

CABB Newsletter

Final
Summer 2022



Welcome to the final CABB newsletter!

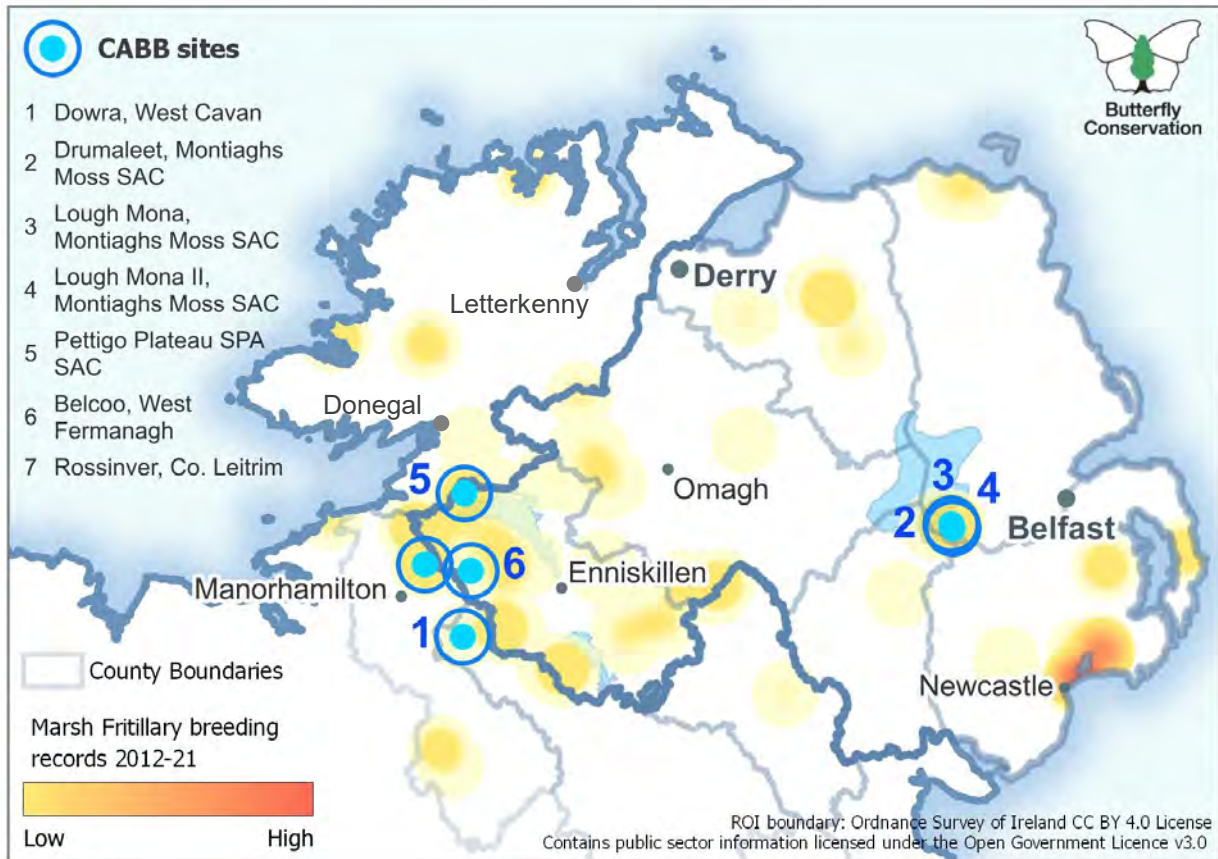
For this issue, we would like to celebrate the bogs, birds and butterflies which have been the focus of partner efforts across Ireland, Northern Ireland and Scotland these last six years. Through CABB efforts, over 3,000ha of peatlands have been restored, locking in carbon, improving water quality and nurturing the growth of peatland plants and habitats. CABB partners have safeguarded nearly 900 pairs of breeding waders, giving iconic birds like curlews and lapwings a chance for recovery. Activities funded by CABB have also enabled enhancements to habitats for marsh fritillary by increasing the availability of their plant food source, through clearing scrub and sowing seed across private and public lands. On page nine, you can see a summary of the CABB outcomes.

We would also like to celebrate the people and the partnerships that have enabled the programme's successes. The programme partners have included Birdwatch Ireland, Butterfly Conservation, Moors for the Future, Northern Ireland Water, RSPB Northern Ireland and RSPB Scotland. You can read highlights of their successes in these pages. There are many others to thank as well – the farmers and landowners who signed on to carry out nature-friendly improvements on their lands, the experts and regulatory staff who provided guidance, and in-kind support, our dedicated CABB Board, the many volunteers who gave of their time and skills to move projects forward, the contractors who added new skills to their repertoires and of course our funders.

The CABB experience showed us that collaboration across borders is not only a good concept; it is a vital necessity to restoring nature. Learnings can be shared and replicated, reducing costs and enabling the more ambitious plans which are needed to save our critical habitats and species. While CABB may be coming to a formal close, project partners have already begun talks on follow-on projects to continue the momentum for nature conservation reached through CABB. We hope you can join us on our next venture!

Butterfly Conservation

Butterfly Conservation's (BC) participation in the EU INTERREG-funded 'Co-operation Across Borders for Biodiversity' (CABB) project has come full-circle to project completion this summer 2022. A part-time project officer delivered conservation action for the threatened marsh fritillary butterfly across the key landscapes of south Lough Neagh and the border counties of Fermanagh, Leitrim and Cavan.



Butterfly Conservation project sites that received capital works

A species we champion, the iconic marsh fritillary was at the heart of BC's project, from supporting research into its needs, monitoring and reporting on its status, and providing land management advice to delivering conservation action with agencies and farmers. Initially our efforts were focused on supporting RSPB NI project officers in key project areas identifying suitable marsh fritillary breeding habitat and deciding what, if any, conservation work was required. We also provided support to BirdWatch Ireland in the Republic of Ireland and to a sister INTERREG project, CANN through species workshops.

Ultimately, BC delivered seven capital works projects across the programme area. Three of these were at Montiaghs Moss Special Area of Conservation (SAC), one at Pettigo Plateau Special Area of Conservation (SAC) and a fifth in West Fermanagh. We also delivered two projects across the border in the fabulously biodiverse-rich areas of West Cavan and North Leitrim. The landowners entered into land management agreements with us, a process which required a good understanding of both the needs of the species and also



Butterfly Conservation - cont.

the farmers. The journey, as they say, is as important as the destination and this was certainly true when it came to arriving at the place where a specialist invertebrate is supported in a habitat that is farmed in a sensitive manner.



Grazing at Montiaghs Moss Credit: Rose Cremin

lays her eggs on the leaves of devil's-bit scabious and once hatched, the larvae will feed on this and successive plants until they hibernate, ultimately pupate and emerge again the following May, to complete the cycle again.

Species-rich grassland that contain devil's-bit scabious are declining in extent and condition due to a range of factors. Protecting this habitat through establishing appropriate grazing will conserve not just the habitat, but the plants that occur there and the host of invertebrates that require it for food, shelter and breeding.

Understanding the importance of the foodplant, we undertook some habitat restoration through plug-planting devil's-bit scabious into the sward of two sites. Local provenance seed from the Montiaghs Moss was collected in autumn by staff and landowners, grown-on into plugs and planted out the following early summer. The plugs have established really well with a patch being visited by an adult marsh fritillary this summer! We are thrilled of course and it's promising stuff for things to come; we'll be back with our volunteers to check for larval webs this autumn!



Devil's-bit scabious Plug Planting, 2021 Credit: Rose Cremin

Engaging with people has been crucial to the successful delivery of the project. We worked with multiple organisations, farmers, fellow project officers, and volunteers to achieve the desired outcomes for the species. In addition to the many farm visits, we also delivered or attended a range of events including workshops and evening talks, and shared knowledge and ideas with other projects and organisations. Volunteers from a wide spectrum of backgrounds and organisations helped deliver the project. Some managed scrub particularly at sites across the Montiaghs Moss, in partnership with RSPB NI, while others attended workshops to learn about the ecology and habitat requirements of marsh fritillary.

We are leaving these sites in a better condition and marsh fritillary's future is just that bit more secure through the partnership project. Our work for this and other threatened species in these landscapes will continue, as Butterfly Conservation looks forward to the crucial funding that PeacePlus will bring to build resilience and nature recovery networks. This funding can't come soon enough as the environment faces the dual threats of the climate emergency and the biodiversity crisis. BC is more committed and ambitious than ever, and believes that the time has come to think 'more, bigger, better and more joined-up'. Finally, thank you one and all for each and every part you played in this project; it's been a pleasure.

Northern Ireland Water

Background

The Garron Plateau is extremely important to Northern Ireland for several reasons; not only is it a highly valuable area of blanket bog, which houses priority species, but it is also designated as a Special Area of Conservation (SAC), a Special Protection Area (SPA), an Area of Special Scientific Interest (ASSI), and provides water for people in Cargan, Broughshane and beyond.

The water draining through and off the peatland at Garron is collected in our Dungonnell Reservoir. Historically, the 'raw' or untreated water in the reservoir had high colour and turbidity (cloudiness) as a result of run-off of peat from the bog. Drains dug through the bog some time ago resulted in the erosion of peat into the reservoir. This meant that to treat the water to the excellent quality we all expect out of our taps, a lot more work had to be done at our Water Treatment Works.

There were a number of issues on the bog prior to the project starting:

- Too many sheep on the bog led to damage by overgrazing and trampling to sensitive mosses and peat which began to erode.
- The drainage channels dug through the bog caused water to run off more quickly towards the reservoir. This led the peatland to eventually dry out, start to erode and release carbon into the atmosphere, contributing to climate change.
- Sensitive bog species like mosses (which only grow in wet and acidic conditions) were at risk of vanishing, and the wildlife that depends on this peat-forming habitat were at risk.

What has been delivered

Together, we have worked to repair the peatland at Garron which was in a poor condition and looking forward, we will restore it to its natural condition. RSPB NI, NI Water and the Northern Ireland Environment Agency (NIEA) carried out the following work:

- Excavators were brought in to "re-wet" the bog by blocking drainage channels.
- The number of sheep on the bog were reduced, to better manage the habitat and avoid overgrazing.
- A Conservation Action Plan was put in place to ensure that in future the bog will be properly managed and protected.

Water

The Queen's University of Belfast has been monitoring water levels for several years across the Plateau and confirm that blocking of the drainage channels has raised the water table at the site. Higher water levels have in turn encouraged bog species to return in earnest. *Sphagnum* species are mosses which 'build' the bog. These mosses hold a lot of water, so they have started to retain more water back in the bog. The water which does reach the reservoir gets there more slowly with fewer peat particles in it so it is easier to clean. The bog also retains more water during periods of drought and, during wet periods, the bog can hold water back from overwhelming areas downstream.



Dam construction at Garron Plateau. Credit: NI Water



Blocked drains at Garron Plateau. Credit: NI Water

Northern Ireland Water - cont.



Sundew. Credit: NI Water

Carbon

Because the peatland is beginning to actively function again, the *Sphagnum* mosses and other species are also starting to absorb or 'sequester' carbon again. Taking carbon dioxide from the atmosphere and 'locking' it into the peat again helps us fight climate change.

Biodiversity

The sensitive 'priority' species which once called the Garron Plateau their home are now returning in numbers. There are now breeding hen harriers, breeding curlews, and many sphagnum species returning to the bog as well as rare plants like the sundew.

What's next?

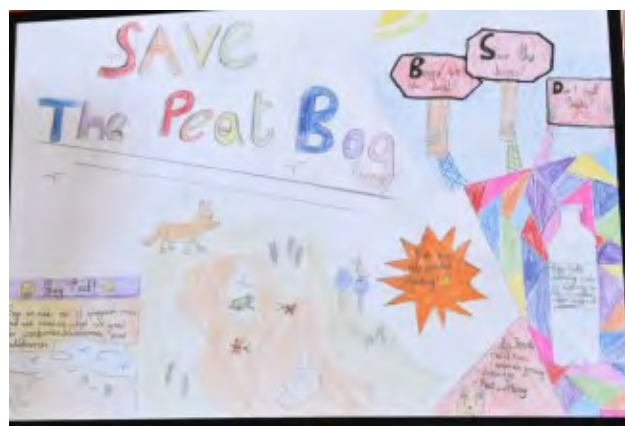
NI Water has already used the methodologies employed at Garron in other areas, including at our Lough Bradan Peatland Restoration Project, and the Source to Tap Peatlands Pilot at Tullychurry Forest.

Breached Dam maintenance

NI Water will continue the legacy of the CABB Project by delivering the Conservation Action Plan over the next number of years, and repair any minor dam breaches highlighted by drone surveys.

Schools work on the Importance of Peatlands

In early 2022, our Sustainable Catchment Area Management Practice (SCaMP) Team accompanied our Education Team to a number of primary schools across the country. We delivered a fun presentation on the Importance of Peatlands to the school children, who were very interested in what bogs hold and what they can do for us. These visits also launched our 'Importance of Peat Bogs' Poster Competition which was a great success!



Sample submissions from NI Water's 'Importance of Peat Bogs' School Poster Competition. Credit: NI Water

The CABB project allowed NI Water to work with CABB partners to really make a difference on a landscape scale, to improve our water quality and habitat, to halt and maybe reverse carbon loss from the bog, and to protect the area for future generations.

RSPB Scotland

As a CABB project partner, RSPB Scotland has been able to invest more time facilitating positive conservation action across the Muirkirk and North Lowther Uplands (MNLU) Special Protection Area (SPA), in East Ayrshire, as well as at RSPB's Loch Gruinart Nature Reserve on the Isle of Islay. Since the MNLU SPA and Site of Special Scientific Interest (SSSI) designations were put into place in the early 2000s, the conservation features of the area, which include blanket bog and bird species such as hen harrier, merlin, peregrine, short-eared owl and golden plover, have been in decline despite targeted agricultural and conservation funding. Many farmers and land managers across the SPA have been keen to do what they can to improve their land for nature but sometimes an extra bit of encouragement and technical support are all that is needed to take things to the next level – this is where CABB has been able to make a difference.



*Peat bunding, holding water back, at Kyle Farm.
Credit: Stephen Inglis*



*Vegetation recovery at Tardoes Farm
following bare peat stabilisation with coir matting.
Credit: Stephen Inglis*

CABB has provided the staff time for RSPB Scotland to have a greater presence on the ground, offering advice and establishing relationships which have ultimately led to positive habitat restoration works. CABB funding has allowed us to address 150ha of degraded peatland across the SPA on third-party land through ditch blocking, reprofiling and scrub clearance. CABB funding has also supported the restoration of 27ha of formerly forested peatland at our Airds Moss reserve. The CABB-funded staff time has provided RSPB Scotland staff the opportunity to apply for additional funding from NatureScot to deliver large-scale habitat restoration on non-RSPB owned land. In 2018 and 2019, funding from NatureScot's Peatland ACTION Project supported 825ha of peatland restoration and, in 2021, NatureScot's Nature Restoration Fund provided the funding to clear 1,265ha of Sitka spruce regeneration across the SPA.



*Airds Moss plantation to bog restoration—immediately post ground-smoothing (left)
and vegetation recovery two growing seasons later (right). Credit: Clive Walton*

RSPB Scotland—cont.

CABB has also allowed RSPB Scotland to invest more at RSPB's Airds Moss Reserve, which lies at the heart of the SPA. Annual vegetation cutting has helped remove the build-up of Purple Moor Grass (*Molinia caerulea*) tussocks which were accumulating across large parts of the reserve. This has opened up the sward making it more suitable for breeding curlews and has also increased the diversity of bog plant species. CABB-funded fencing allowed the introduction of trial cattle grazing which has already further improved vegetation structure and will reduce the need for mechanical cutting in the future. Moving forward we hope to be able to introduce more cattle to other parts of the reserve which will also benefit from grazing.



Highland cow at Airds Moss.
Credit: Katie Horton



Well-grown curlew chick at Airds Moss.
Credit: Stephen Inglis



Construction of sea wall at Loch Gruinart Reserve
Credit: Islay Drone Photography

Although RSPB Scotland's focus has been on the MNLU SPA, CABB has also funded the restoration of the sea wall at RSPB's Loch Gruinart Reserve on Islay which protects 1,000ha of the Gruinart Flats. The Gruinart Flats are a Site of Special Scientific Interest (SSSI), SPA and RAMSAR (wetland of international significance) designated site. This protects important foraging and roosting habitat for white-fronted geese and breeding waders.

What's next for the Muirkirk and North Lowther Uplands?

Through our engagement with farmers and land managers, we have been able to raise the profile of the MNLU SPA and develop stronger interest in conserving its important natural features. This culminated in a meeting organised by RSPB Scotland for SPA farmers and land managers to round off the CABB project, showcasing what we have collectively achieved, and looking forward to what we want to do in the future. As the partnership with SPA farmers has developed, RSPB Scotland has become more involved in agri-environment applications and, in spring 2022, a new collaborative group was established to join up these schemes across the SPA network of farms. Working together with SAC Consulting, this group will be used to co-ordinate our collective effort across the SPA in future years and build upon the momentum developed through CABB. There is plenty more to be done and plenty of will to do it.

Thank you to CABB for giving the SPA such a boost!

Moors for the Future Partnership

In 2013–14, Moors for the Future Partnership (MFFP) provided initial training and technical support for the Sustainable Catchment Area Management Programme (SCaMP) drain-blocking programme at the Dungonnell Reservoir. This was a joint venture by Northern Ireland Water, RSPB NI and the Northern Ireland Environment Agency (NIEA). The project was hugely successful and went on to win the 'Business and Biodiversity' award in the 2014 Business in the Community Awards.

MFFP were therefore delighted to be invited, in 2017, to join the Co-operation Across Borders for Biodiversity (CABB) partnership and provide support for further restoration works across the wider Garron Plateau Special Area of Conservation (SAC). In May 2017, two MFFP senior conservation works officers met with RSPB NI for an initial briefing and site visit. Despite poor weather conditions, they conducted a comprehensive survey of the drains within the proposed restoration area, with an emphasis on those within the Dungonnell catchment, making specific recommendations for gully-blocking locations and techniques (along with alternatives), and measuring peat depth at critical locations.



Drain survey. Credit: Stephen Maynard



On-Site Delivery Team Examining SCaMP Gully Blocks. Credit: Stephen Maynard

MFFP staff returned to NI in early February 2018 to meet with the RSPB NI project officer and the works team. Unfortunately, snow cut short the first site visit, but contingency plans had been prepared and training was continued at a NI Water facility. The next day, the group were able to get onto site again and examine, in detail, the interventions to be carried out at a range of gullies. Examples from the original SCaMP project were also visited to highlight the outputs required, bringing the works team up to speed quickly.

After Moors for the Future Partnership staff returned to England, further technical discussions took place between MFFP and the Garron Plateau CABB delivery team, before construction commenced in mid-February. 172 dams were constructed within a week, before the icy weather known as the "Beast from the East" brought works to a halt. Despite these issues with weather, this was a respectable effort for a new team on a challenging site, and from the images and details provided by the CABB delivery team, MFFP were rightly confident that the team were well set up to re-commence the work in earnest in September, after the breeding bird season.

MFFP is very pleased to have played its part in CABB's success story and wish all our partners well for the future.

CABB Outcomes



PROTECTING 39,028 HECTARES OF HABITAT

Eight Conservation Action Plans covering 39K ha that when enacted will safeguard peatland habitat and associated species including curlew and hen harrier.

MAKING HOMES FOR MARSH FRITILLARY

173 hectares of land is managed to secure habitat for the threatened Marsh Fritillary butterfly.



LOCKING AWAY 4.5 MILLION TONNES OF CARBON THROUGH PEATLAND RESTORATION

CABB sites are now safely storing 4.5million tonnes of carbon and avoiding approx. 54,000 tonnes of emissions per year.

RESTORING 3,006 HECTARES OF PEATLAND

Restoring peatland means that existing carbon in the peat does not escape and that more atmospheric carbon is captured as peat-forming vegetation grows, dies and is laid down as peat. Peatland restoration improves water quality, reduces run-off and mitigates against climate change.



SUPPLYING €3/£3 MILLION/YEAR BENEFITS TO NATURE

Each €1/£1 spent restoring degraded peatlands brings over €3/£3 in societal benefits such as emissions avoided and improved water quality as well as providing homes to nature, improving biodiversity and providing employment.

SAFEGUARDING 894 PAIRS OF BREEDING WADERS

Through managing habitats and installing predator-proof fencing at key nesting sites, endangered breeding waders have been given a chance for survival.



Marsh Fritillary (Image courtesy of F. Goodall, Fieldward.net/ButterflyConservation)

Co-operation Across Borders for Biodiversity (CABB)

<http://bit.ly/CABBproject>

BirdWatch Ireland

BirdWatch Ireland has been working particularly in the border counties of Donegal, Sligo and Leitrim to protect breeding waders – species such as lapwings, curlews, redshanks, snipe and dunlins. These are amongst our most threatened breeding birds, with most now on the red list of Birds of Conservation Concern in Ireland (BoCCI). These counties support some of the largest remaining breeding populations in Ireland. Between 2017 and 2021, we undertook surveys at key sites to determine populations and trends - comprehensive surveys of 37 sites were conducted in 2017, and again in 2021, while other key sites were counted annually. 433 breeding pairs were recorded in 2017; this had declined to 390 pairs in 2021, a drop of about 10%, or 2% per year; this is actually relatively encouraging, given that in Co. Donegal, breeding wader populations at coastal sites declined by 69%, or about 5% per year, between 1996 and 2009. For CABB sites surveyed, most of the overall decline was accounted for at two sites, one of which is Inch Island, where the population fell from 57 pairs to 17 in 5 years, mostly as a result of agricultural operations on land just outside the CABB project area. Some sites saw an increase - the largest was at Rinmore on the Fanad peninsula - from 36 to 50 pairs. This site is protected by a predator fence first erected during the preceding project, the Halting Environmental Loss Project (HELP), and maintained as part of CABB.



Snipe chicks at Rinmore Credit: Daniel Moloney

Our analysis of trends across all sites found that sites with predator fences and island sites both held significantly more breeding waders compared with other sites. This indicates that predation is a key factor in wader declines, but also that predator fences can be a key tool in the efforts to save these critically endangered species.



NPWS and CABB staff protecting curlew nests Credit: Daniel Moloney

Not only have we been able to maintain three fences erected as part of HELP, at Rinmore, Magheragallon and Sheskinmore, but two new fences have also been erected as part of CABB - one at Long Point on Inch Island, a site managed by National Parks & Wildlife Service (NPWS) and one at Blanket Nook, both in Donegal. These projects have just been completed and it is hoped that in the coming years, they will also see the populations of breeding waders begin to increase again.

One reason why island sites may support more waders is because predation may be lower if there are no mammalian predators. However, despite Tory Island having no foxes, badgers or pine martins (the main nest predators of breeding waders), the island experienced a worrying decline in waders, from 160 pairs in 2017, to 133 in 2021. It is possible that human activities in recent years have led to greater disturbance. The colonisation of the island by hooded crows also has an impact. Other once relatively undisturbed island sites may be experiencing similar impacts and it is critical that Government acts to protect these fragile colonies.

We also undertook surveys for breeding curlews in conjunction with the NPWS Curlew Conservation Project at three sites in Donegal and one in Leitrim, where three to five breeding pairs were recorded in most years.

BirdWatch Ireland - cont.



Nesting dunlin on Tory Island, the only site left for this species in Co. Donegal
Credit :Michael Bell

These surveys also helped us to target conservation actions to improve habitat. We worked with local landowners to implement management agreements across 400ha to provide optimal grazing regimes, remove scrub and control rushes to improve breeding conditions. Although curlews have been retained at sites such as the Pollan Dam on Inishowen, protecting breeding curlews is a very significant challenge; even working closely with NPWS at these sites just five curlew chicks are known to have fledged from these sites between 2017 and 2021, due mainly to the threats of predation and habitat fragmentation and loss.

In addition to counting breeding waders at machair sites, we undertook, in conjunction with one of our CABB partners, Butterfly Conservation, surveys for marsh fritillary at five of these sites. This was to ensure that any actions that might be proposed for breeding waders would not conflict with the requirements of this rare butterfly, an Annex 2 Species on the Habitats Directive. In fact, the grazing regimes for waders also benefit marsh fritillary and we found the larval webs at four of the five machair sites. Engaging with our project partners in CABB has enabled us to promote management of these sites to benefit birds and other biodiversity.

Also working closely with NPWS, two other significant projects to benefit blanket bog Special Areas of Conservation (SACs) were enabled by CABB. The first was the drain blocking at Fiddandarry in the Ox Mountains, Co. Sligo. By spring 2022, 35km of drains were blocked with almost 3,000 peat dams, facilitating the recovery of 444ha of blanket bog. The wetter conditions encourage sphagnum mosses and the process of peat formation, benefitting habitats and capturing carbon. In the Pettigo National Nature Reserve, one of the few remaining extensive intact blanket bogs in Co. Donegal, new fencing has enabled the implementation of a Sustainable Grazing Management Plan by NPWS to improve bog and heath habitat. This area is known to support breeding red throated divers and recently, Greenland white-fronted geese.

We also developed four Conservation Action Plans covering the blanket bog SACs of Croaghonagh Bog, Lough Nillan Bog and Meentygrannagh, as well as at Dunragh Loughs/Pettigo Plateau Comprehensive habitat mapping through CABB facilitated the creation of detailed plans in consultation with landowners and other key stakeholders. The measures and actions



Scrub clearance for Curlew at Lough Melvin
Credit: Daniel Moloney

proposed will restore habitats and benefit golden plovers, dunlins, red grouse, and wintering Greenland white-fronted geese, which have all been recorded at these sites. Some of these actions are being taken forward by the NPWS Wild Atlantic Nature Life project, a nine-year project to protect and restore SAC blanket bogs.

What's next for BirdWatch Ireland?

The data from the annual comprehensive breeding wader surveys shows us there is much work yet to be done to bring breeding wader populations and productivity to recovery level. BWI plans to continue working on the next generation of initiatives to restore nature, building on the experience and best practices shared among the CABB partners.

RSPB NI

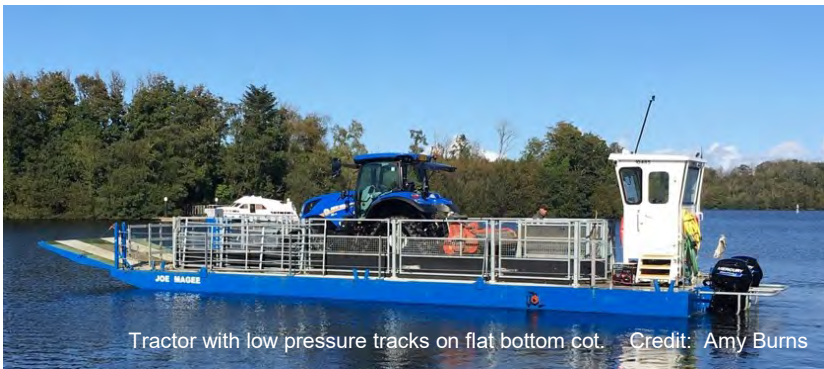
RSPB NI has been delivering CABB conservation objectives across four very different wetland sites in Northern Ireland. Our work during the last five years has been immense and varied. We've installed new fencing, to expand conservation grazing and improve habitats for breeding waders, cleared bog pools to support breeding of Irish damselfly and raised the profile of our bogs and wetland species in the wider community.

The development of three detailed Conservation Action Plans (CAPs), supported by very detailed habitat mapping, is a key CABB outcome for Northern Ireland. RSPB NI worked with CABB project partners NI Water on the plan for Garron Plateau and with Butterfly Conservation for plans for Montiaghs Moss and the Pettigoe Plateau Special Areas of Conservation (SACs). All three plans have been signed off by the Northern Ireland Environment Agency (NIEA). These plans will play a crucial role in halting habitat loss and improving the habitat features of these special sites.

Lough Erne

The islands of Lough Erne in Co. Fermanagh remain a stronghold for threatened species of breeding waders like lapwings, redshanks, snipe and curlews. In Northern Ireland, it is estimated that there may be only 250 wader pairs remaining and approximately 25% of these breed on the Lough Erne Lowlands. Through the CABB project, RSPB NI has delivered an extensive programme of rush cutting and grazing to improve this priority habitat and boost breeding wader numbers. The high standard of work carried out by RSPB NI's assistant warden and machinery operator

received high praise locally and has strengthened relationships with farmers in the Lough Erne area.



Tractor with low pressure tracks on flat bottom cot. Credit: Amy Burns

Rush cutting and conservation grazing on the islands are now supported by up-to-date specialist equipment funded by the CABB project. A tractor, fitted with specialist low ground pressure tracks, is designed to work on boggy terrain, while minimising damage to the delicate habitat. In November 2019, CABB enabled purchase of a brand new flat-bottomed cot to transport livestock and

machinery on the Lough. The cot bears the name of Joe Magee, former RSPB Lough Erne Warden and longtime champion for breeding waders.

Montiaghs Moss

Montiaghs Moss SAC is a former lowland raised bog, located on the southeast shore of Lough Neagh. An array of butterflies, damselflies and dragonflies make their home on the unusual network of pools, a legacy of traditional peat harvesting practices. Since RSPB NI began managing the site in 2017, the focus has been to improve habitat for dragonflies and damselflies, reinstate species rich grassland on overgrown areas of the site, and work with Butterfly Conservation to monitor, and restore habitat for the marsh fritillary butterfly.

Conservation grazing introduced at Montiaghs Moss has transformed overgrown vegetation into a varied sward, bringing back pollinators



New Interpretation Panel for Montiaghs Moss Nature Reserve

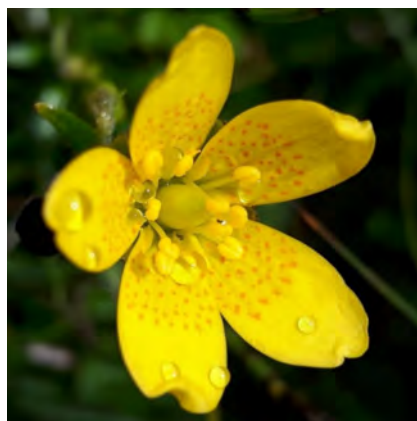
RSPB NI - cont.

and supporting overall biodiversity.

With biodiversity flourishing at Montiaghs Moss, RSPB NI has been carrying out a plan of work to improve public access to the site. A new car park complete with a purpose-built boardwalk and a trail will be available to provide better access opportunities and guide visitors comfortably and safely across peat pools and through heather peatland. Beautifully designed interpretation panels will point nature enthusiasts to the Reserve's key species. The upgraded reserve will be launched in 2023, just as Montiaghs Moss comes alive with darting damselflies, butterflies on the wing, and a range of beautiful birdsong.

Garron Plateau

The CABB-funded efforts on the Garron Plateau SAC are considered one of the most ambitious and successful conservation projects ever undertaken in Northern Ireland. The Conservation Action Plan that was developed covered the entire 4,652ha of the Garron Plateau and is considered by NIEA to be a model for management planning. It also supports the case for long-term funding support for farmers looking to manage blanket bog sustainably.



Marsh saxifrage Credit: Maria Long, Botanical Society of Britain and Ireland

Massive efforts to carefully block over 1,000 drains with peat, wood and stone dams around the Dungonnell Catchment Area have already shown notable increases in crucial 'bog builder' plants such as sphagnum mosses recorded by NIEA and RSPB NI throughout the site. The drain blocking has improved habitats significantly, benefitting a range of species of conservation concern, from hen harriers to viviparous lizards.

Successful partnerships and collaborations with a range of governmental, academic and farming stakeholders should ensure the long-term sustainable policy framework, conservation management and scientific monitoring on Garron Plateau. An example of one action to come from such active partnerships has been the development of a dedicated Species Action Plan for the marsh saxifrage, one of the rarest plants in Ireland, and for which Garron Plateau remains its last known site. Working with NIEA and utilising detailed genetic and ecological research, RSPB NI delivered an Action Plan for this species, detailing population recovery actions which could help this iconic species survive and expand in NI.

Pettigoe Plateau

RSPB NI's third CAP was written for the Pettigoe Plateau SAC on the Fermanagh/Donegal border. In addition to setting out the land management actions required to get the SAC into favourable condition, it also contains a Wildfire Response Plan to identify access points to priority habitats to be saved from fire. The CAP highlighted an action to remove plantation forestry at Tullychurry, to restore the blanket bog in the area. Working in partnership across programmes, CABB secured the support of another INTERREG funded project, 'Source to Tap'. The Source to Tap Programme was able to work with Forest Service and secure tree removal and deliver peatland restoration works. In order to inform the CAP actions, surveys were carried out resulting in quality data on many species including marsh fritillary, Greenland white-fronted geese, and the range of dragonflies. The RSPB NI officer working across the Fermanagh site was also able to assist with the initial drafting of the Dunragh Loughs/Pettigo Plateau SAC CAP in Donegal. In addition to hosting events and information evenings for local farmers, RSPB NI also assisted Butterfly Conservation in the initial planning of its habitat management for marsh fritillary.

We look forward to playing our part in the delivery of the actions contained in the Pettigoe Plateau CAP.



Irish damselflies Credit: Dakota Reid



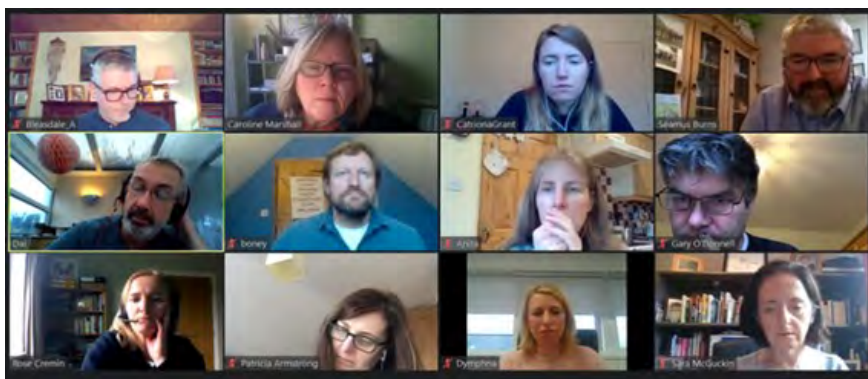
Butterfly Conservation Volunteers on Pettigoe Plateau Credit: Katy Bell

Planning, Perseverance and Partnership

Planning and delivering a large-scale natural heritage programme in three countries with six partners is extremely rewarding, especially when statutory agencies, environmental organisations and others come together and agree upon solutions to overcome obstacles to achieve successful nature conservation. We've learnt much whilst traversing the bogs, protecting breeding waders, and monitoring butterflies. Here are just some of our learnings.

Planning

Plan well and plan well ahead, but still be prepared for changes! We started to plan the CABB project back in 2015, almost two years before we received our official offer of funding from SEUPB. A lot can change over a seven-year period from the initial planning to the final delivery. As well as the 'foreseeables' that you can try and factor into programme delivery, such as delays in planning permissions and consents, staff moving on and unpredictable weather, we had the double whammy of Brexit and Covid-19. Brexit resulted in specialist pieces of equipment



CABB Board Meetings Held Virtually during COVID-19.

getting stuck at the European border. Covid-19 put a stop to face to face meetings with our farmers and stakeholders during the writing of the Conservation Action Plans. Covid and Brexit combined resulted in dramatic increases in the price of materials, in some cases by as much as 30%! Such hikes in prices cause big ripples for funded projects in terms of meeting timescales and keeping to budget.

Perseverance

Despite the unforeseen and unforeseeable hurdles that manifested themselves during the delivery of CABB, we achieved and surpassed our targets. When the digger broke the crust on the surface of the bog and began slowly sinking, partners and contractors worked together and rescued it. We learnt from the incident and the result is a 'machinery extraction plan' to inform future projects. When prices escalated, we fundraised for and were successful in securing additional funds. When we couldn't have face-to-face events for farmers, stakeholders and interested parties, we resorted to online virtual events. Attendance at these events were much higher than at pre-Covid-19 face-to-face events and have enabled us to reach new wider audience. We found ways round the obstacles. We also reverted to virtual meetings for our CABB Board and were able to keep the CABB programme moving forward. Adversity causes us to think in differently and find alternative ways to achieve results.



Disappearing digger during drain blocking
Credit: Henry McLaughlin

Partnership

We always intended that CABB would be delivered through a partnership approach. All six partners and other stakeholders worked together and shared news of what went well and what could have been done differently and better. We learnt from other projects and shared our learnings with statutory agencies and other stakeholders. We worked closely with our contractors and learnt how to do things smarter. When things didn't go quite to plan we worked through the issues with our funders, partners and other stakeholders and planned and delivered solutions. The combined input from universities, statutory agencies, funders, landowners, volunteers, specialists, contractors, along with CABB's six partners has all been vital to the successful delivery of CABB. Working in partnership, we've been able to deliver so much more than the sum of our individual parts.

CABB Legacy



Sharing information and learning new ways of working at Muirkirk, Scotland Credit: Rachel O'Loan

The CABB programme may have come to an end, but there are many things that will perpetuate long after CABB has gone. Here are just a few:

- The detailed habitat mapping carried out at the eight Conservation Action Plan (CAP) sites is a fantastic resource for Northern Ireland Environment Agency and National Parks and Wildlife Service. The mapping informs the development of the management actions required at each site and provides a baseline against which future monitoring of the site can be compared.
- The opening of Montiaghs Moss as a Nature Reserve in Northern Ireland will advance the need for safeguarding its key species, by getting people closer to nature, providing opportunities to appreciate and enjoy our precious peatland landscapes.
- The upgrading of the sea wall at Gruinart in Scotland will protect important breeding waders, Greenland white-fronted geese and peatland habitats against storm surges and sea level rise.
- In Co. Donegal, the management actions laid out in the four CAPs will be delivered by other EU-funded projects, including the LIFE Wild-Atlantic Project and local landowner engagement.
- The works delivered by NI Water at Garron have provided the hard evidence that peatland restoration can reduce water treatment costs. This will inform advocacy work for replication of peatland restoration to save money for taxpayers as well as for the climate change benefits.
- Butterfly Conservation has proved that whilst not a substitute for face-to-face events, virtual workshops really deliver in engaging larger and new audiences. Larger audiences mean greater opportunities to save nature.
- The 'Valuing our Peatlands' report, although not funded through CABB, gathered data from the works done at the Garron Plateau and Montiaghs Moss and showcased the financial and climate change benefits of peatland restoration. The report was shared during CoP 26 at Glasgow and will continue to influence climate change mitigation policy and future peatland restoration work. You can download a copy of the Valuing our Peatlands report via the QR code on the back page of this newsletter.

Looking forward

We look forward to working with our partners again in the future and extrapolating on the good works delivered for important habitats and iconic species, sequestering more carbon, restoring more peatlands, linking more people with their environment and safeguarding iconic species.

What is CABB?

CABB is a €4.9m partnership project funded by the EU's VA Programme, managed by the Special EU Programmes Body.

By the end of 2022, CABB will:

- ⇒ Deliver 2,228 hectares of blanket bog in improving condition.
- ⇒ Prepare 8 Conservation Action Plans (CAPs) for key peatland sites.
- ⇒ Map habitats at CAP sites.
- ⇒ Improve habitat for Marsh Fritillary butterflies, hen harriers and breeding waders.
- ⇒ Share best practice and data.
- ⇒ Raise awareness of peatlands and key species.

Further information

Visit our CABB webpage: <http://bit.ly/CABBproject>

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Data Protection

RSPB is the data controller for any personal data we hold. We will only use your personal data, on the basis of legitimate interest, to contact you with information about the CABB project which is relevant to you. If you do not wish to receive this newsletter in future, please notify Caroline Marshall at caroline.marshall@rspb.org.uk

THANK YOU

The CABB Partners would like to thank all those who made the Programme's accomplishments possible: funders, statutory agencies, farmers, landowners, volunteers, suppliers and contractors.

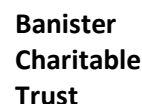
For more information on the value of restoring peatlands, access the 'Valuing Our Peatlands' study mentioned on page 15 by scanning the QR Code:



CABB partners



CABB funders and supporters



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