

RSPB Scotland Loch Lomond

5-year review

Review of work on site
2014—2019 and our vision
for the future



giving
nature
a home

Scotland



Welcome!

For the last 5+ years it is fair to say that the team at RSPB Scotland Loch Lomond have been working hard towards delivering our objectives for nature and people.

We've spent a great deal of that time learning more about the land and wildlife that surrounds us. We've discovered new and rare species of plant and insect; we've gathered additional data and improved the methods for collecting information about breeding and wintering birds; we've learnt about the history of management in this special place and how we can use that knowledge to inform our ways of managing in the future.

It can sometimes be difficult to see what changes or improvements have taken place on site. Some, like bridges, fences and paths, are obvious. Others, like changing grazing levels, cutting and deadwood management, are much more subtle, but all of these actions help us to deliver our shared vision for the site and for the amazing wildlife found in this area, as well as facilitating access for people to allow greater awareness raising of both the wonder and the plight of Scottish wildlife.

One thing's for sure, delivering for ecology takes time and effort—things don't happen overnight! The changing nature of the British landscape means that sitting back and letting 'nature take over' is not an option if we want to continue to see the diversity of wildlife we find in this area.

Equally as important is providing opportunities for people to get up close and personal with nature, be it catching a tadpole, experiencing the magnificence of oak woodlands or seeing the first osprey of the year, the Loch Lomond National Nature Reserve is the perfect place to facilitate that experience.

The next five years will bring with it new challenges, such as a changing political landscape and the impacts that will have on nature conservation, challenges with funding, and climate change impacts. Our new management plan pushes forward improvements that we can make that will make a difference to important species and habitats and help to inspire the next generation of nature lovers.

Paula Baker, Site Manager, RSPB Scotland Loch Lomond

SNAPSHOT: What is a management plan and how does it work?

Our work programme is governed by the RSPB management plan: a large document that sets out in detail objectives for habitats and people, in 5-year cycles.

Where this work intersects with the protected areas on site (i.e. the Special Protection Area (SPA), Site of Special Scientific Interest (SSSI) etc) permission must be sought from SNH.

The process for developing the plan is as follows:

1. RSPB arranges a 'pathfinder' meeting. Invitees include RSPB staff, statutory conservation body reps (SNH) and other key stakeholders (in this case, LL&TNP). The meeting sets out the direction of travel for the site and highlights any ongoing issues. Broad objectives and species/habitat targets are agreed.
2. The plan manager goes away and writes up a first draft version of the plan. This is sent to stakeholders for comments
3. Revisions are incorporated and a second draft produced and shared with interested parties. The final version is sent to SNH along with details of any operations that require consent as a result of the plan.
4. Final version is approved and consent granted for operations on site, where relevant. Plan actions can begin from this point onwards.

Invasive non-native species: The Big Three

There are many types of 'INNS' plants found on site and locally. They are a threat to wildlife as they outcompete native species. Here are three key species to look for:

1. **American skunk cabbage:** Found in damp woodland, this plant was Introduced as an ornamental pond decoration. Mature plants can produce thousands of seeds per year which quickly overtake large areas and spread through wetlands.
2. **Giant hogweed:** Found along watercourses, this plant grows up to 3m tall. The sap is toxic, causing serious skin damage. Large, umbrella shaped flower heads.
3. **Himalayan balsam:** Another watercourse species, the flowers are strongly fragrant and often insects will preferentially pollinate these over native species. The seed pods are explosive, containing around 30 seeds per pod and 30 flowers per plant—that's a lot of seeds!



2014–2019 Projects on site

There have been a number of changes and improvements to infrastructure on site in the last 5 years, including:



A pond dipping area and shelter were created to provide an important learning resource for a range of users, but especially the next generation of nature lovers.



New bridges have been installed to provide safe access for cattle, machinery and people around the site.

Two new, least restrictive access paths were created to provide access for visitors, including a fantastic walk through bluebell woods.

The 'Nature Hub' was developed using an old exhibition trailer to provide a base camp for staff and volunteers as well as a welcome point for visitors.



What are the key species on site?

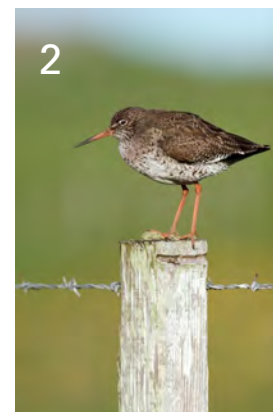
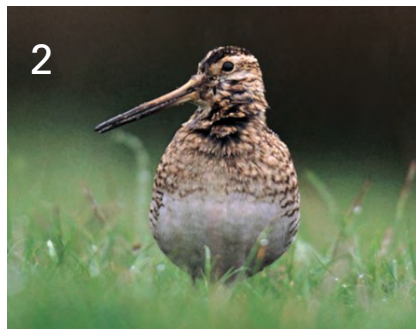
1. Greenland white-fronted, greylag and pink-footed geese

The roost on site includes an internationally important population of GWF goose, with up to 300 birds on the roost, which is 2% of the global population. Greylag goose is also a feature of the SSSI and pink footed goose has increased significantly over the past 5-10 years, so it too is now found at internationally important levels.



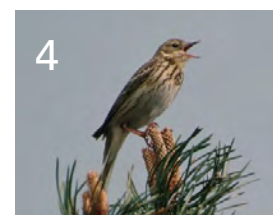
2. Snipe, redshank and lapwing

The mixture of tall, herb rich vegetation, short well grazed pasture and muddy edged pools on site is perfect for breeding snipe, lapwing and redshank. We monitor these every spring to assess the impact of our work on site.



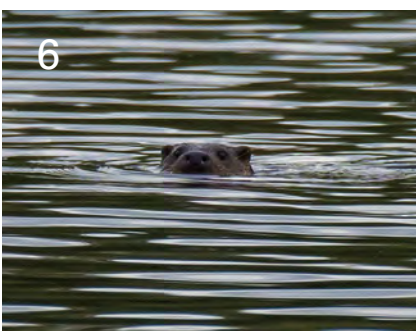
3. Wetland passerines

The tall, herb rich vegetation on site is good for other wetland birds, too. Though there are many species to be found, we concentrate our monitoring on grasshopper warbler and reed bunting



4. Tree pipit and redstart

The western-Atlantic oak woodland found on site, full of mature trees and deadwood, is ideal for these two species, which migrate from Africa each year. They can be found all around the eastern shores of Loch Lomond but we monitor them to assess woodland health.



5. Small pearl-bordered fritillary

This butterfly loves the sheltered edges of the mature woodland on site, and is a good indicator of species richness. We monitor these in June as that is when the numbers peak.

6. Otter

We know and well loved, otters use the site regularly thanks to the network of burns, ditches and rivers that feature on site. We use cameras and field surveys to monitor them.



7. Wintering ducks and waders

The site is important for ducks and wading birds in the winter. These include teal, widgeon, goldeneye, curlew, lapwing and whooper swan. We monitor these using WeBS counts but also collect ad-hoc records throughout the winter.

8. Scottish dock

Although the pure form of this plant doesn't currently exist on the southern part of the NNR, it still remains an important species for the site, and we are looking into a collaborative project with the Royal Botanic Gardens Edinburgh to reintroduce the plant into suitable

Photo credits: Geese by Ian Fulton, Snipe, & redshank by Andy Hay (rspb-images), Tree pipit by Chris Gomersall (rspb-images), Redstart and SPB fritillary by David Palmer (photoscot.co.uk), Scottish dock by Robert Coleman, Otter and whooper swan by David McCulloch

Inspiring people on the NNR

Over the past 5 years we've worked with hundreds of people, including school pupils, community groups, amazing volunteers, and visitors from all over the UK.



Inspiring people about nature is an important part of what the RSPB exists to do. Catching tadpoles, squealing at spiders and kicking up leaves puts nature firmly in the hearts and minds of young people, which will, in turn, lead to a lifelong love of the great outdoors. Equally important is providing opportunities for people to develop their skills in the conservation sector as they start moving towards the world of work, and to continue with their enthusiasm for nature and for this special place by devoting their precious time and energy into what we do. **This is what we have been working towards at RSPB Scotland Loch Lomond**, developing facilities, resources, accommodation and opportunities for a range of people to get up close and personal with nature.

To achieve this, we've spent time working with staff and pupils at Gartocharn Primary School, as well as other schools and youth groups. This has included classroom visits, trips to the reserve, walks to the Shore Wood and playground activities.



It has also included the introduction of residential volunteering, where volunteers live and work on site for anything from 2-weeks to 6 months. Ami Kirkbright, one such volunteer, tells us a bit about it: *"You really get a feel for the ins and outs of how the RSPB works, but at the same time, get the opportunity to get involved with so many different things. I did lots of practical work like fencing, clearing ditches, cutting the fen and wildlife surveys, but also got involved with meeting visitors, leading events and guided walks. Staff that worked there were always helpful and supportive. This experience was all directly transferable to other RSPB sites and has helped me to get a job with the organisation. I'm now very happily working as an Assistant Warden at RSPB Loch Leven."*

Additionally, we have introduced a range of wildlife events and activities for young people. Emma, our Community Engagement Officer, tells us more: *"Families can hire out their own bug hunting kit, go pond dipping, build a den in the woods, watch birds at the feeders or make a pie in the mud kitchen. We also run special days where we have wildlife treasure hunting, crafts and special themed activities."* Our events are not just for families though, and there is lots on offer for both experienced and amateur nature lovers, including photography, butterfly and plant workshops, food foraging events and guided walks, the most popular of which has been the opportunity to view the 10,000 strong goose roost in the winter months.



"Having the opportunity to live and work on an RSPB site is very special...I learnt loads from the other volunteers and staff"
Ami Kirkbright, residential volunteer

Finally, so much of the work that we do could not have been achieved without our amazing team of regular volunteers. Aged from 15 to 75, our volunteers come from Gartocharn, Drymen, Balloch, Helensburgh and further afield such as Clarkston and Edinburgh. They help with anything and everything from ditch digging, tree planting and hedge trimming to chatting with visitors, leading events and admin help. In total from 2014—2019, volunteers gave over 9000 hours of their time to help us to deliver amazing things for nature and people.

How is wildlife faring at RSPB Scotland Loch Lomond?

RSPB Scotland Loch Lomond contains a number of important habitats which can be broadly clustered together as grassland, basin fen, woodland and wetland.

For each of these habitats, we identified key features such as condition, diversity or structure, and key species as indicators of habitat health, that we would be managing for and monitoring during the plan cycle.

Every year as part of our annual review, as well as during the new management plan review process, we look at the techniques being employed and the response of these target species, to tweak our management or to make more substantial changes if required.

In some cases it can be hard to assess where changes are solely down to our management and where external factors may be playing a big part. For example, increases in the number of Greenland white-fronted geese cannot be entirely down to site management as they spend much of their lifespan in northern breeding grounds where we have no control.

However, the provision of suitable space for roosting and feeding will send the birds north with the best possible chance for breeding success and therefore, should enable similar numbers to return each year.

So how have these species and habitats fared?

Broadly speaking, most of the species that were assigned as key site species have either met or exceeded expected numbers. This includes all goose species, with a **significant increase in the total number of birds using the roost** (see graph opposite) mainly due to the increased presence of pink-footed goose, and a peak count of 300 Greenland white-fronted geese during winter 2016/17, which is the **highest count since 2002**.

It includes wetland and woodland passerines. For example, redstart numbers have shown a steady increase on site since 2003, starting at 0 pairs in 2003 to a peak of **13 pairs in 2017. The 5-year average for 2014—2018 is 9 breeding pairs (previous 5-year mean 3 pairs)**.

Wading birds such as snipe have also done well. Snipe numbers on site appear to peak and trough in

roughly 3-year cycles, but overall, they show a steady increase. Management regimes implemented in the last 5 years are likely to have provided more available habitat for snipe, including increased grazing creating a suitable range of sward (grass variety) and removal of rank vegetation build-up. **The 5-year average is 13 breeding pairs (previous 5-year mean 10 pairs)**.

Additionally, otters, wintering ducks, small pearl-bordered fritillary butterfly, rare mosses and important plants have all met or exceeded their targets. More details can be seen on the graphs opposite.

In addition to these species, a number of new or rare species were recorded. These include:

The re-appearance of red squirrels, now seen most days from the Nature Hub and recorded using most woodland on site. There have also been no records of grey squirrels for at least 5 years. **Rare invertebrates**, including the great otter spider, which had not been recorded in Scotland since the 1990's and is found in good numbers on site. Other species include

TIP: Passerine refers to any bird that is distinguished by having feet adapted for perching and includes all songbirds

a number of weevils and bronze shield bug.

New plants and bryophytes, including violet crystalwort and narrow-fruited water starwort.

Those species that didn't fare so well include:

Grasshopper warbler: This bird has dropped in number RSPB Scotland Loch Lomond. It is likely that our management for other species has impacted the availability of suitable breeding conditions for grasshopper warbler, and this is being reviewed as part of the plan for 2019-2024. Grasshopper warbler has also suffered national declines which will also impact the numbers seen on site.

Pied flycatcher and wood warbler: Pied flycatcher had not been recorded on site for a number of years prior to RSPB's ownership, and wood warbler numbers were also low. However, we were hopeful that some new nest boxes and additional monitoring could encourage them back. As it turns out, the small fragments of woodland on site

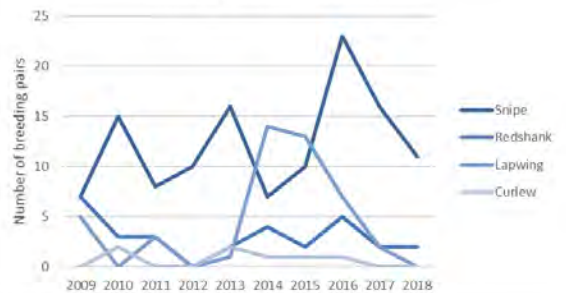
cannot compare to the quality of woodland found around the shores of Loch Lomond and so no pied flycatchers were recorded and wood warbler was only noted in two of the years. However, there have now been breeding records for both species on Inchcailloch, so they continue to be a feature of the wider NNR, of which the RSPB reserve is part.

Barn owl: monitoring of 1 breeding pair was included, however, the nest box they had used collapsed early in the plan cycle, and, despite quick replacement, they were not recorded breeding on site again.

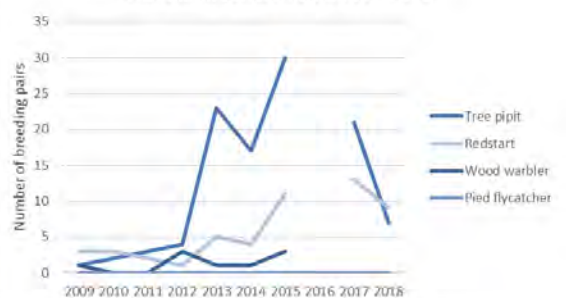
Scottish dock: In the UK, this plant is only found around the eastern shores of Loch Lomond, including populations on the NNR. However, a detailed survey of the populations on the RSPB site showed that all of the plants were hybrids, so no viable population is currently found on RSPB ground. A strong population remains on the north side of the NNR and as part of the new plan, we are looking at a possible reintroduction project.

Summary graphs for breeding and wintering species

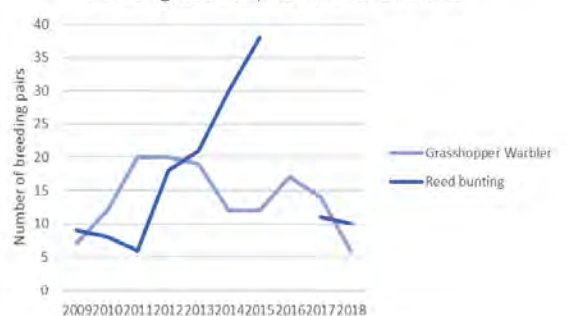
Breeding waders 2009 - 2018



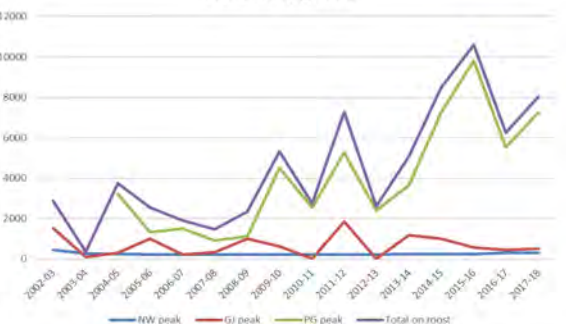
Woodland passerines 2009 - 2018



Breeding wetland passerines 2014 - 2018



Wintering geese



Each of the graphs above show data gathered from the southern mainland section of the NNR, now referred to as RSPB Scotland Loch Lomond. From 2009—2012 data was collected by SNH, in 2013/2014 there was a crossover period and from 2015 onwards all data was collected by the RSPB. Gaps in graphs represent gaps in data, for example, during years where this species was not surveyed. The success of a species is assessed by looking at averages over 5-years, rather than in any one particular year, as variation in numbers can be down to a number of factors such as weather and water levels.

Getting down and dirty for wildlife

Despite appearances, managing for nature takes a lot of hard work, skill and specialist knowledge. Here are some of the highlights from the past few years



Clockwise from top left:

Luke carrying out invasive non-native plant removal; Ami hanging cattle warning signs; ScottishPower corporate volunteers after a hard days work; Softrak cutting in Twenty Acre Meadow; Taking the ArgoCat out for a spin; John cutting and burning plant material in the fen; Winter ditch maintenance.

Opposite: Becky removing large branches from a ditch on site.



2019—2024
and beyond

Our vision for wildlife, habitats and people

What is in store for the next 25 years as we work to improve conditions for the special creatures that call this place home and inspire nature lovers both young and old?

As part of the management plan process, we visualise what we want the site to be like in 25 years time, and then produce 'The Vision' which we work towards in 5-year chunks. **Below is a summary of that vision:**

RSPB Scotland Loch Lomond will be a flagship site for both nature conservation and visitor experience in the National Park and will be known as one of the best places for wildlife and habitat management practice in the west of Scotland.

The site will have a high-quality team of well trained, enthusiastic volunteers who will play a crucial part in the delivery of our vision and objectives.

The visitor facilities and experience will be of the highest quality. The staff and volunteer team on site will be known as one of the most helpful, knowledgeable and friendly in the Park

There will be nature trails that allow visitors to experience the wide range of unique habitats on site and to get close-up views of wildlife such as ospreys, geese and mammals.

The habitat management will be exemplary with all the designated features on site being classified as in favourable condition.

RSPB Scotland Loch Lomond will continue to be a core part of the Loch Lomond National Nature Reserve, an accolade for only the top wildlife sites in Scotland. As a whole, the NNR will be the number one place in the National Park to see wildlife.

The site will be a core part of the community and will be regarded highly and affectionately. The site will be well placed to provide opportunities to support groups with a range of backgrounds and abilities

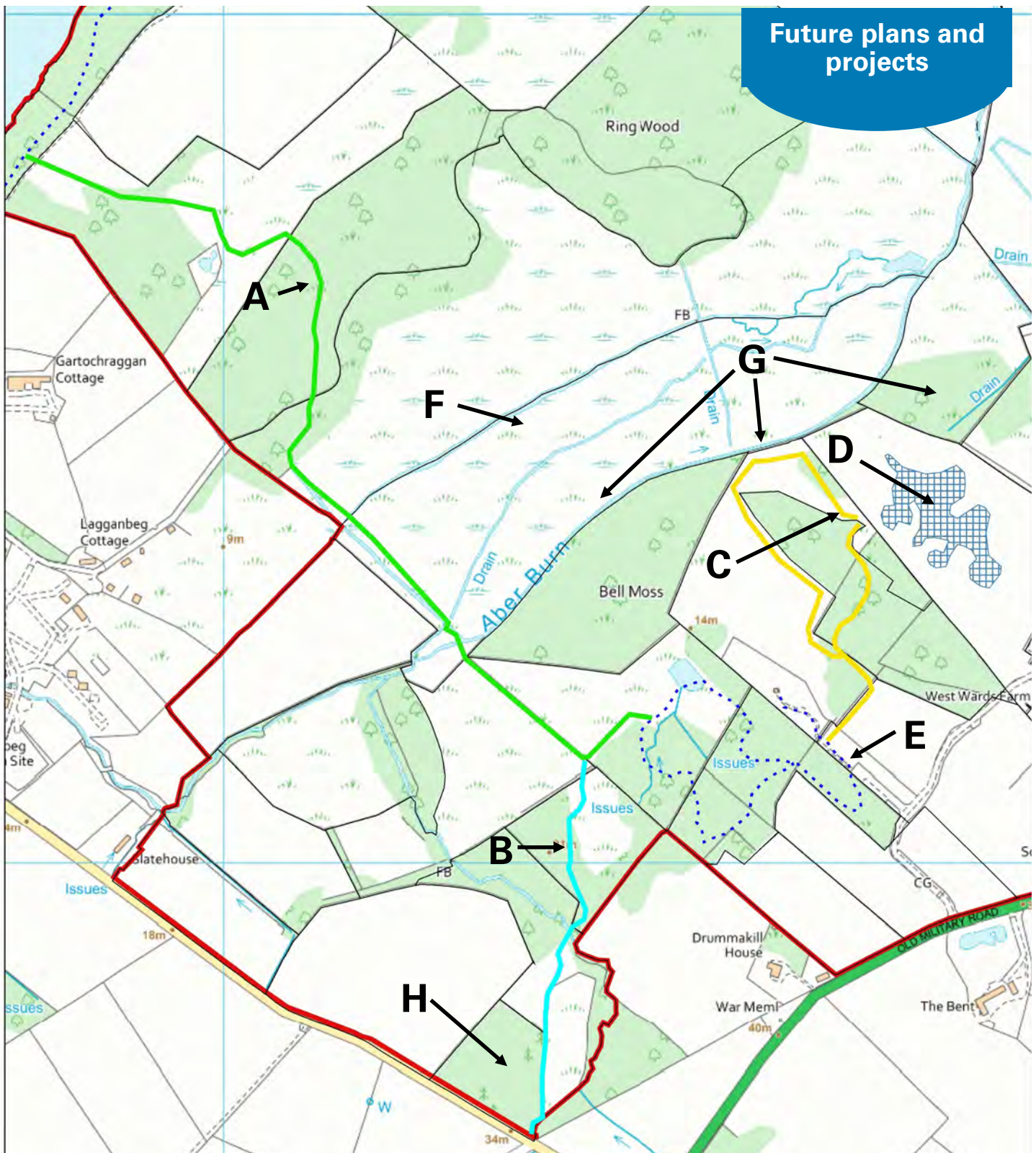
The site will continue to host a significant proportion of the global population of Greenland white-fronted geese

Our graziers will work closely with the site staff to get the best out of the land for conservation.

We will have a superb database of biodiversity and land use records for the site

We will continue to work closely with our partners, SNH and LL&TNP to deliver our shared aims and objectives for wildlife and people

Future plans and projects



The map above shows some of the projects that we will be working on from 2019—2024 for both wildlife and people, as featured in the management plan. These include:

- A. **Loch shore link path:** Linking up the existing visitor facilities with the loch shore, and the Shore Wood path
- B. **Community link path:** Providing an off-road walking route from Gartocharn village to the RSPB site
- C. **Wetland loop path:** Tying in with wetland creation works (D) to provide views of species using new wetland pools on site
- D. **Wetland creation:** Turning a rushy field into a thriving wetland for wildfowl, waders, amphibians and insects
- E. **Improvements to Nature Hub facilities:** Including replacement of the Nature Hub with a more permanent welcome building, small increase in car park size
- F. **Fen management for plants and waders:** Ongoing works to improve the hydrology, plant diversity and soil condition in the fen
- G. **Scrub management:** Removal of invasive willow scrub from around the fen, to create habitat connectivity.
- H. **Non-native tree removal:** Removal of non-native conifer plantations and replacement with native woodland species to benefit woodland passerines

Get involved

Can you spare us some time?

Volunteers are the lifeblood of the RSPB and there's no better way to learn more about what we do that by getting stuck in. Various opportunities throughout the year including:



Love nature? Help us with surveys and monitoring as a **Wildlife Survey Assistant**



Love the great outdoors? Want to keep in shape? Get stuck into habitat management and join in with our **Work Group Volunteers** or help with specific practical tasks.



Love a good blether? If so, become a **Visitor Hub Volunteer** and share stories about fantastic wildlife or become an **Events Volunteer** and help to enthuse people about the reserve.

NEW FOR 2019! Hire your own personal guide for a tailored walk on the reserve

From Wed 1 May—Mon 30 Sept (various dates and times by arrangement with RSPB staff)

Guests visiting and want to show off the area? Looking to expand your wildlife skills, knowledge and experience? Why not take a personalised tour of the reserve with a guide who will tailor the experience especially for you. Perhaps you have specific interest such as birds, insects, plants or local history, or perhaps you're just keen on wildlife in general. Either way, we will endeavour to match you with a local guide who will spend time with you showing you the site how you want to see



Walks available during site opening hours from May—Sept. Booking is essential and please try to give at least two weeks notice. Why not give us a call on 01389 830670 for more information and we'll try to find someone to match your requirements! Walks last 3-4 hours. Cost: £20 (£15 RSPB-members) for the first person and £5 (£4 RSPB members) for each additional person.

Find out more at rspb.org.uk/lochlomond

This newsletter is our way of keeping you up to date with the work taking place at RSPB Scotland Loch Lomond. **If you would like to find out about volunteering with us, supporting our work or for any other enquiries, please call 01389830670 or email loch.lomond@rspb.org.uk**

Front cover: Loch Lomond by Samantha Taylor. Page 2: Paula & otter by Jenny Tweedie, INNS by GBNSS. Page 3: Bluebells along the trail by David McCulloch, Pond Dipping area by David Palmar (photoscot.co.uk). Page 5: Family and scope, bug hunting and Ami Kirkbright by David Palmar (photoscot.co.uk). Page 8: Becky in a ditch by David Palmar. Page 9: Fen burning by Mike Todd, Softrak cutting by Barbara Wolff. Page 10 Hills at sunset by David McCulloch. Page 12: Volunteer photos by David Palmar, Emma in the Bluebells by Bob Shand. All other photos taken by RSPB Scotland Loch Lomond staff and volunteers.

The RSPB is a registered charity: In England and Wales no. 207076, in Scotland no. SC037654

Working in Partnership with:

