



Preparatory Actions for Beskydy-Kysuce Pilot Area



Friends of the Earth Czech Republic – Large Carnivore Conservation Programme,

Transport Research Centre Czech Republic

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November 2022

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1. Introduction

The implementation of the project SaveGREEN started in the middle of 2020. Since the start, a number of measures to safeguard connectivity was introduced either by Friends of the Earth Czech Republic (FoE CZ) and by the Transport Research Centre (CDV).

The scope included support for stakeholders (e.g. setting up the local working group), extensive monitoring, participation in public proceedings, support for farmers, measures addressing poaching and more.

In this document, we briefly summarize the implemented measures in the form of selected parts of the logframe and as short descriptions.

2. Logframe

THREAT / PRESSURE <i>What do we want to address?</i>	GENERAL OBJECTIVES <i>What do we want to achieve?</i>	Problems	Measures	Actions
1. Increased <u>barrier effect</u> of new Transport and other Linear Infrastructure (TLI) projects	01. Provide supporting data for new infrastructure projects	Planned and projected roads: D48, D49, I/35, I/57, I/58.	1. Collect available data on wildlife migration.	a. Collect data on large carnivore migration recording occurrence signs, camera-trapping and telemetry data. b. Improve monitoring of large carnivores and other species using new methods (see relevant general objectives and actions in this document). c. Provide the data to project evaluators and government authorities in the simplest possible form, together with an explanation of the legal obligation to protect ecological corridors and identified problem areas.

			2. Monitor the planning of new infrastructure.	a. Systematically monitor the planning of new linear infrastructure (strategic documents, websites of construction companies, SEA and EIA procedures).
	03. Support designs, technical details and constructive solutions with examples of good practice	Examples of good practice do not reach relevant stakeholders.	1. Inform stakeholders about examples of good practice.	a. Establish long-term cooperation between the members of the local working group. b. Collect examples of good practice available to members of the local working group.
	1. Maximize the functionality of underpasses (all fauna passages)	In the initial stages of preparation, the functionality of underpasses is not obvious.	1. Cooperate with ŘSD CZ and NDS to ensure the functionality of underpasses in new local transport infrastructure projects.	a. Cooperation between nature conservation bodies (government, NGOs) and ŘSD CZ or NDS from the initial stages of specific road construction projects.
		I/35 and the adjacent section of D48 intersect wildlife corridors.	2. Ensure the permeability of I/35 (Lešná – Palačov).	a. Ensure that the recommendations resulting from the EIA process be respected and that the technical details of fauna passages be maintained (authorities, construction supervision).

				<p>b. Initiate negotiations with landowners to plant guiding vegetation.</p> <p>c. Propose the land lease or purchase by the state administration for the planting of guiding vegetation.</p>
		I/57 intersects wildlife corridors.	3. Ensure the permeability of I/57 (Jarcová – Bystřička, jih; Semetín – Bystřička, stage II).	ŘSD CZ was asked to ensure the road permeability already within the SaveGREEN project. The situation needs further monitoring and the migration study evaluating once completed. As the road threatens the population of the protected species scilla bifolia in the northern part of the Semetín – Bystřička section, it is necessary to ensure that the contractor has a valid exemption.
		I/58 intersects wildlife corridors.	4. Ensure the permeability of I/58 (Frenštát pod Radhoštěm – Vlčovice).	The EIA process must be monitored to ensure that

				landscape connectivity is maintained.
<p>2. Barrier effect of existing Transport and Other Linear Infrastructure (TLI) (including increasing barrier effect caused by structural interventions: maintenance or upgrading within the same category/class of roads, railways, navigable channels, waterways, canals, power lines, and pipelines)</p>	<p>1. Safeguard the permeability of existing transport infrastructure (including the increase in the permeability of existing infrastructure where possible)</p>	<p>Missing green bridges (e.g., E75 Třinec – Jablunkov section of Class I road I/11 in CZ, near Jablunkov).</p>	<p>5. Build the missing green bridge on E75.</p>	<p>a. After obtaining the necessary permits, proceed with the construction.</p>
<p>3. Linear transport infrastructure (including electric power lines) causing <u>wildlife mortalities</u></p>	<p>1. Implement an adequate fencing system on motorways and high-speed railways, including escape gates</p>	<p>Fenced sections of infrastructure with no fauna passages are planned in ecological corridors.</p>	<p>1. Prevent fenced sections of roads and railways without fauna passages.</p>	<p>a. Monitor the preparation of fenced sections. b. Plan fauna passages in fenced sections. c. Ban fenced sections of roads in ecological corridors without fauna passages.</p>
	<p>2. Direct animals towards functional crossings</p>	<p>Guiding vegetation is not planned in some cases</p>	<p>1. Ensure the planting of guiding vegetation.</p>	<p>a. Facilitate discussion on systematic solutions for</p>

		despite the recommendations of migration studies.		guiding vegetation along linear infrastructure b. Ensure the implementation of guiding vegetation where recommended by migration studies.
	<p>12. Develop and use an integrated database as a decision-support tool for dealing with traffic accidents (for implementing/adapting measures to prevent wildlife mortality/property damage/human casualties)</p>	There is no central international database of wildlife-related traffic accidents.	1. Collect available data on wildlife-related traffic accidents.	<p>a. Setting up an official procedure for comprehensive data collection (online system at the srazenazver.cz website has been prepared for this purpose); gathering records from nature conservationists, hunting associations, drivers and other citizens, in addition to police records.</p> <p>b. Sharing data on critical points to open up possibilities for incorporating time-specific alerts into car navigation systems.</p>

<p>4. Reduced landscape permeability caused by changes in land-use</p>	<p>1. Prevent changes in land use towards less permeable categories (including compensatory measures in terms of connectivity)</p>	<p>A catalogue of measures has not been developed for the White Carpathians (Bílé/Biele Karpaty PLA).</p>	<p>4. Catalogue of measures for Bílé/Biele Karpaty.</p>	<p>a. Create a catalogue of measures for Bílé/Biele Karpaty. b. Present and discuss the document with local stakeholders c. Adjust proposed measures according to the stakeholders' suggestions.</p>
<p>5a. Reduced landscape permeability caused by land management – fencing</p>	<p>1. Fencing regulations and promoting unfenced areas</p>	<p>In some cases, fencing can significantly reduce the permeability in ecological corridors. In the Czech Republic, this is often related to preventive measures against attacks of large carnivores on livestock. In Slovakia, fencing is installed to protect crops against herbivores.</p>	<p>1. Promote practices to reduce the use of agricultural fencing</p>	<p>a. Educate farmers – field trips; an advisory team competent to propose specific measures depending on local conditions in the grazing area, farmers' preferences, herd characteristics, and landscape permeability requirements. b. Participate in EIA processes. c. Identify procedures to address the problem of agricultural fencing in Slovakia.</p>

5b. Reduced landscape permeability caused by <u>land management</u> – changes in vegetation or crop type/category	---			
5c. Reduced landscape permeability caused by <u>land management</u> – degradation of natural habitats	---			
5d. Reduced landscape permeability caused by <u>land management</u> – mineral extraction	---			
6a. Reduced landscape permeability caused by <u>other anthropogenic activities</u> – game management	4. Implement poaching prevention and control	<p>Poaching is a significant cause of mortality of large mammals and other species. Poaching rates are influenced by the public opinion.</p> <p>Poaching is not sufficiently penalized in the concerned countries,</p>	<p>1. Work with the general public.</p> <p>2. Support the authorities in the fight against poaching.</p>	<p>a. Carry out field monitoring aimed at poaching prevention. b. Educate the general public about large carnivores and poaching (awareness-raising events, media, social media).</p> <p>a. Coordinate anti-poaching measures between nature</p>

		despite it being a widespread problem.		conservation authorities, police and border guard.
6b. Reduced landscape permeability caused by other anthropogenic activities – human-wildlife conflicts	1. Facilitate the implementation of legislation on damage compensation	Some farmers are slow in reporting the damage caused by large carnivores.	1. Informing farmers about damage compensation procedures.	a. Awareness-raising events aimed at farmers.
	2. Facilitate traditional livestock farming practices	Traditional livestock farming (shepherding) largely disappeared during the 20th century. The return of large carnivores was accompanied by significant damage due to the abandonment of traditional protection methods.	1. Informing farmers about traditional shepherding methods.	a. Awareness-raising events aimed at farmers.
	3. Facilitate the implementation of modern prevention methods	Livestock damage reduces the tolerance of large carnivores among farmers and the public.	1. Inform and support farmers in introducing modern preventive methods.	a. Awareness-raising events aimed at farmers.
7. Lack of coherent monitoring at landscape level and adaptation of solutions	1. Facilitate the implementation of an integrated monitoring programme – procedures, databases, indicators, assessment	New threats to landscape permeability continue to emerge. Continuous monitoring of projects and SEA and EIA processes and	6. Monitoring of SEA and EIA processes.	a. Continuous monitoring of policies and plans evaluated in SEA and EIA. b. Develop and implement a monitoring plan.

		participation in administrative procedures is needed.		
8. Reduced support from stakeholders at landscape level for an integrated ecosystemic approach	1. Facilitate collaboration and create a shared platform and database	Lack of communication leads to problems (e.g. misunderstandings about legal aspects of protecting ecological corridors).	1. Create a platform for information and knowledge exchange between stakeholders.	a. Establish a local working group and ensure its long-term functioning after the end of the project. b. Set up an information system for municipalities focusing on the protection of ecological corridors in spatial planning (methodologies, link to a map of ecological corridors, etc.).
	2. Facilitate the spread of information, awareness, education, communication	The issue of landscape permeability is still not well-known among the general public.	1. Increase awareness among the general public.	a. Continue species-specific web and social media communications, including the topic of landscape permeability. b. Organize lectures, debates and information days for the general public.
	5. Facilitate the development and integration of local strategies into the regional	Strategic documents should guarantee a sufficient level of	1. Development plans to contain general principles	a. Monitor ongoing SEA processes and participate in commenting.

	sectoral strategy (landscape permeability as one of the subject matters)	landscape permeability. Some tend to be overly vague or not ambitious enough.	for the protection of landscape permeability.	b. Incorporate permeability issues into strategic documents at all levels.
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Table 1 Logframe

3. Descriptive part

Threat / Pressure 1: Increased barrier effect of *new* Transport and other Linear Infrastructure (TLI) projects.

Objective 1.01. Provide supporting data for new infrastructure projects

Measure 1.01.1. Collect available data on wildlife migration

The long-term monitoring of large carnivores migrations was enhanced as part of the SaveGREEN monitoring efforts. Tracking, camera traps and telemetry were used.

The field trips of employees of FoE CZ were supported by additional volunteer activities which in total led to over 1000 documented monitoring trips performed during the course of the project in the pilot area. 60 camera traps were deployed in the field, their localities identified partially using the results of field trips. Capturing carnivores (especially lynxes with unique individual fur patterns) helps to map the dispersal of the animals throughout the pilot area and beyond. Moreover, these traditional methods were expanded by the telemetry of 5 lynx individuals, allowing detailed monitoring of the animals movements and their spatiotemporal activity.

The results of telemetry helped to confirm or identify several bottleneck locations used by lynx to migrate through the area. The data were presented to environmental authorities and possible applications discussed. They were also used to inform the road construction company (ŘSD) about the need of protecting specific bottleneck areas with planned infrastructure.

In the future, it will be useful to perform telemetry of other large mammal species since they can have slightly different migration needs under various circumstances. More detailed time sampling should be considered to better map the usage of bottleneck areas.



Figure 1: A brown bear footprint in the proposed D49 motorway corridor (spring 2021) © Michal Bojda.

Measure 1.01.2. Monitor the planning of new infrastructure

FoE CZ continuously monitored planned infrastructure with respect to ensuring connectivity for large carnivores. The most important tool was the Czech EIA & SEA Information System. The websites of construction companies and different levels of government authorities were also used.

Around a dozen projects was commented prior to or during the administrative proceedings. Some projects were lacking migration studies or rigorous consideration of the biotope of large carnivores (including migration corridors) as an integral part.

The monitoring proved itself to be time consuming. Extensive time and cost resources will be required to perform this activity consistently in the future.

Objective 1.03. Support designs, technical details and constructive solutions with examples of good practice

Measure 1.03.1. Inform stakeholders about examples of good practice

The local working group was established during the project duration. It has over 20 members and comprises representatives of Czech and Slovak NGOs, research institutes, nature conservation authorities, construction companies, regions and ministries, among others. Three meetings of the group took place, the members were regularly informed about project activities and participated in making up the local CSOP. During the third working group meeting in Ostrava (Nov 11, 2022) it was agreed that the group would remain active after the project closure as a communication platform between all the interested parties. New members are also welcome to join.

Establishing the group around existing communication channels and common activities and reaching out to potential new members throughout the time turned out to be an effective way of enhancing cooperation between stakeholders.

Objective 1.1. Maximize the functionality of underpasses (all fauna passages)

Measure 1.1.1. Cooperate with ŘSD CZ and NDS to ensure the functionality of underpasses in new local transport infrastructure projects

Avoiding problems regarding connectivity from the earliest phases of infrastructure project planning is favourable for both nature conservation and infrastructure companies. This was the reason FoE CZ identified the most pressing issues in the pilot area and initiated communication with Road and Motorway Directorate (ŘSD CZ). Representatives of ŘSD CZ subsequently also became members of the local working group. The effectiveness of this intervention and final form of the road projects remain to be seen.

Measure 1.1.2. Ensure the permeability of I/35 (Lešná – Palačov)

The description of the issues related to the project was part of an open letter addressed to ŘSD CZ by FoE CZ. It was stressed that any changes to the habitat are

in the competence of NCA and common filed evaluation of the situation was recommended. Introduction of guiding vegetation was requested.

Measure 1.1.3. Ensure the permeability of I/57 (Jarcová – Bystřička, jih; Semetín – Bystřička, Stage 2)

The description of the issues related to the project was part of an open letter addressed to ŘSD CZ by FoE CZ. Several problematic spots and their links were identified. It was pointed out that telemetry performed as part of SaveGREEN also suggests critical importance of the last migration corridors present.



Figure 2: The valley of Vsetínská Bečva near Pržno © Radek Kříček.

Measure 1.1.4. Ensure the permeability of I/58 (Frenštát pod Radhoštěm – Vlčovice)

The description of the issues related to the project was part of an open letter addressed to ŘSD CZ by FoE CZ. FoE CZ also sent relevant comments to the regional authority during related proceedings. The regional authority requested an appropriate assessment following the comments from several stakeholders

including FoE CZ. The EIA procedure was initiated and the authority obliged the investor to complete the habitat impact assessment.

This example shows that it is worth it to systematically follow existing procedures and intervene when necessary (see also Measure 1.01.2.).

Threat/Pressure 2: Barrier effect of existing Transport and other Linear Infrastructure (TLI) (including increasing barrier effect caused by structural interventions: maintenance or upgrading within the same category/class of roads, railways, navigable channels, waterways, canals, power lines, and pipelines)

Objective 2.1. Safeguard the permeability of existing transport infrastructure (including a rise in the permeability of existing infrastructure where possible)

Measure 2.1.5. Build the missing green bridge on E75

ŘSD CZ intends to start the construction of the green bridge in 2023. The current state of the preparation was presented during the press field trip and 3rd local working group meeting.

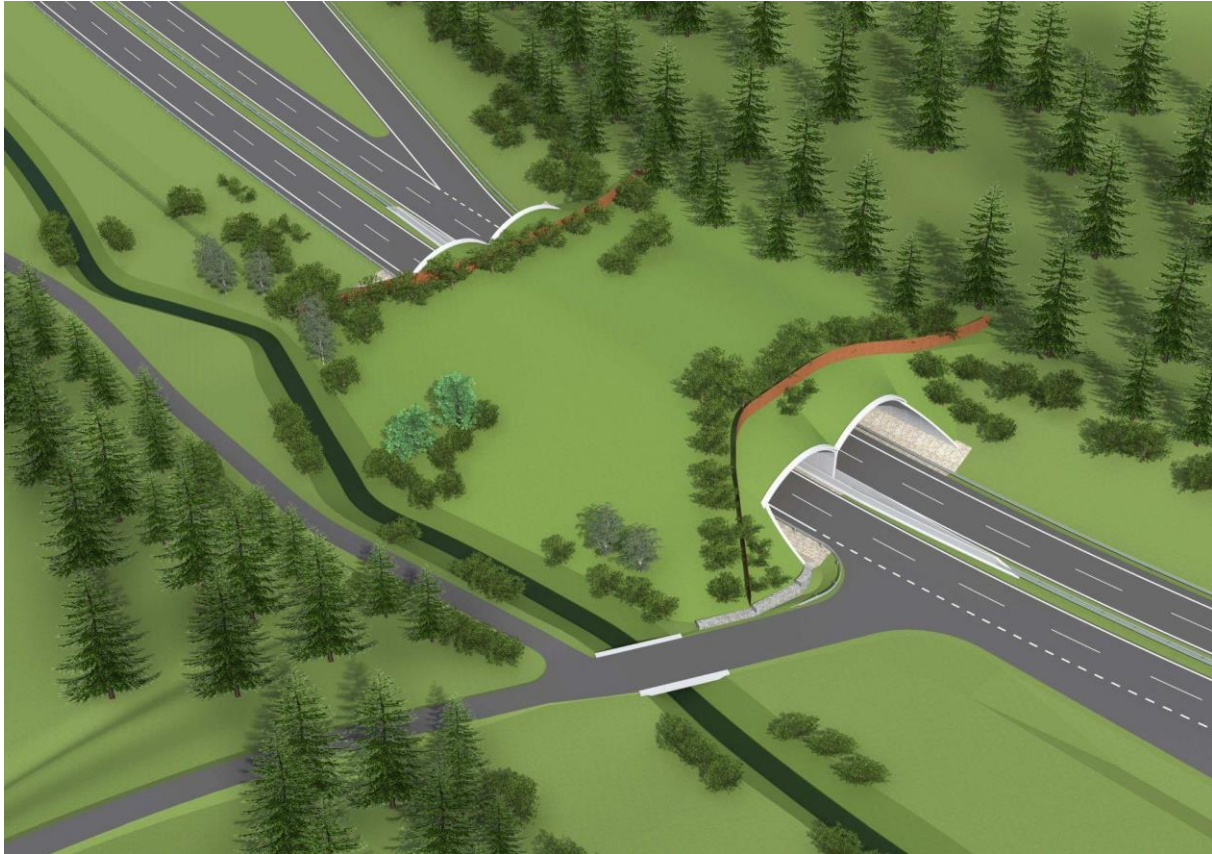


Figure 3: Visualisation of the Mosty u Jablunkova green bridge © Ředitelství silnic a dálnic ČR.

Threat/Pressure 3: Linear transport infrastructure (including electric power lines) causing wildlife mortalities

Objective 3.1. Implement an adequate fencing system on motorways and high-speed railways, including escape gates

Measure 3.1.1. Prevent fenced sections of roads and railways without fauna passages

In some cases, linear structures planned across large mammal ecological corridors are designed to be fenced without the essential fauna passages. An example is Section II of the I/49 – R49 project near Zlín where, according to the EIA documentation, it is not possible to ensure permeability due to the terrain configuration and the routing of the road. However, in this case, the structure would pose a significant negative impact on the habitat of protected large

carnivores. Such situations should be prevented: either the necessary fauna passages should be built or structures obstructing the corridors should be avoided. For this reason, FoE CZ participated in the respective public proceedings by sending a request for a change in the documentation to ensure the permeability of the road while at the same time avoiding road kills.

Objective 3.2. Direct animals towards functional crossings

Measure 3.2.1. Ensure planting of guiding vegetation

An example of implemented guiding vegetation measures can be found in the territory of the municipality of Jablunkov. In the past, the municipality planned a new industrial zone in one of the last migration corridors which would significantly decrease its width (the location was later identified as one of the two official remaining corridors in the area as part of the habitat of selected specially protected species of large mammals). After the intervention of FoE CZ, the zone area was decreased in 2010 and Jablunkov together with FoE CZ and local hunter association planted several patches of guiding vegetation in the migration corridor on the land owned by the municipality. Thus the existing meadows were enriched by bushes and trees leading from the wood complex next to the valley to a safe underpass under a main road (E75) in the middle. Jablunkov became the first municipality in the Czech Republic to protect a migration corridor in their spatial plan and the project served as a good PR for the town. During SaveGREEN, the protective fences around the vegetation could be finally removed. The event took place during the press field trip and thus strengthened public outreach of the project.



Figure 4: FoE CZ managed to negotiate the planting of guiding vegetation on the municipal land in the ecological corridor near Jablunkov. Pictured here is the removal of protective fencing from mature trees attended by the media © Ivo Dostál.

Objective 3.12. Develop and use an integrated database as a decision-support tool for dealing with traffic accidents (for implementing/adapting measures to prevent wildlife mortality/property damage/human casualties)

Measure 3.12.1. Collect available data on wildlife-related traffic accidents

CDV continued managing the central database of road-kills (www.srazenazver.cz). In addition, as part of the Monitoring Toolbox a new SaveGREEN app was developed, where every user (including general public) can collect their observations not only on roadkills but also direct observations of species of interest, their tracks or other signs of occurrence. Data collection is linked into a single system according to the monitoring principles proposed by the SaveGREEN methodology and a single data interface.

Threat/Pressure 4: Reduced landscape permeability caused by changes in land-use

Objective 4.1. Prevent changes in land use towards less permeable categories (including compensatory measures in terms of connectivity)

Measure 4.1.4. Catalogue of measures for Bílé/Biele Karpaty

CDV prepared a draft catalogue and classification of bottleneck areas in Bílé and Biele Karpaty. The basis for the proposal was the existing typological classification of landscapes and analysis of barriers. While respecting the IENE rule “each case = unique case”, the catalogue can be used to propose analogous solutions for similar types of bottlenecks in the area. The catalogue builds on a similar list of critical sites developed for the Beskydy region during the ConnectGreen project.

Threat/Pressure 5a: Reduced landscape permeability caused by land management – fencing

Objective 5a.1. Fencing regulations and promoting unfenced areas

Measure 5a.1.1. Promote practices to reduce the use of agricultural fencing

As part of this Objective, the results of extensive use of fencing in agriculture were discussed with representatives of farmers and Czech and Slovak nature conservancies. It was mentioned that in some cases, agricultural fencing can significantly reduce permeability in ecological corridors.

Fencing is often installed to protect livestock from attacks by large carnivores. A balance must be found between the need to protect large carnivore populations by preventing damage to livestock and maintaining landscape permeability. It is also necessary to monitor and comment on the associated EIA processes.

In Slovakia, traditional shepherding methods are also more widely used than in the Czech Republic, thus fencing of grazing areas is less of a problem. On the other hand, agricultural fencing is largely installed to protect crops from wildlife.



Figure 5: Electric fencing is an effective measure to protect livestock from predators, but it can also be a barrier to landscape permeability © Radek Kříček.

Threat/Pressure 6a: Reduced landscape permeability caused by other anthropogenic activities – **game management**

Objective 6a.4. Implement poaching prevention and control

Measure 6a.4.1. Work with the general public

FoE CZ kept realizing its long-term activities and engaged in the fight against poaching of large carnivores also during the SaveGREEN project. Public awareness was raised via media and social networks, public talks and initial seminars for volunteers of Wolf Patrols (*Vlčí hlídky*). During this activity, active poaching prevention takes place by monitoring the state of the populations of large carnivores and the actual presence in the field, for example.

The topic of poaching was an important part of public communication. FoE CZ repeatedly depicted the issue in social media and communicated poaching with journalists. During the SaveGREEN project, FoE CZ prepared several larger articles or press releases, mainly about lynx poaching which is together with landscape fragmentation the main threat for the lynx population in the Czech Republic. FoE CZ issued 4 articles and press releases connected to poaching of lynx in Beskydy-Kysuce pilot area and seven other articles generally describing the large carnivores poaching situation in the Czech Republic.

The concept of the Wolf Patrols proved to be a popular tool among general public. Hundreds of volunteers were registered throughout the two decades of their existence and dozens are actively supporting the field work every year.

Measure 6a.4.2. Support the authorities in the fight against poaching

FoE CZ was actively supporting authorities during the concerned periods. Because of the cases of a shot European lynx and a wolf injured by a traffic accident in the Czech Republic, the organization recommended making a list of vets authorized to solve such emergency situations during a seminar organized by the Czech Ministry of Environment. Moreover, it urged the Ministry, the Police Presidium and the Minister of Interior to establish a special police unit to investigate wildlife crime.



Figure 6: In 2020, a lynx died of a gunshot wound in Beskydy © Michal Bojda.

Threat/Pressure 6b: Reduced landscape permeability caused by other anthropogenic activities – **human-wildlife conflicts**

Objective 6b.1. Facilitate the implementation of legislation on damage compensations

Measure 6b.1.1. Informing farmers about damage compensation procedures

FoE CZ has been supporting farmers before and during the project both by informing and by supporting the implementation of preventive measures. The information campaign was realized for example by running a dedicated webpage (www.ochranaovci.cz), by organizing talks and excursions for public and by showing the movie *The Lamb and the Wolf* (*Beránek a vlk*) at various locations in the Czech Republic.

A number of farmers took part in projects managed by FoE CZ which goal was to ease the bureaucracy and practical issues when applying for subsidies and setting up actual preventive measures such as electric fences or purchasing shepherd dogs.

Because of the complicated applications for EU funds administered by Czech government, the help offered by FoE CZ was highly appreciated not only by farmers themselves but also by nature conservation authorities which often do not have resources for equivalent level of support.

These actions are tightly interconnected for the measures 6b.1.1., 6b.2.1. and 6b.3.1., hence they are not described in all of them individually.

Objective 6b.2. Facilitate traditional livestock farming practices

Measure 6b.2.1. Informing farmers about traditional shepherding methods

See Measure 6b.1.1.

Objective 6b.3. Facilitate the implementation of modern prevention methods

Measure 6b.3.1. Inform and support farmers in introducing modern prevention methods

See Measure 6b.1.1.

Threat/Pressure 7: Lack of coherent monitoring at landscape level and adaptation of solutions

Objective 7.1. Facilitate the implementation of an integrated monitoring programme – procedures, databases, indicators, assessment

Measure 7.1.6. Monitoring of SEA, EIA processes

A systematic monitoring of SEA & EIA processes was performed by FoE CZ during the SaveGREEN project. Several potential identified problems were required further actions. See Measure 1.01.2.

Threat / Pressure 8: Reduced support from stakeholders at landscape level for an integrated ecosystemic approach

Objective 8.1. Facilitate collaboration and create a shared platform and database

Measure 8.1.1. Create a platform for information and knowledge exchange between stakeholders

The needed platform for information and knowledge exchange was created by establishing the local working group of SaveGREEN (see Measure 1.03.1).

Objective 8.2. Facilitate the spread of information, awareness, education, communication

Measure 8.2.1. Increase awareness among the general public

During the SaveGREEN project, FoE CZ regularly published, issued and shared relevant content and information about landscape fragmentation, primarily in the pilot area Beskydy-Kysuce. The most often used channel was Facebook page Ochrana velkých šelem where FoE CZ shared and posted dozens of posts that were responded to by thousands of users. Every post explained the topic of fragmentation or its consequences, especially connected to large carnivores which are the umbrella species for monitoring of landscape permeability in the pilot area Beskydy-Kysuce. Important parts of direct contact with local people were two events - the press field trip and the infoday. The press field trip was focused on journalists from the region and due to this event many regional articles about the need to improve the landscape permeability were written and published. The second important event was the infostand for local people in the town of Jablunkov

(infoday), where a significant ecological corridor between Poland, Slovakia and the Czech Republic is located.

Objective 8.5. Facilitate the development and integration of local strategies into the regional sectoral strategy (landscape permeability as one of the topics)

Measure 8.5.1. Development plans to contain general principles for the protection of landscape permeability

During the SaveGREEN project, FoE CZ commented the changes of the National Development Strategy of the Czech Republic and the Principles of Territorial Development of Olomouc and Moravian-Silesian regions. The main point of the comments was a systematic protection of the habitat of selected specially protected species of large mammals in the strategic documents. The processes are yet to be finished.

4. Lessons learnt – main points

To briefly summarize the lessons learnt mentioned in the individual paragraphs, the following should be highlighted.

- **Monitoring activities** are **crucial for informed decision making**. Knowledge based intervention was needed to protect the permeability of certain areas. However, constant systematic evaluation of permeability and existing threats requires extensive resources. Future monitoring must be systematically planned and supported by reliable funding.
- Establishing the **local working group** helped to **exchange knowledge** and **clarify the points of view of different stakeholders**. Hidden problems might be revealed when discussing in a group with broad interests. A combination of non-intrusive long-term communication and detailed specialized discussion on specific topics seems beneficial for future progress.
- NGO sector is substituting the role of state in some ways. Although the support and controlling role of NGOs will be still beneficial, **state authorities** should take bigger part of responsibility so that migration corridors can be protected systematically. This might require some legislative changes but mainly **better education** and **systematic implementation of existing rules**. On the other hand, **NGOs** proved to be **effective in certain field work activities** focused on monitoring or prevention of poaching **and in public outreach**.

5. Conclusion

The implementation phase introduced a range of new activities towards protecting the landscape permeability. Long-term ongoing activities were also realized.

The local working group was established and encompassed the representatives of relevant sectors such as infrastructure, nature conservation, authorities and NGO sector. The members contributed to the finalization of the CSOP and attended several dedicated events.

Monitoring of functional connectivity was realized mainly by FoE CZ by performing the field work, deploying camera traps and contracting the telemetry of Eurasian lynx. The structural monitoring was performed by CDV and consisted of the mapping of migration barriers and bottlenecks. Moreover, FoE CZ introduced a systematic monitoring of the Czech database of SEA & EIA processes.

Other activities included support for farmers, support for authorities in eradicating poaching and informing general public about the topic of landscape permeability.