



Moors for the Future

Partnership's Community Science Project

In 2013 Moors for the Future Partnership launched the concept phase of the Heritage Lottery Funded (HLF) Community Science Project with the aim of inspiring and engaging local communities and visitors with their moorlands through providing opportunity, training and materials to enable wide spread ecological and environmental monitoring to take place.

It is a key project to monitoring the long-term health of our moorlands and heritage of the Peak District National Park and South Pennine moors.

OUTCOMES/RESULTS

1 Presented to an eclectic range of audiences at twelve different organized talks this year, reaching over 450 people, including Girl Guides, UK National Park Staff, Institute of Outdoor Learning, Chesterfield Pollination conference, 50th Anniversary of the European Diploma for Protected Areas and 6th World conference on Ecological Restoration.

2 Provided engaging displays at public events including an Eco-Schools day, local outdoor and music festivals, Open garden days, village country days and the 50th celebration of the Pennine Way.

3 Provided inspiration for groups of young carers and homeless adults from Crisis engaging in an O2 funded Eco-Arts project through casual wildlife survey focused nature walks.

3 Distributed over 9,000 casual survey cards and targeted survey guides to local businesses, youth groups, interest groups and at public events. We currently have a 2% response rate so have expanded our audience reach by enabling functionality of existing EU LIFE funded MoorLIFE smart phone applications to allow recording of Community Science species sightings; providing significant added value to both projects.

4 Provided free bumblebee identification and monitoring training to 87 volunteers since March 2015 who have then gone to independently survey 94 transects along 21 different routes, data from which feeds into the Bees, Wasps and Ants Recording Society's national dataset and is a stepping stone in the volunteer journey to the Bumblebee Conservation Trust's national recording scheme.

PEAK DISTRICT NATIONAL PARK, UNITED KINGDOM

South Pennine Moors Special Area of Conservation (UK0030280), UK

Our Community Science Project aims to inspire people to explore and protect our moorlands by engaging in long term data recording, enabling us to understand how our upland moorlands and the species they support are responding to climate change.

MOORLANDS COMMUNITY ENGAGEMENT ENVIRONMENTAL MONITORING ECO-SCHOOLS DAY VOLUNTEERS





LIFE+ INFORMATION AND COMMUNICATION PROJECT: EFFICIENT MANAGERS FOR EFFICIENT NATURA 2000 NETWORK





5 Set-up four environmental monitoring sites across the South Pennine Moors Special Area of Conservation for Community Science volunteers to monitor long-term changes of intact areas of blanket bog habitat in response to climate change.

6 Developed and delivered a number of paper and internet based engagement materials including social media (Facebook, Twitter, Blog, Instagram, Flickr), web-based resources, newsletter, games, displays and a photography competition.

MORE INFORMATION

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At the end of 2014 we successfully received HLF funding to continue engaging Community Scientists. We also receive partnership funding from the Environment Agency, National Trust High Peak Estate, Natural England, Severn Trent Water, United Utilities, Yorkshire Water Services, RSPB and the National Trust Marsden Estate. The current funding period runs until May 2018, by which time the three Community Science staff posts (Project Officer, Communications and Engagement Officer and Project Manager) will gradually reduce as volunteers take ownership of the project and continue it into the future.

Through Moors for the Future's extensive conservation and land management works, including stabilising bare peat through re-vegetation, thousands of young moorland plants have been hand-planted. These plants, including bilberry and heather, rely primarily on insect pollination and provide specialist moorland pollinators with food. Following their introduction we might expect to see an increase in moorland pollinators such as green hairstreak butterfly (Callophrys rubi) and bilberry bumble bee (Bombus monticola) as their food plants become more available; acting as positive indicators of healthy moorlands. As yet little data has been collected on pollinator populations of the moorlands of the South Pennines Special Area of Conservation (SAC) and Special Protection Area (SPA). Promoting informal monitoring - distribution of casual surveys













As the south easterly range of blanket bog in Europe we may also expect to see range shifts of moorland species in response to a changing climate here first; with cold loving species such as red grouse (Lagopus lagopus) predicted to move north or to higher elevations and more southerly species such as or-ange-tip butterflies (Anthocharis cardamines) and tree bumblebees (Bombus hypnorum) moving into the area in higher numbers. Scientific monitoring of specific populations over a landscape scale not only provides spatial information (e.g. on small scale habitat preferences or large scale species range shifts) but also on temporal patterns such as emergence times and arrival of migratory species such as swallows (Hirundo rustica) and peacock butterflies (Aglais io). In order for these patterns to be investigated a large quantity of robust data is required. The Community Science Project not only allows us to collect scientifically valuable data with which to monitor the impact of a changing climate, it also provides a toolkit to engage citizens in moorland science.

Citizen science offers a fantastic opportunity to communicate and connect communities with their natural environment; empowering people to positively contribute to the protection of their environment by teaching new skills and sharing knowledge, changing public perceptions and taking ownership of the evidence which guides those who manage the world we live in.

Through a staged approach there is opportunity for everyone to get involved from casual visitors to regular users who live and work close to the moorlands. Working with the Stockholm Environment Institute (University of York) we have developed a long term programme of biodiversity monitoring using a combination of paper based resources (postcards and survey cards) and multimedia (http://www.moorsforthefuture.org.uk/community-science), ensuring accessibility to, and inclusion of, all audiences.

Ecological records collected by Community Scientists are submitted to a publically available national database (iRecord) where they are verified by expert volunteers. From this platform all records collected by the Community Science Project can be viewed with those collected across the rest of the UK, placing them in a national context. Our surveys were designed to enable data to feed into other national monitoring schemes such as the Bumble Bee Conservation Trust's BeeWalks.

As well as species information we also have sites at which environmental data is collected to monitor moorland health and the effects of a changing climate well into the future. These sites have been situated in relatively intact blanket bog and complement the Moors for the Future Partnership's Science and Monitoring programme, which predominantly focuses on degraded blanket bog that has received treatment, allowing us to build a picture of habitat changes across the South Pennines and Peak District moorlands. The environmental surveys provide opportunity for community scientists to learn how to record variables such as water table height, peat depth, vegetation cover and rainfall, before taking ownership of the long term monitoring at these sites.

MoorCitizens - Making moorland conservation engaging







Working with volunteers bumblebee survey technique









Evaluation of volunteer motivations highlight that the reasons people get involved are numerous and varied, as are the benefits they get from being citizen scientists. Our approach to communications therefore has to be innovative, engaging and inspiring to appeal to eclectic audiences and ensure a legacy of protection and enjoyment of the Peak District moorlands for all.

FURTHER INFORMATION

Website www.moorsforthefuture.org.uk/community-science Facebook.com/MoorCitizens Twitter.com/MoorCitizens Instagram: MoorCitizens

Blog http://moorcitizens.blogspot.co.uk/ Newsletter

<u>1 Developing a structured,</u> accessible programme which includes a range of engagement opportunities is essential – it has to be easy to get involved and clear what the expectations and benefits are.

2 Vital to feedback to volunteers, to actively keep their interest and attention.

3 As the reasons people get involved are numerous and varied, as are the benefits to be gained, so our approach must be innovative, inclusive and adaptive.

4 To increase audience reach we have had success engaging through a range of media from paper-based resources to multimedia (Smart phone applications, social media, blogs, newsletter) and not forgetting face-to-face communication.

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