Co-funded by the European Union

NATURA 2000

EUROKITE

TB Raab
Technisches Büro für Biologie

MEGEG

WINGSPAN 2026

WINGSPAN CONFERENCE
NOVEMBER 04, 2026
BERLIN

Final Conference

LIFE EUROKITE
Main Results

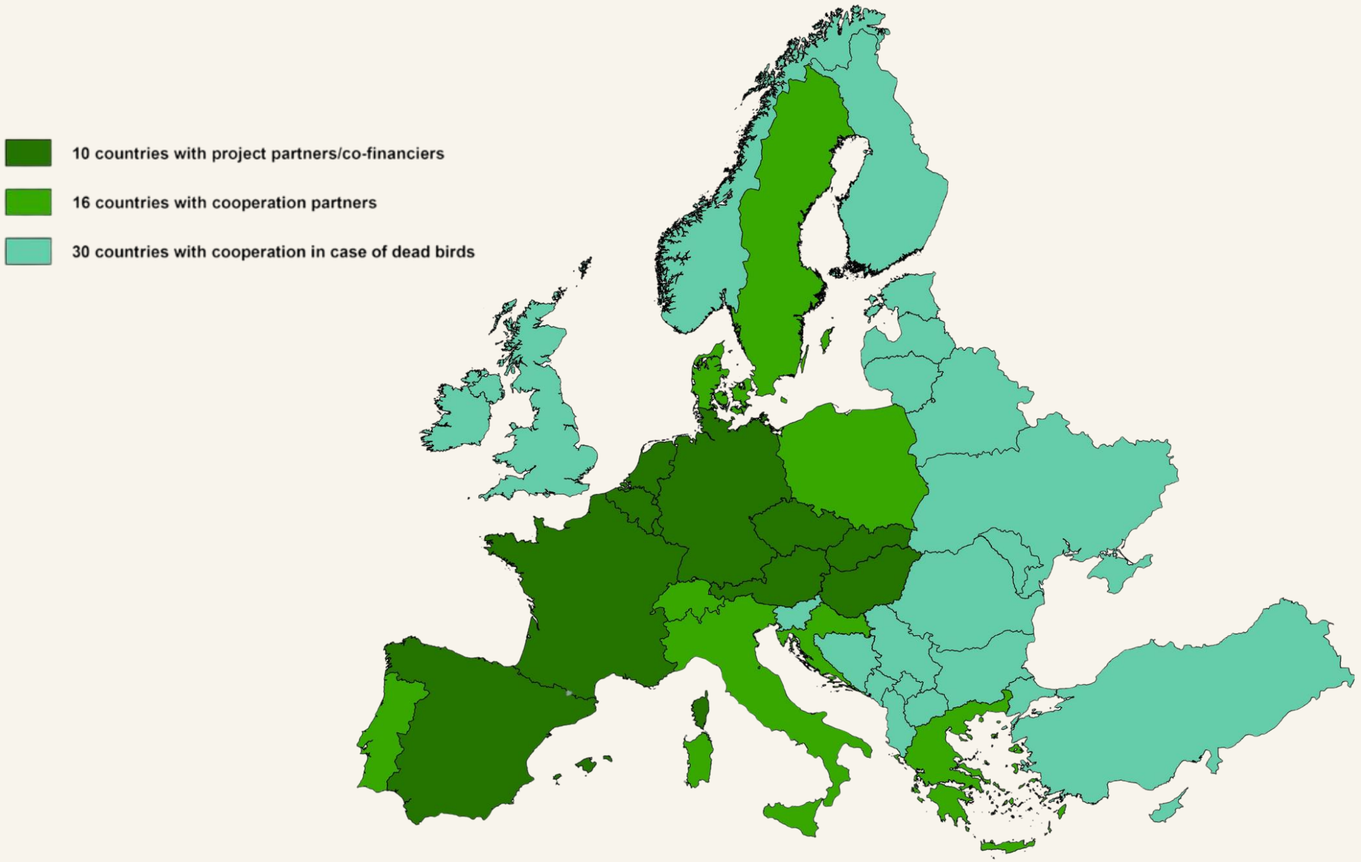
Cross-border Protection of the Red Kite in Europe by Reducing Human - Caused Mortality 2019-2027

DI Andreas Gärtner
Project Administrator LIFE EUROKITE



Red Kite
© Hansruedi Weyrich

Project Overview



Project duration:

07.12.2019 - 31.01.2027

Coordinating beneficiary:

MEGEG

TB Raab was commissioned to implement the LIFE EUROKITE project after a pan-European public tender.

Scale of Collaboration

Coordinated by with 18 project partners, 10 co-financiers, and 73 cooperation partners across Europe.

Total budget:

€ 9,537,423

EU contribution (60%):

€ 5,722,454

Project Partners:

Co-financiers:

Coordinating beneficiary:

Core Objective

Significant **reduction of impact of poisoning** (reduction of the rate of poisoning cases by 5% on EU level).

Identification and **solving of** problematic cases concerning **electrocution / collision**. Reduction of other anthropogenic reasons of mortality.

Population reinforcement in Spain halters range loss and identifies the factors causing a decline of the populations.



Poisoned Red Kite
© AMUS



Dead Red Kite under a power line
© LIFE EUROKITE



Partners of the reinforcement project in Spain
© AMUS

Telemetry

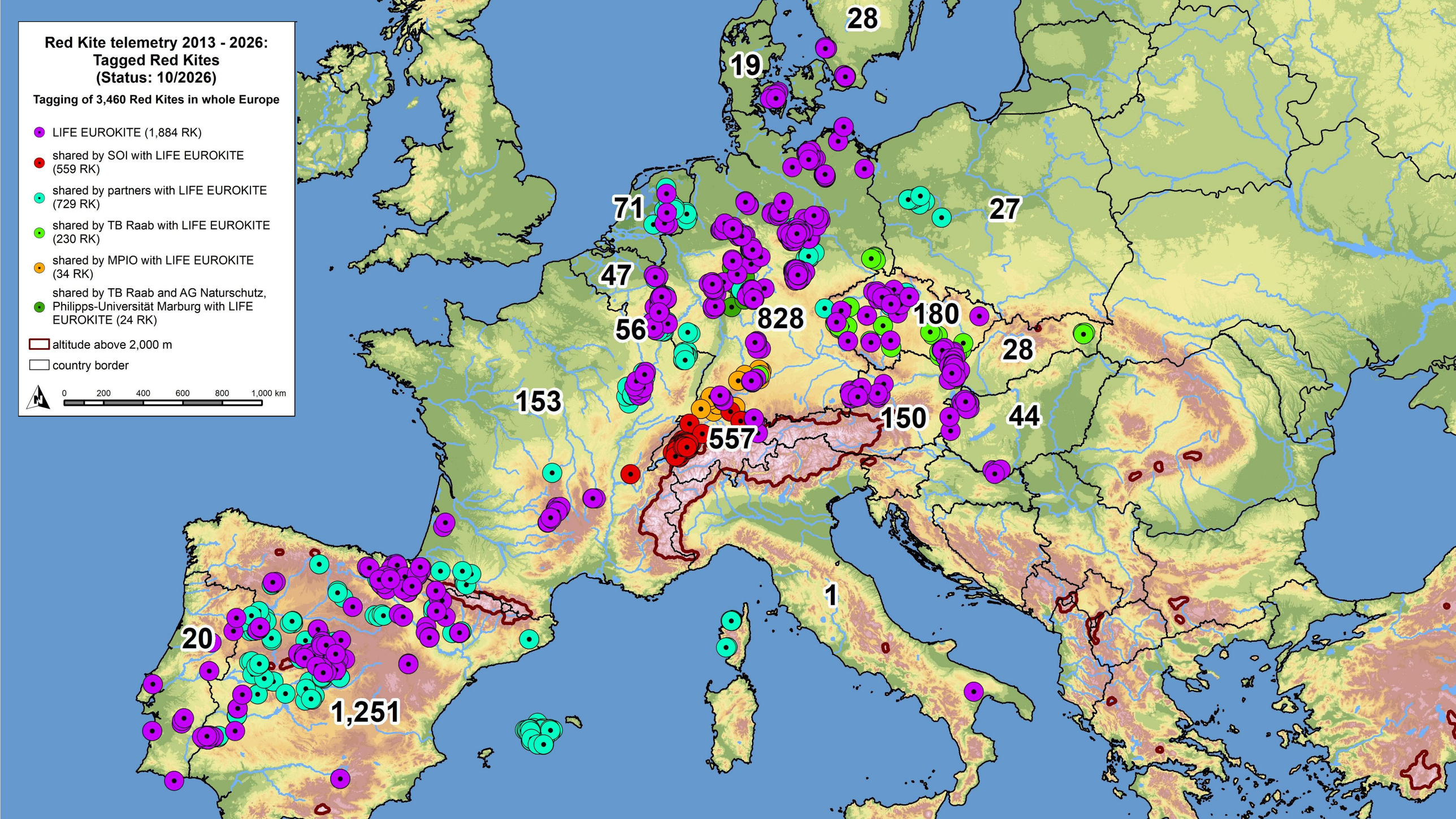
The core idea of the LIFE EUROKITE project was to use telemetry technology to identify the spatial habitat use of the target species and quantify ***the causes of mortality.***

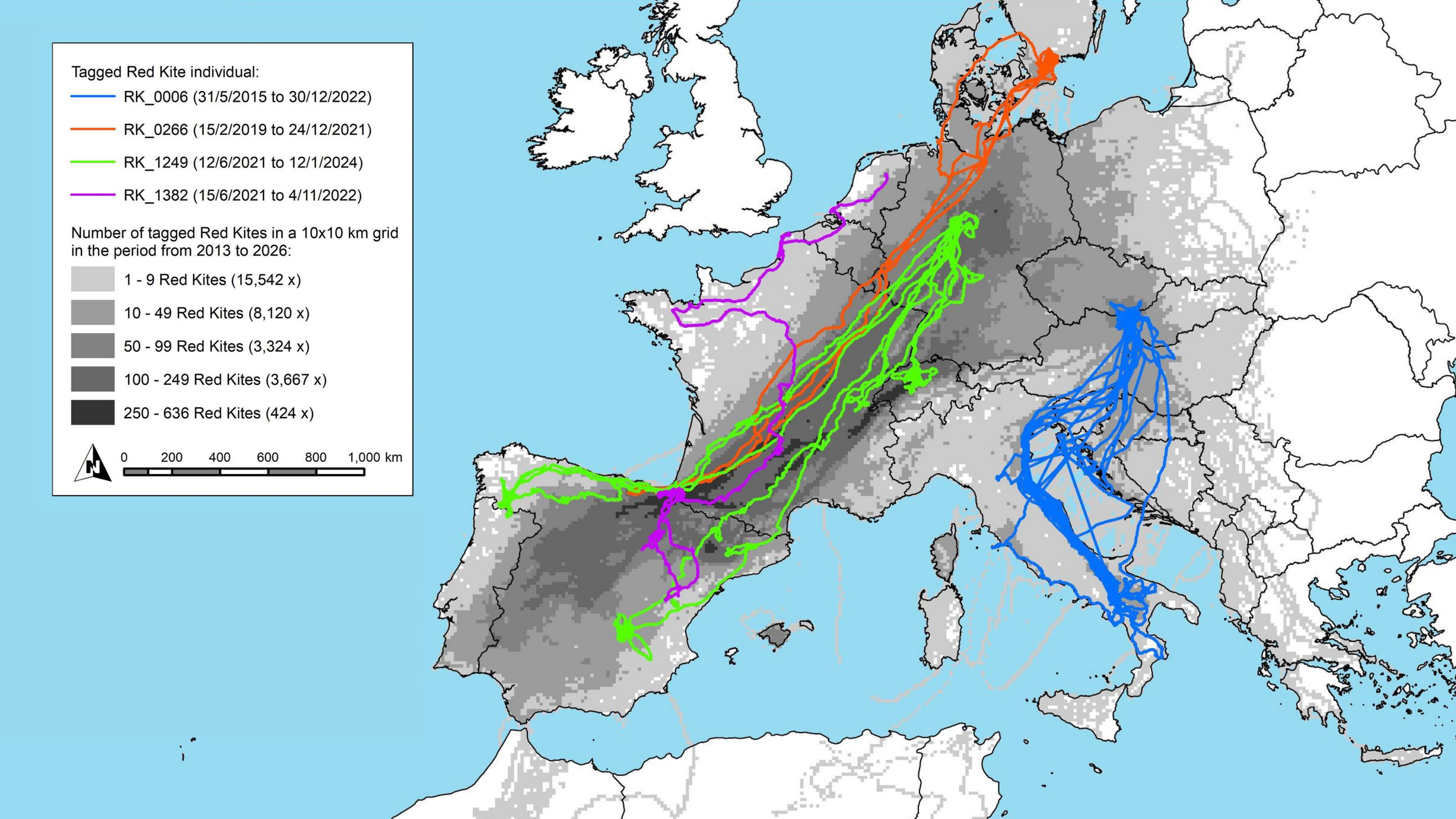
Telemetry Database: Centralized tracking network compiling data from ***over 3,460 tagged Red Kites.***

Additional, ***other species*** (White-tailed Eagle, Black Kite, Imperial Eagle & Honey buzzard were tagged too, but with a much smaller sample size)



Tagged red kites in the nest
© Boris Maderič


Red Kite telemetry 2013 - 2026:
Tagged Red Kites
(Status: 10/2026)
Tagging of 3,460 Red Kites in whole Europe
LIFE EUROKITE (1,884 RK)
shared by SOI with LIFE EUROKITE (559 RK)
shared by partners with LIFE EUROKITE (729 RK)
shared by TB Raab with LIFE EUROKITE (230 RK)
shared by MPIO with LIFE EUROKITE (34 RK)
shared by TB Raab and AG Naturschutz, Philipps-Universität Marburg with LIFE EUROKITE (24 RK)
altitude above 2,000 m
country border
0 200 400 600 800 1,000 km
28
19
71
27
47
828
180
56
28
153
150
44
557
1
20
1,251


Tagged Red Kite individual:
RK_0006 (31/5/2015 to 30/12/2022)
RK_0266 (15/2/2019 to 24/12/2021)
RK_1249 (12/6/2021 to 12/1/2024)
RK_1382 (15/6/2021 to 4/11/2022)
Number of tagged Red Kites in a 10x10 km grid in the period from 2013 to 2026:
1 - 9 Red Kites (15,542 x)
10 - 49 Red Kites (8,120 x)
50 - 99 Red Kites (3,324 x)
100 - 249 Red Kites (3,667 x)
250 - 636 Red Kites (424 x)
N
0 200 400 600 800 1,000 km

Breeding Monitoring

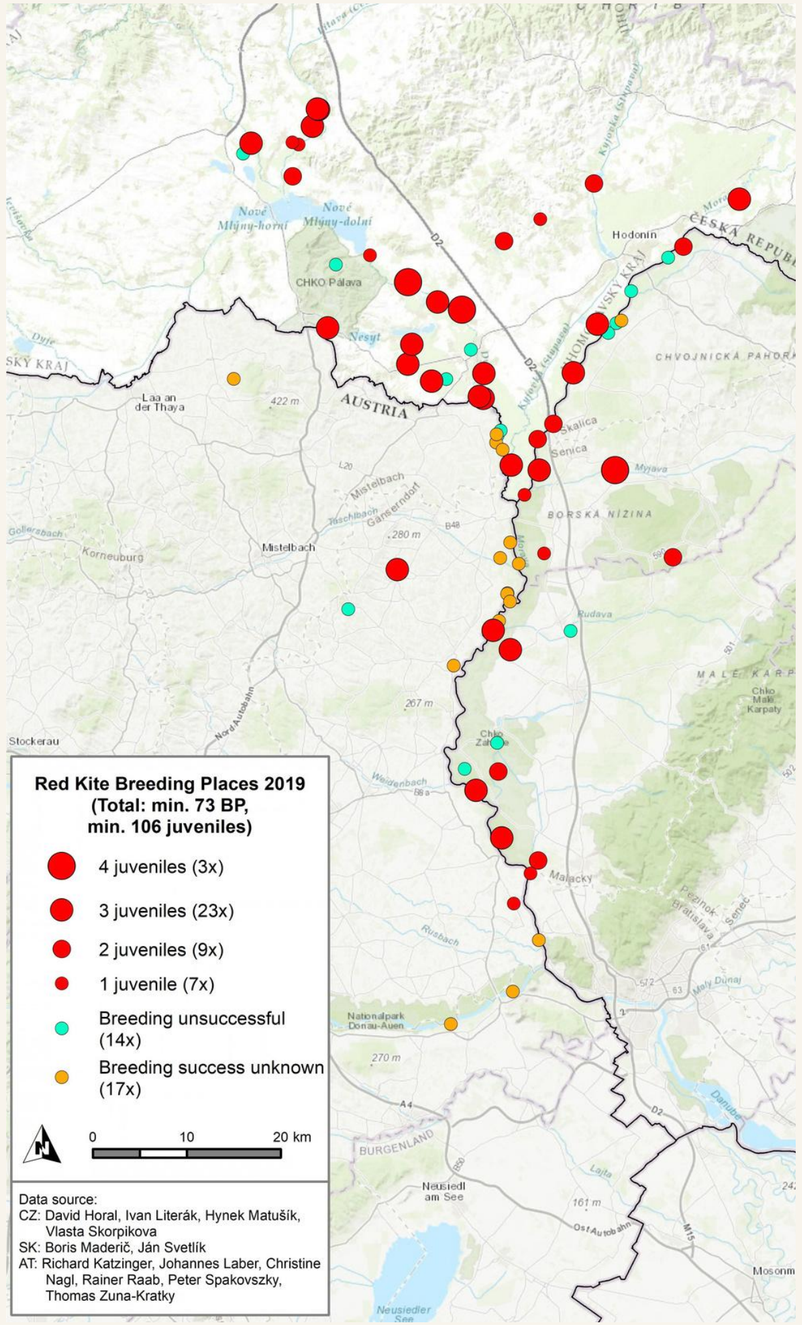


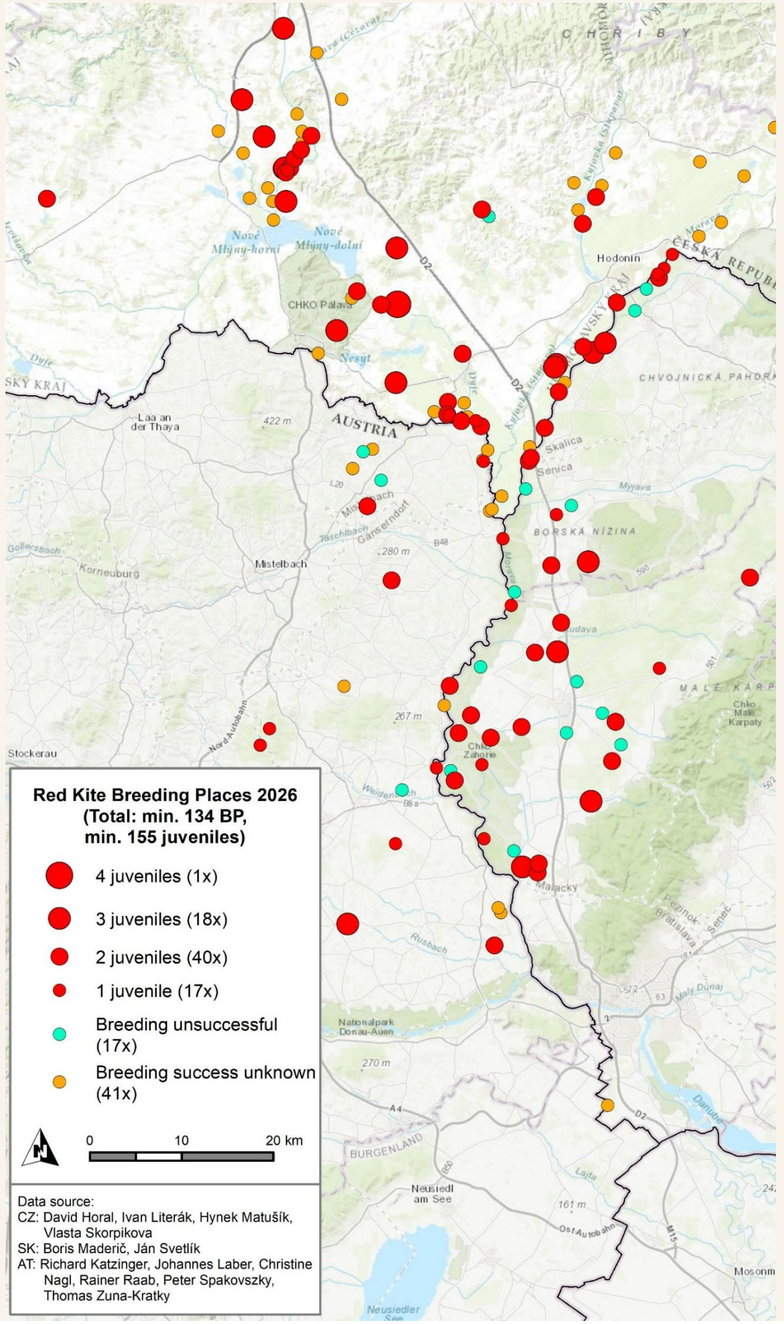
Red kite chicks
© Boris Maderič

Non-Invasive Monitoring Technologies: Implementation of drones and GoPro nest cameras allowed field teams to ***safely monitor*** nest productivity and fledging success without causing disturbance to the breeding birds.

Extremadura (Spain): Documented red kite breeding population expanded from 20 pairs in 2020 to 51 pairs in 2025— ***a 155% population increase*** during the project.

Three-Border Region (Austria, Czech Republic, Slovakia): Breeding pairs grew from 73 pairs (min. 106 juveniles) in 2019 ***to 104 breeding pairs (min. 125 juveniles) in 2025.***


Red Kite Breeding Places 2019
(Total: min. 73 BP,
min. 106 juveniles)
4 juveniles (3x)
3 juveniles (23x)
2 juveniles (9x)
1 juvenile (7x)
Breeding unsuccessful (14x)
Breeding success unknown (17x)
0 10 20 km
Data source:
CZ: David Horal, Ivan Literák, Hynek Matušík, Vlasta Skorpikova
SK: Boris Maderič, Ján Svetlík
AT: Richard Katzinger, Johannes Laber, Christine Nagl, Rainer Raab, Peter Spakovszky, Thomas Zuna-Kratky
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Laa an der Thaya
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Korneuburg
Stockerau
Malacky
Neusiedl am See
BURGENLAND
BORSKÁ NÍŽINA
MALÉ KARPATY
Nationalpark Donau-Auen


Red Kite Breeding Places 2026
(Total: min. 134 BP,
min. 155 juveniles)
4 juveniles (1x)
3 juveniles (18x)
2 juveniles (40x)
1 juvenile (17x)
Breeding unsuccessful (17x)
Breeding success unknown (41x)
0 10 20 km
Data source:
CZ: David Horal, Ivan Literák, Hynek Matušík, Vlasta Skorpikova
SK: Boris Maderič, Ján Svetlík
AT: Richard Katzinger, Johannes Laber, Christine Nagl, Rainer Raab, Peter Spakovszky, Thomas Zuna-Kratky
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Roosting Site
© Jan Svetlík

***Standardized Monitoring*:** Coordinated January winter counts covering 267 selected roosting sites across 18 countries, with 179 sites consistently monitored in 16 countries.

LIFE EUROKITE Winter Count

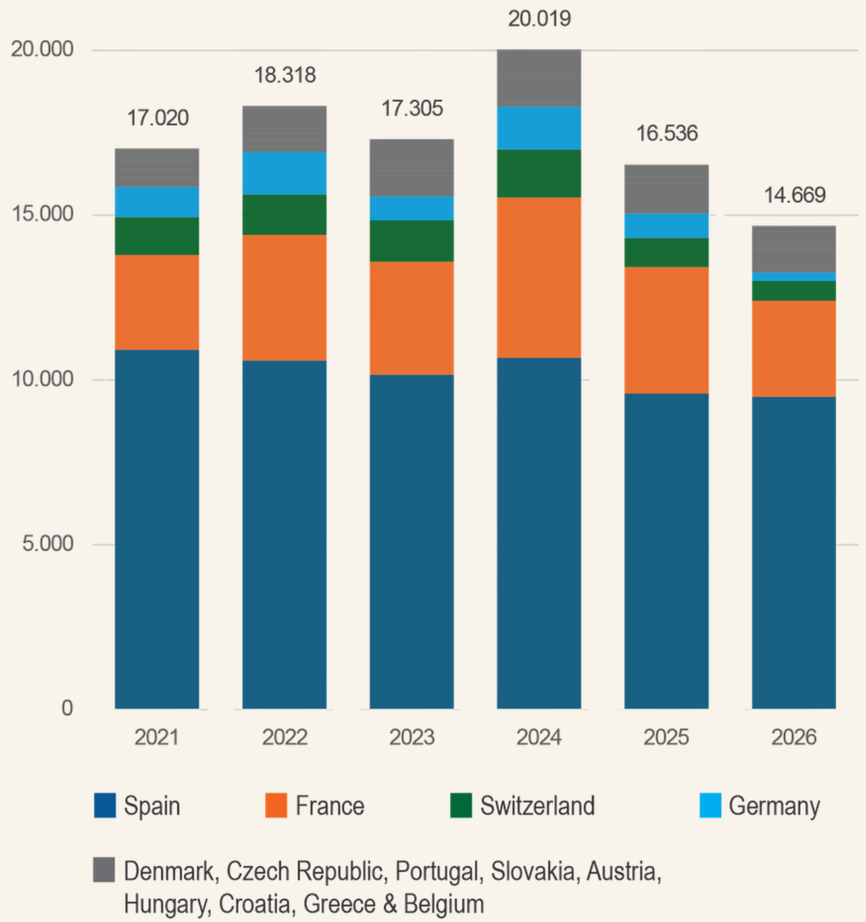
Regional Growth vs. Broad Trends:

Extremadura (Spain):

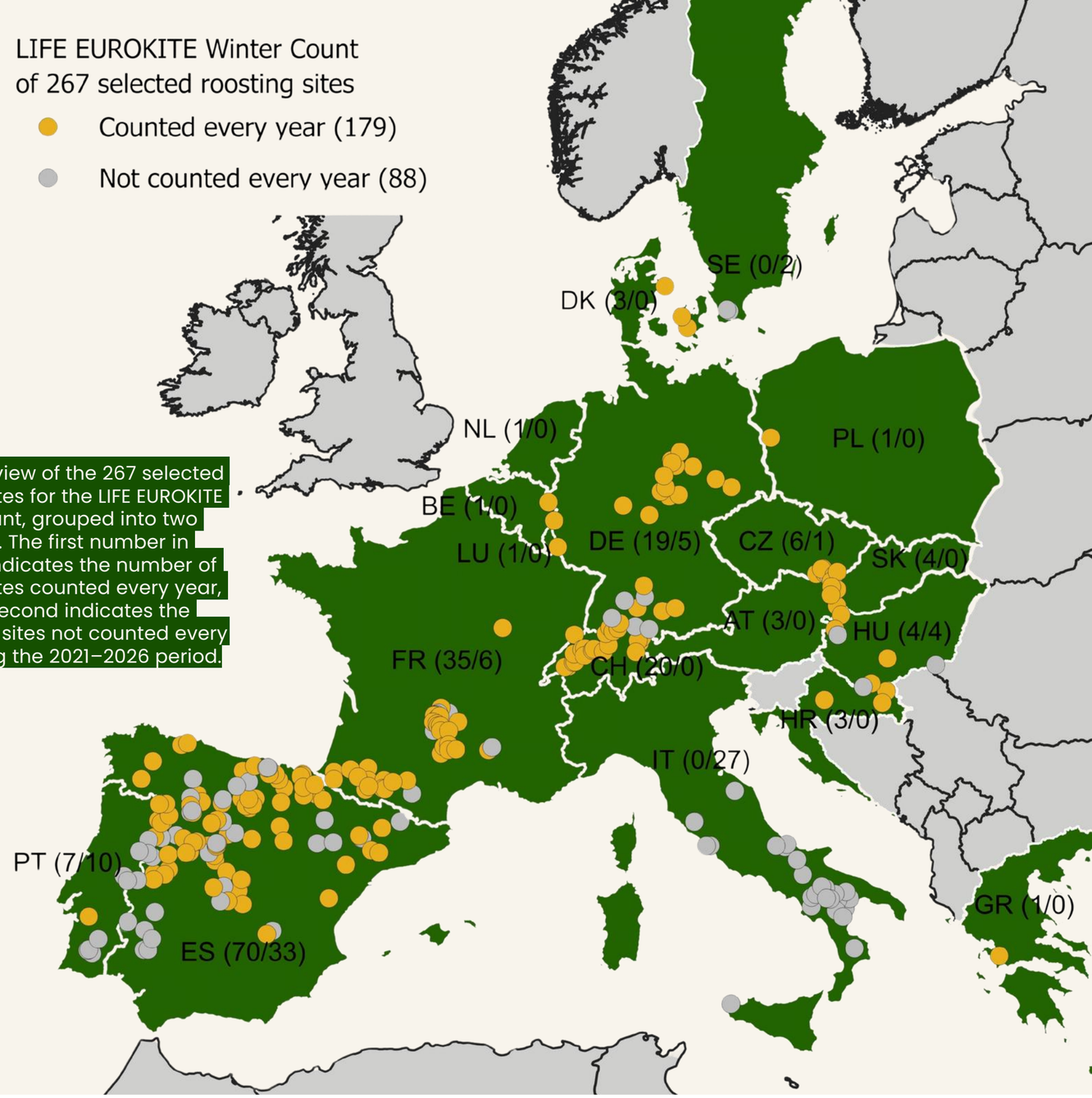
Wintering population ***expanded by 35%*** during the project (from 5,404 individuals in 2020 to 7,311 in 2025).

Central Europe:

Overall wintering counts in countries like Germany and Switzerland experienced ***declines in 2025–2026,*** influenced by winter weather conditions, natural population cycles, and shifting roosting behaviors.



Graph: Total number of red kites counted at roosting sites (179) surveyed annually during the LIFE EUROKITE Winter Count 2021–2026. Italy and Sweden are excluded because no roosting sites in these countries were surveyed every year. Luxembourg, the Netherlands and Poland are excluded because no red kites were recorded at the selected roosting sites in these countries.

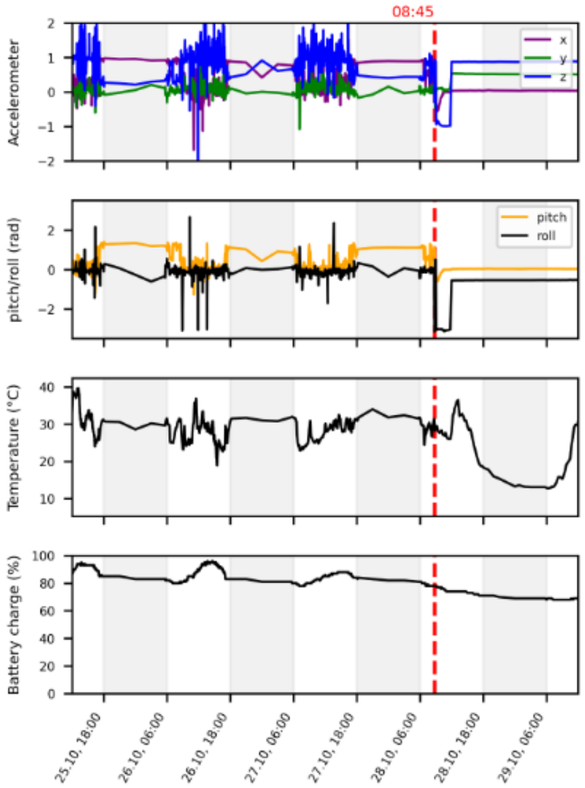


Map: Overview of the 267 selected roosting sites for the LIFE EUROKITE Winter Count, grouped into two categories. The first number in brackets indicates the number of roosting sites counted every year, while the second indicates the number of sites not counted every year during the 2021–2026 period.

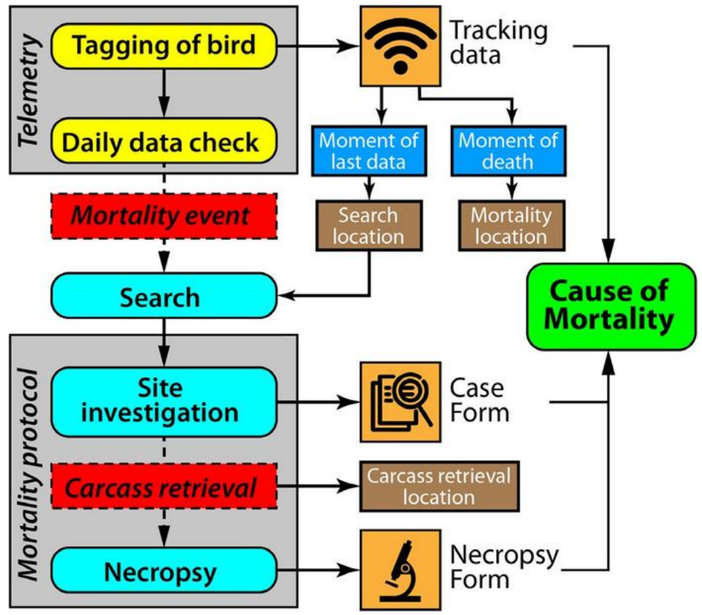
The LEAP Framework

The LIFE EUROKITE Assessment Protocol (LEAP) is a standardized framework designed to accurately identify the timing, location, and cause of death for GPS-tagged birds.

LEAP Protocol: Combines real-time GPS tracking, standardized site investigations, and expert necropsies to achieve high-quality mortality determination in ***64% of cases.***



Tracking metadata from Red Kite RK_2159 (road collision victim): The four plots show the recorded tracking metadata between October 25 at 12:00 and October 29 at 12:00, transmitted once every 5 h. Gray shaded areas represent nighttime, white shaded areas daytime. The moment of mortality is marked with a red, dashed vertical line on the morning of October 28 at 8:45



Schematic representation of the process to determine the cause of mortality of GPS-tagged Red Kites as part of the LIFE EUROKITE assessment protocol (LEAP)
© Panter et al. (2025)

LIFE EUROKITE Crime Report



Bait full of Carbofuran
© RPS

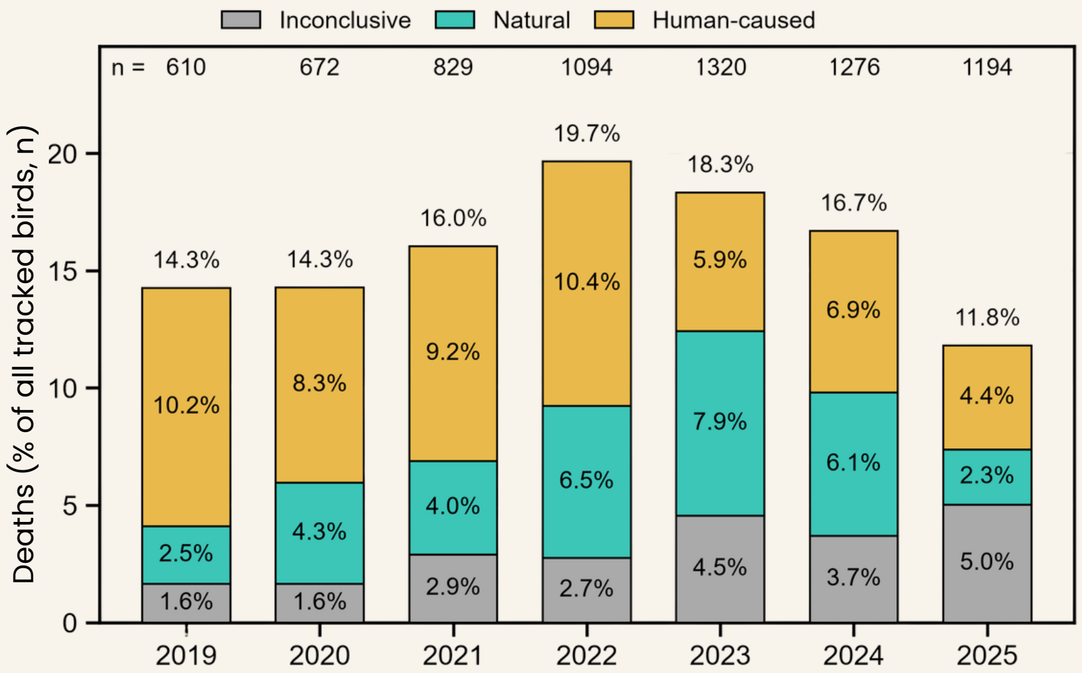
Illegal human caused mortality is one of the biggest threats to red kites in Europe.

Unprecedented Scale: Evaluated 3,554 tagged raptors across 19 countries, documenting 320 illegally killed birds in 24 countries.

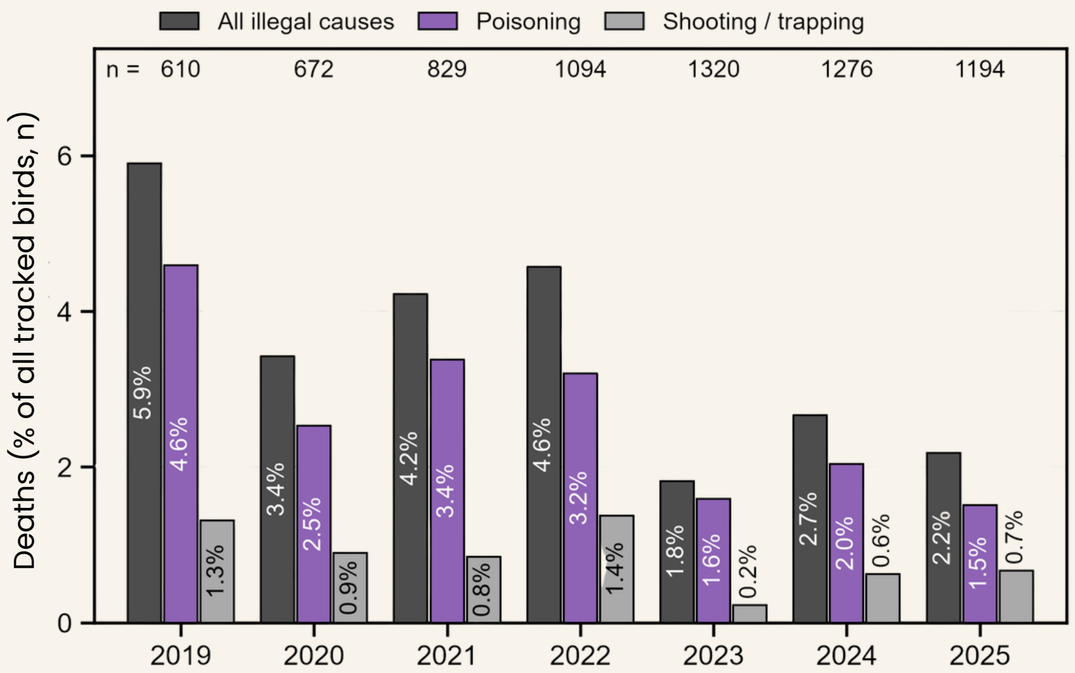
Staggering Europe-Wide Estimates: An estimated ***~46,000 Red Kites*** were illegally killed in Europe between 2020 and 2024.

Illegal Poisoning Dominance: Represents ***74%*** of recorded wildlife crime cases, primarily using banned toxic substances like Carbofuran. Illegal shooting accounts for ***20%.***

Forensic GPS Success: High-resolution GPS tracking delivered direct evidence leading to ***the first landmark conviction*** in Germany for illegally shooting a protected White-tailed Eagle.



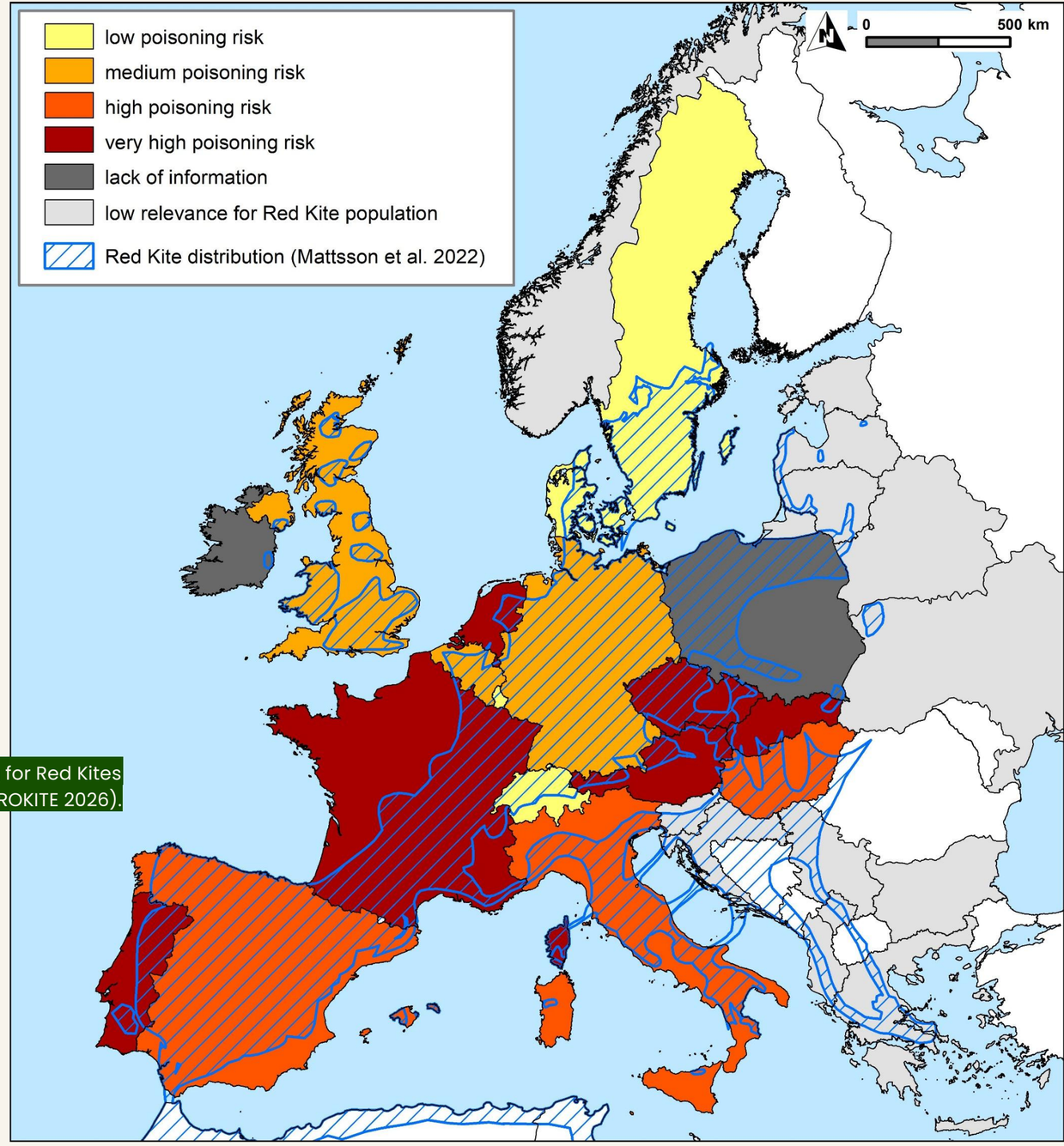
Deaths by mortality cause group. The graph shows the percentage of deaths by mortality cause group from 2019 to 2025.



Illegal causes of death: total and components.



Tagged red kite poisoned while feeding on a poisoned corvid carcass.
© Karel Makoň



Map: Potential Risk of Poisoning for Red Kites in Europe (LIFE EUROKITE 2026).

Stakeholder Involvement & Milestones in Wildlife Crime

Stakeholder Outreach & Education:

Conducted 106 information events in Hungary targeting technical forestry/hunting schools, universities, and professional hunters' associations.



Forestry University of Sopron
© Előd Győrig

Stakeholder Involvement & Milestones in Wildlife Crime

Specialized Investigation & Public Resources:

***Wildlife Crime Guideline*:** Published as a comprehensive operational manual to assist authorities and law enforcement in evidence collection.

Scan to read PDF

Stakeholder Involvement & Milestones in Wildlife Crime

Specialized Investigation & Public Resources:

Bird Crime Brochure*:** Distributed in ***7 languages to enable citizens to identify signs of illegal poisoning and report incidents safely.

Scan to read PDF

Stakeholder Involvement & Milestones in Wildlife Crime

Specialized Investigation & Public Resources:

CPEW Campaign*:** The Campaign against criminal Poisoning of European Wildlife unified ***79 organizations and gathered ***22,033 signatures*** to end wildlife poisoning.



Stakeholder Involvement & Milestones in Wildlife Crime

Forensic GPS Telemetry:

High-precision GPS tracking provided undeniable courtroom evidence, securing the ***first landmark conviction in Germany*** for the illegal shooting of a protected White-tailed Eagle (resulting in a fine and loss of hunting license).



X-ray showing evidence of illegal shooting.
© LIFE EUROKITE



The bird's GPS transmitter was tied to a piece of wood
© LIFE EUROKITE

Stakeholder Involvement & Milestones in Wildlife Crime

GPS data help secure conviction in a red kite poisoning case

Extremadura, Spain | February 2025

- A GPS-tagged German red kite was poisoned. Following EUROKITE's alert to AMUS, wildlife police launched an investigation.
- Another red kite, a common buzzard, a marsh harrier and a feral cat were also found dead. Toxicological analyses confirmed poisoning.
- GPS data established the time and location of death, recorded positions inside a country house and showed the bird's subsequent movement to a roadside location.
- GPS evidence and the police investigation led to one person's arrest and conviction.

Court sentence:

2 years in prison · 4-year hunting ban · Payment of court costs · Financial compensation to LIFE EUROKITE

The Regional Government of Extremadura will also impose a fine for killing protected wildlife.

Dissemination Actions

- Monograph Publication
- Inaugural Wingspan Conference
- Educational Films
- Pan-European Network
- International Information Boards

Monograph Publication:

Published the book ***"The Red Kite in Europe - Successful Protection at International Level"*** (May 2022) in collaboration with APG (Austrian Power Grid) to promote cross-border conservation.



Dissemination Actions

- Monograph Publication
- Inaugural Wingspan Conference
- Educational Films
- Pan-European Network
- International Information Boards

Educational Films:

Pro Vértes produced 4 short films covering major raptor threats: ***Raptor Conservation Threats on Land and in the Air, Satellite Transmitters, Poisoning, and Electrocution*** as well as ***a publication about red kite conservation.***



Dissemination Actions

- Monograph Publication
- Inaugural Wingspan Conference
- Educational Films
- Pan-European Network
- International Information Boards

International Information Boards:

Installed ***5 public information boards*** across key project sites in Austria (TB Raab/MEGEG), Spain (AMUS, SEO/BirdLife – 2 boards), Germany (Rotmilanzentrum), and France (LPO).



Dissemination Actions

- Monograph Publication
- Inaugural Wingspan Conference
- Educational Films
- Pan-European Network
- International Information Boards

Inaugural Wingspan Conference (Brussels 2024)

Launched the biennial flagship conference engaging ***320 stakeholders*** (155 in-person from 32 countries, 165 online). Established a long-term roadmap: ***Berlin 2026, Paris 2028, Vienna 2030, Madrid 2032.***



Group photo at Wingspan 2024
© Hansruedi Weyrich

Dissemination Actions

- Monograph Publication
- Inaugural Wingspan Conference
- Educational Films
- Pan-European Network
- International Information Boards

Pan-European Network

Built a collaborative protection network uniting partners ***across 10 core countries***, cooperation partners in ***16 countries,*** and carcass-recovery cooperation in ***30 countries***.



Cooperation with hunters in Austria
© LIFE EUROKITE

Sustaining Conservation Beyond LIFE EUROKITE



Red kites
© Hansruedi Weyrich

Czech Bird of the Year 2027
Designation of the Red Kite as Czech Bird of the Year 2027 to drive public education, media campaigns, and local stakeholder involvement.

Sustained Grid Safety Standards
Grid operators committed to incorporating bird-friendly technical standards into ongoing grid maintenance and future infrastructure planning.

Long-Term Monitoring & Threat Response
Continued tracking of tagged birds, maintenance of feeding stations, active investigation of mortality events, and anti-poisoning collaboration with farmers and hunters.

Institutionalized Wingspan Platform
Continuation of the biennial Wingspan Conference to maintain cross-sector collaboration between energy developers, grid operators, and conservationists.

Conclusion – Key Findings



Poisoned red kite in Slovakia
© RPS

Dominance of Anthropogenic Impact:

- Represents 74% of recorded wildlife crime cases, primarily using banned toxic substances like Carbofuran. Illegal shooting accounts for 20%..

***Staggering Europe-Wide Estimates*: :**

- *An estimated ~46,000 Red Kites were illegally killed in Europe between 2020 and 2024.*

Decreasing Trend in Human-Caused Deaths:

- Over the course of the project, human-caused mortality rates—particularly ***illegal poisoning***—showed ***a decrease.***

Conclusion – Key Findings



Tagged red kite poisoned while feeding on a poisoned corvid carcass.
© Karel Makoň

Combating Europe-Wide Bird Crime:

- Wildlife crime remains a European-wide issue with widespread hotspots, and ***conviction rates remain low.***
- ***Telemetry as a Forensic Tool:*** High-resolution GPS tracking has proven to be one of the most critical tools for detecting, investigating, and prosecuting wildlife crimes through collaboration between authorities and conservationists.

Climate Change Shifts:

- Climate change is ***influencing the distribution*** of birds of prey in Europe, with some populations expanding their breeding ranges northwards.

Coordinating beneficiary

EUROKITE

The TB Raab GmbH was commmissioned to implement the LIFE EUROKITE project after a pan-European public tender.

TB Raab Technisches Büro für Biologie

MEGEG

Project Partner

AMUS Acción por el Mundo Salvaje

Austrian Power Grid APG

amprion

Rotmilan Zentrum am Museum Heineanum

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This project is co-financed by the LIFE Nature Programme of the European Union

NATURA 2000

Cooperation partner

Additional cooperation partners for specific research questions in the field of renewable energy

This project is co-financed by the LIFE Nature Programme of the European Union

Thank you for your attention!

Together, we can give red kites a safer future.

Andreas Gärtner
Administrator, LIFE EUROKITE

andreas.gaertner@tbraab.at · www.life-eurokite.eu



Red Kite
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