



DEPARTMENT OF THE ENVIRONMENT



- NATURAL ENVIRONMENT TEAM - ANNUAL REPORT 2012

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Introduction

The extraordinarily dry conditions at the start of the year were of grave concern for amphibian breeding as water levels were very low Island-wide. The rain which then fell, seemingly for the rest of the year, was therefore very welcome in some quarters. These weather extremes affect our wildlife dramatically, the dry conditions reducing recruitment to the amphibian population and the wet weather reducing the incidence of insects such as butterflies. The Human population is buffered from the weather, yet we still suffer from it, whereas the fortunes of wildlife are dependant upon it. With weather events likely to become more extreme with climate change in the near future, it is all the more important to protect the wildlife that we have.

The Jersey Island Plan 2011 contains a range of policies designed to protect and enhance the Island's wildlife. In order to implement the policies, the Natural Environment Team has been working with developers and agents to ensure that negative impacts on wildlife through development issues are mitigated to reduce or eliminate harmful effects. We are encouraging the inclusion of positive measures to enhance the conditions for those species of wildlife which can survive in urban environments, such as amphibians, birds, bats and small mammals such as hedgehogs. Proposed initiatives to enhance conditions for wildlife have been well received by developers and we hope to increasingly see measures to enhance wildlife at all levels of development, from major developments to small projects.

Jersey is home to 12 species of bat, including the whiskered bat *Myotis mystacinus* which was discovered here in 2012 by an ecological consultant carrying out a survey for a development proposal. This is an exciting discovery, not only increasing the number of resident species known to inhabit Jersey but also demonstrates that we still have much to discover even in our small Island. It clarifies how important it is to carry out survey work in order that we do not lose species before we are even aware of their existence.

Bats can turn up in all sorts of places, from the very new (they have been found roosting in the new Energy from Waste plant at La Collette!), to the very old (various traditional Jersey properties around the Island).

A number of new housing developments are making positive steps towards bat conservation by including bat roosting space in outbuildings and service areas. Hopefully bats will find and use these new roost sites, providing a large number of new householders the opportunity to watch the exciting displays of bat acrobatics on their own doorsteps.

A bat making use of a bunker at Noirmont SSI



We were delighted to receive a report of a rare bee orchid *Ophrys apifera* found growing in St Ouen's Bay, discovered by members of the Société Jersiaise Botany Section. Bee orchids have been recorded growing in Jersey for centuries, but the last time that it was seen growing here was in 1946. Three plants of this iconic species were eventually found and two successfully set seed. We hope that this will ensure that more of these beautiful plants will grow in future years.

Cirl buntings became extinct in Jersey some 10 years ago with no birds known to have bred since 1999. It was with great excitement therefore that a pair spotted in Grouville are thought to have bred successfully and raised two young in 2012. Special mention at this point should be made in appreciation of the landowners who have given every help with this project. Also the great dedication of an enthusiast who has, through rain and shine, provided supplementary food to the birds throughout the year has probably been key in supporting the pair through parenthood and the successful rearing of their young. Whilst it is unlikely that the birds fully recognise this dedication, we hope that the volunteer is aware of the high regard he is held in by conservationists throughout the Channel Islands. Thanks are due to the many volunteers who work to protect and preserve our wildlife in Jersey. There are a range of organisations and individuals who work day in and day out to collect data, manage habitats and rescue sick and injured animals.

We have been pleased to be working with colleagues at Social Security to assist in creating opportunities for the

growing number of unemployed people in Jersey. Thanks to this there has been an increase in environmental management of some neglected areas of our coastline and we hope to expand on this work in 2013.

Research on our local squirrel population has discovered that, despite the probability that there was only a small founding population introduced here just over a hundred years ago, they are remarkably genetically diverse, so much so that there is a distinct difference between the south-western and north-eastern populations. However, possibly due to the effects of a small founding population, coupled with environmental factors such as the small home ranges that squirrels have in a small Island such as Jersey, that they fall ill to a number of diseases. Current work by land owners, the



Winter stalkball *Tulostoma brumale*

States of Jersey and charities such as Jersey Trees for Life in planting hedges to provide wildlife with better resources will, hopefully, enable our wild animals to disperse more widely across the island, reducing the

genetic effects that small populations suffer from.

Our access network received additional funding in 2012, enabling repairs and maintenance to be undertaken in a number of areas around the Island. Some of this work has received negative commentary due to the dramatic cutting back of vegetation. This large impact was intentional, but it is planned to enable the vegetation to re-grow in a managed way, reducing maintenance costs in the medium term and ensuring better habitats develop alongside the paths in the long term, providing better conditions for the host of wild flowers and insects which enhance the experience of walking the cliff paths.

Due the large area of land that the Natural Environment Team are responsible for, we are grateful to many members of the public who let us know when they encounter issues when out and about in the countryside. A fungi expert drew our attention to rare fungi growing on the sand dunes in St Ouen's Bay which were threatened by the use of the area by people using radio controlled cars. We have now protected the land and directed the enthusiasts to alternative venues for the pursuit of their sport and we are watching the grassland regenerate and expect the return of the fungi this autumn.

It was a shock to discover that ash dieback disease had found its way to Jersey in imported plant material, but so far, a relief that colleagues in the plant health team have failed to find any more infected plants despite their ongoing investigations. We will all need to keep a close eye on ash trees in the hedges and woodland around Jersey this next growing season and hope that our Ash trees are spared the devastating effects that the disease has had on woodlands elsewhere in Europe.

In 2012 feral geese became recognised as the latest invasive alien species causing problems in Jersey. The problems they are recognised to have caused was to crops and infrastructure, but it is unknown what damage is caused to wild animals and plants by the growing numbers of these large, hungry animals. It is hoped that current owners of poultry and other animals will be more responsible and not let animals escape into the wild to cause problems to other people and for our native wildlife.

It is with great sadness that we remember the deaths in 2012 of Mrs Margaret Long and Dr Charles David. Not only is this a sad loss of friends and colleagues but also of a wealth of natural history knowledge to the Channel Islands. Both were outstanding naturalists who made significant contributions to the knowledge base and conservation of wildlife in all of the Channel Islands. They, and their contribution to the Channel Islands will be sadly missed.

John Pinel
Principal Ecologist

Legislation

Sites of Special Interest (SSIs)

In 2012 the coastal strip to the west of the Five Mile Road in St Ouen's Bay was identified as a proposed Site of Special botanical, zoological and ecological interest. A high diversity of species typical of the maritime environment and some of which are rare locally and nationally, have been recorded on the coastal strip. 146 species of vascular plant have been listed there, including the curved hard grass *Parapholis incurva* which does not occur anywhere else in the Island. The dunes also support a number of protected species including the Western green lizard *Lacerta bilineata*, the Jersey bank vole *Clethrionomys glareolus caesarius* and both resident species of shrew *Crocidura sauveolens* and *Sorex coronatus*.

The coastal dunes form an important component of the St Ouen's Bay dune system; they contribute to the ecological health and value of adjacent habitats providing linkages and facilitating the movement and colonisation of species between the two areas. The proposed SSIs will form an extension to the existing SSIs at Les Blanchés Banques and St Ouen's Pond, thus increasing the area under protection in the Bay to 137 hectares. Dune habitat is identified in Jersey's Biodiversity Strategy as a rare habitat which should be given priority for protection against a number of threats including recreational trampling, vehicle access, changes in land use and loss of ecological value due to lack of management.



Lesser white-toothed shrew *Crocidura sauveolens*

Licences under the Wildlife Law

In 2012 a total of 19 scientific licences were issued for conservation or research purposes. These included a licence to install a video camera to monitor a marsh harrier nesting site, and a licence to take samples of orchid species. Ten licences were also issued in fulfilment of planning requirements to carry out ecological surveys of sites subject to development proposals. 198 licences were issued to shoot pheasants to control damage to crops and 12 pest controllers were granted a licence to control herring gulls in urban areas.

Monitoring & Reporting on the Natural Environment

Countryside Management System—CMS

Use of the CMS as the principle repository for site management information continues. Increased data collection has meant that the reporting function is now more robust offering opportunities to evaluate and target habitat management activity. Examples of work generated by the reporting function include quantifying and targeting invasive species control (data used in the Birds on the Edge Project), Footpath and bridlepath route assessment and Warden site patrols. These evaluations identify issues for targeted work including, Project design, methodology, monitoring, Health & Safety and meeting business planning commitments. The reporting function has also been used by the team to bid for capital funds through the Medium Term Financial Planning process, using data collected as part of the habitat management work schedule.

To date the team continue to use CMSv7 but it is envisaged that the upgrade to a web based upgrade CMSi will be adopted in either 2013/2014.

Planning Applications

As a non-statutory consultee within the planning process, the NE team routinely reviews all new planning applications in order to assess any potential environmental impact. Of particular concern are applications which may result in the loss or degradation of protected/key species and habitats, biodiversity or countryside character features.

In May 2012 the Planning Department moved from a paper-based planning system to one in which all application details are made available online and any Departmental responses to applications are coordinated through a web portal. This required several changes to the way in which NET managed and responded to applications. Despite a series of teething problems with new online systems, the team coped well and was able to continue screening and responding to applications as usual.

During 2012 the NET viewed 1,551 planning

| Condition | Requested by NET | Included in Decision Notice | Percentage |
|-----------------------------------|------------------|-----------------------------|------------|
| <i>Ecological Survey</i> | 32 | 25 | 78 |
| <i>Method Statement</i> | 13 | 12 | 92 |
| <i>Landscape Scheme</i> | 4 | 4 | 100 |
| <i>Planting Scheme</i> | 9 | 8 | 88 |
| <i>Mitigation</i> | 3 | 3 | 100 |
| <i>Awareness of Wild-life Law</i> | 100 | 85 | 85 |
| <i>Timing Restriction</i> | 7 | 7 | 100 |
| <i>Other Conditions</i> | 30 | 21 | 70 |

An analysis of the number of conditions requested by NET which were included in the application decision notice. (Based on 159 planning applications submitted during 2012)

applications and 396 were called in by one or more members of staff for further investigation. Within the response letters, NET requested a total of 346 conditions to be included in the decision notices (see table above). A majority of the responses concerned the presence (or possible presence) of bat, nesting bird, amphibian or reptile species but other responses were in relation to SSI sites and key habitats, invasive species (especially Japanese knotweed), hedgerows, trees and protected plants.

Decision notices are available for 323 of the 396 applications that NET called in; of these 111 (34%) were either refused permission or withdrawn while NET did not ask for any conditions for a further 53 (16%) applications. Of the remaining 159 applications, an analysis was conducted which matched NET's response letters against the relevant decision notice (see Table above). This revealed that NET's conditions were fully included in 109 (67%) of decision notices; were partially included in 17 (10%) of decision notices; and not included in 33 (20%) decision notices. This is a reflection of NET's continuing efforts to improve their planning procedures and to work more closely with colleagues across the States of Jersey.

Jersey Biodiversity Partnership (JBP)

The Jersey Biodiversity Partnership is an informal enterprise of organisations, environmental groups and individuals who take a practical interest in Jersey's natural environment via research projects, surveys, conservation management activities or environmental campaigns. The partnership actively encourages more groups or volunteers to join.

The overall aim of the Jersey Biodiversity Partnership is:

"To protect, conserve and enhance the variety of wildlife species and habitats in Jersey through the successful implementation of the Jersey Biodiversity Action Plans"

This aim will be achieved by focusing its work on the following goals:

- To facilitate an integrated approach to conservation by improving the flow of information and communication.
- To encourage participation by all sectors of society.
- To promote awareness of the importance of biodiversity.
- To support partner organisations in their legal and other responsibilities towards biodiversity.

The plans were published in July 2006 with the addition of several new action plans each year in 2008 and 2010. Currently there are 53 biodiversity action plans covering 60 species. Each individual plan sets out the problems faced by the animal, plant or habitat and lists the practical actions and targets with emphasis upon the population distribution and conservation status necessary to ensure its survival. Over time, these plans will encompass all threatened or protected species and habitats in Jersey.

During September 2012 the Partnership held its seventh annual meeting at the Durrell International Training Centre, Trinity. The meeting was open to all existing members and to anyone else with an interest in Jersey's natural heritage. The meeting was called to review recent work undertaken by the partnership and discuss what is planned for the future.

There were presentations by local and visiting experts on some of Jersey's most iconic species including red squirrels, wall lizards and the ormer. There was also an afternoon presentation and an interactive workshop which examined and debated Jersey's protected habitat policies.

Presentations at this year's annual meeting included:

- United Nations International Decade of Biodiversity 2011- 2020. Nina Cornish (States of Jersey)



Wall Lizard, Red Squirrel and Ormer



- Jersey Red Squirrel Disease Surveillance. Tiffany Blacket (Twycross Zoo)
- Population genetics, inbreeding and disease in the Jersey population of red squirrels. Siobhan Simpson (Durrell Institute of Conservation and Ecology)
- Understanding the genetics of Jersey's Ormers. Tony Legg (Jersey Sea Farms)
- Structure and origins of Jersey's wall lizard population. Nina Cornish (States of Jersey)
- Workshop: Reviewing Jersey's protected habitat policies. Lindsey Napton (States of Jersey)

Jersey's Red Squirrel Genetic Structure and Origins

Since 2007 the JSPCA- Animal Shelter has been leading the red squirrel disease monitoring program in Jersey. Their initial findings confirmed that the population has numerous common red squirrel diseases, and that there is high prevalence of a disease called amyloidosis.

Amyloidosis is where proteins are abnormally deposited

in organs or tissue that cause harm, and ultimately leads to organ failure and/or death. Although amyloidosis has been found in a wide range of vertebrates, outside the Jersey population there has only been one other case of this disease (observed in a single individual) in red squirrels. There are a wide range of potential causes of amyloidosis, with primary causes including genetic-based susceptibility and chronic infection. As an island population there is concern that one cause of amyloidosis within the Jersey red squirrel population is inbreeding. Therefore during 2011-2012 the JSPCA and the States of Jersey Department of the Environment acquired funding to investigate the potential link between genetic diversity, inbreeding and amyloidosis in red squirrels on Jersey. The study was carried out by the Durrell Institute of Conservation and Ecology (DICE) at the University of Kent.

The Study revealed that Jersey's population has two genetic origins. Squirrels from England were introduced on to the west of the Island and those from France into the east. Although some level of dispersal across the Island between the two introductions is evident, there has not yet been sufficient gene flow to completely erase the genetic footprint of the introductions that took place 120 years ago. In addition the study also confirmed that the population does not appear to be severely inbred and there is no evidence for an association between individual levels of inbreeding and amyloidosis. It is hoped the results will be published early 2013.

The disease monitoring programme will be ongoing to determine the cause of this disease; therefore members of the public are encouraged to keep bringing any dead squirrels found to the JSPCA at 89 St Saviours Road. The aim is to carry out additional histopathology work and population density studies as soon as funds allow.



Protected Areas Review

Our natural ecosystems are under constant threat from a range of diverse factors including climate change and the increase in the human population. These and many other factors make the protection of the Island's remaining hotspots of biological diversity ever more critical.

As a signatory to multilateral environmental agreements (MEA's) including the Convention on the Conservation of Biological Diversity (CBD) (1994), Jersey is committed to ensuring long term sustainable protection of its natural environment and biodiversity. Currently the principal mechanism for providing legal protection for the Island's natural environment is through the designation of areas known as Sites of Special Interest ('SSIs') under the Planning and Building Law (Jersey) 2002.

The first three ecological SSIs were designated in 1996, and since then the list of ecological SSIs has grown to include 23 sites, measuring approximately 450 hectares. A further 21 geological Sites of Special Interest, measuring approximately 66 hectares, have also been designated. The history of designating ecological SSI's has been one of selecting the best sites worthy of protection, based on justification criteria used in the UK (Radcliffe 1997). Initially, prioritisation of sites for designation was straight forward as there were a number of large, undeveloped, semi-natural areas supporting rare or important local wildlife or habitat. There still remain a number of sites outstanding which have been identified and are awaiting formal designation. These are classed as being Proposed SSIs, of which, at present there are 12 land parcels. Once these have been completed however, a review of the current criteria for designation is needed, to ensure that best practice is followed in the selection and prioritisation of sites.

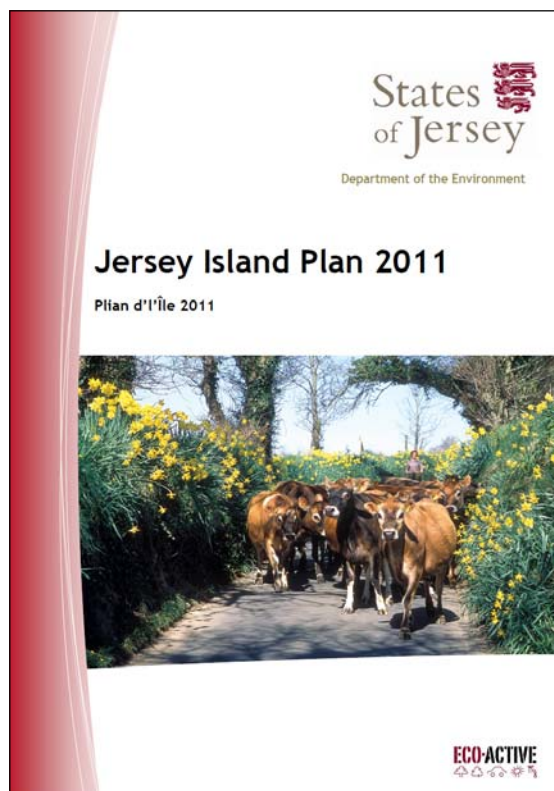
Through the National Ecosystem assessment UK policy makers have identified the need to protect, not just islands of biodiversity, but whole ecosystems and the goods and services that they provide. The focus is on the establishment of ecological networks to ensure the long term conservation and management of habitats and species.

Europe has adopted the same approach and through the Emerald Network encourages non-EU countries to embrace the habitats directive. Membership of the EU is no longer a barrier to cooperation with neighbouring states where the protection of species and habitats across the continent is concerned.

As an integral part of the Protected Area Review, the Department of the Environment are also preparing a guide for managing Sites of Special (Ecological and Geological) Interest. Much of the protected land in Jersey is under private ownership and this guide will help landowners and managers understand the options available to them in terms of acquiring funds,

implementing conservation management and how the Natural Environment Team can help reach their objectives.

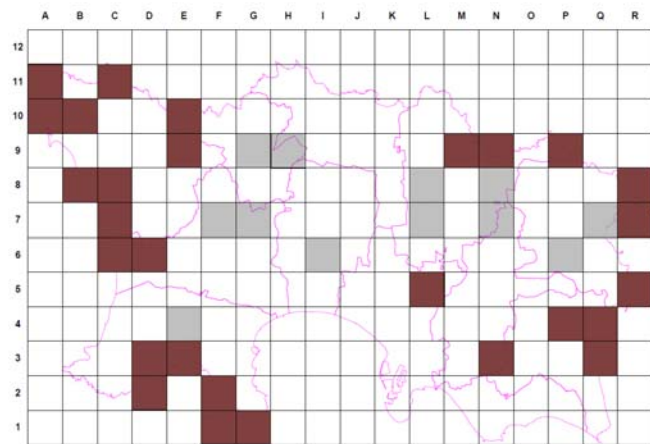
Within Jersey, with strong links with the Island Plan, the Biodiversity Strategy and other environmental policy, the future of our cherished countryside will include the linking of important habitats and biodiversity hotspots to make migration easier for wildlife, allowing animals and plants to spread along corridors and increase their population ranges.



National Amphibian and Reptile Recording Scheme (NARRS)

As part of Jersey's efforts to protect its local species, the Island takes part in the National Amphibian and Reptile Recording Scheme (NARRS) (www.narrs.org.uk). The scheme is a partnership project led by the UK's Amphibian & Reptile Conservation Group (ARC-UK) and the Jersey Amphibian & Reptile Group (JARG). NARRS aims to tell us more about the status of the amphibian and reptile species across the British Isles and specifically here in Jersey.

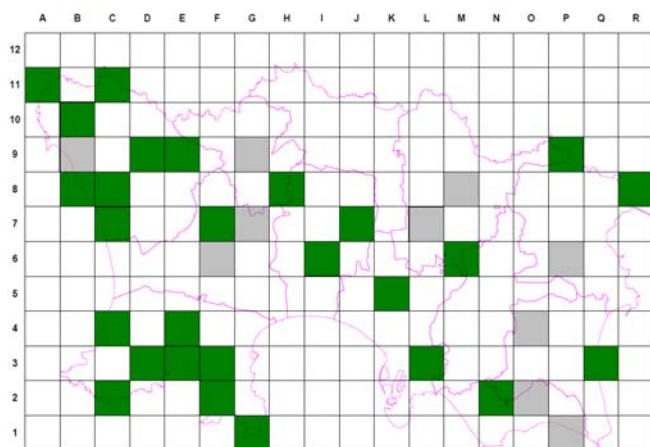
Every year NARRS highlights a species or issue relevant to conservation in the Island. For 2012, to coincide with the Year of the Lizard and Jersey's published biodiversity action plan, the focus is on the legless lizard known as the slow-worm. These fascinating but secretive lizards are not slow at all, but live mainly in ant nests and under rotting wood etc. Slow-worms are the original gardener's friend, drawn by the abundance of slugs and other food. At the moment they are under recorded, so to improve knowledge of these mysterious lizards, the Department decided to



Reptiles

Presences ■

Absences ■



Amphibians

Presences ■

Absences ■

conduct a Jersey slow-worm survey across the Island. The results will help to build up a picture of where slow-worms are distributed, their apparent attraction to compost sites, and what sort of conditions suit them best. Slow-worms tend to like hiding under refugia (e.g. corrugated metal sheets, roofing felt or carpet tiles) so surveyors are encouraged to look for them there.

Records were collected throughout 2012 from gardens and compost heaps and then used to work out what kinds of habitats slow-worms exploit. It is hoped that enough information was collected to establish information against which to judge future trends and, where necessary, take action to conserve the species for years to come.

Central to NARRS is the use of trained volunteers to collect data. During February 2012 JARG held an all day event 'JARG DAY' which involved training for interested volunteers in species identification, survey methodologies, bio-security and health and safety, and given survey forms to fill in and other materials

facilitating the completion of their survey/s (e.g. identification sheets).

The NARRS survey cycle currently runs over a six-year period (2007 – 2012 inclusive) in order to fit in with EU reporting responsibilities for the UK, but this is also a realistic time-frame over which changes might occur and thus be detected. At the end of each survey cycle, the data can be analysed and the cycle begins again with the same rules and conditions. 2012 was the last year of the first cycle.

To date a total of 40 reptile squares and 37 amphibian squares (see figs) have been surveyed between 2007 – 2012. Further results are due to be submitted for 2012. The scheme will continue to run annually.

It is hoped and anticipated that the completion of the first Jersey NARRS cycle will serve to promote the scheme in Jersey, increase participation, and further the goals of herpetofauna conservation in the Island for the future.

Herps, Agile Frog Monitoring & Resume, Head- Starting

Climatic conditions in 2012 meant that the year was one of the most difficult for amphibians not only in Jersey but across the UK. The mild, dry winter months (for the second year running) prior to the breeding season meant that water levels were significantly down across all monitored and potential breeding sites.

Common toads were observed and mating in mid to late January, as might be expected, but the numbers and quantity of spawn remained low as the rains stayed away. The long term impact of two difficult breeding seasons for the common toad is difficult to quantify at this point but monitoring during the 2013 season should begin to provide some anecdotal evidence as to the status of toads in pond that are monitored by the Department.

With regard to the agile frog a short cold snap signalled the start of the breeding season with the first sighting of frog spawn noted on 17th February, in line with the previous 2 years*. Agile frogs continued to breed into early March but with water levels dropping fast the decision was made to remove spawn clumps that were under threat from drying out, to a holding facility that was hastily established at the Howard Davis Farm.

By mid March as water levels continued to fall the decision was made to remove all spawn from the wild to holding tanks at the Howard Davis Farm. The risk of allowing spawn to hatch into water bodies that weren't expected to stay viable to froglet emergence was considered too high.

The establishment of a holding facility for agile frog spawn bought with it an additional level of management. Tank water needs regular monitoring and cleaning particularly when spawn has hatched. In addition tadpoles require supplementary feeding and



Emergency frog spawn holding facility

their demand of a water space to number ratio, means that as tadpoles grow they need more space to reduce the effects of competition. Some of these factors coupled with the scale of the captive rearing at the Howard Davis Farm meant that it was not viable long term. Consequently the head-starting program at Durrell (supported by their facilities and funding from the Environment Department) was re-established and all agile frog spawn was transferred to the holding facilities at Durrell. Tadpoles were then reared to their final growth stages prior to transformation to froglets and the need to leave the water.

Throughout the spring and early summer little significant rain fell and the focus of attention now turned to release sites for the head-started tadpoles being reared at Durrell. Three semi-natural sites, two of which had undergone some specific habitat management work in previous years (to improve conditions for amphibians), were still holding some water and all head-started tadpoles (approx. 8,000) were returned to the wild at these locations. Whilst there are issues with species overloading in habitat it was felt that the development stage of the tadpoles, coupled with the lack of suitable alternatives meant that there was little

opportunity for other release options.

2012 was the second difficult breeding season in a row for amphibians and in particular the agile frog and the impact on what was a recovering population may not be seen for some time. At the time of writing this summary (January 2013) all natural and semi-natural water bodies are full with water and ground water levels seem to be replenished following a very wet Autumn 2012. This bodes well for an improved season for 2013.

**Monitoring and frog presence and spawn clumps has been used for over ten years as a means of assessing the size of the population (particularly breeding females) and the success of the population.*

Jersey Butterfly Monitoring Scheme (JBMS)

The Jersey Butterfly Monitoring Scheme (JBMS) has now been running for eight years and forms part of the Department's integrated programme to carry out 'State of the Environment Monitoring', a schedule of biological monitoring projects which aims to investigate the health of Jersey's ecosystems.



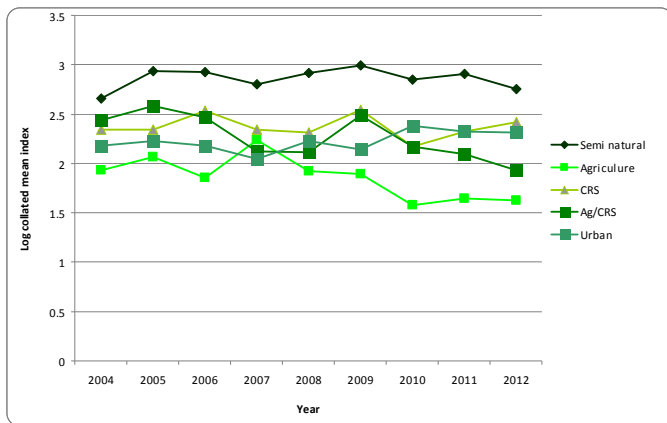
Butterflies act as indicators of the state of the environment. Not only are butterflies biologically suitable as indicator species as they have rapid lifecycles and, in many cases are highly sensitive to environmental conditions. Their short life cycle allows us to monitor them annually, using the data to assess the impacts of climate change and the progress of environmental policy initiatives.

For 2012, 32 butterfly transects were walked out of a possible 35 but the spring and early summer were abnormally rainy and windy, making it one of the wettest years on record. The poor weather seems to have affected the Island's butterfly population with many JBMS volunteers reporting that it was several weeks before they saw butterflies appearing in any numbers. The effect of the poor weather will be subject to a fuller analysis in due course.

The graph overleaf shows measures of collated butterfly indices from 34 transects using 28 species commonly encountered in five key habitat types: semi-natural; agricultural; CRS (Countryside Renewal Scheme) managed; agriculturally improved (under CRS); and urban sites.

The long term trends on the graph indicate that Jersey's semi-natural habitats are the best and most stable areas for butterflies while most other sites fluctuate or are suffering an apparent decline in abundance. The figures also indicate that changes in land use regimes designed to enhance biodiversity have been successful in increasing the populations of the indicator species. However, these figures are provisional and it is hoped that once the JBMS has ten continuous years of data that a fuller analysis will be undertaken.

A training event held on Saturday 24th March 2012; at Howard Davis Farm in Trinity was organised to give existing volunteer recorders feedback on previous year's results as well as inviting possible new volunteers to join the scheme. The event focussed on invertebrate activity in Jersey, with talks on our local species of moths and butterflies. We also had a talk from Dr Tim Sparks at University of Coventry. Tim is heavily involved in collating the UK's data for phenology and what it tells us about the impacts of a changing climate. In addition, there were workshops for individuals who would like to take part in Jersey's scheme and who would like to learn about local and national butterfly identification skills and survey methods.



Butterfly (26 species) trends of abundance (Log collated weak index) in five habitats over nine years

Breeding Bird Survey/ Bird Atlas/ Farmland Bird Survey

In 2012, the Breeding Bird Survey continued with a survey undertaken both in early and mid summer. The breeding bird survey is administered by the Joint Nature Conservancy Council, the Royal Society for the Protection of Birds and the British Trust for Ornithology, and is carried out in Jersey by the Société Jersiaise Ornithology Section, Durrell Wildlife and the Department of the Environment. When compiled, the data are submitted both to national figures and to 'The State of

Jersey', a report which outlines the health of Jersey's natural resources and environment and is published every five years.

2011 was the final year for the British Trust for Ornithology Bird Atlas 2007 – 2011 project. The book will detail individual species breeding distribution, winter distribution, abundance and also the change between the years of recording and is due to be published in August 2013.

The Farmland Bird Survey, which is administered by Durrell, results in important data which can be used as an indicator of the local population trends of a number of species which are known to be declining in number, including the stonechat and skylark. Officers from the Natural Environment Team help with the fieldwork and recording.

The Farmland bird survey is intrinsically linked to the Birds on the Edge project and details of the survey can be found on the Durrell website.

Birds on the Edge (BoE)

This project is a partnership of Durrell Wildlife Conservation Trust, States of Jersey Department of Environment and the National Trust for Jersey. The aims are to restore Jersey's coastal lands, to help the ecological recovery of declining bird populations and other animal and plant species and to encourage the return of those that have died out.

Today, much of Jersey's coastal habitat, especially on the cliff tops of the north and south-west of the Island is degraded and dominated by extensive tracts of bracken. In past centuries marginal areas of heathland, sand dune and steep coastal slopes were an important resource for farming and especially for grazing animals. However, since the early 20th century, changes to agriculture have included a move away from mixed farms and a consequent loss of livestock such as sheep and goats. With these changes the Island has seen the loss and decline of many birds like the skylark, yellowhammer and stonechat.

For any further information about this fascinating and far reaching project, please visit the website at <http://www.birdsontheedge.org/>

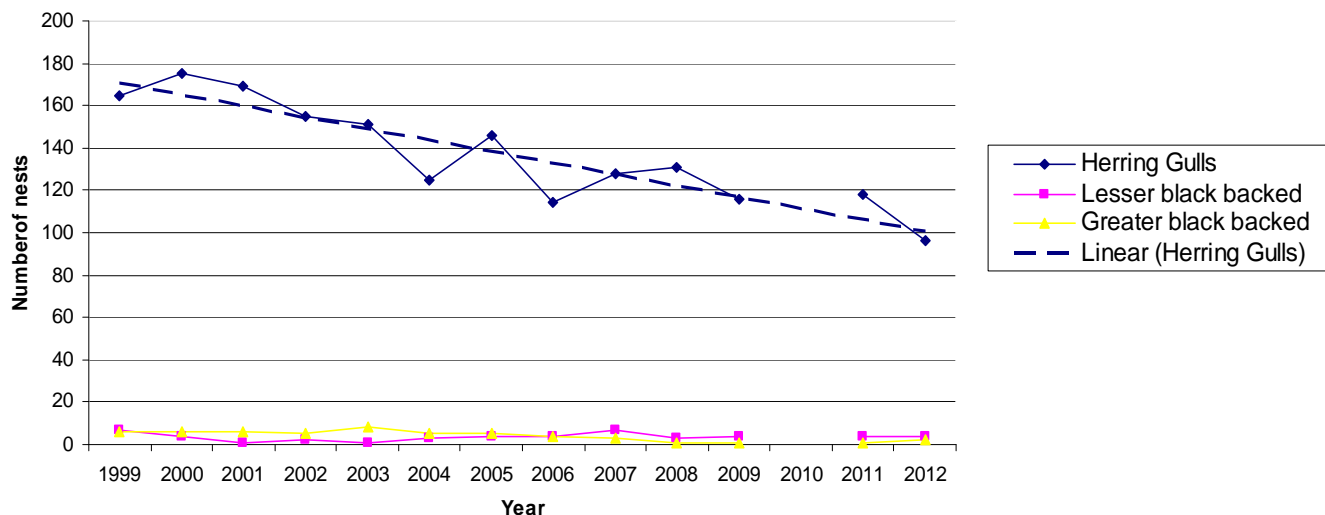


Red-billed chough (Photo credit Andrew Kelly)



North coast aviary

Gull nests in St Helier Study site



2012 proved to be a very interesting year for one of Jersey's more precariously placed bird species; the ciril bunting. A pair of ciril buntings set up residence in the grounds of the Royal Jersey Golf Club and successfully raised a couple of chicks. These birds have been supplementary fed throughout the season to ensure that sufficient nutrition was available, and both adults were seen in early January 2013.

Habitat restoration on Jersey's coastal slopes is underway and projects and resources are being focused on this task. In order to recreate the mosaic of semi natural habitats there are particular projects which will deliver the greatest benefits with minimal inputs. These include bracken clearance, grazing livestock, Holm oak control and Hottentot fig control.

In tandem with the ongoing habitat restoration is a project to return the red-billed chough to the sky's of Jersey. This bird was last seen in the Island in about 1900 and is thought to have become extinct due to changes in land management and a loss of the short cropped, insect rich grasslands on which this species depends.

Aviaries are currently being built on the north coast and the birds, which have been at Durrell, will take up residence in the spring of 2013.

We look forward to updating you on the chough's progress in the 2013 Natural Environment Annual Report!

St Helier Seagull Nest Count

This study started in 1999 and is designed to monitor changes in the number of apparently occupied nests within a study area defined by the ring road of St Helier town. Analysis of the locations and number of nests offer information on colony dynamics and use.

Annual nest counts are made over a number of days in the last week of May, performed with a consistent

methodology. Counts are made from observation points situated on tall buildings within the study site. The distribution of the observation points affords a good visibility across the site and offers a level of overlap so that nest sightings can be verified from several positions. Nests are scanned with binoculars and checked using a high resolution fieldscope to search for apparently occupied nests. Locations of identified nests are held on a geographical information system (GIS) to ensure correct spatial placement.

Although there has been some annual fluctuation over the study period the general trend shows a decline in nesting gulls over the period of observation. It is difficult to determine exactly what has occurred since 1999 but there is a clearly recorded reduction in nest totals however St Helier is a dynamic place and many buildings have changed since that period making it a different habitat for gulls.

There is confidence that an uncontrolled expansion in the present population is unlikely.



iBats – Indicator Bats Program

Bats represent about 40% of Jersey's terrestrial mammals and are recognised as an important group of species. They are protected by the Conservation of Wildlife Law and internationally through Bern, CBD and Eurobats, a treaty under the 'Convention on the Conservation of Migratory



Species of Wild Animals' or the Bonn Convention. As a valuable indicator of habitat quality they are used in the State of Jersey environmental monitoring program to "Monitor Jersey's position in contributing to global biodiversity". All Jersey bat species are collectively covered by a Biodiversity Action Plan (2006)

The main aims of the iBats program are:

1. to provide long-term monitoring at the local, national and regional level.
2. to increase the number of records of mammals (primarily bats) along roads;
3. to determine which roadside habitats are important for bats;

iBats is a partnership operation between the Zoological Society of London and the Bat Conservation Trust, working with a number of national and international NGO's. The iBats scheme has been adopted by many countries and is developing national bat monitoring programs across the globe to help assess the impact of national development and global change.



iBat transects recording Jersey bats

Applied locally the programme covers 280 km of car transects where ultrasonic detectors capture bat echolocation calls on routes driven by staff and volunteers. Repeat surveying of transects over time produces population trend data.

Due to its efficiency and practical simplicity iBats has had huge international success and the project has extended its scope internationally into Hungary, Ukraine

and Russia, with pilot projects set-up in Thailand, Mongolia, Madagascar, Mexico, the USA and Zambia.

The iBats project continually seeks to develop new technologies to improve the efficiency and sustainability of the project and developed smart phone applications which, when attached to an ultrasonic detector, record spatial referenced sound files and other survey data along the route. The geo-referenced sound files are then uploaded onto the iBats web portal post survey. Part of the process for an automatic method of identifying and extracting bat calls via a neural classification network was developed in 2012.

Managing the Natural Environment

Work Completed On Sites

The Annual Work Schedule which the Natural Environment Team (NET) provide Transport and Technical Services (TTS) with each month, outlines in detail the work that should be carried out on public land across Jersey.

In any one year there are over 100 tasks to be carried out across the various sites, all of which must have specifications prepared for them. The specifications describe in detail why, where, when and how any particular job should be carried out.

During 2012, the NET has used the software called the Countryside Management System (CMS) to its full potential so that the work planning and reporting process is more efficient. CMS is designed as a site management tool and allows us to create 'live' management plans for each of the 51 individual sites administered by the Department of the Environment. This planning of work is outlined in the table on page 15.

Throughout the year, our TTS colleagues, including the Ranger, Forestry and Tractor teams successfully completed the 100 plus specified tasks from the Annual Work Schedule and 161 unspecified tasks, all of which have been overseen by the NET. This includes 93 priority 1 tasks which are likely to be hazardous to site users and are responded to within one week.

Contractors

Whilst the bulk of the work undertaken on behalf of the Department is done by the teams at TTS Parks & Gardens (Ranger, Forestry and Tractor) there is also a necessity to engage private contractors for a number of specialist projects in relation to access, habitat management and interpretation. The majority of these projects are already covered in the report but they are summarised on the table on the following page.

The partnership project with the Island Insurance Company saw the continuation of work at C tel de

| Project | No. of Projects | No. of Sites |
|---|-----------------|--------------|
| Total number of projects in 2012 carried out by Contractors | 352 | 51 |
| Total number of projects in 2012 carried out by TTS | 157 | 51 |
| Invasive species control | 98 | 20 |
| Branchage | 19 | 19 |
| Footpath and access track maintenance | 29 | 24 |
| Grassland management | 26 | 19 |
| Management of heather by mowing | 5 | 4 |
| Probation Services | 12 | 7 |
| Implement site safety and inspection | 14 | 51 |

Lecq. This work, carried out by approved contractors, involved, scrub clearance and grassland management work.

The management of key dwarf-shrub heath and maritime coastal grassland habitat, continued at Portelet SSI's, through the removal of invasive holm oak *Quercus ilex*, birch *Betula undulate* and pine sp. *Pinus* sp. by external contractors.

The Department engaged specialist contractors to undertake a Health & Safety Assessment of all trees associated with selected north coast access routes. The results of this saw the commencement of remedial works to ensure continued user safety. This management activity has also been used as a way to improve habitat condition and meet the aims of wider woodland improvement across Jersey.

The Department has continued to ensure that public access to site car parks is in place. This involved a number of re-surfacing jobs to car parks and access tracks to sites, administered by the Department. 2013 will see a move to a more sustainable solution for track maintenance that requires an increased level of initial investment removing the need for such regular maintenance visits. As in previous years the Jersey Community Services Program has also played an integral part in digging trench lines to restrict vehicle access to more sensitive areas of ecological value.

Private contractors continue to manage the footpath maintenance as well as the additional footpath improvements program. See the section on Access for details.

Invasive Non-Native Species Management

Invasive non-native species have an impact on biodiversity by displacing or preying upon native species, by destroying habitats, or by introducing new diseases or parasites. The most direct implications are the threats of predation on, and competition with, native

species. For example, in the U.K. water voles have declined as a direct result of predation from non-native mink.

Invasive non-native species can also affect ecosystems more widely. River catchments are particularly vulnerable to invasive aquatic species: these include signal crayfish and Australian swamp stonecrop. Along riverbanks, dense monocultures of plants such as Himalayan balsam and Japanese knotweed can crowd out native species. When these invasive species die down in winter, they leave the river banks bare, exposing them to increased soil erosion. An audit undertaken in England in 2005, found 2721 non-native species in the wild.

The control of the spread of invasive species is recognised as being the number one conservation priority if we are to protect global biodiversity.

Here in Jersey, the control of these problematic species is ongoing but efforts in 2012 were stepped up with considerable habitat management aimed at the control of non-natives (see table on following page).

Also, in an effort to stay abreast with modern technology and engage as much as possible with citizen science, phone applications are being researched so that sightings of new or established non-native invasive species can be reported with ease.



Native to South Africa hottentot fig at Noirmont SSI

| Area/Time spent on Management of Non- Native Species | | | | | | | | | | |
|--|------------------------|-----------------------|-------------------------|------------------|-------------------------------|---|------------------------------|-------------------------|---------------------------|--------------------------|
| Site | Ecological Designation | Area of site (m2) | Creeping thistle (days) | Ragwort (days) | Hemlock water dropwort (days) | Hottentot fig and other succulents (days) | Area of bracken managed (m2) | Mature Holm oaks (days) | Seedling Holm oaks (days) | Japanese knotweed (days) |
| <i>Les Landes</i> | SSI | 1,027,158 | 27.5 | 2.5 | | | 55,637 | | | |
| <i>Pres d'Auverne</i> | | 7,100 | 2 | 2 | 1.5 | | | | | |
| <i>La Mielles de Morville</i> | | 356,441 | 12.5 | 18.5 | 7.5 | | | 4 | 4 | |
| <i>Les Blanches Banques</i> | SSI | 2,059,574 | | 9 | | 49.5 | 2,685 | | 30 | |
| <i>Gorselands</i> | SSI | 481,857 | 2.5 | 2.5 | 2 | 51 | 30,471 | | 1.5 | |
| <i>Les Creux</i> | | 314,184 | 5 | 0.5 | 3 | | 88,493 | 41 | 26 | 1 |
| <i>Woodbine Corner</i> | | 12,487 | | | 17 | | | | | |
| <i>Ouaisne</i> | SSI | 164,488 | | 2.5 | 11.5 | | 9,825 | | 9 | |
| <i>Portelet</i> | SSI | 327,248 | | | | 13.5 | 28,300 | 50 | 12 | |
| <i>Noirmont</i> | SSI | 318,755 | 15 | 3 | | 13 | 69,072 | 40 | 4 | |
| <i>Duke's Wood</i> | | 20,732 | | | 1.5 | | | | | |
| <i>St Catherine's Woods</i> | | 197,247 | | | 17.5 | | | 16 | 6 | 0.5 |
| <i>Le Petit Pre</i> | SSI | 25,246 | | | 17.5 | | | | 1 | |
| <i>Plemont</i> | | 54,736 | | | | | 5,201 | | | |
| <i>Catel de Lecq</i> | | 61,264 | 2 | 5 | | | 10,755 | | | |
| <i>Crabbe</i> | | 21,832 | | | | | | | | 0.5 |
| <i>Sorel Point</i> | | 58,051 | 0.5 | 1 | | | | | | |
| <i>La Perruque</i> | | 18,397 | | | | | | | | 1 |
| <i>Egypte</i> | pSSI | 16,239 | | | 11 | | 1,649 | | | |
| TOTALS | | 5,543,036 (m2) | 67 days | 46.5 days | 90 days | 127 days | 302,088 (m2) | 151 days | 93.5 days | 3 days |

Unplanned Issues – vandalism, fly tipping, pollution incidents, fire

Every year in the countryside a number of unforeseen events occur which threaten our local wildlife. This could be through direct physical damage to species, pollution of the environments which they occur in or through the spread of invasive species found among green waste.

The damage caused by fires this year was at its lowest point in four years, with only 1,140m² of mature gorse being destroyed in two small furze fires. The first of these, at Les Landes SSI is thought to have been caused by a lit barbeque being thrown down the coastal slope onto an area of gorse, and took 15 fire-fighters the entire night to make safe.



2012 also saw two pollution events occurring on important nature reserves. The first, in January, concerned a stream which flows into St Ouen's Pond SSI becoming contaminated with fuel. The Department of the Environment's Environmental Protection Team responded, using oil absorbent booms to soak up the fuel before it did too much damage to the SSI. Despite the quick response tests indicated that the event had a negative effect on the water quality, but further tests indicate that the system is recovering. The second event involved a total of 10 part full barrels of what was thought to be oils and solvents being dumped in the car parks at La Mielle de Morville and Les Laveurs at the north end of St Ouen's Bay. Both of these incidents were investigated and cleared up by the Environmental Protection Team, and a case file on the incident at St Ouen's Pond SSI has been compiled and a prosecution being sought.

On top of these incidents, the Transport and Technical Services Ranger team have been busy clearing away large amounts of general waste and illegally dumped material. On top of the ever growing amount of dog mess on public sites for nature conservation, the Ranger team cleared up 5,640 litres of general waste, 11,411ltrs of green waste, 1,381ltrs of ash and 420ltrs of rubble, including 3 Christmas trees, a scooter, a car, a camper van and a clothes horse.

The issue of vandalism also continues in the countryside. In 2012 many hurdles placed alongside footpaths designed to keep people to the paths with the aim of

halting erosion of the habitats either side of the paths have been broken, pulled up and thrown down coastal slopes. This has created the need to use additional resources on contractors and Ranger time to replace and repair these hurdles. Similar acts have been carried out on signs placed at Les Landes SSI to protect the breeding population of toads from disturbance, which has undoubtedly affected the reproductive success of the population in a year when the breeding ponds dried up earlier than usual.

Ponds and Water Sampling

As previously mentioned on page 10, below average rainfall at the end of 2011 and the start of 2012 meant that many of the semi-natural ponds important for toads and agile frogs to breed in had very low water levels. Urgent action was needed make sure that there were enough ponds around to support these amorous amphibians...

Firstly, the Rangers from TTS dug a new pond at Ouaisne near to the main slacks. This pond was lined to ensure that it held water, throughout the season so that there would be a receptor site for spawn in danger of drying out. To increase biological activity in the pond, an amount of water and some turfs were lifted from one of the existing ponds and placed in the new pond, providing a food source for any tadpoles which were spawned here.

Secondly, in May, the new pond which had been dug in the winter of 2011 was lined with clay by the Jersey Conservation Volunteers. This pond wasn't immediately ready for use by amphibians, however it will provide a valuable resource for them in the future, and in the winter of 2012 was holding water well.



New pond at Les Creux in 2011



.....and in 2012

In 2011 we reported that we had carried out work on the pond at Woodbine Corner to improve its ability to hold water. These works have been a complete success and it has held water throughout the year. This led to several clumps of agile frog spawn being translocated here from other ponds which had dried out, and hopefully the young frogs will return here to breed when they are ready in a few years time.

An ongoing project which is carried out across most of our ponds and continued in 2012 is to monitor water quality over the amphibian breeding season. This data can help to indicate if there has been a pollution event at any of the sites monitored and to show how levels of nutrients and certain chemicals change throughout the season. It is hoped that in the long term the data will be looked at along with the data collected about amphibian activity, breeding and weather, and to begin looking at some of the factors which affect breeding success or failure.

Woodland Tree Surveys and Health & Safety Work at Egypte

Following a financial commitment to the upgrade of the access network (managed by the Department) over the medium term the decision was made to implement a Health & Safety Assessment of trees lining the network. Put into context the risk of death to users from a falling tree in the countryside in the UK is approximately 1 in 10 million. With this in mind the Department has developed an assessment system in conjunction with local expertise and reference to the Guidance issued by the National Tree Safety Group.



Toward the end of 2012 two sections of the North Coast footpath were assessed as the first in a programme along all key routes of the network. At one of these between Wolf's Lair and Egypte Woods over 200 trees were assessed and a number of prescriptive measures were recommended through a priority based system. Work on addressing these issues has commenced and

will be finished this winter.

This initiative is supported through an ongoing monitoring program of the network by Department Officers that sees the sites visited and checked on a 6 weekly basis. It is likely that the information captured at these visits will define the order in which routes are assessed over the coming years.

Countryside Enhancement Scheme (CES)

Formerly The Countryside Renewal Scheme (CRS), this is an environmental improvement scheme which offers financial incentives to support and reward initiatives designed to look after Jersey's countryside

The scheme has options designed to assist applicants in the delivery of environmental projects that:

- help maintain and improve the Island's unique and internationally significant rural character, landscape, habitats, flora and fauna
- enhances, conserves and protects Jersey's natural environment on a local scale
- implements Island-wide strategic environmental projects that will enhance biodiversity
- assists with the delivery of the Island's commitments to International Multilateral Environmental Agreements (MEAs) and local environmental objectives

In 2012 there were a number of beneficial projects applied for which were successfully carried out. These projects included coastal grassland management, woodland management, pond creation and bracken control.

Please visit the States of Jersey website to find out more about the Countryside Enhancement Scheme.

<http://www.gov.je/Benefits/Grants/Environmental/Pages/CountrysideRenewalFunding.aspx>

Câtel de Lecq

Habitat management work continued throughout 2012 consolidating the efforts already made on the eastern side of the site and "earthworks" whilst targeting the western slopes for the first time. In addition to the use of private contractors, scrub clearance (identified in the Site Management Plan) has also been undertaken by the Jersey Community Services Group, Jersey Conservation Volunteers and the States of Jersey Ranger Team supported by the Back to Work Scheme.

Work on this site has been made possible through the continued financial support of the Insurance Corporation of the Channel Islands and full details of the project and site can be obtained from the Natural Environment Team.

Conservation Grazing

The Department has continued to seek opportunities to work with graziers to provide a habitat management function that meets its objectives at specific sites. Unfortunately one initiative that would have seen a significant increase in the number of sites and habitats grazed fell through after some promising initial negotiations. This left the Department working with two existing graziers at Les Mielles and Noirmont utilizing cattle, sheep and pigs to promote habitat objectives. A number of issues arising through the 2012 season will mean that grazing as a habitat management tool will be subject to a number of changes during 2013 and the success or otherwise of these will be discussed in a review of 2013 season.

In the meantime the Department continues to work with existing graziers to extend the provision of grazing on site and we would welcome any small holders interested in grazing livestock to contact us direct to discuss possible opportunities. The launch of the Countryside Enhancement Scheme provides an opportunity to fund any new initiatives providing projects can show a clear alignment to strategic objectives (for more details see www.gov.je).

Access

Access Maintenance Contracts

2012 saw the second year of the current three year term of access contracts, which are due to expire on December 31st 2013. In order to make savings it was agreed at the start of the current term to reduce the number of cuts per year from four to three. All went well in the first year, however it was impossible to anticipate the weather conditions that would be encountered in spring 2012, and higher than average rainfall together with warm temperatures in spring meant that vegetation grew at a greatly increased rate, in some cases the paths almost disappeared under the luxuriant growth in the two month gap between the first and second cut! It is hoped that 2012 will be the exception and that 2013 will not follow suit.



Rustic hurdles help stop bike erosion down the side of steps



Footpath users enjoying some new steps on the North Coast

Upgrading Jersey's Access Network

2012 was the first year of the five year phased plan to upgrade the footpaths under the management of the Department of the Environment.

Jersey's coastal footpath was constructed in the early 1980s. Budgetary restraints have dictated that hazards and dangers have had to be attended to on a priority basis, but as time passes more work needs to be carried out as the entire length of path reaches maturity at the same time. Much of the existing infrastructure on the network is well past its expected lifespan, and therefore is overdue for replacement in order to provide continued safe Public access.

Improvement work undertaken in 2012 included the restoration of routes severely damaged through erosion by water and cyclists; hard cutting of woody vegetation growth where it is encroaching onto the path; replacement of worn infrastructure including steps, fences and signs; the repair and addition of drainage where necessary and the removal of old worn signs and the addition of new ones.

Areas targeted for improvement included the north coast footpath between L'Etacq and Sorel Point; parts of Waterworks Valley; Cotil de Grouin between Ouaisne SSI and St Brelade's Bay and Ruelle Verclut near St Catherine's breakwater.

The upgrades also provided an opportunity to try some new methods and work practices. For example, a new handrail was installed to replace an old one on a particularly steep flight of steps between Les Creux and La Moye. The uprights on the old handrail had been timber and had broken on numerous occasions, the rope 'rails' had also been prone to braking so as a piece of infrastructure it needed regular maintenance. It was replaced with simulated wooden recycled HDPE plastic posts. Whilst being visually similar to wood, they are UV resistant, splinter free, rot, insect and algal resistant and less flammable than timber, they also do not leach chemicals. The old rope was replaced with



nylon coated wire rope which is flexible and weather resistant.

It is hoped that this improvement will mean that little maintenance will be required in the foreseeable future, thus saving time and money

Access agreements

Of the 70 km of Jersey's permissive access that is under the administration of the Department of the Environment, just over 49% passes over land which is in private ownership. When the paths were originally established by the Public Services Committee (now TTS) in the early 1980's, agreements with owners of the land over which they passed were drawn up. These agreements usually last for 10 years and are renewed as required.

Working in partnership with Jersey Property Holdings during 2012, long-term management agreements have been secured with private landowners for a number of new and existing footpaths, these are listed in the table below.

Education, Awareness and Volunteers

ECO-ACTIVE Biodiversity

As part of the Department of the Environment's commitment to provide environmental information and awareness in order to promote environmentally conscious decision making ECO-ACTIVE was created in 2006. The ECO-ACTIVE programme has grown from a simple public awareness campaign into a suite of tailored programmes and outreach work across many sectors including schools, business and community. ECO-ACTIVE BIODIVERSITY has become the brand for all awareness and education activities related to local biodiversity and will be used to implement the Department's initiatives and activities.

During the summer of 2012 the Department of the Environment partnered with the UN Decade on Biodiversity 2011-2020. The United Nations Decade on Biodiversity has been declared to support the implementation of a Global Strategic Plan for Biodiversity. Its goal is to mainstream biodiversity at

| Landowner | Site | Length of Agreement |
|--------------------------------|---|--------------------------|
| Jersey Water | Dannemarsh and Millbrook reservoirs, Waterwork's Valley | 9 years |
| St George's Preparatory School | St Peter's Valley | 10 years |
| Mr and Mrs P Bell | Petit Pre SSI | Rolling annual agreement |

different levels. Partners are encouraged to develop, implement and communicate the results of national strategies as well as making a long-term commitment to promote the Decade in all their activities and communications. ECO-ACTIVE BIODIVERSITY will be leading the Department's involvement throughout the United Nations Decade on Biodiversity.



Jersey Ecology Fund

The Ecology Trust Fund (publically known as the Jersey Ecology Fund) was established in 1991 using compensation funds from the Amaco Cadiz disaster. Its remit is to provide funding towards small and medium-sized environmental and ecology orientated projects. The NET provides the Fund's executive and administrative officers who provide logistical support to the five trustees. The fund holds quarterly meetings to assess applications and engage in strategic planning.

During 2012 the Jersey Ecology Fund's trustees met four times to discuss new applications and other issues affecting the fund's management. Grants totalling £13,190 were awarded to six individual projects. These ranged from small grants towards specialist training for local botanic groups through to a major research initiative for local marine rays. Grants were also awarded for a study of the diet of local barn owls and for ecological research on the seashore at La Rocque.

The JEF also assisted with the ECO-ACTIVE Sustainable Schools awards by providing panel members for the schools judging and funding two Bronze Awards within the Primary Schools section.

The ECO-ACTIVE Sustainable Schools Awards

The ECO-ACTIVE Sustainable Schools Framework is based on the UK Government's 'Sustainable Schools Strategy' and aims to build coherence among the broad range of initiatives and school practices within the bigger picture of sustainable development.

Part of the 2012 Framework included an annual awards scheme for individual schools which have undertaken environmental initiatives during the school year. Twenty schools put themselves forward for an award, the judging for which took place across two days in June 2012. The NET assisted with co-ordinating the judging schedule, had a member of their team on the judging panel and provided feedback to the ECO-ACTIVE team. The NET was also represented at the awards ceremony, held at the Amaizin' Maze in St Peter, where a team member assisted in presenting two Bronze Awards sponsored by the Jersey Ecology Fund.

School Groups

Since the demise in 2009 of Environment Week in its previous format whereby the Department's educational service was actively promoted to the Island's schools, there has been a year on year decline on the number of school children taken on environmental walks and talks by the team, from 2076 children in 2009 to just 298 individuals in the whole of 2012. The lack of active promotion of the service must contribute greatly to this but also perhaps the fact that several of the Island's NGOs employ education officers, it is also thought that many schools are 'going it alone' and choosing not to use specialist guides when visiting the countryside.

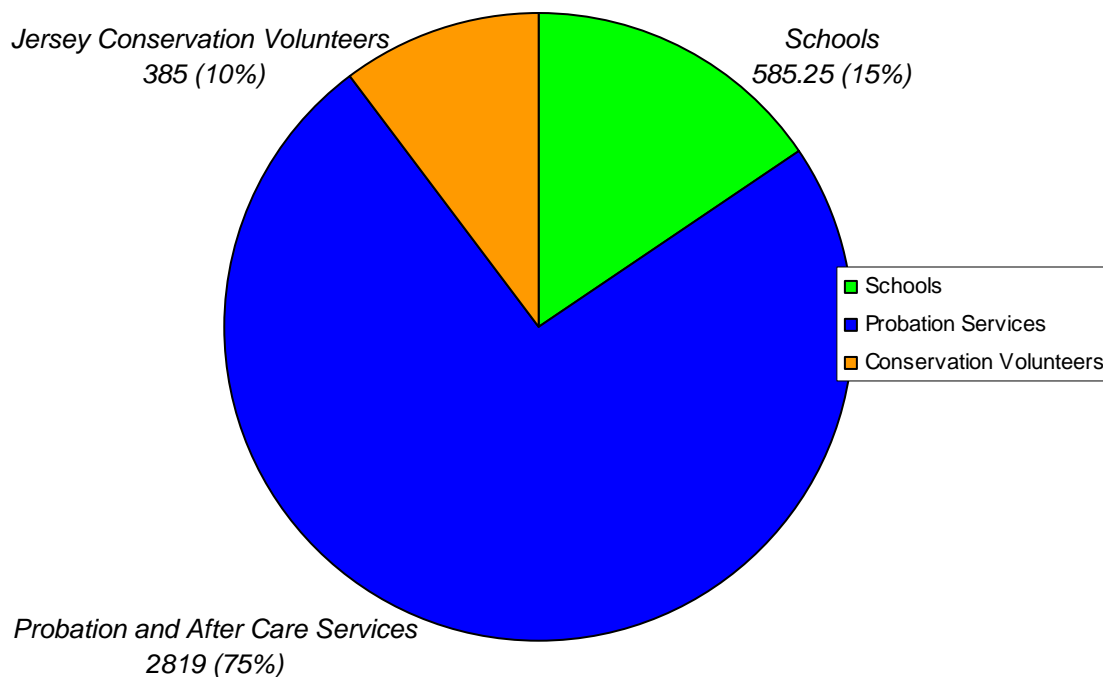


Volunteers (habitat management)

The Jersey Conservation Volunteers met a total of 8 times during 2012, with 50% of tasks being held on sites managed by the Department of the Environment including heathland management at Portelet Common SSI, scrub clearance at C tel de Lecq and lining a new amphibian pond with clay at Les Creux (see page 17 for more). We were delighted to be joined by a number of new recruits this year as well as welcoming back some old friends. A regular turn out of between 30 and 40 volunteers means that some really meaningful work has been achieved, and between them a total of 385 man hours were contributed towards habitat management on Department of the Environment administered sites alone.

The Department of the Environment and Probation and After Care Services have enjoyed a close working relationship for a number of years. The Department was the highest benefactor of hours provided by Community Services during 2012, amounting to a total of 2,819 man hours, a slight increase of 201 hours on 2011's total. This accounted for 75% of all volunteer work undertaken on behalf of the Department in 2012. During the course of the year, Probation and After Care Services successfully carried out 12 projects including access track maintenance, hottentot fig control, bracken control, footpath maintenance and dry stone wall building.

Breakdown of Man Hours Spent on Volunteer Tasks in 2012



Since 2010, Probation Services have been responsible for ongoing management of the coastal slopes overlooking La Corbiere lighthouse and these slopes are improving in condition and are starting to look their most colourful in the spring.



Other volunteer work parties comprised mainly of school groups; of particular note were a group from Jersey College for Girls whose regular meetings to undertake habitat management contributed 128 hours, and Victoria College who achieved a sterling 421.50 hours. It is worth noting that we have not had any corporate organisations volunteering for habitat management tasks since 2010. As always, the team continue to support students from schools and universities in their aspirations to work in an environmental field, either with individual reports and projects or in providing essential work experience.

Back to Work Scheme

Back to Work was set up to help the States meet the Strategic Plan 2012 priority to get unemployed Islanders working, keep people in work and create new employment opportunities through sustainable economic growth

The Back to Work team is based at Social Security and was set up in response to rising unemployment. It explores new initiatives to reduce unemployment by working with employers to meet their recruitment needs and with job-seekers to improve their employability.

Due to the magnitude of tasks to be carried out in Jersey's countryside, the Department of the Environment was a natural choice to turn to in finding work opportunities. For a six week period between October and December a team of 10 Back to Work customers joined the Transport and Technical Services Ranger Team and were mentored through a range of habitat and species management projects. The Natural Environment Team provided a schedule of works for the scheme and was largely focused on achieving the aims of the Birds on the Edge Project.

During this time, not only did participants learn about local ecology and issues present but they were trained in the use of a selection of tools, health and safety risk assessments and a number of other fundamental skills which one requires to successfully fulfil a period of employment.

The additional number of bodies working on the

projects provided was beneficial to the Department of the Environment and we look forward to a continued working relationship with the Back to Work Scheme.

Training and Personal Development

World Congress of Herpetology—Vancouver August 2012



This was a five day event held at the University of British Columbia in August 2012 and was attended by Nina Cornish, Research Ecologist.

The objectives of the Congress are to promote international interest, collaboration and co-operation in herpetology. These are to be achieved by holding periodic international congresses of herpetology, by establishing specialist committees, by serving as the Section of Herpetology of the International Union of Biological Sciences and by undertaking or encouraging such other activities as will promote these objectives.

Sessions attended included;

- Climate change effects on reptiles
- Citizen Science in long-term herpetological research
- Reptile Habitat Use & Spatial Ecology
- Reintroductions and translocations
- Conservation: recovery and restoration
- Insights from Invasions
- Habitat fragmentation

During the conference collaboration with the University of Oxford was made regarding wall lizard work being carried out in the UK and Europe. All Jersey samples were sent to them for inclusion in their evolutionary study.

Bat Conservation Trust

National Bat Conference

14th - 16th September 2012 University of York



Bat Conservation Trust - National Bat Conference 2012

This short 2 day event was held at University of York in September and was attended by David Tipping, Natural Environment Officer.

The conference brings together leading ecologists and

biologists operating in the world of bats. Attendance cultures current best practice, latest developments and meeting and maintaining professional relationships.

Presentations covered diverse topics such as:

- Emerging issues in bat conservation
- Mitigating for the needs of bats
- Bats and lighting
- Small wind turbine in proximity to bats
- New developments in surveying and monitoring
- High-speed thermal imaging of bats
- Automatic acoustic identification of bats
- Surveying bats using bikes

A broad range of bespoke workshops run by specialists detailing latest advances and development in the area of bats was also available.

Wildlife Legislation meeting in Isle of Man

In March 2012 John Pinel and Lindsey Napton represented the island at a two day forum on wildlife legislation held in the Isle of Man, along with representatives of Guernsey and Northern Ireland. The forum included discussions on enforcement issues, protected areas policies and the potential for inclusion of a statutory biodiversity duty in local wildlife legislation.

Planning and Mitigation Training

At the beginning of March the team received training over two days from an ecological consultant on the subject of mitigation for bats and best practice procedures. During his visit the consultant gave a talk on bats in Jersey to local architects and building professionals, which was well attended.

Enforcement Training

In May and June, four members of the Natural Environment Team took part in Enforcement Officer training at Highlands College. This five day course covered topics including the principles and structuring of investigative interviewing, writing a statement, maintaining a notebook, evidence gathering, preparation of case files and the laws surrounding enforcement. Scenarios based on possible relevant enforcement issues were also used to develop interview and recording skills in a number of role plays. Following the June session, the trainer spent a day with the entire team discussing examples specific to nature conservation and the environment.

The members of the team who attended the training at Highlands College are better informed of the correct procedure to take when following up on any enforcement issue, and have passed this knowledge on to the rest of the team. From this, the team has been able to strengthen our enforcement policy and procedures and gain a clearer understanding of how and when to use the relevant legislation.

Natural Environment Team

Conserving Jersey's natural environment for all, forever...

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