

B10 DIVERSITY

years

Isle of Wight Biodiversity
celebrating 10 years of local action



introduction

It's no secret that the wildlife and landscapes of the Isle of Wight are what sets the Island apart from all other English counties. The impressive chalk downs and cliffs are iconic symbols of our Island, and the antics of the red squirrels never fail to charm locals and visitors alike. The Isle of Wight's Biodiversity Partnership has now been working together to conserve features such as these for ten years – and we have much of which we can be proud.

I am particularly pleased that the Isle of Wight Council continues to chair the Biodiversity Partnership. It is right that the council takes a leading role in environmental matters, and we take this commitment seriously. Our Eco Island programme continues, and a sustainable future for nature and wildlife is rightly at the heart of it. As landowner, we care for some of the Island's best-loved Local Nature Reserves and countryside sites, but together with the many other organisations and landowners that make up the Biodiversity Partnership we can have a much wider influence here on the Island, regionally and nationally.

I am very pleased to introduce this book which sets out some of the Partnership's impressive achievements in protecting and enhancing animals, plants and the habitats they depend upon. It also makes clear that we have much more work to do, and that the need for this partnership is as strong now as it ever was. I hope that the next ten years will be no less successful.

Councillor Edward Giles
August 2009



10 years is a good time to take stock and to reassess the status of the Island's habitats and species. There have been a great many successes which we should celebrate, many of which are highlighted in this book.

Biodiversity

Biological diversity, or biodiversity, is the variety of life including plants, animals, humans; the habitats, communities and where they live; and the processes that keep ecosystems functioning.

Biodiversity is vital to our wellbeing and quality of life on the Island. A healthy and stable environment is not only central to economic prosperity but also to sustain a wonderful place to live, work and visit.

Biodiversity Action Plans

Biodiversity Action Plans are the response of the UK government to the Earth Summit held in Rio de Janeiro in 1992 where 150 countries committed themselves to conserve and sustain the variety of life on earth, and work to halt biodiversity loss by 2010.

The UK Biodiversity Action Plan describes the UK's biodiversity resource and presents a detailed plan for its protection. This national plan is

delivered through Local Biodiversity Action Plans (LBAPs), which are developed by partnerships identifying local priorities in order to achieve national targets.

During the last ten years, biodiversity has become more central to both government policy and public concern. Government grants for sensitive land management are beginning to result in gains for wildlife, and together with increased local government responsibilities including changes in planning policy, there are significant opportunities to improve biodiversity.

IW Biodiversity Partnership and Steering Group

In September 1999, the Isle of Wight Biodiversity Partnership, including representatives of conservation bodies, statutory agencies, local government and local groups, was set up. A steering group meets regularly to oversee the work. Partnership working enables us to consider how our achievements and challenges contribute towards the larger regional and national picture.

An audit and assessment of the biodiversity of the Island was published in July 2000 to provide baseline data. Subsequently a series of plans covering special habitats and species identified as priorities for action have been produced.

Monitoring Progress

We have targets set out for each of the priority habitats and species which can be found throughout the book.

Where you see the traffic lights:

Green indicates good progress has been made. 

Amber indicates moderate progress has been made. 

Red indicates poor progress has been made. 

Biodiversity Action Plans

The plans aim to protect and enhance habitats and wildlife by:

- Setting targets for how habitats and species populations can be maintained, improved and expanded.
- Assigning actions to partners to help achieve the targets.
- Recording what is being done to reach targets.
- Identifying what remains to be done so we can set up projects to deliver it.

BAP objectives

The Isle of Wight should be a place where plants, animals and habitats are conserved and enhanced, both for their own sake and as an integral part of our quality of life.

Coastal



By 2015 we aim to:

- Maintain around 50km of free-functioning maritime cliffs and slopes.
- Restore 1km of currently constrained maritime cliffs and slopes.

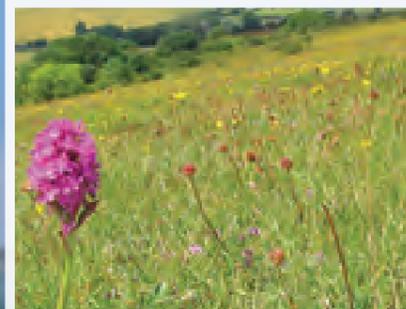
Wetlands



By 2015 we aim to:

- Maintain and restore our existing rivers and wetland habitats and reinstate additional wetland habitats from suitable floodplain land.
- We are currently working on quantifying our targets.

Chalk Grassland



By 2015 we aim to:

- Maintain around 650ha of chalk grassland.
- Restore 85% of currently degraded chalk grassland.
- Recreate chalk grassland from arable and species-poor grassland on chalk.

Estuaries



By 2015 we aim to:

- Maintain around 1050ha of estuarine habitats (mudflats, saltmarsh, sand dune, vegetated shingle and saline lagoons).
- Where possible, recreate estuarine habitats by coastal re-alignment.

Monitoring Progress



The Island is like a miniature version of south east England and has its fair share of the habitats characteristic of the region. In fact, it is unusually rich in species and habitats compared to similar areas on the mainland. The chalk grassland of the downs, the cliffs and slopes of the coasts and the estuaries are all important on a national and international scale.

Through the BAP Partnership, we monitor our progress in achieving the following objectives within each habitat and report annually on success and failures.

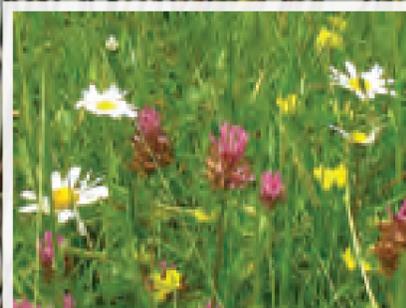
Heathland & Acid Grassland



By 2015 we aim to:

- Maintain around 190ha of acid grassland/heathland mosaic.
- Restore 85% of currently degraded acid grassland/heathland mosaic.
- Recreate acid grassland/heathland mosaic from suitable waste mineral sites.

Lowland Meadows



By 2015 we aim to:

- Maintain around 220ha of unimproved flower-rich meadows.
- Restore 85% of currently degraded meadows and recreate flower-rich meadows from arable and species-poor grassland.

Woodland



By 2015 we aim to:

- Protect all ancient woodland (around 1640ha).
- Manage and restore 85% of this resource.
- Restore unmanaged or inappropriately managed semi-natural broad-leaved woodland and recreate semi-natural broad-leaved woodland from arable and species-poor grassland.

Other Habitats



We also have other important intertidal and subtidal habitats. We need to ensure their long-term wellbeing and survival against the background of sea level rise, but at this stage we have not set ourselves targets for achieving these aims.

the last 10 years

2009 marks the 10th anniversary of the Isle of Wight Biodiversity Partnership. Much has been achieved during this time to improve our natural environment for both wildlife and the enjoyment of people who live or visit the Island. This page introduces some examples of projects where significant gains for biodiversity have been achieved.

Biodiversity Projects Officer



The Isle of Wight Biodiversity Partnership Steering Group meets quarterly and is hosted by the **Isle of Wight Council**. In 2008, thanks to funding from **Natural England**, it has been possible to employ a Biodiversity Projects Officer working on behalf of the partnership. As well as acting as secretariat for the Steering Group, this is enabling us to do more to promote biodiversity on the Island to wider audience.

Hampshire & Isle of Wight Wildlife Trust



The **Wildlife Trust** has grown on the Island from a single officer in 1999, to four permanent staff. Recently the 500th Island member was recruited.

The Trust's work includes:

- Managing six nature reserves, including new sites at Cranmore and Arreton.
- Forest Schools programme and WATCH for schools and younger people
- Involving volunteers in reserve management and NVQ qualifications, walks, talks and events.
- Advising farmers through the Living Landscapes project.
- Surveys of priority species.
- Special projects including IW Red Squirrel Project and Ryde Cemetery Project.

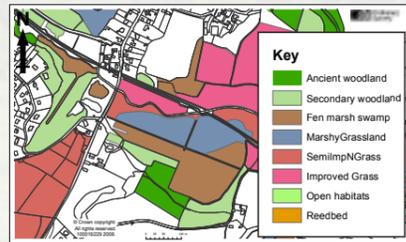
Information Gathering



There is an increasing demand for ecological information from developers, consultants, land managers and students. The collection, storage and analysis of accurate information over time enables us to see trends in the decline or spread of habitats and species, which can be related to factors such as land management, or climate change.

Habitat mapping, using a Geographic Information System (GIS) has been developed by the **Isle of Wight Council** parks and countryside section. The **Isle of Wight Natural History and Archaeological Society** is making major progress digitising species records. Both elements form the basis of developing the Local Records Centre which aims to provide a 'one-stop' service for enquiries about the Island's species and habitats.

There is also an annual recorders' conference, with talks and displays relating to recent recording projects plus the opportunity to share good practice.



Map: Habitat mapping

Area of Outstanding Natural Beauty



Over half of the Island is designated as an Area of Outstanding Natural Beauty (AONB) in recognition of the national importance of the quality and natural beauty of its landscape.

The Countryside and Rights of Way (CRoW) Act 2000, strengthened the level of protection for AONBs and increased the responsibilities of public bodies to improve the way the designated areas are managed.

In 2002 the **Isle of Wight AONB Partnership** was formed, an independent organisation to oversee and manage the conservation and enhancement of the AONB.

The first AONB Management Plan was launched in February 2004. Through successful delivery of the actions, the AONB has seen marked improvements in awareness and understanding of the designation.

Following an extensive review, the second plan 2009 to 2014 was launched on 1 May 2009. Its primary purpose is to ensure continuity and consistency of management of the designated landscape into the future.

Eco Island



Eco Island is the Island's Sustainable Community Strategy until 2020. With its social, economic and environmental elements, it aims to put the Island at the forefront of sustainable development and build stronger, healthier communities with more opportunities for local people.

There is a particular focus on reducing the Island's ecological footprint through lowering carbon emissions, water consumption, waste production and generating renewable energy.

The natural environment and its importance to our way of life, is the Island's major selling point and Eco Island recognises the need to conserve and enhance our surroundings and wildlife.

Amongst the first Eco Island activities are the development of new Local Nature Reserves, and projects demonstrating sustainable living in the AONB.

Delivery of Eco Island will be challenging with much to be done to create jobs and improve wages. There will be always be competing pressures on resources and the effects of climate change will increasingly influence our unique Island. However, Eco Island recognises that growth must not be achieved to the detriment of the environment.

Natural England



Natural England (formerly English Nature) is the independent body whose purpose is to protect and improve England's natural environment and encourage people to enjoy and get involved in their surroundings.

Island achievements over the past ten years have been:

- Over 95% of Sites of Special Scientific Interest (SSSI) are now in favourable or improving condition, ahead of the government's target of 2010.
- The south west coast SSSI has more than tripled in size resulting in 843ha of coastal land protected for nature conservation.
- Land at Cranmore has been designated SSSI to protect the reddish buff moth, found nowhere else in the country.
- Funding is provided to farmers and land managers through agri-environment grant schemes.
- Funding has been provided to other bodies to help purchase the RSPB reserve, employ a biodiversity projects officer, develop the local records centre, and commission research into the state of the livestock industry.

woodland

Woodland occupies around 11% of the Island and the total extent is relatively stable, with any losses offset by gains through new planting and natural regeneration.

Around 40% are on 'ancient' (pre 1600) woodland sites. These are often the richest in biodiversity. Although some 900ha of these retain their original character, a further 714ha have been replanted with conifers or non-native broadleaves. Many are gradually being restored by removing non-native species.

Pearl-bordered fritillary



KM

Woodland butterflies are indicators of well managed woodlands rich in biodiversity yet they are declining. For many species, these declines have been greatest in the south east.

On the Island, the nationally threatened pearl-bordered fritillary is confined to a tiny area within Parkhurst Forest. Ten years ago, it was widespread in the forest but it has since declined dramatically, due to a lack of suitable woodland management.

The **Forestry Commission** is looking to rectify this by implementing a programme of targeted ride widening and trackside management. Hopefully, it will be in the nick of time to save this beautiful butterfly from extinction.

Woodland bats



Recent advances in technology have enabled studies to be carried out on some of our rarest and most elusive woodland bats, by mist netting and radio tracking. A study over five years, carried out by bat expert Ian Davidson-Watts, has revealed that the Island is of national importance for its populations of Bechstein's and barbastelle bats.

JIGSAW Challenge



The **Forestry Commission** launched the JIGSAW Challenge grant scheme in 2001, contributing to sustainable forest management, and encouraging the expansion and connectivity of native woodlands through the planting of new trees. In total around 210ha of new woods were created over the five years through £819k grants. Many of these new woods are publicly accessible.

Over time, the new woodlands will form a significant part of the Island's landscape. They should also increase the area of woodland available for important species such as red squirrel, wood cricket, woodland butterflies and birds, reducing the isolation that these rarer species are experiencing.

Thanks to the success of the original JIGSAW scheme, the Forestry Commission launched a new JIGSAW Challenge scheme in 2009.

IW Forest Design Plan



The **Forestry Commission's** Forest Design Plans set out management proposals for the next thirty years for state woodlands. They aim to fulfil a number of objectives:

- Provide descriptions of the woodlands to show what they are like now.
- Show the process of deciding the vision for the long term future.
- Show how the woodlands will look in twenty years time.
- Show management proposals, in some detail for the first ten years, and in outline for the succeeding twenty years.

The Isle of Wight Forest Design Plan, which went out to public consultation in 2004 and 2005, is designed to ensure the state forests are managed in a sustainable manner providing social, economic and environmental benefits to the local community and visitors from further afield.

Briddlesford Woods



PTES

The **People's Trust for Endangered Species** own Briddlesford Woods, a mosaic of woodland copses, farmland and marshes bordering Wootton Creek. Over the past ten years:

- Coppicing has been reinstated to benefit red squirrels and dormice.
- 15ha of new woodland are being created to link isolated copses.
- 15ha of woodland and parkland have been opened to the public.
- Little Lynn Common is being opened up to encourage heathland regeneration.
- Six new field ponds have been created within the grazed meadows.
- The dormouse population continues to be monitored.
- The woods have been declared a Special Area of Conservation for their nationally important population of Bechstein's bat.

grassland & heathland

The survival of flower-rich grasslands and heathlands are dependant upon traditional management such as grazing by livestock and minimal or no use of fertilisers. These habitats have become scarce in today's modern countryside, and yet our chalk grassland has fared better than most habitats and is now one of the Island's special wildlife treasures.

Wight Quarries



The Wight Quarries Project, established in 2004, works to improve habitats and enhance wildlife on and around disused quarry sites, principally chalk grassland and heathland sites. Practical management improvements not only benefit biodiversity but provide education opportunities and recreation facilities for the local community.

Management work on the larger quarries of St. George's Down and Bleak Down and smaller sites such as Bully's Hill quarry and the Butterfly Walk on Brading Down have benefited from the Aggregates Levy Grants.

Partners: Isle of Wight Council, Wildlife Trust, Bardon Vectis, People's Trust for Endangered Species, Island 2000 Trust and Brading Town Council.

Neutral flower-rich grassland



Only small areas of species-rich unimproved neutral grassland survive on the Island. One of the best examples is looked after by the South East Reserves Forces' and Cadets' Association on behalf of the MOD Jersey Camp at Porchfield.

Although agri-environment grant schemes are helping to keep some sites under management, it is believed that many small and isolated sites are deteriorating through lack of management and becoming scrubbed over.

Heathland



Only fragments of heathland survive today. On Ventnor Downs, ideal grazing conditions have been created by the **National Trust** to allow the heathers and bilberry to thrive and spread. However, most remaining sites are small and unmanaged.

A partnership Heathland Restoration Programme led by the **Wildlife Trust** is working with the **Forestry Commission** to restore sites at Cranmore, Bouldnor Copse and Brighstone Forest through selective felling and vegetation management.

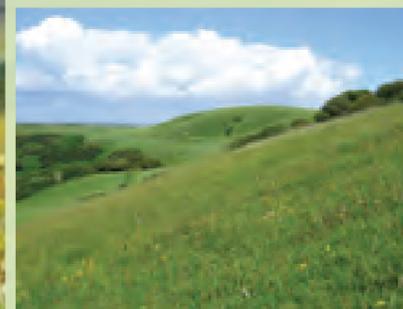
Duke of Burgundy



This small butterfly frequents scrubby grassland and sunny woodland clearings, typically in very low numbers. In recent years it has declined by 52% nationally.

On the Island, where it has always been scarce and local, butterfly watchers have failed to find it in recent years. At its main site at Rowridge, lack of management has resulted in chalk grassland becoming lost to scrub, crowding out the butterfly. There is no current management of this site.

Chalk Grassland



Chalk grassland is one of our most important and rich habitats. It is also one that has received the most management attention.

More than 85% of our chalk grassland is in favourable or recovering condition. More than 150ha of new chalk grassland are being created on ex-arable land.

Early Gentian



The early gentian is one of our special plants, restricted to well managed, high quality chalk grassland. It flowers during May and June in southern England and nowhere else in the world.

The Island has one of the largest populations anywhere and some sites are specially protected for the plant.

Studies have shown that populations can fluctuate wildly from year to year.

Wight Conservation



Wight Conservation owns and manages just over 400ha of grassland and heathland. Since the mid-1990s, a large-scale programme of clearance with re-introduction of appropriate grazing has been undertaken helping to restore species-rich habitats.

On Mottistone, Rowborough and Idlecombe Downs, conifer plantations, dense gorse and mixed scrub have been gradually cleared to create a balance of scrub and open space - benefiting many species and maintaining a landscape appropriate to the area.

On very thin soils on Rowborough and Idlecombe Downs, some good areas of chalk and acid grassland and heathland are beginning to develop. At Wroxall, where chalk grassland has been restored, masses of wildflowers including cowslips and a range of orchids have re-appeared.

Wight Conservation's sites are grazed by prize-winning Highland cattle, which do a fantastic job keeping down scrub and coarser grasses. They are moved between sites throughout the year, ensuring that species-rich sites are not over-grazed.

farmland

Farming has helped shape the Island's unique landscape for thousands of years. Not only does it provide a source of food, employment and an asset to attract visitors, but the land itself contains a mosaic of different habitats which collectively are of biodiversity value.

In recent years, agriculture has been on a 'roller coaster ride' with fluctuating world grain prices, poor harvests, gluts and unpredictable trends affecting the industry. Since 2000, the trend on the Island has been to have more land under grass and less under arable (see charts opposite). For livestock farmers, Foot and Mouth and Blue Tongue diseases have caused extra expense, worry and devastating effects.

Cornflower



Vivid blue cornflowers were once so numerous in arable fields they were considered troublesome weeds. There has been a dramatic decline of this colourful plant in most parts of the UK, and today it is thought they are confined to just three sites in Suffolk, Lincolnshire and the Isle of Wight.

One of these sites is at Cridmore Farm, where agri-environment grant schemes are helping the farmer to keep them on his land.

Recent surveys by keen botanists have shown that other arable plants, considered to have become lost or very rare, are still surviving in arable buffer strips and field margins across the Island.

Grey Partridge



Grey partridge is one of our fastest declining farmland bird species; populations have declined by more than 50% in the south east.

In 2008, Kings Manor Farm, Freshwater was awarded the Dreweatt Neatte Grey Partridge Conservation Trophy for the Wessex Region by The Game and Wildlife Conservation Trust.

They managed to hold their fourteen pairs of grey partridge at a constant level despite appalling wet weather conditions over the past two summers. This has been achieved by implementing predator control and creating arable habitats such as grass margins and beetle banks.

Corn bunting



This nationally declining farmland bird was last confirmed as breeding on the Island in 2003 in the Whale Chine and Atherfield area, despite efforts to provide supplementary feed through the experimental game bird crop plots under the farmland bird project.

Local Produce



The Island is one of the sunniest places in Britain. The varied landscapes, geology and climate mean that it produces a rich abundance of local food and drink.

The farming sector plays an important role in the economy and landscape here. Many Island pubs, restaurants, hotels and guest houses use local products wherever possible. With the farmers' market, farm shops, and numerous food and drink producers open to visitors, there are plenty of opportunities to support local farmers.

Living Landscapes



Research, commissioned by Natural England into the state of the Island's livestock industry, enabled the **Wildlife Trust** to secure £300k funding to promote agri-environment agreements with farmers.

The Living Landscapes project visited over 150 Island farmers, advising on environmentally-friendly farming on over 5,000ha of land.

This work has secured significant biodiversity gains on the Island both for habitats and for a wide range of farmland species.

IW Farming



The disposal of fallen stock and lack of slaughtering facilities on the Island have been debated for the last seven years with little result to date. It is essential that an incinerator and slaughterhouse are built here or the recent reductions in animal numbers will continue, to the detriment of the landscape and much of the wildlife that we currently enjoy.

The development of Environmental Stewardship schemes has placed a high priority on good land husbandry and greater emphasis on sensitive management of land for wildlife, encouraging farmers to continue and expand on their existing good practice

Farmland Bird Survey



The Farmland Bird Survey built on earlier work by the RSPB which suggested that the Atherfield Plain and south west coastal strip were of importance for farmland birds of conservation concern.

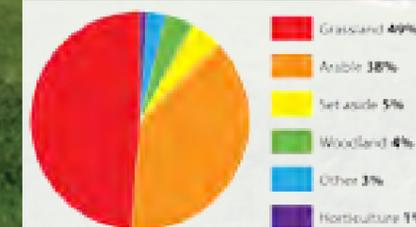
Since 1999, annual farmland bird surveys have taken place, and the findings have helped target

agri-environment schemes and other wildlife projects. The surveys demonstrate that some farmland birds suffering steep declines nationally, such as yellowhammer, linnet and skylark, are doing very well here. Others, such as grey partridge and stonechat, are just holding their own.

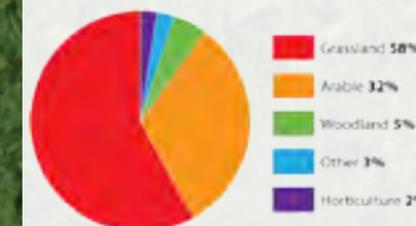
The bird surveys, landscape-scale advice and the project work it informs will continue to benefit farmland birds.

Partners: RSPB, Island 2000, Isle of Wight Ornithologists Group, Leader+.

IW Land Use Changes 2000 and 2008



IW Farming land use 2000



IW Farming land use 2008
Source DEFRA

wetlands

The requirements for water abstraction for agriculture and for the public water supply are placing increasing pressure on wetlands. Recent initiatives, such as the Land Care project, to reduce diffuse pollution of watercourses by nutrient and soil run-off will assist in improving water quality in the long-term. We aim to maintain and restore our existing rivers and wetland habitats and re-instate additional areas from suitable floodplain land but these areas have yet to be quantified.

Brading Marshes



The **RSPB** has secured 388ha of land at Bembridge for nature conservation. This is enabling restoration of the varied wetland habitats of Brading Marshes to favourable condition for wintering and breeding wetland birds.

Recent surveys have identified that water levels on the marsh have been unacceptably low. Current trials of minimum water levels are underway and, combined with other habitat management works, are already delivering results for breeding lapwing.

Some 30ha of ancient woodland, 60ha of reverting chalk grassland and 20ha of bird-friendly arable land that surround the core marsh area are also benefiting from planned conservation management.

Partners: RSPB, Natural England, Environment Agency.

Afton Marsh Local Nature Reserve



Afton Marsh Local Nature Reserve, owned and managed by **Isle of Wight Council** parks and countryside section, is a 15ha wetland reserve on low-lying land behind Freshwater Bay. Part of the Western Yar flood plain, this land was once grazed by cattle but ceased to be grazing marsh many decades ago. Management is targeted at keeping the site wet, and holding back the relentless succession to scrub and woodland.

This is a costly, time consuming business but a big step forwards was taken during the winter of 2009 through the Land Care project and funding from the Environment Agency. A generous grant enabled contractors to assist the countryside rangers and volunteers to carry out successful restoration work in the marsh.

Partners: Isle of Wight Council Environment Agency.

Eastern Yar Bogs



Island 2000 has been working in the Eastern Yar river catchment to dramatically improve tiny, fragile fragments of species-rich mires which have suffered from the slow invasion of woody species in recent years.

At Bohemia Bog, a tiny mire perched on a hillside where the acid water leaves the gravel ridge, gorse has been scraped away, more than doubling the area of the bog. Specialities such as sundew and pale butterwort have responded well, increasing and spreading across the site.

At Munsley Bog, a shallow peaty valley, birch has been removed to help sustain the remaining bog myrtle and cross-leaved heath, and new propagations from these last remnants are being re-introduced.

Partners: Landowners, Island 2000, Environment Agency, IW College Horticultural Unit.

Water Vole



The **Wildlife Trust**, with funding from the Environment Agency and help from local landowners, has undertaken water vole surveys of Island rivers in 1996, 2003 and 2008. Since 1996, the number of locations where water voles are active has declined by 10%.

The national decline of this species is attributed to the feral mink, but fortunately we do not have this species. The local decline is related to lack of waterway management, water quality issues and development pressures.

Lapwing



Breeding lapwing have suffered a catastrophic decline in numbers in lowland Britain due to changing farming practices. In many places they survive only in wet grassland nature reserves, such as Brading Marshes which the **RSPB** has successfully restored in recent years.

Newport Rivers



Newport Rivers project is a collaborative project carried out by the **Environment Agency** in partnership with the Newport Rivers Group and Southern Water.

Recent habitat enhancement works were carried out at Carisbrooke Pond to improve the pond for wildlife by creating a wetland margin along the south bank and planting a variety of native plants such as sedges, flag iris and purple loosestrife.

Areas of reed beds are starting to establish, and will act as a natural filtering system for the water. As a result, the pond will provide an environment that will attract a variety of insects, birds, fish, mammals and amphibians.

Two fish passes have been constructed on the Lukely Brook, suitable for the upstream migration of brown/sea trout. At West Mill, Carisbrooke, the old weir was subsiding and very steep. A complex pool-and-traverse fish pass has been built and re-naturalisation of the channel upstream of the site carried out.

Beneath St. Cross Mill, a two-stage pass was installed as part of a large engineering scheme to allow for fish migration. The area has also been improved for recreational use.

Cridmore Bog



At Cridmore Bog on a hot spring day, the droning whine of millions of tiny insects fills the humid air that rises from floating mats of bottle sedge and bogbean and hangs in the confines of the valley bottom. This provides a refuelling stop for migrant birds passing through the Medina valley.

This rich biodiversity is dependent upon hydrology but, like many wetlands, Cridmore has not escaped the effects of a series of water abstraction and drainage schemes over many years. In fact, archaeological evidence suggests that people were possibly exerting an influence on the hydrology of the site around 4,000 years ago.

Between 1997 and 2004, Cridmore Bog restoration project led by the **Environment Agency** returned the Medina's flow to its 'original' course to one side of the bog and installed weirs in the central drain to impede ground water. With the landowner's agreement, the abstraction point was moved to a less sensitive location. By raising water levels, the restoration has helped to protect the extremely vulnerable peat on which some of the site's most valued flora can be found.

Partners: Landowner, Environment Agency and Natural England

coast

The north coast of the Island is dominated by sheltered mudflats and muddy gravels, with areas of saltmarsh within estuaries, vegetated shingle, sand dunes and saline lagoons. Our 160ha of saltmarshes are amongst the best in the Solent but they are at risk from sea level rise and hence are likely to be in long-term decline. The south coast of the Island is dominated by 51km of actively eroding cliffs and chines of great biodiversity and geological importance, they also support nationally important populations of invertebrates. They are not threatened as a habitat but in some places, erosion is so rapid that vegetation fails to become established and their biodiversity value can be reduced.

Marine Species and Coastal Change



With warming seas, there have been significant changes to the region's marine life over the past decade. Warm summers and mild winters have caused some local fish species such as gillthead bream, bass and red mullet to increase in number and extend their range eastwards towards the North Sea.

The purple topshell (*above*) was rare and known only as far east as Bembridge prior to 2002. By 2009, it became one of the most abundant sea snails spreading to the Sussex and Kent coasts.

Tracking these developments helps monitor the rate of change in our regional and national biodiversity with such species being important indicators of on-going coastal change.

Estuaries Project



The Estuaries Project was set up in the late 1990s with the aim of promoting and co-ordinating the sustainable integrated use of the Island's estuaries, and developing understanding of estuarine features and processes. It is a partnership working primarily on the Medina and Western Yar estuaries, and is actively involved in projects that raise awareness of estuaries, their habitats and associated species.

Over the last ten years, the project has attracted significant funding for local projects including monitoring and research, interpretation, access improvements to appropriate sites and signage for sensitive areas. The project has also instigated bird surveys, saltmarsh monitoring and a series of tools for the Medina estuary that will help to assess the potential impact of development.

Seaview Duver



In 2001, the **Isle of Wight Council** embarked on a coastal protection scheme at Seaview Duver to renew the deteriorating defences and to protect properties from flooding.

The works were set within a highly protected nature conservation area (SSSI, SPA and Ramsar) and to offset the impacts, the low-lying floodplain land behind the seawall was made more attractive to wildlife by creating additional wet areas and improving the exchange of sea water into the lagoons.

In addition, the opportunity was taken to create public access with a bird hide overlooking the wetlands of the Hersey Reserve. This has proved to be highly successful and local people ensure that the hide is opened daily and kept tidy.

Soft Cliffs



Survey work in 2008 by **Buglife**, Invertebrate Conservation Trust, demonstrated that the Island's soft cliffs are some of the UK's richest.

Coastal soft rock cliffs are one of our most spectacular wildlife habitats. They are home to incredible insects such as the handsome cliff tiger beetle (*below*), long-horned mining bee, chestnut click beetle and the Glanville fritillary - the Island's special butterfly.

Soft cliffs are prone to frequent slumps and landslips and to erosion by the sea, weather and groundwater seeping through the rocks. These natural processes create a changing mosaic of habitats with areas of bare ground which warm up rapidly in the sun, clumps of flowery vegetation, wet hollows and streams - all ideal for mini-beasts.

If these processes are prevented or reduced through coastal protection then local extinctions of these specialised insects will follow.

Other threats to soft cliffs are intensive management, artificial drainage and climate change.



Newtown Estuary National Nature Reserve



The **National Trust** owns and manages much of the Newtown Estuary. The area was designated a National Nature Reserve in 1995. The Trust has been able to acquire additional land at Clamerkin Farm (1998) Shalfleet Farm (2004) and Brickfields (2007).

Its beauty and tranquillity make it one of the most treasured places on the Island. Surveys have confirmed the high quality of the habitats and species.

At Shalfleet, an area between the remote Western Haven and Shalfleet Creek is now extensively grazed incorporating some arable land with grass margins and over-wintered stubbles. Some of the gently sloping grass fields will provide opportunity for saltmarsh vegetation to spread inland as sea level gradually rises. Dogs are not permitted here to protect birds and hares.

Brickfields includes the east spit at the entrance to Newtown Harbour, a small piece of limestone grassland and the site of a disused brick works. Scrub has been cleared from the grassland, new fences installed and cattle grazing is provided by the neighbouring farmer.

Solent Seagrass Project



Seagrasses, also called eelgrasses, are unique, being the only flowering plants able to thrive in salt water and form underwater meadows - an important habitat for juvenile fish and seahorses.

Following outbreaks of disease and damage from human activities seagrasses are now considered nationally scarce and are a priority habitat. The Island, with its shallow, sandy sheltered bays, provides a perfect habitat for seagrass and is home to some of the UK's most important seagrass meadows.

The **Solent Seagrass Project** has been running for four years, surveying and collecting records of seagrass. Many areas have been identified but the mapping work will continue to gain a better understanding of the total seagrass extent. Such data is incorporated into local management and conservation plans to help protect these important habitats.

Partners: Wildlife Trust, Southampton National Oceanography Centre



community & education

The range of biodiversity on the Island can help people learn new skills, enjoy their surroundings more, attract visitors, improve health; and getting involved can help communities develop a sense of ownership and achievement.

Many of the BAP partners work directly with the community on activities such as leading guided walks, education and local conservation projects. In turn, thousands of invaluable hours are contributed annually by dedicated volunteers where they can learn traditional countryside skills and share local knowledge as they assist with practical conservation tasks.

Gift to Nature



Gift to Nature is a community and education project using donations from visitors and local residents to improve and enhance the environment. Using a website, leaflets and illustrated maps, people are encouraged to visit and get involved with local sites.

Projects include the red squirrel trail and viewing hide in Parkhurst Forest, One Horse meadow at Totland and the Troll Trail on the old railway track between Merstone and Shide.

The Troll Trail is adorned with twenty railway-inspired signs helping people identify the habitats and wildlife.

Children helped plant a meadow at Merstone and learned about minibeasts in the river. The probation service team helped with maintenance of the meadow and created a grass sofa.

Histree Trail



The Histree Trail project was launched in November 2006 by the **Isle of Wight Council** with support of a £47,000 Heritage Lottery Fund grant. The first 18 months were dedicated to finding the Island's special trees, collecting and researching local stories and heritage. This information was then used to create a series of eight trails linking publicly accessible trees.

Almost 100 volunteers contributed to the project, some of whom were dedicated, long-term helpers who regularly attended site visits with the project officer and assisted with tree surveying.

Over 200 trees were recorded, with at least 50 having a heritage link. A volunteer verifier is currently reviewing and submitting the veteran tree records to the Ancient Tree Hunt, putting the Island's champion trees firmly on the UK map!

IW Natural History & Archaeological Society



The **Isle of Wight Natural History and Archaeological Society** has been promoting biodiversity through projects such as:

- Exhibition to celebrate 100 years since the publication of *Morey's Guide to the Natural History of the Isle of Wight* which contributed to the establishment of the society 90 years ago.
- Establishing the Frazer Memorial Fund for the sponsorship of projects and training, both within and outside the society.
- Running the Wildlife Watch project to identify changes in populations of six species to provide information for future studies.
- Raising its profile through its website and monthly Nature Notes column in the Isle of Wight County Press.

Go Wild on Wight



The **Isle of Wight BAP Partnership** is represented as Go Wild on Wight at events on the Island where informative displays are exhibited along with activities to engage the public.

The website for the IW BAP partnership wildonwight.co.uk was launched in 2007/8.

The site contains a wealth of information on the Island's biodiversity, habitats and species, guidance on the biodiversity duty, examples of projects, potential sources of funding for projects benefiting biodiversity, useful contacts and news from the partners.

A regular newsletter appears in the AONB's *Finest Landscapes* publication and features interesting stories and examples of biodiversity projects happening on the Island.

Hampshire & Isle of Wight Wildlife Trust



During the last five years, the **Wildlife Trust** has significantly developed its community and education projects through the appointment of an Education Officer, Leader+ funded Rural Training Programme and the Forest Schools initiative.

The Rural Training Programme trained 54 volunteers, four of whom gained an NVQ in Environmental Conservation. The Forest Schools initiative has visited eight schools on the Island and delivered over 20 programmes of study.

The trust contributes walks and events for the Island's Walking Festival and supports the Riverfest, Agricultural Show and Wolverton Fair.

Newtown National Nature Reserve



At Newtown National Nature Reserve, the **National Trust's** education warden has a team of 20 dedicated volunteers to assist with tasks such as manning the hide, surveys, community learning and Wild Zone activities.

The Wild Zone programme for family learning includes activities such as bat watching, moth trapping and mini-beast events.

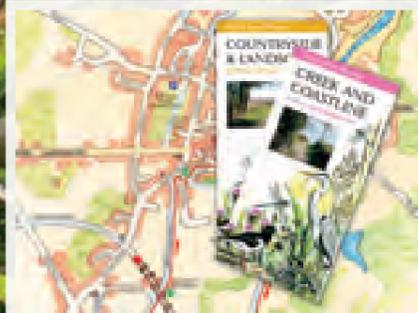
A *Discovering Newtown* booklet has been developed accompanied by a series of interpretive leaflets helping to enhance visits to the reserve.

do your bit

We all appreciate the value of nature and this can bring communities together, create opportunities to share in new experiences and to make friends. Involvement in a project to improve local wildlife can help develop respect and responsibility for local surroundings.

Here are just few examples of projects and ways to get involved to benefit your community and the biodiversity found there.

Local Walks



Wootton Bridge Parish Council has produced a series of five *Walks about Wootton*, supported by the Local Heritage Initiative. These include *Creek and Coastline* and *Countryside and Landscape*. They are a great way of enjoying and learning more about the area.

Whippingham Community Association, with support from the Heritage Lottery Fund, produced a Whippingham Heritage Trail in 2008, celebrating the local history of the village, landscape, river side habitats and surrounding meadows of importance for nature conservation.

Wild on Wight



In the past ten years, many groups have successfully received funding to carry out wildlife improvement projects.

Visit wildonwight.co.uk for information on funding opportunities for projects with biodiversity in mind.

Martin's Ramping Fumitory



Martin's ramping fumitory is a showy weed found at Lake Allotments SSSI but nowhere else in the UK. Allotment holders ensure that the plant continues to thrive amongst their vegetable crops. They know it is special because of visits by botanists from all over the country.

Wildflowers



Thanks to careful management and sensitive mowing by the owners of **Robin Hill Country Park**, these stunning bee orchids can be seen each spring on a grass verge in front of the park's entrance.

St. Helen's Horticultural Association, working with the **St. Helen's Parish Council**, has arranged for a flower-rich area of St. Helen's West Green to be left unmown during the summer months to show off some of the special plants, such as chamomile, which survive from when it was a grazed common.

Northwood Village Parish Council



The natural history section of the **Northwood Village Parish Council** website was launched in 2006. With new sightings lists of birds, butterflies and mammals updated regularly, accompanied by an interactive map; people can discover what wildlife to look for nearby.

Wight Nature Fund



Wight Nature Fund was set up in 1990 to purchase and manage land for nature conservation and people. It has four reserves: the water meadows at Alverstone Mead and the woodlands of Mill Copse, Pelham Woods and Youngwood's Copse.

The fund works in partnership with many of the Island's conservation organisations. The help of dedicated volunteers, community groups and schools have contributed to the construction of boardwalks and bridges, scrub clearance, planting trees and hedges and building nest boxes using material sourced from one of the reserves – all benefiting wildlife and improving access for people to nature.

Kitbridge Enterprises Trust



Kitbridge Enterprises Trust, a millennium community project has the aim of restoring ponds on the former Kitbridge Estate for the benefit of amphibians - particularly the great crested newt.

Of the 98 ponds, 54 have now been improved with community groups such as the Green Gym and Prince's Trust helping carry out practical conservation tasks.

In 2006, 'Every Pond Counts' a location mapping exercise of the 1300+ Island ponds was undertaken thanks to an AONB grant and is currently being developed further to include species surveys.

Nature Trails



In 2009 Medusa's Wildlife Meadow opened at **Brading Roman Villa** thanks to funding from BBC Breathing Places. An area of disused grassland has been transformed into a public area for education, entertainment and research. The theme was inspired by one of the villa's mosaics.

Amongst the grasses and flowers are sculpted seats which provide great wildlife watching spots and shelter for creatures such as field voles, beetles and slow worms.

Partners: Brading Roman Villa, Eccleston George, Green Gym, Footprint Trust, St. George's, St. Johns Primary, Newchurch Primary and Brading Primary Schools.

Brading Town Council



Brading Town Council has obtained grants for community gardens and the newly planted Betty's Copse. Two disused

chalk quarries have been transformed into community spaces with sculpted seating, picnic areas and nature trails. An interpretation board installed in the churchyard identifies species present. Brading Primary School has helped develop walking trails, promoting access to nearby countryside such as Brading Down and Brading Marshes.

In 2008, a precious plot on Brading's popular allotments was dedicated to re-homing slow

worms displaced by a nearby housing development. The slow worms now have a safe haven and assist in the disposal of slugs and snails!

The Brading Plan will help shape the parish for the next 25 years. It is being developed with biodiversity in mind and incorporates sustainable solutions for housing, infrastructure and community within a 'green' framework.

species

135 species of national conservation concern (BAP Priority Species) are found on the Island. In addition 461 locally distinctive species have been identified by local experts and assessed in terms of how well they are faring. Some are increasing, others decreasing and for many we are still lacking in data to make a judgement.

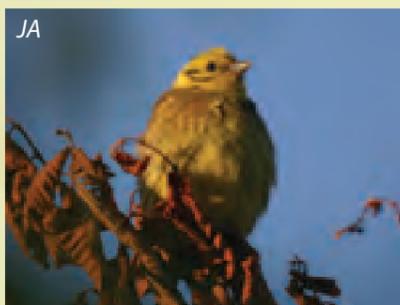
A range of species and the issues which affect them have been highlighted.

Hedgehog



Hedgehogs have been declining nationally for reasons which are not entirely clear. On the Island, it is believed they have declined in the countryside but still survive in urban and suburban gardens.

Yellowhammer



Although nationally numbers have declined by 55% since 1967, on the Island, they are still a fairly common and widespread farmland breeding bird.

Adder



Nationally, adders have experienced great declines. Although there has been an undoubted decline locally, they are still surviving well in a number of scattered sites.

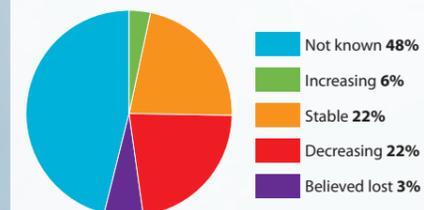
Guillemot



Despite a national decline, the few surviving breeding populations along the south coast of England, including one at Freshwater cliffs, are at least holding their own and probably showing a modest increase.

Changes in fish stocks resulting from climate change may be helping them.

Species Audit 2008



Pie chart demonstrates our current understanding of how Isle of Wight BAP species are faring.

A full list of national and local BAP priority species can be found on wildonwight.co.uk.



Jersey Tiger



This attractive, day-flying moth is an increasing species, first arriving on the Island in 1993. Once restricted to south Devon, this is an example of a species that is benefiting from our warming climate.

Dog Whelk



Our dog whelk population has recently recovered following a national ban on tributyltin (TBT) a polluting chemical in paint used on ships and boats. Dogwhelks have returned to Yarmouth and Cowes Harbour where they are now flourishing.

Tree Lungwort



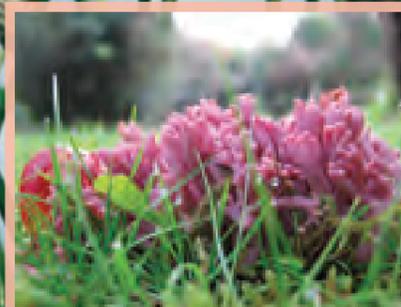
This magnificent lichen, *Lobaria pulmonaria*, grows on old trees in ancient wood pastures and is very sensitive to air pollution. It is very rare in southern England due to lack of woodland management, but here it survives on a handful of trees.

Sundew



This insect-eating plant requires waterlogged acid peaty conditions. It has been in decline on the Island since 1900 and is now confined to a single tiny site which has no legal protection.

Violet Coral



This very rare fungus, *Clavaria zollingeri*, restricted to old unfertilised grassland, is known from just one Island site, at Northwood Cemetery.

Burnt Orchid



Nationally threatened and in decline, this orchid is now believed to be extinct on the Island. It was last seen in 1991 on a single chalk downland site where it had been in decline since 1973.

the way ahead: regionally

South East Biodiversity Strategy



The South East Biodiversity Strategy (SEBS) provides a coherent vision and framework for action in south east England. It has three core elements to which all local biodiversity partnerships contribute:

1. Working in partnership, with agreed responsibility for partners.
2. A Regional Biodiversity Opportunity Map identifying areas which are priorities for restoration and creation of Biodiversity Action Plan habitats in south east England.
3. Agreed regional targets for the extent, maintenance, restoration and creation of Biodiversity Action Plan habitats in south east England.

The Isle of Wight Biodiversity Steering Group has signed up to the commitments of the South East Biodiversity Strategy.

Countdown 2010



In 2001 the UK government, together with other European leaders, made an ambitious commitment to halt biodiversity loss by 2010 – Countdown 2010. Progress has been patchy with the Wildlife and Countryside Link finding that (April 2009):

“Although there has been some success in addressing the conservation of species and a number of declines have been halted or reversed, species at risk are being added to the list faster than others are coming off it.

Site protection in the marine environment continues to lag decades behind that on land. It will not be possible to achieve a network of Marine Protection Areas by 2010.

The target to achieve favourable or favourable recovering condition of 95% of SSSIs by 31 December 2010, remains achievable.

The target to achieve a positive trend for farmland bird

populations will not be met. The farmland bird population index in the UK has fallen in the last three years to its lowest recorded level (48% of 1970 level). Prospects for farmland birds are not encouraging because this recent downturn preceded the loss of set aside land in 2008.

The target to achieve a positive trend in the indices for woodland bird populations will not be met. The indicator was 22% below the level in the early 1970s.

The target to achieve a positive trend for bat populations will be met for some species but eight bat species showed no clear trend.

The target to achieve a positive trend for all butterfly species has achieved some success. Although the all-species index is classed as stable, many specialist butterfly species are struggling.”

In April 2009, the G8+ environment ministers met in Sicily. They used this opportunity for defining the framework for the post 2010 biodiversity targets and to prepare the ground for the UN International Year of Biodiversity in 2010.

The South East Plan



Of all England's regions, the south east is under the greatest pressure to provide more homes. Its ecological footprint is the highest of all the regions, and many aspects of its environment are already under stress.

The South East Plan (May 2009) sets out the long-term spatial planning framework for the region 2006 to 2026. The plan is designed to be a key tool to help achieve more sustainable development, protect the environment and combat climate change. However, delivery of the plan could lead to significant environmental costs, despite concerted attempts to minimise these impacts.

The South East Plan identifies the many challenges for development and population growth if the natural environment of the Island is to be respected:

- Protecting aquifers and surface waters from over-abstraction and pollution.
- Protecting and improving the diversity of habitats and species, particularly sites and species of national and international importance.
- Maintaining the coastline as an environmental, economic and recreational resource, responding to climate change pressures and rising sea levels.
- Avoiding deterioration in existing air quality.
- Reducing greenhouse gas emissions and other pollutants.

the way ahead: locally

The Island's habitats and species are changing under pressure from both natural processes and human actions. The extent to which our rich biodiversity can be conserved for future generations depends upon a sustainable approach to land management and to planning decisions. This report has outlined some of the successes, challenges

and opportunities for wildlife over the past ten years. By working together, we must ensure that we can achieve favourable outcomes for biodiversity on the Island for the future.

Designated Areas



The importance of the Island for wildlife is reflected in the number of national and international (purple) and local (red) nature conservation areas on land, around the coast and off-shore. These range from sites of international importance (SAC, SPA, Ramsar), sites of national importance (SSSI) and sites of local importance (SINC).



Map: nature conservation designations

- Sites of local importance
- Sites of national and international importance

Green Infrastructure



Green infrastructure (GI) identifies sites which have particular biodiversity, landscape and/or recreational assets as a network. GI networks provide high quality environments to be enjoyed and valued for their landscape, biodiversity, historic, recreation and tourism value, accessibility, economic and health benefits.

The GI network will consist of land in a variety of ownerships and under different types of management. Both countryside and urban green space have important roles, as well as corridors that connect the spaces and places between urban and rural locations

The **Isle of Wight Council** is producing a Green Infrastructure Strategy as part of the Island Plan, which will establish the methodology for the project. Anyone who wishes to get involved in this can register their interest by emailing planning.policy@iow.gov.uk.

IW Biodiversity Opportunity Areas



The **IW Biodiversity Steering Group** has identified ten Local Biodiversity Opportunity Areas (LBOAs) to help deliver the Isle of Wight Biodiversity Action Plan, based upon work first carried out by the Wildlife Trust.

The areas cover 43% of the land surface of the Island, where there are the greatest opportunities to maintain and enhance biodiversity.

Up until now, nature conservation has focused on protecting important sites which are often fragmented and isolated. The identification of LBOAs may help us to work at a landscape scale, expanding sites, developing linking habitats and buffer areas.

The BAP Steering Group has already identified several potential collaborative projects in the LBOAs which could help maintain, restore, recreate habitats across the Island.



Map: Isle of Wight local biodiversity opportunity areas.

The Island Plan



The South East Plan provides the context for the Isle of Wight Local Development Framework and Local Transport Plan. It requires that the Isle of Wight Planning Authority will allocate sufficient land and facilitate the delivery of 10,400 net additional dwellings between 2006 and 2026.

Water supply is likely to be a constraint for significant new development within the lifetime of the plan, exacerbated by climate change. Up to one quarter of the Island's drinking water is brought in from the mainland. Over 50% of the Island is categorised as over-abstracted or over licensed.

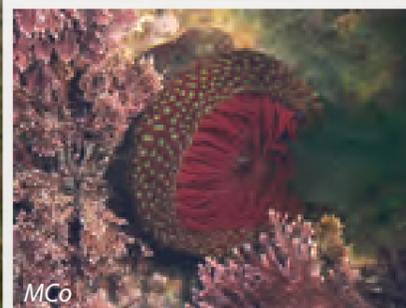
Significant areas along the coast, estuaries and the rivers lie within flood zone. The majority

of growth will be in existing settlements located on or close to the coast and/or estuaries. With rising sea levels, sites around the coast, particularly the north coast, are vulnerable to coastal squeeze.

Tourism generates almost one quarter of the Island's GDP, the highest proportion in the south east region. Increasing development and population will mean additional recreational pressure, traffic movements and air and water pollution. The provision of publicly accessible open space can go hand in hand with the conservation and enhancement of biodiversity. However, conflicts may occur where, for instance, people or their dogs disturb sensitive birds around the coast.

Marine sites already suffer from smothering algal growth as a result of nutrient enrichment (specifically nitrates). Increased volumes of discharged treated effluent from around the Solent will intensify this issue.

Marine



Our coastline waters are rich in wildlife. Much of the maritime environment is protected under the European Habitats Directive. However, in contrast to terrestrial habitats, understanding of the marine environment is still very much in its infancy.

Local Nature Reserves



The **Isle of Wight Council** aims to designate three new Local Nature Reserves (LNRs) before the end of 2010, forming part of the commitment to the Eco Island strategy.

There are currently six Local Nature Reserves:

- Afton Marsh
- Rew Down
- Alverstone Mead
- Shide Chalk Pit
- Dodnor Creek
- Sibden Hill and Batts Copse.

LNRs are places with wildlife or geological features that are of special interest locally, giving people special opportunities to study and learn about them or simply enjoy and have contact with nature.

We do know that the pressures on marine habitats and species are considerable but ways to tackle these are less clear. This will become an increasing priority in the coming years. The forthcoming Marine Bill will help take matters forward.

Isle of Wight Biodiversity Action Plan Steering Group

- Country Land and Business Association
- Environment Agency
- Forestry Commission
- Hampshire and Isle of Wight Wildlife Trust
- Island 2000 Trust
- Isle of Wight Area of Outstanding Natural Beauty Unit
- Isle of Wight Council
- National Farmers Union
- National Trust
- Natural England
- RSPB

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For further information on Isle of Wight Biodiversity, the Partnership and Action Plans see: wildonwight.co.uk

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This publication is available on request as an audiotape, in large print or Braille. For further details, please contact the Isle of Wight Council parks and countryside section on (01983) 823893. This publication can also be found on wildonwight.co.uk.



Isle of Wight
area of outstanding
natural beauty

