# Scotland's environment

**04**

# Scotland's Environment Web Citizen Science

## 1. Background

- Public monitoring or 'citizen science' is the public involvement in data collection and analysis.

- Citizen science increases the capacity for scientific research, providing a rich source of data and information and can extend the range and quantity of data collected by environmental monitoring agencies.

- Citizen science can be an enjoyable and fulfilling activity for those that take part. Many participants gain additional skills and confidence as well as increased knowledge and an understanding of the environment in which they live.

- There are many different types of citizen science, from formal data collection and analysis to more informal recording of environmental observations such as RSPB's Big Garden Bird Watch.



## 2. Key messages and opportunities

- There are already a large number of different citizen science projects in Scotland. There is an opportunity for Scotland's Environment Web to provide a gateway to existing projects, increasing the number of people involved.

- There are opportunities for more citizen science projects in Scotland, learning from best practice and using a number of freely available on-line digital tools. There is an opportunity for Scotland's Environment Web to enable and encourage new projects to be developed.

- Involving the public in citizen science is sometimes seen as a free or cheap way of gathering environmental data and the benefits to both science and the public participants are not fully understood or appreciated. There is an opportunity for Scotland's Environment Web to communicate the value of citizen science.

- The significant increase in personal access to new digital media can be used to extend the scope and uptake of citizen science data gathering. There are opportunities for Scotland's Environment Web to harness 'cyber citizen scientists'.

# 3. Proposals

Given the existing landscape of citizen science in Scotland, the following set of Scotland's Environment Web projects are proposed:

- Scotland's Environment Web will communicate the value of citizen science through illustrations, examples and experiences from scientists and participants. This will include showing how collecting data can be fun, how data collected can, and is being, used for positive environmental protection or improvement as well as making a real contribution to our scientific understanding of Scotland's environment.

- Scotland's Environment Web will promote citizen science in Scotland, through a searchable 'register' of citizen science opportunities, providing an online service to match projects with volunteers and mapped information of which projects are active where.

- Scotland's Environment Web will develop a toolkit of resources for new and developing citizen science projects including good practice guides, freely available IT tools and applications that can help projects in the collection, analysis and reporting of data, a framework for linking project data to Scotland's Environment Web and a guide to how citizen science can contribute to learning and accreditation through schools, families and lifelong learning.

- Scotland's Environment Web will work with the scientific community to uncover environmental topic areas where a new citizen science project could provide valuable data, fill identified gaps, and will encourage the development of projects using Scotland's Environment Web's citizen science tools and guidance.

# 4. Contact us

If you are interested in finding out more about citizen science, the Scotland's Environment Web (LIFE+) project or have any comments on the website, please contact: seweb.administrator@sepa.org.uk

# 5. Supporting documents

Scotland's Environment website:
www.environment.scotland.gov.uk

Scotland's Environment Web Core Briefings:
www.environment.scotland.gov.uk