

RSPB Forsinard Flows nature reserve

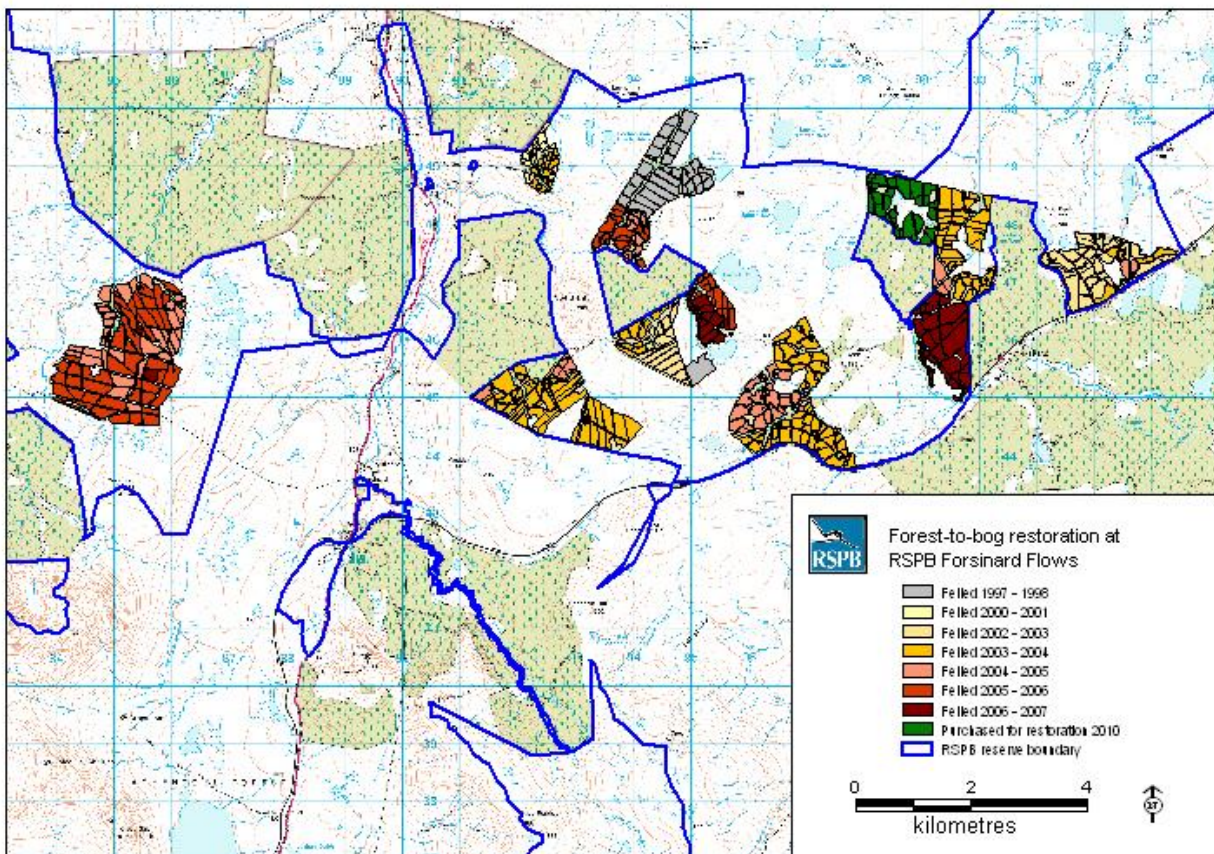
Summary of restoration work & monitoring

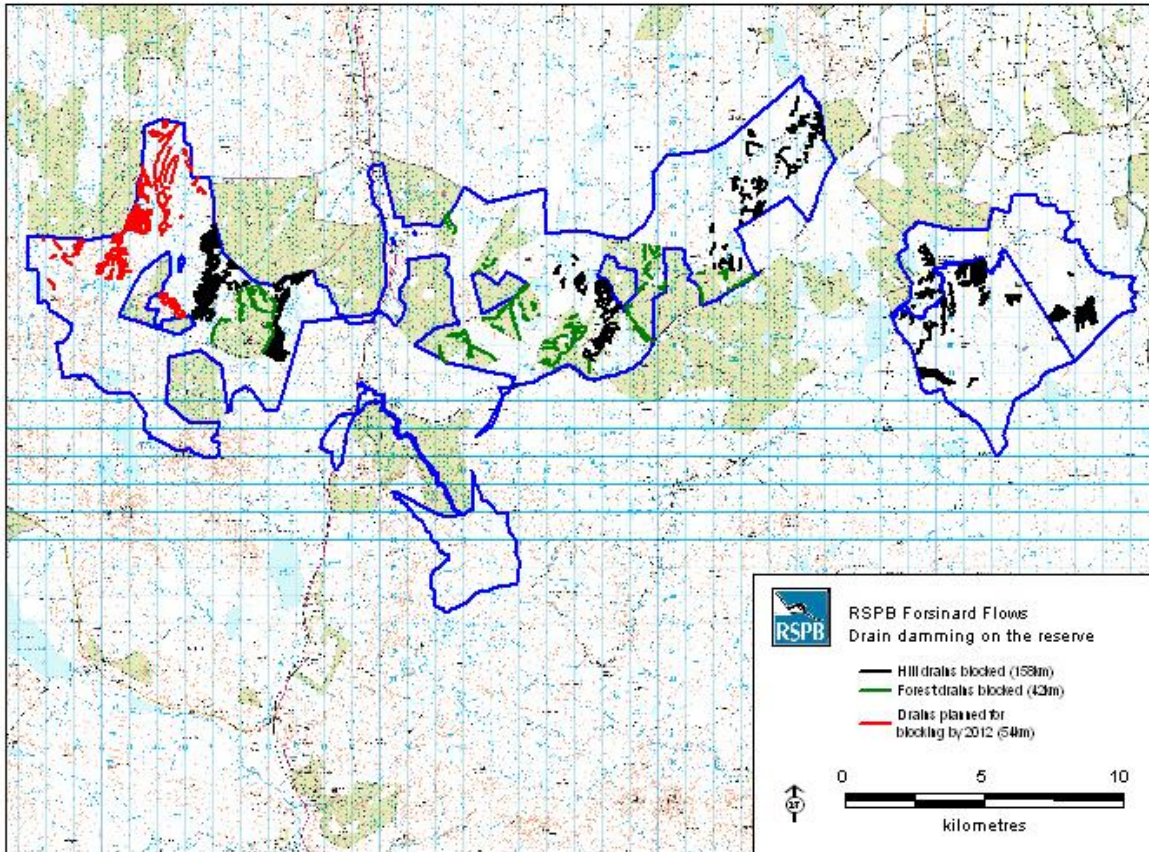
Summary facts about the reserve

- Forsinard Flows Reserve currently stands at 19,263ha
- Location is the peatlands of Caithness and Sutherland
- Designations: SSSI, SPA, SAC, Ramsar and NNR

Restoration work

- Type: restoration of afforested bog (felling exotic conifers between 8-25 years old), and using peat and pile dams to block hill drains
- Extent of the work: The restoration work took shape in an EU-Life funded project 1994 – 1998 and continued in a second project 2000 – 2006. Main reserve-based outputs during the two projects were fell-to-waste 1774 of conifer plantation over a space of 9 years, and block 158km hill drains and 42km of forest drains with a total 11,128 dams constructed of plastic piling, hand built peat or machine built peat.
- Following the Life projects, acquisition of open land and plantation adjacent to the reserve continued on a smaller scale. 367ha of plantation and 2050ha of open ground have been acquired for restoration since the end of the Life project in 2006. In the open areas there are 54km of drains to block, which is planned for completion by 2012.





Measures of success

1. Forestry

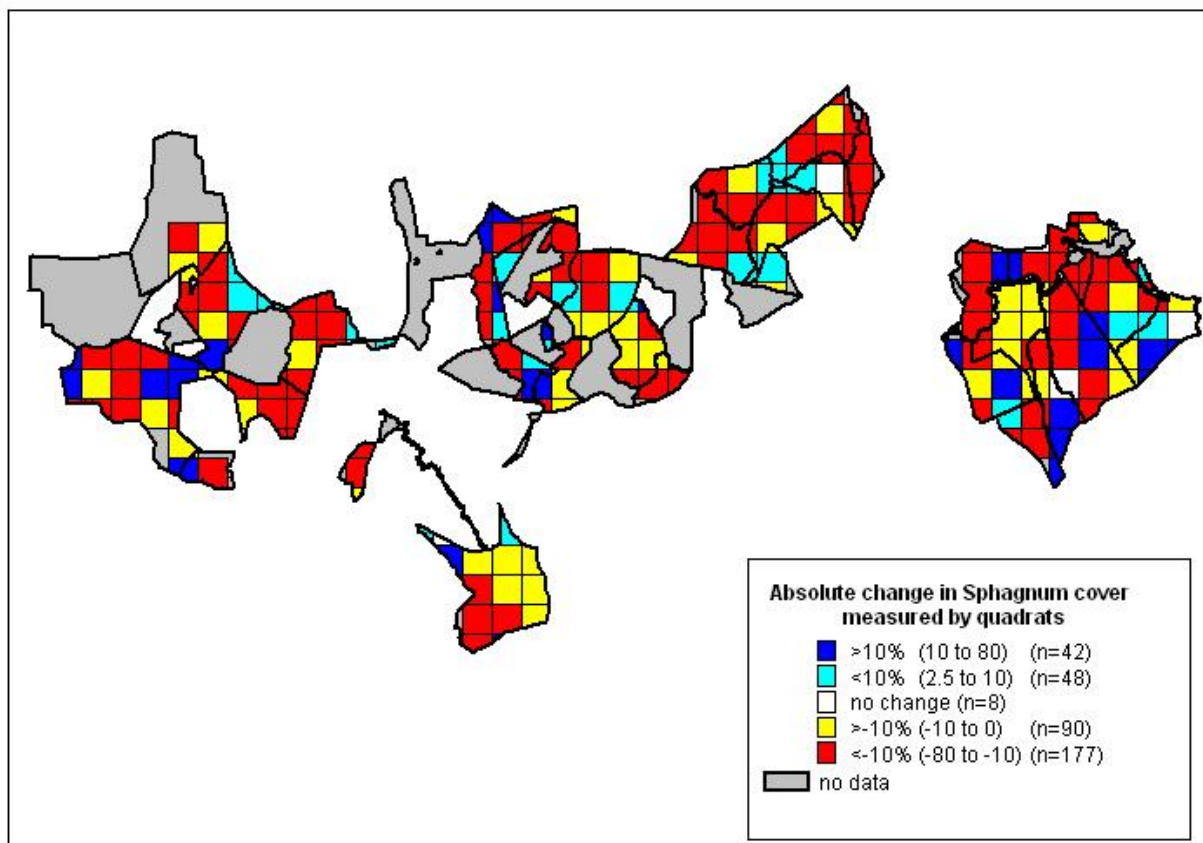
- A vegetation study in Talaheel plantation, felled in 1998, was carried out before and after felling and repeated in 2006. The monitoring work showed an increase in bog vegetation across the site and a decrease in heather and grasses.
- Hydrological monitoring in Lonielist plantation is being carried out using dipwells in different treatment areas, to investigate the relative effectiveness of different types of felling. A basic vegetation survey was carried out in the same blocks and is due to be repeated in the next two years.

2. Drains

- The dammed drains are one a 5-year programme which will check the effectiveness and integrity of the dams. Currently the failure rate is less than 5%.
- Around 20% of the dams have been subject to intensive monitoring on measures of restoration, including abundance and type of vegetation behind the dam, water level and structural integrity in relation to dam type and location. It is anticipated that the data will be analysed and written up into a short study in the next two years.

Associated research and monitoring

- 2002 – 2005 Forest edge effect study comparing bird densities with proximity to standing forest, felled forest and open ground. Other measures included data from predator transects
 - Examination of deer, wader and habitat correlates in the long term monitoring of habitat condition across the RSPB Peatlands reserve. Objectives:
 1. Examination of the SAC and SPA current condition and change in condition (between 2002-5 and 2008), and with particular reference to the Site Condition Monitoring on the Blar nam Faoileag Reserve & Strathmore Estate.
 2. Examination of the role of herbivores, largely deer, by identifying deer, wader and habitat relationships in the most recent Habitat Condition Monitoring (HCM) survey and changes observed between the two HCM surveys in order to improve understanding of herbivore impacts on blanket bog habitat and in turn birdlife.
- Baseline habitat condition monitoring data collected between 2002 – 2006 was compared with repeat data in 2008. This extensive monitoring included data from transects at 250m intervals running north-south across the whole reserve, and point samples at 100m intervals on the transects. Data gathered included measures of abundance of all identifiable plants, presence of deer prints/droppings, peat depth, vegetation height and structure, and presence and type of pools.
- Red deer are counted on the whole reserve three times a year and managed in accordance with the targets set by the Northern Deer management Group. Deer management is carried out under lease to local sporting estates. A maximum population density is set in the reserve management plan and progress is reported annually.



Measures of habitat condition in relation to deer density and grazing are included in the wider habitat condition survey.



Imriche felling (photo: Norman Russell)



Pools in forestry (Photo: Norman Russell)

Partners/contacts

- LIFE II project partners were the Highland Council, Caithness and Sutherland Enterprise (now Highlands and Islands Enterprise).
- Life III project partners were the Forestry Commission, Forest Enterprise, Scottish Natural Heritage, Plantlife. More outputs and progress reports available at <http://www.lifepeatlandsproject.com/>.
- Contact the RSPB Forsinard Office by post at Forsinard, Sutherland KW13 6YT, email Forsinard@rspb.org.uk or call the Site Manager Norrie Russell on 01641 571225.