Stopping mink in their tracks

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Mink has become a widespread invasive species across Scotland, but a new, large-scale initiative is successfully controlling the animal?s population, writes Callum Sinclair

The invasive American mink was brought to Scotland for fur-farming in 1938 and, as a consequence of escapes and deliberate releases alike, became established in the wild in Aberdeenshire in the 1960s. From there, the animals have spread almost unabated across the majority of mainland Scotland ? other than the mountainous Highlands and the far north ? as well as many of the Scottish islands.

Mink are opportunistic and ferocious hunters, taking whatever prey is available ? and they often kill more than they require for food. They have had a devastating effect on native Scottish wildlife, particularly on ground-nesting bird species and water vole populations, but they will also happily prey on rabbits, rats, eggs and domestic fowl. One female mink hunting a 4km stretch of river can take 100 water voles over the 3- or 4-month period when she is feeding her young. This is the equivalent of 10 water vole colonies, often an entire local population, being wiped out.

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The march of the mink across Scotland since the 1960s has shown they are extremely effective colonisers. Subsequent research has shown that, in periods of dispersal before and after breeding, they will travel significant distances in search of new territories. Around 90 per cent of mink emigrate after initial rearing, and while the mean natal dispersal distance is around 20km, some 20 per cent of mink will migrate more than 80km to find new locations to establish and breed.

This means the control measures that were taken across many estates and holdings over many years had little impact in all but local situations; more often than not, any mink removed were quickly replaced from nearby breeding populations. Their ability to colonise confirms that any effective mink control programme must have sufficient coverage to reduce numbers locally and also operate at a strategic scale to limit repopulation from elsewhere.

A number of mink control and water vole conservation projects across northern Scotland between 2004 and 2014 significantly reduced numbers of mink and supported the recovery of water vole and ground-nesting bird populations. Starting from local control in the Ythan catchment, the operation expanded in each phase as success was demonstrated. Analysis of these schemes and their outcomes led to the establishment of the 4-year <u>Scottish</u> Invasive Species Initiative in 2017.

The initiative covers an area of northern Scotland 1.5 times the size of Wales, close to 3 million hectares, focusing on northern Perthshire, Angus, Aberdeenshire, Moray, and Highland as part of one of the largest mainland eradication programmes in the world.

Very much a partnership, the scheme is led by <u>Scottish Natural Heritage</u> working with 10 fishery boards and trusts, and with the <u>University of Aberdeen</u> as academic partner and adviser. In addition, it is raising awareness at community level, recruiting and training volunteers in community organisations, groups and landowners who will continue the long-term work of mink control after the initiative ends. The aim is that when funding runs out the control of mink will still continue.

Mink control centres around the quick detection, trapping and removal of the animals. This is no easy task when dealing with mink, which are such effective colonisers of new areas and are so mobile. Surveillance and control needs to be carried out on a large scale and protect cleared areas from re-colonisation.

This is where a simple, ingenious device known as a mink raft comes in. Using established scientific methodology from the University of Aberdeen, this low-tech piece of monitoring equipment reliably indicates whether the animals are present. It consists of a floating platform with an attached tunnel that conceals a clay pad, anchored to the bank of a waterway. Inquisitive mink will investigate, walking through the tunnel and leaving behind their footprints in the clay, which is kept wet by a layer of horticultural foam below. Once the raft is set up, it can be checked for footprints every week or 2.

Monitoring is easy and requires no previous experience, so is ideal for volunteers. Once footprints are detected, the trap is inserted and it is checked every 24 hours. Should any mink be detected, a live-capture trap is put on the raft and they are caught before being humanely dispatched. The project uses monitoring devices that send a signal to a mobile phone when a trap is triggered ? indispensable technology for traps in remote areas.

At the end of the 1st year of the initiative in December 2018, good progress had been made. Some 385 mink rafts and traps in the surveillance network were being looked after by nearly 200 volunteers, and 71 mink had been removed. More volunteers were recruited early in 2019 to increase monitoring and trapping before the mink breeding season in spring. By the end of June, 509 rafts and traps were in operation and 109 mink had been removed.

At the time of writing, further work was being done to expand the raft-and-trap network for the next mink dispersal period in late summer and early autumn. Surveyors and land managers can help by referring anyone wishing to support or get involved in the project to SISI?s <u>website</u>.

But it doesn?t stop there. The initiative is also targeting 5 non-native invasive plants across the project area, with giant hogweed, Japanese knotweed, Himalayan balsam, American skunk cabbage and white butterbur being systematically controlled along river catchments. Again, the strategy is to develop a network of partners and volunteers, trained and equipped to carry out plant control, such as spraying, now and in the future.

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Further information

 Related competencies include: <u>Environmental management</u>, <u>Management of the</u> <u>natural environment and landscape</u>

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- This feature is taken from the <u>RICS Land Journal</u> (October/November 2019) Related categories: <u>Ecological considerations</u> ; <u>Japanese knotweed and hogweed</u> -