Annual report on bird crime incidents in the Pannonian region - 2018

PannonEagle LIFE project, LIFE15/NAT/HU/000902 Action C1.



Photo: Gábor Deák



Summary

Current report summarizes the overall results of Action C1 of the PannonEagle LIFE project in year 2018.

The Eastern Imperial Eagle the poisoning is still the leading human-caused mortality among all known deadly threats. In year 2018, there were 31 Imperial Eagles found dead in the project countries. From these 8 were known to be poisoned, 5 collided with vehicles (car, train) and 6 got electrocuted.

In the reporting period (01/2018- 12/2018) the PannonEagle project partners reported altogether 102 findings where illegal poisoning, raptor persecution could be suspected or proved. More than half of the cases is poisoning, either directly or indirectly and another 20% is suspected poisoning.



Abbreviations

Project partners:

- BL_AT BirdLife Österreich
- BPSSS Bird Protection and Study Society of Serbia (Društvo za zaštitu i proučavanje ptic ab Srbije)
- CSO BirdLife Czechia (Česká společnost ornitologická)
- HNPD Hortobágy National Park Directorate
- INCVP Institute for Nature Conservation of Vojvodina Province
- KNPD Kiskunság National Park Directorate
- MME BirdLife Hungary
- MZP Ministerstvo životního prostředí (Ministry of the Environment of the Czech Republic)
- RPS Raptor Protection of Slovakia
- VSD Vychodoslovenska distribucna, a.s.
- WWF_AT Umweltverband WWF Österreich / WWF Austria

Other abbreviations:

- AB Associated Beneficiary
- CB Coordinating Beneficiary
- EC European Commission
- EU European Union
- HELICONConservation of imperial eagles by managing human-eagle conflicts in Hungary
(LIFE10NAT/HU/019) LIFE project
- IE Eastern Imperial Eagle (*Aquila heliaca*)
- LIFE Financial Instrument for the Environment of the EU
- NÉBIH National Food Chain Safety Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal)
- WTE White-tailed eagle (Haliaaetus albicilla)

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1. Introduction

1.1. BACKGROUND INFORMATION

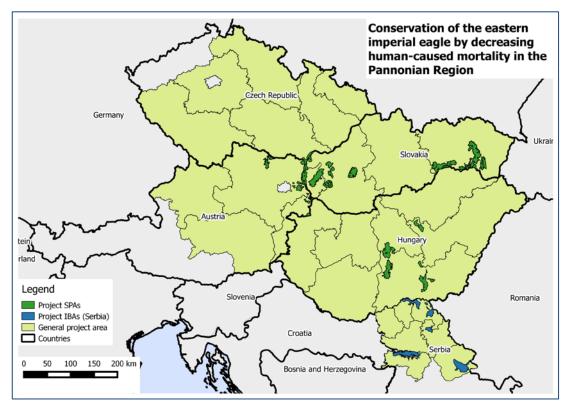
Due to the conservation efforts of the past decades, the Pannonian biogeographical region (which includes all of Hungary and parts of Slovakia, Romania, Czech Republic, Croatia, Serbia and Ukraine) exceeded 300 breeding pairs of the **Eastern Imperial Eagle** (*Aquila heliaca*).

Most Imperial Eagles is being killed of direct persecution aiming other predators (shooting, poisoning) and dangerous anthropogenic structures (electrocution, motorways-railways) and natural cause is still minor compared to these. The reduction of semi-natural agricultural lands serving as feeding habitats and old trees and forests patches offering nest sites give reason for serious concern. Predator persecution incidents, especially illegal poisoning is the main threat for the species in the Pannonian region, representing almost 50% of the known mortality causes.

Persecution also affects other protected raptor species, including another Annex I-listed bird, such as the Saker Falcon. Combating illegal bird poisoning is in line with the anti-poison policy of the Bern Convention on the Conservation of European Wildlife and Natural Habitats.

1.2. PROJECT DESCRIPTION

To help protecting this magnificent predator species, the European Union LIFE Nature Fund supports the project titled **"Conservation of the Eastern Imperial Eagle by decreasing human-caused mortality in the Pannonian Region" (LIFE15 NAT/HU/000902)**. The project is coordinated by MME/BirdLife Hungary together with 10 other partner organizations from 5 different countries.



Map of the PannonEagle project's site

1.2.1. Objectives

In the frame of the PannonEagle LIFE project, we aim to discover and investigate bird crimes committed against eagles with the help of our trained field staff. We also use working dogs which are specialized in poisoning cases, in close cooperation with a network of national park rangers and policemen. Injured birds are treated by veterinarians and released back into the wild if their conditions allow.

The project aims to facilitate a 10% increase of the Eastern Imperial Eagle's Pannonian population, which would result a 9% increase of the EU population, if other populations remain stable.

Further specific objectives in connection with Bird Crime mitigation are:

- to increase the chance of detecting illegal activities and of successful prosecutions;
- to increase understanding of the true, minimal impact of raptors on game species and encourage raptor-friendly game management methods;
- to increase public awareness of the conservation importance of the Eastern Imperial Eagle and of the possible consequences of persecution.

2. Materials and methods

2.1. METHODOLOGY AND MONITORING OF BIRD CRIME INCIDENTS

2.1.1. Definitions: what and how data is being collected?

The PannonEagle project partners deal with birdcrime cases historically to a quite different extent. Most partner organizations collect every data on illegal activities that involve any bird species. In the course of the current project all known mortality cases of Eastern Imperial Eagles or Saker Falcons are collected by the beneficiaries with special attention paid on human-caused mortalities. In order to unify the reported cases for the use of this report, we set some criteria to be taken account when deciding whether to account it as a "birdcrime" case. The criteria are the following:

- it should affect protected raptor bird species
- illegal human activity (such as shooting, trapping or poisoning, nest robbing etc.)

Thus, our definition of 'birdcrime' should rather be addressed by 'raptorcrime' – focusing only on birds of prey. We don't deal with accidental injuries or disturbance of birds, such as collisions. However, accidental poisoning is incorporated if it affects birds of prey species, even though the original intention may have been to kill other animals, the act itself is rather deliberate.

There have been other bird crime related cases, which were excluded from our analysis. These can be categorized in 3 groups:

1.) Birdcrime cases not involving raptor species: e.g. blocking nesting holes of European beeeater (*Merops apiaster*), or shooting at White storks (*Ciconia ciconia*). Even poisoning cases where only mammals or poisoned baits were found were excluded from this report. 2.) Illegal possession of live or stuffed birds

3.) Vague cases reported with uncertain facts that could not be clarified later, whether or not it surely involved illegal activities

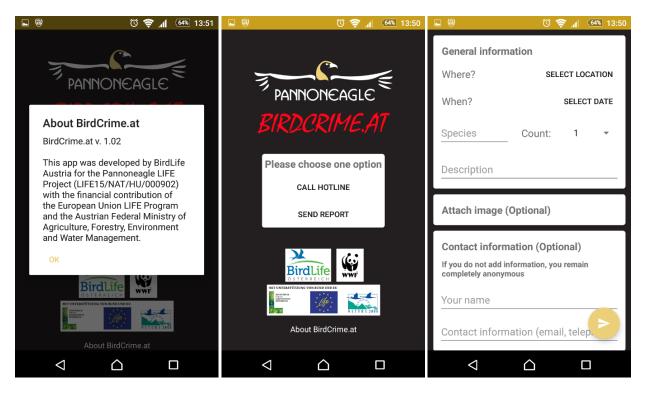
These above mentioned cases were usually not systematically collected by partners, as they fall outside of the project activities in general. In order not to generate biases based on the involvement of partner organizations in these side activities, we excluded these types of cases from our report.

2.1.2. Data collection: reporting

The project partners operate several different options for reporting a bird crime incident. Some of these have been in operation for a long time – mostly national hotline and e-mail services, but some new tools have been added especially by the project. In the Czech Republic a hotline and a thematic webpage (http://karbofuran.cz/) have been operated by CSO. In Austria a hotline is operated by WWF Austria, in Hungary hotline and email reporting have been installed during the previous Helicon LIFE project. The RPS in Slovakia and INCVP in Serbia takes record of poisoning incidents revealed by its members, authorities or by the public.

New means of reporting possibilities have been created in the frame of the PannonEagle LIFE project. The project's website contains an online reporting form, operating on 6 languages (English, German, Slovakian, Czech, Serbian and Hungarian). The reporting form is accessible at the following link: <u>http://www.imperialeagle.eu/en/content/reporting-bird-crime</u>. The form is sent to the national PannonEagle project coordinators, depending on the language used (the English version is directed to MME/BirdLife Hungary).

The BirdLife Austria has created a reporting tool in 2017 which was used since that. The mobile application, called *"BirdCrime"* app. The free, android app has been launched first in July in German and English languages. The Hungarian, Slovakian, Czech and Serbian translations are underway and will available from early 2018.



Screenshot's of the BirdCrime / TOTEM mobile app

The use of the newly developed mobile app is lower than expected. However, a joint advertisement campaign will begin after all language options are tested and finalized.

In practice, the vast majority of reported cases come from the professional communities: national park rangers, environmental authority officers, professional hunters. Maintaining the good contact with these stakeholders is crucial for the program's success, and therefore special attention is paid on nourishing these networks within the PannonEagle project.

2.1.3. Data collection: field surveys

Several different field survey methods are used by the project parallel, depending on the circumstances.

- Dog units
- Drone
- Car

Dog units are best used along linear structures (i.e. ditches, railroads, power lines) or remarkable vegetation switch (like forest edge). Drones can be used to search vast open areas. Cars obviously have a restrain in rough terrain. Actual whether also influences the applicable methods intensely: drones cannot be used in strong wind, while dogs are less tolerant toward a hot summer day nor can small effectively in heavy rain.

<u>Dog units</u>

Country	Organization	Name of the dog	Name of the dog leader	Breed	Age at purchase	Training
Hungary	MME	Carlo	Gábor Deák	Belgian malinois	8 months	passed exam in 2017
Hungary	KNPD	Samu	Anna Gálos	German shepherd 8 months		passed exam in 2017
Czech Republic	CSO	Victory	Klára Hlubocká	Cheasepeak Bay retriever	2 months	from July onward
Slovakia	RPS in cooperation with Slovakian Police	Xara	Martin Hupka	Medium schnauzer	with the leader from 2 months	passed exam in 2019
Slovakia	RPS in cooperation with Slovakian Police	Nero	Pavol Gorny	German Shepherd Dog	8 month	under training

Dog units newly employed by the PannonEagle LIFE project

In Hungary, Gábor Deák also works with "Falco", a 5-year-old German shepherd, trained previously in the course of the HELICON LIFE project. In Czech Republic, Klára Hlubocká has also involved her other dog, "Sam" – earlier trained as human rescue dog – to help her in the field searches.

In the year 2018	No. of field searches	No. of proven crime findings	No. of suspected crime findings
MME Birdlife Hungary - Hungary	150	54	1
Kiskunsag National Park - Hungary	86	3	2
RPS Slovakia	15	0	4
CSO Czechia	48	15	7

Number of searches/findings in year 2018

<u>Drones</u>

MME and HNPD use DJI Mavic Pro type drones, purchased in the frame of the current project. (The drones are also used for checking breeding success of IE's nests in cases when it is the less disturbing possibility.) The drones are a good option when larger, open areas need to be searched. They have very limited applicability in dense vegetation. Drones cannot be used in windy or rainy weather conditions, but are also good options in extreme hot or cold, when dogs cannot work. Drones can be previously program to fly and scan vast lands – and data can be analyzed later with geoinformatic software.

The use of the drones for birdcrime field searches has been only in a pilot phase in this first year of the project, supporting the use of the dog units over extended, open lands. So far, the first experiences show that this method has its relevance under special circumstances; however dogs tend to be more effective in general to find carcasses.

2.1.4. Data management and analysis: "TOTEM", the new regional database

Structure

The purpose of the online database is to fully register, archive and display information about illegal predator crime primary in the region (including the 5 project countries – geographically Romania should be involved later.)

The structure of the database consists of three parts:

- Finding Event
- Case

The lowest level is the "Finding" that contains the most important information about the victims found. "Event" is all the connected findings in a particular area. Usually, this comprises the animals/carcasses within 25 meters found on the same day. There may be more findings for one event if the circumstances indicate a clear link among them. Official documents related to the event such as veterinary reports, national park records, police and court documents are also recorded in the database.

The database structure can be easily adopted later to keep record on other type of wildlife mortality, as well.



TOTEM database platform

Quantity of data

The oldest poisoning data in the database is now dated from 1975, however detailed information on raptor crime has been available since 2000. For now, information available on poisoning and shooting of 2193 mammals and birds, of which 102 individuals are IEs. Certainly, these numbers are increasing continuously. The data submitted online are needed to be validated by an admin/coordinator.

Query options

Data in the database can be displayed in map and chart using different filter settings. The map display works in the 10 x 10 km UTM grid, which can be saved in image format similarly to the diagram. The data stored in the database may be imported in a variety of different file formats.

3. Summary of RaptorCrime incidents in 2018

3.2. BIRDCRIME CASES IN THE SCOPE OF THE PANNONEAGLE PROJECT

Poisoning is the most significant human-caused mortality factor for Imperial Eagles in the Pannonian Region. The situation is still grave.

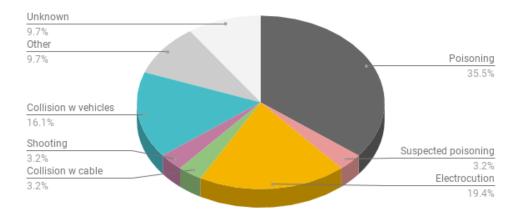
In the year 2018, there were 31 Imperial Eagles found dead in the project countries. From these 12 were known to be poisoned, 5 collided with vehicles (car, train) and 6 got electrocuted. Statistics for mortality causes of IE in total from the 5 project countries in the past 5 years is shown below.

Eastern Imperial Eagle TOTALEstimated number o breeding pairs		Mortality causes							
(Aquila heliaca)		Poisoning	Suspected poisoning	Electrocution	Collision w cable	Shooting	Collision w vehicles	Other	Unknown
2018	308	10	1	6	1	1	5	3	3
2017	286	6	2	4	1	1	5	5	6
2016	283	2	0	3	1	0	3	0	1
2015	268	8	1	9	1	0	3	2	7
2014	230	0	2	4	0	0	1	0	0
2013	225	14	0	0	1	1	1	0	2
2012	218	17	0	2	0	1	2	2	2
2007-2011	146	41	0	15	2	5	6	10	8

Estimated number of breeding pairs and mortality causes of found Imperial eagles in the Pannonian region in years 2007-2018

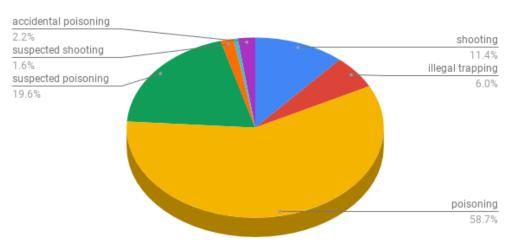
The Saker Falcon (*Falco cherrug*) is considered as secondary key species in the PannonEagle project. In 2018 there was 1 bird which was found shot. We have no concrete data of Saker Falcons falling victim of poisoning during the year.

Imperial Eagle Mortality in 2018



Imperial Eagle Mortality in the Pannonian region, 2018

Out of the wide variety of human-induced mortalities, the project deals with the illegal activities affecting raptors - as these cases are all potential threats to our species in focus.

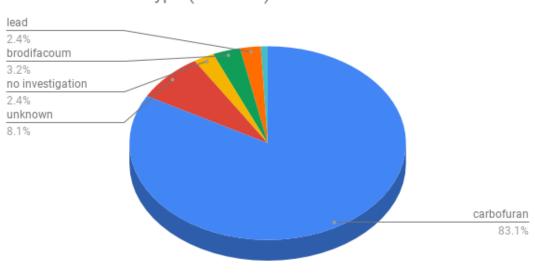


Type of the cases in 2018

Percentage of persecution cases in 2018

In the reporting period (01/2018- 12/2018) the PannonEagle project partners reported altogether **116 cases** where illegal raptor persecution could be suspected or proved. 58,7% of the cases are known to be poisoning, either directly or indirectly and another 19.6% can be added as suspected poisoning (for definition of suspected poisoning see *Image 2*). The suspected poisoning category here in this database means mostly those cases where the birds with characteristic symptoms being found but the laboratory can not justify (lack of samples or unsuitable for lab).

After the poisoning, shooting is the second most frequent crime category in 2018, adding up to 11.4 % of the reported cases. In case of poisoning or suspected poisoning samples are taken and sent to a nationally accredited laboratory in each country for analysis. Carbofuran is still the major compound althoug it was banned in the 70s in all european countries, but recent increase in cases with rodenticides affected such as brodifacoum is also an alarming threat.

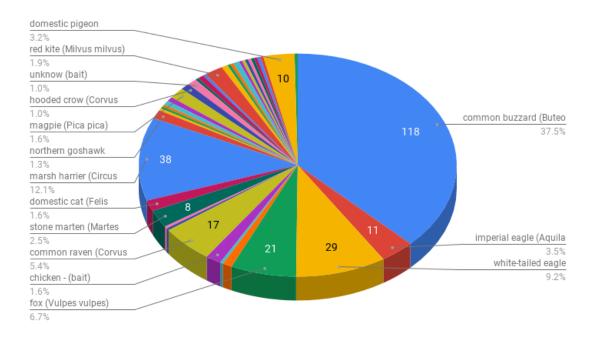


Count of Poision type (if known)

Type of laboratory proven poisons used in 2018

Species affected

The table shows the number of species (even bait species) that were affected by persecution in the Pannonian region in 2018. Complex cases were also recorded such as an illegally shot bird was proven positive for poisoning too



Number of affected species in all crime category in the Pannonian region in 2018

4. Outcomes

4.1.1. Results of cases reported to Police in 2018

It is noticeable that out of the several detected cases, only a little portion of them would finally reach the stage of prosecutions. Even though bird crime cases can be very difficult to investigate and prove, in some countries there is also still a moderate understanding of its importance from part of the law enforcement authorities. Even though there is good cooperation with the national police, many cases reported and plentyful evidence is present the most investigations are closed without fine or conviction. Even more difficult with emerging cases where the intention of poisioning is unclear, such as rodenticide poisioning (where legal subtances were used in an irresponsible way).

2018	DETECTED bird crime cases	POLICE INVESTI- GATIONS started in bird crime cases	PROSECUTIONS started in bird crime cases	CONVICTIONS in bird crime cases
Austria	14	9	0	0
Czechia	23	9	1	0
Hungary	16	6	0	0
Slovakia	38	32	0	0
Serbia	11	2	0	0
All Pannonia	102	58	1	0

Outcomes of the bird crime cases in the Pannonian region in year 2018

4.1.2. Communicating results

Raising awareness among the most important target groups (hunters, game keepers, farmers etc.) and also among the widest audience is an inevitably important part of successfully combating the problem. Bigger birdcrime cases can stir significant media attention. Pressure by the media and conveying public opinion may also influence court decisions.

However, during this first year of the project RPS decided not to communicate bridcrime results in order not to alternate the assessment of the baseline indicators. The agreement between RPS and the Slovakian Police also requested for caution during the investigatory phase. On the other hand, this strategy hinders the project's own communication goals, so RPS agreed to stop this practice from 2018.

The several appearance of the project, the demonstrations held by the dog units at various events and the press releases, TV and radio interviews reached millions of people. The exact output is reported in the communication part of the project's progress reports. This first year has been a most important period in establishing good cooperation with law enforcement authorities (police, ranger service) and other relevant stakeholder groups.

The project put emphasis on networking with LIFE projects combating similar problems to exchange best practice ideas. In 2018, we contacted all LIFE projects involved in birdcrime related issues such as the The PannonEagle project gained international attention from the BirdLife International (articles about the

project were published in March and June). At the end of the year, the coordinating beneficiary welcomed a journalist from Neemo to give input to the 'LIFE and EU Wildlife Crimes' publication.

Visual communication tools, such as folders, leaflets, posters, roll-ups and information boards have been published by the project partners and distributed nationally. Some examples are shown on next page:





Leaflets produced by Pannon Eagle Life project

5. Overview

The illegal killing of birds is still a huge conservation problem in the region – the poisoning being the biggest concern for the European population of the IE and for other raptor species as well. The PannonEagle project partners reported 102 bird crime cases in this reporting period, where birds of prey were directly affected. Out of these 11 IEs and 29 WtEs known or suspected to be shot, trapped or poisoned.

Collaboration and communication channels with the relevant partners and stakeholders were built up, workshops were held and media coverage was provided. These action probably have some effect on prevention but for certain group of offenders only adequate law enforcement and series of convictions would be exemplary and could eventually end raptor persecution in the region.

Unintentional poisoning is also an emerging problem – the offenders are anaware of the fact that they are potentially harming bird of prey by using disposing lead or accumulating rodenticides to the environment. While "traditional" persecution methods will hopefully draw back radically in the upcoming years, these other substances must stil be closely monitored and well-studied in the future.