

Paper 1: Aims & objectives

Overview

This project will be incorporated into proposed programme (Paper 2) that will address INNS issues across the Forth District. The aim of the programme is:

'The protection of Forth District's aquatic and riparian biodiversity through the establishment of a collaborative community based management framework that implements coordinated and strategic actions for the prevention, early detection, rapid response to, and control of selected INNS'

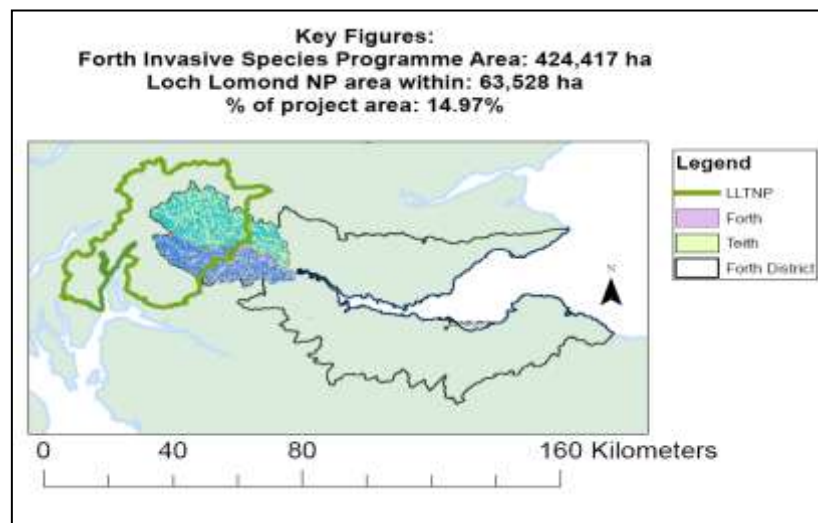


Figure 1: Forth Invasive Species Programme and Loch Lomond & Trossachs NP

This paper describes the goals & activities taking place in the LLNTP area and its buffer zone as part of the overall programme.

The aims of the project are:

1. To eradicate populations of INN riparian plants in the headwaters of the Forth & Teith.
2. To defend the Trossachs water vole reintroduction scheme from further incursions of North American mink by expanding the defensible area of the park.

Location(s):

- Japanese knotweed is found as far up the Teith as Strathyre with giant hogweed also occurring at a single location on Loch Lubnaig (see Map A). On the Forth it occurs above Lake of Mentieth with giant hogweed occurring outside the park boundary (see Map B).
- Mink control will link up with the LLTNP mink control area. (Map B). This will border the western edge of the Forth's mink control on the Rivers Teith & Forth. The forestry commission uses 58 mink rafts to cover the eastern boundary of the park from Loch Katrine in the North to Gartmore in the South.

Methodology

Volunteer recruitment & training: The project will aim to recruit & train local volunteers; volunteers will receive training in:

- Safe application of pesticide (PA6AW) by a water course & stem injection strategies.
- Mink trapping, monitoring and humane dispatch (where possible).

Informal training in other management techniques such as cut & spray, lever & mulch, INNS identification & recording and equipment maintenance will be provided by the programme coordinator.

Volunteers will be recruited from the following organisations:

Angling	Conservation	Landowners	Professional
Forth & Teith Fisheries Management Group Allan Water Angling Association	SWT Stirling ¹ BTCV Stirling Stirling University conservation club Locally based volunteers	Estate staff & riparian owners on Forth & Teith	Countryside rangers, LLNTP rangers, Environmental health officers, fisheries bailiffs

Equipment: The River Forth Fisheries Trust will use the Natural Heritage Grant Scheme to source and purchase the following equipment

INN riparian plant control	Mink control & monitoring
Knapsack sprayers Stem injection guns (1) Chemicals (glyphosate) PPE sets ²	Mink rafts (60) Mink traps (30) Air pistol & pellets (1) Clay & bait

Management: The Forth Invasive Species Programme will manage and coordinate volunteer led control of Invasive riparian plants and mink through its invasive species officer.

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The Invasive Species officer will:

- Complete risk assessment
- Update GIS database
- Ensure that spraying codes of practice are followed
- Gain SEPA & landowner permissions
- Ensure safe storage and maintenance of equipment
- Monitor control efforts
- Liaise with relevant LLNTP staff
- Keep up to date records such as:
 - 1) Equipment & chemical inventories

¹ Plant Local Action Network – An informal grouping of botanists from the Forth catchments whose objective is to assist with the monitoring and conservation of local fauna – www.swtstirling.org.uk

² Face masks, coveralls, boots and nitrile gloves

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- 2) Volunteer records
- 3) Herbicide application records
- 4) Areas treated
- 5) Post control reporting
- 6) Mink sightings & dispatches

Control programmes: The programme coordinator will ensure the following control programmes are adhered to:

INN riparian plant control: The programme coordinator will oversee separate spraying applications 3 times p/annum. The spraying regime will take into account the most efficient times to apply herbicides to INN riparian plants³.

Mink control - Volunteers will check rafts at least once a fortnight, however this will rise to at least twice a week during February and August - September that is the peak dispersal time for mink (due to breeding and seeking out new territories respectively.) The project officer will then assist with trapping whenever this is required. The programme will actively recruit volunteers who either live near burns or rivers (or their properties contain them) or whose work patterns and/or commutes bring them into close proximity to rivers and/or burns.

Initially, the total area of river that the project seeks to protect consists of just over 106km of main stem of river (Allan 30km, Teith 16km, Forth 60km) (Map A). Once mink have been eradicated in these catchments, control will focus on 'pinch points' for mink dispersal to prevent further incursions of mink into the Forth, Teith and Allan Water catchments. Monitoring and control will initially focus on tributaries originating in these upland areas with control shifting to lowland habitats as the project progresses.

Indicators

Aim: To eradicate populations of INN riparian plants in the headwater of the Forth & Teith.

i) Control of Japanese knotweed & giant hogweed on the River Teith : i) Loch Achray NN 50718 06996, NN 51687 06685 (ii) Strathyre NN 55909 17178 and Forth: i) Near Lake of Mentieth NN 54766 00442

ii) 8 local volunteers trained (PA6AW) and equipped to control INN riparian weeds.

Aim: To defend the Trossachs water vole reintroduction scheme from further incursions of North American mink by expanding the defensible area of the park.

i) Mink control and monitoring zone in place and number of mink captured.

ii) Reincursions of mink into previously mink free area detected.

iii) Number of landowners and local volunteers involved in mink monitoring and dispatch (Target – 25).

³ Giant Hogweed – May/June, Himalayan balsam - July, Japanese knotweed – August/September

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Time table

Month	Annual schedule			
	Giant hogweed	Japanese knotweed	Himalayan balsam	American mink
January				
February				
March				
April				
May	S	S	HP	
June			HP	
July				
August				
September	S/SI	S/SI		
October				
November				
December				

Key

Treatment(s)/Control/Peak control times:



Monitor treatment:



Integrated control & monitoring period for all three species:

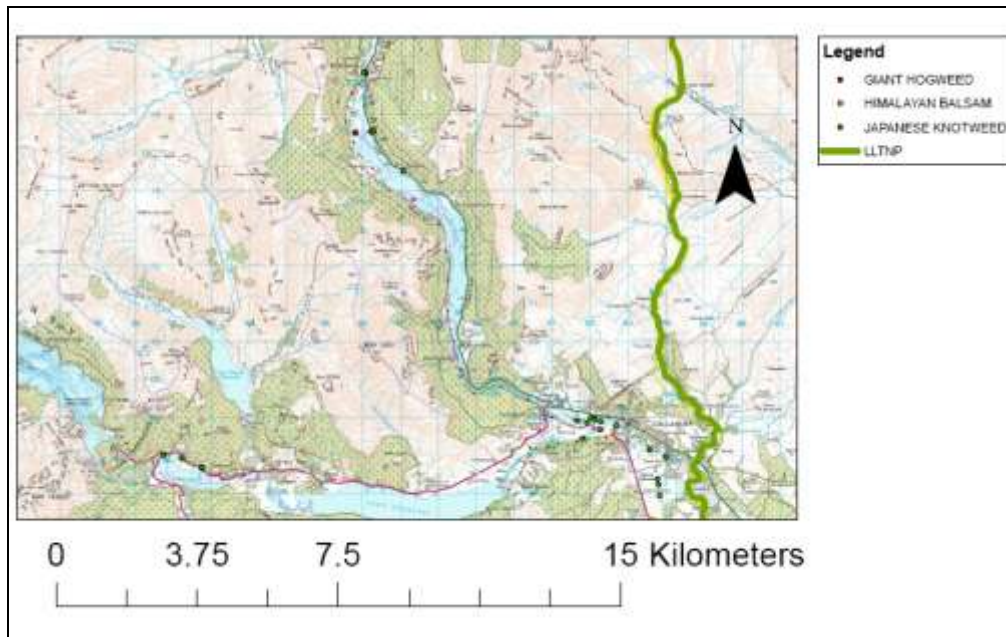
S: Spray

HP: Hand pulling

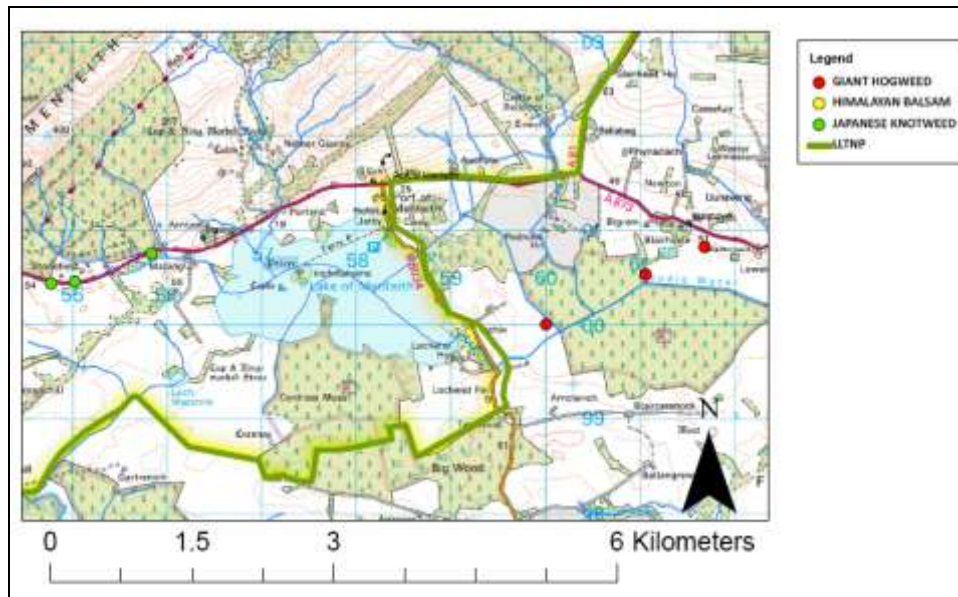
SI: Stem inject

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Maps

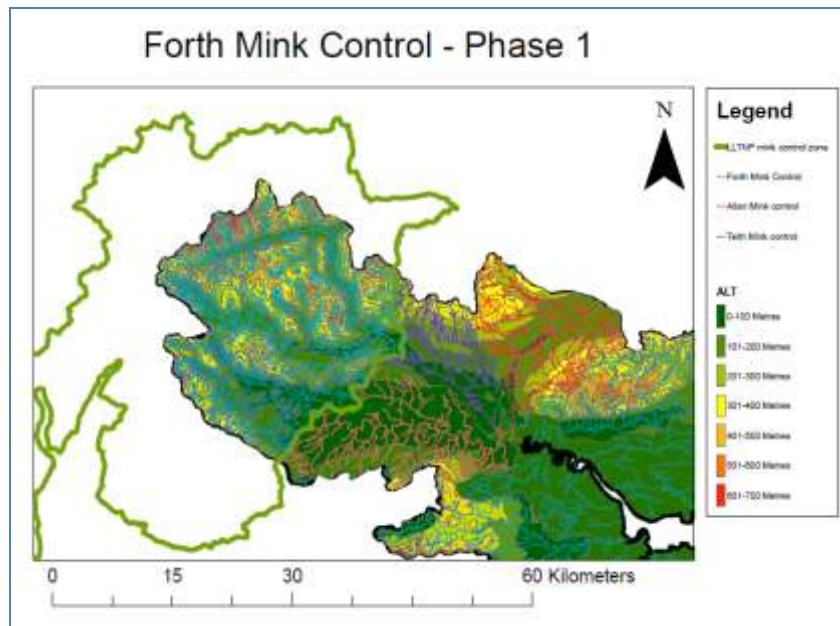


Map A: Riparian INNS on the Teith & in LLTNP



Map B: Riparian INNS on the Forth & in LLTNP

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Map C: Mink Control Zone