



Ministry  
of Justice



# Ecology news...

*"Making the Difference for Flora & Fauna"*

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## ***Endangered blobfish is voted ugliest animal ..***

The Blobfish (*Psychrolutes microporosus*) has been voted the world's most repulsive animal in an online poll aimed at drawing attention to the plight of endangered animals the world deems too ugly to save.



The vote was orchestrated by the Ugly Animal Preservation Society, which aims to raise awareness of creatures whose risk of extinction is largely ignored because they are not 'cuddly' enough.



## ***The Jurassic Coasts monument to extinction...***

Set to open on the Isle of Portland, the Mass Extinction Monitoring Observatory will be a monument to the planet's perished creatures.

The Isle of Portland on the world renowned Jurassic Coast, already designated a Site of Special Scientific Interest (SSSI), has been given further acknowledgment with the announcement that it will become home to the Mass Extinction Monitoring Observatory (MEMO).

The monument will pay homage to the world's extinct species, with images of 860 species assessed as extinct since the disappearance of the dodo inscribed on its sides. For so many species to perish over 350 years amounts to a 'mass extinction event' akin to that which wiped out the dinosaurs 65million years ago. MEMO will be extended over time should more space be needed to commemorate further species that become extinct in the future. Building is scheduled to start in 2014 pending the appropriate funding being raised, £20-25 million.



# Species in residence on the MoJ estate

## Adder (*Vipera berus*) - Native



### IDENTIFICATION

The adder is easily recognised by a dark 'zigzag' stripe along its back. There is also a row of dark spots along each side and a 'V' or 'X' shape on the head. Background colours vary from grey-white in the male to shades of brown or copper in the female. On occasion, completely black specimens are described (*see below*). They can grow to around 60cm in length and have rather a stocky appearance.



### WHERE TO FIND THEM

The adder is the most northerly member of the viper family and is found throughout Britain right up to the north of Scotland. In Scandinavia its range extends into the Arctic Circle. It is not, however, found in Ireland. Adders like open habitats such as heathland, moorland, open woodland and sea cliffs and rarely stray into gardens

### LIFE CYCLE

Mating takes place in April/May and female adders incubate their eggs internally, rather than laying shelled eggs (like the grass snake). Adders give birth to live young in August or September. They feed largely on small rodents and lizards. As a result their venom is not particularly potent.



### Legal Protection

***If you see an Adder let us know***

Adders are protected by law in Great Britain. It is illegal to deliberately kill, injure or sell wild Adders under the Wildlife and Countryside Act 1981.

# Projects



*HMP Haverigg on the Northwest coast of Cumbria, one of MoJ's designated sites. (SSSIs)*



## *Partnership working with HMP Haverigg*

*Just some of the 16,000 high quality plugs plants grown by Brendan and his team in 2013*

Cumbria Wildlife Trust approached HMP Haverigg to ask if the SD Team were willing to take part in the Meadow Life project, allowing parts of the prison farms to be used to produce hay meadow plants from seed. They were also keen to work with the prison community party to aid in the planting of meadows. The prison is very keen to support environmental projects in Cumbria and provide the opportunity for the prisoners to give something back to the community. This project would also offer new opportunities for staff, as the specific needs of the hay meadow plants were new and varied.

When the project began this year we were faced with using new organic composts produced from sheep wool and bracken and root trainer containers. When the first batch of seeds arrived, we soon realised we would be growing what some people consider weeds, and as gardeners this was a strange concept to consider. The first seeds were sown with trepidation, fearing that they may not germinate. There were days and sometimes weeks of worry regarding the germination of the crops, from both staff and prisoners. Although some were less successful than others, we eventually produced over 16,000 plugs.

The prisoners involved have found the project interesting and rewarding. Two of them have used the experience to gain levels 1 and 2 City & Guilds qualifications, also appearing on the local radio. This is an on-going commitment for the prison, staff and prisoners. We hope we can continue to provide plugs for some time and improve our success with each year's involvement.

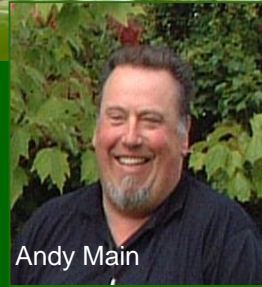
by Brendan Ashton – Gardens Foreman HMP Haverigg

**In Partnership**



*If you are interested in similar projects or would like to take part in projects such as this, contact Phil Thomas at the MoJ Ecology Team on: 020 3545 8548 or [phil.thomas@justice.gsi.gov.uk](mailto:phil.thomas@justice.gsi.gov.uk)*

### PSC Newbold Revel Estate staff work with Badgers



Andy Main, one of the MoJ Ecology Team's Area Ecology Co-ordinators, based at Prison Service College Newbold Revel, is working with a local Badger Group to survey, trap and vaccinate badgers against bovine TB (bTB).

The woodlands at Newbold Revel have been used for running biodiversity training courses for the last 14 years and one of the woodland management modules has been a major provider in maintaining woodland coppice and the diversity of woodland fauna, including the protection of one of Britain's oldest native mammals - the badger.

Local badger groups including the Wildlife Trusts are vaccinating badgers in an attempt to control the spread of bTB.

Cattle vaccination is a possible long-term solution but this is not yet available and is subject to regulatory approval and changes in EU legislation. Field trials of a cattle vaccine are due to start this year. Badger vaccination has the potential to reduce bTB without the negative impacts of perturbation (*increased transference of bTB between infected and healthy badgers and cattle*) arising from a badger cull.

In a clinical field study, BCG vaccination of wild badgers resulted in a 74% reduction in the proportion of badgers giving positive results to TB tests.

#### The Process of Badger Vaccination

- Recorded, numbered traps are placed for 7-10 days at suitable locations
- The traps are initially locked open and peanuts put down for several nights and then activated the night before vaccination
- On the morning of vaccination, traps are visited
- Badgers are vaccinated, marked with stock marker, recorded and released
- Traps are reset and peanuts put down in the afternoon
- Traps revisited the following morning
- Unmarked badgers are vaccinated, marked, recorded and released. If any marked badgers are re-caught they are released
- Traps removed, cleaned, disinfected and either relocated or returned to store



Trapping badgers in Newbold Revel woodlands.





# Rare plants create a buzz at HMP Gartree

Offenders on a new course in wildlife conservation at HMP Gartree made an interesting discovery during a recent inspection of amenity grassland in the prison grounds. The course is part of a series offered within Gartree by educational charity the **Worker's Educational Association (WEA)**. One of the aims of this course is to develop a conservation management plan that will hopefully be adopted by the prison. Although on face value, space for wildlife may appear limited, in this high security establishment, offenders are already discovering hidden delights.

Just before Christmas (2013), the group took its first trip into the grounds to inspect a closely mown grass verge alongside a walkway. Although not the best time of year to identify flowering plants, the basal rosette of an orchid was found. Two more were quickly discovered nearby and it's hoped that further searching will turn up more still in the coming weeks.



Based on vegetative features, geography and habitat by far the most likely candidate is a bee orchid (*Ophrys apifera*), although only waiting for the plants to flower will give absolute certainty to its identity. With its pink sepals and a labellum that bears a striking resemblance to a bumble bee this plant is unmistakable in flower. Although capable of self-fertilisation, its appearance helps to attract pollinating insects.

Bee orchids are typical of un-improved and semi improved calcareous (*lime rich*) grassland. For a variety of reasons, mainly agricultural intensification, these habitats have declined by as much as 90% during the twentieth century and with it their associated flora. Although the bee orchid remains relatively common and widespread in the south east of England it's only recorded from a handful of sites in Leicestershire (*the county in which HMP Gartree is located*).

**If you have bee orchids on your site please let us know here at the MoJ Ecology Team on: 020 3545 8548 or [phil.thomas@justice.gsi.gov.uk](mailto:phil.thomas@justice.gsi.gov.uk)**

# The International Picture for Wildlife in Prisons

*I believe that it's important to share ideas and good practice and wherever possible, understand what works. We can all do this locally with our colleagues, lead partners, and nationally through our Biodiversity network but there are also opportunities to learn from further a field. The MoJ Ecology Team recently contacted "Sustainability Projects in Prisons" in the United States of America.*

*Their mantra being: "Doing Good While Doing Time". The below are just a few examples of what they are doing in the USA.*



*Oregon spotted frog*

## SPP

**S**ustainability Projects in Prisons is jointly run by The Evergreen State College and Washington State Department of Corrections.

Their mission is to bring science and nature into prisons. They conduct ecological research and conserve biodiversity by forging collaborations with scientists, inmates, prison staff, students and community partners. Equally important, they work to reduce the environmental, economic, and human costs of prisons by inspiring sustainable and compassionate practices.

### Their Vision

This union of ideas and activities —with people inside and outside prison walls — creates a collaborative, intellectually stimulating environment in which incarcerated men and women play key roles in conservation and advancing scientific knowledge. We encourage teamwork, mutual respect, and a stewardship ethic among individuals who otherwise have little or no access to nature or opportunities in science and sustainability.

### Research and Conservation *(Just a sample of some of their projects)*

#### **Oregon Spotted Frogs:**

From 2009-2013, inmates successfully raised more than 550 frogs.

#### **Native Prairie Plants:**

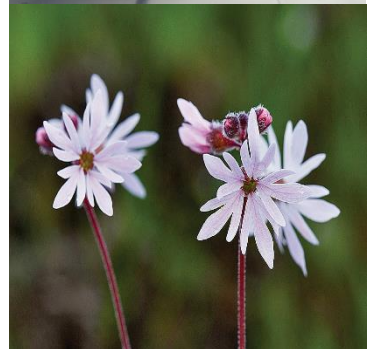
From 2009-June 2012, inmates have raised more than 600,000 native plants for South Sound habitat restoration.

#### **Taylor's Checker spot Butterflies:**

In 2012 and 2013, inmate technicians, students, and corrections staff at raised more than 7,000 butterflies for release.

#### **Honey Bees:**

Inmates and corrections staff maintain active beekeeping programs at several correctional facilities.



If you would like to learn more about SPP contact us here at the MoJ SD Team or visit: <http://sustainabilityinprisons.org/about/spp-network/>

Here in the MoJ Ecology Team, we believe that Training:

*"Is the acquisition of knowledge, skills and competencies, as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity, and performance".*

With this in mind, we hope to continue with our objective to make sure that all of our staff at MoJ designated sites and sites of biodiversity significance, have the skills and knowledge to support the MoJ's Biodiversity strategy.

Ongoing courses:	Date:	Venue:
- certificated <i>Biodiversity Awareness Course</i>	<i>May 12<sup>th</sup>- 15<sup>th</sup></i>	<i>HMP Wymott</i>
- <i>Wildlife and Countryside Law Course</i>	<i>April 9<sup>th</sup></i>	<i>MoJ HQ London (Limited spaces)</i>

For further information on these and other courses, or for future dates, please contact:

Andrew Paternoster at: [andrew.paternoster@justice.gsi.gov.uk](mailto:andrew.paternoster@justice.gsi.gov.uk)



## 2013 NOMS Wildlife Award

*The OSCARS of Wildlife Awards....*



Another good year for applications for the NOMS Wildlife Award, although I can't help thinking that there are many more sites who are doing good things and not being recognised for their good works. It's important for everyone to get the recognition they deserve but not only that, it serves as good practice for others to follow. The final judging round is now taking place and by the June Issue of Ecology news, we should know who the overall National Winner is for 2013.

# Strange but True Facts



Camels have 3 eyelids. Two of them have very long curvy lashes to battle against the sand. A third lid is transparent (Nictitating membrane) so that the camel can still see, it opens and closes sideways.



The koala, like humans, have finger prints, The remarkable thing about koala prints is that they seem to have evolved independently some 70 million years ago.



Ants have graveyards. Two days after an ant dies, its body gives off oleic acid which creates an odour to let the other ants know that it is dead. Once the ants catch the scent, they pick up and carry the dead ant off to their ant graveyard. They do this because corpses have a lot of bacteria and concentrating the dead to one location avoids the bacteria from spreading.



## Ecology Team

MoJ SDT Ecology Manager – Dr Phil Thomas (Editor)

## Area Ecology Co-ordinators

Northwest – Andy Main / Paul Hetherington    Northeast – Andy Main (T)    Eastern – Paul Jackson  
London & Southeast – Nadia Persaud / Martin Dacey  
Southwest & Wales – Glenn Barter    Central – Paul Cooper (T)    BAP Co-ordinator – Beatrice Finch

## Technical Support

Andrew Paternoster

## Editorial

**Anthropogenic** - The overwhelming threat to natural habitat is anthropogenic (caused by human activity), through habitat conversion to agriculture, for development or mining or through the introduction of invasive species. We need to be aware of our actions no matter how good our intentions!



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*“Delivering Ecological Services across the Custodial and Non-Custodial estate, Working to Make a Difference and Making a Difference that Works”*