



Preventing the extinction of the Dinaric-SE  
Alpine lynx population through reinforcement  
and long-term conservation



# Success of the lynx releases and genetic reinforcement of the Dinaric population

## Final report

### Action C.3

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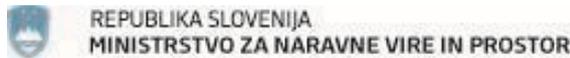
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## 1 Introduction

Prevention of the extinction of the Dinaric – Southeastern Alpine lynx population is the main goal of the LIFE Lynx project (LIFE16 NAT/SI/000634). To fulfill this goal, population reinforcement was needed to increase genetic variability of the inbred Dinaric lynx population. To achieve sufficient genetic reinforcement and decrease the level of inbreeding we planned to integrate at least nine animals from the Carpathians into the existing Dinaric population (within the project action C.3). We relied heavily on best practice examples from other countries when preparing the plan for the lynx population reinforcement (reviewed by Wilson 2018). Individual lynx is considered as integrated into the population if: 1) survives at least one year after the release and, 2) establishes a territory in the area where animals from opposite sex are present. All translocated animals are equipped with telemetry collars, which enable us to monitor the process of their integration in the existing Dinaric population. We have released six animals to the Slovenian part of the Dinaric Mountains; Goru, Catalin, Boris, Maks, Blisk and Sneška and six animals to the Croatian part; Doru, Alojzije, Pino, Emil, Lubomir and Kras. In Slovenia all six lynx were released with “soft release” technique. They were kept in enclosure at the release site to reduce a chance for potential “homing behavior” (i.e. dispersing away from the release site). They stayed in the enclosure for around one month and in that period, local hunters were taking care of them. Two lynx were released from enclosure in Loški Potok, while other four were released from enclosure in Snežnik forests. As preliminary data showed fewer population gaps, we used a hard release technique in Croatia, with all lynx being released right after the translocation in the core area of lynx distribution.

Below we present the status of the released lynx and assess the success of their integration into the existing Dinaric population. This report partially overlaps with the yearly reports for action C.5 (Krofel et al., 2021, Fležar et al., 2022, Fležar et al. 2023, Fležar et al. 2024), where all surveillance data obtained by different methods is presented. In this report, we provide detailed information about the status of the translocated lynx in Dinaric Mountains throughout the whole duration of the project.

## 2 Status of translocated lynx and telemetry

In each subsection below, we briefly describe the most important events for each translocated lynx, taking place since their release into the Dinaric Mountains.

### Lynx Goru



#### **Lynx Goru**

**Estimated age at capture:** 5 years (2019)

**Sex:** male

**Weight:** 22 kg (2019)

**Origin country:** Romania

**Date of capture:** 12. 2. 2019

**Country of release:** Slovenija

**Date of translocation:** 26. 4. 2019

**Date of release:** 14. 5. 2019 (Loški Potok)

**Territory:** Mala gora, Slovenia

**Status:** Established as a territorial animal (2021)



Lynx Goru was captured in Romania in February 2019 and released in Slovenia in May 2019. Seventeen days after his release, he arrived in Mala gora area in the Kočevsko region, where he established his permanent territory. In this area, a female lynx named Teja was already present. Her home range overlaps almost entirely with Goru's territory, which measures approximately 215 km<sup>2</sup>. They encountered each other on the very first day of Goru's arrival in her territory, and they mated in late June 2019.

In August, we detected a single kitten named Mala, which was later captured and collared. Goru's paternity was confirmed through genetic analysis (Krofel et al., 2021). In 2020, based on telemetry data and subsequent genetic confirmation, Goru and Teja mated once again, resulting in the birth of three kittens, one of which was collared male and named Niko.

On March 1, 2020, still during the lynx mating season, Goru temporarily left his territory in Mala Gora and moved towards the Ravna gora area in Croatia, venturing up to 50 km from the edge of his territory. After a month in the Ravna gora area, he returned to his home range in Mala gora. Offspring were not detected in Croatia in the area where Goru was temporarily present, therefore his paternity remained unconfirmed.

On July 14, 2020, he was recaptured, and his collar was replaced, allowing us to continue monitoring him for an additional two years. At the time of the capture, Goru was in good physical condition and weighed 21 kg. At the end of the 2021 mating season, he made another



extra-territorial excursion, heading southwest from his home range towards Snežnik forests in Slovenia and Gorski Kotar in Croatia. After a month, he returned to his home range in Mala gora. It remains unclear whether this excursion resulted in any additional paternity. He mated with the female Teja present within his territory in 2021, which resulted in 3 kittens, two females (Neža and Valentina) and a male named Matic. All offspring were collared (Neža and Valentina in 2022, Matic as an adult lynx in 2024).

During the mating season 2022, Goru again left his home range as he went on two separate mating excursions. First one was in the beginning of March, when he went to the southern area of Kočevski Rog for a couple of days before returning back to his home range in Mala gora. The second excursion was on Velika and Racna gora and only lasted for 2 days. We did not detect his paternity in those locations, however, resident female Teja had 1 kitten that year, which is most likely to be Goru's offspring. In summer 2022 his collar dropped off, and with that his successful telemetry monitoring came to an end, therefore we don't know the location of his mating excursion in 2023, however two Teja's kittens were confirmed within his home range. Within the regular national lynx monitoring with camera traps, Goru was being recorded regularly, with the last time photographed in November 2023.

During his three years of telemetry monitoring, we visited 54 of his kill sites, also cooperating with local hunting clubs. All of his field checked kills were roe deer, except for one fox that was being consumed by Goru.

Given the successful establishment of a new territory and multiple confirmed reproductions, we consider Goru to be successfully integrated into the Dinaric population.

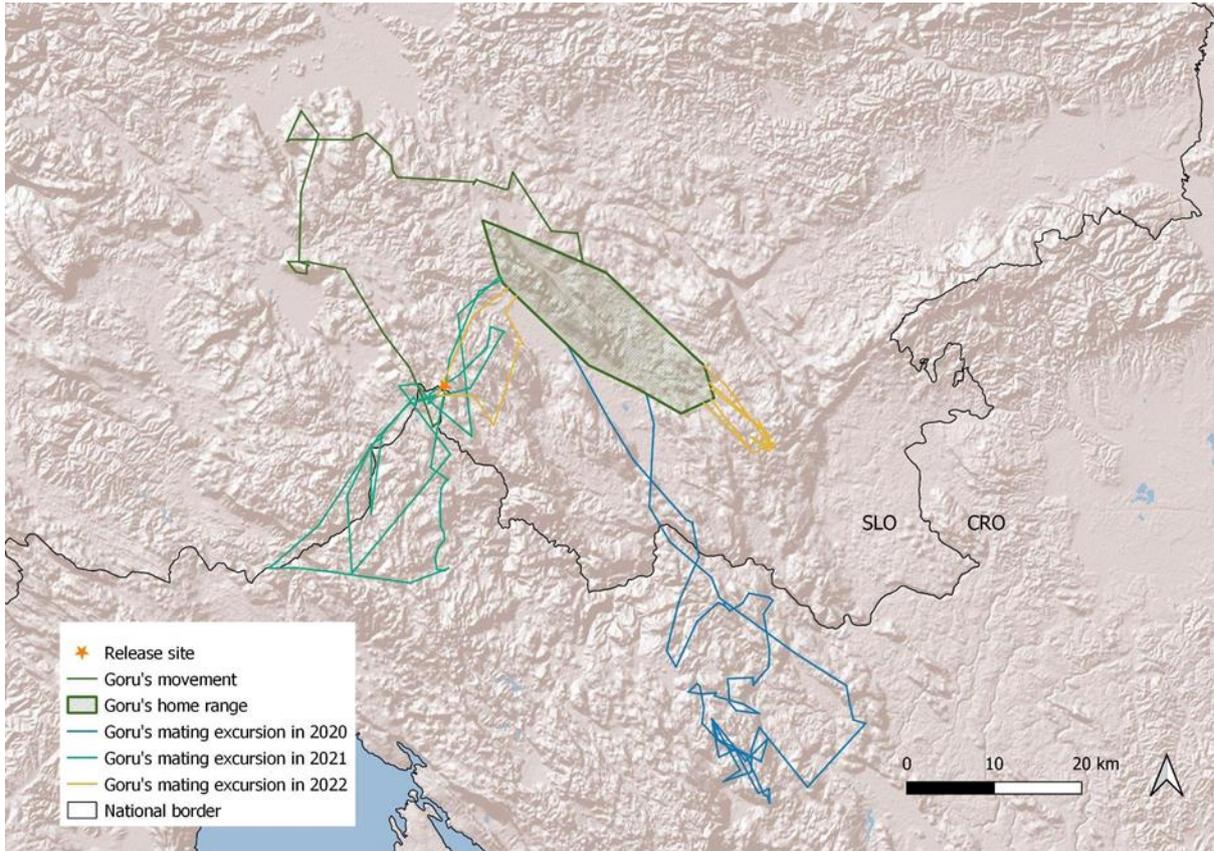


Figure 1: Movement and home range of lynx Goru

## Lynx Doru



### **Lynx Doru**

**Estimated age at capture:** 4 years (2019)

**Sex:** male

**Weight:** 20 kg (2019)

**Origin country:** Romania

**Date of capture:** 27. 2. 2019

**Country of release:** Croatia

**Date of translocation and release:** 4. 5. 2019

**Date of release:** 4. 5. 2019 (Risnjak NP)

**Territory:** Javorniki, Slovenia, (2019)

**Status:** Not integrated - lynx missing since 2020



Doru was captured in Romania in February 2019 and was released in Croatia, specifically in Risnjak National Park, in May. After his release, he spent several days in Risnjak and then moved north, crossing the national border. He arrived in Javorniki, Slovenia, on June 13, 2019, where he made an unsuccessful attempt to cross the Ljubljana-Koper highway. He established his territory in the Javorniki area, covering an area of 130 km<sup>2</sup>. Data from the telemetry collar were only received until the end of January 2020, after which he was no longer detected using any other methods, such as camera traps or non-invasive genetic samples. Therefore, we assume that he is no longer present in the Javorniki area, which was also indicated when in 2020 another collared male named Maks inhabited his territory. Furthermore, we did not detect any potential offspring by DNA analysis; therefore, we can suspect that he was not integrated into the Dinaric population. Since his disappearance from the Javorniki area coincides with the loss of telemetry signal, it seems most likely that he is no longer alive. We substituted him with another lynx from the Carpathian population. During his telemetry monitoring we visited 8 of his kill sites (all eight being roe deer), with cooperation with hunting clubs in the area.

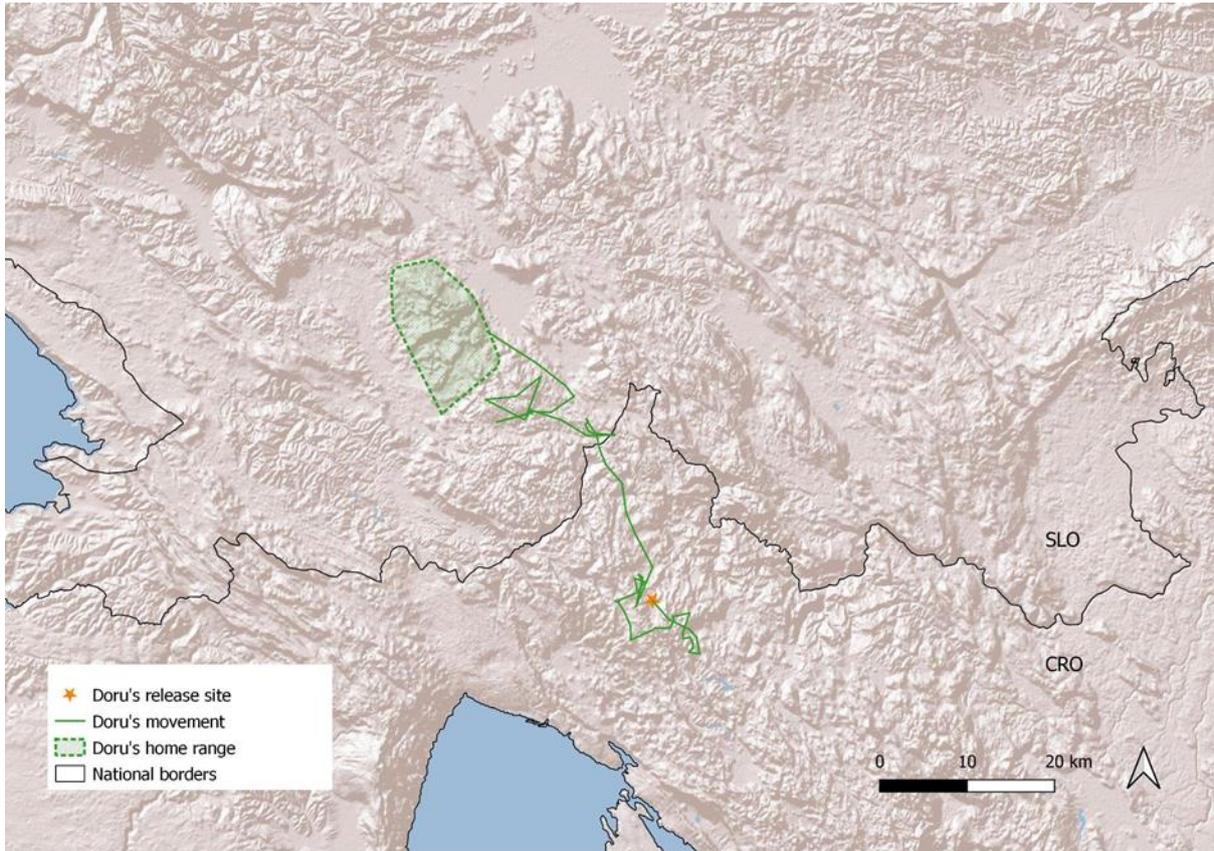


Figure 2: Movement and home range of lynx Doru.

## Lynx Alojzije



### Lynx Alojzije

**Estimated age at capture:** 3-4 years (2019)

**Sex:** male

**Weight:** 20 kg (2020)

**Origin country:** Romania

**Date of capture:** 20. 1. 2020

**Country of release:** Croatia

**Date of translocation and release:** 13. 3. 2020

**Date of release:** 13. 3. 2020 (Paklenica NP)

**Territory:** Sveti Rok, Croatia

**Status:** Established as a territorial animal (2021)



Male lynx Alojzije was captured in Romania on January 20, 2020 and is currently estimated to be 6-7 years old. He was released in Paklenica National Park on March 13, 2020 and soon after the release, he first moved north-west on Velebit Mountains until Baške Oštarije, where he turned back towards the south-east and established his territory around Sveti Rok in southern Velebit where he continuously circulates since May 2020. Alojzije's home range measures around 441 km<sup>2</sup> (MCP 100%). We have successfully identified two females which we continuously monitor with camera traps inside his home range. In March 2021, one of the camera traps recorded 3 individuals in one event, which could arguably be a female with two kittens, although the female could not be identified due to poor record quality. As Alojzije was released on the 13th of March 2020, when the mating season was still going on, theoretically he could have already mated in 2020. Furthermore, in September 2021, the same camera trap photographed a lynx kitten. In the season 2021 - 2022 female Mateja was photographed with three kittens on his territory. We did not register any other males in that area and Alojzije was present on his territory during the mating season so it is very likely he is the father of all observed kittens. In the 2022 - 2023 season no females with kittens were observed on the territory of lynx Alojzije. Unfortunately none of the non-invasive samples collected on his territory could be genotyped. Area where he lives has very low snow cover so collection of samples for DNA analysis is very challenging. Alojzije was regularly captured on camera traps, in the 2021 - 2022 season (8 times), while in the 2022 - 2023 season he was photographed once. The last time he was photographed was in January 2024. Altogether we visited 3 of his kill sites on the field.

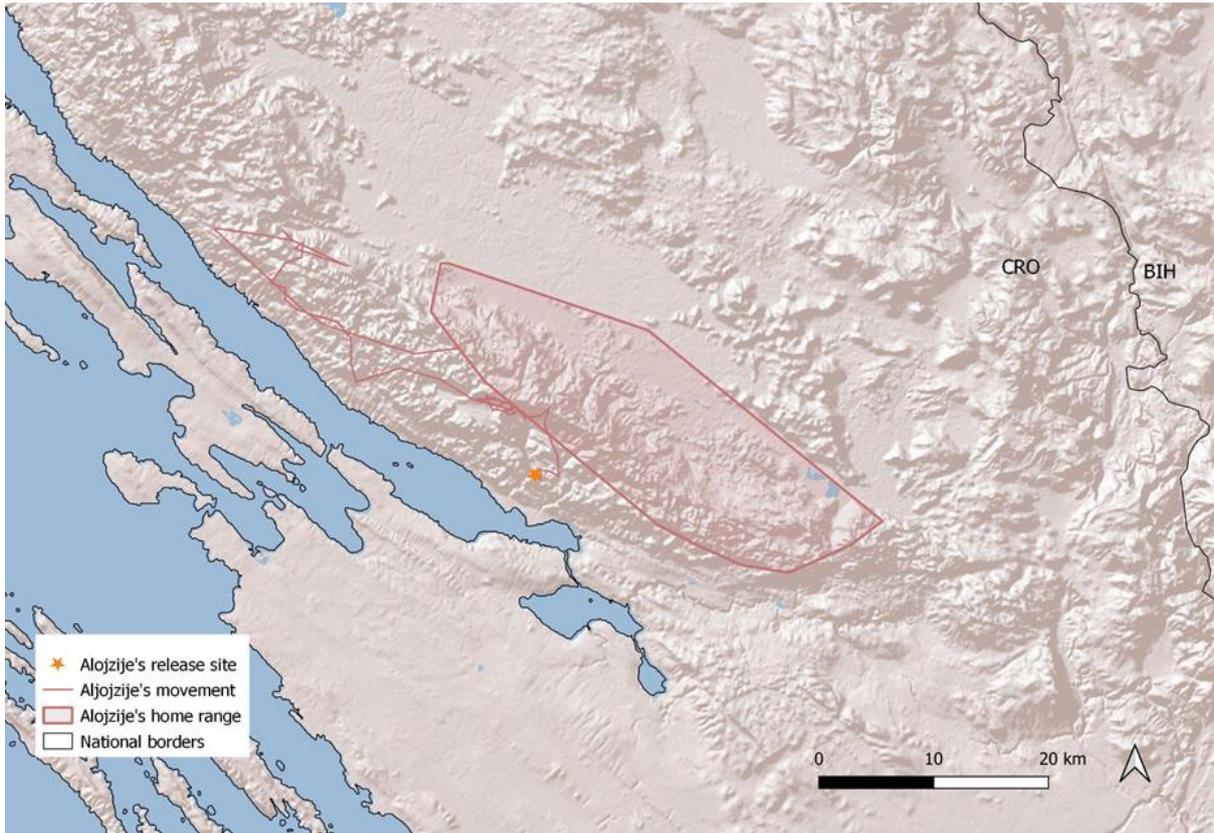


Figure 3: Movement and home range of lynx Alojzije.

## Lynx Catalin



### **Lynx Catalin**

**Estimated age at capture:** 4-5 years (2020)

**Sex:** male

**Weight:** 24 kg (2020)

**Origin country:** Romania

**Date of capture:** 16. 1. 2020

**Country of release:** Slovenia

**Date of translocation:** 7. 3. 2020

**Date of release:** 31. 3. 2020 (Snežnik)

**Territory:** Menišija, Logatec plateau and

Rakitna, Slovenia

**Status:** Established as a territorial animal (2021)



Catalin was captured in Romania in January 2020 and released to Slovenia on 31st March 2020. He is currently estimated to be 6-7 years old and after release in Snežnik plateau, he first went south and crossed the border to Croatia, where he visited the Istra region. Then he turned west and crossed a large part of Gorski Kotar, until crossing the Croatian-Slovenian border again. Back in Slovenia, he first crossed Kočevsko and arrived at the vicinity of Mt. Krim on 19th April. There he established his territory, which covers Menišija, Logatec plateau, Rakitna and recently also Mokrc area. On the western side, his home range is limited by the Ljubljana-Koper highway, which he was so far not able to cross. In summer 2020 he was observed and recorded several times together with a remnant female (known as “Menišija1” from the photo-monitoring). In mating season 2021 he went on a short mating excursion to Kočevsko near the Croatian border, which lasted for three days. He went towards the same direction where lynx Goru and Mihec went, which indicated the presence of a female. In his territory, female “Menišija1” was detected with kittens in the second half of 2021, who have the same coat pattern as Catalin, which is rare in Slovenia and therefore makes it likely that he was the father. However, we could not confirm his paternity with genetic analyses. In mating season 2022, he probably mated again with local female “Menišija1” before he went on excursion that lasted for 6 days in March. Destination of the mating excursion was to the same area as the year before. On 20th of February 2022, Catalin was recaptured and recollared, which prolonged his monitoring for additional two years. In the last year of his telemetry monitoring, we noticed that he increased his home range to the southeastern area, after neighboring local male Igi died. Size of his home range is currently 405 km<sup>2</sup>. In mating season 2023, Catalin had three shorter mating excursions, with all being south of his territory (two towards Kočevsko and one close to Loški Potok). They lasted a couple of days each. He was recorded sharing his kill with a local female from Mokrc in mating season, which probably

means they mated. Catalin seems to be in good physical condition as he is regularly being monitored with camera traps set on his kill sites. So far, we visited 77 of his kills, some of them also with the help of the local hunters.

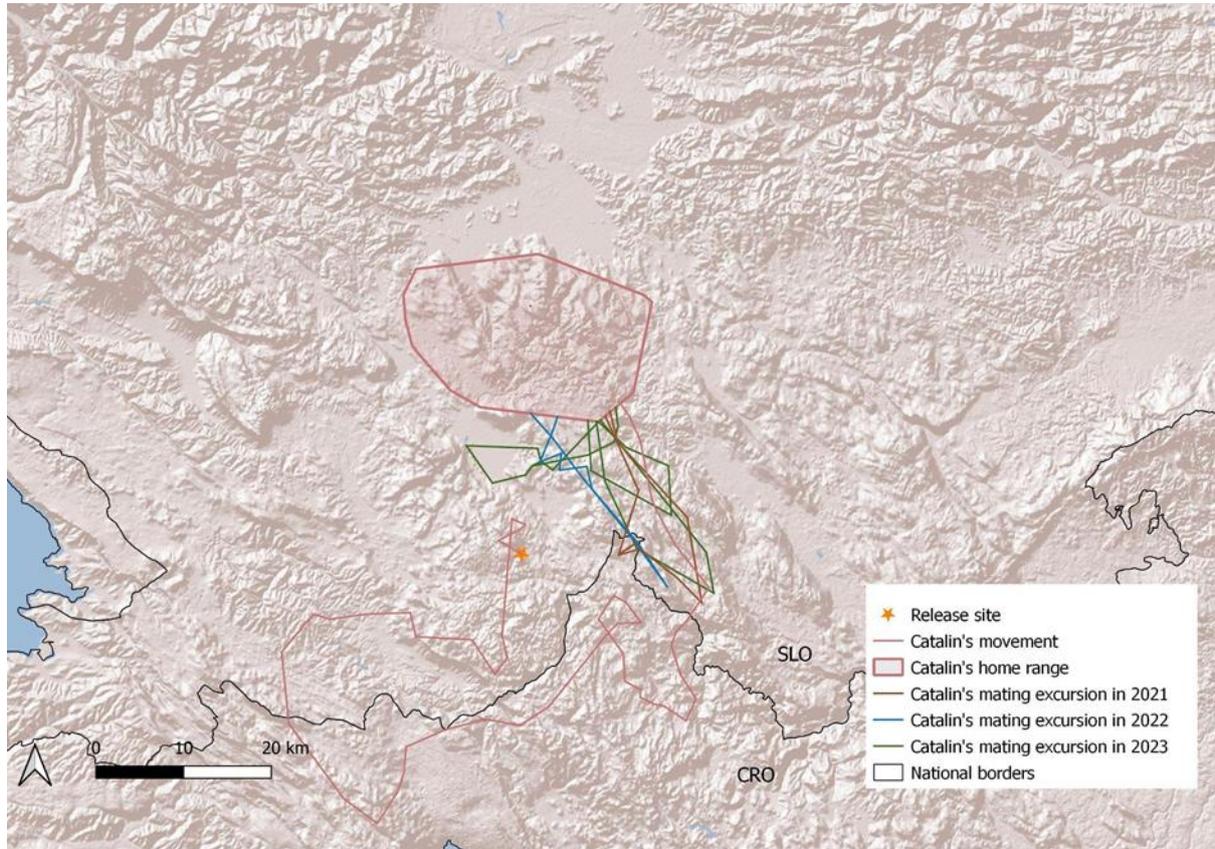


Figure 4: Movement and home range of lynx Catalin.

## Lynx Boris



### Lynx BORIS

**Estimated age at capture:** 1-2 years (2020)

**Sex:** male

**Weight:** 16 kg (2020)

**Origin country:** [Romania](#)

**Date of capture:** 25. 1. 2020

**Country of release:** [Slovenia](#)

**Date of translocation:** 30. 4. 2020

**Date of release:** 28. 5. 2020 (Loški Potok)

**Territory:** Mala Kapela, [Croatia](#)

**Status:** Established as a territorial animal (2021)



Male Boris is a 2-year-old lynx captured in Romania in January 2020. He was translocated to the Loški Potok enclosure and released in late May. Shortly after his release, he ventured into Croatia and stayed around Gerovo for about 2 months, apparently establishing a temporary home range. Most likely due to an encounter with an adult male territorial remnant lynx, he abandoned this area and moved southeast to Vrbovsko, where he stayed for a month. Soon afterward, he moved further south to the Ogulin and Mala Kapela area, where he has been present since October 14, 2020, and has apparently established a territory, although this cannot be definitively confirmed at the moment. In the end of March 2021, his collar stopped sending GPS data; however, the VHF function was still working, therefore we tried to recapture him, however we were not successful, as it was challenging to find fresh kills. Part of his territory is also located on the still area suspected for land mines, which restricted our fieldwork. He was photographed four times with camera traps in 2022 - 2023 monitoring season. In his territory, two remnant females were detected, one with one kitten, which indicates his possible paternity. Altogether we checked 12 of his kill sites in the field. Given the apparent establishment of a territory and the presence of females within his territory, we consider Boris to be successfully integrated into the Dinaric population.

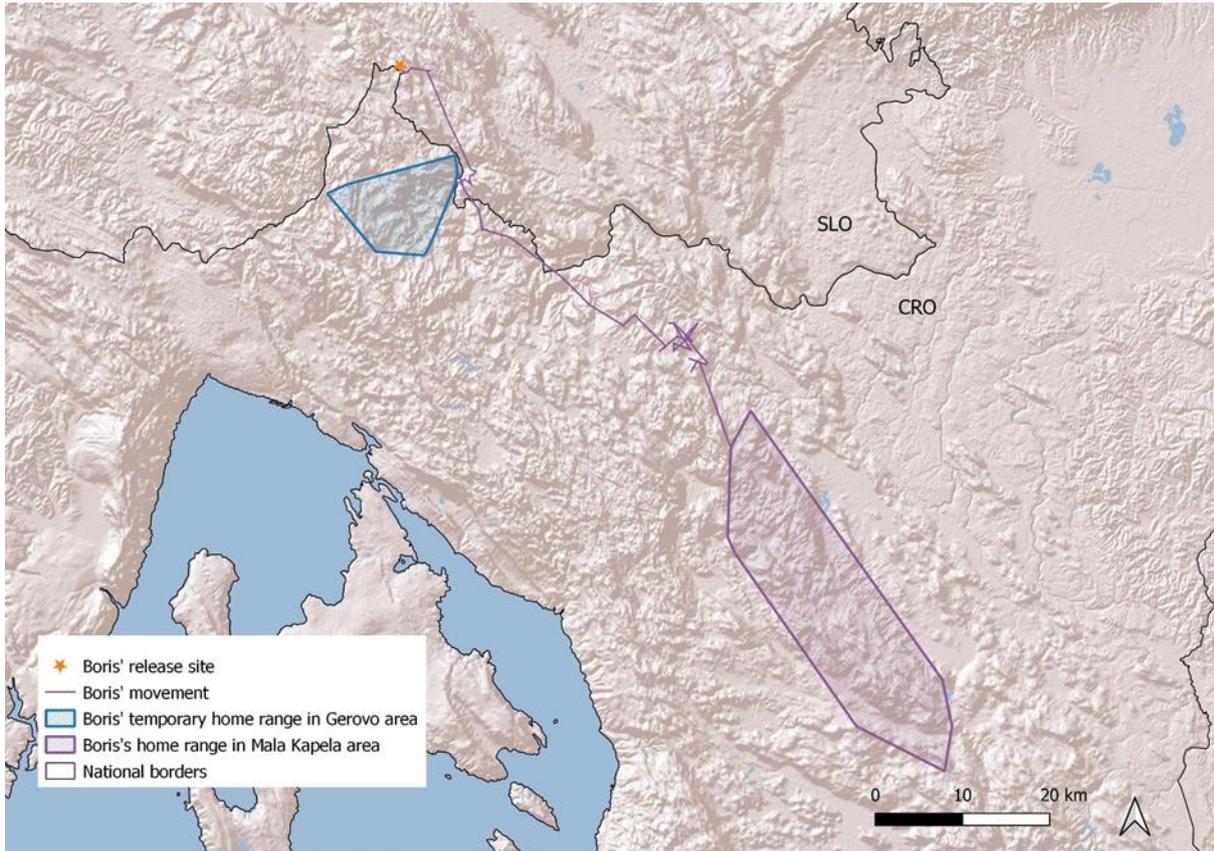


Figure 5: Movement and home range of lynx Boris.

## Lynx Pino



### Lynx Pino

**Estimated age at capture:** 5 years (2020)

**Sex:** male

**Weight:** 20 kg (2020)

**Origin country:** Slovakia

**Date of capture:** 25. 3. 2020

**Country of release:** Croatia

**Date of translocation:** 30. 5. 2020

**Date of release:** 30. 5. 2020 (Velebit)

**Territory:** /

**Status:** Not integrated



Adult male named Pino was captured in Slovakia at the beginning of May 2020. After the quarantine and meeting all the necessary requirements, Pino was transported to Croatia on May 30, 2020 and was released immediately upon arrival at Štirovača forest reserve. The location of the release is the border area between the Velebit Nature Park, the Northern Velebit hunting ground and the Northern Velebit National Park. The lynx was equipped with a radiotelemetry collar that worked properly during the quarantine and transport from Slovakia to Croatia, i.e. determining the animal's location via satellite and delivering data via the GPS network. However, after the release of Pino, the collar no longer sent a single location, suggesting two possible scenarios: collar failure or illegal killing of the animal and destruction of the collar.

In order to find the signal of the Pino's collar, the Croatian LIFE Lynx team organized a search of the wider area around the location of release, as well as a search of the entire Velebit from the sky in several attempts. Also, a network of automatic cameras was set up on Velebit to monitor the lynx population, but Pino was never recorded on the cameras, which further indicated the possibility that the animal was illegally killed soon after the release.

In late September 2023, the LIFE Lynx team was informed by a hunter from the area of lynx release, about the finding of a telemetry collar in the forest less than 2 km from the Pino's release site. After receiving the collar, it was confirmed by the collar number that it belonged to the lynx Pino. It was also found that the strap of the collar had been cut and obviously removed from the animal's neck by a human. Also, damage to the collar indicates that the location and data transmission system was intentionally destroyed. After processing the case by the competent institutions (police), the collar was delivered to the manufacturer in order to obtain the collected data. Retrieved data confirmed the collar stopped working on the 6th day after the release, which is probably the day when he was poached.

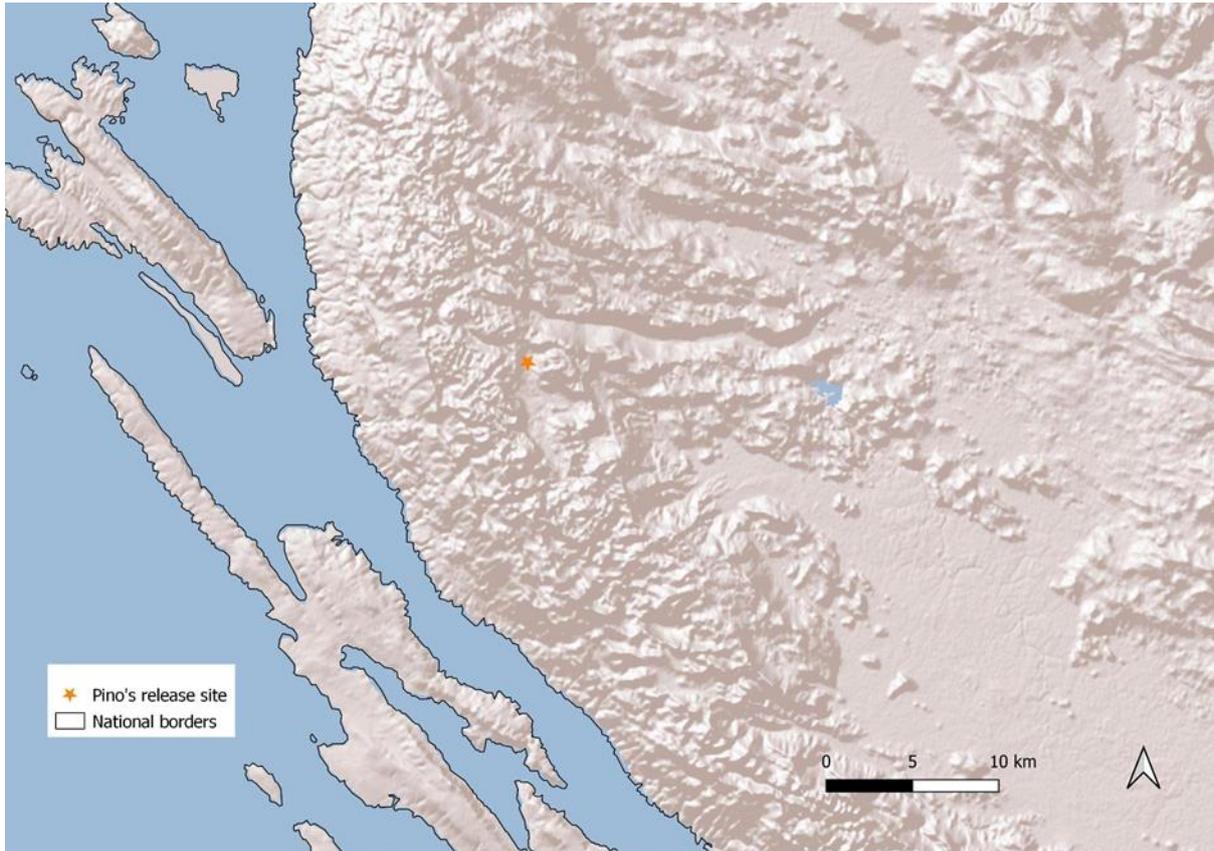


Figure 6: Lynx Pino's release site

## Lynx Maks



### Lynx Maks

**Estimated age at capture:** 2 years (2020)

**Sex:** male

**Weight:** 16 kg (2020)

**Origin country:** Slovakia

**Date of capture:** NA

**Country of release:** Slovenia

**Date of translocation:** 3. 6. 2020

**Date of release:** 23. 6. 2020 (Snežnik)

**Territory:** Menišija (temporary)

**Status:** Unknown



Lynx Maks was translocated from Slovakia to Slovenia after being captured with a broken paw and in poor health in 2019 in Slovakia. He underwent successful rehabilitation at ZOO Bojnice, was transported to Slovenia, and released from the enclosure on the Snežnik plateau in late June 2020. Following his release, he embarked on a journey north toward Javorniki, where, like Doru, he encountered the barrier of the Ljubljana-Koper highway. He stayed in the area for three months, seemingly establishing his territory in the same region previously occupied by Doru. However, on September 24, he departed this area for unknown reasons.

Maks then moved to Menišija and the Logatec plateau, where he spent two months, partly sharing the area with male Catalin, who had arrived a few months earlier, and a resident remnant lynx, likely a female ("Menišija1" identified on camera traps). On November 22, 2020, he left the Menišija area, possibly due to the presence of a territorial male (Catalin), and crossed the Ljubljana-Koper highway. He embarked on an 81-day excursion to the Alps before returning to Menišija, where he stayed until the end of May 2021 but also utilized the area west of the Vrhnika-Unec highway. Subsequently, he left Menišija again and moved west toward Hrušica and Trnovski Gozd, where we lost the signal from his collar in autumn 2021, therefore his status is unknown.

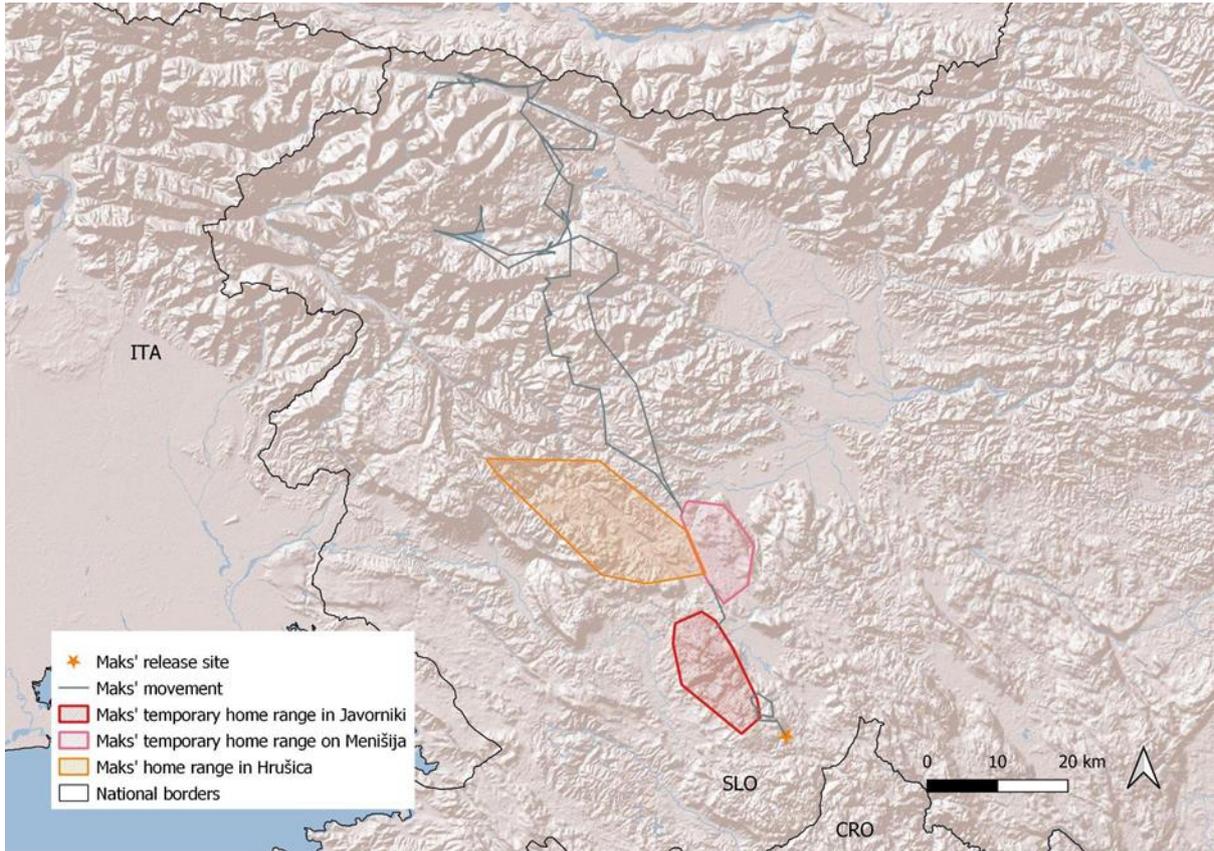


Figure 7: Movement and home range of lynx Maks.

## Lynx Emil



### Lynx Emil

**Estimated age at capture:** 3 years (2021)

**Sex:** male

**Weight:** 20 kg (2021)

**Origin country:** Slovakia

**Date of capture:** 26. 2. 2021

**Country of release:** Croatia

**Date of translocation:** 14. 5. 2021

**Date of release:** 14. 5. 2021 (Velebit)

**Territory:** Baške Oštarije (Croatia)

**Status:** Established as a territorial animal (2022)



Emil is a 5-year old male captured in Slovakia in February 2021 and was translocated to Croatia, where he was released on 14.5.2021 near village Krasno in cooperation with Nature Park Velebit. After exploring northern and central Velebit, he moved southwards where he established his territory in the area of Baške Oštarije, located on the border of the central and southern Velebit. His home range measures around 249 km<sup>2</sup>. Upper NW border of his home range overlaps with the lower SW border of the home range of remnant collared male Pandora. In the season 2022 - 2023 on the territory of translocated lynx Emil, three females were recorded; a female named Tara was photographed with one kitten, while two other females were photographed without kittens; female Trubaja and female lynx Buna, which has been monitored with camera traps since 2018 on the northwestern edge of his territory. Based on this data, we consider him to be integrated into the population. Unfortunately, Emil's collar stopped working in December 2022, a year and a half after his release. His movements were monitored with an Iridium collar, programmed to send the data every two weeks but if the satellite is not reachable at the moment of sending, the data is stored and sent with the next shipment in two weeks. In January 2024 we searched for the VHF signal of his collar from the airplane, but the signal was not found. Lynx Emil was photographed 16 times during the 2022-23 season and his presence was confirmed by genotyping of 3 scat samples. The last time his presence was confirmed by camera trap photo was on March 30th 2023 and since then we can not confirm his status.

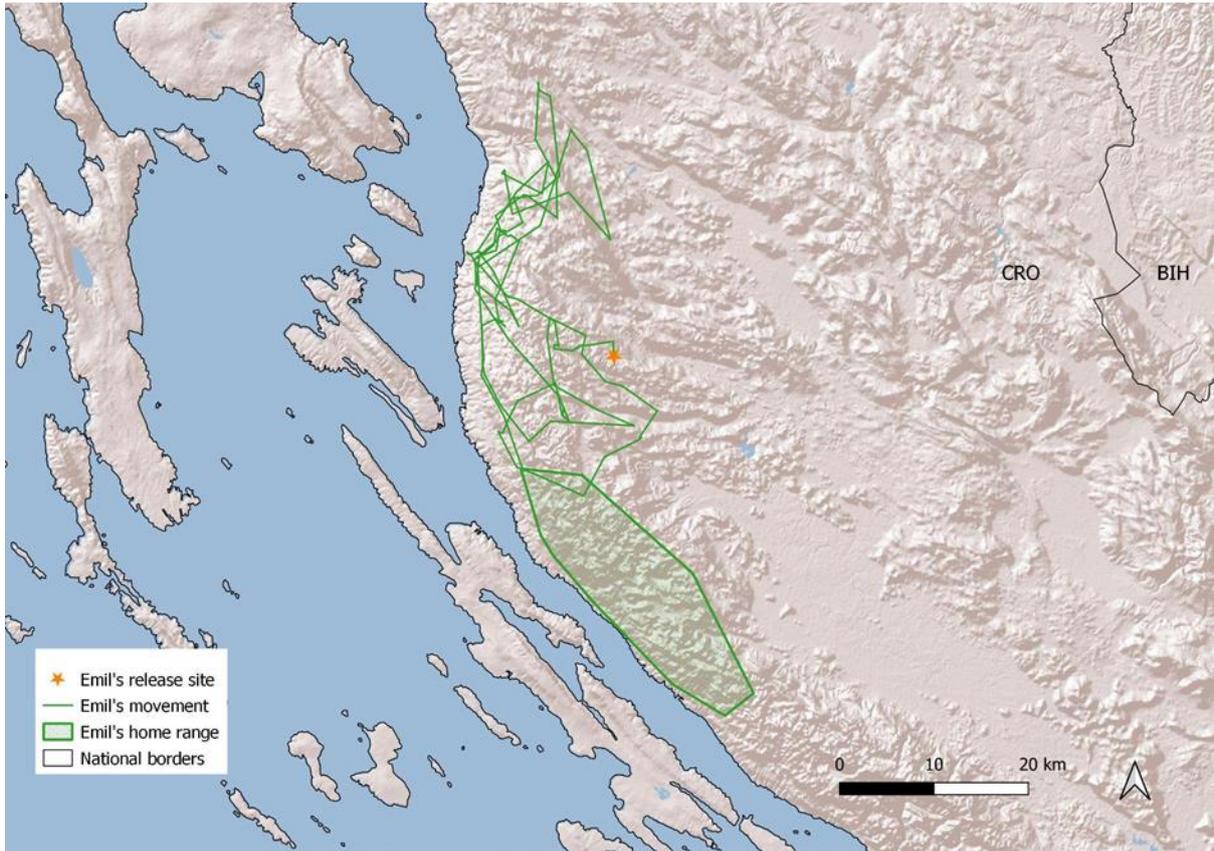


Figure 8: Movement and home range of lynx Emil.

## Lynx Blisk



### Lynx Blisk

**Estimated age at capture:** 6-7 (2022)

**Sex:** male

**Weight:** 27 kg (2022)

**Origin country:** Romania

**Date of capture:** 25. 2. 2022

**Country of release:** Slovenia

**Date of translocation:** 8. 4. 2022

**Date of release:** 17. 5. 2022 (Snežnik)

**Territory:** Northern Javorniki (Slovenia)

**Status:** Established as a territorial animal (2022)



Lynx Blisk was captured at the end of February 2022 in Romania. He weighed 27kg at the time of the capture. On 8th of April 2022, he was translocated to Slovenia, in Snežnik soft release enclosure. In mid May 2022, he was released into the forests of Snežnik, where he stayed for one month, before moving north towards Javorniki plateau, where he established his territory that measures around 130 km<sup>2</sup>. Blisk is sharing his territory with at least one female that was detected in his home range with camera traps. During mating season 2023, he went on a mating excursion to Gorski Kotar, Croatia, that lasted three days. We checked some of his kill sites, where camera traps were deployed and he looked in good physical condition. We also recorded him with camera traps within lynx monitoring.

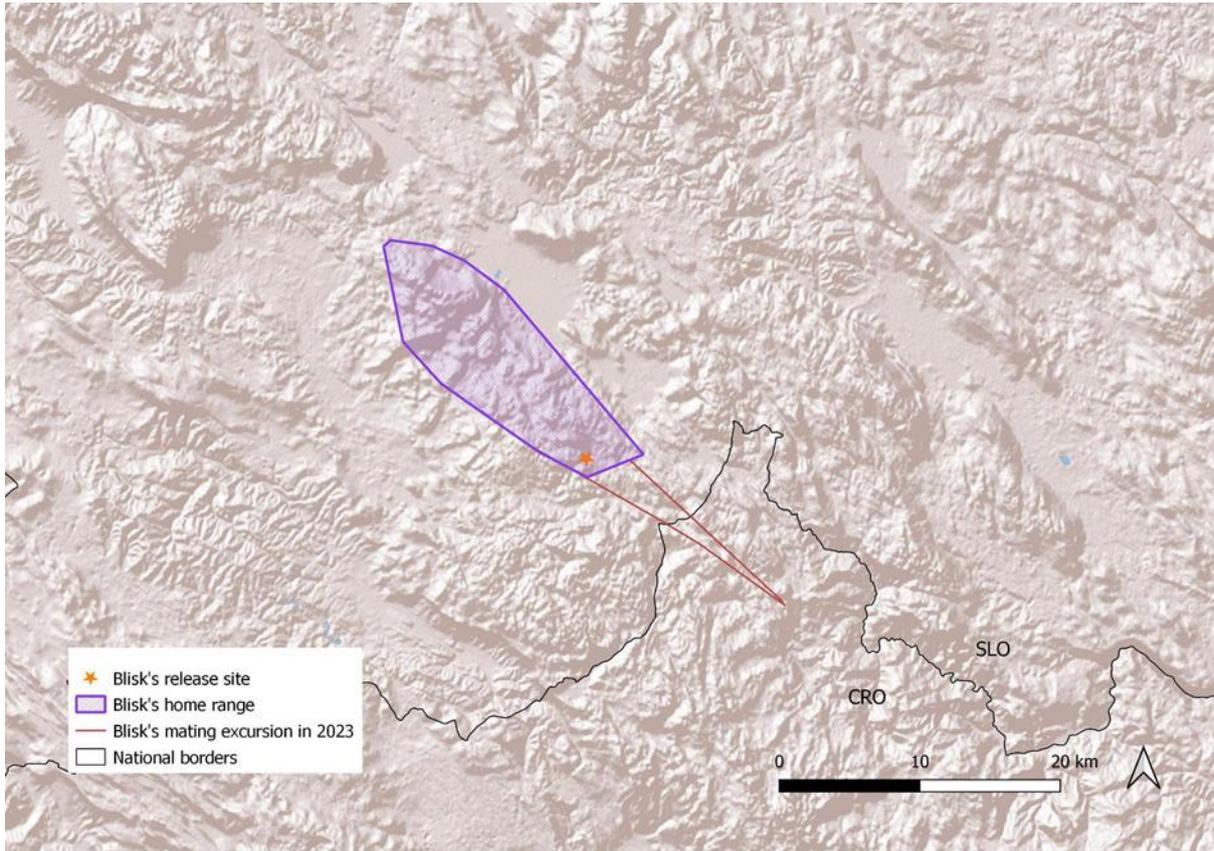


Figure 9: Movement and home range of lynx Blisk.

## Lynx Lubomir



### **Lynx Lubomir**

**Estimated age at capture:** 5-7 (2022)

**Sex:** male

**Weight:** 22 kg (2022)

**Origin country:** Slovakia

**Date of capture:** 10. 4. 2022

**Country of release:** Croatia

**Date of translocation:** 14. 6. 2022

**Date of release:** 14. 6. 2022 (Velebit)

**Territory:** Ramino Korito (Croatia)

**Status:** Established as a territorial animal



Male lynx Lubomir was captured in Slovakia on 10th of April of 2022. Lubomir was then transported to Croatia and released on June 14, 2022, in the Nature Park Velebit. The first locations obtained from his collar showed that the lynx stayed on the release site area for almost ten days after the release. After successfully sending first locations, the collar failed to connect with the satellite many times and during the first 2.5 months the collar sent only two sets of locations showing Ljubo`s movement. Ljubo made a circle around Velebit Mountain and ultimately established territory that measures around 154 km<sup>2</sup> in the hunting ground neighboring Ramino Korito, occupying an area between territories of two other translocated lynx - Emil and Alojzije. During the season 2022- 2023, there were no records of females with kittens within his territory, while Ljubo was photographed with camera traps four times during the season.

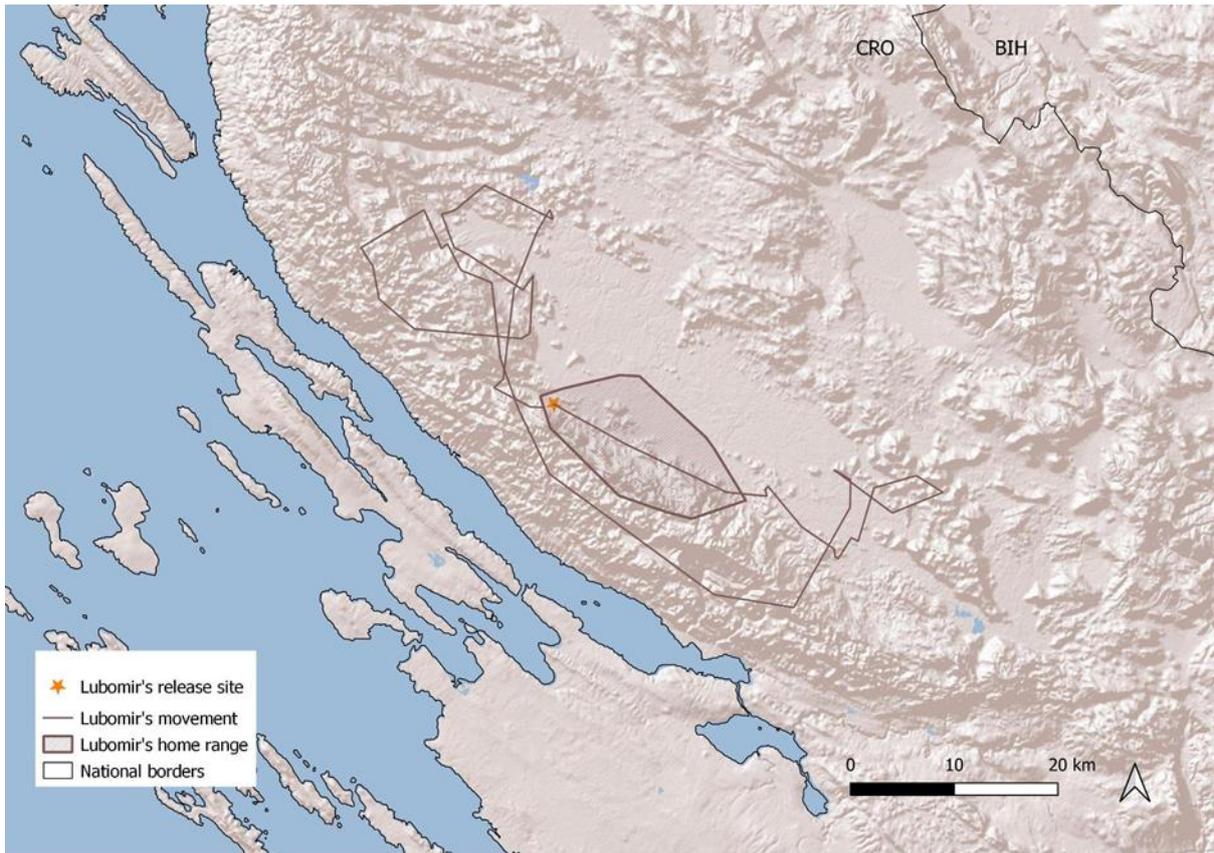


Figure 10: Movement and home range of lynx Lubomir.

## Lynx Kras



### Lynx Kras

**Estimated age at capture:** 2 (2023)

**Sex:** male

**Weight:** 23 kg (2023)

**Origin country:** Romania

**Date of capture:** 19. 1. 2023

**Country of release:** Croatia

**Date of translocation:** 24. 3. 2023

**Date of release:** 24. 3. 2023 (Plitvice)

**Territory:** Gorski Kotar (Croatia)

**Status:** Established as a territorial animal



Lynx Kras was captured in Romania on 19th of January 2023. He was released on the 24th of March 2023 in the Plitvice Lakes National Park. Kras is the sixth and the last lynx released in Croatia within the LIFE Lynx project. Kras started exploring the area shortly after his release. The first set of data obtained from the telemetry collar showed that within the first two weeks, Kras crossed the border of Bosnia and Herzegovina, but soon returned to the area of the Plitvice National Park, near the release site. Soon after, he changed his direction and headed towards Gorski Kotar, where he stayed for three weeks, after which he returned for the second time to the Plitvice area. In May, Kras went to the north and established territory that measures around 116 km<sup>2</sup> in the Gorski Kotar area. In his newly established territory, female lynxes are also present. By visiting the locations that pointed to the place where he caught the prey, we found that Kras is feeding regularly and it seems to us that he is adapting well to his new environment. In June 2023 and February 2024 he was photographed by a camera trap.

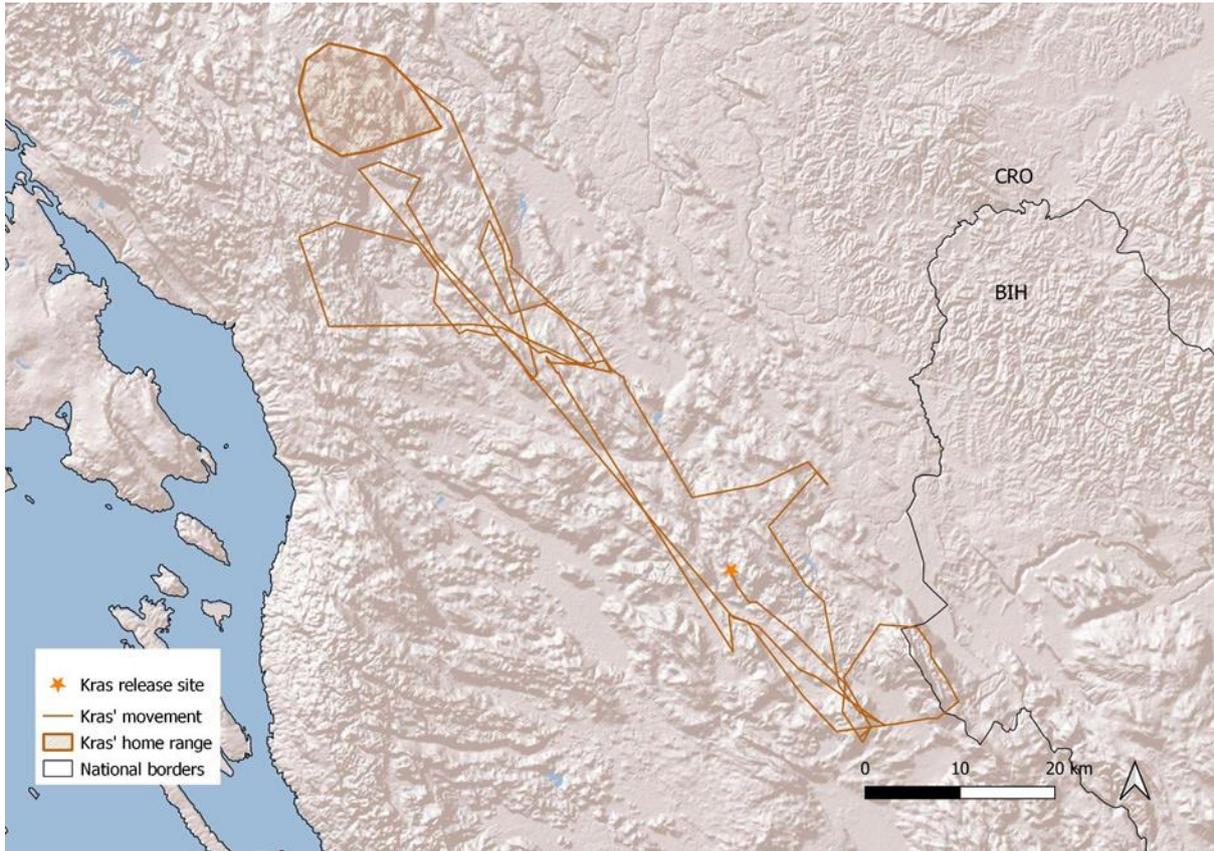


Figure 11: Movement and home range of lynx Kras.

## Lynx Sneška



### Lynx Sneška

**Estimated age at capture:** 5 (2023)

**Sex:** female

**Weight:** 17 kg (2023)

**Origin country:** Slovakia

**Date of capture:** 14. 3. 2023

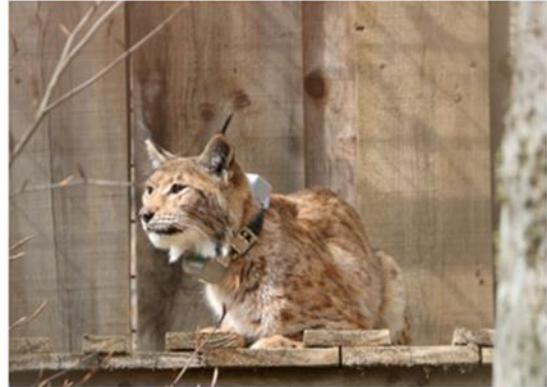
**Country of release:** Slovenia

**Date of translocation:** 23. 4. 2023

**Date of release:** 26. 4. 2023 (Snežnik)

**Territory:** Rakitna plateau (Slovenia)

**Status:** Established as a territorial animal



The last translocated lynx to the Dinaric Mountains was the female lynx Sneška. She was captured in Slovakia on 14th of March 2023 and released on April 26th 2023, on the Snežnik plateau. Sneška was kept in the enclosure for only 3 days due to her being in the late stages of gestation. Sneška was the last lynx that was released in Slovenia within LIFE Lynx projects. She was captured on 14th of March 2023 in Slovakia and was estimated to be five years old at the time of the capture. She was released in the Snežnik mountains in Slovenia. Soon after release, she went east, towards the Velika gora area close to Ribnica, where she stayed for some time. Then she turned west towards Loški Potok, but soon she headed north towards Iška and Rakitna area, where she arrived in the beginning of August 2023. She established her home range there which measures around 67 km<sup>2</sup>, which is relatively small compared to other lynx home ranges. In 2023, we did not detect any offspring of her, however we confirmed she met with another translocated lynx Catalin, with whom she is sharing her territory. We monitored some of her kill sites with camera traps and she was in good physical condition. Within the mating season in winter 2024 she was sharing the territory with a male Katalin. Therefore we consider that she is included into the population.

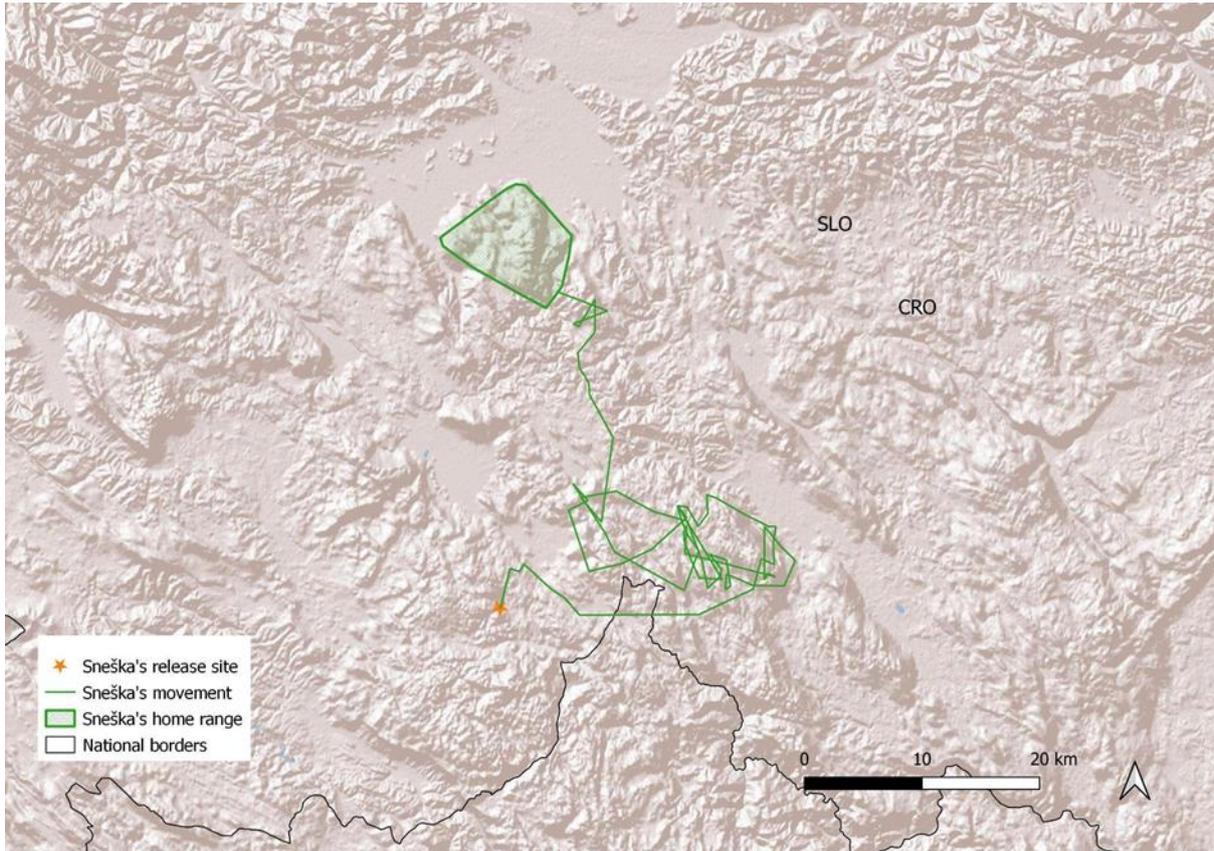


Figure 12: Movement and home range of lynx Sneška.

### 3 Conclusions

With our action we achieved planned population reinforcement. During the project we introduced 12 animals into the existing Dinaric population (6 animals were released in Slovenia and 6 animals were released in Croatia), for 9 of them we can confirm that they integrated successfully: Goru, Alojzije, Catalin, Boris, Emil, Blisk, Lubomir, Kras and Sneška (integration of individual lynx is successful if the released animal survives at least one year after the release, establishes a territory and finds a mate).

Release sites were carefully selected with the help and knowledge of local hunting managers. All the release sites in the C3 action were established in the Dinaric mountain range, east of the Ljubljana-Koper highway, in Slovenia. In Slovenia, there were two different release sites: one in Loški Potok, where we released two lynx, and one in the Snežnik area, where we released another four lynx. In Croatia, there were four different release sites: one in Risnjak National Park, where we released one lynx; one in Paklenica National Park, where we also released one lynx; three releases were made in Velebit; and the last release was at Plitvice National Park. In Slovenia, we used a 'soft release' procedure to maximize the chances for the animals to establish permanent territories. In Croatia, we used the 'hard release' procedure, mainly because the release sites were in the core area of the population and not on the periphery, as was the case in Slovenia.

During the monitoring of lynx using photo-traps and by observations in the Dinarides, we detected that all of the introduced males successfully reproduced, as we detected the presence of cubs in their territories. We detected 14 litters of offspring of introduced lynx. Goru and Katalin had the most successful reproductions, with five litters of cubs detected in Goru's territory and four litters in Katalin's territory, while the remaining successfully introduced lynx had at least one litter in each of their territories. Only female introduced to the Dinarides was Sneška, she was released in 2023 and we have not yet recorded any kittens. She is sharing the territory with the male lynx Catalin in 2023/24. With the data collected, we can confirm that 9 lynx were successfully included into the Dinaric lynx population.

All the released lynx were fitted with GPS-GSM collars before their release. Telemetry tracking of the released lynx provided us with information about the well-being of the translocated animals, including death, injuries, and long-distance migrations. GPS schedules were programmed to operate for at least two years, then an automatic drop-off system released them from the animal.

During the project, we attempted to recapture translocated lynx in order to change their collars and prolong telemetry monitoring. In the C3 action, we successfully recaptured two lynx, Catalin and Goru, and equipped them with new telemetry collars.



On average, Eurasian lynx use their prey for 4 days, returning to feed every night. This gave us an opportunity to locate the kill site during the day while lynx were still returning to the kill site and installed automatic video cameras, on 64 of lynx kills altogether. Video footage enabled us to visually assess animals' physical condition (health status) and to check kitten survival for reproducing females. In total we checked 197 kill sites in the field.

All animals involved in Action C3 have been released. The final release occurred on April 26, 2023, when we released the female lynx Sneška in Snežnik. Monitoring of the translocated animals is ongoing; Catalin, Blisk, Sneška, Lubomir and Kras are still transmitting GPS telemetry data, and we are seeking ways to extend this monitoring period.

The successfully integrated lynxes reduced the inbreeding level of the population, and the positive impact on the genetic status of lynx in the Dinaric Mountains will continue.



## 4 References

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