

## Giant docks and tiny dinosaurs: RSPB Loch Lomond

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RSPB Loch Lomond is 237ha of mixed wetland habitats and farmland within the flood plain of the Endrick Water. Situated on the southern shores of Loch Lomond it forms part of the Loch Lomond National Nature Reserve and is a Site of Special Scientific interest, Special Area of Conservation, Special Protection Area, and a Wetland of International Significance under the Ramsar agreement. The site came into RSPB ownership in spring 2012 after generous donations from supporters of the RSPB, The National Heritage Memorial Fund, Scottish Natural Heritage (SNH) and The Loch Lomond and The Trossachs National Park (LLTNP). The management of the site is through a partnership with RSPB Scotland, SNH and LLTNP and it is hoped that through careful management the site can give a home to nature and a place for people to be with nature.

The broad range of habitats is one of the features that make the site so special. Sitting on the highland boundary fault means that there are species represented at their most northerly range and others at their most southerly range. The Endrick Water is an obvious feature of the site and has a large impact on hydrology and morphology. Despite being, only about 50km long it deposits an estimated 13,800 tonnes per annum of silts and gravel extending and reforming The Ring Point: a 1.6km bar created as the Endrick water meets the Loch (Mitchell 2001).

One of the key species of this river is *Lampetra fluviatilis*, river lamprey. Lamprey are a primitive family of jawless fish whose fossil record stretches back over 450 million years ago (making it the tiny dinosaur of the title). The population in the Endrick is unique in the UK for its unusual behaviour. River lamprey are a migratory species and spawn in freshwater. After about two years the young leave the rivers and head out to estuaries to reach maturity. The river lamprey in the Endrick differ in the fact that they do not mature in the saline waters of the Clyde, they remain in the freshwaters of Loch Lomond where they feed mainly on another special species of the area *Coregonus lavaretus*, powan

(Maitland 2007). Another species unique to the area is *Rumex aquaticus*, Scottish or Loch Lomond dock. As the common name suggests, within the UK, this species is limited to Loch Lomondside. Despite reaching heights of over 2m (taller than your average botanist) it was not described as species in the UK until 1935.

Away from the Endrick but still sustained by its flow are the fens and meadows of the site, these support a wealth of wildlife including a nationally important wintering population of *Anser albifrons flavirostris*, Greenland white-fronted geese, *Lutra lutra* otter, breeding wading birds like *Gallinago gallinago* snipe and a diverse and often specialised group of invertebrates like *Donacia aquatica* zircon reed beetle and *Hydroporus rufifrons* ox-bow lake diving beetle. Special mention must be made of the flora in these areas where diversity is particularly high: one 20 acre meadow alone supports approximately 120 species of vascular plant. Away from the wetlands but still pretty damp are the woodlands including Atlantic oak woodland. These woods are tremendous mix of young, old and decaying trees providing great opportunities for birds, invertebrates, bryophytes, lichens and fungi. As well as an existing wealth of wildlife the site has potential for re-colonisation by a number of species including *Sciurus vulgaris* red squirrel and *Avicola terrestris* water vole. With *Castor fiber* beavers being seen in the wider countryside these too could be a regular sight in years to come.

Despite the site having been a NNR since 1962 there are still threats. The change in farming since the 1930's has had a big impact on some of the meadows and fens. As an example Aber Bog, a fantastic 24ha area of would have been cut in rotation by local farmers, the bog hay would have been removed and used as winter bedding for livestock. This practice stopped in the 1930's and has seen a change in structure and diversity of the flora within this area. Recent attempts to manage the fen by cutting with specialist machinery has had mixed success with the biggest issue being the removal of cut material. One of the challenges as we go forward with site management will be how to reinstate sustainable management in areas like this.

A key management decision will be whether to reinstate close control of hydrology through ditch management and sluices or to try and follow the ambitions of the water framework directive (2000) with a more natural, non-intervention approach. This is a key discussion during the current production of a new management plan for the site.

Grazing is a key tool for the favourable condition of the fens and this is why the purchase of the site included some of the higher non-designated grazing pasture. This will allow an effective grazing regime

to be established. This still needs to be supported by good infrastructure on the ground and this is another challenge for the coming few years.

Over the past ten years a lot of time has been spent on control of invasive non-native species. Across the wider NNR this has included both mammalian and botanical. The main focus on the Endrick floodplain has been with plant species such as *Impatiens glandulifera* Himalayan balsam, *Fallopia japonica* Japanese knotweed, *Heracleum mantegazzianum* giant hogweed and *Lysichiton americanus* American skunk-cabbage. The main impact of these species is to out compete native flora for space but evidence is suggesting that some species may out compete native flora for pollinators (Chittka et al 2001 and Dietzsch 2011). It is clear that this will continue to be a focus for work on site but will also need to be considered as part of a catchment wide approach.

Current work is focused on production of a five year management plan. During the process, it has become clear that despite a relatively good historic level of wildlife recording this has not been consistent. One of the challenges has been collecting recent records for some of the rarer species and we have already discovered unrecorded species such as *Bagous lutulentus*, (Gurney 2013) a weevil of wetland habitats (this record is only the second record in Scotland for a hundred years).

People are going to be a big part of delivering conservation objectives at RSPB Loch Lomond. This is where field naturalists and other volunteers will be key to the site's success. It is also the ambition of the partnership to bring visitors closer to the wildlife of the area. This will be achieved gradually in a planned way to ensure that the wildlife comes first and RSPB Loch Lomond provides a great home for nature.

## REFERENCES

- Mitchell, J. (2001) *Loch Lomondside*. New Naturalist vol 88, Harper Collins
- Maitland, P.S. (2007) *Scotland's Freshwater Fish, Ecology, Conservation & Folklore*. Trafford Publishing Ltd.
- (2000) Directive 2000/60/ec of the european parliament and of the council of 23 october 2000 - establishing a framework for community action in the field of water policy. L327/1-72 *Official Journal of the European Communities*.
- Chittka, L.& Schürkens, S. (2001) Successful invasion of a floral market: An exotic Asian plant has moved in on Europe's river-banks by bribing pollinators. *Nature* 411, 653
- Dietzsch AC, Stanley DA, Stout JC. (2011) Relative abundance of an invasive alien plant affects native pollination processes. *Oecologia* Vol 167(2):469-79.
- Gurney, M. (2013) *Pers Comms*.