

Assessment of beaver potential on NatureScot managed NNRS

Methods

- Identified National Nature Reserves (NNRs) owned or managed by NatureScot either jointly or entirely.
- Assessed overlap of sites with Potential Core Beaver Woodland and main river catchments in GIS to identify those with suitable habitat.
- Reviewed each individually - see comments on NNRS in Table 1.

Summary

NatureScot we are very supportive of Scotland's Beaver Strategy and seeing beavers expand into appropriate areas. We already host beavers on Loch Lomond NNR following the release by RSPB Scotland, with some existing beaver occupancy around Flanders Moss and Tentsmuir. We expect beavers to arrive naturally at Morton Lochs and Loch Leven. We expect Muir of Dinnet to be considered as part of a wider exploration of the suitability of the Dee catchment following consideration of the Spey by CNPA. The rest of our land holdings do not contain suitable habitat or would only support a small number of isolated beavers. Hence as well as supporting existing populations on our land, we are focused on supporting others in developing proposals for more favourable locations.

- A significant proportion of the land owned or managed by NatureScot is not suitable habitat for beavers, being for example coastal, peatland, or mountain. An initial analysis of our reserves indicate 17 sites where we have ownership or are managed under agreement, have some presence of potential core beaver woodland. Many sites have little in the way of suitable habitat or waterbodies on which beavers could establish.
- Generally we suggest the focus should be on strategic/ catchment based applications with multiple release sites rather than seeking to establish isolated populations that require ongoing population and genetic management.
- Many sites are not owned by NatureScot but are managed under Nature Reserve Agreements and hence would be subject to landowner permission.
- A number of National Nature Reserves managed by partner organisations are included within the Spey and Affric catchments where there are live proposals.

Table 1 Commentary on NNRS with Potential Core Beaver woodland.

Organisation	NNR NAME	SITE_HA	CATCHMENT NAME	AREA OF PCBW (HA)	Assessment of potential for beaver territory	Comment
NatureScot	Ariundle Oakwood	70.72	Ardnamurchan Coastal	10.05	n	On river Strontian rather than waterbody, small coastal catchment with small habitat extent.
NatureScot	Loch Fleet	1056.82	Brora Coastal	9.64	n	Estuarine not freshwater, small inland woodland.
NatureScot	Caerlaverock	8184.79	Dumfries Coastal	1.88	n	Estuarine not freshwater.
NatureScot	Moine Mhor	486.61	Knapdale Coastal	1.51	n	Little woodland habitat and being restored to bog. By river

						Add and Crinan canal, but no waterbodies.
		486.61	River Add	8.91	n	As above.
NatureScot	Taynish	344.17	Knapdale Coastal	28.03	y	Waterbody not owned by NatureScot. Suitability assessment previously carried out by Beaver Trust. Potential for one family, poor linkage to other catchments and dispersal to sea, though potential connectivity to Knapdale population. High lichen and bryophyte interests - hence potential risks vs benefit.
NatureScot	Tentsmuir incl Morton lochs	778.41	North Fife Coastal	12.65	y	There is currently a beaver on Tentsmuir and at Tayport via natural dispersal from the Tay. The only suitable release habitat is at Morton Lochs. We know beavers can get here, so question need for translocation. Previous suitability assessment for beaver (Campbell <i>et al.</i> 2021) suggests is highly suitable for a territory. Potential conflict site with existing agricultural flooding concerns.
Joint site	Clyde Valley Woodlands	318.46	River Clyde	123.27	n	Only 2 of 6 sites owned by NatureScot, all steep gorge woodlands rather than waterbodies.
NatureScot	Muir of Dinnet	1166.17	River Dee (Grampian)	112.43	y	Not owned by NatureScot, but managed under NRA. Site with potential for beavers, (assessed by Macdonald <i>et al.</i> 1997). Needs to be viewed in strategic/catchment context.
NatureScot	Beinn Eighe	4856.73	River Ewe	82.79	n	NatureScot don't own the river. Scattered woodland on steep ground along River Ghairbhe no suitable waterbodies.
NatureScot	Loch Maree Islands	265.02	River Ewe	88.00	n	Mostly pine.
NatureScot	Flanders Moss	821.6	River Forth	37.52	n	Beavers present in surrounding watercourses with limited transitory use of this site.
NatureScot / RSPB	Loch Leven	1823.23	River Leven (Fife)	68.89	y	Not owned by Naturescot but managed under NRA. Previous suitability assessment for beaver (Campbell <i>et al.</i> 2021) suggests loch fringes managed by NatureScot are most suitable. Potential for natural colonisation. Likely agricultural conflicts and need for interventions on surrounding low lying and downstream land.

NatureScot / RSPB	Loch Lomond	426.67	River Leven (Loch Lomond)	67.91	y	Already present following RSPB releases and previous natural colonisation.
NatureScot	Creag Meagaidh	3956.3	River Lochy	55.65	n	Sparse habitat on Loch Laggan and Allt Dubh with some potential for future colonisation. No suitable waterbodies for release. Needs Strategic context.
NatureScot	Glen Roy	1161.88	River Lochy	5.38	n	Only small edge of gorge woodland managed by NatureScot.
NatureScot	Craigellachie	257.46	River Spey	6.55	n	Not owned by NatureScot but managed under NRA. A9 dualling and roadside location make unsuitable. Strategic consideration of Spey by CNPA, their assessment of site suitability priority.
NatureScot/ FLS	Invereshie and Inshriach	3730.86	River Spey	71.38	n	No waterbodies, but upland streams on steep slopes, largely unsuitable. Conifer dominated. Strategic consideration of Spey by CNPA, their assessment of site suitability priority.

References

Campbell-Palmer, R., Puttock, A., Needham, R., Graham, H. & Brazier, R.E. 2021. Beaver Translocation Assessment for Tayside. *Unpublished Report to NatureScot*.

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Macdonald D, Maitland P, Rao S, Rushton S, Strachan R, Tattersall F (1997) *Development of a Protocol for Identifying Beaver Release Sites*. Scottish Natural Heritage, Research Survey and Monitoring Report 93, Battleby, UK.