

Welcome to the 3rd edition of the Conserving Scottish Machair LIFE+ Project Newsletter

Machair LIFE+ staff are employees of RSPB Scotland, Managing Partner for the Project, working in partnership with Scottish Natural Heritage, Comhairle nan Eilean Siar and the Scottish Crofting Federation. Our office can be found in the CRP Building at East Camp, Balivanich, Benbecula and our door is always open...

Please explore our new Facebook page to find out what has been happening up to the minute and take part on any discussions ... www.facebook.com/MachairLife and don't forget you can also visit our website www.machairlife.org.uk

Beetle mania: invertebrate survey findings

We are very excited to announce that last year 'Applied Ecology' our consultant ecology survey team found a total of 222 species of Coleoptera beetles when assessing more than 60 plots of machair. Of these, 36 species were new records to the Outer Hebrides and a total of 14 species possess formal conservation status - including three Red Data Book species, nine nationally notable species and one notable species. The Red Data Book lists the UK status of threatened species.

The project funds a number of annual botanical, soil analysis, invertebrate and bird surveys as part of its data



Dryopid Beetle

collection work. All this information is invaluable for assessing the condition of the machair and for informing us of the relationship between agricultural management and biodiversity.

Beetles are essential food for wildlife such as the corncrake. The three Red Data Book beetles recorded include the Siphid beetle, *Thanatophilus dispar* which is rare and in danger of extinction, the Dryopid beetle, *Dryops similaris* which is also rare and the weevil, *Ceutorrhynchus cakillis* still awaiting determination as to its national status. Especially abundant in the Machair is the nationally scarce status Siphid beetle, *Sipha tyrolensis*.

And not forgetting...

The machair is of nationally importance for the presence of two rare bumblebees, *Bombus muscorum*, Moss carder bee and *Bombus distinguensis*, the Great Yellow Bumblebee, which are both key plant pollinators. The Moss

carder bee, although occurring throughout the British Isles, is in serious decline. From the 2010 survey this was the most frequently observed bumblebee on the plots. Populations of The Great Yellow bumblebee are almost entirely restricted to coastal, flower-rich habitats in the Western Isles and the Orkneys making the conservation of these habitats essential for the survival of this species. Our surveys showed this bee is comparatively scarce on the plots.

Unlike hoverflies which tended to utilize plots in crop to a greater extent, bumblebees were strongly associated with fallow plots emphasizing the importance of the maintaining the availability of fallow areas for bee foraging.

We would like to thank all the crofters who are taking part in this survey.



'Applied Ecology' survey plants on the machair.

Inside this issue

Land Management Agreements 2011



Read about our management agreements and what they entail. If you are in a designated area you are eligible for advice and support.

News from Islay and Tiree



What has been happening in our other project areas on the Argyll Islands.

Uists Goose Management Scheme 2011



Starts this year on July 25th. Find out how we can help.

EU visit



Find out about the recent visit to the Isles by the EU LIFE+ funding assessors from Brussels.



© D.I. Gavryushin

Siphid Beetle

Machair LIFE+ Management Agreements 2011



© RSPB

Project assistant, Angus Ferguson shallow ploughing.

We have been busy meeting additional initiatives where we can measure the wildlife benefits alongside crop yield. This work has resulted in thirty agreements this

year where the project will carry out works including shallow cultivation and traditional harvesting.

Highlights have included the spreading of seaweed on areas of machair which have not received organic fertiliser for more than thirty years. This has entailed a reduction in the amount of inorganic fertiliser being used in these areas, which will aid the establishment of wildflowers due to the slower release of nutrients that seaweed fertiliser provides. Since arable crops grown in the Uists are for animal fodder the presence of flowers within the crop is tolerated. The use of seaweed as fertiliser will also benefit the machair through providing valuable binding material to stabilise the vulnerable sandy soils.

Financial support is also available for crofters to make arable stacks and the project has already agreed

to bind crops for stacking in areas where this practice has long-since ceased.

We are also encouraging crofters to carry out the late harvest of arable silage, which is grown as cattle feed. Delaying harvest until September will protect corncrakes which may be nesting or roosting their chicks in the crop. However, leaving crops in the ground leaves them vulnerable to damage by adverse weather or from feeding geese. To give crofters the confidence to leave crops standing late the project will continue to step-up its crop protection scheme.

We look forward to continuing to enter into agreements with crofters across the Uists. Please contact us if you would like to find out more.

Ploughing the machair



© RSPB

Crofters attend demonstration event at Balranald.

The project had a great turn-out for its ploughing and rotavating events in North Uist and Benbecula in April. Our project assistant, Angus Ferguson was at hand to demonstrate the project's 3-furrow, reversible plough and our Reco Maschio rotavater to cultivate machair at shallow depths. Many crofters were particularly interested in the rotavater as an alternative to the conventional plough due to the fine seed bed which is achieved. Shallow cultivation is known to

benefit the machair because it not only helps to prevent soil erosion, which will aid crop establishment but will also provide ideal conditions for the germination of wild flowers because the soil is not turned at a depth which will bury the seeds. We will be monitoring the development of the crops on many of the plots where we have carried out work so that we can assess crop yield alongside biodiversity benefits of shallow cultivation.

The future generation of crofters

This spring and summer the project has been working with students from Lionacleite School's Crofting course to highlight the links between crofting management and the rich wildlife which it supports. Students went out to survey and identify the plants, birds and insects on Lionacleite machair. We were joined by Scottish Natural Heritage and a local crofter to help with species identification and inform students about current management.

Although the rather chilly weather in June inhibited the movement of

bees, students were able to find and identify a variety of plants including field pansy and forget-me-nots and observed nesting lapwing, oystercatcher and ringed plover making good use of the flower-rich machair land for nesting and feeding.

The project will also be building on its engagement with local schools including arts interpretation of the machair as part of the new Curriculum for Excellence and with the Crofting Connections programme www.croftingconnections.com



© RSPB

Students at Lionacleite College Crofting Course.

Cairns for the Uists

The first of three cairns with information about the project has been built at Aird in the Cula Bay car park area. Others are to be erected at Garrynamonie picnic area and at Balranald.

Neil MacPhearson, local crofter and stone mason has constructed the cairns to allow them to withstand the Hebridean weather and any inquisitive cattle looking for a back scratcher.



Cairn at Aird.

Uists Greylag Goose Management Scheme 2011



Scarecrow test pilot.

Building on the success of last years schemes in the Uists and Coll and Tiree, the project will step up its goose protection measures as from July 25th. Groups of experienced scarers will be deployed to cover all areas of vulnerable crops using the latest scaring techniques. Our best practice guidelines are published on our website

www.machairlife.org.uk

We are also holding three scarecrow making workshops with the help of local artists as part of the Ceolas Festival and Childrens' Festival in north Uist. All ages are to be invited to design and decorate the scariest scarecrow. The scarecrows will then be placed in fields around the Uists.

Advise on protection

Limited quantities of temporary fencing and kites are available from the Machair LIFE+ office. For detailed advice on protection measures, please call Goose Scheme Coordinators:

Rory MacGillivray for the Uists on 07879 443518 or for Coll and Tiree, Peter Issacson on 07752662847.

Visit from the EU

In June a team of three assessors from the LIFE+ team at the EU came to audit the project to check that all our objectives and actions are being met. We are happy to announce that the project is on course. As we are only in year two of a four year plan, there is still much to be achieved

with the help and advice of the local crofters. We would like to take this opportunity to thank our RSPB colleagues, our bird, invertebrate and botanical consultants and our project partners at SNH and CnER and also the Crofting Federation for their support.



Juan Pérez Lorenzo and Tommy Sejersen talk to local crofter, Duncan MaCuish.

New project manager arrives



Rebecca Cotton and her dog Sprout.

Rebecca Cotton recently moved up from a busy farming community in Rutland, Leicestershire to replace Jonathan Hudson, who has carefully steered the project through its first year. Rebecca is a chartered landscape architect with a background in plant sciences and landscape history. She has been a frequent visitor to the Hebrides over the past five years and is looking forward to working with local crofters.

News from the Argylls

RSPB on Islay have just taken delivery of their shiny new John Deere 510M tractor. This will be used to carry out all sustainable farming practices benefiting wildlife, particularly for corncrake and chough management.



John Deere 510 tractor



Oronsay Special Area of Conservation for the machair, also a Specially Protected Area for corncrake & chough.

On Tìree advisory work has been taking place with the Scottish Agricultural College to design and assist with Rural Development applications for corncrake and breeding wader management resulting in 30 successful schemes.

Conservation management work on Oronsay continues for corncrake & chough. Extensive management of grasslands within designated sites provides ideal conditions for both species. Fields are mown late in September as winter silage for cattle

and then grazed with a mixed stock of cattle and sheep. This management encourages the growth of plants such as orchids, Ragged robin and Yellow rattle, which attract foraging insects and in turn provide food for breeding chough and corncrake.

Update Rhinns of Islay



Corncrake



Chough

Mary Macgregor, acting warden of the RSPB reserve at Smaull on Islay reports on chough and corncrake.

"I've been covering Smaull since early January, and have been responsible for surveying the birdlife there through the winter and into the breeding season.

The first corncrake heard on Islay was just over the hill from Smaull, under 1km, as such may well have been hatched there. They were heard on the reserve by the end of the following week. First

official survey was carried out in May recording 5 calling males. The cover provided in the corncrake corridors is well established, providing the birds with all the secure calling and nesting areas they need.

Both pairs of chough on the reserve have fledged two young, and they are just finding their wings and being shown the hill ground. A third pair of chough, just on the outskirts north of

the reserves have also successfully bred and can often be seen feeding on Smaull's hills.

Through winter the resident chough could be seen daily feeding on the shore line, and on the oat stubble field, and as spring progressed they appeared to utilise the cattle feeding area's on the hill, where Martin Bignal, the grazier, has been able to feed dry hay to the herd thus opening

up more ground to the chough and encouraging invertebrates to the newly churned ground.

In mid April the juvenile chough flock from Ardnave arrived on the reserve and fed on the low ground by the shore. Another pair of breeding chough from south of the reserve were also seen feeding in the oat stubble field through winter. "



Contact Information

Website: www.machairlife.org.uk • Email: machair.LIFE@rspb.org.uk • Telephone: 01870 603361

Conserving Scottish Machair LIFE+ Project, CRP Building, East Camp, Balivanich, Benbecula HS7 5LA