

Northern Devon

NIA

Nature Improvement Area



Linking life in the Torridge



Meshaw, wildflower grassland

The first three years: 2012 - 15

Progress and learning so far

An introduction to the Northern Devon Nature Improvement Area

Linking life in the Torridge

The Northern Devon Nature Improvement Area (NIA) covers the river Torridge catchment, an area of some 72,000 hectares. The Torridge flows from its headwaters near Hartland, down to Okehampton where it picks up the Lew and Okement, widening into steeper-sided valleys at Rosemoor and Great Torrington, and out to the estuary at Bideford.

This is a predominantly farmed landscape of heavy, poorly drained soils and variable agricultural productivity. Land management is a major source of employment, with small mixed farms, intensive dairy units, conifer plantations and tiny settlements.

The Torridge catchment has significant nature conservation interest, with 35% of the UK resource of Culm grassland, a variety of purple moor-grass and rush pasture, surviving in vulnerable fragments. Broadleaved woodland is difficult to access, fragmented and often neglected. River Torridge water quality is poor, largely due to phosphates and sediment.

Although famous for Henry Williamson's Tarka the Otter, this landscape supports many other key species, including two of Europe's top ten threatened species. Marsh fritillary (*Euphydryas aurinia*) enjoys a relative stronghold on Culm grassland. The fourth largest English population of freshwater pearl mussel (*Margaritifera margaritifera*) is in the river Torridge, but little more is known of its status. With a complex life cycle involving salmonids and clean gravels, it is a sensitive indicator of water quality.



Map showing Northern Devon Nature Improvement Area

Evolution of the NIA

The Torridge is the largest river catchment within the UNESCO North Devon Biosphere Reserve, which for the last ten years has championed local action for the environment. However, conservation in the Culm Measures has been underway for at least 30 years, through identification and designation of sites in the 1990s and initiatives such as Reconnecting the Culm, Ruby Country, South West Forest and Working Wetlands.

The Northern Devon NIA developed from the momentum created by the organisations and individuals involved in these projects, and their desire to achieve Professor Sir John Lawton's vision of a landscape that is 'bigger, better, more and joined'. With significant experience, expertise and data, an eye to innovation, and an ambition to take landscape scale approaches to the next stage in the Torridge, the Northern Devon NIA partnership was delighted to be awarded one of 12 NIA grants by Defra in 2012.

NIA Vision to 2015

By 2015 firm foundations will have been laid and impressive progress will have been made in the delivery of a robust and resilient catchment ecosystem. Over 1000 hectares of priority habitat will have been restored and re-created. This will enable the unique wealth of wildlife in the area to flourish, in particular threatened species such as marsh fritillary and breeding curlew. Degraded ecosystem services, such as water resources, will be restored.

Communities will value nature and place it at the heart of their decision making. They will feel a greater sense of connection with the natural world and understand the ways in which a healthy environment helps to support a sustainable local economy. Resilience to climate change will be enhanced for all. These outcomes are fundamental tenets of the wider Biosphere Reserve and UNESCO ambition.

NIA Objectives

1. Develop a more robust and coherent Torridge catchment ecosystem, maintaining, enhancing, restoring, re-creating and reconnecting a mosaic of key habitats, primarily Culm grassland and semi-natural woodland
2. Realise the Torridge catchment's potential to deliver high quality ecosystem services, particularly water quality, flood risk and carbon
3. Enable communities to understand and value the role of nature in delivering a range of ecosystem services, through active participation and engagement, reconnecting people with their local river and wider environment
4. Provide an integrated and co-ordinated advisory service to landowners
5. Realise the benefits of ecosystem services by supporting supply and demand in local markets, primarily woodfuel

NIA delivery

For its first three years the NIA project has been delivered and co-ordinated by a team of 5.5 full time equivalent staff and one contractor, employed by Devon Wildlife Trust and Devon County Council, and based at Beaworthy, Barnstaple and Exeter. The team consists of a project manager; two farm advisory officers; one water resource advisory officer; and three part time community outreach officers. This has been complemented by employing a local community interest company providing woodland advice.

In addition, some parts of the project are delivered by partner organisations. Further actions within the catchment have developed during the life of the NIA, adding value and enhancing the original business plan for the project further.

This report summarises the progress and learning from Northern Devon NIA for the period April 2012 to March 2015. It is intended as a 'taking stock' of project outputs, a sharing of the project's experiences so far, and an indicator of the direction of this NIA through to 2020 and beyond.



The NIA staff team and students

NIA partnership

The NIA partnership includes charities, statutory agencies, local authorities and businesses, with a wide range of skills and experience. The project is led by Devon Wildlife Trust, and falls within the remit of the North Devon Biosphere Partnership.

Partners include:

Beaford Arts
Butterfly Conservation
Devon Biodiversity Records Centre
Devon County Council
Devon Wildlife Trust
Environment Agency
Forestry Commission
Met Office

Mole Valley Farmers
Natural England
North Devon UNESCO Biosphere
Plymouth University
Torridge District Council
University of Exeter
Woodland Trust

The NIA Steering Group and project team are supported by five NIA Forums, bringing together local expertise and experience on issues of woodlands, community, research and monitoring, landowners and advice provision.

Further details, updates, links and references can be found on the NIA's website: www.northerndevonnia.org

“The Northern Devon Nature Improvement Area is a project that all the partners are strongly committed to and are proud to be associated with. We firmly believe that this is an initiative that really can make a lasting difference.”

NIA business plan

Objective 1: Develop a more robust and coherent Torridge catchment ecosystem

The NIA has worked towards the following outcomes for 2015

A more coherent terrestrial ecosystem will be created, securing the milestone of 75% of all terrestrial priority habitats in favourable condition, with Culm grassland, wetland and woodland as the main

focus. Flagship species populations will be more robust and better able to cope with the threats posed by climate change.

Restoring existing wildlife habitat

Up to March 2015, landowners working with the NIA restored 1487 ha of culm grassland and other grassland habitats, 106 km of hedgerow and 19 ha of undermanaged broadleaved woodland. The project targeted existing wildlife sites and worked with landowners to bring sites back into sympathetic management.

Most restoration has been achieved through grant schemes on private land: 21 Higher Level Stewardship schemes, 38 capital works schemes, 35 ELS / OELS schemes, 45 England Woodland Grant Schemes, and 22 small capital grants funded by Devon County Council and the Environment Agency.

Often it is the lack of appropriate grazing animals, or suitable machinery, that prevents Culm grassland restoration. During this period, with the help of our sister project Working Wetlands, we reinstated favourable grazing on 76 Culm grassland sites, and improved site condition using the Devon Wildlife Trust machinery ring in 133 cases.

The project team assessed the condition of 92 County Wildlife Sites and identified 12 new sites.



Photo, Kevin New

Creating new wildlife habitat

To March 2015 the NIA achieved 49 ha of wetland and 13 ha of grassland re-creation (change of land use), and initiated 19 ha of woodland planting, although our targets are far higher. This reflects the lack of grant available for major works, and the long term commitment required from landowners.

Low-cost methods for re-creating species-rich grassland, using green hay and wildflower seed from high quality sites, have been used with good initial results.

Action for key species

The NIA has established a better picture of the status of our two key species: the marsh fritillary and the freshwater pearl mussel.

- Survey of marsh fritillary butterflies and web counts has revealed healthy populations on the majority of previous sites, plus 13 new sites found.
- Survey of known freshwater pearl mussel sites revealed an estimate of 2000 individuals (more than previously thought), but none of them below about 50 years old. Evidence suggests no breeding is occurring.



Marsh fritillary. Photo, Chris Root



Freshwater pearl mussel



Hatherleigh Moor

Case study

The NIA team, Hatherleigh Commoners Association and Natural England worked together to secure Higher Level Stewardship Scheme funding on Hatherleigh Moor, a 160ha common with large areas of Culm grassland. The funding will secure sensitive grazing and management of the site for ten years, encouraging a broad range of

wild flower species to become more widely established. The moor links nicely with other areas of Culm grassland, and the scheme will aid the recovery of many important species, such as curlew and marsh fritillary. The moor is a popular site with the local community who will benefit from these works.

Next steps

The NIA will continue to target its work improving and connecting existing wildlife habitat, and where possible creating new wetlands and woodlands. Any further habitat restoration or re-creation we achieve will be largely dependent on available funding.

We will continue monitoring marsh fritillary and how it is benefiting from Culm grassland restoration, and work to establish whether any part of the Torridge has water clean enough to sustain breeding populations of re-introduced mussels. A new freshwater Pearl Mussel project, funded by Biffa Award, is part of the next phase of the NIA.

Challenges and learning

- In order to achieve Lawton's vision, significant Rural Development Plan grant must be available for landowners to support the restoration and re-creation of habitat, and to sustain the changes made. The Countryside Stewardship scheme, together with associated targeting and support from advisors, will largely determine the amount of habitat restoration and creation that can be achieved after 2015.
- Habitat improvements, particularly habitat re-creation or projects with complex land tenure, can take many years to bring to fruition, and sustained advisory and practical support is required.
- Long term survey programmes need to be sustained to detect real trends in species populations. Ongoing monitoring of wildlife habitat can be built into projects such as the NIA to ensure that data is constantly reviewed.

"The weed-wiping that the Northern Devon NIA team helped me with has been hugely valuable. The soft rush has really been knocked back, and there are many more wild flowers in the fields this year than I have noticed previously."

Rupert Weatherall, local landowner

Objective 2: Realise the Torridge catchment ecosystem's potential to deliver high quality ecosystem services

The NIA has worked toward the following outcomes for 2015

Habitat restoration and re-creation will enable carbon sequestration in the range of 3,000 tonnes over the first three years of the project.

There will be a 20% reduction in nitrate application by 20% of farms receiving support and advice. Strategically targeted land adjacent to 60km of watercourse will be brought into favourable management by the NIA.

Riverside land and water management

Sympathetic management of land adjacent to the river, and restoration / re-creation of wildlife habitats, can help to manage water quality and water quantity (contributing to the management of flood risk). Through working with landowners the NIA has so far positively influenced land management adjacent to 96 km of the river Torridge, exceeding our 2015 target.

We have used small capital grant scheme funding provided by Devon County Council to target works alleviating flood risk, such as riverside planting and fencing, and additional floodplain woodland planting grant provided by the Environment Agency.

The 'Proof of Concept' project, a partnership between Devon Wildlife Trust and Exeter University, has been measuring the water holding capacity of Culm grassland compared to intensive farmland. Initial results suggest that Culm grassland is up to five times more effective than intensive grassland at holding water.



Surveying for freshwater pearl mussels

Action to improve water quality

Using Environment Agency funding, the NIA has purchased two soil aerators to lend to landowners. These machines are designed to manage improved pastures by relieving soil compaction and allowing water, oxygen and nutrients to penetrate deeper into the soil, so reducing runoff and subsequent pollution. Relieving soil compaction makes good business sense as the grass crop will be better, due to enhanced root development and nutrient take-up.

These machines have been made available on loan to farmers and landowners who live within the NIA project area. Takeup so far has been very positive.

Working with Natural England's Catchment Sensitive Farming programme, and with funding from the Environment Agency, our water resources advisor has targeted Water Framework Directive priority sub-catchments to the south of the NIA for resource protection advice and Catchment Sensitive Farming grants. An estimated 65 schemes and £650,000 funding have been delivered so far.

The NIA has also assisted with an EA pilot scheme on capital works to help alleviate diffuse pollution in selected catchments.



Soil aeration demonstration

Case study

Ed Strawbridge is a dairy farmer near Beaford. Over the last year he has used the NIA's two soil aerators, on loan. These machines are designed to relieve compaction in soils, a problem all too common after the prolonged rain of 2012. The result is better drainage, improved soil condition and better grass growth, as well as a reduced

risk of diffuse pollution. Ed said: "Since using the aerators I have noticed a significant difference in the quantity of grass growth, as well as seeing less water sitting on the surface of fields. I would recommend using these machines as they will improve the condition of your soil."

Next steps

The NIA will continue to provide water quality advice to landowners through our work with the local CSF Strategic Partnership and the Country Stewardship scheme. This will be targeted at specific failing sub-catchments as determined by the Environment Agency and Natural England.

We will continue to influence riverside habitats and target the use of small capital grants on flood risk, and loan soil aerators to landowners across the Torridge catchment.

Challenges and learning

- Landowners usually seek advice on resource protection to ensure compliance with regulation, save money or improve their infrastructure. NIA advisors have often found it challenging to integrate this into a whole farm environmental approach including habitats.
- Targeting of the Catchment Sensitive Farming scheme is inevitably focused on the highest priority sub-catchments, but many measures are required throughout the catchment. Without financial incentive or stronger regulation, farmers are less likely to make water quality improvements to their farm, however much they may be required.
- Soil aerators have helped us provide advice to landowners who otherwise would not see environmental improvement as relevant to them.
- Capital grants for small projects are an essential part of the NIA's toolkit.
- Clearer availability of data and clearer messages through Defra's Catchment Based Approach will be crucial to raise awareness of water quality issues and their causes: we have found that awareness among landowners is generally low.

"The results of our monitoring programme highlight the huge potential that unimproved grasslands and wet woodlands have to mitigate flooding in areas that are currently dominated by intensively-managed grasslands."

**Professor Richard Brazier,
Exeter University**

Objective 3: Enable communities to understand and value the role of nature in delivering a range of ecosystem services, through active participation and engagement

The NIA has worked toward the following outcomes for 2015

There will be increased understanding within the NIA and beyond of the crucial interconnections between local people and their environment.

Local communities will be equipped and able to take action to conserve and protect the natural world around them.

Education

52 school groups have so far been taken out on site to experience the natural environment at first hand, including use of the new DWT reserve at Meeth, visits to farms, and work with 'Giants in the Forest' sculptures on the Tarka Trail. Primary school curriculum materials on ecosystem services have been developed and used by schools across the NIA.

The NIA has hosted three full time six-month undergraduate placements from Plymouth University each year, developing strong connections with their Conservation Biology course and many relevant fieldwork projects which have complemented the NIA's work. This has been funded through the Holly Hill Trust.

Community Outreach

The NIA team has delivered over 150 community events so far, including walks, talks, agricultural shows and fairs focusing on the many important aspects of the NIA. A number of different activities have been developed for these audiences, including maps, displays on the landscape approach, quizzes on woodfuel and Ecosystem Services Jenga.

Parish action for the environment

Over 80% of the NIA area has now been covered by 60 Parish Biodiversity Audits through our work with Devon Biodiversity Records Centre. 15 parishes have started environmental projects, with at least 20 community 'pathfinders' contributing major energy and time to their local projects. We have helped to establish two community woodlands in the south of the NIA and two potential new Local Nature Reserves.

Arts programmes

Beaford Arts, the NIA's arts partner, has developed a number of interactive community arts initiatives based around NIA objectives. In November 2012 Terje Isungset, a musician from Norway who plays instruments made out of glacier ice, played chimes made of frozen river Torridge water by a volunteer, at his performance in Appledore.

A Devon theatre company, Burn the Curtain, were commissioned by Beaford Arts to develop a new show for families on their local environment, 'The Bureau of Extraordinary Survey,' held in Buckland Brewer and Shebbear during autumn 2013. Another company, China Plate, produced a theatre piece called 'The Common'; holding three shows in the winter of 2014-15 before touring other NIAs.



Ice music performance



Performance of 'The Common'



Bradworthy school tree planting

Case study

"We previously ran a pond dipping day at the pond in support of the Northern Devon Nature Improvement Area (NIA) taking place within the river Torridge catchment as part of this year's Hatherleigh Festival, and realised just how serious the spread of Parrot's Feather had

become. We are pleased to be working with the NIA and other groups again to do something about it".

Barrie Lewis, Brandis Corner Wildlife Group talking about parrots feather removal at Hatherleigh pond, September 2013

Volunteering and Citizen Science

7 Citizen Science projects and 36 biodiversity volunteer tasks have been held so far, including hedge laying, invasive parrot's feather clearance, survey and water quality monitoring. Over 3100 volunteer hours have been recorded.

Cultural Ecosystem Services

In 2013 the University of Exeter delivered a study on Cultural Ecosystem Services in three NIA parishes, Hatherleigh, Meeth and Merton, with a questionnaire to residents followed up by workshops on positive and negative perceptions and aspects of the local environment.



Riverfly Training Day

Next steps

The NIA will continue to develop a range of community outreach activities, with a focus on schools and parishes, and supporting Beaford Arts. We will increasingly use media such as websites, film and mobile technology to enhance our projects.

We hope to monitor local perceptions of cultural ecosystems through follow up work with Exeter University.



Challenges and learning

- Partnership work in this area has been inspiring. Beaford Arts' efforts show what can be done if the ecosystems approach is used creatively by a strong community organisation, bringing in new perspectives that develop the remit and the reach of the NIA.
- A wide range of community outreach activities take a great deal of organisation, co-ordination and support, requiring additional staff resource to make it work.
- Local knowledge of individuals and parishes, and contacts, take a long time to work up and develop, particularly in a sparsely populated area like the NIA.
- Research so far has shown that access to natural habitats at the parish level, and more general access to the river, are extremely limited for many people in the Torridge catchment, and that they would like to see access increased.
- There is a distinct need for a 'base' in the NIA for educational and community activities, and Meeth nature reserve will provide some of this resource in the future. There may be further potential for some areas of common land in this respect.

The activities forced the children to look closely at the environment.

They were obliged to be creative and to respond to questions that required them to think deeply and to develop responses. They also really responded to creeping up the bank to see all the dragon and damsel flies.

**Beaford Primary,
following a school habitat visit, June 2013**

Objective 4: Provide an integrated and co-ordinated advisory service to landowners

The NIA has worked towards the following outcomes for 2015

There is efficient and effective provision of advice to landowners through better co-ordination and integration between advisors. Expertise and resources are used to maximum effect in support of project targets for habitat restoration and re-creation, and ecosystem

service delivery. There is better co-ordination and cooperation between landowners; and there is more effective use of, and added value to, RDPE schemes.

Advisory visits and the whole farm approach

The NIA team continues to exceed targets for landowner advisory visits every quarter. By March 2015 the NIA had undertaken 1012 site visits to 276 different farms, covering approximately 21% of the Torridge catchment. NIA advisory staff have used and developed a 'first stop shop' approach to integrated advice, including signposting to other specialist advisors when required. The advisors have developed good working relationships with landowners from initial visits through to grant applications, practical work and maintenance.

The NIA has promoted its advisory service through media, marketplace events, and landowner networks such as Mole Valley Farmers and DWT's Culm Connections newsletter. We also proactively target landowners in key areas depending on grants and resources available.

Workshops for landowners

Workshops are an important and informal way of sharing expertise between advisors and landowners, allowing debate and often showcasing particular techniques or management issues. The NIA has delivered 24 habitat management and restoration workshops and 11 resource protection workshops. Most have been well attended by landowners, and topics have ranged from deer management to swailing to specialist machinery use and soil protection.



Case study

In the winter of 2013-14, the NIA ran a number of workshops and meetings about woodland management. Topics included best practice for planting new woodlands; the value of woodfuel; grey squirrel control; managing woodlands for wildlife; woodland access for

woodfuel; and the potential of woodfuel from hedgerows. The events stimulated lively debate, generated new contacts for advisory visits, and helped the NIA and landowners to explore some very real challenges and opportunities for woodlands in the catchment.



Southern marsh orchids. Photo, Kevin New

Grant schemes and added value

Grant schemes are undoubtedly essential in achieving environmental outcomes, but they also provide significant financial benefit for landowners. To date the NIA has raised an estimated £3.7 million for environmental improvements by landowners through grant schemes.

Co-ordination of advisory provision

There are more than 50 land management advisors in north Devon covering a variety of issues. The Culm Advisors' Group has proved to be a good mechanism to share experience and information, and stimulate debate, between advisors. The NIA has also run workshops and training for advisors including water quality training from the Environment Agency and County Wildlife Site assessment from Devon Biodiversity Records Centre.

Next steps

We will continue to develop our 'first stop shop' model of advisory provision and signposting, and develop workshops for advisors to share expertise and diversify their skills.

As the Countryside Stewardship scheme and Water Framework Directive delivery models develop, we will evaluate how our advisory service can evolve accordingly, and develop in a way which broadens the NIA's involvement with farm businesses and the local landowning community.

Challenges and learning

- The numerous land management grant schemes available, led by different organisations, often have very contrasting priorities and cultures. The NIA has acted to some extent as a 'broker' for these in our search for an integrated approach. This has been challenging at times, particularly in the debate over grassland vs woodland, or in connecting water quality with land use management.
- Grant availability, as well as an understanding of the impact of proposals on the farm business, is crucial to enable landowners to deliver habitat improvements, and to secure commitment to their maintenance.
- Technical advisory support for landowners is essential, not only to secure habitat in good management, but also throughout the life of the grant scheme to ensure successful implementation and maintenance of habitat works.
- The NIA has worked with a wide variety of landowners but we are aware there are a number of commercial farmers who are less concerned with environmental matters, yet hold significant land, and sway, within the catchment. A more encouraging approach to sustainable environmental management from farming organisations would help here.
- Most advisors tend to specialise in one or two subject areas, and they are not experienced in taking an integrated or whole farm approach – therefore only considering one aspect, e.g. Culm grassland, woodland, nutrient, or survey, when going on-farm. The NIA's first stop shop goes some way to address this. Even better communication / signposting from other advisors is also required, as well as training to broaden the skills base of advisors across the area.

"Thank you so much for a fabulous short course; I really enjoyed myself and I certainly am able to look at hedges with an improved understanding. I thoroughly enjoyed learning a new skill and having an opportunity to share time with others in a mutual task. Excellent."

Humphrey Pullar, local landowner

Objective 5: Realise the benefits of ecosystem services by supporting supply and demand in local markets

The NIA has worked towards the following outcomes in 2015

The Upstream Thinking model is embedded in project delivery to secure water quality and water resource management across the Torridge catchment. Development of a local woodland economy is supported by exploring and supporting approaches for woodfuel, wood products, and carbon sequestration.

The value of the carbon market is exploited and promoted as a new method for securing investment in woodlands both by landowners and private companies. Through demonstration and practical action, landowners are more aware of the financial benefits of investing in woodland creation and management.

Delivering the potential of ecosystem services

South West Water's Upstream Thinking programme has contributed to the Torridge through funding the machinery and grazing rings operated by DWT's Working Wetlands project, enabling wetland restoration leading to improved water quality and water resource management.

As with much of England, nearly 60% of the NIA's woodland is undermanaged. Good woodland management and subsequent marketing of woodland products, such as woodfuel, will bring benefits to the local economy and improve local biodiversity. To date 168 advisory visits to woodland have been completed to 112 different holdings, and the NIA has helped approximately 19 ha of woodland back into management. We have supported DCC's Ward Forester initiative to bring woodlands back into management through promoting local agents to bring small woodland owners together. We have also supported the production of 13 new woodland management plans.

With Devon Hedge Group, and workshops with landowners, we have investigated the connections between hedgerow management and woodfuel, and whether this could be economically viable.

Information and training

The NIA has delivered 16 woodland management and woodfuel events for landowners to date.

The Forestry Commission has provided training for advisors and partners on the Woodland Carbon Code, but suitable woodland planting projects have not yet been achieved.

Damage from grey squirrels poses a serious threat to the viability of establishing productive woodlands in the NIA, alongside deer damage. A Plymouth University undergraduate has undertaken a local study on the extent of squirrel damage across the area.



*Woodland management
landowner workshop*



Case study

"The NIA advisors helped me come up with a really good planting scheme and get all the paperwork approved before the Forestry Commission deadline. They also ran a great workshop on how to implement the planting scheme and look after the trees once they

were planted. I really appreciate knowing that they are always available to answer any questions. I'm looking forward to seeing my woodland develop and to harvesting the hazel coppice in due course."

Kay Callis, local landowner, 1.7 hectares of new woodland planted

Next steps

While the NIA's initial focus was on encouraging new woodland creation, as the NIA has progressed our focus has increasingly been to bring the NIA's woodlands more into productive management.

Fully utilising the resource, for example by supplying the woodfuel market, will realise the full benefits of woodlands to the rural economy as well as the local environment. Development of a broader initiative to link with the Biosphere's Energy Strategy and the Local Enterprise Partnership is an obvious next step for a future project.

Challenges and learning

- Our woodland work was set back at the beginning of the project due to staff loss. Instead of re-recruiting a staff member, we took the opportunity to employ a local community interest company, Trees and Land, who have significant local knowledge, to deliver our woodland work. This has the advantage of supporting local business and expertise, but is more challenging to integrate into the wider work of the staff team and partnership.
- The NIA's woodland creation target is ambitious. Grant availability and level will determine whether landowners are willing to create new broadleaved woodland.
- Much work remains to be done on the various parts of the market chain between broadleaved woodland management and woodfuel supply to consumers.
- The issues of deer and squirrel damage, plus tree diseases such as ash dieback, bring additional challenges to meeting the NIA's woodland planting and woodland management aspirations.

"Commercial management of broadleaved woodland in north Devon has its challenges – deer and squirrel damage, and tree diseases. But any woodland area can be managed well for amenity and wildlife, as well as the financial value of its products."

John Wilding MBE, Clinton Devon Estates

The ecosystems approach: making it happen

An ecosystems approach is a holistic and inclusive approach to looking after the natural environment -

Ecosystems Knowledge Network

The Northern Devon NIA is more than the sum of its parts. Taking a holistic, joined-up approach to the environment brings many benefits. It can mean the physical connecting of habitats across the Torridge catchment; championing that an individual piece of land can deliver multiple benefits; strengthening the connections between people and the natural world; increasing the web of support, expertise and

delivery across the partnership; and starting to integrate the link between ecosystems and the services they provide into wider society.

The NIA partnership has already learned a great deal in our exploration of working at the landscape scale. Here is some of our learning so far.



Connections between habitats

The first steps to achieving a landscape that is genuinely 'bigger, better, more and joined' are to identify existing habitats and potential connections. By identifying priority areas for action, resources can be targeted to achieve habitat restoration and re-creation on a strategic basis.

Inevitably, the NIA has found that our ability to geographically target habitats is heavily influenced by two related factors: grant available for habitat works, and willingness from landowners. We have worked closely with Devon Biodiversity Record Centre, the NIA's Woodland Forum and others to identify priority areas, and made good progress on delivery within the opportunities available.

Achieving a truly joined-up landscape is a long game, made more complex by the fact that each grant scheme works on a different set of priorities and target areas. Sometimes conflict has arisen between the priorities of different partner organisations. When is scrubbed up wetland potential restored Culm grassland, and when is it developing wet woodland? There are no right answers here, only decisions on a case-by-case basis in the context of the wider landscape.

The NIA has helped develop the Habitat Resilience Tool, an online resource that helps us understand the resilience of current wildlife habitat across Devon, on the basis of fragmentation, management, site designation status, topography and climate. It will be invaluable to NIA partners in developing increasingly focused targeting of advice with fewer resources in the future. Find it at <http://www.metoffice.gov.uk/hadobs/climviz/Culm/>



Public event at Meeth Quarry nature reserve

Connections between organisations

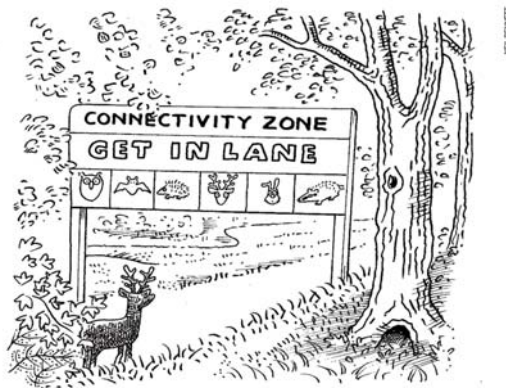
The NIA partnership is a strong and dynamic one, where a great many partner organisations are directly involved in the delivery of the NIA's outputs as well as its governance. This is crucial for a project that is in a process of continual development. The Advisory Forum and the Research and Monitoring Forum have added to partnership working in these two areas. The NIA has benefitted from a number of key individuals who have been working in the Culm for decades, and whose local knowledge and expertise is second to none.

The Biosphere Reserve, in providing a much broader partnership of place and interest on the environment, has been a useful 'umbrella' partnership within which the NIA can deliver for the Torridge. Other NIA partners have broadened the remit and thinking of the partnership: a good example is Beaford Arts, who have not been afraid to take innovative arts approaches to the environment.

Connections within the community

The NIA's Community Outreach programme has already delivered impressive outputs; however, measurement of outcomes for this type of work is more challenging, and developing initiatives with communities takes time to show results. Identifying and accessing 'pathfinders' (champions) in communities of place or interest is key to developing meaningful initiatives at the parish level that have true buy-in, and this has taken longer than anticipated.

The local landowning community is key to the NIA's work, but our Landowners' Forum has been slow to get off the ground. The NIA's intention is to support a community of farmers and landowners who will promote and support environmental action to their contemporaries, and whilst there are many individuals who support this, the group has not found a focus yet. In the meantime, NIA advisors have made efforts to engage with more large-scale, commercial farmers, where water quality and machinery loan has been a useful way of establishing connection.



Project delivery, added value and development

To the end of March 2015, the total cost of the Northern Devon NIA project has been £1,075,339, with £278,114 in addition through in-kind partner contributions in line with the project's business plan. The role of the NIA's lead partner, Devon Wildlife Trust, has been crucial in driving forward delivery on a day to day basis, and the NIA team has enjoyed strong support from staff and volunteers in the Trust. The use of established systems in DWT for managing people, contracts, finances, data, volunteering and events has assisted in the smooth running of the project and ensured that more staff time can be spent on delivery and development. Also crucial has been the resourcing of a team with the right skills, local experience and approach to meet the NIA's targets.

Landscape scale delivery has worked well so far, but it has required both a dedicated staff team, and an actively involved partnership. The active involvement of partner organisations is heavily influenced by the culture and capacity of the organisation in question and the tenacity and commitment of the individuals involved. We could not have 'hit the ground running' with the NIA, and achieved so much in a short timescale, without the momentum and achievements of existing projects such as DWT's Working Wetlands.

Additional projects that have added to NIA delivery since the beginning of the project have included DWT's purchase and restoration of Meeth nature reserve, the Biffa Award Flagship landscape project through DWT, the Cultural Ecosystem Services study by Exeter University and Beaford Art's projects. To date, the NIA has attracted over £600,000 through added value projects.

The NIA has recorded progress using Defra's NIA Monitoring and Evaluation Framework, and our own local systems. We work closely with Devon Biodiversity Records Centre to make sure this data is available at local and national levels. However, the figures quoted represent the work of the NIA staff team only. Outputs from 'core' work of partner organisations are not currently recorded through the project structure, and BARS (the Biodiversity Action Recording System) is not used by many local partners. This issue could be resolved in project design in the future, but will require a deal more co-ordination to achieve.



Otter. Photo, Matt Whorlow

Thanks

A huge thank-you to everyone who has contributed to the Northern Devon NIA's successes so far: landowners and managers, staff, volunteers, partner organisations, parishes, schools, surveyors, scientists, artists, the list goes on..... this is your NIA and it couldn't happen without you!

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www.gov.uk/government/publications/nature-improvement-areas-improved-ecological-networks

Next steps: 2015 and beyond

Defra funding has underpinned the NIA's work until the end of March 2015, but the NIA partnership is securing funding from different sources after that time. A Business Plan for 2015 - 20 has been developed by the NIA Steering Group. Projects are now being developed by DWT and other project partners towards the delivery of the Business Plan.

Ambitions on the NIA Business Plan for 2015 - 20 include:

- Continuing to achieve a connected and thriving natural environment in the river Torridge catchment
- Strengthening connections between local communities of place and their environment
- Realising connections between ecosystem services and the local economy

This project has been supported by Defra, DCLG, Environment Agency, Forestry Commission and Natural England

