



NatureScot
Species Licensing
Great Glen House
Leachkin Road
Inverness
IV3 8NW

01463 725364
e-mail: licensing@nature.scot

Licences are issued by Scottish Natural Heritage, acting under its operating name NatureScot.

Animal Licence

Licence Number	249931	Valid from	15 Nov 2023	Valid to	18 Jan 2026
This Licence has been amended from Licence Number: 242992					

Licence Holder

Name	[Redacted]
Address	[Redacted]

This licence is granted under the following legislation

Wildlife and Countryside Act 1981 (as amended): Section 16 (4) (c)

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended): Regulation 44 (2) (c)

Project Details

This licence permits the release of captive bred Wildcats (*Felis silvestris silvestris* (Scottish wildcat population)) from RZSS Highland Wildlife Park, Saving Wildcats Conservation Breeding for Release Centre. This licence also permits the release of captive bred Wildcats which will be of Scottish and Spanish parentage. The Wildcats will be released within Cairngorms Connect Partnership Boundary plus the surrounding/contiguous habitat as part of the Saving Wildcats - (Site location is provided in Appendix 21 of Application Package) - reinforcing the wildcat population in Scotland for the purpose of conserving wild animals. All works must be carried out in accordance with the Translocation Project Form submitted to NatureScot 3rd October 2022 and associated documents that formed the licence application

This licence is granted subject to compliance with the terms and conditions specified.

Authorised on behalf of NatureScot by: [Redacted] on 15 Nov 2023

Project Details

package and any subsequent correspondence agreed in writing between the NatureScot Licensing Team and the licence holder, but subject to modifications or amendments imposed by the conditions of this licence.

Activities, species and locations covered by this licence are listed in Annex 1

Conditions

1	All working methods must be carried out in accordance with those set out in the licence application and supporting document(s) as listed in the project details above, and any subsequent correspondence agreed in writing with the NatureScot Licensing Team, but subject to any modifications or amendments imposed by this licence.
2	Pelage score, genetic score and wild provenance of each individual Spanish candidate cat will require approval from the Saving Wildcats Project Management Group on a case by case basis prior to the importation
3	The importation of Spanish Wildcats will be subject to local Spanish permissions.
4	The licence holder may appoint agents or assistants to operate under the terms of this licence.
5	The licence holder may permit agents or assistants to work under the terms of this licence. It is the responsibility of the licence holder to ensure that any such person understands the terms and conditions of this licence. A record of any agents or assistant is must be kept by the licence holder and produced to NatureScot or the police if requested. The record should include name, contact details and the date /time they were operating under the licence.
6	No work authorised by this licence may be undertaken on a National Nature Reserve without the prior permission of the NatureScot NNR Manager.
7	While engaged in work authorised by this licence, the licence holder and agents, must each be able to produce a copy of this licence to any Police Officer, authorised person, or official of NatureScot on demand.
8	The licence holder is required to monitor the occupancy and expansion of the Wildcats post release. The licence holder must adhere to the Saving Wildcats: Post-release monitoring plan which was submitted with the application pack. This is to include Post-release behaviour of captive-born wildcats including movement, diet and hunting behaviour, resting and den sites, survival, and reproduction. The evaluation of project success and targeting ongoing threat mitigation. Changes in magnitude and distribution of threats to wildcats. Evaluation of threats from wildcats to other protected species. Behaviour, ecology, and genetics of second generation. Population ecology and genetics of wild-living population. Human attitudes towards wildcats and project activity.

This licence is granted subject to compliance with the terms and conditions specified.

Authorised on behalf of NatureScot by:  n 15 Nov 2023

Conditions - continued

9	The licence holder must provide NatureScot licensing team with an annual return and a final return within one month of the expiry of this licence. The return must summarise all works carried out under the terms of this licence. Please send this information by email (including your licence number in the subject line of the email) to: licensing@nature.scot .
---	---

Notes

Licence holders or any other persons covered by this licence should note the following;

1	This licence is granted subject to compliance with the conditions as specified. Anything done otherwise than in accordance with the terms of the licence may constitute an offence.
2	Agents may work independently of the licence holder. It is the responsibility of the licence holder to ensure that agents have the appropriate training and experience and that they understand the terms and conditions of this licence.
3	Assistants must work under the personal supervision of the licence holder or named agents. The number of assistants that can be appropriately supervised is at the discretion of the licence holder or agent.
4	Assistants must work under the personal supervision of the licence holder. The number of assistants that can be appropriately supervised is at the discretion of the licence holder.
5	Nothing in this licence shall confer any right of entry on to land or property.
6	This licence may be modified or revoked at any time by NatureScot.
7	This licence only permits the activities specified in the project details of this licence. Licensed offences that cover these activities are listed in Annex I: Permitted activities. It does not permit any other actions that would otherwise be illegal.

This licence is granted subject to compliance with the terms and conditions specified.

Authorised on behalf of NatureScot by:  on 15 Nov 2023

Annex 1: Permitted activities

Action	Purpose	Species	Location	Grid Reference	Method
Possess	Conservation	Wild Cat	Cairngorms Connect Partnership Boundary plus the surrounding /contiguous habitat. Site location is provided in Appendix 21 of Application Package	-	N/A

Action	Purpose	Species	Location	Grid Reference	Method
Transport	Conservation	Wild Cat	Cairngorms Connect Partnership Boundary plus the surrounding /contiguous habitat. Site location is provided in Appendix 21 of Application Package	-	N/A

Action	Purpose	Species	Location	Grid Reference	Method
Release species outwith native range	Conservation	Wild Cat	Cairngorms Connect Partnership Boundary plus the surrounding /contiguous habitat. Site location is provided in Appendix 21 of Application Package	-	N/A

This licence is granted subject to compliance with the terms and conditions specified.

Authorised on behalf of NatureScot by:  n 15 Nov 2023

Licence 249931

Statement of Reasons for granting a licence to release captive breed Wildcats (*Felis silvestris silvestris* (Scottish wildcat population)) and Wildcats which will be of Scottish and Spanish parentage into the wild with the aim of establishing a population of wildcats in the Badenoch and Strathspey area of the Cairngorms National Park.

The application was received to release Scottish wildcats and Wildcats which will be of Scottish and Spanish parentage within the Cairngorms Connect Partnership Boundary plus the surrounding/contiguous habitat as part of the Saving Wildcats - reinforcing the wildcat population in Scotland project for the purpose of conserving wild animals.

Wildcats in Scotland (Scottish wildcats) are a critically endangered “sub-population” of the European wildcat (*Felis silvestris silvestris*) and are the last remaining wild felid species in the UK. The European wildcat is listed on Annex IV of the EU Habitats Directive.

A status review of wildcat conservation in Scotland by the IUCN SSC Cat Specialist Group (2019) concluded that the free-living wildcat population in Scotland is no longer viable, ostensibly because wildcat numbers are too few, too hybridised and too fragmented, and that recovery will only be possible with the support of translocation projects, reinforced by wildcats from continental and captive populations.

The project seeks to address the decline of wildcats by conducting a release of a minimum of 60 wildcats from a dedicated captive breeding for release facility located at RZSS Highland Wildlife Park into Cairngorms Connect landscape in the Highlands of Scotland (see Section 5 for site details and Appendix 21 for maps). The project aims to mitigate threats to wildcats at the release site and surrounding area and to monitor the release closely. With focused conservation action at a single site, the project also aims to lay the long-term foundation for the fuller recovery of wildcats across other sites in Scotland.

Release of a non-native species

Any release of wildcats into the wild in Scotland requires a non-native species licence under Section 16(4)(c) of the Act. There are no specific licensing tests in relation to a release. Therefore, this licence is issued based on our assessment of the release against the Scottish Code for Conservation Translocations requirement of compliance with protected species legislation and its associated licensing tests.

NatureScot have considered the benefits of this translocation in terms of increasing the population of Wildcats along with wider public benefits in terms of education and ecotourism.

Licensing Test 1 – There must be a licensable purpose:

This licence application was received under

- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended): Regulation 44 (2) (c) for the purpose of conserving wild animals and;
- The Wildlife and Countryside Act 1981 (as amended) Section 16 (4)(c)

The release of Wildcats into the wild can be permitted under The Habitats Regulations 1994 for the following licensable purposes:

- Conserving wild animals (primary purpose).
- Science, research or education (secondary purpose).

There is a licensable purpose in this case and test 1 is passed.

Licensing Test 2 – There must be no satisfactory alternative:

In assessing whether or not test 2 is met, NatureScot have considered the alternatives to granting a licence for the stated primary purpose.

Scottish Wildcat Action partners commissioned members of the IUCN SSC Cat Specialist Group to carry out [an independent review](#) of the conservation status of the wildcat in Scotland and the conservation work done to date.

The report concluded there is no longer a viable wildcat population living wild in Scotland, with hybridisation with domestic cats the major threat to their survival. This means the extinction of the species is highly likely without wildcat releases.

Do Nothing – This is not a satisfactory option in this case. Not granting a licence could result in there being a very good chance that “no action” will lead to the total extinction of the species on a national scale in direct opposition to the “Zero Extinction” Aichi Target 12 of the Convention on Biological Diversity (and target 4 of the zero draft of the post 2020 biodiversity framework) and of the EU Biodiversity Strategy for 2030 target to “Ensure 30% of EU protected species and habitats are in favourable conservation status or have positive trends by 2030”.

Alternative Locations – There are currently no other proposed release sites in Scotland

On balance NatureScot considers that for the purpose of conserving Wildcats in Scotland there is not a satisfactory alternative to licensing the release of Wildcats out with their native range.

Test 2 is passed, there is no satisfactory alternative.

Licensing Test 3 - The proposed action must not be detrimental to the maintenance (or restoration) of the population of Wildcats at a favourable conservation status in their natural range:

According to the [2019 Article 17 report for the UK and conservation status species assessments](#) the conservation status of Wildcat in Scotland is as follows: The Conservation Status of the Wildcat is “Critically Endangered”.

The work being done under this licence will help improve the conservation status in the hope that one day it will be favourable.

This licence application proposes the release of captive breed Wildcats. The Wildcats have been breed at RZSS Highland Wildlife Park, Saving Wildcats Conservation Breeding for Release Centre. 151 cats formed the UK conservation (captive) breeding programme, at the point (01/10/2020) where a group (8 females & 8 males) were selected for transfer to the Saving Wildcats Conservation Breeding for Release Centre.

The release of Wildcats into the Cairngorms Connect Partnership Boundary will contribute to improving population numbers and genetic diversity and thereby the conservation status of the species in Scotland.

Test 3 is passed.

The proposal has passed all 3 EPS licensing tests.

It is considered that this application meets all three species licensing tests and a licence has therefore been approved for the release of Wildcats for the purpose of conserving wild animals.

Translocation project form:

Saving Wildcats: Translocation application for wildcats in Scotland

1. Lead applicant details

Name:	
Address:	
Telephone number:	
Email:	
Organisation:	Royal Zoological Society Scotland
Position:	

2. Project partners

Name:	
Organisation:	
Email:	
Role in project:	

Name:	
Organisation:	
Email:	
Role in project:	

Name:	
Organisation:	
Email:	
Role in project:	

Name:	
Organisation:	
Email:	
Role in project:	

Name:	
Organisation:	
Email:	
Role in project:	

3. Project details

Project title: Saving Wildcats - reinforcing the wildcat population in Scotland

Focal species: *Felis silvestris silvestris*- European wildcat (Scottish wildcat population)

Desired outcome(s): Conduct the first trial release of a minimum of 60 wildcats with the aim of establishing a population of wildcats in the Badenoch and Strathspey area of the Cairngorms National Park and of refining wildcat release methodology for future recovery across Scotland, contributing to a vision of "Wildcats restored to landscapes across Scotland, cherished by people for generations to come."

Expected timescale for outcomes(s) to be achieved: 2026

Goals: To release a minimum of 60 wildcats into suitable release points within the Cairngorms Connect landscape. By 2026:

Key objectives

- All released wildcats have been monitored closely and we have learnt about the factors impacting on wildcat survival and reproduction in the wild.
- Stable wildcat territories have been established within the project area.
- Kittens have been born to released wildcat females as a result of mating with wildcats males [and not with domestic cats or hybrids].
- The wildcat population is genetically diverse and includes wildcat genes from mainland Europe.
- Local support for the project has been maintained amongst key stakeholders.

Wider objectives

- Through these outcomes, wildcat have moved along the Cairngorms Nature Species Recovery Curve from stage T1 to T3 ¹
- We have substantively improved the scientific knowledge-base for future releases (paving the way for wildcat to move further along the curve to R1-3 beyond 2026).
- We have used evidence from the releases to generate the next national conservation action plan for wildcat across Scotland, supporting future restoration of the species to landscapes across Scotland (and potentially other sites across the rest of the UK), with a long-term objective of achieving "favourable conservation status".
- We have developed an understanding of the economic and cultural benefits of the wildcat's return.
- The project has shared its finding to support carnivore restoration across Europe and beyond.

4. Rationale:

Overview of the project:

Wildcats in Scotland (Scottish wildcats) are a critically endangered "sub-population" of the European wildcat (*Felis silvestris silvestris*) and are the last remaining wild felid species in the UK. The European wildcat is listed on Annex IV of the EU Habitats Directive. In the Third Report by the UK under Article 17 (2007 - 2012), their UK conservation status was assessed as "bad/declining", with their UK population status as "bad" and no improvement in this since the previous report; the population estimate was suspected to be below the favourable reference value (FRV) (Council Directive 92/43/EEC) but with a habitat and range status as "favourable". Although once thought to be a unique sub-species (*Felis silvestris grampia*), they are now

¹

recognised to be the same sub-species as the European wildcat (*Felis silvestris silvestris*), as albeit a geographically isolated sub-population- and the most northerly.

The latest known estimate for wildcat population size in Scotland from 2018 is 200 (95% CI= 30-430), a decrease from estimates of 400 in 2004 and 3500 in the 1990s. There is also compelling evidence of 'cryptic extinction' through hybridization with the domestic cat as all wild-living wildcats show some degree of hybridization (Senn et al., 2019).

In response to this crisis the EU LIFE funded Saving Wildcats (#SWAforLIFE) project was developed. The project was born out of the experience of the Scottish Wildcat Action Project partnership (2015-2020) and brings together the expertise and skills of national and international organisations. The partnership is led by the Royal Zoological Society of Scotland (RZSS) in collaboration with NatureScot, Forestry and Land Scotland (FLS), The Cairngorms National Park Authority (CNPA), Nordens Ark and Junta de Andalucía. Wildcat releases will be conducted with the support of the Cairngorms Connect Partnership (Wildland Limited, The Royal Society for the Protection of Birds, Forestry and Land Scotland and NatureScot). The £5.4 million project is funded with a 60% contribution of the LIFE Programme of the European Union. The remaining funding is provided by RZSS, NatureScot, FLS, CNPA, Nordens Ark, Junta de Andalucía, The Garfield Weston Foundation, The National Trust for Scotland, The People's Trust for Endangered Species, The European Nature Trust, People's Postcode Planet Trust and many others. RZSS also received a Scottish Zoo and Aquarium Conservation Fund grant during the global covid-19 pandemic to support some of its core commitment to the project.

This project seeks to address the decline of wildcats by conducting a release of a minimum of 60 wildcats from a dedicated captive breeding for release facility located at RZSS Highland Wildlife Park into Cairngorms Connect landscape in the Highlands of Scotland (see Section 5 for site details and Appendix 21 for maps). The project aims to mitigate threats to wildcats at the release site and surrounding area and to monitor the release closely. With focused conservation action at a single site, the project also aims to lay the long-term foundation for the fuller recovery of wildcats across other sites in Scotland. It hopes to demonstrate the socioeconomic and cultural benefits of returning this species and hopes that wildcats can act as a driver (or indicator species) for achieving connected high-quality habitats capable of supporting a wide range of species. This release^{2[OBJ]} will aim to move the species along the species recovery curve (see above objectives). Preparatory actions for the release are also detailed in the Scottish Wildcat Conservation Action Plan.

The key success of Saving Wildcats, so far, is that we have established the physical, staffing and scientific infrastructure to deliver the UK's first wildcat breeding for release programme. We have also established the staffing and scientific outline of the field program which has delivered the assessment of the release site and will be monitoring the release, mitigate threats and will manage actions which will benefit the wildcat across Scotland. **Having assembled this foundation, we are now seeking legal approval to move forwards with the release of cats into Cairngorms Connect from Q2 2023 onwards.**

Maps of all the sites described in this application can be found in Appendix 21.

A glossary of term relating to spatial descriptions of the release sites are given here:

Release Site: synonymous with the geographical boundaries of the Cairngorms Connect (CC) partnership, where wildcat releases will be carried out under permission from the four CC landowners (FLS, NatureScot, RSPB Scotland, and Wildland Limited) and the CC project board.

Core Project Area: the Cairngorms Connect partnership plus the surrounding/contiguous habitat, mainly incorporating landowners that share a primary boundary with CC; up to the significant wildcat movement barriers of the River Spey (west and north) and the Cairngorms Plateau (east and south). Preparatory in-situ activity is focused in the Core Project Area.

² https://cairngorms.co.uk/wp-content/uploads/2019/02/CairngormsNatureAction19_24PlanFinal.pdf

Wider Project Area (dispersal zone): a 10km buffer zone around the edge of the Core Project Area to incorporate highly suitable areas of habitat that wildcats will likely disperse into post-release. In-situ activity is also carried out in the Wider Project Area, with priority partly dictated by geographical proximity to the Core Project Area.

A **Release Point** is the location where a wildcat is released e.g. the location of a soft release pen, or a hard release location.

Why is a translocation necessary?

A status review of wildcat conservation in Scotland by the IUCN SSC Cat Specialist Group (2019) concluded that the free-living wildcat population in Scotland is no longer viable, ostensibly because wildcat numbers are too few, too hybridised and too fragmented, and that recovery will only be possible with the support of translocation projects, reinforced by wildcats from continental and captive populations. Translocations are detailed as actions to be considered under the Cairngorm Nature Action Plan and the Scottish Wildcat Conservation Action Plan (2013-2019).

What other options have been considered, and why have they been discounted (see Chapter 3)?

The IUCN SSC Cat Specialist Group status review (2019) concluded that recovery would require the use of conservation translocations. Please see below for a summary of how the alternative options have been explored in the run-up to the submission of this licence:

Area-based and species-based solutions were trialled during Scottish Wildcat Action (SWA) and found to be insufficient to achieve recovery. The SWA work was based around three pillars: i) to work within geographic Priority Areas (see Appendix 21, Figure A1-d) deemed to contain the best wildcat populations³ to reduce the risks of hybridisation, disease and accidental persecution; ii) to establish a conservation breeding programme (which now forms the basis of this release project, see source population information in Section 5); and iii) to improve our knowledge of the status and ecology of the wildcat. Details of the work conducted during SWA can be found in the project reports (SWA Final Reports, in prep), but in summary:

Within wildcat geographic 'Priority Areas', SWA worked to detect and trap for neutering and vaccinating (TNVR) 205 feral domestic and obvious hybrid cats and encouraged the neutering and vaccination of pet cats. SWA engaged with estates to reduce the risks to wildcats during predator control procedures. SWA also worked closely with forestry staff to reduce risks to wildcats during forestry operations and to develop ways of improving the forest habitat for wildcats, including testing the use of artificial dens.

In parallel, to improve the knowledge of the wildcat in Scotland, SWA collected over 1 million images in wild-living cat camera-trap surveys, identifying 356 cats within Priority Areas, including 31 wildcats as identified by coat pattern. The project also collected 769 cat records from the public, 45 of these we verified as wildcats based on appearance. The project also fitted GPS collars to 14 wildcat-hybrids, using the data to inform forestry management, identify rest sites and examine habitat use and movement patterns of the cats. SWA investigated disease and toxins in wild-living cats, identifying a broad range of infectious agents and showing that cats accumulate rodenticides. SWA ran genetic tests on 529 cat samples, finding that no samples taken from wild-living cats alive during the project scored as wildcat. Morphology and genetic results indicate high levels of hybridisation in the wild-living cat population and the level of hybridisation has increased markedly since about 1995 (Senn et al., 2019; SWA Final Reports, In Prep).

Overall, during SWA, too few cats that looked like wildcats were detected in the Priority Areas to be sustainable in the short term, and too few nationally to be viable in the long term. SWA shared survey and genetic results with members of the IUCN Cat Specialist Group, who concluded in the 2019 status review that the wild population was no longer viable without reinforcement or reintroduction.

³ This report details the justification for those areas <https://www.nature.scot/doc/naturescot-commissioned-report-768-survey-and-scoping-wildcat-priority-areas>

The IUCN review also made recommendations that the following actions be strengthened going forwards: a) Monitoring wild living cats across Scotland, b) furthering research and research cooperation and c) spatial conservation planning for wildcat recovery. These elements which on their own cannot secure the recovery of the wildcat population, do additionally form a critical part of the Saving Wildcat project which aims to take a scientific approach to the releases by conducting extensive pre- and post- release monitoring. The project also has specific (funded) actions to support the production of a new national action plan for the species between now and 2026 in cooperation with the Scottish Wildcat Conservation Action Plan Steering Group. Work for Saving Wildcats also includes scoping future release sites and sharing best practice with other similar projects across Britain and the rest of Europe.

Social/indirect solutions – The IUCN Review also made recommendations that responsible cat ownership, TNVR and control of feral cats and hybrids needed to be strengthened across the country. This is undoubtedly a critical action, and the Saving Wildcat project aims to address these with the following actions:

- Monitoring and control programme for feral cat threat mitigation? across the Core & Wider Project Area (via TNVR)
- Responsible cat ownership campaign. Neutering, vaccinating and microchipping of pet cats across the Core & Wider Project Area, building on SWA's #Supercat and #GenerationWildcat campaigns

These actions have and will continue to be a focus, with the aim of demonstrating efficacy at a small scale. At a national scale, the project also aims to continue to provide advice on how legal mechanisms to encourage responsible cat ownership can be strengthened and promoting responsible cat ownership mechanisms through the Scottish Wildcat Conservation Action Plan Steering Group.

It is worth noting though, that reducing the number of unneutered pet cats, feral cats and hybrids on its own, is not thought to be sufficient action to generate populations recovery. The project aims to use the impetus of releases into a single site to drive the conversation on responsible cat ownership forward at a national scale.

Two further social risks pose a threat to wild cats. These are:

- a) Persecution, b) road traffic mortality.

The project also aims to focus on understanding and mitigating these risks at the scale of the release site, so that requirements for further conservation action at a national scale can be understood and action replicated more widely in future.

No action – we do not believe that the evidence gathered to date suggests that “no action” is a viable option. There is a very good chance that “no action” will lead to the total extinction of the species on a national scale in direct opposition to the “Zero Extinction” Aichi Target 12 of the Convention on Biological Diversity (and target 4 of the zero draft of the post 2020 biodiversity framework) and of the EU Biodiversity Strategy for 2030 target to “Ensure 30% of EU protected species and habitats are in favourable conservation status or have positive trends by 2030”.

5. Population information

5.1. Donor population details (add additional pages for each donor population)

Donor Population 1

Population name: UK wildcat conservation (captive) breeding programme for wildcats

Population Location: RZSS Highland Wildlife Park, Saving Wildcats Conservation Breeding for Release Centre (CBRC) and, where necessary, other participating captive holders of the UK conservation breeding programme for wildcats⁴

Dates of removal: Animals released to the wild between 28th Feb 2023- and 31st September 2026

Name of collection owner: Royal Zoological Society of Scotland (studbook keeper and owner of cats born at the Saving Wildcats Conservation Breeding for Release Centre); any participating captive holders of the UK conservation (captive) breeding programme who transfer cats to the pre-release enclosures.

Collection owner contact details: [REDACTED]

Population size of original donor population: 151 cats formed the UK conservation (captive) breeding programme, at the point (01/10/2020) where a group (8 females & 8 males) were selected for transfer to the Saving Wildcats Conservation Breeding for Release Centre. The development of the UK conservation (captive) breeding programme, including reconstruction of the studbook and genetic testing for hybridism, is detailed a report by Barclay and Senn produced for SWA (SWA Final Reports, In Prep).

How original population size was estimated: Direct counts are made from studbook records held by RZSS.

Ex-situ population consists of captive bred/reared individuals or is it the original wild-collected stock? The ex-situ population (i.e. the UK conservation (captive) breeding programme) consists, predominately of captive bred individuals. The only current exception is two living individuals managed in the breeding programme which were collected from the wild, under licence, in Scotland (a female in 2018 and a male in 2019) during SWA. Both these wild sourced individuals have reproduced in captivity and contributed new genes to the ex-situ population.

Number of donor individuals to be removed/sampled: Sixteen individuals were removed from the UK conservation breeding programme in 2020/2021. These individuals are the founder parents for the population at the Saving Wildcats Conservation Breeding for Release Centre at Highland Wildlife Park. The plan is that these parental individuals will provide the offspring (20 cats per year) which will be released into the wild. In addition to this:

- a) The parents may be released themselves or exchanged with other parents in the UK conservation breeding programme
- b) Additional animals may be taken directly from the UK conservation breeding programme and prepared for release into the wild and/or used as breeders to replace parental stock.
- c) In Phase 2 of the project: Animals from the UK conservation breeding programme crossed with wildcats sourced from Northern Spain may be released (see Population Source 2; Section 5)

⁴ <https://savingwildcats.org.uk/about-saving-wildcats/conservation-breeding-programme/>

Nature of donor selection method: The donor selection method is outlined in the Breeding Plan Appendix 1. In brief:

- All animals are tested genetically for hybridism and must meet the criteria for breeding (Senn and Ogden, 2015).
- A selection process has been developed using a Population Viability Analysis (PVA) constructed in 2020. This PVA uses population analysis of the ex-situ population to define suitable candidates for removal to the Saving Wildcats conservation breeding for release centre. This selection process provides a basis to minimise inbreeding in the release population, maximise long-term viability of the UK conservation breeding programme whilst demonstrating the “no harm to source population” principle (see Breeding Plan, Appendix 1). The PVA analysis will be rerun periodically to account for swapping out of parental stock with new animals from the breeding programme, or the additional of novel imports from abroad (as explained above a-c).
- In addition to the genetic testing for hybridism, individuals are also scored on pelage markings (see Kitchener, 2005) to ensure that where possible the highest pelage traits are selected, and to allow for continued study of pelage traits in relation to genetic measures of hybridism since the relationship between genetics and pelage is not yet fully understood (see Breeding Plan, Appendix 1).

Habitat type of donor population: Known locations of animals taken into captivity are all north of the Highland boundary fault. The animals arrived in captivity between 1971-2019.

Intra-specific classification of donor population: *Felis silvestris silvestris*- European wildcat (Scottish wildcat population)

Additional information about the donor population relevant to the translocation:

Details of ex-situ facilities:

An overview of the ex-situ management facilities is outlined in the CBRC Design Plan (See Appendix 2) in brief:

- A dedicated conservation breeding for release centre (CBRC) was built in a secluded location at RZSS Highland Wildlife Park.
- Animal management facilities at the CBRC consists of 8 breeding enclosures, 20 pre-release training enclosures (anticipated completion of construction 10/2022), a quarantine facility (under refurbishment as of Sept 2022) and a dedicated veterinary facility.
- The animal management enclosures (breeding & pre-release) are surrounded by a bio-secure fence which significantly reduces the risk of other carnivores e.g. badger, fox, wild living cats, entering the facility and posing a disease risk.
- The CBRC also includes an extensive CCTV monitoring system to ensure animal behaviours can be observed / documented whilst maintaining minimal human presence at the centre (completion due Oct/Nov 2022).

Details of ex-situ management: Wildcat breeding for release, management and pre-release training will be carried out as outlined below:

- A “hands off approach” will be adopted across the CBRC to reduce habituation to human presence and to promote the development of natural behaviours.
- However, some close contact management will be required within the breeding enclosures given the need for animal introductions, separations, health care and offspring management.

- Stimulation of key behaviours (hunting, human avoidance) will be promoted throughout the CBRC via an enrichment and pre-release training programme and tools will be developed for the pre-release training programme to encourage natural feeding patterns, activity patterns and behaviours.
- Animals housed in pre-release enclosures will mostly be managed individually with some socialisation prior to release (e.g. female to female / male to male)
- Transfer of offspring born in the breeding enclosures to the pre-release enclosures will take place prior to the following breeding season (i.e. Nov – Dec annually)
- Regular data collection (e.g. diets, behaviours, avoidance behaviour, enrichment use) will be used to inform an evidence-based approach to breeding for release management.
- The CBRC population management strategy will allow a two-way system for animals to move back into the captive breeding population (not just from the captive breeding programme to the CBRC). This is important so that valuable breeding space at the CBRC is not taken up by animals that are less suitable for breeding (either due to fertility issues or genetic over- representation). These animals can be moved back into the wider captive breeding programme, enabling the space at the CBRC for breeding-for-release to be freed up.

Pre-release assessments: Prior to their release, all cats will receive a pre-release assessment as outlined in the Pre-release Strategy and Checklist (Appendix 3), in brief:

- All release candidates will receive a final health assessment and disease screening prior to transfer to soft release enclosures – see “UKWCBP disease, genetic, pelage protocol” (Appendix 4).
- All individuals will have an active microchip and have up to date vaccinations (see Appendix 5 - Disease Risk Assessment, Sub-Appendix 5 – “Pre-release health assessment of sub-adult wildcats”).
- All individuals will have a final physical and behavioural assessment prior to release, taking into account behavioural monitoring data collected from CCTV observations during the pre-release training programme.
- All individuals will have a GPS collar fitted in advance of release during the final health assessment / disease screening process.
- All individuals will be free of injury and in good physical condition (see Appendix 5 -Disease Risk Assessment, Sub-Appendix 5 – “Pre-release health assessment of sub-adult wildcats”).
- All individuals will display minimal habituation to human presence.

Donor Population 2- to be considered in Phase 2 of the project

Population name: Mainland Europe

Population Location: Northern Spain

Northern Spain is chosen as a suitable source population because the population is stable and it shows the highest genetic proximity to Scottish wildcat (see Genetic Risk Assessment Appendix 6, Sub-appendix 2). Other potentially suitable donor populations are listed here for comparison, and we would not rule out making an application for translocation from these in future.

	Population	Habitat type	Dominant prey type	Genetic relatedness to Scottish population
Northern Iberia	Stable (in Spain, unclear in Portugal)	Temperate Broadleaf and Mixed Forests,	Rodents > rabbits	Highest proximity
Southern Iberia	Declining	Mediterranean Forests, Woodlands and Scrub	Rabbits > rodents	?
Western Central Europe: Switzerland, Western Germany, France	Stable /expanding	Temperate Broadleaf and Mixed Forests	Rodents > rabbits (with localised variations)	High proximity
Central-Germany	Stable /expanding	Temperate Broadleaf and Mixed Forests	Rodents > rabbits (with localised variations)	Likely high proximity, some uncertainty over whether there is a significant difference to the Western Central Europe Cluster

Dates of removal: TBC (case by case since these will be rescue animals)

Name of collection owner: TBC (case by case since these will be rescue animals)

Collection owner contact details: TBC (case by case since these will be rescue animals)

Population size of original donor population:

Information taken directly from the IUCN red list assessment in 2021: The species is considered Near Threatened at the national level. A population size estimate is only available for the Andalusia region (South Spain, 88.000 km²), where 860 (794–926) adult individuals were estimated. The Iberian metapopulation of the European Wildcat is divided into two highly distinct biomes: i) the 'Mediterranean Forests, Woodlands and Scrub' biome, occupying ca. 2/3 of the Iberian land area; and ii) the 'Temperate Broadleaf and Mixed Forests' biome, occurring at the northern Iberian fringe (including the Pyrenees) and occupying ca. 1/3 of Iberia's area. The ecological differences of the European Wildcat occurring in each of these biomes is striking, which is reflected in suspected different population trends. The European Wildcat populations occurring in the Mediterranean region are estimated to be declining, with an overall fragmented distribution and occurring at low population densities. Conversely, the population in the temperate region of Iberia appears to be stable and occurs at relatively high population densities variously of 60-70 individuals per 100 km² and 20-40 individuals per 100 km². Cats for this project will be taken from the 'Temperate Broadleaf and Mixed Forests' populations of Northern Spain. They will all be rescue animals (defined in Section 9.2).

How original population size was estimated:

Expert opinion (see IUCN red-list for details)

Ex-situ population consists of captive bred/reared individuals or is it the original wild-collected stock? We are planning to release individuals that have been bred in captivity. One parent will be a wild-sourced Spanish cat. One parent will be a cat from the UK wildcat conservation (captive) breeding programme for wildcats.

Number of donor individuals to be removed/sampled: Up to six Spanish parental cats (see PVA for justification of the numbers)

Nature of donor selection method: Donor Population 2 cats will be selected in the following way:

1. They will be injured or rescued wild living cats that have been earmarked as being unsuitable for rehabilitation on a case-by-case basis by Spanish Authorities.
2. They will meet the criteria for admission to the captive breeding programme (Senn and Ogden 2014) on pelage and genetic characteristics.
3. They will have had their whole genome sequenced and will be assessed individually for suitability against the genomic reference data presented in the Genetics Risk Assessment (Appendix 6). This will assess individual hybridisation and inbreeding in more detail, and will confirm for the candidate animal, that the expectations around the population source being closest to Scotland hold true. It will also assess the relatedness between founders from the same population.
4. They will be held in captivity in Nordens Ark or at Highland Wildlife Park and will be bred with an animal from the UK wildcat conservation (captive) breeding programme for wildcats.
5. **The offspring** will then be treated as candidate release animals and handled as for SOURCE 1 (see above) with the exception that source 2 animals will not be returned to the captive breeding programme until a new Long Term Management Plan (LTMP) has been established for the population (current LTMP is available on request).

A protocol for importation is included in Appendix 7. A transfer file containing details of the source population (population location; dates of removal; name of collection owner; collection owner contact details, legal documents, genetic and disease screening results) will be constructed for each cat and submitted as part of the annual licencing returns.

This approach

1. Maximises genetic diversity in the release population via the inclusion of additional founders. Additional founders will maximise chance of long-term survival and adaptability of the population and minimise any potentially harmful effects of inbreeding.
2. Minimises any potential harm to the source population 2, using animals that cannot be returned to the wild.
3. Minimises any potential (more minor) risks of outbreeding using animals bred in captivity with Scottish origin cats.

The Disease Risk Assessment (Appendix 5 including sub-Appendix 7) incorporates the considerations required for this approach. All cats would be disease screened accounting for this risk and in accordance with national legislation.

Habitat type of donor population:

Temperate Broadleaf and Mixed Forests' biome

Intra-specific classification of donor population: European wildcat *Felis silvestris silvestris* (Spanish wildcat population)

Additional information about the donor population relevant to the translocation: n/a

5.2 Release site details (add additional pages for each release site)**Release site 1:**

Population name: Cairngorms Connect

Population location (region, country): Highland Council, Scotland

Grid ref: A map of the site location is provided in Appendix 21

Inside or outside of native range of translocated species or type: Outside

Inside or outside of natural range of translocated species: Inside

Dates of release: Q2 2023- Q3 2026

Land owner name: Forestry and Land Scotland, NatureScot, Wildland Limited, RSPB Scotland

Land owner permission granted:

Forestry and Land Scotland- Yes, pending receipt of licence.

NatureScot- Yes, pending receipt of licence.

Wildland Limited- Yes, pending Memorandum of Cooperation and receipt of licence.

RSPB Scotland- Supportive of releases into wider area pending receipt of licence, permission for releases onto RSPB Scotland land is subject to further internal review.

Conservation protection afforded to the site:

SAC designations within area: Cairngorms, River Spey & Insh Marshes (IM). 1 RAMSAR site also present at IM. SPAs within area; Abernethy Forest, Cairngorms Massif, River Spey – IM, Craigmore Wood & Cairngorms. National Nature Reserves (NNR) present in 5 locations; Glenmore, Abernethy, Cairngorms, Invereshie & Inshriach & IM. 7 SSSIs within area: North Rothiemurchus Pinewood, Northern Corries, River Feshie, River Spey - IM, Glenmore Forest, Abernethy Forest, Allt Mor & Cairngorms. A map of the Protected Sites in and around Cairngorms Connect is provided in Appendix 21 Figure A21-c. Further details are also provided in the completed Habitats Regulations Appraisal (Appendix 15).

Habitat type (e.g Phase 1 habitat category, NVC or HIS, or general description)

The Saving Wildcats project release site will be the Cairngorms Connect Partnership landscape <http://cairngormsconnect.org.uk/>. The Cairngorms Connect project area is situated within the largest National Park in the UK, Cairngorms National Park (CNP), in the Highlands of Scotland (see map in Appendix 21 Figure A21-b). The project area stretches over 590 square kilometres and covers 13% of the National Park and represents a large expanse of well-connected wildcat habitat within a landscape very well covered by European protected sites (see Appendix 21 Figure A1-c). A map of habitat types (EUNIS Landcover Scotland) and their distribution across the Cairngorms Connect landscape is provided in Appendix 21, Figure A1-f.

Cairngorms Connect covers four landowners: Royal Society for the Protection of Birds Scotland (NGO), Forestry and Land Scotland (Govt. organisation), Wildland Ltd (Private owner) and NatureScot (Govt. organisation). The land is primarily managed for nature conservation and has a plan to improve and restore habitats over the next two centuries. The land also supports farming, forestry, recreation and managed moorland.

Cairngorms Connect are undertaking the largest habitat restoration project in Britain focused on five key areas: 1. Reducing deer damage across the entire area 2. Restoring woodland habitats and process 3. Restoring key peatland habitats 4. Restoring natural hydrological process across the site's floodplains 5. Making a significant contribution towards the maintenance and enhancement of the livelihoods and wellbeing of local people.

A 2015 study evaluated that the Cairngorms Connect area is situated within the largest block of contiguous wildcat habitat in Scotland (Kilshaw et al., 2015). The original survey and scoping report for the wildcat priority areas (Littlewood et al., 2014) indicated that a population of 40 cats (20 females, 20 male) stands a 95 % chance of survival over 50 years and that an area would need to be at least 4000 ha of suitable habitat in a matrix of other habitat types to support 20 females. Habitat modelling of the Cairngorms Connect project area conducted by NatureScot for the EU LIFE application in 2019 showed that 37.3 % (around 22,123 ha) is high quality within a range of other mixed habitats (Cairngorms Connect total area ~59,000 ha). The results of this habitat model are illustrated by the map in [Appendix 21](#), Figure A21-e.

This model suggests that the Cairngorms Connect release site has areas of high suitability habitat in the middle and north of the site. There are large areas of low suitability habitat, predominantly in the higher elevations interspersed with areas of medium suitability habitat in some of the lower glens (see [Appendix 21](#) Figure A21-g).

As with any release project, the selection of the release site attempts to balance a variety of factors including, in this case, the protected status of the site (that activities take place predominantly in European/Natura 2000 sites is a precondition of funding) and the relative risk of other threats e.g. hybridisation and persecution.

Proximity and context to other population of the focal species

The current evidence shows that there are no viable populations of wildcat in Scotland (IUCN 2019). The most recent data on wildcat populations in the rest of Scotland come from the Scottish Wildcat Action project survey 2015-2018 (SWA Final Reports, In Prep). Across the project years (including data collected outside standardised surveys) the project detected a total of 31 individual wildcats (pelage score of 17 or more), 162 individual hybrids and 151 individual domestic cats, excluding known pets (total 358 including 12 un-categorised cats). Overall, hybrid and domestic cats together outnumbered wildcats 10:1. The populations that contained wildcats were Angus Glens (11), Morvern (3), Stathbogie (10), Strathpeffer (5) Northern Strathspey (2). 769 public records from across Scotland were also collected through the sightings page on the SWA website and the app, of which 317 were described by the observer as a wildcat. SWA were only able to verify 45 of these as wildcat (pelage score of 17 or more). Of all the samples tested genetically during the SWA project none exhibited the genetic score above the test threshold and very few a combination of borderline genetic score and high pelage characteristics which would still make them admissible to the breeding programme.

Which donor populations are being released at this site Population Sources 1 & 2, as described above.

Distance of the donor population to the release site: All animals will be located at the Conservation Breeding for Release Centre at Highland Wildlife Park prior the release. This ~2-10 km from the release site and ~ 10-30 minutes by cars.

Is donor population in the same country as the release site: Most animals will be transferred from the Conservation Breeding for Release Centre at RZSS Highland Wildlife Park. Some animals may arrive to the Saving Wildcats Conservation Breeding for Release Centre (Highland Wildlife Park) from other captive holders in the UK conservation breeding programme outwith Scotland including from project partner Nordens Ark in Sweden. All animals will be held at Conservation Breeding for Release Centre at Highland Wildlife Park prior to release. All animals entering the Conservation Breeding for Release Centre will be subject to quarantine and health screening requirements (Appendix 5, Sub-Appendix 4)

Nature of the released material: Animals.

Number of animals: The project aims to release a minimum of 60 cats. This is driven by the overwhelming consensus in the reintroduction literature that the higher the number of animals released the higher the likely chance of success (e.g. Griffith et al., 1989; Wolf et al., 1996; Fischer and Lindenmayer, 2000; Brichieri-Colombi and Moehrensclager, 2016). Morris et al. (2021) suggest the release of at least 20-50 individuals is required to achieve success. With a minimum of 60 cats released over three years, it would **theoretically** be possible to achieve a populations size of 40, two years after the end of the project, given a Y1 post-release mortality rate of 60% (Figure 8 in the PVA appendix to Appendix 1 CBRC Breeding Plan). Dispersal will probably reduce this number and mortality rates (especially in the early stages) may be higher (see Section 8 Biological Risks). The constraint on releasing more than 20 cats per year are primarily practical (financial cost of running a larger CBRC or conducting additional transfers and the logistical difficulty of monitoring more cats post-release).

Age, generally 12-18 months: By this age they are independent of parents and at post-dispersal age and it will be the peak prey season (June-September). The age of release is determined by practical constraints: a) The upper age range of captive cats is limited by the fact that cats will need to leave the centre to make way for breeding of the next cohort, if we are to achieve a target release population of a minimum of 60 cats, b) Animals cannot be released younger than 12 months because of problems with collaring growing animals that are <1 year. Some older animals may be released (see Section 5).

Sex ratio, ~50:50: This will be determined by the likely ratio of births at the Conservation Breeding for Release Centre. There are a number of arguments for skewing sex ratio in different directions, but the project's view is that in the initial phases of the release, it is more important to aim for population growth (i.e. release as many animals as possible), rather than refining issues around sex ratio, which would block further breeding (as it would require the holding of animals for longer period of time to generate the desired ratio) and can be adjusted once a population has established by targeting specific releases later on.

See "Saving Wildcats Release Strategy Workshop Report" for further details of discussion with experts which led to this decision making (Appendix 11).

If multiple populations are used, what are the proportion of the mix

Majority Source Population 1 with some Source Population 2 (likely no more than 6 animals)

If an existing population is present at the release site:

Population size of resident population: Zero wildcats present at the release site

How population size was estimates:

During an intensive camera trap survey of the site in 2020/21 no wildcats were found (see Appendix 9, Baseline camera trap survey)

Reason for reinforcement

See Section 4, no recovery likely without reinforcement/ local reintroduction.

Intra-specific classification of the resident population: N/A

Intra-specific classification of the donor population: *Felis silvestris silvestris*- European wildcat. Majority of individuals from the Scottish wildcat captive breeding population (see source 1) and some mixed source individuals with European population origin cats (see Source 2).

Release strategy summary (include details of what is released where):

Year	Number of wildcats released	Source population (see section 5)	Where?	When	Strategy preference (see section 6)
2023	~20	Source 1		June-August	Soft
Jan 2024 review of release 1 informs subsequent strategy					
2024	~20	Source 1 + 2	Evaluation of released population in Spring 2024 will determine future release points	June-August	Soft (potentially with hard releases)
Jan 2025 review of release 2 informs subsequent strategy					
2025	~20	Source 1 + 2	Evaluation of released population in Spring 2025 will determine future release points	June-August	Soft (potentially with hard releases)
Jan 2026 review of releases 1-3 informs project exit/continuation					

Additional information about the release site relevant to the translocation:

See baseline data and prey report(s) (Appendices 9,9a&9b) for a full description of the release site with regards to habitats, prey base and carnivore presence. This is further discussed in the section on biological risk (Section 8).

6. Methodological Summary: *Outline the approaches that will be used in undertaking the translocation, including key relevant aspects of the species' biology and any specialist advice received. This should provide sufficient information to demonstrate that achieving the desired conservation outcome is feasible.*

The key methodological decision for a release of this nature is whether to opt for a “soft” or a “hard” release strategy. Strategies that include the provision of food, shelter and an initial period of on-site containment designed to reduce any detrimental post-release dispersal are termed “soft” releases. In contrast to this, those that involve the immediate release of animals following their translocation to the release site, with limited or no additional provision of food & shelter are termed “hard releases”. Some authors favour the terminology “delayed” and “immediate” release for “soft” and “hard” releases respectively, in

acknowledgement that there is no certainty that soft release approached always produces better outcomes, and that therefore the terminology is misleading (Moseby et al., 2014).

In brief, the project will initially favour a “soft” release methodology. This will involve releasing cats from temporary pens within the release site. We will aim to do this in two cohorts of approximately ten animals. After the first cohort is released, the second will be released six to eight weeks later. Animals will be released in cohorts to maximise the chance of them finding each other in the landscape. The spacing into two cohorts is determined by the number of cats the field team of four officers can track at a time (see Section 11, Monitoring). Full details of the proposed protocol can be found in Appendix 10.

Justification for favouring a “soft” release in early phases of the project:

The release methodology adopted is one that has been developed based on available literature, communication with other carnivore translocation projects with expertise represented with our advisory groups (e.g. Iberian lynx, pine marten, European mink, swift fox, and wildcat in Germany) and discussions at a two-day Saving Wildcats release strategy workshop held on the 2nd and 3rd February 2022 (Appendix 11).

Reviews exist which have attempted to systematically examine the impact of hard versus soft releases. Generally, they report that soft release methods have a positive effect on outcome i.e. Fischer & Lindenmayer 2000 (positive); Tetzlaff et al., 2019 (positive); Resende et al., 2021 (positive); Morris et al., 2021 (mixed evidence). It is clear however that soft release methods can vary greatly and relatively small sample sizes and comparisons across a wide range of projects, species and success criteria makes a truly systematic evaluation challenging.

Since published methodological descriptions are often hard to find, we additionally surveyed members of the advisory groups for the details of their soft release methods, and these are provided in Appendix 12. These have informed the soft release protocol for this project (Appendix 10).

Ongoing review of the “soft” release approach and adaptive management:

Information from the process of release management and post-release monitoring (see below) will be reviewed annually to help inform future releases. “Soft” releases are more logistically complex and resource intense to manage than hard releases and thus it would *potentially* allow us to release more cats if a hard release strategy was used.

Following review of Y1 releases there may be an appropriate argument for the implementation of a mixed approach whereby some animals are released using the “soft” release method and others using a “hard” release method. Providing a significant number of cats were released using each method, such an approach would allow a systematic comparison between methods. Experimental comparisons of release methodology are rare (e.g. Moseby et al., 2014) and would be of benefit to other projects, however the overwhelming objective is the achieve the highest post-release survival rate in the first year.

In addition to the “soft” release protocol (Appendix 10) we may:

- Add man-made “natural” den site to the release site with landowner permission, if tracking data indicates that den site might be a limiting factor. This could involve the construction of man-made wildcat den sites across the release site to encourage site fidelity and reproduction or adapt existing release site structures with landowner permission e.g. adapting old (derelict) farm buildings.
- Collaborate with the landowners over the placement of deer carcasses, if tracking and/or diet analysis data indicates that wildcats might be making use of this food source. This will be evaluated in conjunction with the Cairngorms Connect Predator Project.

To be clear, whilst “soft” releases are currently favoured, we wish to retain the option of “hard” releases if circumstances suggest they would be a better or more appropriate option at the time.

Monitoring and adaptive management after the release

See Section 11 for full details of monitoring.

Releases will be evaluated against the success criteria annually at the Saving Wildcat Advisory Group Meeting and a release strategy for the following year adopted.

7. Benefits

7.1 Benefits Table

Beneficiary	Benefit type	Level of benefit*		
		Low	Med.	High
Focal Species	<i>Reducing extinction risk and/or improving the conservation status of a species by:</i>			
	Increasing the number of individuals, improving population structure, and/or increasing the number of locations at which a species occurs	☐	☐	☒
	Improving the genetic health and resilience of a population by directly introducing genetic diversity	☐	☐	☒
	Establishing 'bridging populations', to facilitate migration and /or gene flow	☐	☒	☐
	Establishing populations in areas where the species will experience reduced levels of threat (e.g. by moving organisms into more suitable 'climate space', disease-free areas, or localities with suitable management)	☐	☐	☒
Habitat / Ecosystem	<i>Improving the conservation status of an ecosystem, habitat and/or other species by:</i>			
	Increasing the overall species richness of a habitat to enhance its biodiversity value	☐	☐	☒
	Increasing habitat quality (e.g. translocating species to change grazing regimes)	☒	☐	☐
	Improving ecosystem services and functions (e.g. translocating species to provide pollinator services)	☐	☒	☐
People	<i><u>Additional</u> socio-economic benefits that may arise as a result of conservation translocations through:</i>			
	Enriched human experiences and environmental awareness due to increased contact with biodiversity	☐	☐	☒
	Increased benefits to humans from ecosystem services (e.g. pollination)	☒	☐	☐
	Increased income (e.g. revenue from ecotourism where the translocated species leads to increased visits or spend)	☐	☒	☐

7.2 Details of benefits (expand on the 'medium' and 'high' benefits identified above)

Focal Species

Increasing the number of individuals, improving population structure, and/or increasing the number of locations at which a species occurs.

The aim of the project is to release 60 animals with the ambition of eventually achieving a viable population of wildcats at the release site (see Section 3 for project outcomes). Ultimately, we hope that this will assist with the reversal of the "bad, declining status" of the species in the UK (Target 1 EU Biodiversity Strategy to

2020). Through this project we also hope to lay the foundation for eventual replication of conservation action at other sites and the restoration of a viable population across Scotland. We acknowledge that there are notable challenges in achieving this aim, as for all carnivore reintroductions, but we believe this project will enhance our knowledge base significantly around how to achieve full species recovery in the future.

Improving genetic health and resilience of a population by directly introducing genetic diversity

The genetic health and resilience of wildcats will be enhanced by

- a) the minimisation of hybridisation with domestic cats.
- b) the minimisation of inbreeding within the wildcat population.
- c) the maximisation of wildcat genetic diversity.

These are key aims for the project (Section 3), and they are explored in detail under biological risks (Section 9) and donor population details (Section 5).

Establishing ‘bridging populations’, to facilitate migration and/or gene flow.

Establishing a “bridging population” *per se* is not an aim of this project, however emigration and dispersal can provide useful information for future releases and connectivity will be critical to the future viability of any release project. The release site is adjacent to the Strathspey Wildcat Priority Area (Appendix 21, Figure A21-g), [REDACTED]

[REDACTED] Extensive camera-trap surveys conducted by Scottish Wildcat Action between 2015-2018, combined with trapping and genetic testing, strongly evidenced a lack of pelage and/or genetic wildcats, but a relatively abundant hybrid population (SWA Final Reports, In Prep). On the positive side, considerable potential therefore exists for population expansion of released wildcats into this site, reducing the risk of limitations on carrying capacity. However, with increased dispersal and population expansion comes increased risks of contact with unneutered domestic feral (and hybrid) cat populations, and so the project strategy is to conduct TNVR in the Core Project Area as a priority, expanding to the Wider Project Area prior to wildcat releases (Appendix 21, Figure A21-a). Baseline and ongoing surveys strongly suggest that the hybridisation risk in the Core Project Area is relatively very low (Appendix 9) and so the initial TNVR effort is likely to be minimal. Saving Wildcats have also established a positive relationship with the local branch of Cats Protection, who have conducted TNVR in the Strathspey area for decades and facilitated them to increase TNVR effort by loaning camera-traps and trapping equipment donated from SWA.

Establishing populations in areas where the species will experience seriously reduced levels of threat.

The Release Site is managed for conservation under a 200-year vision and raft of conservation designations (see Section 5). The potential for control over future adaptive land management to benefit the species is a key factor in the selection of the release site. However potential for conflict with predator control activities exists within the surrounding area (both Core and Wider Project Area Appendix 8, Figure 4). We cannot be sure that a population will establish on Cairngorms Connect land and habitat modelling indicates that animals are likely to move into the Wider Project Area where they will, experience elevated risk of both persecution and road traffic mortality (Appendix 21, Figure A21-g).

Habitat/Ecosystem

Increasing the overall species richness of a habitat to enhance its biodiversity value

We are aiming to restore a felid species that is locally extinct and on the brink of extinction nationally.

Improving ecosystem services and functions

The guild of large and medium sized carnivores present at the release site is significantly disrupted relative to what was historically “normal”, given the loss of brown bear, wolf, Eurasian lynx, polecat and wildcat, which would have all co-occurred along with the extant fox, badger and pine marten populations going back 2000 years. The restoration of wildcat has the potential to rebalance ecological relationships between carnivores in unforeseen ways, that can be better understood during this conservation action. A significant advantage of the release site is that considerable baseline data on the carnivore guilds exists through the action of the Cairngorm Connect Predator Project and we will monitor the interaction of wildcats with fox, badger and pine marten (see Section 11). Wildcat should additionally be considered as an indicator species for a complex mosaic of forest, grassland, and scrub habitats.

People

Enriched human experiences and environmental awareness due to increased contact with biodiversity

There is a clear cultural service provided by the Scottish wildcat within Scotland. They are now Scotland's and the UK's only remaining native felid and as such play a strong role as a cultural emblem. The Clan Mackintosh features a feisty-looking cat, with the motto 'Touch not the cat without a glove', and for the Clan MacGillivray the motto is 'Touch not this cat'. Historically, the area now known as Sutherland formed the Pictish province, Cataibh, meaning land of the Cat Tribe. The Duke of Sutherland's Gaelic title is Morair Chat, meaning 'The Great Man of the Cats'. There is a cat in the clan crest, and their motto is 'Sans Peur' ('Without fear'). In contemporary culture, they still have a big role to play in the Highlands as evidenced by the high level of support received by the SWA and Saving Wildcats Projects in landowner and community consultations (Appendices 13 and 14). Several other commercial organisations locally currently utilize the wildcat brand, it is the emblem of the Royal Dornoch Golf club and features on labels for the Cairngorms Brewery beer and Clynesh Whisky. In surveys ran locally ahead of submitting the NHLF bid for the Wildlife Discovery Centre at RZSS Highland Wildlife Park, few people had ever seen a wildcat, but it was top of the list as “favourite Scottish animal”. Signage around the release site feature the species including at the Cairngorm Mountain ski centre, RSPB Abernethy, the Newtonmore village sign and a newly installed public seating area in Newtonmore. Newtonmore is also site of the Clan MacPherson Museum and the wildcat trail, a popular walking route featuring painted wildcat statues.

Due to significant disturbance potential both for wildcat and for other priority species, the project will actively discourage any direct “contact” with the species in the wild. This will be an active part of our messaging campaign. Instead, we believe that significant cultural and environmental awareness benefit will come from being able to communicate to people simply that this elusive species is “out there” and being restored as part of a wider effort to recover our local ecosystems within the Cairngorm National Park. For better or worse people are significantly drawn to charismatic “cute and fluffy” species like the wildcats, so we intend to leverage the wider benefits of this enthusiasm. The project intends to:

- Offer “diversionary” (low impact) tourism opportunity via the on-show wildcat enclosures at the RZSS Highland Wildlife Park and video link into to the off-show Conservation Breeding for Release Centre. This will mean that people will be able to see the living animals without the need to try and find them in the wild. This engagement opportunity will be enhanced by the development of the facilities and educational programmes in association with the NHLF-funded Scotland's Wildlife Discovery Centre project at RZSS Highland Wildlife Park which is currently ongoing.
- Deliver talks to at least 3000 people and 2000 school children. The project specifically aims to engage local children with the scientific/technical/educational aspects of the project including camera trap and GPS collaring data. The project has a specific action to develop educational material (SWAforLIFE Action E1)
- Work closely with local businesses to understand the benefits they can gain from the species

presence. The project already has relationships with a wide range of local businesses and LIFE actions involve the development of a wildcat themed tourism trail where we plan to link -up wildcat themed businesses providers.

It is worth noting that the intrinsic value of wildcats seemed to be rated more highly in community surveys than economic benefits relating to tourism (See Figure 12 of the survey report in Appendix 13)

Increased income

The project has created 14 diverse full-time jobs (in the trades, animal care, veterinary, ecology, communications and administrative sectors) within the Cairngorms National Park resulting in salaried income worth c.£400,000 pa, a significant proportion of this likely to be spent in the local area on housing & living expenses. As of 30/09/2021 the project had spent at least £230,000 with suppliers within a 40-mile radius of the project site at RZSS Highland Wildlife Park and this will now be significantly more. An estimated 42% of individual purchases and 35% of project spend had been made within this area (data from the project mid-term report to the EU submitted 31/10/21).

Work packages with actions in the second half of the LIFE funded project include establishing a trainee work programme (SWAforLIFE Action F2).

8. Legislation

Legislation table (delete/edit as applicable to present the legislation relevant to your translocation – see Chapter 5 for further details on legislative issues)

Degree of constraints (statutory and non-statutory) on:	Low	Medium (should involve consultation with SNH or other relevant body)	High (covered by formal legislation)
Translocated species			Intended EPS, protection under the Wildlife & Countryside Act 1981 or equivalent
Release site (current)			Release site is (or is in proximity to) a SSSI, SAC, SPA, NNR, Ramsar site within a National Park. Release site is outwith the native range of focal species Release site contains protected species which may be affected by the translocation

Release site (post-release)	No change likely		
Source population site	N/A- Source 1 is captive		Pertaining to Source 2- source population is from another country (See section 5)
Animal welfare		Handling and movement of vertebrates	
Quarantine/biosecurity		Possibility (or uncertainty as to the possibility) of pest and pathogen transmission	
Dangerous species		Organisms that could potentially harm humans during the translocation process	

8.1 Species or Non-native Species Licences – Additional Information

When do you need a licence/licences for (start & end dates)? 28 Feb 2023 to 31 October 2026.

Provide names, addresses and organisations (if applicable) of any additional persons you want to include on the licences (either as Agent or Assistant): Having a licence that allows the licence holder to nominate authorised persons would work best for this project due to the number of people potentially involved for the duration. If this is not possible then we can supply a list to NatureScot licensing nearer the time. The list will include a number of RZSS staff involved with animal handling as well as other partner staff.

Provide your previous experience in carrying out species translocations or related activities (including details of any previous licences held in Scotland or the wider UK for similar work)

RZSS has held/holds licences to conduct beaver, pine hoverfly and pond mud snail translocations. We also held licences for the handling of wildcats during the SWA project.

Please provide the contact details of a referee (Name, address, telephone number, email, plus licence numbers held by the referee if applicable) - only complete this if the applicant has not held a licence for similar work in the last five years: N/A

8.1.1 Species licences

List the species for which a 'species licence' is required (e.g. focal species, and/or any other species that may be affected - see Chapter 5 for more details)

Wildcat

What activities require a species licence? (Capture, injure, kill, pick, uproot, take, disturb, possess, transport, etc.?) N/A

What other solutions have been considered and why have these been discounted (i.e. why can't you undertake the work in a way which does not require a licence)? N/A

What will the impact of the proposed translocation be on the conservation status of the population/species concerned? Positive. We expect the translocation to lead to the establishment of a population of wildcats at the release site. This will reverse the trend of decline of wildcats in Scotland and will be the first step in a transition toward the species (hopefully) eventually reaching favourable conservation status.

8.1.2 Non-native species licences

Do you need a 'non-native species licence' for the species you wish to translocate (see Chapter 5 for more details)? Yes

What alternative options have been considered and why have these been discounted (e.g. promoting natural recolonisation)? (give further details in Section 4) Please see Section 4.

Summarise any threats the translocated species poses to the release site and wider environment? (give further details in Section 8 and 9) Please see Section 9: we do not believe wildcats to pose substantial threats.

Summarise actions that will be taken to reduce the risk of the translocated species causing negative impacts, how any risks will be monitored and how remedial action will be implemented if any risk is realised? (give further details in Section 8, 9 and 11) Please see Habitats Regulation Appraisal, HRA (Appendix 15)

Legislation other than Species or Non-native Species Licences

8.2 Provide a summary of permits/permissions obtained, consultation undertaken, and the steps taken to ensure the translocation is legal. This should include details of any consents needed for protected places (see Chapter 5).

The area contains European sites, encompassing, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), and Sites of Special Scientific Interest (SSSIs). These are afforded legal protection under the Habitats Regulations and the 2004 Act. Specific permissions will be sought as follows:

- a) The project has undertaken a site-specific Habitats Regulations Appraisal for the site (Appendix 15).
- b) RZSS will enter into appropriate permissions with the landowners at the release site.
- c) Permissions under the Nature Conservation (Scotland) Act 2004 for any operation requiring consent for the SSSI would also need to be secured. We are in discussion with NatureScot about obtaining the necessary consent.
- d) RZSS also holds the following licences in relation to wildcat work conducted as part this project:

- The trapping and possession of wildcats as part of the Scottish Wildcat Conservation Action Plan (SWCAP) #204098 (Appendix 16).
- The disturbance and capture of Scottish wildcats in order to sedate, conduct pelage assessment, take samples from, implant microchips and fit/remove GPS collars as well as the placement of camera traps near to suspected wildcat den sites all for the purpose of science, research or education. The release of wildcat hybrids and neutered but otherwise healthy feral cats caught for the purpose of conserving wild animals #207451 (Appendix 17).

9. Biological risks

9.1 Biological risk table (delete/edit as applicable – see Chapter 7 for further details).

Risk attribute	No/Low risk: Self-certification	Medium risk: Advisory (should involve consultation with SNH or other relevant body)	High risk: Detailed evaluation (and specialist advice)
Distance of the translocation	Local movement – all animals including (those from source 2) will be bred in captivity and housed at the Conservation Breeding for Release Centre at HWP prior to release		
Threat to the source population		Modelling of the captive source populations shows that releases are sustainable, but this need to be managed carefully (see Section 5, Appendix 1).	
Establishment following the translocation may cause loss/reduction of important habitat	Very unlikely		
Establishment may cause loss/reduction of important species	Very unlikely – evaluated by the HRA (see HRA, Appendix 15)		
Translocation may spread pests and diseases		No known significant problems with the donor population. All animals will be health screened (see DRA, Appendix 5 & below)	

Hybridisation threat (intra-specific races or inter-specific)			Significant problem. Significant mitigation action will be taken to minimise risk  
Species is likely to spread beyond the confines of the release site			Species has significant potential for spread beyond the release sites. This could be viewed as a success, although will bring challenges for future management of hybridisation and may result in additional mortality as animals move across more hazardous areas of the landscape (Appendix 21 & below).
Potential for animal welfare concerns to released animals or those they interact with		Moderate concern with handling and transport, concern reduced with using trained experts.	

9.2 Details of steps taken to mitigate any biological risks and an appraisal of whether it is “safe to proceed”

Threat to the source population –

Source 1 (UK wildcat conservation (captive) breeding programme for wildcats) - This has been evaluated in using Population Viability Modelling presented in the Breeding Plan (Appendix 1).

Source 2 (Cats from northern Spain)- According to the IUCN red list evaluation (2021) the population is stable and occurs at relatively high population densities. Cats will be sourced by the Spanish authorities from rescued individuals e.g. those having been injured in an RTA.

See Section 5 for further details.

Translocation may spread pests and diseases

Disease risk analysis of 98 identified infectious and non-infectious hazards supports the viability of this wildcat translocation. No public health or livestock hazards were identified which cannot be reliably mitigated to negligible or low risk. Most risks to all species identified can be significantly mitigated by interventions which are feasible both practically and financially. FIV is the only infectious disease which remains medium risk to released wildcats, although the local prevalence of this virus is very low and ongoing active surveillance measures are already in place. The remaining medium risk hazards to wildcats are all non-infectious; anticoagulant rodenticides, hybridisation, persecution, road traffic accidents and malnutrition/starvation. Mitigations for these hazards are more limited but should be considered as crucial

strategies for improving the likelihood of long-term success of this translocation. Post-release surveillance will be essential to continually re-assess and adaptively manage the risk from these identified hazards, and from any novel or emerging hazards. Full details can be found in the Disease Risk Assessment (Appendix 5)

Hybridisation

Hybridisation is evaluated as high risk [REDACTED] Hybridisation with domestic cat is pervasive in Scotland today (Senn et al 2019). Analysis of museum specimens and modelling of genomic data suggest that hybridisation is largely a recent phenomenon in Scotland (Senn et al., 2019, Howard Mccombe et al., 2021) having accelerated markedly in the second half of the 20th Century. This suggests that wild and domestic cats have therefore lived alongside each other for a long time with limited impacts of hybridisation. Evidence from mainland European populations also suggests that hybridisation is not universal even when populations are in contact (Tiesmeyer et al 2020). Evidence from wildcats & other species that hybridise suggests that it is likely that depressed population size/density is a driver of hybridisation (e.g. Quilodrán et al., 2019 for wildcats; see Senn et al., 2019 for a comparison with sika hybridisation in Scotland). Depressed population size/density results into an accelerating collapse into a hybrid swarm (i.e. due to *edge effects*).

The following mitigation is proposed:

Reduce genetic contact with domestic cats as much as possible via:

1. The genetic selection of released individuals to reduce/minimise the domestic fraction in the genome. See Section 5.
2. Removal of reproductive feral domestic and hybrid cats from the release site. Camera trapping indicates that the number of these cat at the release site is low (Baseline camera trap survey report, Appendix 9). The project plans to conduct TNVR at the Core Project Area throughout the project timeline, whenever target cats are identified. Additional TNVR is being conducted in areas of high habitat quality/connectivity to the NW including the Strathspey wildcat priority areas (Appendix 21 Figure A21-b), and on the W and SW side of the river Spey adjacent to the Core Project Area, and this will continue throughout the timeline of proposed releases. In collaboration with Cats Protection Strathspey branch, we are monitoring the infectious disease and hybridisation profile of cats undergoing TNVR in Badenoch & Strathspey, to further inform risk assessment of these sites (see Appendix 5 DRA, sub-appendix 6 for further details).
3. Release of animals using a strategy to reduce edge effects. In year 1, animals will be released in batches of approximately 10 animals, and subsequent planning of release site locations will be managed with this in mind.
4. An expanding area of hybridisation mitigation (TNVR & responsible cat ownership messaging) around the edges of the establishing population.

Our monitoring strategy (Section 11) which includes GPS collaring, fixed camera trap arrays and genetic testing of kittens and non-invasive (scat & hair) samples will assist with spatial planning of the Y2 release/hybridisation mitigation strategy following the first release of cats.

Species is likely to spread beyond the confines of the release site

This risk/probability is evaluated as high due to the connectivity of the site. Expansion could be viewed both as a positive and negative outcome and this is discussed further in Section 7 (benefits of migration and/or gene flow).

Potential for animal welfare concerns

There are three primary areas of welfare consideration related to this project

1. Handling and management of the animals at the CBRC

The welfare consideration relating to management at the CBRC are documented in Appendix 18.

2. Handling and management of the animals during the translocation pathway

Captive wildcats will be captured for management interventions including movement between enclosures, health screening and transport for release. Additionally, wildcats may be trapped post-release for monitoring and GPS collar removal and feral cats trapped for TNVR. The risk of injury or trauma during these events is assessed as medium, with multiple studies documenting morbidity and mortality of mammals during trapping, physical restraint and chemical immobilisation. Through adherence to best-practice standards for capture, handling, anaesthesia and transport, these risks can be mitigated to low, and high standards of animal welfare maintained. The trapping of free-living wildcats for conservation management and of feral cats for TNVR must only be carried out under the terms of the licenses issued for these activities (See Section 8.2 for licences)

3. Outcomes for the wildcats post-release

Anthropogenic risks to released wildcat population are described in detail the section on non-infectious hazards in the Disease Risk Assessment (Appendix 5). In summary they cover:

Persecution and risks from predator control: Whilst only very limited predator control is conducted within the Cairngorms Connect land ownership, a high proportion of the surrounding landscape is managed for gamebird shooting including predator control. Dispersal of released wildcats into these areas is likely and therefore persecution and predator control remain medium risk in the wider Project Area. See Landowner Engagement and Consultation Report for further details of proposed mitigation (Appendix 8).

Road traffic mortality: Major roads lie to the W and N of Cairngorms Connect. During post-release dispersal released cats will encounter roads and may establish territories in other areas with higher density road networks. Releases will be located away from major roads, and timed to avoid peak traffic times, however it will be challenging to mitigate this risk. Members of the SW In-situ team have input to consultations on the dualling of the A9 trunk road and made recommendations to help reduce risks to wildcats through e.g. the installation of wildcat-proof fencing and appropriate culverts.

Malnutrition/starvation: This risk consists of two elements: prey availability and the capacity of the released population to hunt. The proposed release site has a low density and fragmented rabbit population, and released cats are likely to rely on small rodents, whose population fluctuations make prey availability less certain (Appendix 9, 9a&b). Starvation also is a documented risk in translocations and captive-born individuals may be less well adapted to hunting than wild individuals. In the UK, provision of live vertebrate prey to captive animals, which could mitigate this, is illegal. The risk of starvation/malnutrition will be mitigated by the design of the CBRC facility (Appendix 2) and the pre-release strategy (Appendix 3), designed to support the development of innate hunting behaviours in a natural setting. The use of a “soft” release protocol including the option of supplementary feeding in release pens will also help mitigate against this (Appendix 10).

There is likely to be an interplay of these risk factors, e.g. cats searching longer/more widely/or sub-optimally for food will potentially be exposed to higher RTA and persecution risks.

The project’s monitoring strategy (Appendix 19) is designed to allow us to monitor post-release behaviour of individual cats closely, especially through the use of the GPS radio-tracking of released wildcats. A decision tree has been developed to support individual decision making (Appendix 20).

10. Socioeconomic risks

10.1 Socioeconomic risk table (delete/edit as applicable – see Chapter 8 for further details)

Risk attribute	No/Low risk: Self-certification	Medium risk: Advisory (should involve consultation with SNH)	High risk: Detailed evaluation (and specialist advice)
Likelihood of strong social resistance by some to translocation		Some concerns – [92% of surveyed local residents (Appendix 13) and 32/33 of surveyed landowners around the Core Project Area (Appendix 8) support the project aims	
Harm to human health and well-being		Some diseases which are medium risk in the absence of mitigation.	
Harm to human livelihoods		Small impacts on pets and livestock	
Insufficient resources may prevent successful implementation of the translocation plan		Translocation is expensive but well resourced	
Major financial costs once the translocation has been completed (e.g. control measures if the population has greater impacts than envisaged)		In the short-term translocation is well resourced by the EU LIFE funded project. To achieve long-term success, it is likely that release, mitigation and monitoring actions will need to continue beyond 2026.	

10.2 Details of steps taken to mitigate socioeconomic problems and an appraisal of whether it is “safe to proceed” (including information on stakeholder consultation)

Likelihood of strong social resistance by some to translocation - evaluated as amber. See Section 11, Landowner consultation report (Appendix 8) and Community consultation report (Appendix 13) for details and proposed mitigation.

Harm to human health and well-being

The risks from zoonoses are evaluated in detail in the Disease Risk Assessment (Appendix 5). No public health or livestock hazards were identified which cannot be reliably mitigated to negligible or low risk. Appropriate PPE must be worn by any project team member working who will be handling or working in close contact with wildcats to mitigate the risks from zoonotic diseases (this will be risk-assessed individually for all project activities).

Harm to human livelihoods

Limited concerns relating harm to human livelihood were raised in the community consultations (see Appendix 13). Specific landowners have raised concerns about the presence of wildcats attracting tourists onto working farmland (See Appendix 8 for details and proposed mitigation). Benefits to human livelihood are outlined in Section 7.

Insufficient resources may prevent successful implementation of the translocation plan AND Major financial costs once the translocation has been completed (e.g. control measures if the population has greater impacts than envisaged)

Fundraising has been an integral part of our project from the start, since carnivore reintroductions of this nature are always a long-term effort. We have a specific action within the EU LIFE project dedicated to financial sustainability (Action F2) and will be generating a ten-year fundraising plan by the end of the project. To-date additional fundraising has been highly successful despite the challenging circumstances of the global covid-19 pandemic. Since submission of the LIFE application RZSS has raised in excess £204,000 of direct income, plus a grant of £400,000 from the Scottish Government Zoo and Aquarium Fund, £189,000 from partners and £295,000 from co-financiers. The project is developing a strong supporter and funder base via newsletter, social media channels, direct debit donors, sponsor-a-wildcat supporter programme and other actions. It is likely that a next phase of the project will require a significant input of core funding, but we are planning for sustainability of project finances now. We believe that it will be necessary for the Conservation Breeding for Release Centre to serve further releases at this site and across others if “favourable” conservation status is to be reached.

11. Monitoring and adaptive management – outline the type and frequency and duration of planned monitoring.

Monitoring:

A detailed plan for the post-release monitoring can be found in Appendix 19. A significant aim of this project is to gather high quality data from the release so that methods can be continually improved over time (see Section 3 outcomes).

Outline the arrangements for ongoing management, including an appraisal of the feasibility of reversing the translocation should unacceptable outcomes occur

Adaptive management:

The decision tree for the management of individual animals following release can be found in the Release telemetry flowchart (Appendix 20).

The release strategy, as a whole, will be reviewed annually in November/December (prior to the breeding season for the next cohort of cats).

Exit strategy for the whole project

An exit strategy is an integral part of any project plan. This may be implemented either during the project if major insurmountable problems occur, or at the end of the project. The reasons for considering implementation of an exit strategy are as follows:

1. Unsustainable and detrimental effects arise as a result of the re-introduction of wildcat to the release site.
2. There is an insupportable level of mortality in released animals as a result of persecution, other anthropogenic threats or natural mortality attributed to release procedures. This will be evaluated on an annual basis.
3. The security of the site is compromised to the serious detriment of any released animals.
4. Loss of support from the local community

The following options exist:

In the event that an exit strategy requires that no more wildcats are released, the option would be to halt future breeding and retain the wildcats within the CBRC. Wildcat breeding decisions are made in November / December each year, with pairs introduced for breeding the following January onwards. Wildcat kittens are born in spring/summer and therefore lead-in time is required to ensure cats are separated prior to breeding. The annual review point for the project is designed to coincide with this timing.

In the event that an exit strategy requires that all wildcats be removed from the release site, there would be limited capacity to reintegrate these into the breeding centre. If total removal of the population were required, removal strategies would need to be agreed. This would be an option of last resort and would need to have extremely strong justification and legal support.

Will biological samples be collected during the translocation and monitoring

Yes, a range of samples will be collected from the cats both prior and subsequent to release, and from other cats resident at the release site and in the surrounding area. All sampling of living cats will be conducted by veterinarians. Sampling of feral cats and hybrids for disease screening during TNVR has been specifically approved by the RCVS. Sampling of wildcats post-release is included in the Saving Wildcats wildcat trapping licence from NatureScot.

If so, describe the nature of the specimens

- A range of samples from live and dead animals for the purposes of veterinary screening (including blood samples, faeces and swabs from live cats, and tissue samples from dead cats, as described in the Disease Risk Assessment, Appendix 5). Genetic testing and genomic screening will be conducted on excess whole blood (EDTA), tissue from dead animals or hair plucks in cases where blood has not been taken.
- Non-invasive samples gathered at the release site (faecal sample and hair) for the purposes of diet analysis, Individual ID, parentage and hybrid testing (see Post-release monitoring Plan, Appendix 19).

Where will they be housed?

All samples will be housed at RZSS. Voucher EDTA blood and/or frozen tissue samples from each captive and wild-living cat will be deposited in publicly accessible biobanks through EAZA

(<https://www.eaza.net/conservation/research/eaza-biobank/>) and CRYOARKS (<https://www.cryoarks.org/>)

biobanking hubs managed by RZSS. Genetic and genomic data generated from these samples will be deposited on GenBank (<https://www.ncbi.nlm.nih.gov/genbank/>) following publication. following publication.

12. Communications plan

The communication plan for the successful translocation of wildcats in Scotland will be an essential and integral part of the project. The Saving Wildcats project has had frequent and successful communications with a wide range of local, national and international stakeholder since 2019, across press, media, social media and engagement activities. Building on these successes, the project team are developing a detailed plan to deliver timely and effective communications before, during and after the release of wildcats.

Objectives: The Saving Wildcats project communications plan will aim to:

- Engage effectively with all stakeholders
- Ensure stakeholders have a clear understanding of the need for the proposed translocation
- Change behaviour and perceptions where necessary to benefit the proposed translocation
- Mitigate the concerns held by stakeholders about the proposed translocation
- Share the outcomes of the translocation in a transparent and accessible way

Audiences: The plan will aim to reach all stakeholders that may affect or be affected by the proposed translocation. It will target local communities in and around the project area, including pet owners, businesses and landowners. Other target audiences will include: government, funders, visitors and the wider public. When appropriate, communications will be targeted on specific audiences in ways that accommodate their cultural values and communication channel preferences.

Content: Planned content will aim to maximise the likelihood of achieving our translocation objectives and will include both proactive and reactive elements.

Proactive communications will be deployed subsequently over the course of the project. These will come before, during and after the release and will include longer-term periodic updates. Topics will include, but not be limited to:

- Responsible cat ownership campaign, building on SWA's #Supercat and #GenerationWildcat campaigns
- Reasons why the proposed translocation is necessary to restore the Scottish population of the wildcat (e.g. persecution, hybridisation with domestic cats and habitat loss)
- Preparatory work to maximise the likelihood of a successful translocation (e.g. TNVR work in and around the release site)
- Scientific evidence underpinning decision-making about the translocation (e.g. results of fieldwork in the release site, data collected from stakeholder engagement)

Content for reactive communications will be prepared to respond to potential scenarios (Section 11), prior to the proposed translocation. Reactive communications on unanticipated events will be dealt with on a case-by-case basis, with support of the partners' expertise and experience in preparing reactive communications.

The project has already conducted a wide range of communication activities which are detailed in [Appendix 8](#) (landowners), [13](#) (community) and [14](#) (wider engagement).

13. Data confidentiality (delete/edit as applicable)

I give my permission for the information in this form to be included in the Scottish Translocation Database with the following exceptions:

All appendices containing, as yet, unpublished data which is being submitted pre-publication as evidence in support of this application.

Note that personal information and geographically sensitive information will not be made public

14. Declaration

I declare that this translocation will be undertaken in accord with the [Scottish Code for Conservation Translocations](#) and associated [Best Practice Guidelines](#).

For translocations which require SNH to grant a Species and/or Non-native species licence, I agree to the terms of the licence application:

- *Applicants should note that it is an offence under Section 17 of the Wildlife and Countryside Act 1981 and under Regulation 46 of the Conservation (Natural Habitats &c) Regulations 1994 to knowingly or recklessly provide false information in order to obtain a licence.*
- *I understand that failure to comply with any conditions included on any licence granted in respect of this application may constitute an offence.*
- *I declare that the particulars given in this application and any accompanying documents are true and accurate to the best of my knowledge and belief, and I apply for a licence in accordance with these particulars.*
- *If a licence is granted, I agree to send to SNH a written report of the licensed activities within one month of the expiry of the licence.*

Signed:



Date: 30 September 2022

List of appendices submitted in support of this application:

- 1) CBRC breeding plan (including Population Viability Analysis as a sub-appendix)
- 2) CBRC design plan
- 3) DRAFT Pre-release strategy & checklist
- 4) UKWCBP wildcat disease, genetics, & pelage screening protocol
- 5) Disease risk assessment and sub-appendices
- 6) 
- 7) DRAFT Wildcat import protocol
- 8) Landowner engagement and consultation report
- 9) Baseline camera trap survey report 2020-21
 - 9a) CCPP Small mammal survey methods and results
 - 9b) Water vole report 2021
- 10) DRAFT Release strategy
- 11) Saving Wildcats release strategy workshop report
- 12) Soft-release case studies
- 13) Community consultation report (including survey results as a sub-appendix: “Assessing community attitudes to the restoration of wildcats within the Cairngorms National Park and the evidence of responsible cat ownership within that area”).
- 14) Wider engagement report
- 15) Habitats Regulations Appraisal
- 16) Licence - Trapping and possession of wildcats as part of the Scottish Wildcat Conservation Action Plan (SWCAP) #204098
- 17) Licence - The release of wildcat hybrids and neutered but otherwise healthy feral cats caught for the purpose of conserving wild animals #207451
- 18) DRAFT CBRC Working Procedures
- 19) Post-release monitoring plan (NB this protocol refers to several sub-appendices which have not been included for review prior to submission. These include: Camera trap survey protocol, Wildcat trapping protocol, TNVR protocol, Valarian pouch protocol and RTA cats protocol. These can be provided on request)
- 20) Release telemetry flowchart
- 21) Project maps

References (in order of appearance in the text)

Senn, H. V., Ghazali, M., Kaden, J., Barclay, D., Harrower, B., Campbell, R. D., (...) Kitchener, A. C. (2019). Distinguishing the victim from the threat: SNP based methods reveal the extent of introgressive hybridization between wildcats and domestic cats in Scotland and inform future in situ and ex situ management options for species restoration. *Evolutionary Applications*, 12(3), 399–414.

Cairngorm Nature Action Plan and the Scottish Wildcat Conservation Action Plan (2013-2019)

Breitenmoser, U., Lanz, T., Breitenmoser-Würsten, C. (2019) IUCN SSC Cat Specialist Group status review. Conservation of the wildcat (*Felis silvestris*) in Scotland: Review of the conservation status and assessment of conservation activities.

Scottish Wildcat Action, Final Reports, NatureScot (In Prep.)

Senn H.V., Ogden R. (2015) Wildcat hybrid scoring for conservation breeding under the Scottish Wildcat Conservation Action Plan, Royal Zoological Society of Scotland, May 2015

Kitchener, K., Yamaguchi, N., Ward, J.M., Macdonald, D. (2005) A diagnosis for the Scottish Wildcat (*Felis silvestris*): A tool for conservation action for a critically-endangered felid. *Animal Conservation*. 8; 223-237. The Zoological Society of London.

Kilshaw, K., (2015) Introgression and the current status of the Scottish Wildcat (*Felis silvestris silvestris*). D. Phil Thesis, University of Oxford, Department of Zoology. Wildlife Conservation Research Unit. 232 pp.

Littlewood, N.A., Campbell, R.D., Dinnie, L., Gilbert, L., Hooper, R., Iason, G., Irvine, J., Kilshaw, K., Kitchener, A., Lackova, P., Newey, S., Ogden, R. & Ross, A. (2014). Survey and scoping of wildcat priority areas. Scottish Natural Heritage Commissioned Report No. 768.

Cushman, S., Kilshaw, K., MacDonald, D. (In Prep) A preliminary assessment of potential release sites for wildcat conservation translocations.



Wolf, M.C., Griffith, B., Reed, C., Temple, S.A. (1996) Avian and Mammalian Translocations: Update and Reanalysis of 1987 Survey Data. *Conservation Biology* Vol. 10, No. 4. pp. 1142-1154

Fisher, J., Lindenmayer, D.B. (2000) An assessment of the published results of animal relocations. *Biological Conservation* 96 (2000) 1-11.

Brichieri-Colombi, T., Moehrensclager, A. (2016) Alignment of threat, effort and perceived success in North American Conservation translocations. *Conservation Biology* 30 (6).

Morris, S.D., Brook, B.W., Moseby, K.E., Johnson, C.N (2021) Factors affecting success of conservation translocations of terrestrial vertebrate: a global systematic review. *Global Ecology and Conservation*, 28.

Moseby, K.E., Hill, B.M., Lavery, T.H. (2014) Tailoring Release Protocols to Individual Species and Sites: One Size Does Not Fit All. *PLoS ONE* 9(6): e99753.

Tetzlaff, S.J., Sperry, J.H., DeGregorio, B.A. (2019) Effects of antipredator training, environmental enrichment, and soft release on wildlife translocations: a review and meta-analysis. *Science Direct*.

Resende, P.S., Viana Junior, A.B., Young, R.J., Azevedo, C.S. (2021) What is better for animal conservation translocation programs: soft or - hard release? A phylogenetic meta- analytical approach. *Journal of Applied Ecology*, Wiley:

Howard-McCombe, J., Ward, D., Kitchener, A., Lawson, D., Senn, H. and Beaumont, M. (2021). On the use of genome-wide data to model and date the time of anthropogenic hybridisation: an example from the Scottish wildcat. 30 (15), 3688-3702

Tiesmeyer, A., Ramos, L., Lucas, J.M. (...) Nowak, C. (2020) Range-wide patterns of human mediated hybridisation in European wildcats. *Conservation Genetics*, 21, 247-260.

Quilodr  n, C. S., Nussberger, B, Montoya-Burgos, J. I., & Currat, M. (2019). Introgression during density-dependent range expansion: European wildcats as a case study. *Evolution*, 73(4), 750  761.