

Reserve Management Statement. Merkinch Proposed Local Nature Reserve.

Contents.

1. Site Ownership
2. Site Description
3. Site History
4. LNR Steering Group.
5. LNR Vision
6. LNR Aims
7. Opportunities for Environmental Education and Community Participation
8. Suggested Artists
9. Arrangements for Access and Visitor Management
10. Management Arrangements
11. Initial Management Priorities
12. Current Grant Applications
13. Future Grant Applications
14. Future Project Ideas

Appendix 1. Recommendations from City of Inverness Greenspace Audit.
January 2005.

1. Site Ownership.

The site is almost wholly owned by Highland Council, with a small area (just under a hectare) owned by British Waterways. The proposal of this area as a Local Nature Reserve is consistent with Policy G5 of the Highland Structure Plan, Integration of environmental and community interests. It states, "The Council will support measures that link the protection, enhancement, understanding and enjoyment of the natural and cultural heritage with the sustainability and vitality of local communities".

2. Site Description.

The area consists of:

Area 1 (east of the South Kessock ferry slipway and part of the intertidal area towards Carnarc Point) – 0.7 hectares. Intertidal area between high and low water mark.

Area 2 (bounded by the housing to the east, the railway to the south, the canal to the west and the low tide mark to the north) – 48 hectares. This is known as Westfield. Managed grassland, coastal grassland, stoney beach, freshwater pools, reedbed, wet heath, scrub and woodland.

Area 3 (bounded by the railway, industrial estate and canal) - 6 hectares. The area consists of grassland, mudflat, saltmarsh, saltwater, brackish pools, reedbed, scrub and woodland.

Total area of the site is 54.7 hectares.

3. Site History.

Merkinch (island/ meadow of the horses in Gaidhlig) was originally an estuarine island; the east bank of the canal follows the old shoreline. The Roy map of 1747-55 see <http://www.nls.uk/maps/> shows this outflow to the Beaully Firth had been filled in. Previously the Ness had a secondary channel that flowed into an estuary down what is now Abban Street. It is difficult to say if this was a main channel or just one that ran at times of high water. At this time there were unenclosed strips of cultivation shown on the map but little in the way of buildings apart from the ferry cottage, Carnarc Point didn't exist.

The building of the canal (opened in 1822) created the seawall that runs from the canal to the old ferry slipway, enclosing the mini-estuary.

By the Ordnance Survey map of 1870 Carnarc Point, a breakwater had been built and enclosed (presumably drained) field systems had been created. No open water was mapped but the lagoon area was noted as "liable to flood". In the 1900 OS map a lagoon was noted behind the sea wall and the remaining area behind the sea wall is mapped as wetland.

Sluices in the sea wall allowed some tidal flow allowing the salt marsh and mudflat to remain, though these were no doubt made to allow water flowing from the wetlands out to sea. The building of the railway (opened in 1862) finally cut off the area to the south east of the line from the sea and creates the freshwater lagoon to the north of the railway embankment. A burn still

flows parallel with the canal at the bottom of the southern embankment, where this flows from is unclear as it disappears from view under Telford Street.

4. LNR Steering Group.

The impetus for designating this area came from Merkinch Greenspace (formerly known as South Kessock Environment Company), a voluntary organisation with charitable status. It consists primarily of local volunteers. As well as having local support; designating this area as an LNR fulfils a recommendation in the Inverness Greenspace Audit, which says, "The site could be viewed as a semi-natural reserve". For full text see Appendix 1.

Merkinch Greenspace (formerly known as the South Kessock Environment Company) approached the Council's Biodiversity Officer in January 2007 asking for advice on how to set up an LNR. A meeting of site owners and stakeholders was arranged in March 2007. A wide spectrum of site user groups and "expert" groups e.g. botanists were invited to this meeting. After this, a steering group was formed and has met several times to take the application for designation forward. It consists of representatives from Merkinch Greenspace, Councillor Peter Corbett, Highland Council (Biodiversity Officer and Inverness and Nairn Ranger Service), Merkinch Enterprise, greeninverness, British Waterways (owners of a small section of the proposed LNR) and SNH.

The steering group and the expertise it contains has been vital in developing the application for designation of the site. Various members have taken forward work to secure the agreements and information required for designation. The steering group has also been looking beyond the site's designation and has secured funds to draft a detailed site management plan.

5. LNR Vision.

To create the best Local Nature Reserve in Scotland: a place where people and biodiversity co-exist to each other's mutual benefit.

6. LNR Aims.

- 6.1. To conserve and if required restore the natural habitats on the site.
- 6.2. To maximise the biodiversity value of the managed habitat on the site.
- 6.3. To improve/ upgrade access provision on the site.
- 6.4. To maximise the opportunities for community involvement in the management of the reserve.
- 6.5. To maximise the learning opportunities afforded by the reserve to the local community.
- 6.6. To highlight the value of the reserve to residents of Inverness living outside Merkinch and also to tourists.

7. Opportunities for Environmental Education and Community Participation.

The diversity of habitats on site and easy access from the local school, and also schools in central Inverness mean that the proposed LNR provides substantial opportunities for formal environmental education.

The proximity of the reserve to the local community and its high levels of informal use mean that there is a level of value attached to the site by its users. This means that there is a receptive audience for informal environmental education activities and events for both adults and children. There is also scope through this local connection with the site for innovative interpretation, both temporary and permanent, on the site.

The work of Merkinch Greenspace has already begun engagement with the community and the work of the Highland Council Rangers with schools and community groups such as Guides and walking groups.

To celebrate the opening of the reserve a major event (perhaps a children's parade) could be planned for April during the Easter Holidays. It would involve a week long residency of one artist and cost around £1000 for their time and materials. This residency would be primarily for the local children on holiday (but adults could come along too). An earlier artistic event could take place this winter to create artworks within the reserve and a logo for the site, again through the work of local young people; this could cost upto £10,000, depending on the scale and permanence of installations created. The artist himself for a week would cost around £1000.

These events would foster a sense of ownership amongst the young people in the area, especially through the devising of the logo and encourage exploration and investigation of the LNR through both events.

8. Suggested artists.

For the opening celebration - Gordon MacLellan "Creeping Toad"

<http://creepingtoad.org.uk>

John McNaught who used to be a resident artist for Highland Council and who worked with pupils to produce many of the colourful Primary School signs in Highland. He works at the Highland Print Studio.

9. Arrangements for Access and Visitor Management.

There is already an access network on the site and though this is unlikely to expand significantly it is in need of upgrading (see Section 10). The layout of the site e.g. wetlands, mudflats, railway, creates areas that are inaccessible forming low disturbance zones within the site.

It is likely that most of the paths in the reserve area will be considered as candidate core paths in the context of the 2003 Land Reform (Scotland) Act. This is subject to the assessment of the Highland Council Access Officer and from feedback from local consultations. A second informal consultation took place in September 2007 and a formal consultation will take place in 2008.

10. Management Arrangements.

At present only the amenity grassland in Area 2 is managed regularly. Therefore there is considerable scope for potential management for biodiversity for the rest of the reserve. A key objective will be the restoration or improvement of a particular habitat.

The management plan will look in detail at how to manage the site and will use the 1996 SWT management plan for Westfield as its starting point. Some potential actions for each habitat are detailed below.

Managed grassland – creation of wildflower meadows, institute meadow management regime in suitable areas, experiment with annual meadow planting.

Coastal grassland – Maintain extent and manage sensitively.

Stoney beach, mudflat – Maintain extent.

Saltmarsh – Maintain and look to any possibilities for expansion.

Freshwater pools – Maintain/ improve water quality. Mitigate any run-off issues. Habitat expansion.

Reedbed – Maintain extent. Possible expansion.

Wet heath – Maintain extent.

Scrub and woodland – Restructuring.

Watercourse - Maintain/ improve water quality.

11. Initial Management Priorities.

11.1. In the first instance find out what the community would wish for the LNR, through a consultation event prior during the development of the management plan by a consultant in winter 2007/8.

11.2. Upgrading the access routes on the site. Improving drainage, cutting back vegetation along paths, resurfacing existing paths, repairing and renewing the boardwalk. Making sure all are up to the current legislative requirements.

11.2.1. The following estimates (from the Inverness and Nairn Access Officer) are for the path along the sea wall (830m) to bring it up to the specification of the least restrictive option as determined by the Fieldfare Trust's category of urban and formal landscape:

- Hard firm path with no loose stones over 5mm.
- 1.2m wide.
- 50m between passing places and or resting places.
- No steps, stiles or fences.
- Ramp gradient of no more than 1:12.
- Maximum cross-slope of 1:50.
- Clear walking tunnel of 1.2m wide by 2.1m high.

11.2.2. Clearing a walking tunnel to 2m wide by 3m high at £2.50/m to waste (habitat piles of no more than 1m high by 2m long tightly packed) or £3.00 to chipped. **Cost £2075 to £2490.**

11.2.3. Widening path to 1.5m by cutting turves from existing path edge to form path tray, disturbing existing path surface, laying of type 1 [40mm to dust aggregate], to width of 1.5m compacted to failure, finishing with 3mm dust to form either a central camber or crossfall compacted to failure meeting path shoulder at a cost of £15 - £20/m². **Cost £18675 to £24900.**

11.2.4. Revenue costs would extend to ½ day/annum @ £200/day = **£100** which should include cutting back vegetation. Assuming quality construction and drainage where required one could anticipate resurfacing with dust in 5 years' time at around £2/m² [2 x 1.5 x 830] = **£2490**. This could be seen as

optional if the path surface is well enough bound or blinded by the fine aggregate surfacing.

11.2.5. The boardwalk is an estimated 120 metres long. It requires some maintenance now and will require more in future. All costs include using recycled plastic and are estimates.

11.2.6. Boardwalk repair – 120 metres @ £135/ metre = **£16200**.

11.2.7. Boardwalk rebuild – 120 metres @ £115/ metre = **£13800**.

11.2.8. The revenue costs, these are difficult to estimate and depend on the existing construction and the level of vandalism to the boardwalk. A figure for this after 10 years could be; 4 work days per annum, 10 years after construction barring any bad vandalism, at £200/day = **£800/annum**. After this time the maintenance figure will rise until a complete rebuild (at 15-20 years) becomes the most cost effective solution.

11.2.9. Seawall maintenance is critical to the sea wall path's existence. The sea wall needs regular inspection and maintenance. This is the Council's responsibility as owner of the site.

11.2.10. It is likely that the ongoing maintenance of the Sea Wall path will be taken on by the Council as it is the owner of the site and this path is likely to be identified in the Core Paths Network in and around Inverness.

11.3. An audit of the species found on site and if these include any UKBAP priority species or Scottish Biodiversity List species. If present, any specific action required to maintain or monitor them will be detailed in the management plan.

11.4. Draw up a woodland management plan. This will concentrate on maximising the biodiversity and amenity value of woodland on the site. The Management Plan will include this.

11.5. Look at the potential for varying the management of the amenity grassland on the site to maximise its biodiversity. The Management Plan will include this.

11.6. Creation of a website giving virtual interpretation of the site. Look to involve the school and local people in this exercise. This will be undertaken by the consultant as part of the management planning process. There is already a local website that could host the LNR site.

11.7. A downloadable or paper leaflet could be produced as part of the interpretation for the site. A paper leaflet would cost £700 for 2000 copies.

11.8. To formalise the entrances/ signage at the perimeter of the site, it has been agreed that 4 entrance signs (boulders) should be erected. The cost of 4 marker boulders would be upto £13,200, depending on where exactly they are sited and the designs carved on them. The grant offered by SNH towards these costs is based on a quote of £9,635, as provided by Merkinch Greenspace (then SKEC) in the grant application. Supply of boulders £1,300 each plus 17.5% VAT. Approximate cost for foundation and erection of each boulder £500 plus 17.5% VAT. Approximate costs for designs and lettering on each boulder £250 + 17.5% VAT

11.9. The interpretation of the Beaully Firth and Ferry is to be included in-situ or virtually. The Consultant's Management Plan will or can identify this.

11.10. Provide appropriate seating after discussion with user groups.

12. Current Grant applications.

12.1. SNH – Awarded £12,368.00 Awaiting acceptance by Merkinch Greenspace by 10 November 2007.

12.2. Community Economic Development - £10,000. Awarded. To be spent by 31st March 2008.

12.3. Further funding has been secured but this includes work outwith the LNR in Merkinch. A grant of £18,000 Merkinch Community Regeneration funding has been secured.

12.4. These funding applications are for a consultant to develop a management plan, interpretation plan and website for the reserve (upto £8,000) and to install 4 boundary markers at the entrances to the reserve (upto £13,200).

12.5. The grant awarded by SNH also includes a contribution towards the launch. Total cost of launch quoted as £7,550.

12.6. The Steering Group has secured enough funding to pay for a launch event, boundary markers and a consultant to draw up a site management plan.

13. Future Grant Applications.

The scale of these will depend on the contents of the Management Plan that will be drafted by March 2008.

14. Future Project ideas.

14.1. Development of a site management plan. The site management plan will run from 2008-2013.

14.2. Site Developments. There are long standing community plans for a multi purpose community/ visitor centre, built to maximise its sustainability. The outline costs are around £300,000.

14.3. Development of access facilities. This will be determined by the core path planning consultation that is ongoing.

14.4. Enhancement of Biodiversity. This will be determined by the site management plan.

14.5. Environmental Education and Interpretation. Signage, history of the site on line, on line leaflet.

14.6. Activities that involve local communities in LNR management.

14.7. Maintenance of the site to include litter removal and clearance, clarify who is responsible for this. Address any anti social issues

Jonathan Willet.

October 2007.

Appendix 1.

Recommendations from City of Inverness Greenspace Audit. January 2005.

Carnac Crescent playing Field.

Site Description:

The site comprises of a large area of regenerating scrub woodland on an area of low land behind a breakwater/dyke. To the west the site is bounded by the Beaully Firth and to the south by a railway line. The area abuts South Kessock Playing Field. A walkway runs along the top of the breakwater linking the turning head and viewpoint at the end of Kessock Road with the Canal towpath at Muirtown Basin. The footpath provides excellent elevated views out across the Beaully Firth and is in good condition.

The open space comprises of a series of cut grass terraces and mown paths in-between scrub/ regenerating woodland. It is difficult to link the path on the breakwater with the open space, although rough footpaths cross eastwards to the playing fields. The area is biodiverse, with a series of different habitats. It is an isolated pocket of land.

Opportunities/Recommendations

- The site could be viewed as a semi-natural reserve and some form of environmental audit should be carried out to ascertain areas of ecological value.
- Management of the site should be diverted towards habitat creation / preservation.
- A series of open informal paths could be created to run around the site and open it up to users.
- Clarification is needed around site entry / exit points to enhance legibility, possibly with maps/interpretation at entrances.