



# Durham Wildlife Trust

## *Living Landscapes - Volunteer and Student placement opportunities*

Volunteering is at the heart of what Durham Wildlife Trust does - if you have some time to offer, we can put it to good use.

*Living Landscapes* involves the creation of robust, resilient and connected landscapes on a large scale. Living Landscapes are: highly valued and accessible to people; full of wildlife and rich in opportunities for learning, health and wellbeing. What is good for wildlife, is good for people too. Living Landscapes can help local communities and businesses to thrive. They are all about sustainable local economies; they will safeguard our wildlife through an unprecedented period of climate change and through shifts in agriculture and industry. The ultimate aim of the Wildlife Trusts is a series of Living Landscapes, linked together across the length and breadth of the UK. This will re-connect our urban and rural areas, freshwater and coast. Beyond the coast, the connections continue to create Living Seas.

### *Current work in Durham is focussing on 3 areas;*

- Heart of Durham (south of Derwent reservoir, north of Hamsterly forest, west of Durham)
- Durham Coast (between blackhall rocks and seaham)
- Cassop-Kelloe limestone area

### *Living Landscapes consist of;*

1. **Core areas** of high quality wildlife habitat. Often these will be protected areas, nature reserves or Sites of Special Scientific Interest (SSSIs). These provide vital wildlife sanctuaries and centres. From these areas wildlife will be able to re-colonise the landscape once it is restored.
2. **Connections** between core areas. These come in the form of both corridors – or wildlife highways – and also stepping stones which can link a landscape of isolated patches into one large unit. These provide functional connectivity across a landscape, not just physical connectivity i.e. they enable the landscape to work for wildlife.
3. **Permeability** across the whole landscape. Land between core areas and functional connections should be accessible to wildlife movement. It may not all be perfect habitat but even when sub-optimal habitat it allows movement, if not long-term survival. Actions here centre on promoting less intensive agriculture and forestry.

This area of work is about recognising that although much wildlife has been lost or declined – good populations of wildlife and natural habitats still exist locally – and by making the most of available opportunities it is possible to restore wildlife back to the wider landscape over time.

How is Durham Wildlife Trust working to develop Living Landscapes?

- Working in Landscape Partnerships with other organisations to develop landscape scale management plans and projects
- Working with partner landowners in these landscapes to carry out wildlife friendly management
- Developing future funding bids to carry out landscape scale conservation projects
- Carrying out research into local opportunities for restoring particular habitats and species

***Are you interested in volunteering to help us achieve our vision for a Living Landscape in these areas?***

We are working to find out

- What work can be done to reconnect wildlife populations or encourage colonisation?
- Where are the local opportunities and priorities for conservation?
- How can we encourage more people to enjoy the wildlife in their local areas?
- How can we work with local landowners and farmers to encourage wildlife?
- How can local landowners and farmers benefit from management aimed at increasing wildlife?
- We are interested in the conservation of all wildlife groups; birds, mammals, invertebrates and plants – as well as the habitats they live in

***Could you help us with;***

- Helping to compile wildlife records, write habitat management reports or research the management requirements of particular habitats or species
- Assisting with writing funding applications for future conservation projects
- Helping to contact landowners and farmers to offer conservation management or advice
- Geographic Information System (GIS) mapping of conservation zones, management works and species and habitat records
- Volunteer habitat management days carrying out practical conservation work
- Habitat surveys of wildlife groups such as birds or plants

If you have experience in office work, computer mapping / GIS, internet research, species or habitat identification, geography and map analysis, or are keen to acquire skills in these areas then please get in touch. Perhaps you know local landowners, farmers or companies and could help us get in touch with them to manage areas for wildlife?

If any of these opportunities are of interest please contact Jonathan Winn on 0191 512 8953 or [jwinn@durhamwt.co.uk](mailto:jwinn@durhamwt.co.uk). Let us know your areas of interest, experience and skills and we'll get back to you to arrange a time to discuss any available opportunities.

The following categories of project are available;

- G - Geographic Information Systems (GIS) projects
- R - Factsheets and reports placement / projects
- V - Volunteer Officers – placements and long term volunteers
- M - MSc projects – including literature reviews
- B - BSc projects – including literature reviews (NOT AVAILABLE - in development)

## (G) - Geographic Information System (GIS) Projects / Placements

No	Section	Topic	Outputs	Location	Contact	Status
G1	Living Landscapes	<p><b>Setting up a long term volunteer digitising project</b></p> <p>Researching and investigating a suitable method for a long term volunteer project (e.g. over 1yr) to create a Phase 1 habitat map of Co Durham using only GIS information and aerial photographs. – a full coverage map showing the field by field habitats present in the county. Steps include –how to digitise over aerial photographs, date of photographs, keeping track of areas of the county that have been covered.</p> <p><u>Purpose</u> = to provide an estimate of how long the project might take to complete and to provide a step by step instruction booklet for future students to use</p>	<p>Method for project</p> <p>Step by step instructions.</p> <p>Estimate of how long it takes per 1km square to do the survey</p>	Rainton Meadows	Jonathan Winn	In progress but more volunteers required
G2	Living Landscapes	<p><b>Compiling list of available free GIS data suitable for nature conservation use</b></p> <p>Compiling a check list of all currently free and available GIS data under research or non-commercial license or available to wildlife trusts and charities. List under heading types - – e.g. social / environmental / pollution / population etc.</p> <p><u>Purpose</u> = to ensure that DWT uses all available GIS data. To highlight to other Wildlife Trusts the range of GIS data currently available for use in conservation projects.</p>	Table of data in word format	Rainton Meadows Or Home based	Jonathan Winn	Available
G3	Living Landscape + membership	<p><b>Where to see wildlife in County Durham</b></p> <p>Produce 1 composite map of the best locations to see wildlife in county Durham – colour coded or labelled by either species or season. Also 4 individual maps, 1 for each season showing good locations at which to see wildlife.</p>	GIS map of wildlife watching location	Rainton Meadows Or Home based	Jonathan Winn	Available
G4	Living Landscape	<p><b>Magnesian limestone grassland restoration opportunity mapping</b></p> <p>Examine the existing range of GIS data showing the location of areas of remnant magnesian limestone grassland. Explore and quantify the relationship with slope, aspect and soil conditions at remnant site. Research and recommend potential expansion / re-creation sites – especially within quarry areas and close to existing Wildlife Trust reserves. Assess the potential extent of the different NVC types.</p>	<p>Literature review</p> <p>GIS output maps</p> <p>Summary report</p>	Rainton Meadows Or Home based	Jonathan Winn	Available

## (R) - Reports and Factsheets Projects / Placements

No	Section	Topic	Outputs	Contact	Status
R1	General	<p><b>Wildlife factsheets – for website</b></p> <p>Produce a summary wildlife guidance factsheet / document –max 4 sides A4 on particular wildlife conservation topics. E.g. - Wildlife friendly gardening - Ponds and wildlife - Park management / open spaces / grass cutting - Wildlife and buildings. To research the topic, examine other websites / factsheets etc and write material and ref all suitable sources. To include suitable photographs and technical drawings. To clear all necessary copyright so the material can be placed on the web.</p> <p><u>Purpose</u> = to promote to the public and DWT members ways of achieving conservation and to be able to direct members of the public who phone us up to our website for further detailed information.</p>	Factsheet Copies of references and websites	Jonathan Winn	Available
R2	Living waterways	<p><b>Flood plain restoration techniques</b></p> <p>Living waterways – practical and academic examples of river and floodplain restoration (see below) Researching in the academic literature and on websites etc the current range of practical conservation management techniques - with examples of where they have been successful</p> <p><u>Purpose</u> = to ensure that projects have best available information to choose the best techniques when designing conservation schemes</p>	Summary document / report	Michael Rogers	Available
R3	Living Landscapes	<p><b>Opportunity mapping</b></p> <p>Listing current biodiversity opportunity mapping projects within Wildlife Trusts, Natural England and Environment Agency to categorise and discuss the methods used</p> <p><u>Purpose</u> = to provide a resource for DWT when undertaking biodiversity opportunity</p>	Summary document / report	Jonathan Winn	Available
R4	Living Landscape + Membership services	<p><b>Where to watch wildlife in County Durham</b></p> <p>Project to compile a list of the best location to see particular wildlife in county Durham - need to draw up a list of species, species groups, and habitats. Research and investigate the locations where each occurs, list who owns site, highlight those owned by DWT, is there visitor facilities? car park? etc, when is best time to visit to see each feature. Consult local experts / and GIS records then - List all in a document / table ready to produce a map.</p>	Summary document / report	Jonathan Winn	Available
R5	Living Landscape	<p><b>County Durham land use change</b></p> <p>Changing land use within Durham – compiling government statistics on the county to show how the use and cover of the countryside has changed over time. This will be used when planning conservation projects within our mapped Living Landscape areas.</p>	Summary document / report	Jonathan Winn	Available
R6	Living waterways	<p><b>Wetland habitat (reedbed) creation for diffuse pollution reduction</b></p> <p>Living waterways – research, collate and summarise industrial, practical and academic examples of habitat creation for diffuse pollution reduction – focus on reedbed creation, but also include ponds, woodland and marsh.</p> <p><u>Purpose</u> = to ensure that DWT conservation projects have best available information from which to choose techniques when designing conservation schemes</p>	Summary document / report	Michael Rogers	Available

## (V) - Volunteer Officers - placements and long term volunteers

No	Section	Topic	Outputs	Contact	Status
V1	General	<p><b>Research coordinator</b></p> <p>To coordinate links to local universities and colleges and initiate and manage research contacts</p> <p>To maintain an overview and summary of research projects linked to the Wildlife Trust</p> <p>Research potential funding to support students and researchers to undertake work with Durham Wildlife Trust</p>	-	Jonathan Winn	Available
V2	Project planning	<p><b>Living Landscape - Project planning volunteer</b></p> <p>To develop future Living Landscape project ideas (to be initiated in 2 + yrs time).</p> <p>To research similar projects in other Wildlife Trusts and Local Authorities around the country</p> <p>Contact other Trusts for advice / methods and documents and to put together a project plan outlining how the project could be delivered – e.g. timescale / costs etc.</p> <p>Current potential projects include;</p> <ul style="list-style-type: none"> <li>• Quarry slopes grassland restoration officer (researching and encouraging creation of magnesian limestone grassland)</li> <li>• Big society wildlife support officer (working with local project groups, assisting with funding)</li> <li>• Woodland ground flora re-introduction project</li> <li>• Habitat surveying in Living Landscape areas</li> <li>• Wildlife building creation (design, planning application, organise contractors and volunteers)</li> <li>• Durham city centre wildlife viewing boardwalk and visitor centre</li> </ul>	Summary document / report	Various	Available
V3	Ecologist / planning applications	<p><b>Volunteer ecologist / planning application officer</b></p> <p>Devise and follow a procedure to assess and reply to priority planning applications that may have wildlife implications</p> <p>Review contacts with local authorities planning departments and ecologists.</p> <p>Initiate a system to review, assess and reply to priority planning applications – as a standardised procedure.</p>	Procedure and method note for future volunteers	Jonathan Winn	Available

## (M) - MSc projects -

No	Topic	Outputs	Contact	Status
V1	<p><b>Magnesian limestone grassland restoration opportunity mapping</b></p> <p>Examine the existing range of GIS data showing the location of areas of remnant magnesian limestone grassland. Explore and quantify the relationship with slope, aspect and soil conditions at remnant site. Research and recommend potential expansion / re-creation sites – especially within quarry areas and close to existing Wildlife Trust reserves. Assess the potential extent of the different NVC types. Research and develop focal indicator species for magnesian limestone grassland and model their distribution under current conditions and following restoration or expansion of grassland areas on to suitable landform slopes.</p>	<p>Literature review.</p> <p>Summary report</p> <p>GIS outputs</p>	Jonathan Winn	Available
V2	<p><b>The impact of transport infrastructure on landscape permeability</b></p> <p>The impact of stream culverts and transport infrastructure on the ecological connectivity of streams and rivers in County Durham (Research areas = select focal species, assess connectivity and permeability – predict permeability bottlenecks for different species groups – map intervention zones)</p>	<p>Literature review.</p> <p>Summary report</p> <p>GIS outputs</p>	Jonathan Winn	Available
V3	<p><b>Cumulative development impacts</b></p> <p>A review of the cumulative impact of development in relation to species and habitat distribution and abundance – case studies of housing development and infrastructure change in County Durham over time – a comparison of the landscape connectivity and permeability following urbanisation.</p>	<p>Literature review.</p> <p>Summary report</p> <p>GIS outputs</p>	Jonathan Winn	Available
V4	<p><b>County Durham land use change</b></p> <p>Examining county based land use change in terms of ecosystem services. How have the different ecosystem services changed over time in County Durham as a result of historic land use change.</p>	<p>Literature review.</p> <p>Summary report</p>	Jonathan Winn	Available
V5	<p><b>Ecosystem Service mapping – targeting habitat creation areas for diffuse pollution reduction</b></p> <p>Map the pollution reduction potential of habitat creation activities across County Durham by examining the co-location of pollution risk and the habitat creation potential of areas of land as a function of land use, landform, hydrology and soils.</p>	<p>Literature review.</p> <p>Summary report</p>	Jonathan Winn	Available
V6	<p><b>Ecosystem Service mapping – targeting woodland restoration for landscape amenity, health and recreation benefits</b></p> <p>Mapping and comparing the relative woodland restoration priority areas when the different ecosystem services of landscape amenity views, health and recreation benefits are compared. Using the wider Derwent valley and ancient woodland network in County Durham as a case study area.</p>	<p>Literature review.</p> <p>Summary report</p>	Jonathan Winn	Available

**(B) - BSc projects - \*\* In development \*\***

No	Section	Topic	Outputs	Contact	Status
B1					
B2					
B3					