

Biodiversity Matters



Issue 7

DEFA's Biodiversity News

July 2014

Biosphere Vannin

In a nutshell, Biosphere Vannin is all about active conservation of everything we're proud of in our beautiful and unique Island. To quote from UNESCO "Biosphere reserves are areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use".

Biosphere reserves serve in some ways as 'living laboratories' for testing out and demonstrating integrated management of land, water and biodiversity. DEFA and partners are working hard to complete the nomination paper to put the Island and its sea forward as a UNESCO Biosphere Reserve, Biosphere Vannin. (<http://biospherevannin.im/>).

During the year there has been a stakeholder workshop to discuss the three zones (core, care, and living and working), a photographic competition, a Facebook page has been set up (<https://www.facebook.com/#!/biospherevannin>) and various maps are being prepared. The Biosphere Reserve is seen as a way to meet some of the objectives of the Biodiversity Strategy. Fingers crossed for the success of the bid!

Liz Charter

Recent News

A new bee record for the IoM

BugLife, a charity devoted to the conservation of invertebrates, has been contracted by DEFA to survey the invertebrates of Manx soft cliffs, a naturally eroding habitat with specialist species that are adapted to warm, open sites.

The study is not yet complete but a Halictid bee, *Lasioglossum minutissimum*, has been found by Sarah Henshall at Glen Wyllin and Orrisdale Head. This species has not been recorded previously on the Isle of Man. It is a small and rather uncommon species of sandy heaths and cliffs. It will be worth looking out for its related parasite *Sphecodes longulus*, which is in the same bee family. There are clearly still many unrecorded terrestrial invertebrates on the Isle of Man and further study is warranted.

Dr Richard Selman

Events

To find out about the wide range of forthcoming events organised by wildlife and countryside groups see:

<http://www.manxbiodiversity.org/>



Widows cause arachnophobia

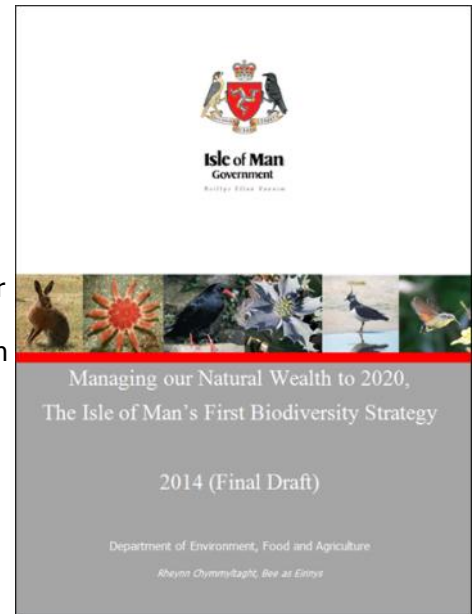
This last year there has been a surge in public interest in spiders, led by news items in the UK regarding false widow spiders and spider bites. There are very few spider species here that can produce a noticeable bite on a human, and this is only likely in handling them, or inadvertently threatening them, such as sitting on one! However, the larger species of **false widow spider**, though shy by nature, are capable of biting, with an effect considered equivalent to a bee sting. There are two species of interest in this regard. *Steatoda grossa* was first recorded on the Isle of Man when I found it at Kirk Michael in 2010, and it has since been reported from Douglas in 2014. This species is native to Britain. The somewhat larger, well-marked, *Steatoda nobilis*, I identified from a Port St Mary specimen found in 2013. It is thought to have been introduced to Britain in the late nineteenth century. Specimens of both species have been lodged with the Manx Museum, where anyone interested can view them.

The only Manx spider bite that I am aware of, was one reported from Douglas this year, but no specimen was available for identification. Most queries that have resulted from the media interest have turned out to be common, harmless species, such as *Amaurobius*, and one interesting query was identified as the **cave spider** *Meta menardi*, but living in a compost bin, rather than its usual cave and mine sites. Anyone interested can access good information on **false widow spiders** and other species on the websites of the Spider Recording Scheme, the Natural History Museum and Garden Safari, and we recommend checking the pictures of similar reported species before requesting further advice.

Dr Richard Selman

Biodiversity Strategy

In August and September 2013 the Strategy was released for public consultation and many positive responses were received.



In June DEFA approved the Biodiversity Strategy, Managing our Natural Wealth to 2020. The intention is to work with DEFA's new Minister, Richard Ronan to ensure he is comfortable with the document and minor updates are made before it is taken to Tynwald for adoption in the autumn.

Liz Charter

The Ayres National Nature Reserve

It has been a turbulent 12 months on the Ayres NNR. The winter tidal storm surges caused massive erosion to the fore dunes and a large amount of litter and **marram grass** were deposited along a newly created strand line in the dunes. Approximately 50 **shag** corpses were found on the beach and it is likely that these were unable to feed during the storms and died from starvation. The remote weather monitoring station at the Point of Ayre run by Ronaldsway Met Office recorded more than double the average rain fall for January and the largest floods on the NNR in living memory ensued. The inundation lasted for four months seriously hindering access for visitors and local dog walkers.



Several species not usually recorded on the NNR took advantage of the newly created lakes including **tufted duck** and many wetland birds bred in good numbers including **mallard, teal, coot** and **moorhen**. In addition a **four-spotted chaser** was recorded on the NNR for the first time. Negative impacts of the floods included the loss of some **lichen** heath, a globally rare habitat and the nationally rare **field gentian** that flowers in September is also likely to have suffered.

Exceptional numbers of **little terns** have been recorded on the NNR this year with 60 pairs attempting to breed. Unfortunately there has been massive egg predation with many clutches being raided by **hedgehogs**. This may be an after effect of the tidal storm surges and floods; the floods will have pushed the **hedgehogs** into the dunes and the heaps of marram grass left by the tidal storm surges have provided perfect day time/nesting cover. So far 17 **little terns** have fledged and there are still chicks and eggs on the beach and so hopefully more will follow. Rene Beijersbergen, a Dutch researcher, visited the Island in June to collect data on the feeding behaviour of the Manx **little tern** colony.

This is the first time any research of this type has been undertaken on the Isle of Man and Rene will be publishing his results in due course. There have also been exceptionally good numbers of **Arctic terns** recorded at the Point on land owned by Bride Sand and Gravel with at least 30 pairs recorded. Unfortunately these have also suffered very high egg predation and **brown rats** have been monitored raiding the eggs here. So far 7 chicks have hatched successfully and several birds are still incubating and so we should at least see some fledged young this year. This year there has been at least three first summer **Arctic terns** (black legs and beak) present at the Point, it is quite unusual for these birds to travel back to their breeding grounds in their first year.

The Manx Ringing Group have fitted both **little terns** and **Arctic terns** with coloured lettered rings and it is hoped that the ringing project will provide information on their migration routes, their wintering grounds and movements between nesting colonies. Ringing data so far has shown that **little terns** ringed as chicks at Foulney Island Burrow-in-Furness, The Breaches Kilcoole Wicklow and Brora Highland have all nested on the NNR and one of these birds was 13 years old. In addition two **Arctic terns** ringed as chicks at the Point in 1999 were seen nesting at the Point this year.

This year volunteer nest recorders undertook training and have been issued with licenses to monitor **ringed plover** and **oystercatcher** nests. Sixty-four **ringed plover** clutches and forty-six **oystercatcher** clutches were monitored with most having successful outcomes at the hatching stage. Large chicks and juveniles of both species are being regularly recorded on the beach. **Curlews** also appear to have done well on the NNR this year with one pair being recently sighted at Ballaghennie with 3 chicks not far off fledging.

For information on the NNR or if you would like to get involved with wildlife monitoring or volunteering on the NNR/DEFA estate please contact Louise Samson on 365131.

Marine invasive species

In April, Dr Liz Cook from the Scottish Association of Marine Science in Oban came and trained government and non-government people in marine invasive species identification and strategies to deal with them.

The Island already has a few marine invasives. **Sargassum seaweed** also known as **wireweed**, has colonised many of our shallow rockpools in the last 8 years.

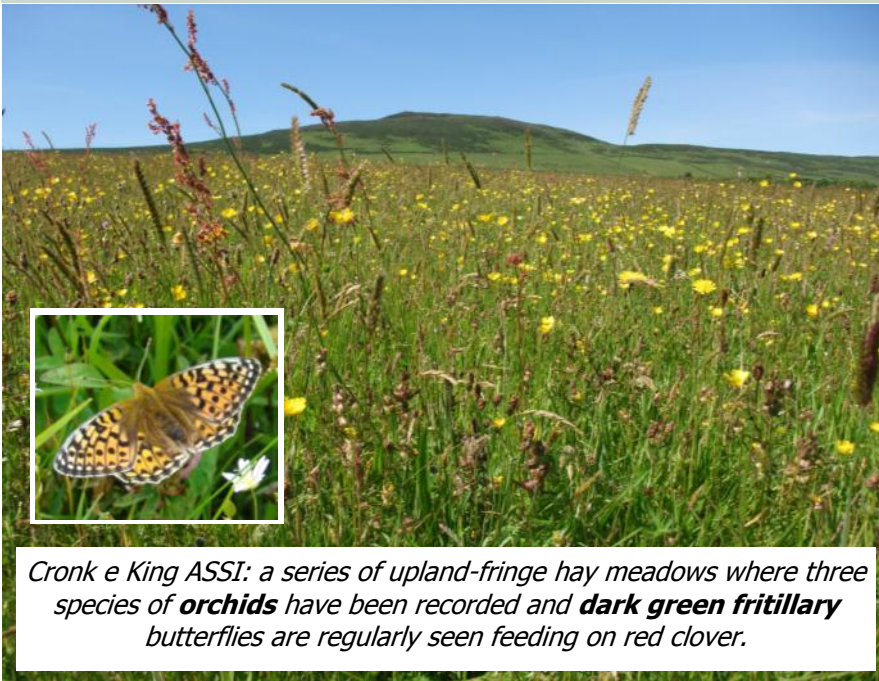
There are other invasive species with the potential to cause various types of damage, such as the **carpet sea squirt** (*Didemnum vexillum*) which has been an expensive problem in Holyhead. DEFA will be writing a strategy for addressing invasives both on land and in the sea, as outlined in the Biodiversity Strategy.

Liz Charter



Arctic tern chick on the verge of fledging and showing the coloured ring
© Sean Gray www.grayimages.co.uk





Areas of Special Scientific Interest

The Government working with landowners to conserve our natural heritage

The Isle of Man contains many areas of particular interest for their wildlife habitats, geological features and landforms. Some are important as wildlife havens, as laboratories for science, or as educational resources displaying our geological history and richness of wildlife. Areas of Special Scientific Interest are given legal protection as the best examples of this natural heritage. There are currently 21 ASSIs covering a total area of 2,299 hectares (5,681 acres).

For further information see:

<http://www.gov.im/categories/the-environment-and-greener-living/protected-sites/>
Aline Thomas

*Cronk e King ASSI: a series of upland-fringe hay meadows where three species of **orchids** have been recorded and **dark green fritillary** butterflies are regularly seen feeding on red clover.*

The Isle of Man's most bio-diverse marine habitat

In the last edition of 'Biodiversity Matters' we reported on a meeting of **horse mussel** (*Modiolus modiolus*) researchers in Port Erin. Several members of the group subsequently made dives on horse mussel reefs off the Point of Ayre and south of Douglas, collecting 'clump' samples of 25x25cm² and continuing with a long-term monitoring programme. The samples from the Douglas site were then sent to two taxonomic experts, one for epifauna (typically the larger, surface organisms) and one for infauna (the smaller, sediment-living animals) to provide a definitive species identification and biodiversity indication.

The results were a very positive surprise, with a total of 296 individual species being identified from the sample. This makes it the second most bio-diverse horse mussel sample ever recorded in the British Isles, after a mussel reef in Shetland which recorded 297 species. From a local perspective it is also the most bio-diverse site we know of within the Manx Territorial Sea, and possibly within the whole Island, including terrestrial habitats. These results indicate the relevance and importance of these mussel reefs to the local and regional marine biodiversity, and emphasise the importance of protecting them, not only for the varied habitat they provide, but also as important nursery grounds and food supply for commercial fisheries species (http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-18-HorseMusselBeds.pdf).

Horse mussel reefs are listed as Threatened and/or Declining Species and Habitats under the OSPAR Convention, to which the Isle of Man is a signatory, and therefore we have commitment to preserving such areas (<http://www.ospar.org/>).

Dr Peter Duncan

For further information please contact Dr Fiona Gell (Fiona.Gell@gov.im). *Photographs by Caroline Perry & Phil Roriston*

