



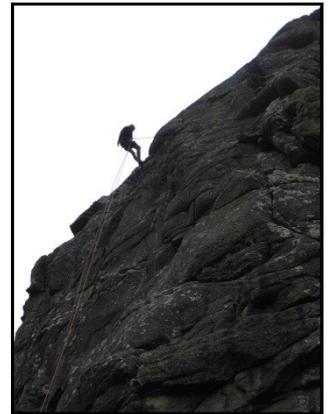
University of Aberdeen Science and Research Bumper Edition

Extreme Mink Monitoring!

Sandy beaches are a great place to find mink footprints and the Moray coast certainly offers plenty of places to look! Not far from Lossiemouth, two local residents have chosen a unique way to access the beach to check if mink are living close to a breeding colony of seabirds.

John and Barbara are keen climbers and have found a way to combine their passion for climbing on the local cliffs with checking the beach close to their house for evidence of mink.

John said, "Being part of the Scottish Mink Initiative gives us another great reason for getting out along this beautiful coastline. Looking for signs of mink has also made us much more aware of all the other wildlife in our area. So far we have caught 3 mink and we hope this has helped towards preserving our local native wildlife."



Cairngorms National Park Volunteers nominated for Award!

See page 6 for details.



Who's Eaten All The Fish?

We spoke to a freshwater fish farm manager based in Scotland to find out which predators 'feast' on the farm and how much of a problem they really are.

It comes as no surprise that mink are one of the top offenders. Other predators include otter, heron, feral cat, osprey, crow, gull, kingfisher, blackbird (!) and the occasional cormorant and merganser. On this particular farm average predation losses before 2011 were



reported to vary between 30,000 and 50,000 fish: that's £20,000 a year at production costs and double for retail values!

All predators, including mink, seem to prefer smaller fish (i.e. those weighing less than 200g). Only ten years ago mink were responsible for most of the predation on this particular farm.

Mink traps have been used in the past however mink predation has reduced somewhat and the traps have remained in storage this year!

Fish farm staff have spent a great deal of time installing 'deterrents' and so far this year the farm has seen a reduction in predation losses by around 95%! New predator netting is a smaller size, chicken wire has been attached to existing stock fencing and electric fencing has been introduced around ponds. These measures do not come cheap however the saving over a number of years will be more than worth it — average predation losses for this year alone are currently below 3,000 fish.

For more information contact Hollie Walker, SMI Coordinator at hollie@rafts.org.uk

Mink Activity in the Summer Months

After choosing suitable denning sites, those female mink who were successfully mated during breeding season will give birth.

The gestation period of the American mink varies between 40 and 75 days and they could give birth to between 2 and 10 kits. In mid to late summer the mother and her kits will leave the natal den so that she can begin to teach them how to hunt for prey.



Juvenile mink will disperse from the family group to seek out their own territories in early autumn — at this time they are very easy to trap!

We would like to remind volunteers to remain vigilant to increased activity on their rafts with a view to commencing trapping. Please contact your local Mink Control Officer should

your rafts require attention.

Updates From Across North Scotland

Highland - Gunnar Scholtz

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Durness and Coigach were the focus of an intense trapping effort carried out during the mating season in order to establish if breeding mink were present.

Following 1,000 trap nights no mink were caught, suggesting that there is not a big population despite previous sightings. A second trapping effort is planned for during the autumn months. In the meantime it is hoped that a dog handler from the Hebridean Mink Project (HMP) will also be able to spend some time assisting in the area. HMP have been using dogs for the past few years to sniff out dens and mink signs. It is hoped that the dog handler can work in areas where sightings have been reported but no mink have been caught, just to make sure no mink remain.

American mink are still being caught around Wester Ross, especially around Gruinard Bay. 'Keepers are keen to keep mink numbers low. A mink spotted by a ghillie and his clients on the Carron evaded traps on a number of beats.

Aberdeenshire - Jim Mann

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Since taking on the role of Aberdeenshire Mink Control Officer in March 2012, Jim prioritised work on the Ugie and Ythan. Extensive trapping on the Ugie resulted in 6 captures, with notable catches from Longside Golf Course thanks to the Head Green Keeper, Josh Lester.

Surveying the Ugie was greatly simplified with thanks to the River Bailiff, Bob Davidson. Surveys for mink activity were conducted on the Cruden, Forvie and Foveran and 16 rafts were deployed. Work on the Ythan area also commenced with early success from the Ebrie with the capture of an unusually coloured male mink (photographed opposite). year!



Work will now focus on the River Don catchment - possibly the main cause of repopulation of many other surrounding areas with 26 mink captures since March 2012. A new volunteer, Mrs Doreen Scott has set the pace by catching 6 mink on the Red Burn since May 16, 3 of which were lactating females - well done Doreen!

52 mink have been dispatched from the following areas: Philorth Water, River South Ugie, St Fergus, Loch of Strathbeg, Ythan catchment and the Don and Dee catchment; 105 new rafts have been deployed and 32 new volunteers have been recruited—all this since March this



A mink with 2 heads?!

Jim got a surprise when he discovered 2 male mink in the same trap on the River Ythan. Not known for their friendliness towards each other, they were sitting quietly side by side which suggests they could be juvenile brothers, dispersing together. We will know more about them once their carcasses have been analysed by the University of Aberdeen.

Cairngorms and Moray - Cat Robinson

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The Moray coast and lowlands have been the focus of work this year. There has been an increase in sightings this year which is hopefully due to increased awareness, rather than an increase in the mink population! Sightings have come from the Lossie catchment and along the coast between Spey Bay and Findhorn. Further inland, mink have been spotted along the Spynie Canal and the Muckle Burn.

There have been fewer mink captures between January and July this year, compared with last year. The most marked difference being on the Lossie where 16 mink were caught on one estate in 2011, but none have been caught there this year, which is promising news! Ghillies, 'keepers and volunteers in the Spey, Avon and Fiddich catchments have also seen and caught fewer mink this year which hopefully indicates mink are few and far between across the area.

Trapping along the coast near Lossiemouth began earlier this year and 2 mink were caught within the first 5 days. One of these was a female which we hoped would remove hunting pressure from the neighbouring seabird colony, however a juvenile was caught at the beginning of August suggesting that another female had successfully bred nearby. More tracks have been recorded on the beach around the traps and hopefully the trapping success will continue!

Thank You!

To all our dedicated volunteers. Without you the project would not be possible. Keep up the good work!



North Tayside - Ann-Marie MacMaster

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The first priority for this year was to get full raft coverage on the main stems of the Bervie Water and the River North Esk. The Bervie Water now has 12 rafts out and this year 2 males and 1 female have been captured. There is reasonable raft coverage on the River North Esk between the coast and where the A90 crosses the River North Esk and 1 mink capture has been reported to us so far – we believe more mink will have been controlled by people not connected with the project. 13 mink have been removed from the River South Esk this year however there is still a lot of work to be done here – please get in touch if you can help on the River South Esk. Reports are starting to come in of mink families being spotted on this river. The Lunan Water has very good coverage and this year only 5 mink have been removed from this sub-catchment.

Work for the rest of this year will be focused on the main stem of the River Tay between the outflow from Loch Tay and its confluence with the River Tummel. Sightings, signs and budding volunteers have already come forward but there is always room for more! This year 9 mink have been removed from the Tay catchment (specifically the



Following the Spread of Mink Families in the North East



By reconstructing mink families through genetic analysis we are understanding more and more about aspects of mink biology which are relevant to the success of the Scottish Mink Initiative.

Our on-going analysis of mink movement, shows that at the end of the breeding season mink appear to show two different strategies. About 40% of mink appear to stay very close to the place where they were born, being captured within 4 km of their family members, regardless of their age. The other 60% begin to quickly move away from the place of birth around about mid-September to establish territories elsewhere. The rate and extent of this varies between males and females, so that adult males (1 year and older) have typically moved 25 – 40 km, whereas adult females typically move less far, around 10 – 25 km. For both sexes there are of course exceptions, with some mink moving considerably further than this. These findings provide an important insight into the size of area we need to clear in order to protect and avoid recolonisation of focal areas, or river catchments. The most important thing is to avoid recolonisation by females, as they can re-establish a mink population in an area that has previously been cleared. So as a general guideline, we would not expect mink to become well re-established in areas that are more than 25 km away from the nearest uncontrolled area. We may still capture the odd mink in areas that are deemed to have been cleared, but the chances are that such mink are more likely to be males, as males comprise more than 70% of the mink we capture that are known to have moved more than 20 km.

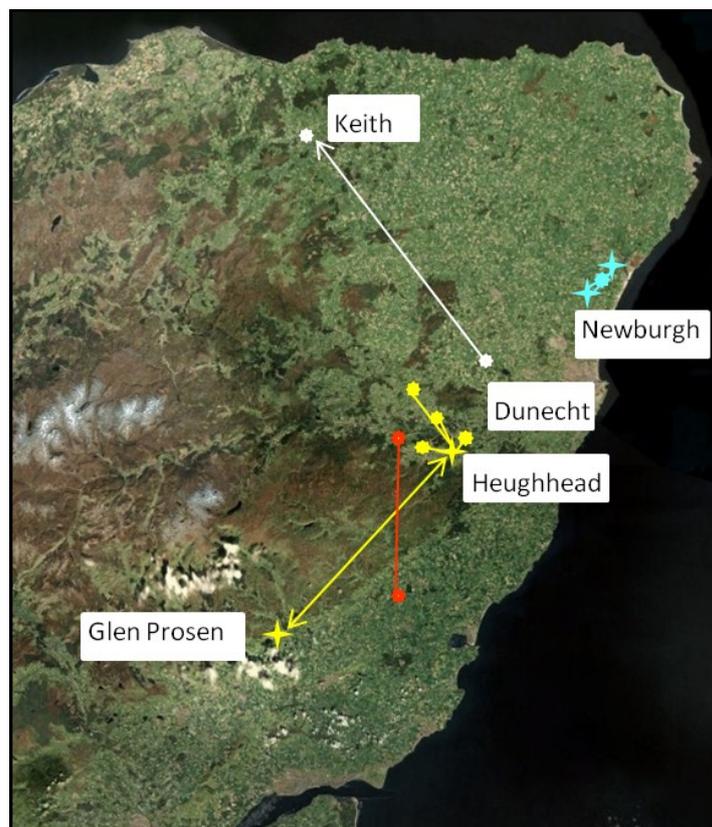
As mentioned, some family groups seem to show very little movement, even across generations. For example, two females captured in the lower Ythan catchment in

2008 were just over 1 km apart, despite having been born two years previously in 2006. What is more, a daughter that was assigned to one of these females, having been born in 2007 and captured in 2008, was also captured in the same area. So, as far as we can tell, these related females had spread very little over two generations (less than 4 km, highlighted in blue on the map).

By way of contrast two females born in 2007 were captured in 2008 almost 50 km apart in Glen Prosen, part of the South Esk catchment, and near Heughhead

on the River Feugh, part of the Dee catchment. The Heughhead female had successfully bred, with four of her offspring were also captured in 2008. Luckily they were all trapped quite early in the dispersal phase (i.e. between September and November) and before they could disperse far. Nevertheless two of them had already left the Feugh and were captured on the north side of the Dee catchment on the Beltie Burn (See yellow group).

There are also numerous cases where individuals have moved considerable distances in relatively short periods of time, although these tend to be males. For example, a young male born around Potarch Bridge on the Dee in 2007 was captured on the North Esk catchment around Stracathro and Careston, 30 km away in January of the following year (red points). An even more impressive movement was that of a young male that having started life in 2008 around the Leuchar burn, Dunecht was captured in late October of the same year near Keith on the Deveron catchment, 55 km away (white points)!



Matt Oliver m.k.oliver@abdn.ac.uk

Don't Forget to Keep Your Mink Carcasses

Although our primary aim is to help local communities to control mink numbers we also work closely with researchers from the University of Aberdeen. Carcasses dissected have tissue, teeth and stomach contents sampled. We would like to collect every carcass you trap or find (road kill or natural causes). Noting the location means we can get an idea of mink hotspots and can concentrate our efforts in those areas. If you find a carcass, put it in some plastic bags, label it with your name, date and the location found and put it into a freezer. Call us and we will happily collect it.

Join us on Flickr

<http://www.flickr.com/groups/scottishmink>

Have you found mystery prints on your raft or do you just fancy sharing your photos with other SMI volunteers? Visit flickr.com to see photos and share your own - just follow these easy steps:

- Go to flickr.com and sign in. If you do not have a Yahoo, Gmail or Facebook account, you can easily create one.
- Select your images and press 'Upload' on the home screen top menu, renaming your photos if necessary (incorporating your name gives you ownership). When you see a blue box with 'Upload Photo' on the top right, click to complete image upload.

How to join the SMI group:

- Type 'Scottish Mink' in the top search bar. When results show, click 'Groups' (SMI will appear) then 'Join' and follow prompts.
- Once you are a member, re-visit our page - under 'Group Pool' click 'Add items'.
- Select your photos to share and click 'Add To Group'. Your photos will now be available for SMI group members to see.

If you get stuck, there's a help menu top right hand corner.
Happy snapping and sharing!

Events and Activities

North Tayside:

- 7 November - Otters and Fisheries Conference, Apex International Hotel, Edinburgh. SMI display and information available throughout the day. See www.otter.org/events.aspx for details, £40 attendance fee.
- 19 November, 7.30pm - SMI presentation to Pitlochry Scottish Wildlife Trust Members Group, Pitlochry Tryst, Pitlochry. Open to all - £2 members, £3 visitors.
- 1 December - 'Putting the Buzz into Local Biodiversity: Tayside's Community Action for Wildlife Seminar', Battleby Conference Centre, By Perth. Short update on progress of the Scottish Mink Initiative in north Tayside. See www.taysidebiodiversity.co.uk for details.

Highland and Cairngorms and Moray:

- 15 September - SMI stall at the Invercharron Highland Games, Bonar Bridge. See www.invercharrongames.co.uk for details.
- 28 September - SMI presentation at the 5th Highland Invasive Species Forum at the NTS Glencoe Visitor Centre - Biosecurity and Rapid Response Protocols, all welcome.

Aberdeenshire:

- 2 October - SMI presentation to Turriff Round Table, Fife Arms Hotel, The Square, Turriff. Members only.
- 6 November - SMI presentation to Peterhead Rotary Club, Community Hall. Members only.



Mink on the Menu

In the last edition of our newsletter (March 2012) you may recall a photograph of a water vole in a golden eagle nest (eagle food!) – this edition sees the first official record of mink being recorded as a prey item in a white tailed eagle nest! The photograph was taken by Justin Grant on the Isle of Mull whilst ringing eagle chicks in June this year. We look forward to finding out what Justin finds in the eagle nests next year!



SMI Nominate Cairngorms National Park Volunteers for Award!

We are pleased to announce we have nominated all SMI volunteers operating within the National Park boundary for a 'National Park Volunteers Award'. The award recognises the hard work of volunteers across the UK's 15 National Parks, and their contribution to keeping Britain beautiful by protecting native wildlife - we could not let it pass without shouting about the hard work you all put in. The award is only for volunteers within the National Park boundary, otherwise we would nominate you all! To find out more, please visit:

<http://www.nationalparks.gov.uk/lookingafter/jobscareersvolunteers.htm/volunteer-awards.htm>

www.scottishmink.org.uk

Goodbye Meryl and Cat, Hello Jim and Lynn

Earlier this year we said farewell and good luck to Meryl as she left Cromarty Firth Fisheries Trust to join the Ayrshire Rivers Trust. We welcome Lynn Brydon who has taken up the challenge as the new Non-Native Invasive Species Project Officer — Lynn can be contacted on lynn.brydon@hotmail.co.uk

We welcome Jim Mann, who replaces Sarah Atkinson, as the new Aberdeenshire Mink Control Officer. As you can see from Jim's update he has wasted no time in recruiting new volunteers and catching mink across Aberdeenshire.

This summer we say a sad farewell to Cat as she moves on to pastures new to begin work with the Environment Agency. We wish her the best of luck with her new job - we are sorry to see her go. Cat's current email and phone will be checked regularly so you can still make contact with the project if need be.



This project is being part-financed by the Scottish Government and European Community Cairngorms, Highland, Moray, Rural Aberdeenshire and Rural Tayside Local Action Groups LEADER 2007 – 2013 Programme