



Natural Devon

Devon Local Nature Partnership



Marsh fritillary. Photo, Chris Root

The State of Devon's Nature 2013

This is a summary of the State of Devon's Nature, a report commissioned by Natural Devon (Devon's Local Nature Partnership). Its publication marks a very important moment. For the first time ever we have a stock take of some of Devon's priority species and the habitats in which they live.

The report is a reminder of the value of our natural heritage. Devon's wildlife and wildlife-rich places are very special and for many people one of the main reasons for choosing to live and work here.

Devon's nature is amazing...

Devon supports a wonderful diversity of landscapes ranging from heaths and moorlands, to ancient oak woodlands, sand dunes and wet acid (Culm) grasslands.

Devon is the only county which can boast two coastlines. Its marine and coastal habitats include sea caves, estuary saltmarshes, reefs, sandy beaches and rocky shores.

Devon is a vital home to globally threatened species including European eel, marsh fritillary butterfly, shore dock, Balearic shearwater, pink sea fan coral and freshwater pearl mussel. Devon is the only place on the planet in which some species such as the Lundy cabbage flea beetle and the horrid ground weaver spider can be found.

Devon's nature underpins our lives...

Nature provides us with vital services including crop pollination, flood alleviation and clean water.

Nature provides us with the space and recreational opportunities to be healthier and happier people.

Nature is a draw to visitors who provide a crucial boost to local economies.

The State of Devon's Nature full report can be found at www.naturaldevon.org.uk



What state is Devon's nature in?

The county's wildlife continues to be dazzling in its diversity and awe-inspiring in its beauty. However, *The State of Devon's Nature* contains findings which should concern us.

Over recent decades many of Devon's habitats and species have experienced loss and decline. Much of what is unique and rich about Devon's nature remains, but overall our natural heritage needs urgent care and attention.

The State of Devon's Nature pulls together information on a number of Devon's habitats and species which have been identified for priority conservation action. These are some of the headlines:

Green = generally doing well

Mudflats
Upland valley mires
Otter
Dormouse



Otters are thriving in Devon. Photo, Matt Whorlow

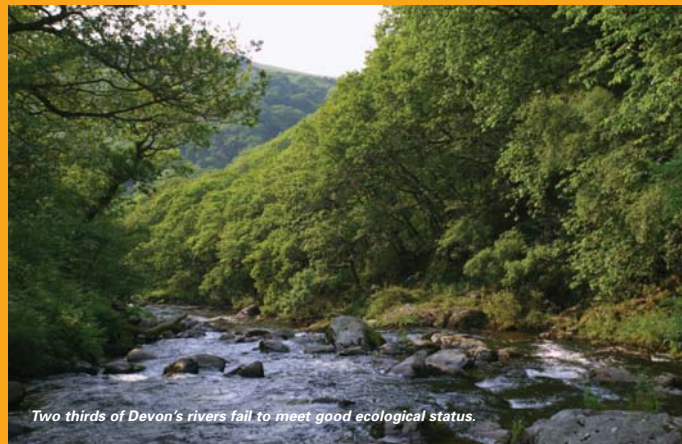


Devon's estuary mudflats continue to provide food and shelter to many species. Photo, Nigel Hicks

Amber = doing OK, but facing challenges

Broadleaved woodland
Rivers
Coastal grasslands
Heathlands
Hedgerows

Barn owl
Cirl bunting
Great crested newt
Southern damselfly
Pink sea fan coral



Two thirds of Devon's rivers fail to meet good ecological status.

The majority of Devon's reefs are now protected from damaging fishing practices. Photo, Paul Naylor



Great crested newt habitat is still being lost and degraded. Photo, David Kilbey

Red = face significant challenges

(* = in danger of extinction)

Coastal sand dunes

Lowland meadows

Lowland wetlands

Water vole*

Curlew (breeding populations)*

Ring ouzel*

Marsh and pearl-bordered fritillary butterflies

High brown fritillary butterfly*

White-clawed crayfish*

Freshwater pearl mussel*

Narrow-headed ant*

Field gentian*

*The pearl-bordered fritillary: one of the most threatened butterflies in Devon.
Photo, Chris Root*



Sand dunes are being lost to scrub encroachment and sea level rise. Photo, Nigel Hicks



Breeding curlew are extinct on Exmoor and threatened elsewhere. Photo, Neil Bygrave

Losses and returns

Known extinctions in Devon since 1998 include:

water vole, orange upperwing moth, Irish ladies' tresses orchid.

Species re-introduced to Devon since 1998 include:

water vole, large blue butterfly (reintroduction failed) and smooth snake.



*Water voles have been re-introduced on the Rivers Tale and Axe since 2004.
Photo, Hugh Clark*

Key Devon habitats and their wildlife

**Many of Devon's habitats are small and fragmented.
Their health is threatened due to a range of issues including:**

- Invasive species and disease
- Lack of appropriate management
- Pollution and nutrient enrichment
- Climate change
- Continued habitat loss and fragmentation

Grasslands, wetlands and heathlands

With the support of agri-environment grants, Devon's upland wetlands and heathlands are being better-managed by farmers. However, large areas fail to support the full range of wildlife that they once did. Many of Devon's lowland grasslands are under-grazed and threatened by scrub encroachment.

Grassland, wetland and heathland wildlife:

- Exmoor and Dartmoor continue to support regionally important numbers of birds including dunlin and snipe
- Other upland birds are struggling: ring ouzel, lapwing and red grouse are extinct on Exmoor
- The silver-studded blue butterfly and southern damselfly are declining nationally, but Devon's populations are increasing where management is being undertaken
- North west Devon's acid Culm grasslands remain one of Western Europe's last strongholds for the marsh fritillary butterfly

Rivers

Only around a third of Devon's rivers are in good condition. Many are struggling to support a diverse range of wildlife because of pollution, barriers (including weirs, culverts and channels) and invasive species.

River wildlife:

- Poor water quality has contributed to the decline of the globally threatened freshwater pearl mussel
- Predation from introduced American mink and the loss of bankside habitat led to the extinction of water voles in Devon during the early 2000s. Re-introductions have recently taken place but their future remains uncertain
- Better controls on pesticide use and improvements in river habitat means that otters are once again widespread in Devon

Coast and marine

The legislative protection of marine environments still falls short of that enjoyed by many of Devon's landscapes. Damaging fishing practices (such as bottom-trawling), over fishing, climate change and pollution remain specific challenges to the health of Devon's sea life.

The county's coastal habitats are threatened by a lack of grazing leading to scrub encroachment. Coastal squeeze (the loss of coastal habitats because of sea-level rise) places sand dunes and saltmarshes under greater pressure.

Coast and marine wildlife:

- The pink sea fan coral is a globally threatened species but is now protected against commercial fishing activities around Lundy and in Lyme Bay
- South Devon's cliffs and cliff tops remain as some of the UK's most important sites for solitary bees and other insects including short-necked and Mediterranean oil beetles

Woodland

Devon's woodlands remain broadly static in size, but they face challenges. Invasive species (especially rhododendron and cherry laurel), lack of management and large deer and grey squirrel populations threaten to undermine the health of native woodlands. Diseases such as ash dieback are an increasing threat.

A growing interest in woodfuels offers new opportunities for sustainable economic management which will improve woodlands for wildlife.

Woodland wildlife:

- Many of Devon's woodland birds are declining including wood warblers, marsh tits, willow warblers and redpolls
- Devon's woodlands remain a stronghold for dormice

Improving the state of Devon's nature

Devon's nature is not a lost cause.

Over the last decade a series of key initiatives have shown what can be done to turn the tide.



Management demonstration event led by Devon Wildlife Trust.

Upstream Thinking: a South West Water funded initiative which is improving wildlife habitat, water quality and water storage capacity in Dartmoor, Exmoor and the Culm Measures. A shining example of how commercial business, conservation land managers and farmers are working in partnership.

Cirl buntings: Advice and agri-environment grants provided to South Devon farmers have improved habitat for cirl buntings and other farmland wildlife. Numbers of cirl bunting territories have increased from 118 in 1989 to 862 in 2009.

Lundy Island: the seas around the island are designated as both a No Take Zone (2003) and a Marine Conservation Zone (2010). This gives it a level of marine protection unique in Devon's waters. The benefits to wildlife have been dramatic; lobsters for example are five times more abundant and 9% larger in the un-fished zones. Manx shearwaters are successfully breeding again on Lundy since the eradication of rats in 2004.

Northern Devon Nature Improvement Area: one of 12 national landscape management pilots launched in 2012. The project is working with local communities and landowners to improve the quality of habitats and water in the River Torridge catchment.



The Devon Ward Forester project has helped restore woodland management. Photo, Kevin New

Woodlands: A number of projects have been restoring, enhancing and linking Devon's Ancient Woodlands, largely using Forestry Commission grants. The Devon Ward Forester project is bringing woodland owners together to improve the management and productivity of small woodlands.

Thanks to them

An army of willing volunteers means that Devon's wildlife and wild places are now better recorded and understood than ever before. The depth of data contained in *The State of Devon's Nature* stands as a tribute to these people who have given their time and expertise to search, spot, collect, collate and summarise.

Working together

The State of Devon's Nature shows that wildlife has many friends and advocates. The report is the collective work of an alliance of charities, statutory and non-statutory bodies. For a full list of participants see the full report at

www.naturaldevon.org.uk



Surveying dormouse nest boxes: one of the many expert tasks undertaken by volunteers. Photo, Tom Marshall

Let us know your views

Updates to *The State of Devon's Nature* are planned for coming years, with a full update planned every five years. If you have comments or information for future reports please email nature@devon.gov.uk