# **BRIEFING NOTE:** SOURCING LYNX FOR REINTRODUCTION



The source of lynx for a UK reintroduction is likely to be either captive-bred animals, or lynx taken from healthy wild populations in Europe, or a mixture of the two.

This is based on the extensive experience of lynx conservation programmes in Europe that have been reintroducing lynx or supplementing their numbers in struggling populations over several decades, helping to bring the species back from its historical 20<sup>th</sup> century low. There are advantages and disadvantages of each option, and the genetic and geographic origin must also be considered in planning.

# How would the lynx for a UK reintroduction be sourced?

There are three practical options for sourcing lynx for a UK reintroduction. First, it might be possible to use lynx that currently live in captivity in zoos and private collections either in the UK or in Europe ('captive lynx'). Second, a related option is to breed the lynx in dedicated facilities specifically for the purpose of reintroducing them to the wild ('captive-bred lynx'). Third, the lynx may be taken from a healthy wild population in Europe, and transported to the UK for release, therefore spending minimal time captive ('wild-caught lynx').

# **Captive lynx**

These animals are, in some respects, a known quantity. Their age, sex, genetics, health status, and location would already be known, so it would be possible to select the best individuals based on the data already held for them. However, these animals have most likely only ever experienced life in captivity, and their ability to survive in the wild and behave exactly like wild lynx is unknown. Some captive lynx may already be too familiar with people (imprint on people), posing a potential risk when they are left to fend for themselves in the wild, and they may not be experienced in opening natural prey carcasses to eat them. Having said this, captive lynx have been used very successfully in previous reintroduction programmes in some places in Europe.



# **Captive-bred lynx**

There is currently a captive breeding programme for lynx that is supplying kittens for release in central and western Europe. The difference between this option and the use of existing captive animals is that the breeding programme is specifically designed with dedicated breeding facilities to produce healthy lynx for release into the wild.

The extensive knowledge and experience that has developed in the lynx conservation community because of this captive breeding initiative is vast, and there is detailed information and protocols readily available on all aspects of the process, including for example the criteria for assessing whether the zoo facilities are suitably designed, coordinating the pairing of breeding animals, the husbandry and veterinary care of the kittens to ensure that they do not become imprinted on people, and the design of enclosures to house the kittens prior to release.

Kittens born for release have minimal contact with people and their behaviour is tested before being released to make sure that they have a natural aversion to humans. However, the physical infrastructure, time, and cost associated with this option can be substantial.



Lynx pre-release 'coordination pen' in Bavaria, Germany © Deborah Brady

# Wild-caught lynx

Lynx sourced from the wild must come from a sufficiently large population to ensure that harvesting lynx does not jeopardise the population it comes from. There would need to be extensive work to check the status and health of a source population. The lynx are captured in purpose-built, legally compliant trapping devices either near one of their stashed prey carcasses or in a location that is reliably visited by the lynx. This requires prior knowledge of the lynx population and ideally the individual lynx being targeted.



Once trapped, the lynx is tranquilized and examined by a veterinary team. If the lynx is suitable for use in the reintroduction programme, then they will be immediately transported to a dedicated quarantine facility where they will remain for observation, treatment, and assessment until transport to the release destination. As with captive breeding there is extensive collective experience in trapping wild lynx among the project teams across Europe.

Using wild lynx means the animal has no entrenched behaviours associated with captivity, such as familiarity with people. However, there is limited control over which lynx is captured making it difficult to select the optimum combination of individuals based on sex, age, genetics, and health. It may also be challenging and demanding of time and personnel to trap the lynx at all.

# Selecting a source of lynx

It is mostly likely that a combination of captive-bred and wild-caught lynx would be the best option for a reintroduction to Britain. This allows for flexibility in the timing and planning of sourcing the animals as well as maximising the genetic diversity of the founding population. The final decision would be informed by a disease risk assessment of each option, as well as the practicality of implementing each option, including for example, making arrangements with potential captive breeding institutions, and seeking consent from the national authorities and local communities where the wild lynx populations are located.

Both captive breeding and wild sourcing have previously been used for species releases in Britain, including for dormice, water voles, pine martens, and beavers. Likewise, recent and planned lynx release projects in Germany are using a mixture of wild-caught and captive-bred lynx.

# Where exactly would the lynx come from?

Besides the practical means of sourcing the lynx, we would need to consider their genetic and geographic origin. This is because Eurasian lynx are not identical throughout their range, but are in fact six distinct subspecies. Three of these occur in the region of Europe. The subspecies known as Northern lynx occur throughout Scandinavia, Finland, the Baltic, and part of Russia. The Carpathian lynx is found throughout eastern and central Europe, having initially been restricted to the Carpathian Mountains in southeastern Europe. The last subspecies in Europe is the Balkan lynx, which is found in southeastern Europe (further south than the Carpathian lynx) and numbers in the region of only 50 individuals.



Each of these subspecies is composed of small and often isolated subpopulations, although some of these subpopulations are much larger and healthier, such as those in Scandinavia, Russia, the Baltic, and in the core Carpathian range. The most appropriate lynx to reintroduce to Britain would be from a large and genetically diverse population of either Northern or Carpathian lynx, ideally including a combination of wild-caught lynx and captive-bred individuals.