

Annual report on bird crime incidents in the Pannonian region - 2020

PannonEagle LIFE project, LIFE15/NAT/HU/000902

Action C1.



Photo: Gábor Deák



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1. Introduction

1.1. BACKGROUND INFORMATION

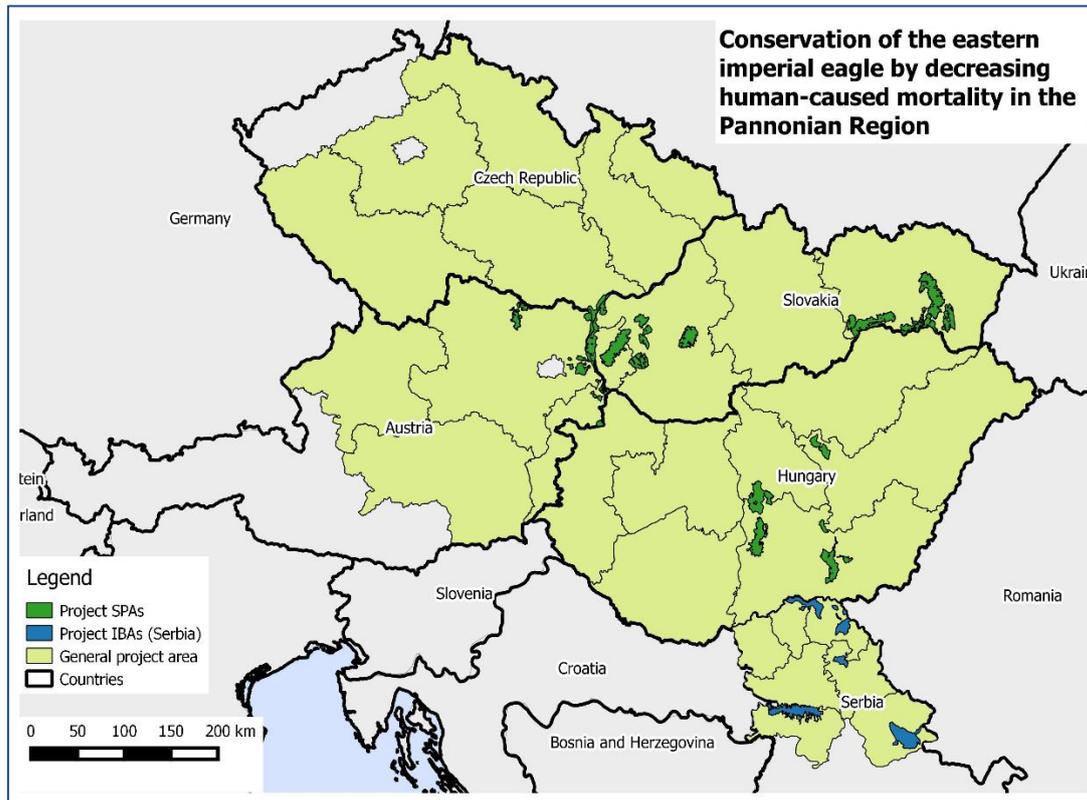
Due to the resilience and conservation efforts of the past decades, the Pannonian biogeographical region (which includes all of Hungary and parts of Slovakia, Romania, Czech Republic, Croatia, Serbia and Ukraine) there are 396 breeding pairs of the **Eastern Imperial Eagle (*Aquila heliaca*)**.

Although illegal persecution is slowly decreasing, still many imperial eagles 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 (*Falco cherrug*). 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

1.3. 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

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 bee-eater (*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.

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2.2. 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: <http://www.imperialeagle.eu/en/content/reporting-bird-crime>. 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 data is then imported to the TOTEM database:

link: <https://totem.mme.hu/>

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.

link: <https://play.google.com/store/apps/details?id=at.birdlife.birdcrime.birdcrime&hl=en&gl=US>

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.

2.3. 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.

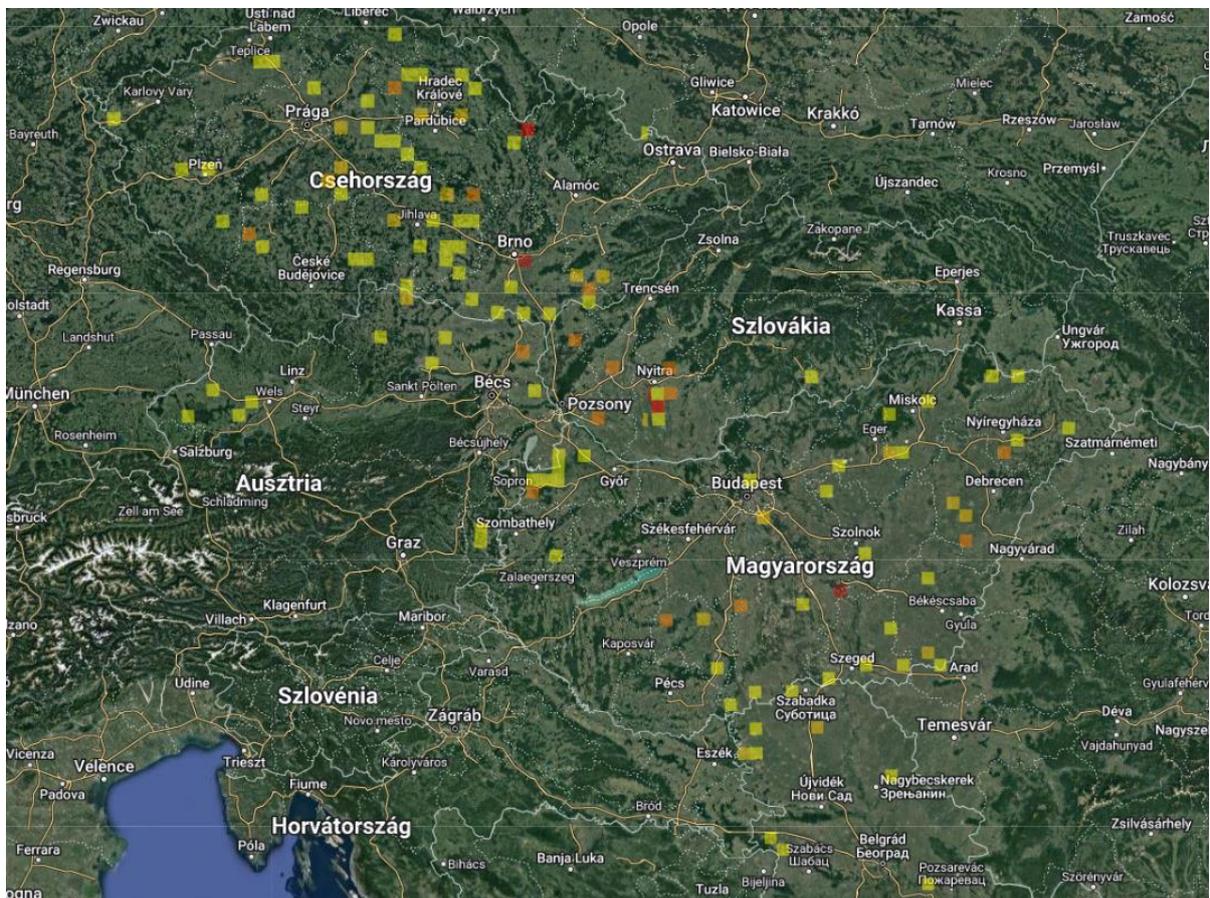
Quantity of data

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.



Distribution of poisoning cases in the Pannonian region from 2018-2020

2.4. DATA COLLECTION – DOG UNITS

Dog units of the PannonEagle project are efficient in finding poisoned carcasses and baits. This significantly improves the detection rate and the number of findings on the field.

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	Zoltán Kalán	German shepherd	8 months	passed exam in 2017
Czech Republic	CSO	Victory	Klára Hlubocká	Cheasepeak Bay retriever	2 months	from 2018 onward
Czech Republic	CSO	Irbis	Klára Hlubocká	Cheasepeak Bay retriever	2 month	under training
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	exam completed in 12/2019

Dog units newly employed by the PannonEagle LIFE project

In the year of 2020, PannonEagle dog units altogether conducted 221 searches where they discovered 63 proven crime findings and 33 suspected crime findings. The proven crime findings were reported to the police in all matter. Unfortunately, Sam, the older search dog of CSO's unit passed away, leaving Viky alone. CSO's unit decided to train a new dog, named Irbis.

In the year 2020	No. of field searches	No. of proven crime findings	No. of suspected crime findings
MME Birdlife Hungary - Hungary	132	46	27
Kiskunsag National Park - Hungary	46	1	4
Police of Slovakia / RPS	16	1	3
CSO Czechia	66	24	6

Number of searches/findings in year 2020

3. Summary of RaptorCrime incidents in 2020

3.1. 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 2020, there were 30 Imperial Eagles found dead in the project countries. From these 7 were known to be poisoned, 5 were suspected to be poisoned, 3 collided with vehicles (car, train) and 3 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 TOTAL (Aquila heliaca)	Estimated number of breeding pairs	Mortality causes							
		Poisoning	Suspected poisoning	Electrocution	Collision w cable	Shooting	Collision w vehicles	Other	Unknown
2020	396	7	5	3	0	1	3	7	4
2019	336	9	7	4	1	3	7	3	9
2018	320	10	1	6	1	1	5	3	3
2017	303	6	2	4	1	1	5	5	6
2016	270	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 2007-2020

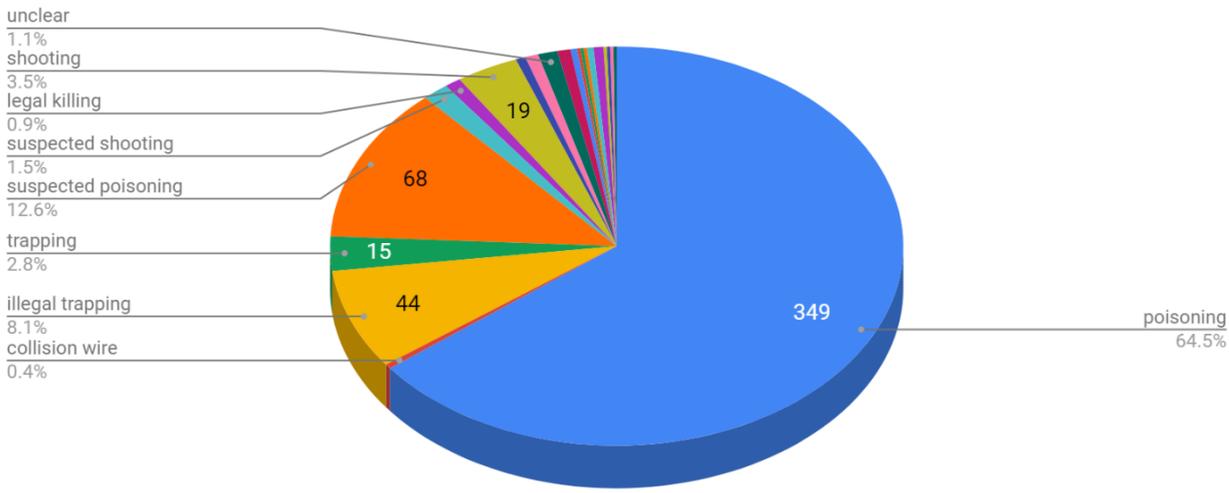
Out of the wide variety of human-induced mortalities, the project deals with the illegal activities affecting raptors - as these cases are all potential threats to our species in focus.

3.2. BIRDCRIME CASES IN THE SCOPE OF THE PANNONEAGLE PROJECT

Recorded cases

In the reporting period (01/2020- 12/2020) the PannonEagle project partners reported altogether **134 cases with 541 findings** where illegal raptor persecution could be suspected or proved 64,5% of the cases are known to be poisoning, either directly or indirectly and another 12.6%

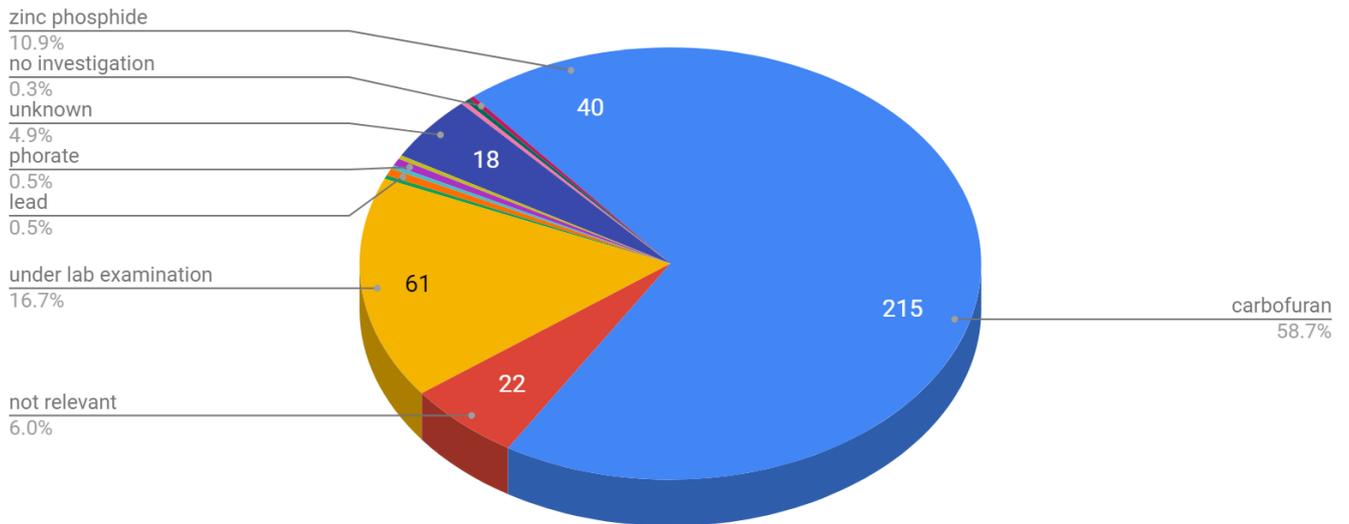
can be added as suspected poisoning. The suspected poisoning category here in this database means mostly those cases where the birds with characteristic symptoms being found but the laboratory can not justify. After the poisoning and suspected poisoning, shooting illegal trapping is the most frequent crime category in 2020, adding up to 8.1% 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.



Findings recorded by the PannonEagle partners in 2020

Detected & persumed substances

Among the detected substances, carbofuran is the most frequent poison which was proven in 215 findings. Carbofuran is highly neuro-toxic carbamate pesticide that had been banned in the European Union in 2008. Unfortunately, it seems like the perpetrators either still have remaining storage or can import it illegally. The second most-used poison that was detected was zinc phosphide, mainly carcasses found in Czechia by CSO’s dog unit.



Type of laboratory proven poisons used in 2020

3.3. SPECIES AFFECTED

The table shows the 541 individuals of 240 different species (even bait species) that were recorded in the Pannonian region in 2020. From the data common buzzard (*Buteo buteo*) is the most common victim of persecution, but large eagle species (*Aquila heliaca* and *Haliaeetus albicilla*) are also present. Compared to previous years a peaking number of european pond turtle (*Emy orbicularis*) were recorded in Kiskunság National Park Directorate. White-tailed eagle and eastern imperial eagle

common buzzard (<i>Buteo buteo</i>)	102
european pond turtle (<i>Emys orbicularis</i>)	58
chicken - egg (bait)	43
dog (<i>Canis lupus familiaris</i>)	35
sparrow hawk (<i>Accipiter nisus</i>)	32
marsh harrier (<i>Circus aeruginosus</i>)	24
rook (<i>Corvus frugilegus</i>)	24
white-tailed eagle (<i>Haliaeetus albicilla</i>)	22
imperial eagle (<i>Aquila heliaca</i>)	21
red kite (<i>Milvus milvus</i>)	19
fox (<i>Vulpes vulpes</i>)	18
hooded crow (<i>Corvus cornix</i>)	18
northern goshawk (<i>Accipiter gentilis</i>)	17
common raven (<i>Corvus corax</i>)	14
unknow (bait)	13
domestic cat (<i>Felis catus</i>)	12
saker falcon (<i>Falco cherrug</i>)	7
hare (bait)	5
magpie (<i>Pica pica</i>)	5
stone marten (<i>Martes foina</i>)	4
viscera bait	4
common kestrel (<i>Falco tinnunculus</i>)	4
long-eared owl (<i>Asio otus</i>)	4
chicken - (bait)	3
common wood pigeon (<i>Columba palumbus</i>)	2
pheasant (bait)	2
hawk's basket	2
eagle owl (<i>Bubo bubo</i>)	2
grey heron (<i>Ardea cinerea</i>)	1
hen harrier (<i>Circus cyaneus</i>)	1
wild pig (bait)	1
peregrine falcon (<i>Falco peregrinus</i>)	1
wild boar (<i>Sus scrofa</i>)	1
wild boar (bait) (<i>Sus scrofa</i>)	1
brown kite (<i>Milvus Migrans</i>)	1
eurasian scops owl (<i>Otus scops</i>)	1
european honey buzzard (<i>Pernis apivorus</i>)	1
tawny owl (<i>Strix aluco</i>)	1
lesser spotted eagle (<i>Clanga pomarina</i>)	1
sparrow	1
common starling (<i>Sturnus vulgaris</i>)	1
brown kite	1
white stork (<i>Ciconia ciconia</i>)	1
stock dove	1
Pygmy Cormorant (<i>Microcarbo pygmaeus</i>)	1
bate (not confirmed)	1
cat	1
woodcock	1

Number of affected species in all crime category in the Pannonian region in 2020

4. Outcomes

4.1. RESULTS OF CASES REPORTED TO POLICE IN 2020

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 poisoning is unclear, such as rodenticide poisoning (where legal substances were used in an irresponsible way).

Country	01 - no procedure	02 - active lab analysis	03 - negative lab result	04 - reported to police or state nature conservancy	05 - active police investigation	06 - closed police investigation (no accusation)	07 - police accusation	08 - active court procedure
Austria	10	5	10	4	18	3		
Czechia	6			7	26	1	1	
Hungary	15			5	2	7		1
Slovakia				6	11			

Outcomes of the bird crime cases in the Pannonian region in year 2020

5. Summary

Current report summarized the overall results of Action C1 (Detect and Investigate Raptor Persecution) PannonEagle LIFE project in year 2020. Altogether 30 eastern imperial eagle (*Aquila heliaca*) carcasses were recorded in the project countries. In the reporting period (01/2020- 12/2020) the PannonEagle project partners reported 134 cases with 541 findings where illegal activities were suspected or proved. The majority of the persecution cases are poisoning, either directly or indirectly and another 20% is suspected poisoning. The PannonEagle specialized dog units conducted 221 field searches and revealed 63 proven and 33 suspected crime findings. In relation with the dog unit's field work one case reached court phase.