



## GOOD PRACTICE MANAGEMENT

American Mink (*Neovison vison*)





# GOOD PRACTICE MANAGEMENT GUIDE

## American mink (*Neovison vison*)

**Other names:** Mink

**For ID guides and more information:**

<http://www.nonnativespecies.org/index.cfm?sectionid=47>



American mink (*Neovison vison*)



# MANAGEMENT SUMMARY

## Ecology and impact of American mink



The American mink *Neovison vison* is a medium-sized semi-aquatic mustelid native to North America. It has short ears, relatively short limbs, and a tail approximately one third of the body length. In America, native individuals are almost uniformly dark brown, but the chin is white, and white markings may also occur on the throat, chest and belly. Captive breeding in fur farms, however, has resulted in escaped animals having a wide range of pelage colours, from white, grey or fawn through to black. Mink breeding farms have been closed since 2003 and numbers are declining.

Mink are opportunistic carnivores that feed on a variety of prey, including small mammals such as rodents, waterbirds, small invertebrates such as crustaceans (crayfish and crabs), amphibians (mostly frogs), reptiles and fish. In the UK, the main negative conservation impact is predation of water voles, chickens and ground nesting birds including game birds.

Mink are strictly territorial, males occupying exclusive home ranges of 1-6 km in length. Females have smaller territories within or overlapped by those of males. They use their scats to mark the boundaries of their territory, and the neighbourhood of their den. Dens are nearly always an existing cavity usually within 10m of water; one home range may contain several dens. Mink favour aquatic water ways, but can be found on the coast and in-land on farms. Females have just one litter a year, during May, with young born blind and hairless, in litters of four to six. They can breed at one year old.

## Effective management: summary

Effective control is based on the use of mink rafts. Rafts/traps should be set where mink are most likely to encounter them, such as confluences of watercourses, inlets or outlets for ponds and lakes, and where drains, hedges or fence lines meet watercourses, deployed at around 1km intervals. The use of rafts has the benefits of a reduced need for manpower, increased trapping efficiency, reduced numbers of trap (compared to land-based bank-side traps) and reduced non-target captures.





# MANAGEMENT METHODS

## Trapping



**Game and Wildlife Conservation Trust (GWCT) Mink Raft**

<https://www.gwct.org.uk/advisory/guides/mink-raft-guidelines/>

### Timing:

Trapping should be conducted between January and mid-April (i.e. pre-breeding) to minimise the size of the breeding population and from August to December to catch dispersing and wintering animals. Trapping should not be undertaken when females are likely to have dependent young (between mid-April and the end of July). Once trapping has been initiated it should be continued; mink will continually re-colonise unoccupied areas if they are not being controlled on adjacent land.

Trap density: Mink control is most effective when the rafts/traps are deployed at around 1km intervals on a watercourse. This requires many people to make an effective network of traps and hence a co-ordinated programme of mink control is essential for best results.

Trap location: Rafts/traps should be set where mink are most likely to encounter them, such as confluences of watercourses, inlets or outlets for ponds and lakes, and where drains, hedges or fence lines meet watercourses.

Pheromones: The placement of bait containing mink scent glands has been found to be particularly successful as mink, like other mustelids, communicate via scent deposition.

# MANAGEMENT METHODS

## Trapping

Despatch: It is recommended that an airgun, rather than a firearm or shotgun, is used to dispatch any mink caught. The mink must be kept still in the trap to allow for an accurate humane dispatch shot. This can be done by using two plywood combs to push the animal firmly against the side or roof of the cage, restraining it in the manner of a livestock handling crush.

Carcass disposal Dead animals must be disposed of in accordance with current legislation and local bylaws, which may put additional requirements on top of legislation. If dead mink are requested for scientific study, the location of where the mink was trapped and date it was dispatched should be attached to the carcass (or put into the bag it is frozen in) before it is collected.

Constraints Traps should not be set in extreme weather (e.g. torrential rain or storms) as this can cause undue distress or death of captured animals (which may not always be mink). If putting rafts on watercourses, it is also important to make sure that the appropriate public body is aware of the project as some types of raft design need to be registered with the body.

Non-target species: In areas where polecats are present it may not be possible to distinguish mink and polecat tracks recorded in rafts or tracking tunnels. Any non-target animals captured must be released as soon as possible. Non-target species which are protected (e.g. otter, water vole) must be released when traps are inspected.

### When to manage American mink with trapping (green)

Trapping should not be undertaken when females are likely to have dependent young (red)

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Green	Green	Green	Light Green	Red	Red	Red					



## Exclusion

In some areas of conservation importance, or for the protection of livestock, exclusion using mink-proof fences may be the most effective tool. Various types of repellent may also be used.

## Biological control

There is evidence to suggest otters are hostile towards mink and facilitation of the recovery of otter populations could be an important component of mink control in the United Kingdom and other parts of Europe.

## Holistic approach

A holistic approach to mink management, involving mink removal, habitat restoration and the recovery of native competitors is advocated.

## Animal welfare

Once set, the mink trap should be checked at least once every 24 hours. The best time to check a trap is in the morning as many riverside animals are most active during the night. Removing animals in the morning reduces the chance of their discovery by the public and their exposure to the light and heat during the day. If the trap cannot be checked at least once every 24 hours it should be removed or pegged open.



## Legislation

American mink is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to release or allow the escape of this species into the wild. If a trap contains a mink it must be killed as it is illegal to release it back into the wild. That is also a legal requirement when grey squirrels are trapped but rats can be killed or released at your discretion.

## Health and Safety

Useful resources and guidance on health and safety when planning a project working with invasive species is available on the GBNNSS website:

<http://www.nonnativespecies.org/index.cfm?pageid=266>



## References

BASC. Mink Control Best Practice. <https://basc.org.uk/wp-content/plugins/download-monitor/download.php?id=613>

Berkshire, Buckinghamshire, Oxfordshire Wildlife Trusts. Guidelines for the Control of Mink for Water Vole Conservation. <http://www.bbowt.org.uk/sites/default/files/files/Guidelines%20for%20the%20control%20of%20mink%20for%20water%20vole%20conservation%202014.pdf>

Game and Wildlife Conservation Trust. The GWCT Mink Raft v2.4. <https://www.gwct.org.uk/media/557953/GWCT-Mink-Raft-guidelines2015.pdf>

Global Invasive Species Database (2018) Species profile: *Neovison vison*. <http://www.iucngisd.org/gisd/species.php?sc=969>

IUCN SSC Invasive Species Specialist Group (ISSG). Management: American mink (*Mustela vison*). [www.nonnativespecies.org/downloadDocument.cfm?id=1079](http://www.nonnativespecies.org/downloadDocument.cfm?id=1079)

Porteus T, Short M, Richardson S, Reynolds J. (2012). Empirical development of strategy for the control of invasive American mink by trapping. *European Journal of Wildlife Research* 58: 403–413

Reynolds JC, Short MJ, Leigh RJ. (2004). Development of population control strategies for mink *Mustela vison*, using floating rafts as monitors and trap sites. *Biological Conservation* 120: 533-543.

Reynolds JC, Richardson SM, Rodgers BJE, Rodgers, ORK. (2013). Effective Control of Non-Native American Mink by Strategic Trapping in a River Catchment in Mainland Britain. *The Journal of Wildlife Management* 77(3): 545–554.





## References (cont)

Roy S, Reid N, McDonald RA. (2009). A review of mink predation and control in Ireland. Irish Wildlife Manuals, No. 40. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

Sussex Wildlife Trust. Mink Control Best Practice for Wildlife Conservation. <https://assets.sussexwildlifetrust.org.uk/mink-control-best-practice-1.pdf>

The Norwegian Directorate for Nature Management (2011). Scientific basis for action plan against American Mink in Norway Invasive American Mink (*Neovison vison*): Status, ecology and control strategies. DN-utredning 6-2011.



## Where To Go For More Information

[www.nonnativespecies.org/downloadDocument.cfm?id=1095](http://www.nonnativespecies.org/downloadDocument.cfm?id=1095)

[www.mammal.org.uk/sites/default/files/factsheets/american\\_mink\\_complete.pdf](http://www.mammal.org.uk/sites/default/files/factsheets/american_mink_complete.pdf)

<https://www.cabi.org/isc/datasheetreport?dsid=74428>

<http://www.nonnativespecies.org/home>

<http://www.nonnativespecies.org/rapid>

## RAPID

RAPID is a three year EU funded LIFE project led by the Animal and Plant Health Agency (APHA), with Natural England and Bristol Zoological Society as key partners that piloting innovative approaches to Invasive Alien Species (IAS) management in freshwater aquatic, riparian and coastal environments across England. The project is supported by a number of further Technical Partners.

<http://www.nonnativespecies.org/rapid>