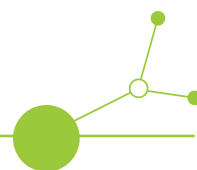


Pilot action fact sheet

ReCo Pilot Region 5

Íńsko Lakeland / European Bison (PL)



9 April 2025



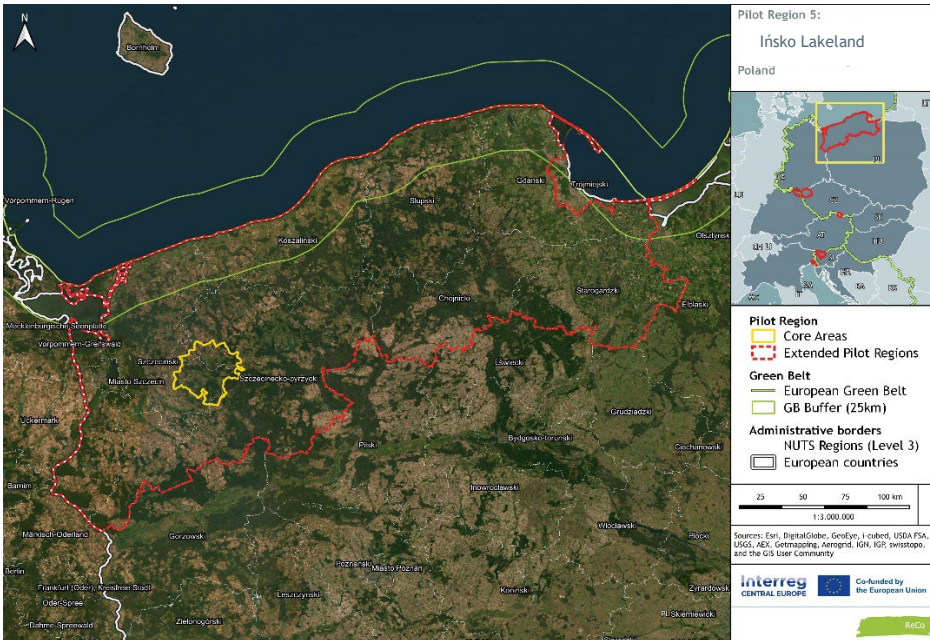


PILOT ACTION - FACT SHEET

Pilot action factsheet for ReCo Pilot Region 5 Ińsko Lakeland

D.2.2.4 Species: European Bison

O.2.2 Joint Pilot action 2 “Species” implemented in 2 ReCo pilot regions (partial)

Location, country	Pilot region 5 Ińsko Lakeland/European bison, Poland (the boundary of the Joint Pilot Action implementation area is marked in yellow) 53°26' N, 15°33' E 
Pilot action (PA) title (as indicated in AF + related deliverable number (no.))	D.2.2.4 Implementation Joint Pilot Action 2.1 "Species - European Bison" in 1 pilot region (PL)
Project Partner (name, no.)	Federacja Zielonych „GAJA“, PP5
PA aim	- Monitoring of European bison migration paths to enhance migration routes for the species conservation in NW Poland. - Minimizing human - European bison conflicts.
PA concept/summary including technical description	The priority species for the ReCo project in the region was the European bison <i>Bos bonasus</i>. In Western Pomerania, the West Pomeranian Nature Society, an associated partner, had been actively implementing conservation measures for the European bison since 2005. These included captive breeding, reintroduction, translocations, GPS monitoring (with 80 individuals collared at the time), emergency interventions, winter feeding, and veterinary services. As a result, the bison population in the region increased and the



	natural diversification of herds was initiated. By the time of implementation, the population had grown to nearly 350 individuals (including 77 residing in the Ińsko Lakeland) distributed across 11 herds spanning the borders of the Zachodniopomorskie, Lubuskie, and Wielkopolskie voivodeships in Poland. Until the implementation of this action, the main approach to protecting European bison had involved controlling their movement to minimize conflicts with local communities, such as crop damage, and to protect the animals from traffic accidents. Although significant progress had been made, continued and enhanced conservation efforts were deemed necessary to ensure the long-term survival and genetic diversity of the species. During the planning of the Joint Pilot Action, the need to address migration barriers became evident. These barriers contributed to the isolation of herds and limited gene flow, which in turn fostered inbreeding and increased susceptibility to disease and environmental stressors. Another critical issue identified was the declining social acceptance of bison due to damage caused by large herds to agricultural land. This challenged the sustainability of conservation initiatives and highlighted the importance of engaging with local communities. The Joint Pilot Action was implemented to address these pressing challenges, including migration barriers and human-wildlife conflicts. The restoration strategy applied in the Joint Pilot Action focused on improving the management of reintroduced bison populations in north-western Poland. This involved identifying migration barriers, and proposing recommendations for transport infrastructure improvements. The key techniques and methods applied in the action included: • GPS-collar deployment - ten bisons were equipped with advanced GPS collars, significantly enhancing the ability to monitor and analyze their movements and behaviors, thus informing conservation strategies. • Migration barrier identification - thorough assessment was carried out to identify geographic and human-made barriers impeding natural bison movement, providing critical input for habitat connectivity planning. • Transport infrastructure recommendations - a detailed review of the regional transport network was conducted, resulting in targeted recommendations to harmonize infrastructure development with ecological connectivity, thereby fostering sustainable human-wildlife coexistence.
PA timing (start and end date)	March 2023 - February 2025 (status: finalized).
Expected solution derived from PA	The Joint Pilot Action contributed to the development of a self-sustaining European bison population in north-western Poland, reinforcing the species' role as a keystone within the regional ecosystem through the following solutions: • Enhanced migration corridors - the project identified and addressed migration barriers to improve connectivity between bison subpopulations. This facilitated greater genetic exchange and reduced the risk of inbreeding. The objective was achieved through



	formulating recommendations for transport infrastructure improvements that supported wildlife movement. • Population monitoring and management - GPS telemetry was employed to track bison movements with precision, generating valuable data for conservation planning. Ten bison were equipped with GPS collars, and the collected data were continuously analyzed to assess habitat use, migration patterns, and potential human-wildlife conflict zones. • Conflict mitigation and stakeholder engagement - to minimize negative interactions between bison and local communities, the project implemented conflict prevention strategies such as informing bison emergency service, coordinated by the West Pomerania Nature Society. Engagement with local farmers and landowners was actively pursued through stakeholder meetings and participatory workshops, ensuring broad community involvement in conservation planning.
Preparatory work done so far	• Joint Pilot Action's concept development • Public procurement - GPS collars • Purchase of a GPS collars and collaring 10 bisons • Telemetric monitoring of collared bison • National stakeholder workshop • Local stakeholder workshop for implementation of the Pilot Action in the Pilot Region NW-Poland • Peer-review visit in the Polish Pilot Region • Joint Pilot Action evaluation
Permits required for the investment (contract, availability etc.)	Permission for activities related to legally protected species, issued by the Ministry of the Environment of the Republic of Poland (permit obtained).
PA/Investment progress update (what has been achieved so far/every 6 months, status of implementation and progress)	The concept of the Joint Pilot Action was developed with the support of the Work Package 2 Teams. Cooperation within these teams included an ongoing evaluation of the implemented actions. As part of the initiative, a public procurement process was conducted, leading to the purchase of 10 GPS collars and the collaring of 10 bison. Telemetric monitoring of the collared bison has been carried out. Each GPS telemetry collar consisted of a two-layer PVC strap reinforced with fabric, measuring 1-1.2 meters in length and 7 cm in width, with a dedicated 10 mm channel for a VHF antenna. The strap was secured using a stainless-steel clasp with four screws. Support components included polyurethane resin filling with high hardness and tensile strength, stainless steel hardware, a plastic-coated steel safety cable, and neodymium magnets to deactivate the VHF and GSM modules. All electronic components were enclosed in a CNC-milled polyacetal housing. The VHF transmitter operated within the 138-230 MHz range, offering a signal rate of approximately 50 pulses per minute, with a transmission range of 2-5 km depending on terrain. Power was supplied by six lithium-thionyl chloride batteries for the telemetry module and two separate batteries for the VHF unit, all capable of operating in extreme temperatures. The GPS/GSM/GPRS module featured cyclic GPS tracking, autonomous logging in GSM signal loss, dual-mode data transmission (GPRS/SMS), remote



	configuration, adjustable roaming settings, and 5-year data hosting with online access. The module met IP65 protection standards and included a 72-channel GPS receiver with high sensitivity, a quad-band GSM modem, a 3-axis accelerometer for motion and activity detection, and a reed switch for power control via external magnets. Ten telemetry collars transmitted approximately 11,000 location points from the collared animals. Additionally, thanks to the courtesy of the West Pomeranian Nature Society, data from 2019-2022 were also integrated into the ReCo project database, resulting in the collection of nearly 1,1 million entries, which are currently being analyzed. The collars are still collecting telemetry data, which continues to be gathered and analyzed. Until the completion of the ReCo project and throughout its durability period, data curation will remain the responsibility of the Green Federation „GAIA“. After this period, and until the collars cease to function (with the manufacturer specifying a maximum operational lifespan of five years), the associated partner - the West Pomeranian Nature Society will take over responsibility for data collection, analysis, and collar maintenance, based on an appropriate agreement. The telemetry data from the collars will be used to support the bison emergency service - such as driving bison away from agricultural fields and early intervention in cases where animals gather near roads or railway tracks, as well as for herd management purposes (i.e. maintaining appropriate population density and initiating the division of overpopulated herds when necessary).
Stakeholders involved	• Municipality of Miroslawiec, • local communities, • Miroslawiec Forest District, • Zlocieniec Forest District, • the Land Forces Training Centre in Drawsko, • the Municipality of Jablonowo, • farmers, • tour operators/nature-tourist guides, • Cultural Centre in Miroslawiec, • The Regional Directorate for Environmental Protection in Szczecin.
Citizen science approach (if applicable)	N/A
Joint cooperation dimension (in partnership)	The action was planned within Work Package 2 Teams "Species" and "Habitats". The collaboration involved consulting and reviewing the implemented action, monitoring and evaluating its implementation, addressing potential challenges in real-time, developing mitigation measures, and formulating strategies for stakeholder engagement. The implementation of the action actively involved an associated partner - the West Pomeranian Nature Society, which contributed by selecting animals for collaring, providing essential information for field operations, and facilitating stakeholder engagement. Meanwhile, another associated partner, the University of Szczecin, provided expert consultations on the biology and ecology of the European bison and supplied scientific knowledge.



	Three Local Stakeholder Meetings were held: 26 March 2024 (Szczecin), 25 July 2024 (Kopice), 8 June 2024 (Jabłonowo). These meetings gathered 50 participants representing various stakeholder groups, ensuring their active involvement in the coordination and implementation of pilot actions. The discussions aimed to maximize community-based leverage effects, initiating additional funding opportunities and other activities to expand pilot investments by stakeholders. Additionally, on February 25, 2025, a national stakeholder workshop was held with the participation of representatives from West Pomeranian Nature Society, Bura Foundation, Polish Society for Conservation Genetics LUTREOLA, Cultural Centre in Mirosławiec, Green Federation "GAIA", Polish Association for Bird Protection, University of Szczecin, Stepnica Tourist Organization, Museum and Institute of Zoology of the Polish Academy of Sciences and local farmers. From 1-3 September 2024, a peer-review visit to the Polish Pilot Region took place, conducted by a joint peer review team consisting of members from the Joint Pilot Team members. The team carried out an in-depth analysis of selected pilot restoration measures, assessing the challenges encountered, stakeholder perceptions, and potential community-based leverage effects. The visit also included a local public event, during which the team shared and discussed its initial findings with the hosting project partner and selected local stakeholders. The event provided an opportunity to present recommendations for policy improvements.
Personnel involved	Jakub Skorupski, Aneta Kozłowska
Related investment description (incl. no, name)	Manufacturing 10 remote tracking collars and collaring 10 European bisons, collars maintenance and GPS data collection, curation and analysis.
Investment budget spent per item (only CC5 equipment)	Purchase of 10 GPS collars and collaring 10 bisons - € 24.710,10. The expenditure was incurred and certified. The partner has also already received the reimbursement. The actual cost of the task was € 289.90 lower than the amount originally allocated in the budget. The remaining funds are not planned to be used for any other expenses.