



Annual Report 2013-14

North Devon UNESCO World Biosphere



*living and working
in harmony with nature*

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Forward



This annual report is a taster and cannot possibly cover everything that the Biosphere achieves in a year. Do look at our website , www.northdevonbiosphere.org.uk for more information.

Yet again I am impressed by the number of initiatives and projects that such a small team generates and implements. Without doubt the investment by our various funding partners gives great value for money, with the Biosphere making a real contribution to people's lives in north Devon. It is a powerful force for good in terms of its economic and social impact and its positive effects on human and environmental wellbeing. The Biosphere is about both project delivery and strategic partnership. The partnership is a wide one, spanning a large geographical area and a wide range of functions and interests.

A fundamental feature of Biosphere thinking is its attempt to join-up issues and concerns that are often treated in isolation, for example looking at both biodiversity *and* economic development, at both coast *and* countryside. The Biosphere team cannot go it alone. We work closely with local partners - from planners to business groups - to seek to influence local policies and developments that will have a fundamental role in shaping the future for the Biosphere over the next decade and make a real difference to people's lives.

Professor Michael Winter OBE
Chairman

Ten Headline Achievements

- The Biosphere partnership provides a leverage of investment to the local authorities of at least 24:1*
- The Biosphere has been chosen to host the Environment Agency' South West Catchment Pilot
- The Biosphere provides focus and coordination for landscape scale catchment management projects worth £4.2m to local economies in 2013-14*
- The Biosphere Service is host and lead for Marine Conservation Zones and marine planning in northern Devon
- The production of a Sustainable Energy Action Plan for the Biosphere to improve the local economy
- Completion of Life's Journey Tarka Trail Heritage and access improvement project
- Over 200 community events
- Over 220 Hectares of habitat improved
- Over 300 landowners advised
- More than 120Km of river bank improved

* - See finance section at the back of this report.



Great diving beetle at a B10 celebration event at Torrington Commons

Catchment Management

Healthy rivers and streams provide benefits for all and we need to find practical, affordable solutions to manage these precious resources at a catchment level. Well-managed rivers bring life to our region and are good for the health, wealth and prosperity of North Devon. Working at a catchment scale means helping land managers, and in a rural area like the Biosphere that means farmers, to manage the land in ways that help improve water quality, lessen run off and improve biodiversity.

Taw Rivers Improvement Project

The Biosphere Partnership began the £1.8million Taw River Improvement Project (TRIP) in 2012 to improve the water quality of the river Taw catchment in order to help meet the environmental targets of the Water Framework Directive.

The TRIP is a partnership project with different organisations offering specialist advice and help. Achievements so far include:

- 43 farm plans drawn up to offer advice on reducing diffuse water pollution from agriculture
- 36 farmers have received woodland planting or management advice or assistance with woodland planting grants
- 3 woodland training events have been run for woodland owners
- 9 culm grassland owners have been given TRIP grant aid to help manage their sites
- 53 km of new or replacement riverside fence grant-aided, often with new drinking troughs, to reduce cattle poaching beside the river
- North Wyke Weir removed, banks re-profiled and seeded
- Riverside coppicing work, removal of debris dams and the cleaning of gravels to help fish spawning



Surveying the river for the endangered Fresh Water Pearl Mussel

Catchment Management

North Devon Nature Improvement Area

The North Devon Nature Improvement Area (NIA) (2012 to 2015) is led by the Devon Wildlife Trust on behalf of the Biosphere Partnership. It covers the River Torridge catchment and is one of only 12 NIAs in England. It is delivering bigger and better quality areas of culm grassland, woodland and river habitat, improving water quality and creating more wildlife habitat. It is also strengthening the connections between local people and this deeply rural landscape, and promoting a better understanding of the ecosystem services it provides.

- To date, over 100ha of culm grassland, 92 km of hedgerow and 28 ha of broadleaved woodland have been restored by working with local landowners
- 40 hectares of wetland and 33 hectares of woodland planting are underway
- £2.9 million brought to local landowners through Defra Stewardship and Woodland grant schemes
- Over 100 community events across the NIA and nearly 3000 hours of volunteer time given
- 39 parish biodiversity audits covering 70% of the project land area



Farmer training day focussing on soil aeration

Catchment Sensitive Farming

In 2009 the Taw Torridge and North Devon Streams Catchment Sensitive Farming (CSF) Partnership was formed. This partnership of Natural England, the Environment Agency and the North Devon Biosphere Service has carried out work on reducing diffuse pollution from agriculture in a dozen priority areas.



Soil infrastructure workshop focussing on silage management

In 2013, 25 infrastructure reports were delivered to help farmers reduce diffuse pollution associated with yards and buildings. These specialist reports were frequently used to support applications to the CSF Capital Grant Scheme. Two very successful farm infrastructure workshops were held and two newsletters distributed to all the farmers with more than 20Ha within the nine target catchments.

Catchment Management

Through partnerships with the Devon Wildlife Trust, West Country Rivers Trust and FWAG South West, the project helped 136 farmers in the Biosphere Reserve receive over £1M worth of Catchment Sensitive Farming grants to improve their infrastructure and reduce the risk of causing pollution. This number of farmers equated to a little over 60% of all applications received nationally.

Agricultural Diffuse Pollution Project

Diffuse pollution can have serious effects on rivers, lakes, estuaries and coastal waters. Agriculture is not the only source but agricultural run-off can be a serious problem. The Agricultural Diffuse Pollution Project (ADPP) was a 4 month programme run by the North Devon Biosphere Service and funded by the Environment Agency. It focused on three sub-catchments of the River Torridge; the Waldon, Whiteleigh Water and Pulworthy Brook, with the aim of reducing pollution from agricultural sources (pesticides, fer



New yard roof grant aided through the ADPP

All farmers within the target area were contacted and informed that, as a failing catchment, all farms would be inspected by the Environment Agency. Those that engaged with the project had the opportunity to receive advice, grant aid and time to implement any changes needed. Those that did not engage were informed that they would be visited by the Environment Agency first.

The project delivered 17 specialist farm advice visits (either infrastructure audits or soil and nutrient testing) and provided over £58,000 of grant aid to 12 landowners.

Catchment Based Approach

The momentum from our catchment projects, together with the breadth of skills and experience on the Biosphere Partnership has meant that it has been chosen to host the Environment Agency's Catchment Based Approach (CaBA) pilot for northern Devon. The 'Your rivers your views' consultation process will begin in the Autumn of 2014. The process will produce a plan that focusses on water related issues as affected by land-use. This plan will be a key part of our work in the Biosphere Reserve over the coming years.



Word map of catchment management issues raised during the consultation process — the bigger words are raised more often

Marine Management

The marine part of the Biosphere Reserve is as important as the land when we consider all the benefits and uses we get from the it. The Biosphere partnership has been working hard with the fishing and conservation sectors to ensure that we are caring for our seas and getting the best out of them. This partnership was instrumental in bringing the £0.9M for the Fisheries Local Action Group fund to the Biosphere to support our fishing communities. We are pleased to say that from our data, the fishing in the Biosphere Reserve is sustainable and it is important that we work with our fishermen to keep it that way and that they get rewarded for their efforts. We are working on a marine management plan with our partners that is fully supported with good data and projects that will keep our seas healthy.

Marine Conservation Zones

Over three years ago the Biosphere Partnership designed the set of potential Marine Conservation Zones (MCZs) for the Biosphere area. So far only one has been confirmed by government but the others we put forward are being considered in the second site confirmation process currently underway. Our work now is to make sure that there is robust evidence to support the designations and that suitable management measures are in place that do not unduly penalise the fishermen we have been working with. The former Atlantic Array site is still being considered by Defra for MCZ status but is a very contentious because of its high economic fishery value. We are therefore working with Defra, Natural England, and the fishing community to identify alternative options that will bring the same conservation benefits with less economic impact.

ValMER project

ValMER is a European Union funded project designed to quantify the value of marine ecosystem services. The Biosphere's seas have been chosen as a case study area the ValMER project is developing a management and impact assessment tool to help gauge the impact of activities such as fishing, gravel extraction, energy production and shellfish farming on marine ecosystem services. Already we are seeing the benefits of having a strong data set compiled to support our other work in the sea.



Lobster fisherman John Balls



The Taw Torridge estuary from the air

Sustainable Energy

From domestic heating to transport, industrial process to wood fuel production; how much energy we use and where it comes from is a major factor that helps determine this area's carbon footprint and contribution to climate change. North Devon's Biosphere Reserves is leading the way in tackling one of the world's biggest challenges at a local level.

Sustainable Energy Action Plan (SEAP)

Our study sets out a baseline for energy consumption and generation in the Biosphere and shows how different energy types are used in the domestic, transport and commercial sectors. It explores strategies to reduce energy demand and increase appropriate renewable energy production.

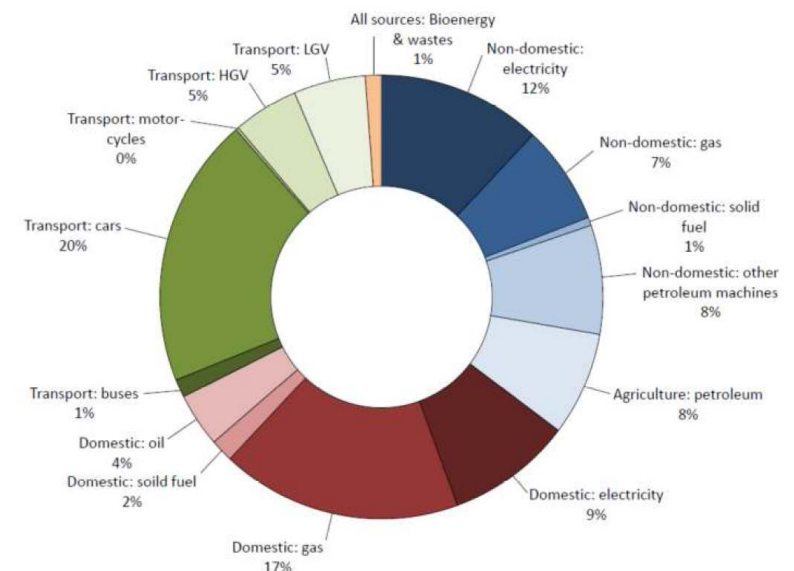
A key finding is that our area will miss government greenhouse gas reduction targets if it relies on national policy initiatives alone. Additional local interventions are needed that should focus on reducing energy demand in tandem with a switch to renewable energy use and a drive to generate this locally in way accepted and perhaps funded by local communities.

Biosphere headlines

- Nearly £300m is spent on energy each year. Most leaves the area and goes to national energy companies
- 31% of energy use goes on domestic heat and light, 20% on private cars
- Nearly a tenth of our homes are in fuel poverty with the hotspots in rural areas. This is higher than Devon and National average. Therefore reducing energy demand will help to tackle poverty
- 141MW of renewable energy has been installed in the area, providing approximately 7% of energy demand. National targets call for 40% renewable energy generation by 2030
- More community led renewable schemes are needed and will reduce the loss of funds from the area



There is significant potential for sustainable wood fuel production in the Biosphere



Energy consumption across the SEAP area by sector and fuel

Sustainable Energy

Following on from the SEAP, we have a very active Sustainable Energy Group that is working with the private sector to bring energy efficiency grant support to the most fuel poor homes and develop community energy projects to retain the money spent on energy within the local economy. We have also experimented with remote sensing data and LiDAR imagery to efficiently calculate the potential sustainable yields from hedgerows and woodlands to stimulate the markets for wood fuel and boost our rural economy. This experiment was done to specifically support the development of a community energy scheme in North Devon.



LiDAR image of valley-side woodland



Biosphere woodlands mop up carbon, help prevent flooding and purify our water

Cultural Heritage

Be it the food we eat, the places we live, the communities we belong to or the cultural life we take part in; it is all strongly linked to the Biosphere environment. In north Devon we celebrate this link through artistic creativity and cultural awareness and the Biosphere frequently works with artists, crafts-people, historians, and communities to inspire, entertain and educate.

Life's Journey Project

The story of the Tarka Trail begins a long time before it became a cycle way and the Life's Journey Project was designed to reveal some of this fascinating history. It has improved the visibility of heritage features at three sites alongside the Tarka Trail and involved people in activities to help to understand, appreciate and look after it.

The North Devon Biosphere Service secured the £74,000 for the project (mainly from the Heritage Lottery Fund and Landfill tax) and led from the outset.

Engagement:

1250 hours of volunteer time were given to the project and over 700 people attended public events

Infrastructure:

Rolle Canal

- Paths were improved and created to help people access canal features. A new viewing platform beside the Tarka Trail and new interpretation boards to tell the canal's story
- The canal stable block at Ridd was Re-roofed and works undertaken to expose and conserve other parts of the remaining canal infrastructure.



Above: Enjoying playing with clay at the Life's Journey Clay Day at Fremington Quay



Left: A new interpretation board on the Tarka Trail at Beam

Cultural Heritage

Fremington Quay

- New interpretation was installed at the café to complement that in the new Heritage Centre extension
- A new Tramper mobility vehicle was made available for hire at Fremington Quay

Home Farm Marsh

- Paths were re-routed and resurfaced and a new access point was created onto the Tarka Trail.
- 2 new wildlife viewing shelters were built by volunteers and 5 new interpretation boards erected



Volunteers building a new wildlife viewing shelter at the Gaia Trust's Home Farm Marsh Reserve



Councillor Rodney Cann unveils the new Tramper mobility vehicle at Fremington Quay

Participation, Community & Engagement

Biosphere Reserves are not only about nature conservation; they are about people. They are a focus for finding creative and effective ways for people and nature to thrive together. That means involving people in all that we do.

B10 celebrations

2013 was the 10th year of the Biosphere and a B10 programme of events was organised to celebrate and to continue the process of community engagement that is such a crucial part of the designation.

Between April and the end of November 2013, 34 different events and projects were organised ranging from creative arts to guided walks, writing competitions to recipe cards.

These events were supported by an on-line presence including a dedicated website and social media streams that on a single day had more than 5000 visitors viewing more than 6000 pages of information.

More than 1500 people entered the Biosphere prize draw and more than 30 press articles in the local media brought our message into homes throughout the area

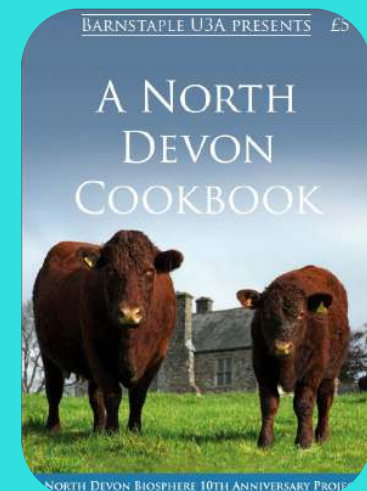


IFCA supported B10 at the Clovelly Lobster and Crab Festival

A North Devon Cookbook – Produced by the Barnstaple U3A group with Biosphere support, this book tells the cultural story of 12 north Devon recipes. Proceeds from sales go towards environmental projects.

“In 2011, at one of our meetings, our group listened to a talk on the work of the North Devon Biosphere Team. Perhaps for the first time, our members really began to appreciate the enormous value and extent of the Biosphere’s commitment to the natural environment here in North Devon, the range of its task, and the breadth of its vision. Our U3A group offered to help celebrate the Biosphere’s 10th anniversary by compiling this cookbook with a difference – one that provides some environmental and cultural background to each of the recipes.”

Gillian Kerr, Chairman of Barnstaple U3A



Participation, Community & Engagement

BioBlitz— As part of B10, the local Coastwise North Devon volunteer group organised a BioBlitz in Woolacombe. The project brought together local experts, schools, conservation bodies and the public to discover as many different species as they could in just a few short hours, and to learn and have fun in the process.

On Saturday 7 September 2013, more than 250 locals, visitors and scientists counted 762 separate species in 8 hours.



Planning support for local authorities

The Biosphere Reserve has supported the local planning authorities in the development of the Local Plan to ensure that it works with the grain of nature and has policies to protect the very assets that underpin our quality of life here in the Biosphere. We are delighted that the new Joint Local Plan for Torridge and North Devon uses the Biosphere Reserve as a key policy tool and takes novel approaches to protect the goods and benefits we get from the natural environment. We have generated robust data on the value of Biosphere habitats to the people of north Devon to help deliver this aim.



The Taw Torridge Estuary and the Westward Ho! pebble ridge

Participation, Community & Engagement

The Tarka Trail

The North Devon Biosphere Service manage the Tarka Trail to balance recreation by various users (pedestrians, horse riders and cyclists) with wildlife enhancement and social benefit.

In 2013, automatic cycle counters embedded in the Tarka Trail recorded nearly 600,000 cycle passes. This is reckoned to equate to 1.2 million Trail users each year.

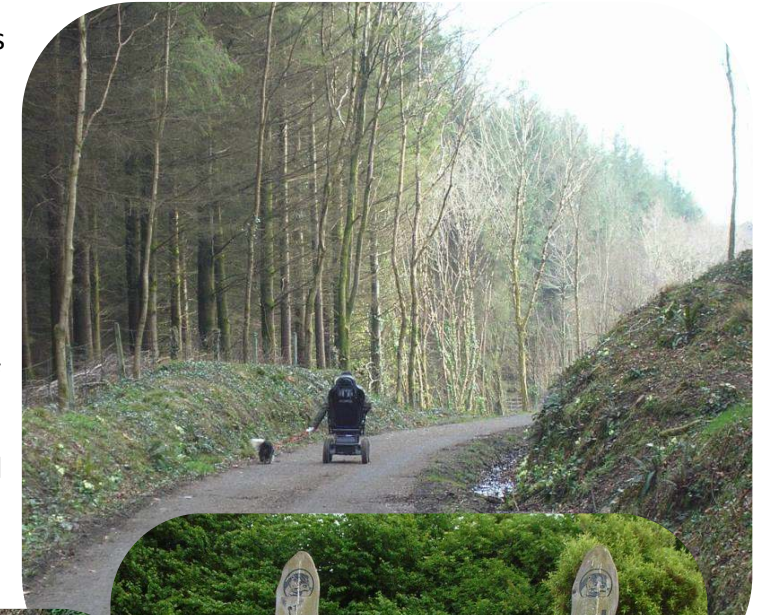
During 2013, the Biosphere team organised for a firewood contractor to coppice just over 1km of trailside trees without payment, earning money by selling the firewood produced. The consequent opening up of the Trail on the coppiced sections has proved popular with cyclists and walkers and has helped keep the Trail surface in a good condition for all.

The Trail also supports social programmes and volunteering. Management of a number of picnic sites and other areas alongside the Trail is undertaken by local Youth Offending teams whilst volunteers from communities in Bideford and Instow planted and maintain two trail-side community orchards.

Top right: A visitor enjoys the more open feel of a newly coppiced section of the Trail near Torrington

Middle: A trail-side information board at Fremington Quay

Bottom: Volunteers plant a trail-side orchard at East-the-Water, Bideford



Participation, Community & Engagement (cont)

South West Coast Path National Trail

The Biosphere Service is responsible for nearly 77 miles of the South West Coast Path in North Devon. Figures from 2012 show that 3.2 million people used the Trail in Devon (north and south coasts) and spent over £157 million in the process.

As well as general maintenance to National Trail standards, the Biosphere Service helped secure a number of enhancement projects.

The most significant is the long-awaited enhancements at Watermouth to create safe walker access beside the busy A399. This is the culmination of 8 years' work where staff have fought hard to make improvements in this area. Many possible solutions were investigated and eventually a new pavement was put in by moving the carriageway away from the coastal edge. This improvement helps long distance walkers, visitors to nearby Watermouth Castle and road users by reducing the risk of collision. The £277,000 project was the biggest single investment out of the entire 'Unlocking our Coastal Heritage' project and was supported by a grant from the Rural Development Programme for England with additional funds provided by Devon County Council and the South West Coast Path Association.

Smaller grants and local partnerships also meant that new signage could be installed to help promote the path and navigate people to it from Barnstaple railway station, whilst new brass footprints installed at Ilfracombe help people follow the path through the town.



Top: Workers building the new section of Coast Path at Watermouth

Bottom: Brass footprints help people navigate the Coast Path through Ilfracombe



Finance

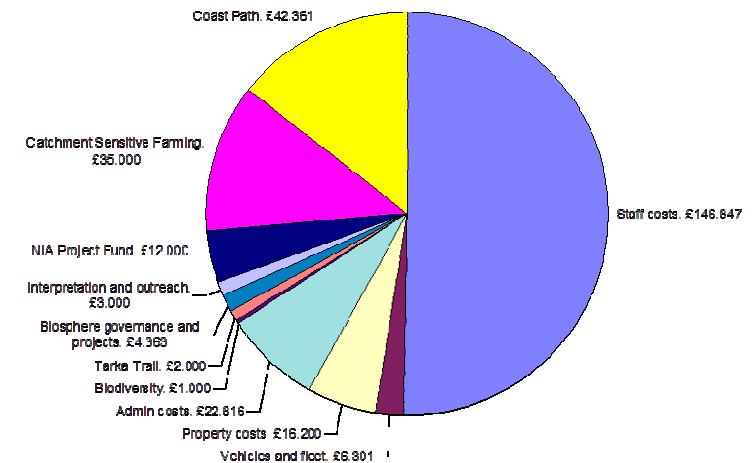
The Biosphere Reserve team coordinates the Biosphere Partnership as well as delivering particular projects and activities in support of the Biosphere Reserve Strategy and Action Plan.

In this section we report not only at the direct work of the team but also on the project funding brought into the Biosphere through coordinated partnership working.

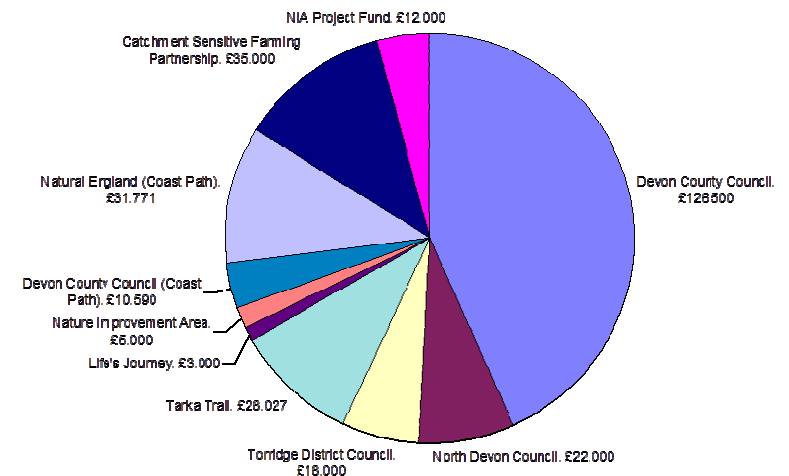
Project expenditure by the Biosphere Partnership over the 2013-14 financial year:

- Nature Improvement Area: £1.2m
- Catchment Sensitive Farming: £1.2m
- Taw River Improvement Project: £600K
- Agricultural Diffuse Pollution Project: £80K
- ValMER: £400K
- Life's Journey: £35k

Based on the £146K the core team receives from the local authorities, this is a return of £24 for every £1 the authorities invest in the Biosphere Reserve partnership.



Biosphere Service expenditure 2012-13



Biosphere Service income 2012-13

The Biosphere Partnership

Chairman • **Prof Michael Winter OBE** (Exeter University)

Vice Chair • **Mark Wallace** (Director, Beaford Arts)

Vice Chair • **Juliet Bidgood** (NEAT Design)

Vice Chair • **Martin Wickham** (Marsden's Cottage Holidays)

- **David Appleton** (Natural England)
- **Andrew Austen** (North Devon Council)
- **Elaine Hayes** (North Devon AONB Manager)
- **Pete Burgess** (Devon Wildlife Trust)
- **Andrew Butler** (National Farmers' Union)
- **John Butterwith** (North Devon Fisherman's Association)
- **Cllr. Rodney Cann** (North Devon Council)
- **Cllr. Caroline Chugg** (Devon County Council)
- **Sarah Clark** (Devon and Severn Inshore Fisheries and Conservation Authority)
- **Raymond Coldwell** (Christie Devon Estates)
- **Rose Day** (Chairman of North Devon Areas of Outstanding Natural Beauty Partnership)
- **Robert Down** (Deputy Chair and Treasurer, Coastwise North Devon)
- **Brian Fraser-Smith** (Devon Association of Parish Councils)
- **Lesley Garlick** (Professional Planner, Devon County Council)
- **Jan Kennedy** (North Devon Council)
- **Malcolm Harris** (Torridge District Council)

- **Prof. Peter Howard** (Bournemouth University Landscape Research Group)
- **Pete Jollands** (Chairman of Biosphere Foundation)
- **Andrew Knights** (Marine Officer for North Devon, Natural England)
- **Kate Little** (Torridge District Council)
- **Sue Neary** (U3A)
- **Tony Pratt** (Taw Torridge Estuary Forum)
- **Stan Pyle** (Bideford College)
- **Jay Rowntree** (Environment Agency)
- **Rob Sekular** (Countryside and Community Projects Officer, West Devon Council)
- **Cllr. Derrick Spear** (Chairman, Tarka Country Trust and North Devon Plus Board)
- **Cllr. Gaye Tabor** (Torridge District Council)
- **Eirene Williams** (FWAG South West)
- **Cllr. Jeremy Yabsley** (Devon County Council)