Citizen Science surveys that the public are encouraged to participate in. Online support, identification guides and resources are available and many of these charities hold local training courses organised through their network of volunteers and supporters that can help individuals or groups build confidence in their recording abilities.

These national surveys cover a wide range of species and habitats and can be tailored to suit your Community Group's interests and abilities. Working with these organisations, you will be introduced to a variety of survey techniques and be able to develop your skills and confidence. The conservation charities

that run the surveys are often able to provide local support to start using the surveys and develop identification skills. They are also able to work with Community Groups to help them set up monitoring and conservation projects. A list of surveys and links to organisations can be found at the end of this document.

Case study 1 – British trust for Ornithology’s (BTO) surveys

Background to the BTO projects

The British Trust for Ornithology (BTO) is a charitable status organisation that is highly regarded for their prowess in scientific study. They offer a set of interesting bird recording surveys that suit both individuals and community groups. BTO surveys look to fill knowledge gaps in our understanding of bird population health with reliable data gathered from well set out surveys undertaken by committed volunteers.

How the BTO projects work

BTO have surveys that suit both individuals and that can accommodate community groups. The BTO have [BirdTrack](#) online recording site for anyone with an interest in submitting *ad hoc* sightings. All that is needed is for the volunteer to register with the service and start recording their sightings.

How BTO involve communities

Other projects such as BTO Wetland Birds [WeBS survey](#) lends itself well to more traditional community participation. A community group could 'adopt' a water body (stretch of river, pond, loch, canal etc) and either monitors it together as a group, or individually on a rota basis. Communities can also participate in monitoring their local birds of prey by engaging with a local [Raptor Study Group](#).

A Community Group wishing to engage with a particular survey, it might be possible for them either to attend a relevant [training course](#) or, potentially, for BTO to run bespoke training. The first port of call for training in many regions is the [BTO Regional Representative](#), who would provide guidance on surveys and survey squares available. BTO’s partners, the Scottish Ornithology Club could also provide local support, for example if the Community Group wished to become involved in raptor monitoring.

For many people, their 'community' is formed around their hobby or cause. BTO run the [What’s Up? upland birds survey](#), which primarily supports communities of hillwalkers and those who live and work in upland areas. For hillwalkers engaging with the What's Up? project BTO have ID guides and special survey recording booklets.

Case study 2 – Plantlife Wildflowers Count survey

Background to the Plantlife projects

Plantlife is a charitable based organisation that encourages the surveying of wild plant species, through supported surveys and training workshops. They can carry out Citizen Science with community groups on request with the [National Plant Monitoring Scheme](#), which works well at both individual and group level.

How the Plantlife projects work

Wildflowers Count survey is a common plants survey that is ideal for Community groups as it can work at a variety of levels. From the simple Wildflower Path on which the presence of key species along a 1km route is recorded annually, to the Wildflower Plots where 5m x5m plots are studied and the %age abundance of key plants is recorded to note change over time. Plantlife can offer full colour printed ID guides of the key species to record, and instruction booklets and recording sheets to support community groups to record.

How Plantlife involve communities

Plantlife can arrange day-long training workshops with groups if they express an interest. They can also support all volunteers via telephone or email from the [Plantlife Scotland Office](#) for any administrative or technical queries. Various community groups have already been involved in Wildflowers Count and though the groups differed in structure and character, Citizen Science worked well within the flexibility of Wildflowers Counts survey.

Case study 3 – Scottish Mink Initiative (SMI)

Background to the Scottish Mink Initiative projects

Invasive Non Native Species (INNS) are the biggest threat to biodiversity after Climate Change and Habitat Loss. The American Mink, *Neovison vison* has colonized all of the Scottish Mainland and islands, developing populations of animals escaped from fur farms from the 1930's to when the last ones closed in 1993. The Mink is a proficient hunter and some of our native species are particularly vulnerable to mink predation. [The SMI](#) is a volunteer-based organisation run as part of the Rivers and Fisheries trusts for Scotland (RAFTS).

How the Scottish Mink Initiative projects work

A wide range of individuals and groups take part in mink monitoring and trapping. These can be householders, rangers, gamekeepers, environment groups, ghillies, etc. SMI have a large number of monitoring rafts across the project area which are monitored by volunteers. Without volunteers the SMI would not work since it would be too expensive to pay trappers to cover an area of approx. 30, 000km². Volunteering with SMI is not the typical example of environmental volunteering; it is a long term programme which doesn't require teams of people, (unlike for example Himalayan balsam removal which requires a team to remove the plants).

How Scottish Mink Initiative involve communities

SMI are always looking for new volunteers for the north Tay, Aberdeenshire, Cairngorms and Moray and North Highlands. People can get involved to whatever level suits them, simply by reporting sightings, by monitoring a raft, by monitoring a raft and setting a trap when mink prints are recorded, or by monitoring, setting and checking a trap and carrying out dispatch (only trained volunteers carry out dispatch).

Support material that is suited to community group participation in Citizen Science can be found [here](#). A group or individual can be trained by Ann-Marie MacMaster (Scottish Mink Initiative Coordinator) on the North Tay or by a fisheries trust member of staff elsewhere in the project area. Volunteer networks are

coordinated locally by local fisheries trusts, who offer training and support to volunteers in their catchments.

Case study 4 – Shore Thing project

Background to the Shore Thing project

There is strong evidence that recent climate change has resulted in changes in the abundance, population structure and range of a number of intertidal indicator species. The Shore Thing Project (www.mba.ac.uk/shore_thing), run by the Marine Biological Association, encourages individuals and local communities to monitor their local rocky shore for climate change indicators and non-native species.

How the Shore Thing project work

The project encourages volunteers to monitor rocky shores to record the distribution and abundance of climate change indicators and non-native species. Research shows that warm water species are moving north and east and cold water species are retreating towards the poles in response to climate change. The project has been designed to collect valuable data using robust but simple methods. Communities get involved in ‘real’ science and the records are made available to the National Biodiversity Network ([NBN](#)) and sent to [Scottish Natural Heritage](#).

How the Shore Thing involves communities

The Shore Thing has been working with community groups throughout the UK since 2006. The records collected are made available to the community of scientist, land managers and people with an interest in shore dwelling species. Survey materials are available for download from the [project website](#). Shore Thing Survey Guides and a set of the ‘flash’ cards for the species search can be sent to groups free of charge. There are trained Shore Thing surveyors in areas of Scotland and training courses can be organised for groups and [The Shore Thing Project Officer, Fiona Crouch](#) would be happy to organise the support of an ecologist in any area of Scotland upon request.

Case Study 5 – Butterfly Conservation’s Bog Squad

Background to the Butterfly Conservation Bog Squad project

[Butterfly Conservation](#) is a charitable based conservation organisation that provides advice, trains volunteers and supports projects that deliver habitat improvement for Butterflies and Moths across the UK. They also monitor seasonal changes and species density in a variety of [surveys](#) including a joint conservation and recording project, The Bog Squad.

How the Butterfly Conservation Bog Squad project work

Peatlands across the Central Belt are hidden gems in a landscape dominated by agriculture and urban settlements. These bogs are essential to the wellbeing of humans, such as improving water quality and storing carbon. As well as providing homes for butterflies and moths, restoring bogs will improve biodiversity, help prevent flooding and reduce greenhouse gas emissions from peatlands.

How Butterfly Conservation Bog Squad involves communities

Bog Squad volunteers get trained to do simple but vital habitat management work, such as damming ditches, removing scrub and pulling pine seedlings and the use of handtools, such as bow saws, mallets and loppers. Work also incorporate species monitoring or a habitat familiarisation walks exploring the fascinating plants and animals found here. An open exchange of knowledge and interests allow volunteers to learn to identify species in an informal way. There is opportunity to take part in Butterfly surveys during the summer and investigate moth traps during the autumn. The work suits all abilities, but a steady footing is needed on uneven and boggy terrain.

Case Study 6 – Buglife

Background to the Buglife projects

[Buglife](#) (the Invertebrate Conservation Trust), promote biological recording through training workshops (beginners workshops, under-recorded species workshop and habitat management workshops. They run a number of ongoing wildlife surveys including the Scottish Seashell Survey, Scottish Ladybird survey, Scottish oil beetle survey and Scottish Glow worm survey. Buglife also take local groups out on bug walks where they are shown different species and told about habitats. They carry out habitat creation with community groups such as installing bee banks for solitary bees or sowing/planting wildflowers for pollinators as part of the ‘Buzzing’ projects (such as Glasgow’s Buzzing.)

How the Buglife projects work

Buglife run species identification workshops in Scotland attended by over 200 people. This training includes beginner’s workshops, under-recorded species workshop and habitat management workshop. Buglife have a UK wide support network with offices and staff in Stirling, Peterborough, York, Plymouth and Cardiff. They also have online support material that is suited to community group participation in Citizen Science [here](#) and [here](#).

How Buglife involves communities

Communities can get involved in Buglife’s [B-Lines](#) project which maps and improve the connectivity of wild-flower rich habitats for pollinators and other invertebrates. The National [Buzzing](#) project create and improve parks and green spaces in urban areas for pollinators and engage with local communities. Buglife have also worked with community groups to promote the importance of [brownfield sites](#) for wildlife.

Case Study 7 – Riverfly Partnership’s Angler’s Riverfly Monitoring Initiative

Background to the Riverfly Partnership’s Angler’s Riverfly Monitoring Initiative project

[Riverfly Partnership’s Angler’s Riverfly Monitoring Initiative project](#) (ARMI) is a citizen science initiative which works with community groups and others, in partnership with the relevant statutory body, in England, Scotland, Wales and Northern Ireland. Community volunteers are trained to monitor eight groups of freshwater invertebrates on a monthly basis to check for severe changes in water quality, i.e. pollution incidents.

How the Riverfly Partnership's Angler's Riverfly Monitoring Initiative project works

There are between 1000 and 1500 community volunteers monitoring over 750 river sites throughout the UK; on a monthly basis. The data is available for the statutory bodies and biological record centres and many pollution incidents have been detected by ARMI volunteers, then reported to the relevant statutory agency; for example [River Kennet](#). The initiative has grown since its launch in 2007 and there are now more than 100 ARMI communities, and other, groups. There are currently 20 regional hubs offering training and funding support to local groups and there is a focus to develop a complete network of hubs across the UK.

How Riverfly Partnership's Angler's Riverfly Monitoring Initiative involves communities

Riverfly Partnership website: <http://www.riverflies.org/> provides information about getting involved with ARMI, an online database and GIS mapping for volunteer river monitors across the UK. Details of Riverfly recording schemes and free resources are also available. ARMI offer one-day workshops for community group leaders and members wishing to become volunteer monitors. The workshops are led by accredited tutors and there is currently a Riverfly Hub hosted by the [Clyde River Foundation](#). [Ben Fitch](#), the national ARMI Coordinator is also happy to take enquiries, offer advice and support to community groups. Newly forming ARMI groups can apply for funding to help with set up and equipment costs.

Case Study 8 – Using Media in Citizen Science

iSpot Background

[iSpot](#) is a website aimed at helping anyone identify anything in nature. People upload their observations of wildlife, help each other identify it, and share and discuss what they've seen.

iSpot uses photography to help people put a name to what they see and encourages them to go out and collect more observations by rewarding its users with online badges. Using iSpot is a good extra activity to add on to already existing citizen science activities in case your group finds any unusual species or does not have a lot of experience in identifying wildlife. It can provide a community group with extra support from an online community.

Zooniverse Background

[Zooniverse](#) is a platform for people powered research. You don't need any specialised background, training, or expertise to participate in any Zooniverse projects. Hundreds of thousands of people around the world come together to assist professional researchers by taking part in online activities. The aim is to enable research that would not be possible, or practical, otherwise by enlisting the help of the public. Some examples of projects that Zooniverse has are Chimp & See and Wildebeest Watch. Hundreds of camera traps have been set up in the Serengeti and other reserves in Africa to identify the movements and behaviours of wildlife there, with a focus on Wildebeest and Chimpanzees, whilst also looking at the biodiversity of the area. Participants can sign up to see camera trap videos and images.

If you are looking for something more practical to do with your community there are camera traps available through local wildlife groups such as the [Wildlife Trusts](#), which your group can use to collect their own wildlife data through images.

Crowdsourcing media

There are several research projects that have used crowd sourced images to collect information.

The Fort Morgan fire roared through [Mount Diablo State Park](#) in Clayton, Calif., on Sept. 8, 2013, leaving behind a charred landscape. But as fire is part of a natural ecosystem, plants and animals have begun to return to the once-blackened land. To document the recovery, the group researchers use Twitter hashtags. Visitors to the state park can set their phones in one of four holders near signs explaining the project to take a pre-framed photo. They then send the photo to Twitter or Instagram with a hashtag linked to the location. It is then automatically collected and archived, searchable by hashtag. They are monitoring how the landscape is changing and recovering after the fire by taking pictures from fixed locations for 1 year after the fire. The unique use of Twitter allows users not only to share their own image of the fire recovery, but also to see the recovery over time by searching.

A similar project is happening in the Cairngorms National Park. [The Cairngorms Scenic Photo Posts project](#) is a pioneering citizen science initiative to gather information about our landscapes as they change from day to day and year to year. There are currently 14 photo posts located around the Cairngorms National Park, they range from mountain top views to rivers, glens and community woodlands. The website gives locations and directions <http://cairngorms.co.uk/photo-posts/>. Having found the post, you pop your camera, phone or tablet into the bracket, take a photo and then you can register and upload the image on to the Photo Posts website and contribute to a visual record of our changing landscape.

Top tips for getting your community involved in Citizen Science

- **Plan well ahead.** Many surveys are seasonally restrictive, so advertise for volunteers well in advance and have everything ready to start the surveying at the most appropriate time.
- **Share the load.** Make sure that more than one person takes on the responsibility. Sharing the work makes it more fun and means the project will still go ahead if a key person leaves.
- **Tell the world.** Get the message out as much as possible using Facebook, blogs, tweets and putting up posters to get as many people as you can to join in.
- **Gather support.** Seek out other local interest groups, gardening clubs, elderly groups, scouts/guides. People with a similar interest, spare time or eager to help out are there for you to engage with.
- **Ask for help.** Some Citizen Science projects are supported by their creators with guides and other materials to help with the surveys. There may even be local support services and training available near you.

Further Support for Citizen Science activities

Many organisations champion the Citizen Science cause and welcome enquiries from community groups and individuals. They offer training, support material and involvement in local and national conservation projects.

Contact/Organisation	Telephone	Email/webpage
Amanda Malcolm, Citizen Science Coordinator, Scotland Counts, The Conservation Volunteers	0141 552 5294	citizenscience-scotland@tcv.org.uk
The Conservation Volunteers	01786 479 697	http://www.tcv.org.uk/scotland/discover/citizen-science
Scottish Biodiversity Information Forum	01875 825 968	sbifcoordinator@wildlifeinformation.co.uk
OPAL Community Scientist, Amy Styles, The Conservation Volunteers (covers Central & East Scotland)	01786 476 185	a.styles@tcv.org.uk
OPAL Community Scientist, Matt Keyse, Field Studies Council (covers Glasgow & West Scotland)	01475 530 581	matt.sco@field-studies-council.org
OPAL Community Scientist, Joanne Dempster, Glasgow City University		Joanne.Dempster@glasgowsciencecentre.org
OPAL Community Scientists, Keith Marshall & Anne-Marie Robinson, Aberdeen University		kmarshall@abdn.ac.uk annierobinson@abdn.ac.uk
Scottish Wildlife Trust	0131 312 7765	http://scottishwildlifetrust.org.uk/about-the-trust/local-groups/
Forestry Commission Scotland		http://scotland.forestry.gov.uk/managing/who-manages/forest-districts
SEWeb project finder		http://apps.environment.scotland.gov.uk/project-finder/search_projects.aspx
Local council biodiversity officers and rangers are a good source of support/knowledge		Search for Ranger Services on your local council website.

Biological Records Centres across Scotland

BRISC

Biological Recording In Scotland (BRISC) <http://www.brisc.org.uk/index.php> is a charitable organisation that promotes the gathering of environmental data in order to increase public awareness about biological diversity in Scotland and to ensure that effective actions are taken to conserve this resource. BRISC encourages and supports all aspects of recording wildlife and wildlife habitats in Scotland, through local record centres, national recording schemes and societies, and individual recorders.

An accurate map of the area for Local Records Centre boundaries can be seen here:

<http://www.brisc.org.uk/lrc/LRCs%20in%20Scotland%20January%202010.pdf>

Shetland Biological Records Centre	Glasgow Museum Biological Records Centre (including East and West Dunbartonshire)
Orkney Biodiversity Records Centre	Argyll and Bute (no Record Centre) Send records to Glasgow Museum Biological Records Centre
Highland Biological Recording Group	Islay Natural History Trust Wildlife Information Centre
Outer Hebrides Biological Recording Project	Fife Nature Records Centre (formerly FERN)
Renfrewshire, East Renfrewshire and Inverclyde LRC partnership	Skye Environmental Centre
The Wildlife Information Centre for the Lothians and the Borders	Leisure and Culture Dundee
North East Scotland Biological Records Centre	North and South Lanarkshire Biological Records Centres partnership
Arran Biological Records Centre	Falkirk Museum (no Record Centre)
The Dumfries and Galloway Environmental Resources Centre (DGERC)	Ayrshire Biological Records Centre partnership (no Record Centre)

For information and future support, contact:

Amanda Malcolm, Scotland Counts, The Conservation Volunteers Scotland

E: citizenscience-scotland@tcv.org.uk

T: 0141 552 5294

W: <http://www.tcv.org.uk/scotlandcounts>

National Surveys suitable for use by Community Groups

Organisation(s)	Website	Detail	Training and Equipment
British Hedgehog Preservation Society and people's trust for endangered species	http://www.hedgehogstreet.org/	Hibernation Survey - Record any sightings of hedgehogs when out. Recordings to be logged by website ONLY and would prefer to have a grid reference but postcode/nearest town or county will do. Will need a login to upload sightings onto website.	No training needed/Notebook, pen, GPS.
Royal Society for the Protection of Birds	http://www.rspb.org.uk/birdwatch/	Big Garden Birdwatch - Record the highest number of each species of bird seen in one hour. This can be done in a garden or at the park. This is an annual survey and is only carried out on one weekend in January. Results are submitted online ONLY but can download a help sheet to use while recording and then upload findings online. Possibly need to become a member to upload data.	No training needed/Download help sheet (or use a notebook), pen.
	http://www.rspb.org.uk/thingstodo/surveys/	Various bird surveys - Various projects that collect data from birdwatchers, bird recorders, county bird clubs and national datasets that targets bird species or habitat management for birds of conservation concern.	No training needed/Download help sheet (or use a notebook), pen.
Shorewatch	http://www.shorewatch.co.uk/html/resources.html#downloads	With thousands of archaeological sites at risk from erosion around Scotland's coast, Shorewatch aims to get as much information as possible on the sites before it is too late. Shorewatch has a recording sheet that prompts you for all the information necessary to make an archaeological record about any sites that you find. The sheet is based on those used by archaeologists doing fieldwork, and the data that you collect can be easily added to local and national records.	Online instructions/Simple recording & reporting tool

Woodland Trust (Scotland)	http://www.naturedetectives.org.uk/download/hunting_early.htm	Seasonal Packs - Free packs available from: http://www.naturedetectives.org.uk/packs/play which gives a list of activities such as nest challenge, texture trail etc that can be done at home or at the park. Great for beginners and children to get involved in nature and perhaps invite some to become recorders.	No training needed/Packs are emailed then can be printed out.
	https://www.woodlandtrust.org.uk/visiting-woods/ancient-tree-hunt/	Ancient Tree Hunt - Involves people in finding and mapping all the fat, old trees across the UK to become part of the only living archive of ancient, veteran and notable trees.	No training needed/Download help sheet (or use a notebook), pen.
Marine Conservation Society (MCS)	http://www.mcsuk.org/what_we_do/Wildlife%20protection/Report%20wildlife%20sightings/MCS%20Jellyfish%20Survey	Jellyfish Survey - Record jellyfish that have become stranded on beaches. Recordings can be uploaded online without registration or by post. Can also download Jellyfish identification guide to help and email pictures to peter@mcsuk.org if unsure.	No training needed/Download jellyfish identification guide, notebook, pen.
	http://www.mcsuk.org/what_we_do/Wildlife+protection/Report+wildlife+sightings/Alien+species	Alien Species - Working with MarLIN (the Marine life Information Network at the Marine Biological Association) to record invasive non-native species. Record any seen on beaches using the Marine Non-native Species ID Guide which can be downloaded. Results are to be uploaded online at http://www.marlin.ac.uk/rml.php but must log in first.	No training needed/Download marine non-native species guide, notebook, pen.
UK Cetacean Strandings Investigation Programme (CSIP)	http://ukstrandings.org/	Report Strandings - Report any strandings of whales, dolphins and porpoises (collectively known as cetaceans), marine turtles and basking sharks that strand around the UK coastline. To report a sighting for live strandings contact SSPCA on 0131 3390111 and for dead strandings contact SAC Veterinary Services on 01463 243030 or 07979 245893 (out of hours).	No training needed/N/A

Fresh Water Habitats Trust	http://freshwaterhabitats.org.uk/projects/pondnet/	PondNet - collect information about trends in pond quality and pond species, including rare plants and animals.	No training needed/Can print out form to record, pen.
	http://freshwaterhabitats.org.uk/projects/clean-water/	Clean Water for Wildlife - A community survey which aims to find wildlife rich, clean water habitats in England and Wales. Take part to find out whether the ponds, streams and rivers in your neighbourhood are really good enough for wildlife.	No training needed/White tray, sieve, survey sheet. Survey kits available on their website.
	http://freshwaterhabitats.org.uk/projects/people-ponds-water/	People, Ponds and Water - a national project that helps people to make a significant difference to protecting our freshwater wildlife. This is the project under which there are the PondNet and Clean water for Wildlife initiatives.	Notebook to record/ Survey kits available on website.
Galaxy Zoo	http://www.galaxyzoo.org/	Roughly one hundred billion galaxies are scattered throughout our observable Universe. Each galaxy contains billions of stars. The aim of Galaxy Zoo is for the public to study the shape and form of the galaxies photographed by the Hubble telescope and to classify them. This study will assist astronomers attempt to understand how the galaxies we see around us formed, and what their stories can tell us about the past, present and future of our Universe as a whole.	
Natural History Museum	http://www.nhm.ac.uk/take-part/citizen-science/big-seaweed-search.html	Big Seaweed Search - Explore the UK coastline and record the living seaweeds you find to help us monitor the effects of climate change and invasive species.	No training needed/Survey sheet, pencil/pen, ID sheets to help. Camera
	http://www.nhm.ac.uk/take-part/citizen-science/orchid-observers.html	Orchid Observers – Record Orchids growing in your local areas by going on a walk and photographing them. Send you results into the Natural History Museum.	

British Geological Survey (BGS)	http://www.bgs.ac.uk/citizenScience/home.html	The BGS recognise the input of citizen scientists allows their scientists to accomplish research objectives more feasibly than would otherwise be possible. In addition, these projects promote public engagement with their research, as well as with science in general. Their website has 8 surveys that the public can input their data into; including App based mobile surveys and historic photograph requests.	Online instructions/Simple recording and reporting tool
Marine Biological Association of the UK	http://www.mba.ac.uk/recording/about	Sealife Survey - Record sightings of marine life. Recordings are uploaded online however login is needed. Records are sent to the NBN Gateway and a recording guide is available.	No training needed/Notebook, pen etc. If new to recording find your recording guide here
The Bumblebee Conservation Trust	http://bumblebeeconservation.org/get-involved/surveys/beewalk/	BeeWalk - Help us monitor long-term changes in bumblebee populations. A familiarity with the common garden species is required. Establish a 1-2km transect along your favourite walk where you are likely to see bumblebees and then survey this once per month between March and October. Guidelines are made available once you register your interest by emailing beewalk@bumblebeeconservation.org	Training details on website/Camera, recording sheet, GPS, pen etc.
The Bumblebee Conservation Trust	http://homepages.abdn.ac.uk/wpn003/beewatch/	Bee Watch - If you love digital photography and wish to learn more about bumblebees then please upload your bumblebee photos to BeeWatch. Share some basic information about the photo such as the date and location and in return we will teach you how to identify bumblebees yourself through an interactive tool. An expert will then send you feedback with the correct identification and some interesting information about that particular species. BeeWatch allows us to gather more valuable information about the distribution of our 24 species of bumblebee.	No training needed/Camera, notebook, pen

British Trust for Ornithology	http://www.bto.org/volunteer-surveys/core-surveys	Bird Track - Record birds seen in a site or sites of choice. Need to register to upload results. Need to read instructions which are available to download online. Enter location, time, date and check off species when filling in survey online.	No training needed/Binoculars, notepad, pen etc.
		Breeding Bird Survey - The survey involves two spring visits to a local 1-km square, to count all the birds you see or hear while walking along two 1-km transects within the square. Each visit should take less than two hours, and it's recommend that you make a reconnaissance visit to set up or check the transect route and access, and complete a habitat recording form. You can download the instructions from the website. Need to contact the Regional Organiser to allocate the 1-km BBS square.	Common bird knowledge, courses on website/Binoculars, notepad, pen etc.
		Nest Record Scheme - Watch a single nest box in their garden or finding and monitoring nests in the wider countryside. Online guide to monitoring nests is available. Training courses are also available.	Course detail on Website/notepad, pen etc.
Plantlife Scotland	http://www.plantlife.org.uk/scotland/things_to_do_in_scotland/volunteering_in_scotland/florasguardians	Flora Guardians - Allocated sites near to where you live in which you monitor a specific wild plant and its habitat on a regular basis. These include endangered 'Back from the brink' species and also non native invasive species such as Japanese knotweed. Download the enrolment form.	Training available from Plantlife
Bat Conservation Trust	http://www.bats.org.uk/pages/batmonitoring.html	Batwatch - Contact - Anne Youngman, Scottish Bat Officer, BCT, Unit 10, RFL House, Anderson Street, Dunblane, FK15 9AJ. Tel: 01786 822107 Email: ayoungman@bats.org.uk	Training required from BCT/Simple online recording process and ID Sheets
Whale and Dolphin Conservation	http://www2.wdcs.org/hyck/volunteer/volunteer.php	Cetacean and pinniped surveys - Contact Bridget Davies-Robertson on 01249 449500 or info@wdcs.org. For more information on	Training from WaDCS recommended/Field

Society		volunteering with the WDCS.	Training
Sea Search	http://www.seasearch.co.uk/	Sea Search Recording - Recording after a dive on an Observation form which requires the main habitat and seabed cover types as well as the main species of marine life. More detailed recording can be done on a Survey form. Can download guidance notes on the observation form and survey form as well as the forms themselves.	No training needed/Simple online recording process and ID Sheets
NNS (GB non-invasive species secretariat)	https://secure.fera.defra.gov.uk/nonnativespecies/index.cfm?sectionid=47	Identification of non-native invasive species - Identification sheets of non-native invasive species available to download. A recording of observed INNS allows you to record what you've seen and where.	No training needed/Simple online recording process and ID Sheets
The Met Office	http://www.metoffice.gov.uk/climate/uk/wow.html	Weather Observations Website - Recording rainfall and other meteorological phenomena around you. Either record your weather on the go through your smart phone or set your home/work/school up as an observation site recording rain, weather type, temperature and any other conditions you wish. Then see your reports alongside hundreds of others in your area.	No training needed/Simple online recording process
Buglife	https://www.buglife.org.uk/activities-for-you/wildlife-surveys	Bug Surveys - Take part in a wide variety of insect surveys including pollinator hoverflies, moths, butterflies, harlequin ladybirds, glowworms, seashells, beetles, and giant aphids surveys. Something there for everyone.	No training needed. Contact Buglife for advice and training/Simple online recording process and ID Sheets
Butterfly Conservation	http://www.butterfly-conservation.org/downloads/49/bc_scotland.html http://butterfly-	Butterfly Identifier - Record the butterflies you see around you with the butterfly identifier. Clear colour photos of the butterflies and a simple recording online form Big Butterfly Count - Count butterflies in your local area. Sit for 15	No training needed/Simple online recording process and ID Sheets

	conservation.org/110/recording-and-monitoring.html	<p>minutes in the sunshine, between specific dates, and record what you see.</p> <p>Various surveys - Lots of recording and monitoring of Lepidoptera (butterflies and moths) to get involved with! Visit the site to find a survey that suits you.</p>	
iSpot	http://www.ispot.org.uk/	<p>iSpot - Not a survey however provides peer to peer review of photographs and description of specimens seen in the field. Gives rapid ID for unknown species and builds up your ability and knowledge to confidently spot things yourself. Mobile App is also available to turn your mobile phone into a tool for accessing information on the go.</p>	Online instructions/Simple ID and recording tool
iRecord	http://www.brc.ac.uk/irecord/	<p>iRecord - Not a survey however provides a way of uploading multiple photographs and details of specimens seen in the field. Mobile App also available turns your mobile phone into a tool for recording on the go.</p>	Online instructions/Simple ID and recording tool
SCAPE	http://www.shorewatch.co.uk/	<p>Shorewatch - aims to save information about Scotland's archaeological sites before they are lost to erosion. The website contains information on how to get involved and explains how to record archaeological sites. There are pages giving details of some of the current projects and others explaining why they are collecting the data, who it is for and where records will go. There are also forms and guidance notes to download to help you start your own recording project.</p>	Online instructions/Simple ID and recording tool
ASHTAG	http://ashtag.org/	<p>Ash Tag - Provides a way of uploading photographs and details of evidence of Ash Dieback appearing on Ash trees around the country. A mobile phone app and a pc based tool allows for</p>	Online instructions/Simple ID and recording tool

		recording on the go.	
Clyde Forum	http://clydeforum.com/index.php?option=com_content&view=article&id=64&Itemid=70	Clyde Invasives project - Provides a way of uploading photographs and details of evidence of Invasive non Native Species (INNS) appearing in the busy ports and harbours on the Clyde. A danglebook is available with ID pictures as well as detailed pc based tools allows for ID on the go and upload at your leisure at home.	Online instructions/Simple ID and recording tool
Phototrails	http://www.phototrails.org	Phototrails - Provides detailed accessibility information for trails throughout the UK. Each mapped trail combines photos of every potential hazard and details on surface, gradient, facilities etc so you can ensure the trail is suitable for you before you go. Allows user additions and reporting.	Online instructions/Simple recording and reporting tool
Scottish Wildlife Trust	http://scottishwildlifetrust.org.uk/what-we-do/scotlands-red-squirrels/squirrel-sightings	Squirrels Survey - Scottish Wildlife Trust is collecting information on the distribution of red and grey squirrels right across Scotland. This allows us not only to identify areas of importance where habitat management or grey squirrel control will benefit red squirrel populations, but also to understand natural changes in their populations. The data will be shared with local biological records centres and the national database of squirrel records. Please help by reporting sightings of red or grey squirrels where you see them.	Online instructions/Simple recording and reporting tool
Amphibian and Reptile Conservation	http://www.narrs.org.uk/index.php	National Amphibian and Reptile Survey Scheme – Record the amphibians and reptiles in your area and join existing surveys.	Information and survey resources available on the website. No experience needed.
British Dragonfly Society	http://www.british-dragonflies.org.uk/content/	Dragonfly Watch – Help the British Dragonfly Society by searching for dragonflies and submitting records of dragonfly/damselfly	Online instructions/Simple recording and reporting

	recording-dragonflies-and-damselflies-britain	sightings. Requires the basic 'what, where, when and who' information.	tool. No experience needed.
FIDRA	http://www.nurdlehunt.org.uk/	The Great Nurdle Hunt – Search for Nurdles, plastic pellets used in the plastic making industry, on your local beach to help see how far they are spreading in our environment.	No experience needed advice on how to take part on website.
OPAL – Open Air Laboratories	http://www.opalexplorationat.org.uk/surveys	OPAL currently run seven citizen science surveys that anyone can get involved in at anytime: Biodiversity Survey Tree Health Survey Soil and Earthworm Survey Water Survey Air Survey New Zealand Flatworm Survey Bugs Count Survey	No experience needed, suitable to do in groups. See website for guidance and downloadable survey packs.
The Mammal Society	http://1061396120.test.prositehosting.co.uk/owl_pellet_survey http://www.mammal.org.uk/footprint_tunnel_survey	National Owl Pellet Survey – wander through woodlands and wild places in search of owl pellets and send them off to the mammal society. Footprint Tunnel Survey – Set up a footprint tunnel to see which small mammal species are living in your local area.	No experience needed. No Experience needed, however purchase or construction of a footprint tunnel required
Wild Knowledge	http://www.wildknowledge.co.uk/	Wild Knowledge - Not a survey however provides information on how to turn your mobile phone into a tool for accessing information on the go.	Beginner, online instructions, simple ID tool