

# Teesdale Special Flora Trust's Plants on the Edge Project



## Final Evaluation

June 2023



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OUR FUTURE  
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Special Flora



## Abbreviations used in text


Defra	Department of Food and Rural Affairs	NH	Northern Heartlands Charitable Incorporated Organisation
CAP	(EU) Common Agricultural Policy	NPAONB	North Pennines AONB Partnership
EA	Environment Agency	NVC	National Vegetation Classification
ELMS	Environmental Land Management Scheme	POTE	Plants on the Edge Project/ Partnership
HF/ NLHF	National Lottery Heritage Fund	SSSI	Site of Special Scientific Interest
IE	Independent Evaluator/ Evaluation	TRaPS-Teesdale	Rare Plant Site/Sites
GRCF	Green Recovery Challenge Fund	TSF/ TSFT	Teesdale Special Flora/ Research and Conservation Trust
M&E	Monitoring and evaluation	UTASS	Upper Teesdale Agricultural Support Services Ltd
MH-UT NNR	Moor House – Upper Teesdale National Nature Reserve	UTBG	Upper Teesdale Botany Group
NE	Natural England		

Codes used to identify respondents to survey & interviews

**PL** = Project lead or Partner representative; **V** = Volunteer; **PA** = Participant in one or more POTE events or activities; **NP** = Aware of POTE but not involved in activities; **NA** = Unaware of POTE until approached as part of this evaluation.


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Cover: (Clockwise from top right): Guided walks were a feature of POTE's 'connecting people' activities; local school pupils examine the special flora; Mountain Everlasting, a fairly widespread species in Upper Teesdale; a poster for Margaret Bradshaw's weekly wildflower walks run by the Upper Teesdale Botany Group; UTBG members conducting a plant survey on Widdybank Fell; a mapped output from the species survey work; a poster for the POTE exhibition 'Teesdale's Tiny Giants'; the exhibition at the Witham in Barnard Castle with (seated) Dr Bradshaw; Teesdale's iconic species, the Spring Gentian; and (centre) the 'many hands' of Middleton in Teesdale Primary School pupils holding fragments of sugar limestone, the Teesdale Assemblage's characteristic base rock.



## Location of the POTE area

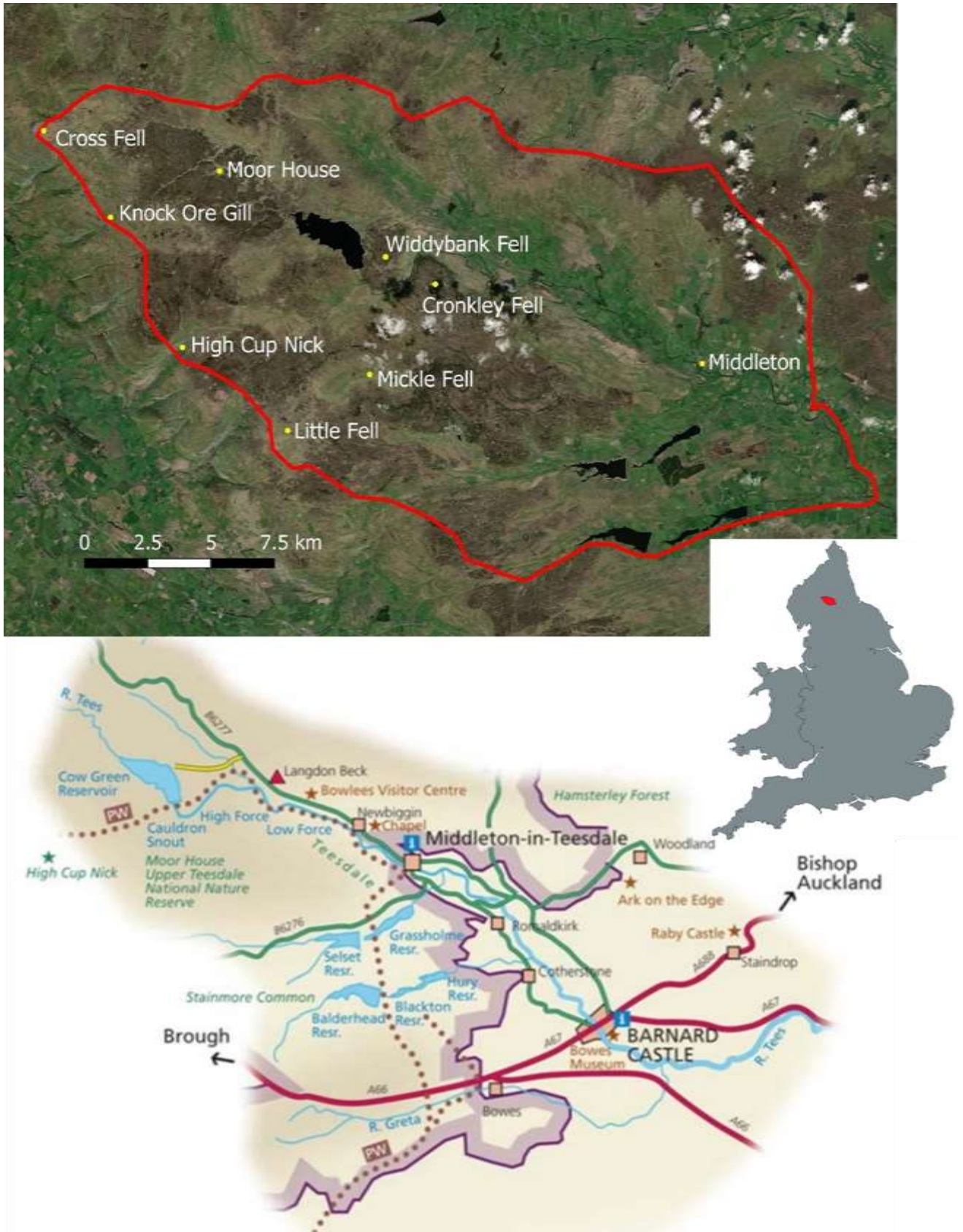


Figure 1 Location of TSF and the POTE project (top, courtesy John O'Reilly) and (below, courtesy NPAONB) in relation to local settlements with (inset) location in Britain.

## Acknowledgements

Production of this report has been greatly helped by the cooperation of those directly involved with the development and delivery of POTE whose assistance has been invaluable. Naomi Priestly, the project's part-time volunteer and engagement officer has given generously of her time. Julia Nelson has been vital not just to the evaluation work but to delivery particularly of the 'people' aspirations of POTE and Bruce Wilkinson has provided valuable insights in addition to his work in preparing POTE's own project handbook. Lizzie Maddison, Chair of UTBG has been central to the survey work of volunteers in addition to leading its excellent programme of walks and talks. Tricia Snaith was kind enough to let us 'sit in' on the UTBG's winter on-line programme of talks. Dr Geoff Herbert, Martin Furness, Martin Rogers, Richard Friend and Ruth Starr-Keddle have all been central to POTE's delivery, as has practical input from Natural England's MH-UT NNR Team. The two POTE consultants Dr David Oatway and John O'Reilly have shown a commitment to the scheme beyond their contractual obligations.

The partnership between the Teesdale Special Flora Research and Conservation Trust (TSFT) and the Northern Heartlands CIO (NH) underlies the success of POTE: Dr Tom Gledhill the former Chair of the TSFT, Bruce Wilkinson, Lizzie Maddison and Jill Cole, NH's Director, were crucial to POTE's application to GRCF and together with Jayne Bradley, NH's administrator, have freely given support. And of course, POTE would not exist without Dr Margaret Bradshaw, POTE's initiator and a dynamic and vocal presence throughout.

Illustrations included in this Report have come from a variety of sources, including the website of TSFT and while we have not attributed individual images, we would like to thank Bruce Wilkinson, Geoff Herbert, Jeremy Roberts, Jill Cole, John O'Reilly, Lynne Sharp, Margaret Bradshaw, Martin Rogers, Naomi Priestley, Rachel Richards and Tom Gledhill; if we have omitted anyone we apologise.

Finally, would wish to thank all those – in addition to the above – whom we have met and spoken with during our visits to the POTE area, who completed our survey or whom we interviewed during the course of the evaluation.

# Teesdale Special Flora Trust's Plants on the Edge Project Final Evaluation

## June 2023 Summary

### Introduction

**Upper Teesdale** is one of the five most important botanical sites in the British Isles. Due to the Dale's climate, geology, geography, traditional farming practices and current land management, rare plant species appear to have survived here since the end of the last ice age, over 10,000 years ago.

Teesdale's Special Flora comprises some 100 plant species of conservation interest, of which: 28 are on the Red List (threatened with extinction), 18 are nationally rare and 35 are nationally scarce. The flora, known as the Teesdale Assemblage, is unique, including 'southern' species which are at their northernmost limit and 'arctic-alpine' species which are at their southern limit in the British Isles.

The Assemblage today faces an uncertain future, threatened by climate change, aerial pollution, eutrophication, changes to land management and recreational pressures. Recent (2017-2019) research comparing current plant distribution with surveys from 1968-1977 found that 19 species survive in half the locations they were 50 years ago. 28 species are considered to be endangered.

The campaign to arrest the steady decline of these species owes a great deal to the commitment of one woman, Dr M E Bradshaw MBE, over a period of 50 years. Through her founding of the Upper Teesdale Botany Group (UTBG) in 2001 and nearly twenty years of dedicated teaching, she has built a strong base of friends and supporters. In 2017, she financed the establishment of Dr Margaret Bradshaw's Teesdale Special Flora Research and Conservation Trust (TSFT) which set out to establish the current status and distribution of the rare plant species and the requirements for their conservation.

**Plants on the Edge** (POTE) commenced delivery in September 2021, supported by a Green Recovery Challenge Fund (GRCF) grant of £222,400 as 96% of total approved costs. The Accountable Body is the TSFT in partnership with the Northern Heartlands Charitable Incorporated Organisation (NH). Other delivery partners include the North Pennines AONB Partnership (NPAONB) and Natural England (NE). The Raby and Strathmore Estates have committed significant match funding as have individual Trustees. GRCF funding – and POTE – ended in June 2023. The project was comprised of 14 separate activities clustered into two main themes – Nature Conservation and Restoration and Connecting People with Nature.



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## **The evaluation context and methods**

GRCF projects are funded through the National Lottery Heritage Fund (HF) which requires all its supported activities to evaluate their work and to embody the results in a completion report to be submitted to HF at the end of their project in order to secure release of the final instalment of grant monies. HF guidance is that evaluation should be much more than a retrospective summative exercise to enable it to sign off its grant. Evaluation should be planned during development and start early in delivery. It should engage all partners, project leads and participants and focus on 'improving' as well as 'proving'. HF guidance includes provision for external input by an Independent Evaluator (IE).

Preparation of this Final Evaluation has been a collaborative process. Stages in its production have included:

- Working with the POTE delivery partners and team to produce a monitoring and evaluation (M&E) framework 'owned' by the partnership as a whole.
- Assessment of quantitative and qualitative monitoring data collected by POTE project leads and partners and of the operation of the M&E framework, in particular regarding:
  - *Outputs* relating to project targets and progress
  - *Wider outcomes* and the effectiveness of mechanisms for capturing these, relating to individual activities and to the project as a whole.
- Desk research including examination of a range of documents relating to POTE and its partnership.
- An on-line survey addressed to POTE participants and a wider audience who may have been engaged in or affected by POTE activities.
- Semi-structured interviews (on-site and by telephone) with key individuals including funders, delivery partners, volunteers, project participants and respondents to the survey.
- Site visits to project locations and participation in POTE activities.

The Report is intended to be more than a retrospective summative exercise to enable HF to sign off its grant. It assesses (and celebrates) what has been achieved, identifies gaps and weaknesses, and draws tentative conclusions about lessons learnt. It includes brief case studies, graphics and other illustrative material which should help serve as a permanent public record of what has been achieved, of lessons that have been learnt and of what remains to be done. It will hopefully contribute to legacy planning and activities including proposals (and funding applications) for future work. Thanks are due to all those with whom we have worked, many of whom are named in the body of the report.

## **Headline outputs**

### **Key indicators of activity include:**

- A 5-year species recovery plan with recommendations for further studies required over the next 5 years to trial management prescriptions for the conservation of the Teesdale Assemblage.
- Base-line ecological survey data covering the project area and a 5-year monitoring plan which will enable changes in the conservation status of key species and initial results of species recovery trials to be assessed and which can form the basis for subsequent monitoring.
- 27 actively involved volunteers mainly from the local community of whom eight are continuing to work on 100m<sup>2</sup> monitoring in 2023.
- 5 winter 'A Bit of Botany' classroom sessions involving 31 participants in total including 6 new UTBG members.
- 28 school visits and sessions involving 212 engagements with 181 school pupils and Scouts.



- 52 participants in guided walks promoted by TSFT and/or UTBG in 2022, 58 in 2023 with further walks planned.
- An interpretation plan for the area together with an audio tour and leaflet.
- Reprint of the Tees River Bank plant Identification guide; design and print of New Widdybank and Cronkley Guides in same format now on sale in local outlets.
- Branding and communications materials including an attractive and informative website which will strengthen the activities of TSFT for the future.
- A POTE travelling exhibition initially at the Witham, subsequently at Langdon Beck and Egglestone agricultural shows, featuring artworks produced by local school pupils and more durable, 'pop-up' and eyeleted display banners which have been retained for exhibition at subsequent events.

### **Legacy**

Major enduring outcomes include:

- Wider awareness and understanding of the importance of the Teesdale Assemblage and of its conservation amongst local residents, a wider public and a broader professional and academic audience.
- Assembled data regarding past and ongoing changes in key species with strategic proposals for future monitoring and management actions.
- Commitment of local organisations and land managers (including the North Pennines AONB Partnership, Natural England, and Moor House –Upper Teesdale NNR staff) to conservation of key habitats and their flora.

The POTE target area is within the Moor House - Upper Teesdale NNR as well as the North Pennines AONB. Both have a commitment to nature conservation which is also a declared objective of the two local landowners - the Raby and Strathmore Estates. Collaboration with TSFT and NH has strengthened these commitments particularly in regard to the Teesdale Assemblage, and has increased the likelihood of their realisation.

The ultimate success of POTE will depend on the continuing engagement by local residents, landowners and land managers, and the degree to which recommendations within the Monitoring Plan and the Species Recovery Plan are implemented. Inevitably the last of these will depend at least to some degree on factors outside the control of POTE partners and TSFT, not least the patterns of farm support introduced by the government's new Environmental Land Management Scheme, details of which have yet to be released. However the expertise and commitment of TSFT in conjunction with Natural England, the UTBG and the Upper Teesdale Agricultural Support Services Ltd (UTASS) will significantly improve the likelihood of success.

### **Efficiency and effectiveness of the project delivery team and project partners**

The POTE delivery team has applied effective project oversight, and this has been done in a way which has been open and accommodating. This perception is supported by responses to interviews and to the on-line surveys. The team are to be particularly congratulated on successfully meeting a number of challenges, including the lack of lead time between the announcement of GRCF and the deadline for applications, the consequent delay in appointing staff, and changes in personnel consequent on illness (including Covid) and personal circumstances.

Despite the small central team, office procedures have worked well. Monitoring and evaluation (M&E) based on a Framework agreed early in delivery has integrated with the POTE partnership's own reporting to HF. Lead partners have engaged well with evaluation of their own-activities.

### **Lessons learnt and recommendations for the future**

In all of the above it seems likely that the longer-term legacy will have amply justified HF's support and stand as an enduring tribute to the commitment and competence of all involved.

Despite the diversity of POTE activities, the majority of these have been led by 'established players'. This has facilitated management and delivery. TSFT's expertise and dedication to the conservation of Teesdale's special flora has been critical. So too has been its partnership with NH, adding experience in working with local communities and using creative activities as a means of widening popular engagement. This synergism has proved critical and has potential advantages for future activities in terms of continuity, as well as in arrangements for POTE's legacy.

There is little doubt that the community engagement (engaging, enabling and awareness raising) has been a success and will leave a long-term legacy in terms of the understanding and commitment of local residents as well as those from further afield to the conservation of the Teesdale Assemblage.

Of the nature conservation and restoration activities, the base-line ecological survey and the five-year monitoring plan will be of great value in providing the basis for assessing future changes in the Teesdale Assemblage and in particular the success (or otherwise) of management. This last, however will depend on a number of factors which are beyond the direct (at least) control of the POTE partnership.

One factor is the still uncertain nature of the government's plans for a new post-Brexit Environmental Land Management scheme to replace existing agricultural support payments. It is to be hoped that this will not be a 'one-size fits all' approach but that it will be targeted, including on areas such as Upper Teesdale where the benefits – to nature and to society – will be greatest.

Another factor is the attitude of landowners and their tenant land managers. Both the Raby Estates and the Strathmore Estate declared an early commitment to the project and the former has been directly engaged in the delivery of some activities.

The challenge for all partners – which they are now better placed to meet – is to build on what has been achieved, in terms both of public engagement and support and the necessary resourcing for ongoing trials leading to effective prescriptions for the conservation of the special flora of Upper Teesdale.

Congratulations are due to all partners, volunteers, project participants and the delivery team for a successful project which has proved to be 'more than the sum of its parts'. It should leave a lasting legacy for local community engagement and hopefully also the unique Teesdale Assemblage that POTE was initiated to protect.


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June 2023

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# 1 Introduction

**Upper Teesdale** is one of the five most important botanical sites in the British Isles. Due to the Dale's climate, geology, geography, traditional farming practices and land management, rare plant species have thrived here since the end of the last ice age, over 10,000 years ago. Teesdale's special flora – otherwise known as the Teesdale Assemblage – comprises some 100 plant species of conservation interest, of which:

- 28 are on the UK Red List (considered to be threatened with extinction) – including at least one species found nowhere else in Britain.
- 18 are nationally rare.
- 35 are nationally scarce.

The Teesdale Assemblage is unique in Britain. It includes 'southern' species which are at their northernmost limit and 'arctic-alpine' species which are at their southern limit in the British Isles. Its existence is due to a unique combination of geology, climate and past land management.

The Assemblage faces an uncertain future, threatened by climate change, nitrogen deposition and other aerial pollutants, changes to land management and recreational pressures. Recent (2017-2019) research compared current plant distribution with surveys from 1968-1977 and 2002-2010. The research found that the 19 species studied in both surveys are found in half the locations they were 50 years ago. 28 species are considered to be endangered.

The campaign to arrest the steady decline of these species has principally been the work of one woman, Dr M E Bradshaw MBE, which she has pursued doggedly for over 50 years. Through her founding of the Upper Teesdale Botany Group (UTBG) in 2001 and nearly twenty years of dedicated teaching, she has built a strong base of friends and supporters. In 2017, she financed the establishment of Dr Margaret Bradshaw's Teesdale Special Flora Research and Conservation Trust (TSFT) which set out to establish the current status and distribution of the rare plant species and the requirements for their conservation. In 2020, the Trust became a registered company limited by guarantee (No. 12436150) and a registered charity (No. 118828). The aims of the trust are:

- to promote, for the public benefit, the protection, conservation and improvement of the physical and natural environment and biodiversity
- to advance the education of the public in the conservation, protection and improvement of the physical and natural environment.

In practice, this includes conducting botanical surveys and sharing the findings with land managers and agencies, supporting the Upper Teesdale Botany Group and encouraging interest through guided walks, lectures and exhibitions.<sup>a</sup>

**Plants on the Edge (POTE)** was launched in September 2021 and part-funded by a £222,400 grant from the government's Green Recovery Challenge Fund (GRCF).<sup>b</sup> POTE was led by a partnership of TSFT and the Northern Heartlands Charitable Incorporated Organisation (NH). Coordination of activities was via

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<sup>a</sup> <https://teesdalespecialflora.uk/>

<sup>b</sup> GRCF is delivered through the National Lottery Heritage Fund (HF) in partnership with the Department of Food and Rural Affairs (Defra) including Natural England (NE) and the Environment Agency (EA).

a Steering Group including Natural England (NE), the North Pennines AONB Partnership (NPAONB) and the UTBG. Representatives of the two local landowners (Raby Estates and the Strathmore Estate) attend by invitation.

POTE's mission has been to "address the steady decline of the Teesdale flora through:

- Surveying the populations and distribution of the rare species.
- Trialling practical management actions for species recovery.
- Engaging volunteers, visitors and young people with training, walks, talks, creative arts and exhibitions."<sup>(1)</sup>

POTE is comprised of fourteen overlapping activities in two strands, aligning with the aims of GRCF:

**Strand 1.** Nature Conservation and Restoration. Three key contractor-led activities were designed to produce three reports:

- Developing a 5-year monitoring plan to identify and prioritise survey and monitoring needs.
- Conducting a base line survey to supplement and update existing data including an additional 25ha of habitat survey.
- Production of a 5-year species recovery plan, identifying and prescribing practical management actions.

**Strand 2.** Connecting People with Nature. Eleven separately costed activities aimed to deliver outcomes over three areas:

- Enabling; recruiting new volunteers and building volunteer skills and capabilities.
- Engaging; botanical skills training for communities; arts outreach with schools and groups.
- Awareness raising; via exhibitions, walks and talks, website and social media content.

Delivery was planned and implemented by four working groups: Programme Management; Nature recovery; Engagement and Volunteering; and Communications. 'People' activities were facilitated by a Volunteer and Engagement Officer employed through NH.

In February 2022, the authors of this report were appointed as Independent Evaluators (IE) to work with the POTE delivery team, partners and activity leads, to advise and assist on monitoring and evaluation (M&E). An early output of the first stage was the production of an M&E Framework incorporated into POTE's Project Handbook. In January 2023 POTE secured an extension of its GRCF grant, (initially due to end in March) until the end of June.

This Evaluation Report fulfils the requirement of HF for POTE to conduct a final evaluation of its work and report to HF on what has been achieved. However it is intended to do more than enable HF to 'sign off' its grant. It is the culmination of an on-going evaluative process initiated early in delivery, manifesting a commitment to evaluation as a process of 'improving' (providing feedback to enhance delivery) as well as 'proving' (that activities have delivered the intended outputs and that public monies have been properly spent).<sup>(2,3)</sup> It is hoped that it will also contribute to legacy planning and activities following the end of GRCF funding. In particular this Report aims to:

- 'Tell the story' of POTE, its origins, aims, development and delivery.
- Assess what has been achieved; where the original ambitions and targets have been met (or exceeded), and where (and why) there may have been a shortfall.

- Identify the benefits that POTE has delivered, the lasting difference that it has made for the area's heritage and communities and the arrangements in place to ensure this legacy is carried forward.
- Review the effectiveness of governance and project management structures and identify any administrative weaknesses.
- Examine the extent to which POTE's vision, aims and objectives have been realised, identify what has been less successful or might have been done differently and the lessons that may be drawn from this.
- Provide an input to plans for future work including funding applications.

Preparation of this Final Report has been a collaborative process drawing on all the work undertaken by partners and activity leads. The Report is addressed not just to HF but to all those who have been involved in delivery of POTE or affected by it. It focuses primarily on outcomes and legacy. It includes brief case studies, graphics and other illustrative material. The report should help serve as a permanent public record of what has been achieved, of lessons that have been learnt and what remains to be done.

#### **Box 1 Dr Margaret Bradshaw MBE**

POTE would not exist without Dr Margaret Bradshaw, and in many ways represents the culmination to date of her commitment to the Teesdale flora. In March 2023, and to add to her many other honours and distinctions, Margaret was awarded the H H Bloomer Medal of the Linnean Society of London. The following is a slightly abbreviated text of the citation.

Dr Margaret E Bradshaw is a nationally renowned amateur botanist, well known for her work in plant conservation. Aged 97, she has devoted much of her life to the study and conservation of the rare plants in Upper Teesdale. Born into a farming family in the Wolds of the East Riding of Yorkshire has enabled her to link her concern with species conservation to a solid, practical understanding of land management and the ability to communicate with local farmers. Upper Teesdale and its special plants captured her imagination at an early age and after completing her teacher training she moved to Bishop Auckland in order to be within reach of the area where she met Dr Max Walters, who suggested that she study the morphology and cytology of lady's-mantles *Alchemilla vulgaris* agg. This became the focus of her part-time PhD at Durham University. Subsequently for more than two decades Margaret became a part-time tutor in botany and environmental science in Durham's Department of Extra-Mural Studies.

From 1983 to 1988 Margaret resettled in Devon and became a sheep farmer, continuing her botanical research as a volunteer for the then Nature Conservancy Council (NCC), discovering a species of whitebeam that was new to science eventually named 'Margaret's whitebeam' *Sorbus margaretae* in her honour. Returning to Upper Teesdale in 1998, Margaret resumed the long-term annual plant population studies at permanently-marked plots on Widdybank and Cronkley Fells that she began in the 1970s. The data from these detailed studies are now of great significance, clearly demonstrating recent declines in important rare species.

After a heart attack in 2008, Margaret entered the Great North Run half marathon for the first time. In 2015, nearing her ninetieth birthday, Margaret completed the race for a fourth time; raising over £6,000 for the Teesdale and Weardale Search & Mountain Rescue Team and the Upper Teesdale Agricultural Support Services (UTASS). In 2017 Dr Bradshaw created the Teesdale Special Flora (TSF) Research and Conservation Trust. In late 2021 the Trust (of which Margaret is Director) secured a



grant of £222,400 from the National Lottery’s Green Recovery Challenge Fund for its Plants On The Edge project in conjunction with the Northern Heartlands CIO, to conduct a base line survey, produce a five-year monitoring and species recovery plan, build volunteer skills and capacity and secure the awareness and support of local communities via arts outreach with local schools and communities.

Towards the end of POTE in March 2023 M Bradshaw’s book Teesdale's Special Flora. Places plants and people<sup>(4)</sup> published by Princeton University Press and Natural England provides an overview of the area’s flora in the context of its geology, climate and land use; identification guides and ecological information about TSF’s key species, and recommendations for conservation and management.



**Figure 2 The Plants On The Edge Exhibition. Clockwise from top left: At the Witham in Barnard Castle; Setting up at the Langdon Beck and Egglestone agricultural shows; a page from the exhibition’s visitor book. The exhibition brought Teesdale’s special flora to the attention of those who might not otherwise have heard of it and provided a showcase for the products of pupils from Middleton-in-Teesdale, Teesdale and Barnard Castle Schools and the Middleton-in-Teesdale Scouts.**

## 2 The evaluation context

This section starts with a summary of HF's requirements and guidance in respect of evaluation. It then introduces the purposes of this Report and presents the approach and methods adopted in our work

### HF evaluation guidance

Monitoring and evaluation are key elements in HF's current generic Good Practice Guidance.<sup>(2)</sup> HF's Evaluation Guidance<sup>(3)</sup> requires that every National Lottery-funded project should include evaluation as a key element of delivery and, towards the end of the project, submit a Final Evaluation Report 'telling the story of the project, its achievements and lessons learned' before it can 'sign off' the project. More detailed advice for example on the use of Logic models<sup>(5)</sup> and subsequent guidance<sup>(6)</sup> all emphasise the importance of mixed-method qualitative as well as quantitative assessment of outcomes of multi-element projects.

Evaluation, for HF, is 'about both proving and improving'. Evaluation should be built into delivery from the beginning, based on an evaluation plan which should be created early in delivery and should assist in provide feedback on progress. HF recommends the use of a 'logic model' in planning evaluation to set out the activities, resources required, and planned outputs and outcomes (or impacts) of a project in a clear and accessible way. A logic model involves clear identification of expected or intended project:

- **inputs** — resources required, including time, money, work (both paid and in-kind),
- intended project **activities** and target **outputs** (measures of activity) — what will be or has been done both physical (such as habitat improvements), temporal (events) and intellectual (surveys, reports &c) with appropriate targets (areas affected, numbers of participants &c),
- **outcomes** (benefits to heritage and for people) both shorter (learning, awareness, skills), medium (behaviours, policies) and longer-term (including environmental, social, economic) changes which endure beyond the end of HF funding (**legacy**).

**Examples of outputs** for individual activities include:

- numbers of talks, guided walks, exhibitions &c with time, place and other details of each and a record of the numbers of participants, wherever possible with their contact details, postcode and other information,
- numbers of quadrats surveyed with details of their location and time and where the results have been stored,
- photographs of work in progress.

**Examples of outcomes** for individual activities include:

- recorded comments by participants not just on the quality of an event, but on how it has affected their understanding or perception of the subject, and how they might follow this up after the end of the project,
- the quality of survey data or of a species recovery plan as assessed by an independent expert or by the individuals or organisation charged with using or implementing it.

HF emphasises the need for evaluation to:

- Engage all partners, seeing **evaluation as a participative process** which enhances delivery rather than primarily an external assessment of achievement.

- Utilise a wide variety of evidence including **qualitative as well as quantitative** indicators.

### **Role of the Independent Evaluator**

HF recommends the appointment of an **Independent Evaluator** (IE) for all but its smaller grant-aided activities. The role of the IE is to:

- work with the delivery team to produce an **evaluation framework** to be modified in collaboration with the POTE delivery team and integrated in the POTE project handbook),
- advise project leads and **help capture the outcomes** of the project,
- produce a final **Evaluation Report** (this document) towards the end of HF funding.

Our appointment in February 2022 to act as IE for the POTE project included a contracted 18 days spread over the life of the project which was initially due to end in March 2023: in February of that year HF granted an extension to the end of June. While our time devoted to the project has been a good deal more than contracted, it has of necessity had to be allocated carefully over this period. This report would not have been possible without the cooperation, commitment and enthusiasm of those with whom we have worked.

Key elements of our work are identified below.

### **Site visits and event participation**

A limited programme of site visits to POTE locations and participation in key events throughout the project's delivery has provided valuable supplementary information to the above and enabled us to conduct informal interviews and to 'ground truth' information secured from other sources.



**Figure 3 A programme of on-site walks attracted a total of 110 participants, some of them new to the area's special flora and the conditions of its survival.**

which also enabled us to participate in a Steering Group meeting. A meeting in May 2023 enabled us to discuss the contents of a preliminary draft of this Report with Steering Group members and other representatives of POTE partner organisations, prior to participation in the project's final event, '*Plants On The Edge – a Celebration*' in Mickleton Village Hall.

A three-day orientation visit in March 2022 proved invaluable in enabling us to orientate ourselves with the aims and ambitions of POTE and to meet key individuals involved in delivering its component activities. We would particularly like to thank Margaret Bradshaw for taking the time to conduct us to Widdybank Fell and show us some of the survey plots and induct us into the identification of some of its species. Thanks also to project leads and Steering Group members who met us at the Bowlees Visitor Centre during this first visit to the area, to tell us about some of the 'Connecting People' activities of POTE.

Other in-person visits have included the POTE exhibition in the Witham the following August,

In addition to physical visits we have been fortunate to ‘sit in’ on a number of POTE’s ZOOM – enabled online activities. These have included, importantly, the excellent autumn 2022 and winter 2023 programmes of the UTBG.

### Evaluation framework

An early output of the evaluation work was an evaluation framework intended to guide delivery leads in the assembly of output and outcome data. This was very much a collaborative effort and thanks are due to Julia Nelson, who undertook the role of evaluation lead for POTE, for the work she has devoted not just to the production of the framework document but to its implementation in POTE’s delivery. The Evaluation Framework (and this Report) in turn incorporate material from POTE’s Project Handbook<sup>(7)</sup> which is based on an Excel master spreadsheet.<sup>(8)</sup> These summarise intended outputs and outcomes for each activity. Importantly, neither the evaluation framework nor the Project Handbook were designed as ‘final’ products. They were working documents to be used by activity leads as a guide – without acting as a bureaucratic impediment to delivery – and intended to be revised, improved and updated as necessary as delivery proceeds. Warm thanks are due to Bruce Wilkinson who undertook the task of producing them and to Bruce and Naomi Priestly, POTE’s Volunteer and Engagement Officer for their work in capturing the outputs of activities to date in a December 2022 delivery update.<sup>(9)</sup> Other sources include POTE’s own delivery reports to HF.

### Desk research

This has included a range of material feeding in to, related to or produced by POTE and partner organisations. The starting point has been the aims and objectives of POTE as contained in its application to HF<sup>(10)</sup> and the individual activity plans contained in the POTE handbook<sup>(7)</sup> as modified during the life of the project. Key documents relating specifically to POTE are listed in the table below.

Document	Notes
<b>POTE Partnership Agreement<sup>(11)</sup></b>	Asserts the nature of the POTE partnership, its objectives and the roles and responsibilities of the three constituent bodies (TSFT, NH and NPAONB).
<b>POTE application to HF<sup>(10)</sup></b>	Provides a summary outline and justification for POTE; identifies key activities to be funded, and POTE’s broad objectives in relation to HF’s own strategic aims (for heritage, people and communities); outlines POTE’s governance and delivery arrangements; includes a summary timetable for all delivery activities; a risk analysis, sections on legacy, evaluation and itemised costs.
<b>HF Permission to Start<sup>(12)</sup></b>	Awards POTE’s grant of £222,400 agreed costs under nineteen ‘approved purposes’ allocated under HF cost heads and specifies additional grant conditions.
<b>POTE Project Handbook<sup>(7)</sup></b>	Describes each of POTE’s component activities in a standard format, including its title, aims, background and justification, anticipated allocated budget & funding, timescale for delivery, activity lead and delivery partners, target outputs and anticipated outcomes and legacy. It provides valuable contextual information.
<b>POTE Project Plan – Master<sup>(8)</sup></b>	An Excel spreadsheet with POTE’s component activities (rows) with column descriptions including objectives, timing, resources required, delivery responsibility,



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output measures and outcome aims, formed the basis of the Project Handbook.

**Monitoring Plan,<sup>(13)</sup>  
Baseline Survey<sup>(14)</sup> and  
Species Recovery Plan<sup>(15)</sup>  
tender briefs** Consultant briefs for the three key elements of the Nature Conservation and Restoration activities of POTE each of which provide a broad outline of the nature of the work involved and the anticipated outcomes.

**Monitoring Report<sup>(16)</sup>** Final POTE monitoring plan consultant report (David Oatway, June 2022) assembles surveys data collected to date and identifies survey and monitoring requirements for 2022-2026 and beyond.

**Baseline Survey Report<sup>(17)</sup>** Final baseline survey consultant report (John O'Reilly); an interim report was also submitted in December 2022.

**Species Recovery Plan<sup>(18)</sup>** Final Species Recovery Plan consultant report (David Oatway, June 2023) identifies options for management trials, research, interventions and management prescriptions to support conservation objectives.

**Volunteer and  
Engagement Officer  
Information Pack<sup>(19)</sup>** Job description for the Volunteer and Engagement Officer charged with leading on the Connecting People with Nature strand of POTE – initially an 18-month appointment (Naomi Priestly), later extended (with the revised end date of POTE) to 21 months.

**Interpretation Plan<sup>(20)</sup>** Analysis of interpretive needs, aims and objectives in the context of existing and potential visitor profiles, with proposals for physical, interpersonal and digital interpretation off and on site.

**POTE delivery update  
September 2021 to  
December 2022 (draft)<sup>(9)</sup>** A report by Bruce Wilkinson and Naomi Priestly to TSF Trustees and the POTE Steering Group on progress to the end of 2022.

**POTE Request for  
extension to delivery  
period<sup>(21)</sup>** Outline of progress in delivery and expenditure to December 2022 and request with justification for an extension to the end of June 2023.

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Other documents relating specifically to Teesdale and its special flora include Durham Wildlife Trust's handbook of the area,<sup>(22)</sup> Horsman's history of the Teesdale rarities<sup>(23)</sup> and his and other theses on the area.<sup>(24-27)</sup> Publications of Dr Margaret Bradshaw are given in Box 2, below.

### **Box 2 Selected publications of Dr Margaret Bradshaw**

Dr Margaret Bradshaw's publications relating to Teesdale's special flora extend over sixty years, as represented by the following selection:

(1959) Variation in *Alchemilla vulgaris* agg. PhD thesis, Durham University.<sup>(28)</sup>

(1962) *The Distribution and Status of Five Species of the *Alchemilla Vulgaris* L. Aggregate in Upper Teesdale* Journal of Ecology 50. 681-706.<sup>(29)</sup>

- (1963) *The Nomenclature of Alchemilla minor* Auct. Brit. Watsonia 5 (5) pp. 259-263 (with P D Sell and S M Walters)<sup>(30)</sup>
- (1965) The threat to Upper Teesdale: an appeal by the Botanical Society of the British Isles. London: (with J E Lousley, D T Streeter, J C Gardiner, E B Bangerter, E Milne-Redhead, and S M Walters).<sup>(31)</sup>
- (1976) Phytosociology in Upper Teesdale: guide to the vegetation maps of Widdybank Fell. Department of Extra Mural Studies, University of Durham.<sup>(32)</sup>
- (1978) *Plant population studies and their relevance to nature conservation* Biological Conservation 14 pp. 223-242 (with J P Doody).<sup>(33)</sup>
- (2009) *The decline of Lady's-mantles (Alchemilla vulgaris L. agg.) and other hay-meadow species in Northern England since the 1950s* Watsonia 27 pp. 315-321.<sup>(34)</sup>
- (2012) *The Upper Teesdale Assemblage of rare plants in decline* British Wildlife 23 (6) pp. 392-401.<sup>(35)</sup>
- (2018) *Flora and vegetation* in Steve Gater, ed. The Natural History of Upper Teesdale. Mosaic. 2018 pp. 89-122 and *The Natural History of Upper Teesdale* (with Judith Turner) *ibid* pp. 123-12.<sup>(36)</sup>
- (2023) Teesdale's Special Flora. Places, plants and people Princeton University Press and Natural England.<sup>(4)</sup>

### Key Informant and participant interviews

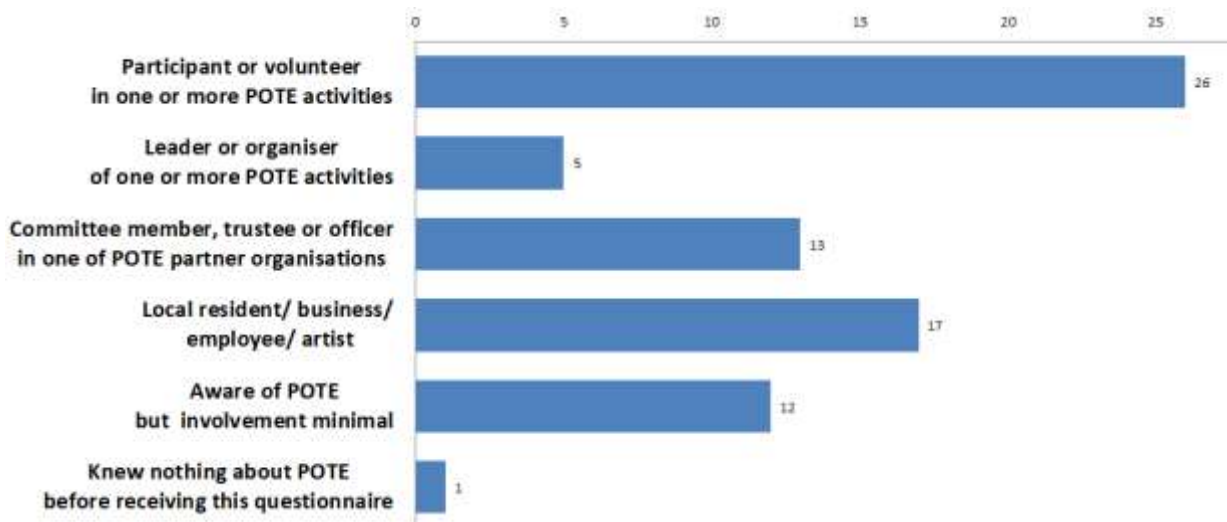
A programme of (telephone and on-site) interviews with individuals who might reasonably be considered to have expert or 'inside' knowledge of POTE and its impact has included the following categories:

- **POTE team members, activity leads and partner representatives.**
- **'Experts' including those involved in local cultural and natural heritage works.**
- **Representatives of those with responsibility for land management.**

In addition the evaluation has been informed by informal and often brief conversations with project participants, volunteers and attendees at POTE events. The participant survey (below) concluded with an invitation to those who wished to provide their contact details for a short follow-up interview. Twenty individuals did so and six such interviews were conducted, yielding useful additional information.

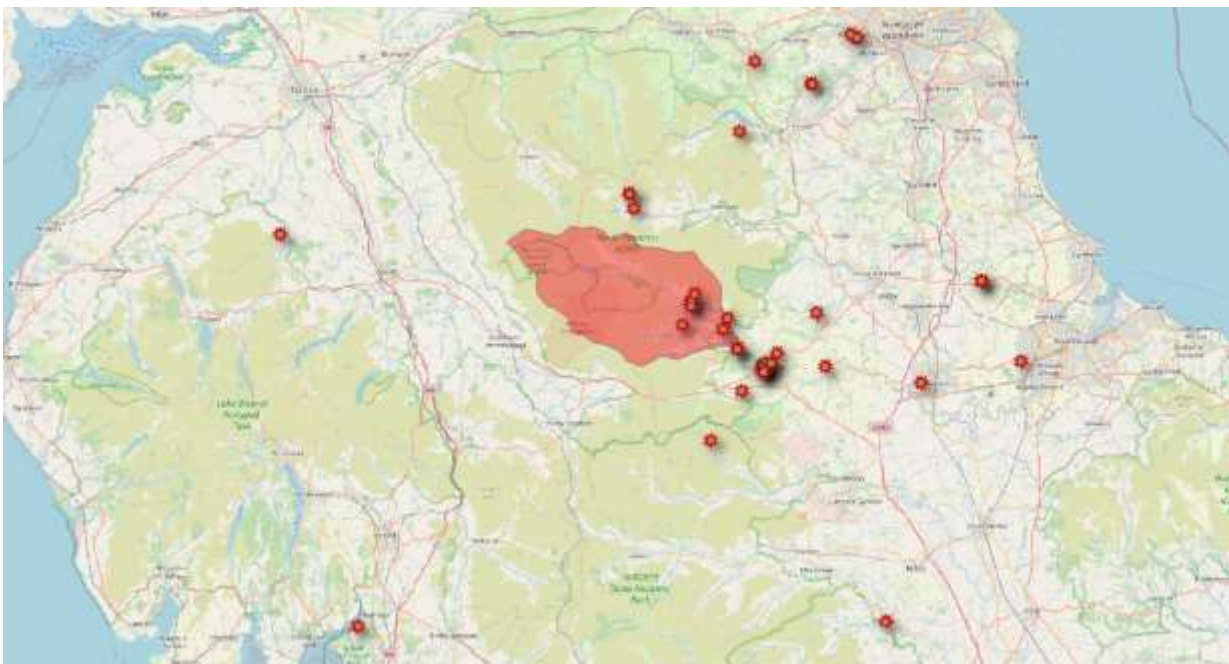
### Participant survey

In the final months of POTE an online survey (using Microsoft Forms) focused on the achieved or expected outcomes of all POTE activities and on participant experience. Quantitative data and responses to open-ended questions are presented where appropriate in the sections that follow. For simplicity in the remainder of this Report, no attempt has been made to identify categorical or narrative responses with an individual activity or participant unless this appears particularly relevant.



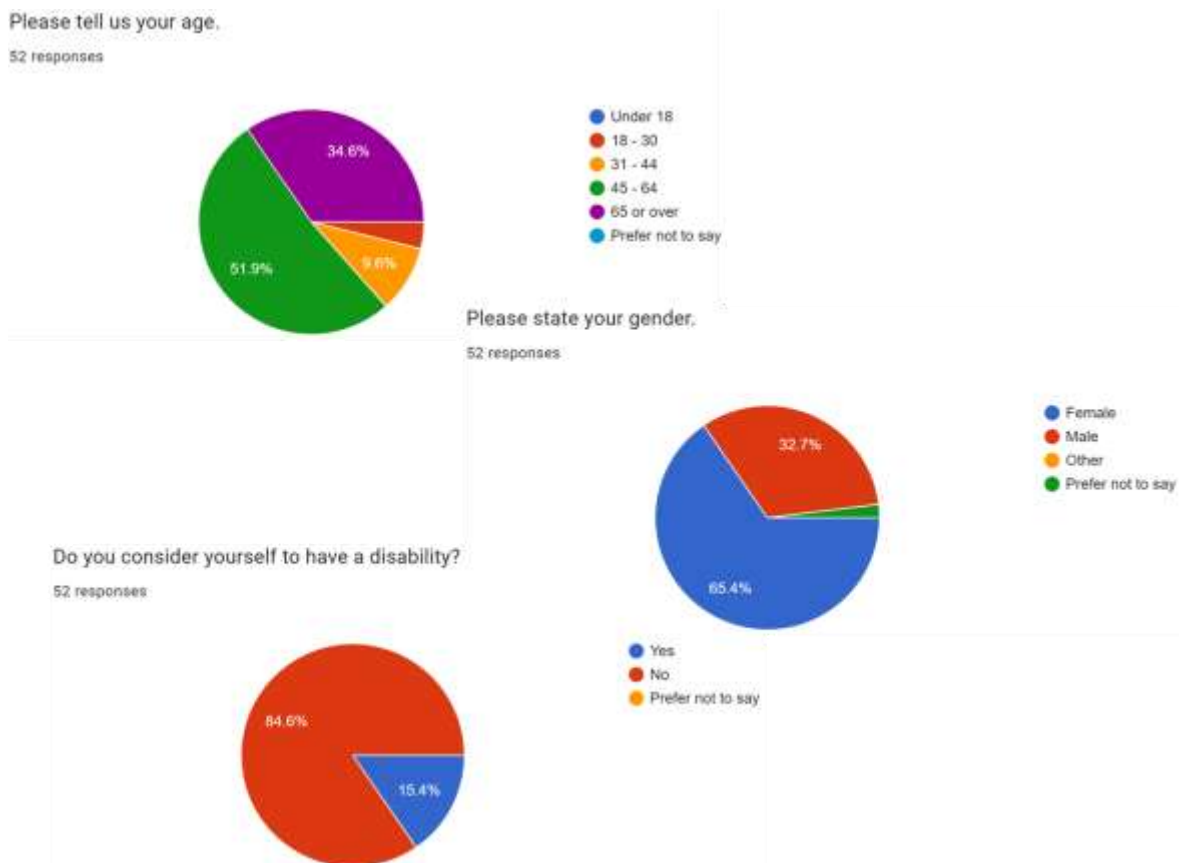
**Figure 4 Nature of survey respondent's involvement with POTE.**

A total of 54 valid responses were received to the survey, though the total number of individuals involved in POTE was considerably more than this. Half of all survey respondents were participants or volunteers in POTE activities; one-third were local residents. Committee members, officers or trustees of POTE partner organisations comprised one in four of all respondents. Just under half of all respondents were engaged in more than one capacity (Figure 4).



**Figure 5 Distribution of survey respondents who provided their postcodes.**

Survey respondents were asked to provide their postcode. The distribution shows the expected clustering around the POTE project area, with a number residing further afield. Of the 49 individuals who responded, 34 reported a 'DL' (Darlington) postcode including 20 reporting 'DL12' (Barnard Castle, Bowes, Middleton-in-Teesdale). Additional postcodes were secured from the individual activity reports, above. Some respondents opted to provide only the first part of their postcode and the map does not discriminate between locations of single individuals and those of many.



**Figure 6 Distribution of survey respondents by age (top), gender (middle) and disability (bottom). For reasons discussed below other demographic information was not requested.**

Age distribution of survey respondents shows a skew towards upper age groups; almost 87% were over 45 years including around 35% aged 65 or over. Less than 10% were between 31 and 44 years; however these proportions exclude the school students engaged by POTE, none of whom completed the questionnaire. 65% of respondents were female. Eight (15%) respondents reported having a disability of some sort. In the interest of simplicity – and because the ONS categories in each area are either pejorative or largely meaningless, no other socioeconomic information such as employment status, occupation, ethnicity, religion etc. was formally requested from respondents. Instead a request was made to provide any information which might help us assess the inclusivity of POTE. Of the 29 individuals who responded to this question, several elaborated on their disability, three were self-employed and one on a zero-hour contract. Six reported their ethnicity as ‘white’, one as Irish and another as ‘Asian’.

In references to survey responses and other participant data in the assessments that follow it is important to remember that the survey was not a random sample either of POTE participants or of local residents/ businesses/ employees. Nevertheless they offer some indication of the opinions of those who have been involved with POTE and/or affected by its activities, and, supplemented by our own interviews, visits and observations, provide a robust basis for the conclusions of this Report. Alongside our own survey, POTE delivery leads conducted their own collection of information from participants in individual activities. Thanks are due to Naomi Priestly for condensing the requirements of the evaluation framework into a simple questionnaire (including data and comments on individual activities) and to Julia Nelson for collating comments on early drafts of this survey.



### 3 Activities, outputs and outcomes

POTE is comprised of two relatively distinct programme strands; Nature Conservation and Restoration, and Connecting People with Nature. Each consists of a number of separate activities. These are described in the POTE Project Handbook<sup>(7)</sup> and summarised in Sections 3.1 and 3.2 below.

Figure 7 below shows the distribution of survey respondents across the range of activities in POTE. The categories represent a description of the activities which were felt most likely to be recognised by respondents as describing the activities in which they had participated and do not correspond to the individual activity titles in Sections 3.1 and 3.2 below.

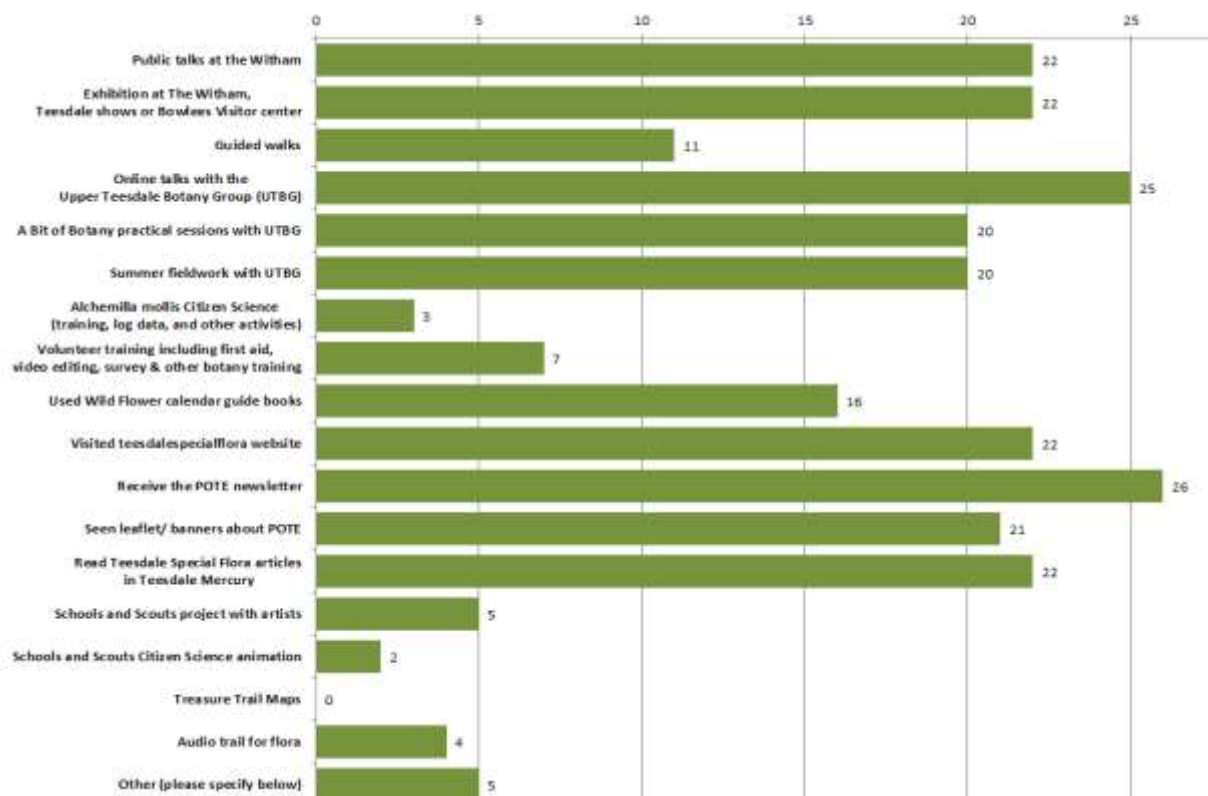


Figure 7 Distribution of survey respondents across the range of activities in POTE.

All respondents reported participation in more than one ‘activity’ (including receipt of the POTE newsletter and visiting the TSFT website). It seems likely that the numbers do not reflect the number of individuals actually engaged in some activities; for example at least nine participants were involved in the *Alchemilla mollis* project, but only three survey respondents reported this as an activity in which they had been engaged.

### 3.1 Nature Conservation and Restoration: benefits to Teesdale’s special flora

Three activities involved studies led by contractors aimed at laying the basis for future conservation of the Teesdale Assemblage:

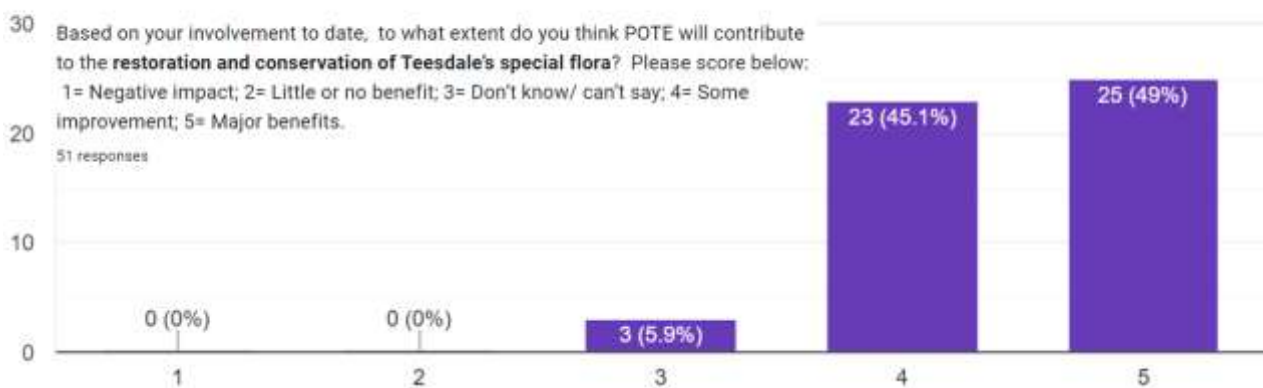
- **A Five-year monitoring plan;** identifying and prioritising survey and monitoring requirements.
- **A Base-line plant species survey;** augmenting and updating existing data.
- **A Five-year species recovery plan;** identifying requirements for practical conservation management.

**Table 1 List of POTE nature conservation and restoration activities with brief description and key outputs.**

Ref	Title	Brief description and key outputs	Activity lead
N1	5-year monitoring plan	<p>Includes a literature review, particulars of historic surveys since 1950, of the current POTE survey effort and detailed recommendations for what survey and monitoring should take place between now and 2030 to understand the conservation status of the Teesdale Assemblage and the reasons for its decline.</p> <p>The report identifies which survey activities could be undertaken by volunteers and which will need to be delivered by a professional ecologist and it includes recommendations for data management. It includes a validation survey to assess the accuracy and monitor quality of the baseline survey by selecting a sample of 10x10m survey quadrats and surveying these at 1x1m detail.</p> <p>The Plan is addressed to Natural England, Raby and Strathmore Estates, the North Pennines AONB Partnership, academic institutions, BSBI, UTBG and future funders arguing for a comprehensive long term monitoring programme which will record changes in the conservation status of the Teesdale Assemblage and allow conservation actions to be taken in a timely manner.</p>	<p>Managed by TSFT. Work undertaken by David Oatway, consultant ecologist with Ketmar. Final report produced in June 2022.<sup>(16)</sup></p>
N2	Base line plant species survey	<p>A detailed survey of 41 plant species in 2500 10m squares of species rich habitat on 3ha of suitable habitat on Cronkley Fell, building on similar work started in 2017, including Widdybank Fell with records relating to 82 of the species of conservation interest. The report summarises all survey work from 2017 to 2022 and includes volunteer training and mentoring (including identification of squares to be surveyed and validation of data) and input to community engagement activities.</p>	<p>Managed by TSFT with steering from NE and land manager. Work undertaken by John O’Reilly, consultant ecologist at PTYXIS ecology</p>

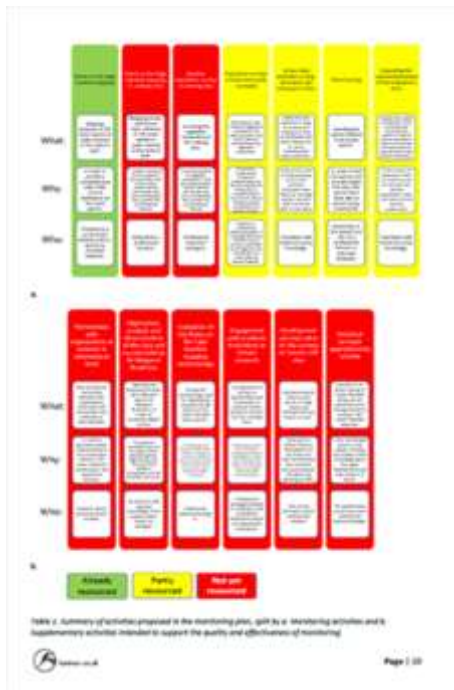
Ref	Title	Brief description and key outputs	Activity lead
		All survey data is presented in a GIS compatible format consistent with the Teesdale Conspectus and has been shared with Natural England and the Botanical Society of the British Isles (BSBI) and summarised in an appropriate format on the TSFT website.	and volunteers. Final report produced in March 2023. <sup>(17)</sup>
N3	5-year species recovery plan	A detailed set of recommendations regarding actions required to identify and trial the conservation actions needed over the next 5 years in order to ensure the conservation of the Teesdale Assemblage. The plan includes a review of relevant literature, a description of the methodology and baseline survey results from field trials set up in 2021 and 2022 investigating the viability of a variety of techniques to reverse declines in the Teesdale Assemblage including cutting of taller and more vigorous vegetation; the creation of suitable habitat by localised soil stripping/exposure close to existing populations of rare plants; mechanical scarification and a trial which simulated poaching by cattle hooves on Widdybank Meadow. It also considers a number of additional proposals for academic research and further field trials aimed at better understanding the causes of decline and management techniques which might play a role in species recovery and the efficacy of ex situ species propagation for conservation and species recovery in Upper Teesdale. Its recommendations are intended to be used by the TSFT to inform funding bids, influence stakeholders such as Natural England and the North Pennines AONB, and to inform future management proposals.	Managed by TSFT. Work undertaken by David Oatway. Final report produced in June 2023. <sup>(18)</sup>

Respondents to the evaluation survey regarding the nature conservation activities of POTE were overwhelmingly positive with 94% of respondents of the opinion that the project had delivered at least some benefit to the conservation and restoration of Teesdale’s special flora.



**Figure 8 Survey participants' perceptions of the likely benefit of POTE to the restoration and conservation of the Teesdale special flora**

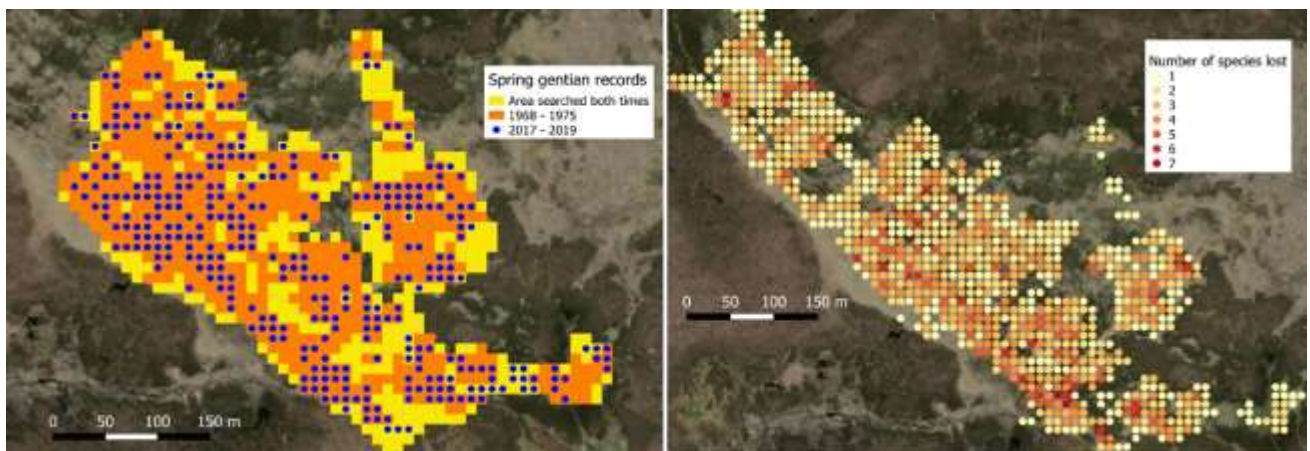
Perceptions of survey participants are supported by the opinion of our ‘expert’ interviewees. The base-line ecological survey and the five-year monitoring plan will be of significant value in providing the basis for studying ongoing changes in the Teesdale Assemblage and in particular the success (or otherwise) of future management. Inevitably there is some overlap between the two reports, including the latter’s proposals for more baseline recording.



**Figure 9** Extract from 5-year Monitoring Plan summarising proposed (above) monitoring and (below) supplementary activities. Green = already, yellow = partially and red = not yet resourced.

The five-year species recovery plan amply fulfills the consultant brief for a detailed set of recommendations regarding actions required to identify and trial the conservation options needed over the next 5 years in order for the TSFT ‘to, inform funding bids, influence stakeholders such as Natural England and the North Pennines AONB, and inform future conservation.’<sup>(15)</sup>

Ultimately however the success of all three reports - the five-year monitoring plan, the base-line ecological survey and the five-year species recovery plan - will depend on their implementation. The Species Recovery Plan is not a conservation management plan; there are no detailed objectives (beyond the overall aim of protecting the Teesdale Assemblage) or prescriptions for management. Rather (as specified in the consultant brief) it reports on field trials (mowing, scarification, exposure) conducted in consultation with relevant stakeholders including the farmer, Natural England, North Pennines AONB Partnership and the Raby Estate and makes recommendations on further conservation actions to inform funding bids, influence stakeholders such as Natural England and feed in to proposals for future management.



**Figure 10** Examples of mapped data from historical and recent surveys of the Teesdale Assemblage on Widdybank Fell.



*The survey of Cronkley Fell made it possible to compare with that of Widdybank Fell and revealed some unexpected contrasts; monitoring and species recovery projects provide data and suggestions for future work. [PL]*

*The survey results give us much more useful information than we had before for targeting future conservation action and will allow us to assess how the special flora is doing in the future by having some accurate detailed data we can compare future survey results to. [PL]*

*It assists with the ongoing need to highlight the special nature of the flora, for locals and the nation, plus it sets in train essential scientific work to support conservation efforts. [PA]*

*The survey and research has been exceptional due to the hard work of surveyors like John O'Reilly. [V]*

At the same time, some respondents raised concerns about the compression of activities into a short timescale; others pointed to the need for volunteers to have appropriate identification skills and there was a concern that, as a voluntary initiative, the impact of POTE might be less than if it were to be one funded or supported by a statutory body. All indicate the need for further work, appropriately funded and including the input of trained volunteers and local residents.

*There has been such a short period of time to do the work. It has been good to have the opportunity to include a second growing season. [PL, referring to the POTE's project extension to June 2023]*

*In terms of conservation, the initial restoration trials have not yet been followed up, through lack of time. This is being addressed and hopefully will take place shortly. [PL]*

*We need more people with good botanical identification skills capable of doing detailed survey work. There is a very big skills gap to bridge between beginner botanists and fully competent professional botanists. [PA]*

*Unfortunately too few people take sufficient interest to make a major difference. This needs a properly funded national/local government [initiative, PA].*

Representatives of Natural England however have welcomed the reports, as proposing actions which may be beyond their capacity to implement themselves. NE's central grant had for many years been below a level which would allow activities to go much beyond a focus on essentials including fulfilment of legal obligations to health and safety and public liability.

These constraints have eased a little over the past five years in recognition of the hugely under-resourced management needs, however both the further studies proposed in the three reports may well be beyond the existing resources of NE. Examples include a detailed National Vegetation Classification (NVC) mapping of the area: NE SSSI monitoring over such a large area is necessarily on a much coarser scale. It is ten years since the last Appleby Fells SSSI condition assessment; in the last rating 93% of the area was designated 'unfavourable recovering'.

The current management plan of the Moor House – Upper Teesdale NNR is due for review in 2025. The POTE work to date, including the species recovery plan is detailed and informative; it and any subsequent studies should be an important feeder into the revised plan. The contribution of TSFT in direct volunteer input, in funding contracted studies, and in raising public awareness is greatly valued by the NNR Manager and the representative of the NPAONB Partnership.

### 3.2 Connecting People with Nature: benefits to individuals and communities

POTE’s second strand consisted of activities aimed at developing awareness and skills and at the same time delivering direct benefits to individuals and communities in the following three areas:

- **Enabling;** building volunteer skills and capabilities.
- **Engaging;** botanical skills training for communities; arts outreach with schools and groups.
- **Awareness raising;** via exhibition, talks, web and social media content.

These aims were addressed through a series of eleven listed with brief descriptions below; left-hand column numbers refer to POTE’s application to GRCF.

**Table 2 List of POTE ‘connecting people with nature’ activities with brief description and key outputs**

Ref	Title	Brief description and key outputs
P7	Schools and community outreach	Initially planned to engage schools and local communities with Teesdale, its flora, and the wider environment, this delivered more than expected, evolving into a number of separate activities involving two different artists, three schools and one Scout group visiting the habitats of Upper Teesdale with UTBG members (including Margaret) – a total of 28 school visits. Further work with Middleton-in-Teesdale primary and Teesdale and Barnard Castle secondary schools involved recreating plants in different art forms which formed a key component of POTE’s traveling exhibition and to the creation of social media content, with other schools and the scout group contributing to campaigning and action against the invasive species <i>Alchemilla mollis</i> .
P4	Plants on the Edge Exhibition	The Plants On The Edge Exhibition, launched in August 2022 at the Witham in Barnard Castle brought Teesdale’s special flora to the attention of those who might not otherwise have heard of it. The exhibition compared data from Margaret’s surveys in the 1970s with the most recent surveys and provided a showcase for the products of pupils from Middleton-in-Teesdale, Teesdale and Barnard Castle Schools and local Scouts. It was subsequently taken to the local Egglestone and Langdon Beck agricultural shows in September with respectively 99 and 36 stickered ‘interactions’, followed by two ‘pop ups’ at North Pennines AONB visitor centre at Bowlees in October (27 interactions) where a video slide show created from the exhibition is now included in the display on the screen at North Pennines AONB visitor centre at Bowlees. Information from exhibition now features on pages of TSF’s new website
P3	Communicating with people	Fundamental to the research and conservation of Teesdale’s special flora is the need to engage people with the special flora itself and with its champions, TSFT and the UTBG. This activity focused on two areas: branding and communications planning. Neither The Trust nor the UTBG had a logo or ‘branded’ identity. Brand-D consultants were commissioned to work with POTE’s Branding and Communication sub-group (comprised of Trustees and the Volunteer and Engagement Officer) to create a brand identity including

Ref	Title	Brief description and key outputs
		logos, fonts and colour palate. These were then used on all communications and promotional materials, including letterheads / email signatures, websites, leaflets, 'pop-up' and eyeleted display banners, and exhibition content. Alongside this, a communications plan was produced, linking with the Trust's objectives, strategic planning and fundraising, and including a social media calendar and relevant #hashtags to be used in communications for key organisations, groups and individuals to follow.
P5	Interpretation Plan & Podcast / App	An interpretation plan was developed to raise awareness of the Teesdale Assemblage and its sustainable management. The plan covers options for traditional media (leaflets and interpretation panels), walks and talks with the public and visiting groups, and digital media. The latter includes self-guided podcasts and a geo-referenced audio tour which can be downloaded at home or triggered at points around Upper Teesdale for use with smartphones as a person moves along the trail. Led by consultant Dan Boys, <sup>a</sup> development and delivery was a participative process including volunteers, Trustees, UTBG committee and the POTE Engagement Officer supported by the Communications Working Group. The interpretation plan ties in with the communication plan.
P6	Plant ID Guides	A reprint of the existing Tees River Bank plant identification guide including an updated design to align with TSFT branding together with the design and printing of new Widdybank and Cronkley Guides in the same format. 1,000 of each have been produced and are available at £3.00 each in local businesses and visitor centres, with proceeds to UTBG to cover future print runs.
P8	Public Walks and Talks	A programme of public walks and talks was developed in parallel with the existing UTBG programme. It included five public in-person talks held at the Witham, intended to attract people who would not normally form part of the UTBG programme and to provide a 'showcase' for the Trust and the Group for the wider public. The talks, with local, regional and national speakers on botany / environment / farming or land management each attracted audiences of from 50 to over 90 with a total of 313 participants. An initial series of four walks at key locations in Upper Teesdale was followed by a further six walks in 2022, attracting a total of 52 individuals. A further seven walks during May and June 2023 involved 58 walkers and 10 volunteer walk leaders/ first aiders. More are planned.
P9	UTBG Lecture and Field Work Programme	Winter class-room teaching sessions for new and existing members covered botany, plant identification, the geography and environment of Teesdale and the ecology of the Teesdale's special flora. Taught by Dr Margaret Bradshaw these laid the foundation for summer field work sessions. Summer field trips focused on different aspects of Teesdale's flora and

<sup>a</sup> <https://at-creative.co.uk/>

Ref	Title	Brief description and key outputs
		botanical field work. The purchase of equipment for people who didn't have their own, removed at least some barriers to participation and many venues were accessible by local / community transport. In addition to enabling participants to enjoy plants and identify individual species these led to some individuals undertaking training in order to take on more specialist survey work. This was continued through an autumn and winter programme of online lectures and presentations accessible by individuals who were unable to travel to Teesdale for the in-person classes and fieldwork. An advanced training programme fed in to the volunteer strategy and monitoring plan and citizen science activities, providing participants with opportunities to progress and enhance skills and knowledge to a specialist level.
<b>P10</b>	Botany Group Taster Talks and Walks	In parallel with the above a small programme of five 'Bit of Botany' taster sessions engaged 31 people including six new UTBG members. A parallel 'Connecting with Nature' programme in local village halls introduced people to the basics of plant ID and botanical skills. These included activities with specific groups not usually engaged with the British countryside, including a group of nine refugees from Syria and Iraq; a further walk for Durham Action of Refugees is planned for June 2023.
<b>P11</b>	Botany Group Survey	Linking with p9 above, this included delivery of a field activity identified in the monitoring plan development process. Ten volunteers have been trained to survey 100m <sup>2</sup> plots, supporting the N2 base-line plant species survey above.
<b>P2</b>	Developing and supporting the Trust's volunteer programme	Volunteers are central to the management and operation of the TSFT and the UTBG. This activity developed the process, already under way, of formalising volunteering arrangements, including establishment of a membership data base, development of volunteer role profiles, procedures for leading walks including health and safety, and documentation required to enable the Trust to manage volunteers.
<b>P1</b>	Trust Strategy and Planning	Focused on the resilience of the lead organization for POTE this envisaged consultants working closely with trustees to formally set down a 2030 vision and strategy for TSFT, including a review of current policies and recommendations for the development of future ones, together with mentoring and advice to Trustees. Pressures on time precluded full implementation of this activity which remains a target for the future; activity sessions are planned for late summer 2023.

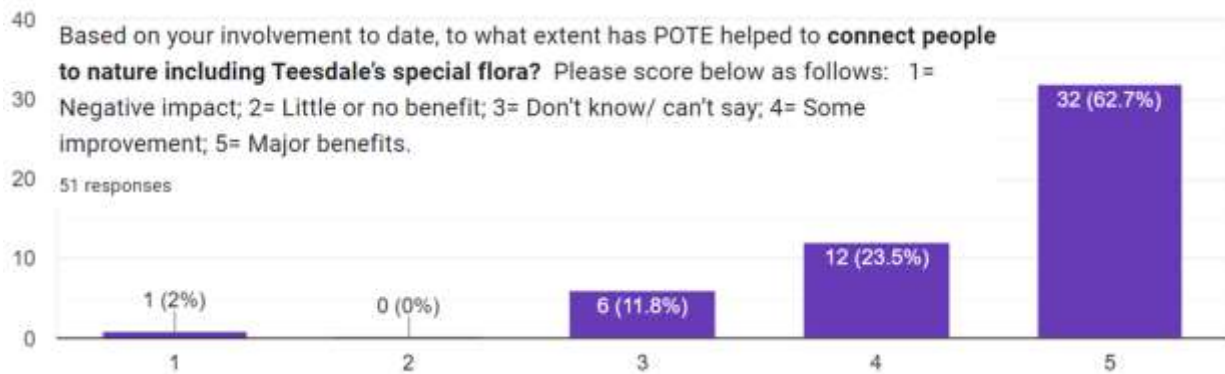
Space prevents a more detailed discussion of the content of each project; instead the sections below present the principal outputs and outcomes of project activities under each of the two programme heads (Nature Conservation and Restoration, and Connecting People with Nature) followed by an outline of how the outputs and outcomes of POTE link to HF's own principal programme aims.

While much of the data input to all three reports has been the work of the contractors engaged, POTE has included training in plant identification and survey techniques and volunteers have made a vital input.



**Figure 11 UTBG volunteers recording along a transect in Widdybank Meadow.**

Participant opinions of the ‘people’ activities of POTE have been overwhelmingly positive. 86% of survey respondents felt that POTE had secured greater public awareness and understanding and nearly two-thirds believed that POTE was delivering major benefits in terms of public engagement.



**Figure 12 Survey participants' perceptions of POTE's success in connecting people to nature.**

*POTE has been really helpful to me in learning more about the plants in Teesdale. Many local residents have improved their knowledge of the local flora. [PA]*

*I have been with the UTBG for many years; the support of POTE is excellent. [PA/V]*

*The project has done well in raising the profile of Teesdale's Special Flora through excellent Comms, via social media. [PL]*

*The public talks worked really well with high attendance. [PA]*



*Naomi has developed great relationships with Teesdale school and school children. [PL]*

*Margaret is inspiring and has helped to be a beacon/champion for the rare plants. [PA/V]*

*The 6 guided walks lead by Margaret, Lizzie Maddison & others in May/June 2022 were excellent and enthused those attending. [PL]*

One major 'people' activity was the POTE exhibition, described above (and see Figure 2 page 5).

*Linking creative activities (cyanotypes, sculpture) to nature observation, and the bigger picture (geology, conservation, having fun going outside, being excited about something awesome on their doorstep. Being able to share this experience with their parents out of school time. [PL]*

*Great exhibition! – I didn't know anything about these plants before... [PA]*

Field activities have been an important element of the POTE programme, ranging from volunteer training sessions to gentler guided walks including those designed for non-traditional groups. All field sessions included a qualified first-aider in attendance.



**Figure 13** The need to engage 'non-traditional' and minority groups was recognised by POTE. Here a group of nine asylum seekers from Syria and Iraq now living in County Durham were led by Lizzie Maddison in a 'Connect with Nature Walk' from Bowlees on 16<sup>th</sup> July 2022.



Comments from the July 2022 walk with asylum seekers included:

*I like to enjoy time together with my friends. / I want to discover nature, area and flowers. / I heard that it is very good for relaxing and free your mind. And it is very nice environment to see / I had a very nice feeling, enjoyed walking with the kind company. / I feel great and feel full of positive energy. / Relaxed, nice feeling after long time of stress and depression. / I feel like a nice feeling inside because I really enjoyed. / After a long time of staying at home I feel very nice. / My mental health is excellent now.*

Asked to say what they would otherwise be doing, if not on the walk, all participants said that they would be 'at home', some adding: 'Cleaning at home'; 'Cooking at home'; 'at home cleaning or cooking'; 'At home doing nothing'; 'Work and sit at home'.



**Figure 14** Activities with KS2 children from Middleton in Teesdale Primary involved on-site visits and (top right) processing cyanotypes in the school grounds; these later formed part of the POTE Exhibition in the Witham.

Feedback from POTE activities with school pupils has been very positive. Activities with 20 KS2 children from Middleton in Teesdale Primary involved on-site visits with Sara Cox and Margaret Bradshaw. Replies from pupils to the question 'Who is responsible for taking care of the flowers?' ranged from 'The government', 'Middleton in Teesdale Council' and 'The prince or the bishops' through 'A gardener', 'People getting paid to water them', 'Everyone in Teesdale', 'Everyone except people who pick them' to 'Nature (because rain provides water for the flowers)' and 'Rain and sun'.



Field Trip Friday 10th June



Second workshop Friday 24th June



**Figure 15 A field trip for children from Barnard Castle School to Cow Green Reservoir in June 2022 was followed by an indoor workshop a fortnight later.**

Work with pupils from Barnard Castle School included field and classroom work. Of the 22 students involved 17 said they previously knew nothing about the Teesdale Assemblage. Comments from participants to the question ‘What would you like to do to protect the flora? Have you told anyone about the plants?’ included:

*Yes I would like to protect the flora because it’s important that the beautiful, ancient flowers live on for people to be able to see and study. I have told my parents and some of my friends about the stunning flowers. [PA]*

*I would put a sign and it would say ‘no stepping in the grass’. [PA]*

*Yes I would like to donate money to save more plants like this. [PA!]*

*I was teaching dad about some of the plants. [PA] Yes. I’ve told my mum. [PA]*

*I live close to Barney but I’d never seen the flowers. I told my parents and they didn't know about them either. [PA]*





**Figure 16** As with POTE’s school work, an activity with Middleton in Teesdale Beavers and Cubs involved fieldwork and indoor workshops, the latter producing models which (as with the production of cyanotypes by Middleton’s Primary pupils) were exhibited in POTE’s Exhibition.

Responses to a similar set of questions to those put to the school children, above, resulted in:

*I think I will stay on the public footpaths and not crush plants. I have told my parents about the different flowers. [PA]*

*Water them, plenty of sunshine. I have told my mummy. [PA]*

*Look after the land and tell people. [PA]*

*Don’t step on them and don’t kick them because they are rare. [PA]*

*Tell everyone about how the flora are slowly dying. [PA]*

*I’m going to help grow plants for the environment and plant them in the garden for bees. [PA]*

*I think it’s important to look after the plants especially the spring gentian. It only lives in one place. [PA]*

*I told my mum about the plants. I am going to protect the plants by telling everyone to keep on the path. Do your best not to stand on the grass. [PA]*

The UTBG’s own programme – technically not part of POTE but complementary to it – included site visits, volunteer training, survey work, and an excellent winter programme of on-line Zoom-facilitated talks and presentations. The latter attracted audiences of 35 to 40 on each occasion, mostly local to the area but some coming from as far as Darlington and Gateshead. They covered a remarkable range of topics from higher plant mycorrhizal associations, through the conservation status and management of individual TSF species, to the challenges and potential of the developing programme of agricultural support replacing CAP subsidies post-Brexit. They proved hugely relevant to the objectives and recommendations of POTE with discussion extending to the wider social context including the highly concentrated land ownership and the degree to which this is to the net benefit or detriment of conservation. Together with Dr Bradshaw’s declaration that ‘the management of the right level of grazing is a nightmare’<sup>(4)</sup> they addressed deeper philosophical issues including the distinction between

species conservation management and ‘gardening’ – resolved here with recognition of the scientific and heritage value of an Assemblage which has existed since the retreat of the ice and human colonisation of the landscape.

Comments on the ‘classes’ included:

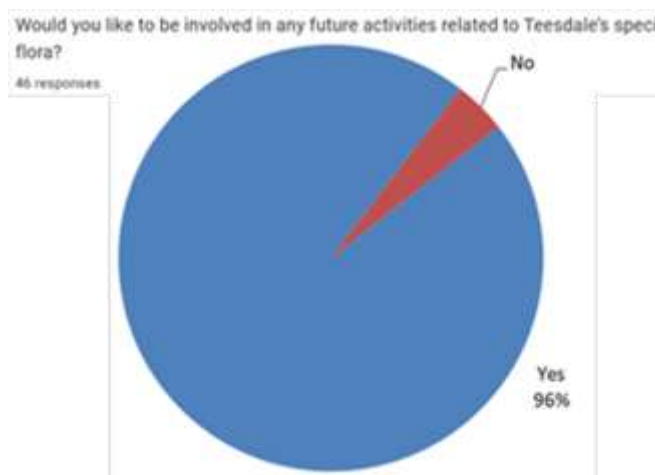
*Perhaps more experienced members could contribute to leading sessions in future, to share the load?* [PA]

*I am looking forward to Spring!* [PA]

*I would love to do more and on different subjects as well like fungi for instance.* [PA]

*I thoroughly enjoyed these classes. They have enhanced my understanding and basic botany skills. Lizzie's passion as a teacher as well as sharing the interest in botany with other participants made this class the highlight of my week.* [PA]

*Just a great set of sessions with a good bunch of people.* [PA]



**Figure 17** Most survey respondents indicated their desire to be involved in future activities related to TSF in some way.

In answer to the question ‘Would you like to be involved in any future activities related to Teesdale’s special flora?’ 96% of survey respondents responded ‘Yes’. A number elaborated on what sort of activities might attract them. These included the desire of trained volunteers to continue their survey and monitoring activities, to more general indications of interest.

*Being a garden designer but also passionate about saving native habitats and species I'd like to know of future projects.* [PA/V]

However while POTE;s success in securing interest and engagement is unquestioned, some reservations were expressed, to do with

matters of detail, such as timing of talks. Other interviewees pointed to the difficulties of securing long-term volunteer commitment, in particular with regard to younger people.

*The talks in the Witham were all, or at least mainly, on Thursday evenings, which meant those with a prior commitment on a Thursday could not attend. This drawback would presumably be reduced if the Witham talks were on a Monday evening, the normal meeting time. If that's not possible or desirable for any reason, it would be helpful, if possible, to vary the evening for any future talks.* [PA]

*Some of the volunteer training has had less take-up than hoped. It may be that people just don't have enough time or interest to get involved in formal training. Perhaps the original bid was just too optimistic.* [PL]

*Engaging broader profile of population e.g. 20- 30 year age group. Develop current tentative steps in online interactive knowledge and skills training/ awareness raising.* [PL]



### 3.3 Outputs and outcomes by HF programme themes

One of the potential strengths of POTE as a multi-activity project is synergism between its different elements. POTE is designed to deliver significant outcomes in six of the eight standard HF programme themes as indicated below.

- a) A wider range of people will be involved in heritage.
- b) Heritage will be in better condition.
- c) Heritage will be identified and better explained.
- d) People will have developed skills.
- e) People will have learnt about heritage, leading to change in ideas and actions.
- f) The funded organisation will be more resilient

The remaining two HF programme themes; g; The local area will be a better place to live, work or visit and h; The local economy will be boosted, were considered not appropriate to the objectives of POTE. Visitor numbers to Upper Teesdale are high (and during periods between Covid lockdowns were even higher) and although tourism is an important contributor to the local economy the visitor profile is somewhat different from the 'traditional' profile found in other UK protected landscapes.<sup>(37)</sup> Some visitor behaviours create pressures on the vulnerable flora. The aim of POTE has not therefore been to increase visitor numbers (compared to pre-Covid levels) but rather to raise awareness, build understanding and provide opportunities to enable new visitors to be actively engaged with unique natural heritage of Upper Teesdale.

*The problem with short-term projects, when you are trying to conserve nature, is that the survival of the special flora is needed for years to come, not just for a period of time. Funding is the key issue, we need Plants on the Edge to continue for much longer. I hope that the Trust will be able to continue its legacy and be able to find further funding for continued monitoring and continued engagement with the public. [PL]*

Table 3 below considers the intended achievements of POTE as a whole under the relevant thematic HF programme aims, each of which is considered under two heads: outputs (the 'deliverables' of each activity in terms of its immediate objectives) and outcomes (the longer-term benefits, to heritage and people).

**Table 3 POTE outputs and outcomes by HF programme themes**

Outputs	Outcomes
<p><b>a) A wider range of people will be involved in heritage:</b></p>	
<p>A wide range of activities in the ‘Connecting People with Nature’ strand of POTE involved volunteers, local residents and visitors in the heritage of Teesdale’s special flora, including:</p> <ul style="list-style-type: none"> <li>• Some 200 children / young people engaged through schools and related activities.</li> <li>• Five public talks held at The Witham, Barnard Castle with local and national speakers attracted audiences between 52 and 92 at each session. UTBG’s online weekly programme of winter and autumn talks attracted audiences ranging from 25 to over 50.</li> <li>• 12 new individuals attended the ‘Bit of Botany’ introductory sessions and nine new people engaged with botany through Dr Bradshaw’s ‘Weekly Wildflower Walks’</li> <li>• 3 citizen science activities delivered together with volunteer training (see d, below) involved a total of some 50 individuals.</li> <li>• Production of the monitoring plan and species recovery plan has involved engagement with a number of organisations, universities, professionals and academics.</li> </ul>	<ul style="list-style-type: none"> <li>• The Plants On The Edge Exhibition brought Teesdale’s special flora to the attention of those who might not otherwise have heard of it and it provided a showcase for the products of pupils from Middleton-in-Teesdale and Barnard Castle Schools.</li> <li>• Participant testimony (including responses to the survey and interviews) indicates a desire to continue engagement with Teesdale’s special flora and its conservation; this included a significant number of individuals for whom their engagement is new.</li> <li>• Over 95% of survey respondents indicated a wish to be involved in future activities related to Teesdale’s special flora.</li> <li>• The monitoring plan has identified options for at least two future citizen science projects including plant hunting for ‘extinct’ species and collecting data on reproduction and mortality in ‘Champions’ plots..</li> <li>• It seems likely that POTE has resulted in greater awareness in the broader professional and academic worlds, of the issues faced and of work being undertaken to combat the decline of rare plant species in Upper Teesdale.</li> </ul>
<p><b>b) Heritage will be in better condition:</b></p>	
<ul style="list-style-type: none"> <li>• A baseline survey and monitoring plan assemble existing data on the flora enabling tracking of future changes and make recommendations for future survey priorities.</li> <li>• A species recovery plan identifies a broad range of options for arresting</li> </ul>	<ul style="list-style-type: none"> <li>• Reports have been shared with key stakeholders including landowners, land managers, Natural England and the North Pennines AONB Partnership, and have been received favourably by the Senior Manager of the Moor House –Upper Teesdale NNR and the representative of the</li> </ul>

Outputs	Outcomes
<p>the decline and promoting the recovery of special flora including additional research and field trials. Other interventions are proposed in identified locations. Four trials of different management options and interventions aimed at species recovery have been initiated; on Widdybank and Cronkley Fells and one on Widdybank Meadow.</p> <ul style="list-style-type: none"> <li>The interpretation plan and communication plan both focus on encouraging positive behaviours as well as raising awareness of the special flora.</li> </ul>	<p>Raby Estate.</p> <ul style="list-style-type: none"> <li>The monitoring plan identifies and assembles currently available data and indicates where future surveys should be targeted to fill in knowledge gaps.</li> <li>The Species Recovery Plan identifies options for future action based on a number of the proposals contained in the report (and beyond the trials already commenced). It has already formed the basis of a funding bid by the Moor House –Upper Teesdale NNR to DEFRA and initial funding has been secured for mowing and scarification trials.</li> </ul>
<p><b>c) Heritage will be identified and better explained</b></p>	
<p>Beyond the engagement of volunteers, local residents and others (see a, above):</p> <ul style="list-style-type: none"> <li>The five-year monitoring plan identifies requirements and resources for activities suitable for citizen science as well as ecological contractors. The interpretation plan provides the basis for future off- and on-site provision of interpretive materials. The communication plan has been implemented in part to include: <ul style="list-style-type: none"> <li>- an expanded website with improved general pages for visitors to the area and more technical information on plants species for specialists,</li> <li>- a phone app (virtual guided walk) which will remain available following the end of the project.</li> </ul> </li> <li>1000 each of the Tees River Bank and the new Widdybank and Cronkley</li> </ul>	<p>Evidence for better identification and explanation of Teesdale’s special flora includes:</p> <ul style="list-style-type: none"> <li>Knowledge and data relating to an additional 25ha of habitat</li> <li>Good initial sales of the reprinted and new ID books, and significant interactions with TSF’s expanded website</li> <li>25ha of site survey data has been made available via BSBI website<sup>a</sup> and the NBN Gateway<sup>b</sup> for public, organisational and academic use.</li> <li>Both the monitoring plan it and the species recovery plan collate all existing surveys and research, providing a valuable reference resource.</li> <li>The species recovery plan, in its proposals for ex situ propagation proposes the establishment of a conservation collection of Upper Teesdale species (aka botanical garden), which could form the basis of a</li> </ul>

<sup>a</sup> <https://bsbi.org/maps>

<sup>b</sup> <https://nbnatlas.org>

Outputs	Outcomes
<p>booklets were produced and are now available in local businesses and visitor centres with income to UTBG for further print runs.</p> <ul style="list-style-type: none"> <li>• Some eight articles written by UTBG members and a further 13 items relating to the activities of the TSFT have been published in the <u>Teesdale Mercury</u> and elsewhere. Several scholarly articles are in preparation.</li> <li>• 4 short special flora films have been completed following digital editing skills training and it is proposed to post these to the TSFT website.</li> </ul>	<p>research/educational/local heritage resource.</p>
<p><b>d) People will have developed skills</b></p>	
<p>Training activities provided within POTE have included:</p> <ul style="list-style-type: none"> <li>• A structured training programme from beginner to special flora champion botanist; some 35 individuals now have practical field skills in species identification including 3 ‘species champions’</li> <li>• 10 volunteers have been trained on comprehensive baseline survey methods</li> <li>• 10 volunteers have received first aid training for walks and fieldwork.</li> <li>• 5 volunteers have been trained in digital content skills.</li> </ul>	<ul style="list-style-type: none"> <li>• Greater numbers of individuals skilled in species identification and trained on comprehensive baseline survey methods should provide a resource for future surveys and monitoring.</li> <li>• Engagement of and testimony from volunteers and flora champions who have completed training suggests that their skills will be reflected in continued activity.</li> <li>• Volunteers trained in leadership and first aid skills will facilitate future field activities and ‘walks and talks’.</li> <li>• Volunteers trained in digital content skills and the three films completed to date should prove an important resource for the future.</li> </ul>
<p><b>e) People will have learnt about heritage, leading to change in ideas and actions</b></p>	
<ul style="list-style-type: none"> <li>• The monitoring plan and the species recovery plan are publicly available and have been accepted by a wide range of stakeholders including the North Pennines AONB, Natural England and land managers.</li> <li>• The outreach and communication activities including the schools programme, publications, the exhibition, lectures and talks have</li> </ul>	<ul style="list-style-type: none"> <li>• Participant testimony and returns to surveys in relation to outputs in a) above demonstrate increased awareness, understanding and commitment in relation to Teesdale’s special flora.</li> <li>• Our evaluation has demonstrated ongoing commitment of local organisations and land managers (including Natural England and local</li> </ul>

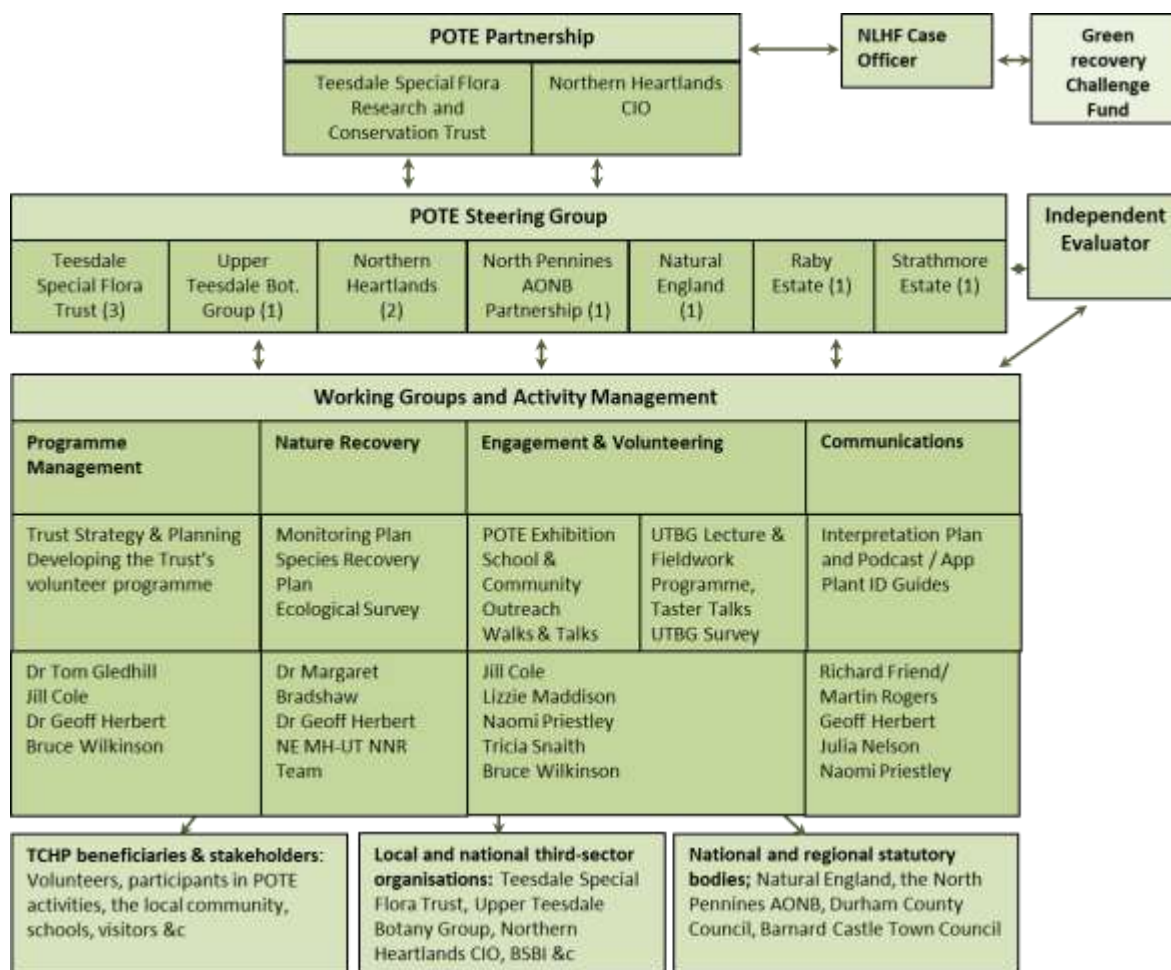
Outputs	Outcomes
<p>together attracted a wide and diverse audience.</p>	<p>staff including Moor House –Upper Teesdale NNR and the North Pennines AONB) in relation to their expectations or proposals contained within the three reports in b) above. It seems likely that POTE has also led to a better understanding of the fragility and value of the Teesdale Special Flora amongst professionals and policy-makers.</p>
<p><b>f) The funded organisation will be more resilient</b></p>	
<ul style="list-style-type: none"> <li>• Reports and policy documents have been created to underpin and guide future trust activities including: <ul style="list-style-type: none"> <li>- 1x strategic vision,</li> <li>- 1x volunteers plan and role descriptions,</li> <li>- 1x communications plan identifying audiences, channels and themes,</li> <li>- 1x interpretation plan,</li> <li>- 1x monitoring plan and</li> <li>- 1x species recovery plan.</li> </ul> </li> <li>• More than 24 new members of UTBG since January 2022,</li> <li>• The Funding bid to DEFRA to commence trials of techniques proposed in species recovery plan has already resulted in initial funding for mowing and scarification trials and TSF Trustees are working with the Engagement Officer and the NH Director to develop proposals for further funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased knowledge and understanding in e) above should put the Trust and other stakeholders in a potentially stronger position to take positive action.</li> <li>• Increased volunteer capacity and enthusiasm assessed through survey and interviews should feed in to new or strengthened Trust activities.</li> <li>• Onward plans by TSF Trustees and members developed for future work and funding proposals include projects in collaboration with Northern Heartlands who will employ Naomi Priestly until September to assist in the development of plans to maintain and develop public engagement and identify funding opportunities.</li> <li>• Like any voluntary organisation, the Teesdale Special Flora Trust is dependent on the capacity and commitment of individuals who inevitably have other demands on their time. It is hoped that the momentum generated will lead to a situation where championing Teesdale’s special flora will no longer be dependent on the determined efforts of one individual, but will be sustained by a robust and influential organisation.</li> </ul>



## 4 Administration, delivery and governance

### Governance and administration

The governance structure for POTE is illustrated in Figure 19 below. The three bodies comprising the POTE Partnership (TSFT, NH and NPAONB) are joined on the Steering Group by a representative of UTBG (not formally part of the Partnership): delivery was overseen by four Working Groups, reporting to the Partnership via quarterly meetings of the Steering Group.



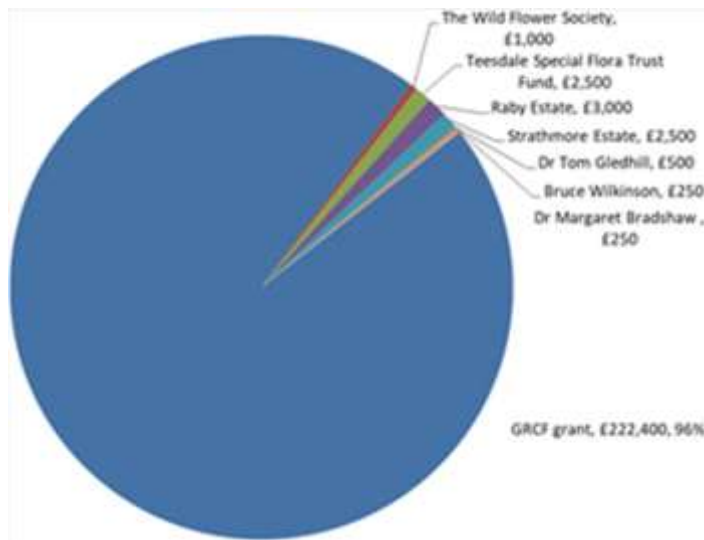
**Figure 18 Governance and delivery structure for POTE. Project delivery was coordinated by four working groups reporting to the POTE Steering Group and Partnership**

TSFT has in practice acted as project lead – including managing the POTE budget and reporting to funders; chairing the POTE Steering Group and overseeing project evaluation; and taking responsibility for POTE’s conservation and restoration activities including the consultants contracted to deliver POTE’s Nature Conservation and Restoration activities. TSFT has also taken an active role in the promotion of POTE’s Connecting People with Nature activities, including those delivered through UTBG: however, formal responsibility for this strand has been that of NH which has acted as the employer for the Volunteer and Engagement Officer as well as for consultants contracted to deliver other ‘people’ elements (including artists and the audio tour). As a statutory body the NPAONB has had an important formal role in working to ensure that ‘the recommendations arising from the Species Recovery Plan are put into action at a scale where they will make a significant

contribution to the conservation of the special flora of Teesdale’, providing technical advice, and helping to co-ordinate the activities of partners and to avoid duplication and ensuring complementarity, whilst carrying no financial responsibility which lies with TSFT and NH.<sup>(11)</sup>

This structure has worked remarkably well, the organisations involved having overlapping objectives and their representatives offering complementary skills and expertise.

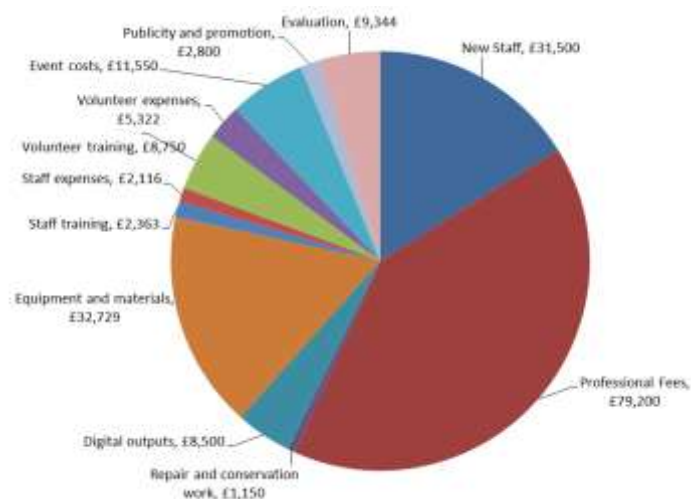
## Finance



**Figure 19 POTE income from GRCF application**

Figure 20 shows major sources of income. 96% of initial income was secured from GRCF, with smaller but significant donations from voluntary organisations, the two landowners, and, importantly, individuals who played an important role in setting up POTE. This diagram does not show subsequent income generation by TSFT or from POTE activities, including registration fees to talks and other activities. Nor does it show the considerable amount of volunteer time which in other National Lottery scheme is counted as match funding.

Major approved cost headings are shown in Figure 21. The significant element of ‘professional fees’ included not just the species monitoring, survey and recovery plan commissions but other services such as the interpretation plan and audio trail, plant ID guide designs, branding, and artists’ and lecture fees. Initially, Covid restrictions in the first eight months of the project considerably reduced the numbers and activities of POTE and led to a significant underspend particularly on volunteer activities. The extension in December 2022 of POTE’s delivery to June 2023 proved vital in allowing projected activities to be completed.



**Figure 20 Major GRCF approved cost headings**

## Project delivery

Our assessment of POTE's delivery is that it has been competent and efficient. This perception corresponds to the views expressed by survey respondents (Figure 22) and by all those we have interviewed during our evaluation work in relation to administration, approachability of staff and the organisation of events and activities. Some reservations were expressed regarding publicity and the availability of information – primarily from individuals who had not been engaged with or aware of Teesdale's special flora prior to the launch of POTE. Again this reflects at least in part the absence of a development phase, delays due to Covid restrictions, and the lack of dedicated office personnel to assist in administration.

The involvement of NH has been critical and NH staff have contributed to POTE's activities beyond their obligations. The one respondent who entered a 'very poor' opinion did so in relation to all four questions and from other narrative responses to the survey this may have been a ranking error. Otherwise the only negative responses related to administration and to publicity and the availability of information and from our interviews it seems likely that this was due primarily to the fact that the single part-time member of staff employed by the project was primarily concerned with delivery of activities and that there were no paid administrative staff associated with the project.

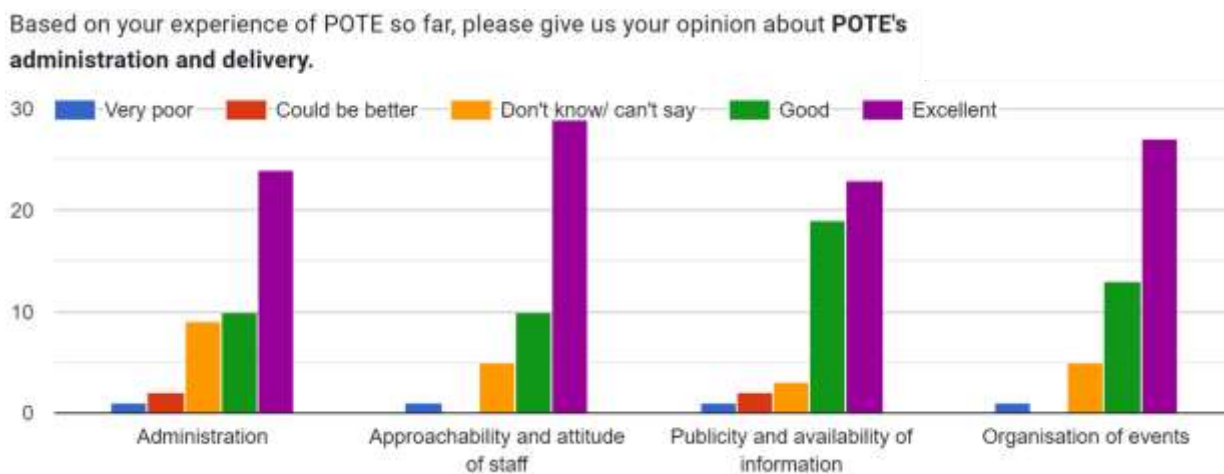


Figure 21 Assessments by survey respondents of the quality of POTE's delivery.



Figure 22 New logos produced for TSFT and UTBG as part of P3, POTE's communications activity

The POTE team are to be particularly congratulated on the project's management and administration, despite a number of challenges.

One significant challenge was the lack of lead time between the announcement of GRCF and the deadline for applications. The national Interim Evaluation of GRCF <sup>(38)</sup> itself found that the government's delay in launching GRCF after the COVID-19 pandemic and the consequent short timeframe for applications was challenging for many organisations. The absence of a development phase for POTE meant that detailed

planning had to take place before there was any guarantee of funding. This was less of a challenge than for some other GRCF projects because of the existing focus of TSFT and UTBG regarding the perceived needs of the Teesdale Assemblage in relation to survey, monitoring and management; however it meant that some activities, particularly in regard to public engagement, had to be developed within a very short space of time. The partnership with NH with its track record in public engagement and creative activity was critical in this regard. Nevertheless there was an inevitable delay in appointing staff. Beyond the staff of NH, who have been critical both to launching and the delivery of POTE, the one paid member of staff, herself only part-time, was not in place until late December 2021. Delivery has therefore relied heavily on volunteers (including the Trustees of Teesdale Special Flora).

Other issues included illness and unforeseen individual circumstances. Critical periods were in the autumn and winter of 2021, predominately driven by Covid related issues, and the spring and summer of 2022 when two of the Trustees had to step down and two further ones (recently recruited to increase Trustee capacity) found themselves with less time due to increased work and personal commitments.

Particularly in this context, it is remarkable that delivery has proceeded so smoothly and reservations about POTE's implementation have been so few.

*I have been a member of Teesdale Botany Group for over a year. It took a while for me to grasp that the three associated groups are different for funding purposes yet essentially involve the same people. I think the three associated groups are confusing - POTE, UTBG and Teesdale Special Flora Trust - and perhaps one umbrella organisation would have more impact when marketing/ publicising the aim of preserving and monitoring our botanical heritage. [PA]*

*I think there could have been more collaborative working alongside the AONB and other outside organisations. I tended to find out about things after they had happened rather than being consulted about them during the development of an idea. [PA/V]*

*I had hoped that the two projects [POTE and Tees-Swale: naturally connected] might run events, or activities together, and share some ideas/develop some ideas together. [PA]*

*The steering group tended to just be about feeding back about past activities, rather than brainstorming future work. [PL]*

## 5 Conclusions: landscape legacy and the special flora

This section considers POTE's legacy; the enduring benefits the project has delivered and what will happen now the project is formally at an end. Our assessment of the achievements and legacy of POTE as a whole is framed in terms of the degree to which they help to secure the broader vision of the project's initiators and champions, the TSF Trust.

There is little doubt that POTE's community activities (engaging, enabling and awareness raising) have been a success although several activities have involved only a relatively limited number of individuals. The activities will leave a significant legacy in terms of participants' understanding and commitment and the awareness both of local residents as well as those from further afield – including academics and policy-makers - to the conservation of the Teesdale flora.

One lesson is the need for a paid administrator for a project of this complexity. POTE's volunteer and engagement officer has devoted time and effort significantly beyond her three-day per week contractual obligation; and additional 'office' person would have provided office back-up and an additional focus on communication and monitoring of POTE activities.

Of the nature conservation and restoration activities, the base-line ecological survey and the five-year monitoring plan will be of significant value in providing the basis for studying ongoing changes in the Teesdale Assemblage and in particular the success (or otherwise) of future management. The five-year species recovery plan amply fulfills the consultant brief for a detailed set of recommendations regarding actions required to identify and trial the conservation options needed over the next 5 years in order for the TSFT *"to inform funding bids, influence stakeholders such as Natural England and the North Pennines AONB, and inform future conservation."*<sup>(15)</sup>

That objective itself says a good deal about the political context within which POTE has developed. Dr Bradshaw's creation of the TSFT in 2017 was in good part the consequence of her frustration at Natural England's lack of funds (its core grant had halved since 2010), its necessary prioritisation of its legal obligations and the consequent financial limitations on its ability to undertake survey and monitoring related to the conservation of rare species of the Dale.

The positive reception given to POTE's activities (in particular the reports of the ecological survey and monitoring plan and the proposals within the species recovery plan) by Martin Furness of Natural England and Ruth Starr-Keddle of North Pennines AONB Partnership is encouraging. Both the Raby Estates and the Strathmore Estate showed an early commitment to the project and, like NE and the NPAONB, the Raby Estate has been a conspicuous supporter of POTE from the start, including Lord Barnard's personal engagement with several activities.

Ultimately however, conservation of the Teesdale Assemblage will depend on a number of factors which are beyond the direct (at least) control of TSFT. A key factor is the attitude of landowners and their land managers. The contributions of the Raby and Strathmore estates – in cash (£3,000 and £2,500 respectively) and in kind – suggest that both landowners would be sympathetic in principle to further activity. The management trials and further survey work envisaged in POTE's monitoring plan and species recovery plan seem likely to involve little extra accommodation than has already been given to such work. However the implementation of any wider and longer term management prescriptions that emerge may involve more significant modifications to management practices.



The objectives of POTE fit well with the government’s Environmental Improvement Plan for England (EIP, published in January 2023 under the 2021 Environment Act), both with its ‘apex goal’ – halting the decline in biodiversity to secure ‘Goal 1: Thriving plants and wildlife’ – and with its final ‘Goal 10: Enhanced beauty, heritage, and engagement with the natural environment.’<sup>(39)</sup> However much will depend on the still uncertain and evolving nature of the government’s plans for a new post-Brexit Environmental Land Management Scheme (ELMS) to replace pre-Brexit agricultural support payments.

It is to be hoped that ELMS will not be a ‘one-size fits all’ approach but that it will be flexible and targeted, including on areas such as Upper Teesdale where the benefits – to nature and to society – will be greatest. The likely relevance of its key elements - a Sustainable Farming Initiative, a Landscape Recovery Scheme and the adaptation of the existing Countryside Stewardship<sup>a</sup> (now Countryside Stewardship Plus instead of a new Local Nature Recovery Scheme as previously announced) to the Teesdale flora is unclear. In the meantime the EIP’s proposed Species Survival Fund ‘to create, enhance and restore habitats’ may offer the possibility of follow-on funding although publicity for the proposed fund focuses on more prominent animal species - ‘from hedgehogs to red squirrels’.<sup>b</sup>

In addition to the above (though beyond the remit of this evaluation, albeit touched upon in some of the UTBG lecture series) the experience of POTE raises important issues regarding the intrinsic versus instrumental value of the Teesdale Assemblage, its relative significance in relation to major ongoing changes in the British vegetation consequent on climate change. It also emphasises the connection between species conservation and community well-being, reflected in Dr. Bradshaw’s assertion that ‘The welfare of the Upper Dale is the best guarantee of the future survival of its special flora.’<sup>(4)</sup>

In a relatively short space of time, and with a huge amount of voluntary effort, POTE has achieved a considerable amount. All concerned have done well to meet unforeseen challenges; not least the restrictions of Covid and conflicting demands on time, particularly of steering group members and activity leads. The challenge now – both for TSFT and for conservationists more generally -will be to build on what has been achieved, in terms both of public engagement and support and the necessary resourcing for ongoing trials leading to effective prescriptions for the conservation of the special flora of Upper Teesdale.

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<sup>a</sup> [www.gov.uk/government/publications/environmental-land-management-schemes-overview](https://www.gov.uk/government/publications/environmental-land-management-schemes-overview) see also <https://defrafarming.blog.gov.uk/>

<sup>b</sup> [www.gov.uk/government/news/ambitious-roadmap-for-a-cleaner-greener-country](https://www.gov.uk/government/news/ambitious-roadmap-for-a-cleaner-greener-country)

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