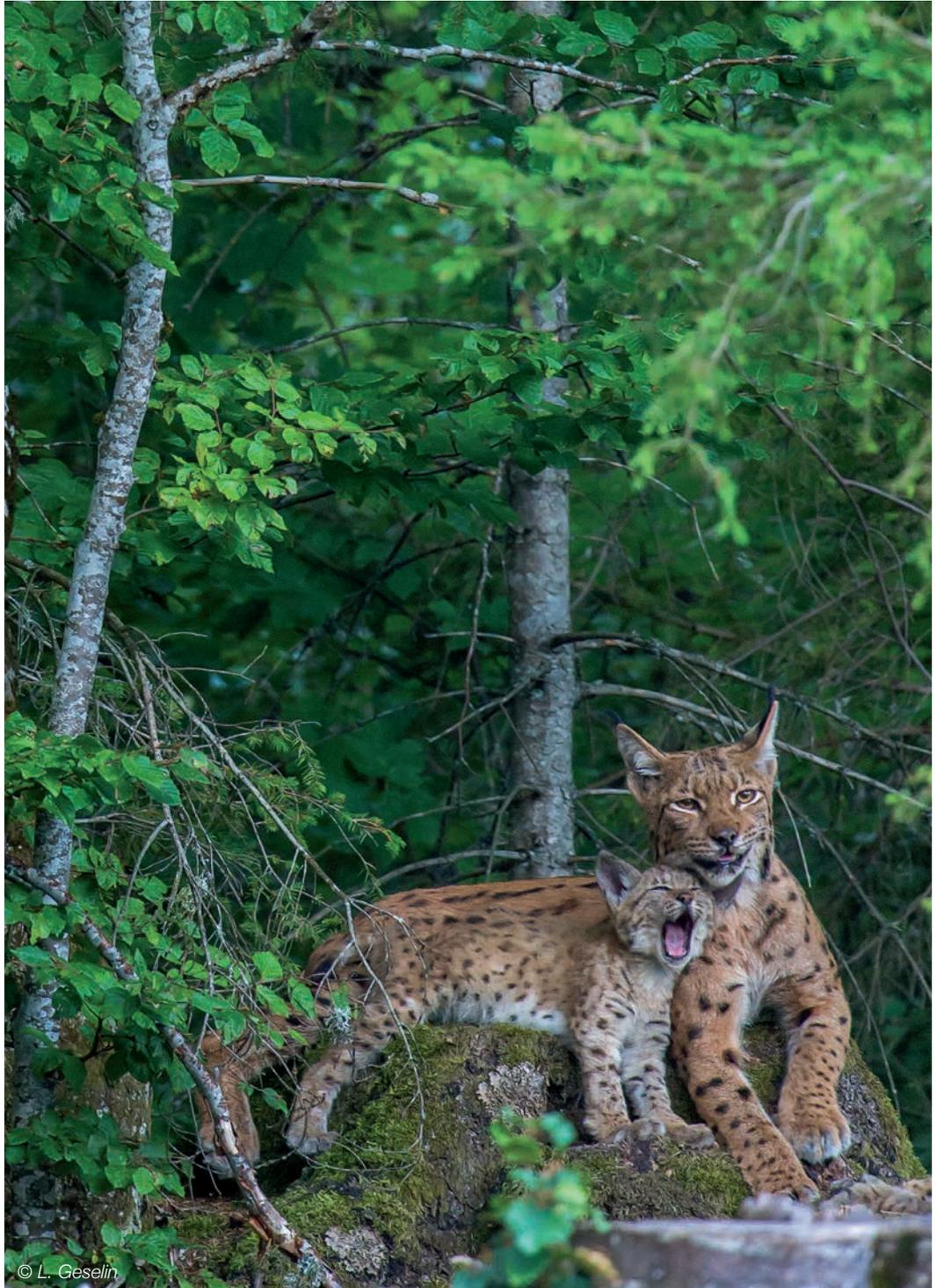


SCHON TIEF Pfälzerwald

Project Report 2015 – 2021



Funded by:





The Palatinate Forest: vast forests, few roads, little settlement © M. Schäf



Large parts of the transboundary Palatinate Forest and Northern Vosges UNESCO Biosphere Reserve are designated as Natura 2000 protected areas. Natura 2000 is an EU-wide network of protected areas for the conservation of threatened or typical habitats and species. The network makes an important contribution to protecting biodiversity in Europe.

LIFE is a European funding instrument for the environment. „LIFE nature“ co-finances projects to restore and conserve threatened natural habitats and to protect endangered species within the Natura 2000 network.

Together with the Parc naturel régional des Vosges du Nord (Northern Vosges Regional Nature Parc), SYCO-PARC, Landesforsten Rheinland-Pfalz (State Forest Authority of Rhineland-Palatinate) and WWF Germany, the Stiftung Natur und Umwelt Rheinland-Pfalz (Foundation for Nature and Environment of Rhineland Palatinate) ran an EU LIFE project to reintroduce lynx. The aim of the project was to establish a new lynx population in the Palatinate Forest and Northern Vosges Biosphere Reserve that would in the long term spread and link up with other lynx populations.

Palatinate Forest

Together with the Northern Vosges in France over an area of 3000 km², Germany's largest contiguous area of forest, the Palatinate Forest, is home to many different plant and animal species. Rocky outcrops, different forest types and open valleys are characteristic habitats. The Eurasian lynx (*Lynx lynx*) was once native to this region. However, the destruction of habitats and the hunting and killing of lynx led to the almost complete extinction of the species in Central Europe in the 19th century. Current acceptance of the large predator and the recovery of its habitats are now allowing its return. However, lynx usually only settle permanently where they can connect with conspecifics, i.e. in areas where there are already other lynx. This very passive dispersal behaviour means that lynx are less likely to repopulate suitable habitats on their own: they need the help of humans to return to their original distribution areas.

quiet stream valleys © M. Schäf



beautiful landscapes © M. Hanke



impressive rock formations © R. Krotofil



RETURN

of the lynx

The LIFE project was launched in 2015 and ended in September 2021. A total of 20 lynx were captured in the Slovakian Carpathians and Switzerland with the help of authorities and local institutions and relocated to the Palatinate Forest. Taking animals from various different areas ensured the genetic diversity of the founder population.

After extensive preparations, the first three lynx were released in the summer of 2016. By March 2020, a total of twelve females and eight males had been re-

located to the Palatinate Forest. GPS tracking collars were put on the lynx before they were released. The collars transmit the animals' positions over a period of one to two years. This made it possible to follow the movements of the released lynx and to monitor them during the acclimatisation period. The first lynx kittens were born in the Palatinate Forest just one year after the first releases. Lynx cubs have been documented every year since then. As at September 2021, nine litters have been recorded with at least 18 kittens, and there may have been more.

Swiss lynx LYCKA during her release into the Palatinate Forest © C. Arens - KCLICKFaszination



The lynx represents extensive, unfragmented and natural forest habitats. As a large predator, it is an important part of the forest ecosystem.

one of the three cubs of the lynx MALA, 2019 © SNU



The first cubs were born in 2017: FILOU and PALU. © A. Sommer

health check of a captured lynx © DIANA



Decisions worked out together lead to mutual acceptance. © SNU



electrification of a pasture fence © SNU



For the rare lynx attacks on farm animals, the State of Rhineland-Palatinate set up a fund to provide 100% compensation for the loss of an animal or 100% funding for possible prevention material. A network of volunteer helpers is in place to assist farmers with practical implementation.

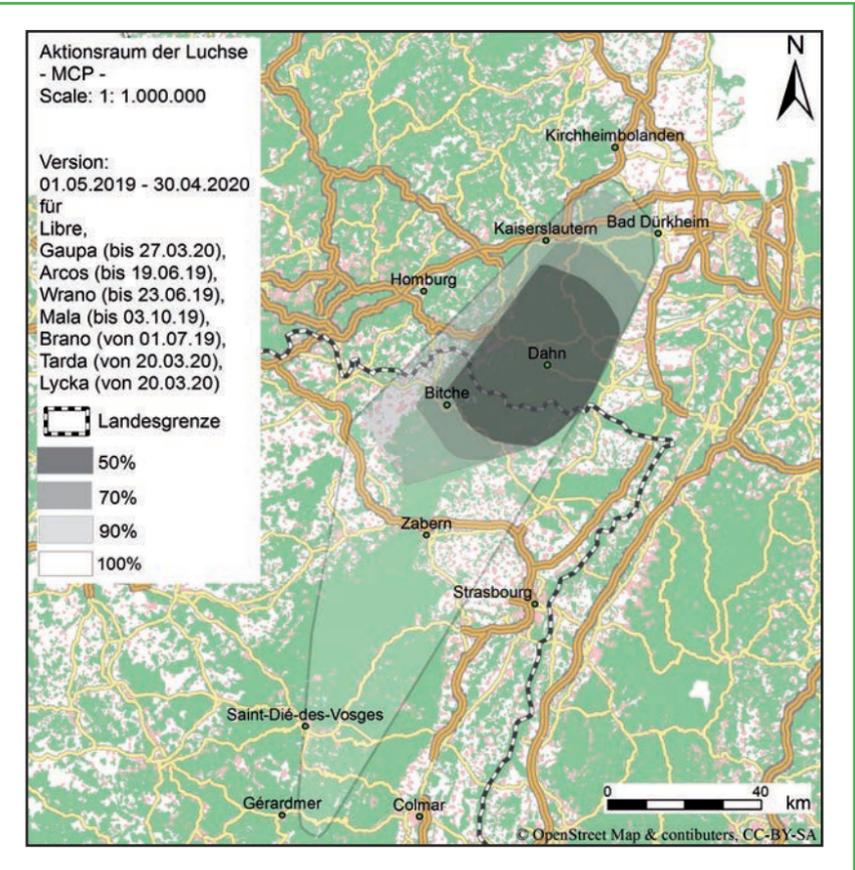


Lynx like to use forest paths for roaming through the woods. © FAWF

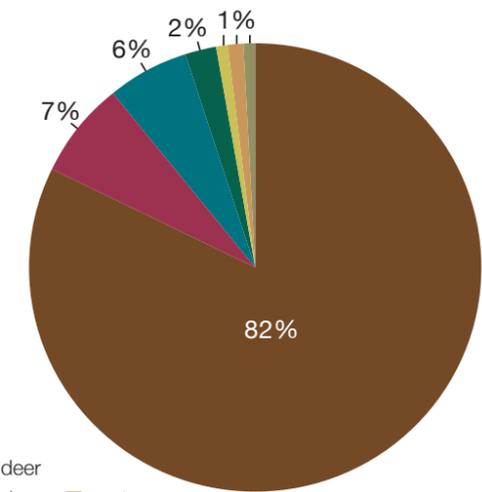


© A. Sommer

Systematic use of camera traps in a 1000 km² reference area in the Palatinate Forest recorded a density of approx. 0.5 independent lynx per 100 km² towards the end of the project.



Within the timescale of the project, the lynx spread to large parts of the Palatinate Forest and the Northern Vosges, and also to neighbouring areas such as the Donnersberg, the Westrich and, on the French side, the Central Vosges. These are important steps in the establishment of the new lynx population.



Since lynx return to their kill several nights in a row, GPS data made it possible to search for large prey. In the Palatinate Forest, roe deer were the lynx's main prey, accounting for about 80%.

THE FRANCO-GERMAN

„Lynx Parliament“

In addition to the actual translocation of lynx, the project also included a wide range of other measures. These included comprehensive consultation with the stakeholders involved. After around 200 years without a lynx population in Rhineland-Palatinate, hunters and livestock (sheep, goat and game) farmers in particular were unsure about the return of the large carnivore as it could personally affect them. That is why the LIFE project set up a transboundary project advisory body, the „Lynx Parliament“, before any lynx were relocated. The Parliament had representatives of all interest groups, authorities and institutions from the region. Together, they discussed the expected or feared impact of reintroduction, how best to protect flocks, compensation measures, and identified topics where research might be needed. Specific, practical questions regarding reintroduction were examined, and existing regulations and procedures were regularly reviewed on the basis of current events and adapted if necessary. The Parliament also explored the potential that lynx and the reintroduction project offered for the region, tourism and nature in the biosphere reserve. The direct exchange of information and the participatory processes in the Lynx Parliament built trust, appreciation and better understanding between participants and thus also led to greater acceptance of the acceptance of the lynx..



ON THE TRAIL

of the lynx...

For acceptance and public relations work, it is essential to be able to provide reliable information on the lynx's whereabouts, behaviour and range of prey, for example. Lynx are solitary and establish territories covering between 50 and 400 km². To obtain reliable data, there was comprehensive monitoring of the new lynx population with measures including GPS tracking collars and camera traps. The camera traps allowed researchers to follow the development of the young and the lynx that were no longer wearing tracking collars in particular. Lynx have their own individual coat patterns and can therefore often be clearly identified in photographs. Photographs can thus provide information on population development and on the distribution of the animals. The results of monitoring were regularly published on the project homepage to make them publicly available.

LYNX VOLUNTEERS:

local contact people

Many reports about lynx come from the public. In Rhineland-Palatinate, there is therefore a network of large carnivore correspondents who are available as local contact people and who follow up on reports. As part of the LIFE project, these volunteers were given practical training about lynx and the network was expanded. The volunteers are important multipliers in the dissemination of information and their work contributes to the protection of the lynx, for targeted protection and management of the animals is only possible when all data are combined and collated.



Hunters and foresters in particular, and also visitors to the forest, can provide important information about prey killed and about lynx kittens. The State of Rhineland-Palatinate offers an expense allowance for reports backed up with evidence.



control of a roe deer kill © SNU

The paw prints of lynx are circular and usually don't show any claw marks. © SNU

recovery enclosure for injured lynx © SNU



for lynx in emergencies

An enclosure for lynx was built at the VIER PFOTEN TIERART wildlife rescue centre in Maßweiler to provide proper care for sick or injured lynx and lynx orphans, and allow them to be released back into the wild wherever possible. This will ensure professional and appropriate treatment and temporary shelter for lynx until their recovery, even after the end of the LIFE project.

CARING

THE LYNX

perspective

Franco-German public relations work as part of the LIFE project ranged from information events and discussions on the ground to the provision of material specifically for hunters and livestock farmers, and extensive press work. The primary objective of the public relations work was to convey a realistic and fact-based image of the lynx. Regular events were held in partnership with hunting and livestock associations. Locals and visitors can now explore the Palatinate Forest from a lynx's perspective thanks to a specially created „lynx trail“ in the Dahner Felsenland area and six different geocache routes across the Palatinate Forest.

A Franco-German environmental education programme „Œil de lynx - Luchsauge“ („Lynx eyes“) was offered for school classes. Through experiential learning and projects developed and implemented by the children themselves, pupils engaged with the topic of lynx and the animal's return to the region. Their imaginative work was presented at annual „lynx festivals“. More than 2,400 children learned about lynx in this way within a period of six years.

The environmental education folder „Rückkehr der Pinselohren“ („The Return of the Lynx“), produced as part of the project, offers education professionals and other interested parties a wealth of information on lynx reintroduction, and includes a range of lesson ideas for sharing that knowledge in an age-appropriate way. Together with various professional development events, this firmly and permanently established the topic of lynx in teaching on the environment at various institutions within the biosphere reserve.

The typical features of lynx: Tufted ears, spotted coat, paw prints and beard-resembling ruff.

training event for educators © Zoo Landau



Pupils perform a play about the life of lynx. © SNU



joint „Lynx Festival“ of school classes © SYCOPARC



© A. Prüssing / SNU



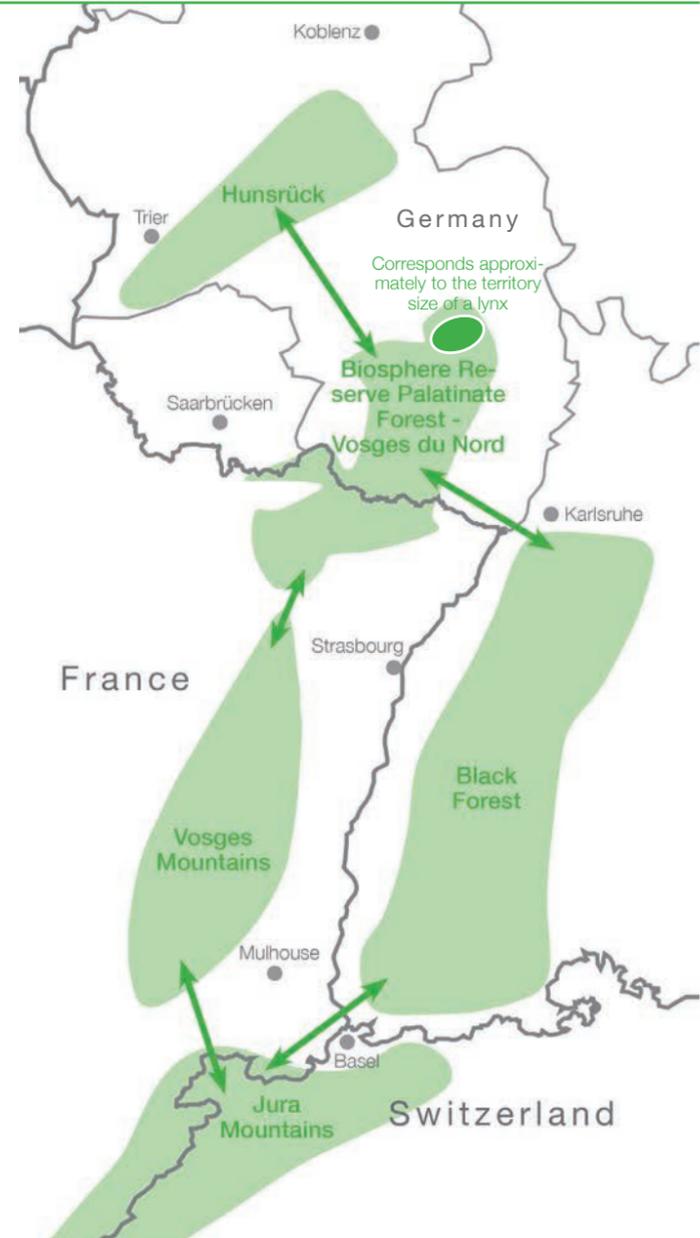
Wildlife bridges help to cross major roads safely. © SNU

CONNECTING

lynx populations

One considerable problem for lynx and many other species is the fragmentation of their habitats by major transport routes and large-scale settlements. These obstacles separate animals from each other and populations remain small and isolated. If lynx only have contact with conspecifics in their immediate environment, the likelihood of inbreeding and therefore genetic erosion increases. In the long run, this leads to disease and reduces adaptability. Added to this are direct losses as a result of road traffic.

Links such as migration corridors and wildlife crossings are therefore important. There are already two green bridges in the Palatinate Forest that are frequently used by lynx. If we protect our forests and reduce habitat fragmentation, we will enable populations of lynx, as well as many other species, to link up and survive in the long term. The LIFE project drew up habitat connection guidelines („Leitfaden Vernetzung“) to further facilitate the connection of forest areas in Rhineland-Palatinate. Cross-border collaboration under the umbrella of the Upper Rhine Conference has advanced the model of a transboundary lynx population in France, Switzerland and Germany.



WHAT HAS THE LIFE PROJECT ACHIEVED?

Measures implemented as part of the LIFE project „Reintroduction of Lynx (*Lynx lynx carpathicus*) in the Palatinate Forest Biosphere Reserve“ („Wiederansiedlung von Luchsen (*Lynx lynx carpathicus*) im Biosphärenreservat Pfälzerwald“) have successfully led to the establishment of a new population nucleus in the Palatinate Forest. Lynx have now bred in the biosphere reserve for the first time in more than 200 years. They have also spread into most parts of the Palatinate Forest, the neighbouring Northern Vosges and beyond.

The „Lynx Parliament“, which brought together all groups of stakeholders – both within and across national borders – was a constructive voice throughout the reintroduction process and actively contributed to project implementation. The ongoing exchange based on mutual respect and listening was fundamental to the success of reintroduction and is to be continued in the future.

Intensive and targeted environmental education and public relations work and the involvement of local stakeholders helped to increase appreciation for and knowledge of the lynx and its habitat in the Palatinate Forest and Northern Vosges Biosphere Reserve. A large number of long-term environmental education programmes were established.

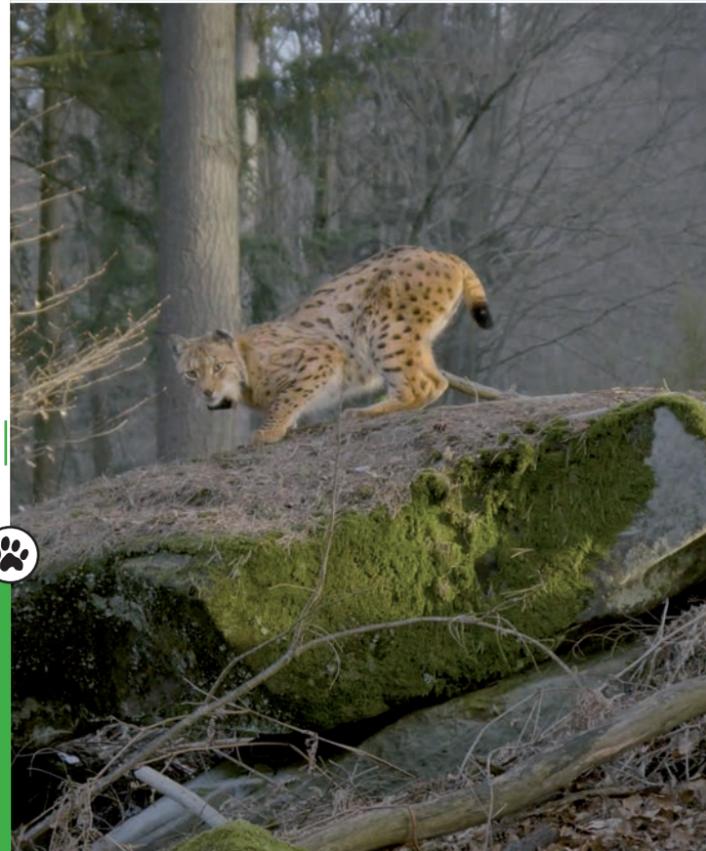
The reintroduction of lynx to the Palatinate Forest could in the long term help to connect the separate lynx populations in Germany, France and Switzerland. Excursions by individual lynx and the use of wildlife crossings demonstrate the potential for linking up with other populations. The new population nucleus represents an important contribution to maintaining intraspecific genetic diversity and providing migrating lynx with the opportunity to connect with conspecifics. A population in the Palatinate Forest is facilitating the colonisation of other low mountain ranges in Rhineland-Palatinate. The positive experiences from the reintroduction project can be drawn upon for similar projects.

Rocks are a welcome viewpoint for lynx. © A. Sommer

After LIFE: what happens next

The new Lynx and Wolf Coordination Centre („Koordinationszentrum für Luchs und Wolf“, KLuWo) at the research institute for forest ecology and forestry (FAWF) in Trippstadt will continue to oversee monitoring of the lynx population and will now also work on questions of herd and flock protection and public relations/acceptance. It will also organise management of the lynx population in consultation with Rhineland-Palatinate Ministry of Climate Protection, Environment, Energy and Mobility (MKUEM). Contact details: kluwo@wald-rlp.de.

Lynx like to balance on tree trunks. © A. Sommer



More information on the LIFE project can be found on the project homepage at <https://luchs-rlp.de>. A range of project publications are available for download there.

**LIFE nature project „Reintroduction of lynx (*Lynx lynx carpathicus*) in the Palatinate Biosphere Reserve“
LIFE13 NAT/DE/000755**

Duration	01 Jan. 2015 to 30 Sep. 2021
Project coordinator	Stiftung Natur und Umwelt Rheinland-Pfalz (SNU)
Partners	Parc naturel régional des Vosges du Nord (SYCOPARC), Landesforsten Rheinland-Pfalz with the Forschungsanstalt für Waldökologie und Forstwirtschaft (FAWF), WWF Germany
Total budget	Approx. €2.75 million
EU funding	50 %
Other co-funders	Ministerium für Klimaschutz, Umwelt, Energie und Mobilität (MKUEM), Deutsche Wildtier Stiftung, NABU Rheinland-Pfalz, BUND Rheinland-Pfalz, HIT-Umweltstiftung
Area	Palatinate Forest and Northern Vosges Biosphere Reserve; total area of 3000 km ²

MEASURES

- Translocation of 20 lynx from Switzerland and Slovakia to the Palatinate Forest
- Collaboration across all stakeholder groups in the Franco-German „Lynx Parliament“
- Extensive public relations and acceptance work, environmental education and educational material
- Monitoring and evaluation of the reintroduction process
- Volunteer training
- Development of guidelines on connection
- Construction of a lynx rescue enclosure



Slovakian lynx WRANO during his release into the Palatinate Forest © C. Arens - KLICKFaszination



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 Responsible within the meaning of the Press Act [Pressegesetz]: Jochen Krebühl
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 Phone: 06131-165070, E-mail: kontakt@snu.rlp.de
 www.snu.rlp.de; www.luchs-rlp.de
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