

CommunityScience

Targets and achievements



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Introduction

This report is designed to supplement the 2018 Community Science project (CSP) podcast, which will be available to listen to via the Community Science case study page on the Moors for the Future Partnership website from early 2019.

While the podcast focusses on the experiences of volunteers involved in the project, this document brings together headline figures to demonstrate the ways in which key targets have been met during the Heritage Lottery Funded (HLF) phase of the project.

Headline figures

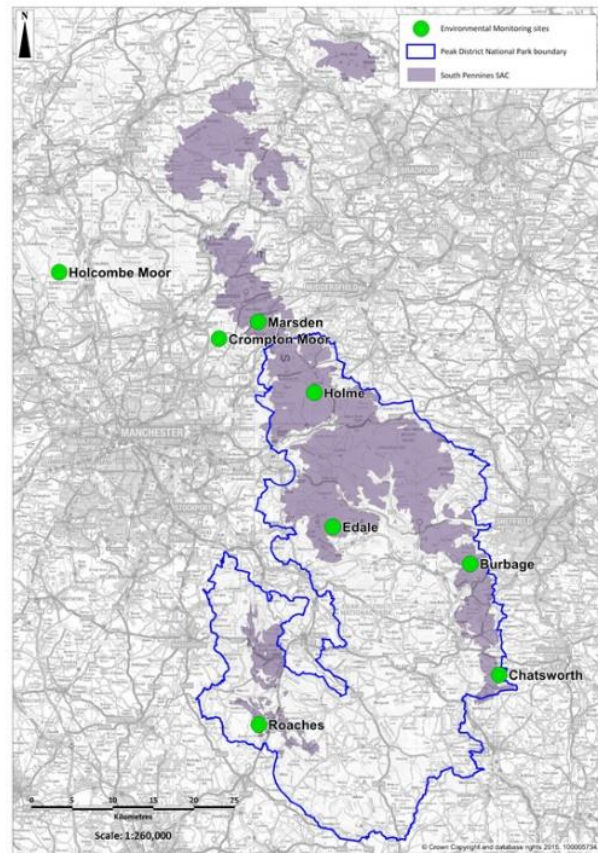
Since 2015...

- Over 1,000 different volunteers have given over 16,500 hours of their time to Community Science activities. That's almost 1 million minutes – equivalent to about 7 year's full time work.
- Volunteers have recorded 11,745 individual animals through 3,985 casual Opportunistic Monitoring survey records, exceeding annual targets by an average of 363%.
- Volunteers have conducted 1,708 Targeted Monitoring surveys (Bumblebee Survey; *Sphagnum* Survey; Buds, Berries and Leaves Survey and Tails of the Uplands Survey) and walked at least 968 miles in the process. That's equivalent to walking the Pennine Way three and a half times.
- 195 Environmental Monitoring volunteers have downloaded 2,441 files from equipment on site, collected 2,740 manual dipwell (water table) measurements, taken 2904 photographs and monitored 790 vegetation quadrats. This equates to just under 40,000 separate pieces of information recorded.
- The project has generated 272 press, radio and TV pieces, including three appearances on BBC's Countryfile, and reached an average potential annual audience of nearly 10 million.
- Community Science has been represented at 351 events, attended by 10,119 people. This equates to an event every 4 days during phase two of the project.
- 28 monthly 'Creative Conservation' trips have been run in collaboration with Crisis, generating 171 visits from their members.
- Almost 100 young people from schools and youth groups have taken part in the Moorland Indicators of Climate Change Initiative's new method based on Community Science techniques.
- Three annual Community Science photographic competitions generated a total of 1,248 entries from 20 different countries around the globe.
- Community Science was the overall winner of the 2017 Campaign for National Parks 'Park Protector Award'. It was highly commended in the 'Natura 2000 Communications Award' and was shortlisted as a finalist in the National Biodiversity Network 'Lynne Farrell Group Award for Biological Recording'.

Environmental Monitoring (EM)

Targets: Set up and install equipment in a network of eight Environmental monitoring sites (six new in addition to the two established during project development). Increase the number of different measurements taken each year.

Achievements: Eight sites have been successfully set up with all necessary equipment at Edale, Holme, Marsden, Burbage, The Roaches, Chatsworth, Holcombe Moor and Crompton Moor. An additional ninth site has also been established on Crompton Moor to monitor *Sphagnum* introduction. During the project additional methods of monitoring have been added including wildlife cameras, humidity and air temperature loggers, and peat depth monitoring. Opportunities to monitor water quality are now being trialled.



Targets: Recruit experienced academics and collaborate to develop long-term data collection programme. CSP data to be used in climate change initiatives and moorland management decision making.



Achievements: Stockholm Environment Institute (SEI) based at the University of York were recruited and helped to develop the programme of monitoring, including new sites and new techniques. After the 2018 wildfire at The Roaches, the scientific value of that site has increased, as there is strong baseline data for monitoring wildfire recovery. It is now one of only a handful of such sites worldwide. Academics at the University of Exeter and the University of Manchester have expressed interest in CSP data. Crompton Moor vegetation monitoring has been set up in such a way as to inform future management decisions by Oldham Council on the site (*Sphagnum* planting). Holcombe Moor data has been considered in MFFP's upcoming MoorCarbon project (a £3 million bare peat recovery project). £10K has been secured from the Environment Agency to explore how Community Science techniques can be used to monitor water quality.

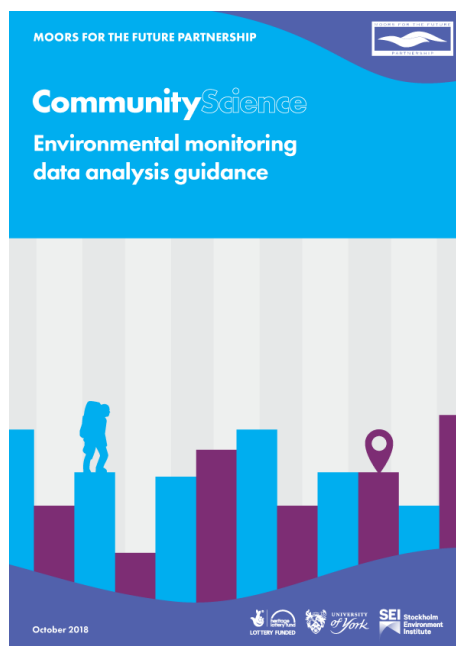
Targets: Recruit community volunteer groups for each site and establish ongoing monitoring with volunteers taking a lead role. Train 15 new volunteers each year, including two in equipment maintenance, and provide supporting documentation. Partner with other organisations to ensure continued collection of good quality data after HLF funding period.

Achievements: All EM sites have a dedicated group of volunteers performing monthly downloads and measurements, as well as annual vegetation surveys. 195 individual volunteers have taken part since 2015. There is an average of two volunteers present at each site coordinating and leading the monthly site visits.

Ongoing volunteer led EM training across all sites has resulted in a large pool of capable volunteers. Over 30 volunteers have been trained in data processing to ensure datasets are kept accurate and up to date. Volunteers have been involved in building monitoring equipment to be installed at EM sites. Volunteers at each site are troubleshooting and maintaining equipment including making minor adjustments to equipment to ensure smoother data collection. Guidance documents are now available to download on the new Moors for the Future Partnership volunteer portal.



Partnerships are in place with the National Trust (at three of our sites), the Eastern Moors Partnership, Friends of Crompton Moor and Holme Valley Scouts. MFFPs established volunteers are also committed to long term monitoring of sites while being supported by the Partnership.



Targets: Downloads at each site to take place every two months. Clear guidance documents produced to ensure continued data collection and volunteer confidence. Data available to download with accompanying protocols.

Achievements: Monthly visits have been made to each site. Since 2015 volunteers have given 5,003 hours to EM activities, downloading 2,441 files from loggers, taking 2,740 manual dipwell (water table) measurements, surveying the vegetation in 790 quadrats (that's 31,600 separate pieces of information recorded during vegetation surveys). Guidance documents (protocols) are available for all areas of EM: Fieldwork, Using a GPS, Data Processing and Data Analysis; helping to ensure project longevity post HLF funding.

Targets: *Identify additional sites for landowners and organisations to monitor using CSP protocols. Eight schools per year taking part in Moorland Indicators of Climate Change Initiative (MICCI) monitoring. Positive feedback from schools.*



Achievements: 12 MICCI sites across varying land ownership were adopted within the Peak District. MICCI was offered to schools during British Science week over the last two years and was run with a new and improved method based on Community Science EM, accompanied by a new and clearer manual. The update was also adopted nationally by other National Parks and was well received: ***“The new instructions pack was excellent – thank you”***. Seven groups took part in 2017 (the eighth unfortunately had to be cancelled due to snow) and despite the ‘beast from the east’ in Spring 2018, two out of the planned MICCI visits still went ahead during British Science Week and a further 30 students undertook MICCI later in the summer.

Targeted Monitoring (TM)

Targets: *Collaborating with contractors, add a new Targeted Monitoring (TM) survey each year from 2015 to 2017. A minimum of two additional survey sites set up per year, and a minimum of one survey submitted per month per site during survey season.*

Achievements: Working with SEI, three new surveys were created in addition to the Bumblebee Survey to make up the TM survey suite: The Big Moss Map, designed to record *Sphagnum* moss abundance; Buds, Berries and Leaves, designed as a phenology survey of moorland plants; and Tails of the Uplands which is a mammal survey of water voles, otter and mink. For the surveys where it was measurable (Bumblebees; Buds, Berries and Leaves and Tails of the Uplands) we added 22, 18 and 27 survey sites respectively between 2015 and 2018, considerably exceeding the original target.

To date, 1,708 volunteer surveys have been carried out, recording: 10,025 individual bumblebees of 13 species (averaging 15.8 surveys per month in survey season); 1,128 patches of *Sphagnum* (averaging 4.9 surveys per month in survey season); 5,945 plant phenology observations (averaging 11 surveys per month in survey season); and 167 Tails of the Uplands surveys (averaging 7 per month during survey season).



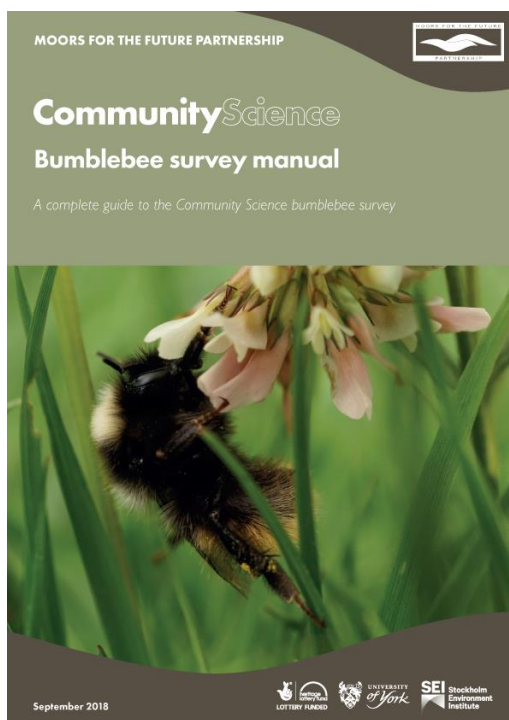
Targets: Run 10 training sessions per year, with 12 volunteers per session. Recruit two volunteers to take on training of new volunteers for each survey.

Achievements: Between 2015 and 2018, 117 TM training sessions have been run, with a total of 1248 people completing training - an average of 10.6 people per session. Some of these sessions have been led by volunteers. As the project progressed, training gradually shifted away from group training sessions led by staff, to a volunteer led one-to-one mentoring system where training takes place in the field. At the time of writing the number of volunteer mentors stands at: Bumblebee Survey (12), Buds, Berries and Leaves (4), The Big Moss Map (7) and Tails of the Uplands (4).



Targets: Make contact with 20 new interest groups and attend 10 TM related meetings with different groups per year.

Achievements: Contact was made with a large number of different interest groups, some of which led to longer term collaboration. One such group was Friends of Crompton Moor who we ran TM survey training for - and this then led to the creation of a new EM site and *Sphagnum* planting trials. Another group who we've had a strong relationship with for several years is Sheffield University Conservation Volunteers, one of their event co-ordinators went on to become our most active volunteer and eventually secured employment with MFFP. Each year we have attended ten or more meetings to promote our TM surveys with new interest groups, examples of these include the Wildlife Trusts, MOSAIC and Edale WI.



Targets: Make a toolkit available to volunteers to help them undertake surveys.

Achievements: Complete manuals, and online survey guidelines for each TM survey are available to new and existing volunteers. While the web resources are aimed at new, untrained surveyors who wish simply to take part in a survey, the manual documents cover all aspects of each survey and are designed to help ensure that surveys can be picked up by anyone in the future (including new mentors) with minimal staff input - serving to increase the sustainability of the project.

Targets: *Academic peer-reviewed papers using CSP TM data and the findings being considered in climate change initiatives and moorland management decision making.*

Achievements: The original desired intention of securing funding to use CSP TM data in academic research has not yet come to fruition. However, data has been used by both partner and non-partner organisations in many other ways and has been considered in moorland management decision making. Examples include: All TM data is shared annually with High Peak National Trust (NT). Mink monitoring has been set-up with Eastern Moors Partnership to inform management of this potential problem species. Bumblebee survey results are directly accessible by the Science Manager at the Bumblebee Conservation Trust (BBCT) to feed into national survey results. Tails of the Uplands survey results are sent to Derbyshire mammal group annually, whilst otter data was sent to the Joint Nature Conservation Committee to be used in their reporting to the European Union.

Targets: *Sign-post volunteers to other projects that they can take part in to gain further new skills and share knowledge.*

Achievements: The good links developed with various partner and non-partner organisations mean that volunteers have been directed to a whole host of complementary volunteering projects including but not limited to: BBCT Pollinating the Peak project, NT High Peak to take part in *Sphagnum* surveys, Butterfly Conservation's long running UK Butterfly Monitoring Scheme. As well as general volunteering with Derbyshire Wildlife Trust, the Eastern Moors Partnership and Woodland Trust. Sign-posting has regularly taken place via social media, as well as in person or by e-mail. The following e-mail to Community Science demonstrates how this signposting has worked:



“We have come across your website – we were first made aware of it through Springwatch; your website is great and your work has inspired my 16 year old son who is fast becoming a bird expert. He’s enthusiastically looking for conservation initiatives he can get involved with. He already does the Waterways Breeding Bird survey for the BTO; any opportunities you may have are certainly of interest.”

Opportunistic Monitoring (OM)



Targets: Collaborating with contractors, create one new Opportunistic Monitoring (OM) campaign per year including background information about each species on the website.

Achievements: Working with SEI and in consultation with partners and external organisations, three new OM surveys have been created since 2015 seeking casual sightings of: Hares and rabbits; ring ouzels and redwings; and toads, lizards and adders (the 'Scales and Warts' survey).

All three surveys increased the value of the sightings by collecting additional information including hare coat colour verses snow cover, ring ouzel habitat usage, and herptile life stages. Results have been used by external organisations including the Eastern Moors Partnership and Derbyshire Amphibian and Reptile Group. Full species and survey details have been added to the MFFP website; and full survey manuals have been produced for all five OM surveys - above and beyond the project deliverables.

Targets: Distribute 5,000 survey postcards per year and reach 10,000 readers through local press.

Achievements: Approximately 67,000 postcards have been widely distributed by staff and volunteers since 2015 (an average of 16,750 per year). Postcard holders have been installed in several key locations such as National Park and partner car parks. Postcards are the primary call to action in MFFP's Bogtastic Van. A total of 272 articles (average of 68 per year) have been generated across print and online press, radio and TV (including three appearances on BBC's Countryfile) with an average potential annual audience reach of 9,598,843.

Scales and Warts Survey
Community Science

Help us to understand how climate change is affecting when and where we find reptiles and amphibians in the uplands.
Please tell us when and where you see these species. Please do not pick them up or disturb them – they are protected by law and adders are venomous.

	Date	Where? (provide as much detail as possible e.g. grid reference, road name or pond)	How many of each animal have you seen?	Life stage?	In water? (boil only)
Adder (<i>Vipera berus</i>) Size: Up to 75cm long Colouring: Dark zig-zag stripe along its back, spots along its side and an X or V on its head. Body colour brown in females and grey in males. Juveniles: Less than 20cm in length and reddish in colour. Other species: No other British snakes have a distinctive zig-zag pattern along their back.	e.g. 15/04/17	Kinder, SK 097 873	2	juvenile / adult	
Common Lizard (<i>Zootoca vivipara</i>) Size: Up to 15cm long including tail Colouring: Usually brown (occasionally yellow, green or black) with patterns of spots and stripes. Juveniles: Less than 5cm in length and very dark in colour. Other species: No other lizards are found in this area. Could be confused with newts but lizards have scales and move very quickly.	e.g. 15/04/17	Kinder, SK 097 873	1	juvenile / adult	
Common Toad (<i>Bufo bufo</i>) Size: Up to 13cm long Colouring: Brown or olive-brown with dull, dry-looking, warty skin. Spawns: Laid in strings around vegetation. Other species: Frogs have moist-looking, smooth skin and two raised ridges along their backs. Frogs jump whereas toads walk. Frog spawn is laid in clumps not strings.	e.g. 15/04/17	Kinder, SK 097 873	2	spawn / adult	yes/no

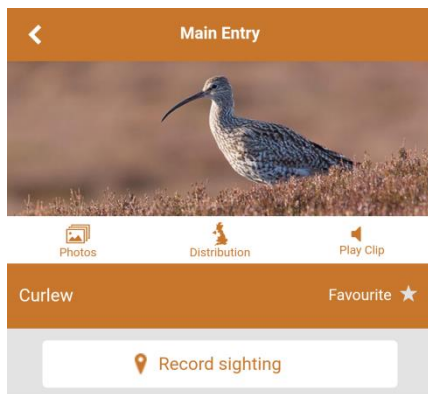
Submit your records through www.moorsforthefuture.org.uk/community-science/submit-results, via the MoorWILD app available on iOS and Android or post this card. Include photos if you have them to help us verify your sightings.

www.mffp.org.uk
www.facebook.com/MoorCitizens
[@MoorCitizens](https://twitter.com/MoorCitizens)
moorcitizens@peakdistrict.gov.uk
 01629 816585

Targets: Attend a minimum of four events per year to promote OM surveys.

Achievements: OM surveys have been promoted at all 351 events where Community Science has been represented since 2015. This equates to an event every 4 days during phase two of the project, and an audience reach of 10,119, or just over 2,500 per year.

Targets: 1-10% return rate of records from postcards distributed (50 per year, then doubling).



Scientific name:
Numenius arquata

Other names:
Eurasian Curlew

Description:
Large (length 48-57cm (incl. bill), wing span 89-106cm), elegant brown wader with a long (9-15cm), strongly decurved beak.
Sexes are alike.
Voice - a beautiful bubbling call in flight. Also onomatopoeic "coorllilil" call.
The work carried out by Moors for the Future Partnership on the Moorl IFF project has helped to restore and preserve their

Achievements: The overall return rate (record received from postcards distributed) from 2015 to 2018 is 5.3%. The annual target number of records was exceeded in all years - by an average of 363%.

In order to increase records submitted and encourage repeat surveys, Community Science developed the pre-existing 'MoorWILD' iPhone and Android application from a moorland wildlife identification guide to a platform for submitting sightings directly to iRecord from the field.

Targets: Evidence of repeat use of iRecord; 25% of those submitting records on iRecord submit data on more than one occasion.

Achievements: Of those who have submitted sightings through OM surveys since 2015, 73% of the known (i.e. named) individuals have submitted records on more than one occasion. This figure cannot take into account those who submitted records anonymously, for example via a postcard.

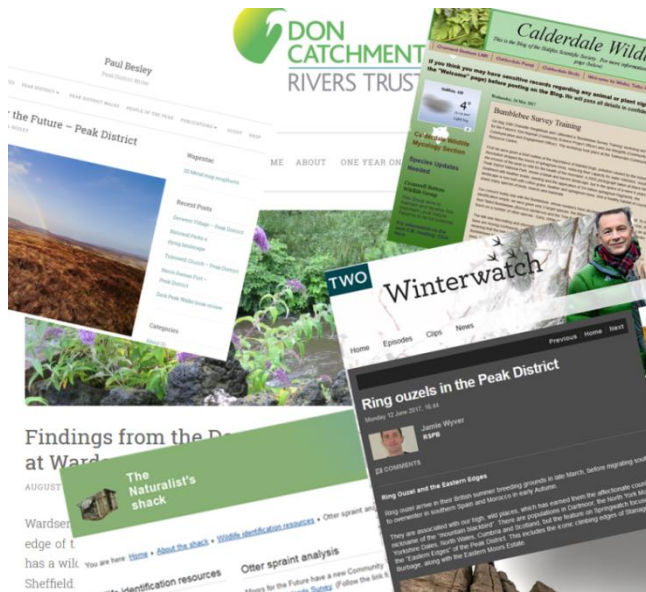
Communication and Engagement

Targets: Ensure there are active volunteers for all roles defined within the project.

Achievements: Volunteers have taken an active role in every aspect of the project – from submitting casual OM records, taking part in TM surveys and collecting monthly EM data. In addition, data volunteers have input, processed, error-checked and represented information collected through the project. Volunteers have helped to communicate about the project – for example by assisting at engagement events, and have also mentored other volunteers as they became familiar with TM and EM survey techniques. A number of volunteers have specialised in certain tasks – for example writing annual MICCI reports, mapping project data, and speaking at survey launch events.

As a legacy of this target, volunteer roles have been developed and are outlined on our website via our new 'Better Impact' volunteer management system. Since 2015, over 1,000 different volunteers have given over 16,500 hours of their time to Community Science activities. That's almost 1 million minutes – equivalent to about 7 years' full time work.





Targets: Recruit and maintain volunteer interest using social media (reach 500 followers on Twitter and Facebook). Feedback to volunteers about all aspects of the project via quarterly newsletter, and via the website. At least four articles/blogs/webpages per year via external websites.

Achievements: Social media posts have been regular and varied since 2015, enabling the project to amass 1150 Twitter followers (230% of the target), 750 Facebook likes (150% of the target), and a blog which has reached over 10,500 page views.

Community Science webpages have been viewed over 65,000 times and are some of the most viewed pages on the Moors for the Future Partnership website. Blogs and webpages by external organisations have been regular throughout the project and have included an article by BBC Springwatch. The quarterly Community Scientist newsletter has been sent out throughout the project, reaching up to 1000 people. The newsletter received positive feedback from project partners including The Environment Agency: ***“Some really impressive statistics, shows how good the engagement has been and the results from it; great presentation too. Thanks.”***

Targets: Run additional skills training events each year; and create skills sheet allowing volunteers to increase their employability.

Achievements: Additional volunteer skills workshops were run on topics including: Mammal identification, vegetation identification, photography and navigation. A skills sheet was created, but proved to have a low uptake from volunteers. To simplify this, a list of skills gained through each role was provided upfront in role descriptions via the website. A volunteer who gained employment in the environmental sector after volunteering for Community Science commented: ***“Your Power Point and links to the ID sites really helped me in the interview, thank you! As a result, I’m now truly elated as they’ve actually offered me the job! Can’t quite believe it, but I’m so happy! Thank you both again for all your training and help. I do think it was of huge benefit during the interview to be able to talk about some of the things I’ve done with you and the training you provided - it was all a great experience too and has left me feeling very impressed with MFFP.”***





Targets: *Two taster sessions per year for EM & TM attended by a minimum of 15 people. Promotional stands at four events per year. Attend the annual Bogtastic event to promote volunteering opportunities.*

Achievements: In addition to delivering the target survey taster sessions, the project ran five very successful survey launch events designed to promote the surveys to new audiences. These were

attended by a total of 371 people, and generated media coverage including a live broadcast from BBC Radio Sheffield. Volunteer feedback was used to inform the delivery of annual volunteer celebrations and feedback events, which included indoor results presentations, an outdoor 'mini festival' and site visits to Kinder Scout led by staff members. CSP was represented at 'Bogtastic' events in 2015, 16 and 17. In 2018 the newly completed 'Bogtastic' van was on the road representing CSP surveys at 51 different events and interacting with 4,286 people, 31% of whom were aged 25 or under.

Targets: *Develop competitions for TM and OM surveys. Prizes announced in newsletter and at annual volunteer gathering.*

Achievements: The scope of this target was developed, and rather than several small competitions aimed only at volunteers, an annual photographic competition was held in order to engage as many people as possible in the project and raise awareness of the importance of blanket bog as a habitat.

Sponsorship was gained each year from companies including Opticron, Alpkit, Gardenature and Adventurequip resulting in the donation of prizes over the years valuing a total of £800. The three annual Community Science photographic competitions, judged by professional photographers, generated a total of 1,248 entries in 'Adults' and 'Aged 15 and Under' categories from 20 different countries around the globe. Winning images were shown in The Times and on BBC Breakfast News.

Prizes were announced in newsletters, via the website and at events – including Buxton Adventure Film festival where the prizes were awarded by renowned photographer John Beatty. The winning and shortlisted images were displayed each year in a touring exhibition visiting varied venues including Manchester Museum, National Park visitor centres and Dean Clough Mill gallery in Halifax.



Targets: Increase volunteers from inner city or BME communities. Increase collaboration with organisations working with underrepresented groups, giving opportunities for knowledge exchange and capacity building. Provide accreditation through PDNP awards.



Achievements: When taking part in a project called Moorland Wonderscapes, which invited underrepresented groups into the Peak District to take part in outdoor art activities (in this case themed around bumblebees) contact was made with one of the participating groups, Crisis. Crisis are a charity for homeless people, and through CSP their Sheffield Skylight centre co-created a 'creative conservation' course for their members (those who have been, or are at risk of becoming homeless). The course mixed Community Science

surveys with art activities, and to date 28 monthly 'moorland trips' have been run, and 171 visits have been made by members from Sheffield, Rotherham, Doncaster and Barnsley, many of whom have never accessed the green spaces in the National Park at all. One Crisis member, arriving at Brunt's Barn in Grindleford for a bumblebee survey training session: ***"I didn't get the memo that we were coming to heaven"***. Through creative conservation, 9 Crisis members achieved a Certa qualification in Data Handling and Walk Planning. From 2019 onwards the monthly trips will continue, but will be facilitated by Peak District National Park rangers.