

Annual report on bird crime incidents in the Pannonian region - 2019

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) reached 317 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.

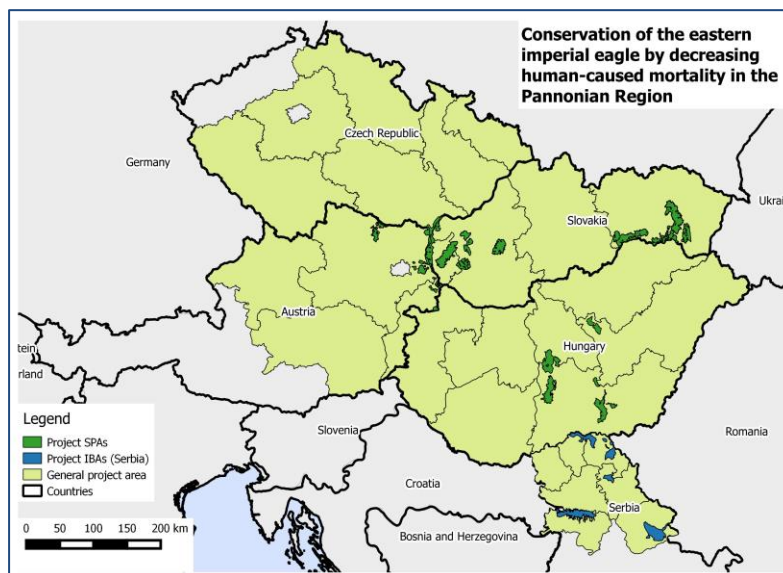
Persecution also affects other protected raptor species, including another Annex I-listed bird, such as the Saker Falcon (*Falco cherrug*). Combating illegal bird poisoning is in line with the anti-poison policy of the Bern Convention on the Conservation of European Wildlife and Natural Habitats.



Photo: Matthias Schmidt

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 veterinary institutes 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.

2.2. DATA COLLECTION: REPORTING SCHEME

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.

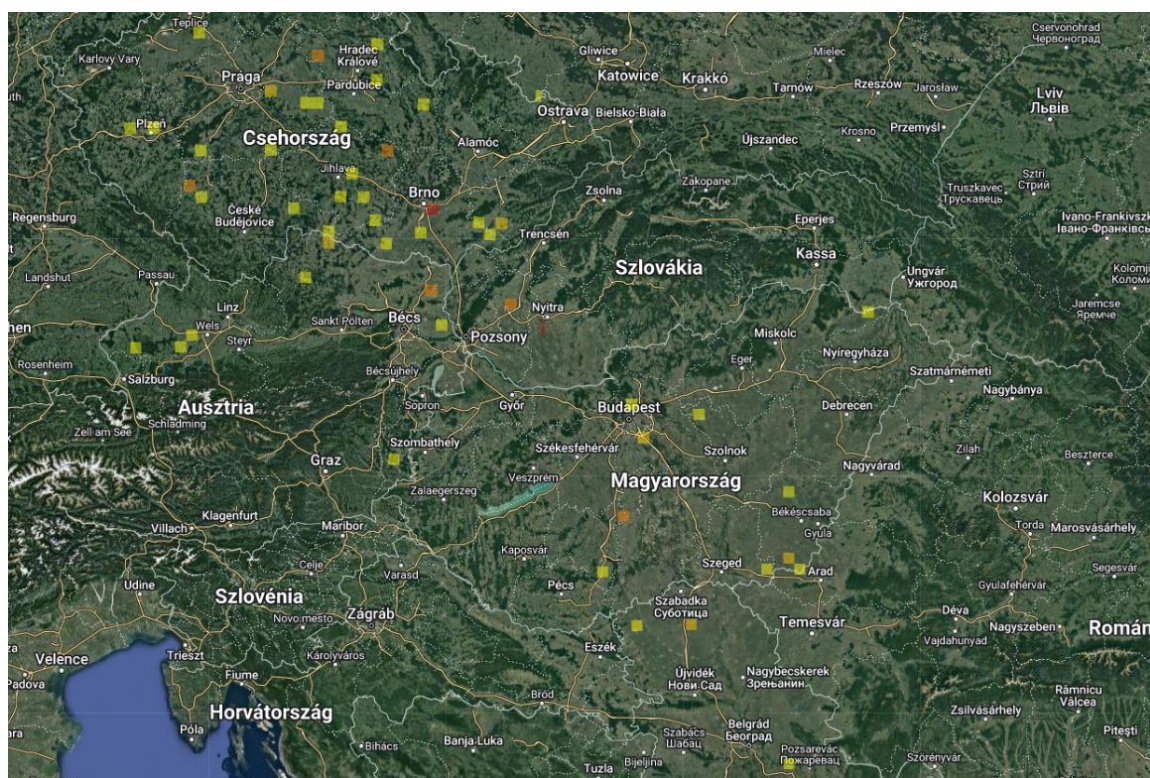
Quantity of data

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 in 2019

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	Anna Gálos	German shepherd	8 months	passed exam in 2017
Czech Republic	CSO	Victory	Klára Hlubocká	Cheasepeak Bay retriever	2 months	passed exam in 2019
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	Formal Training in spring 2019, exam completed in 12/2019

Dog units newly employed by the PannonEagle LIFE project



Photo: Klára Hlubocká

In the year of 2019, 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.

In the year 2019	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 2019

3. Summary of RaptorCrime incidents in 2019

3.1. POPULATION AND MORTALITY DATA OF THE EASTERN IMPERIAL EAGLE

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

In the year 2019, there were 36 Imperial Eagles found dead in the project countries. From these 9 were known to be poisoned, 7 collided with vehicles (car, train) and 4 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
2019	336	9	8	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

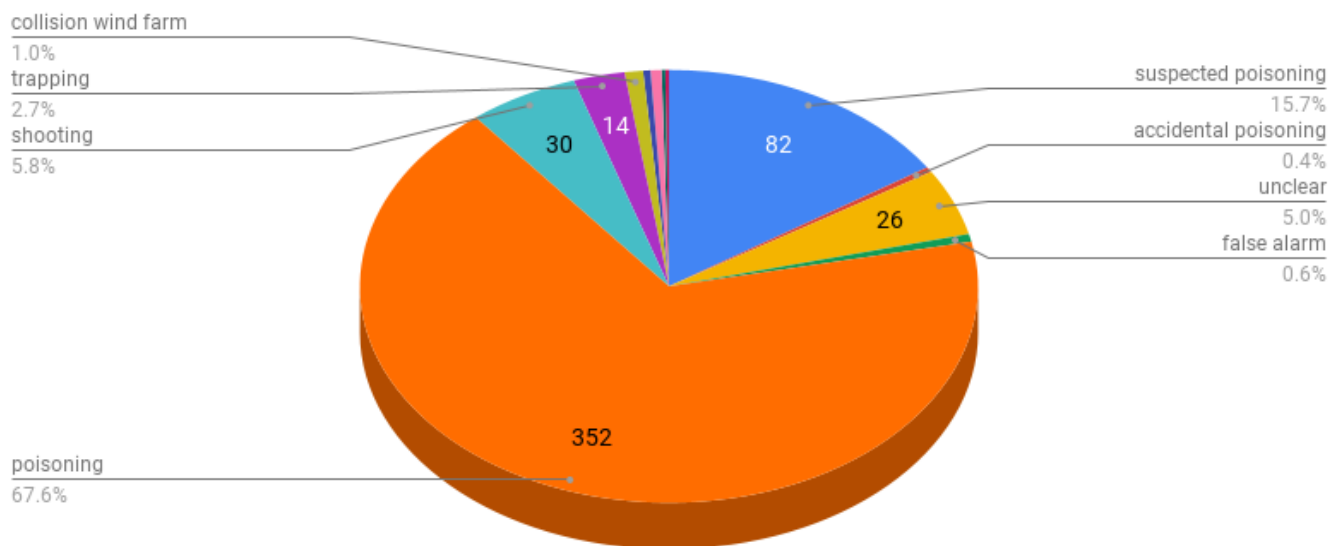
Estimated number of breeding pairs and mortality causes of found Imperial eagles in the Pannonian region in years 2007-2019

The Saker Falcon (*Falco cherrug*) is also considered as a species of interest in the PannonEagle project. In 2019 there was 1 bird which was found shot. We have no concrete data of Saker Falcons falling victim of poisoning during the year.

3.2. BIRDCRIME CASES IN THE SCOPE OF THE PANNONEAGLE PROJECT

Recorded cases

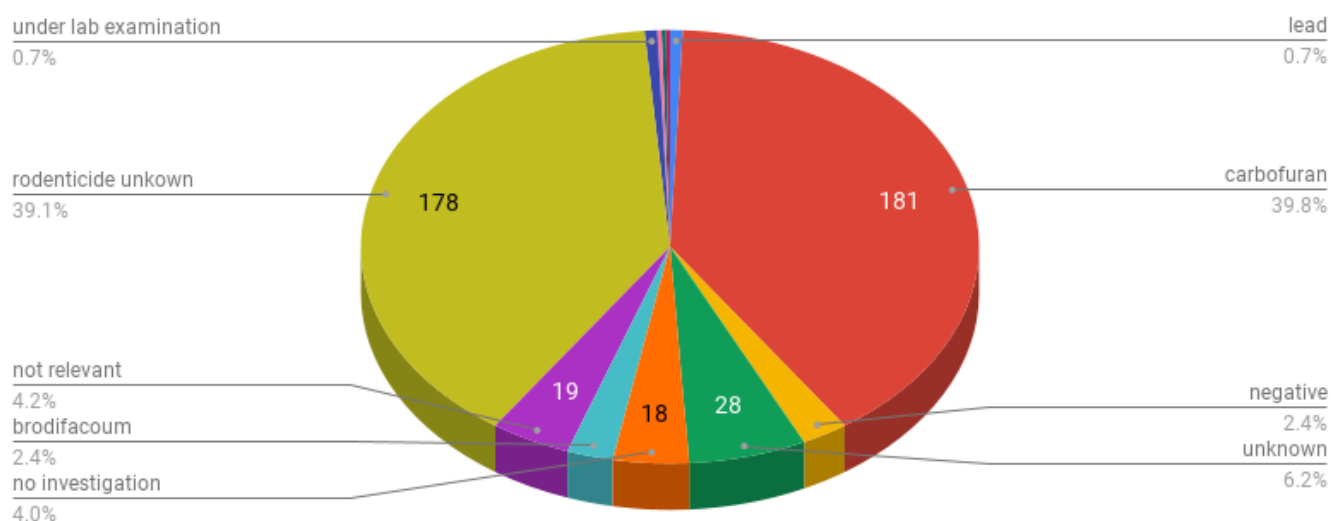
In the reporting period (01/2019- 12/2019) the PannonEagle project partners reported altogether **141 cases**. The majority of the cases are related to proven or suspected illegal wildlife persecution, but occasionally electrocution, colision cases are also recorded and investigated. Latter sometimes could reveal presence of non-lethal residues of rodenticides. Among the recorded cases, 67% of the findings are known to be related to poisoning, either directly or indirectly and another 17% of the findings filed 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 (very old or scattered carcasses can be sometimes unsuitable for lab tests). The partnership also recorded 30 shooting and 14 illegal trapping incidents which indicates that these crimes are still present.



Findings recorded by the PannonEagle partners in 2019

Detected & presumed substances

Among the detected substances, carbofuran is the most frequent poison in relation of 181 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. A worrying increase of anticoagulant rodenticide poisoning cases also recorded. In Hungary 19 individuals were containing lethal or sub-lethal levels of brodifacoum, a second generation anticoagulant rodenticide.



Type of laboratory proven poisons detected in 2019

Species affected

The table shows the 521 individuals of 240 different species (even bait species) that were recorded in the Pannonian region in 2019. 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 143 european hares were recorded caused by a rodenticide called Stutox II in Czechia.

white-tailed eagle (<i>Haliaeetus albicilla</i>)	30
rook (<i>Corvus frugilegus</i>)	19
fox (<i>Vulpes vulpes</i>)	20
dog (<i>Canis lupus familiaris</i>)	12
imperial eagle (<i>Aquila heliaca</i>)	27
common buzzard (<i>Buteo buteo</i>)	80
northern goshawk (<i>Accipiter gentilis</i>)	8
common kestrel (<i>Falco tinnunculus</i>)	6
hooded crow (<i>Corvus cornix</i>)	12
otter (<i>Lutra lutra</i>)	1
unknow (bait)	4
domestic cat (<i>Felis catus</i>)	7
red kite (<i>Milvus milvus</i>)	14
stone marten (<i>Martes foina</i>)	17
magpie (<i>Pica pica</i>)	14
hare (bait)	3
black-headed gull (<i>Larus ridibundus</i>)	1
common raven (<i>Corvus corax</i>)	32
steppe polecat (<i>Mustela eversmanii</i>)	1
european hare (<i>Lepus europaeus</i>)	143
long-eared owl (<i>Asio otus</i>)	3
pheasant (bait)	2
common wood pigeon (<i>Columba palumbus</i>)	4
jackdaw (<i>Coloeus monedula</i>)	2
peregrine falcon (<i>Falco peregrinus</i>)	1
roe deer (<i>Capreolus capreolus</i>)	4
common pheasant (<i>Phasianus colchicus</i>)	4
marsh harrier (<i>Circus aeruginosus</i>)	11
grey heron (<i>Ardea cinerea</i>)	1
great white egret (<i>Ardea alba</i>)	1
eagle owl (<i>Bubo bubo</i>)	2
roe deer (bait)	3
badger (<i>Meles meles</i>)	1
golden eagle (<i>Aquila chrysaetos</i>)	2
sparrow hawk (<i>Accipiter nisus</i>)	2
chicken - (bait)	7
chicken - egg (bait)	11
domestic pigeon (<i>Columba livia domestica</i>)	3
species undetermined	
common starling (<i>Sturnus vulgaris</i>)	1
white stork (<i>Ciconia ciconia</i>)	2
pigeon (bait)	2
chicken - chick (bait)	1

Individuals of different species recorded in the Pannonian region in 2019

4. Outcomes

4.1. RESULTS OF CASES REPORTED TO POLICE IN 2019

In all countries a significant amount of active police investigations were initiated. In general it is difficult to follow police investigations either because the investigation itself could take months or years or the police refuses to provide information to third parties.

In lower Austria a poisoned white-tailed eagle was found by a jogger beside a dirt road. After the case became known, the public reacted with great dismay. Especially in the region where the bird was found a lot of rumours started and people gave hints that led to a 70-year-old hunter and gamekeeper. The police and the prosecutor-initiated field search on the hunting ground accompanied by conservation dogs specialized in carcass search. The banned pesticide was seized during the subsequent house warrant with the cooperation of poison-sniffing dog Falco from MME Hungary. Protected animals were found in the suspect's freezer - including animals containing carbofuran. A strictly protected eagle owl was also found among them. In two days of trial, the case was finally brought to the landing court and a verdict of guilt was reached. The verdict is six months conditional and 120 daily rates unconditional.

In Czechia another court trial is expected in relation to a poisoning event near Mečichov where two white-tailed eagles and two ravens were found by CSO's dog unit.

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)	11 - convicted by court
Austria	11	13	3	3	17	1	1
Czechia		1	1	6	22	8	1
Hungary	28		4	7	2	4	
Serbia	1			1	1		
Slovakia				6	7	1	

Outcomes of the bird crime cases in the Pannonian region in year 2019

5. Summary

Current report summarized the overall results of Action C1 (Detect and Investigate Raptor Persecution) PannonEagle LIFE project in year 2019. Altogether 37 eastern imperial eagle (*Aquila heliaca*) carcasses were recorded in the project countries. In the reporting period (01/2019- 12/2019) the PannonEagle project partners reported 141 cases with 521 findings where illegal activities were suspected or proved. More than half of the cases is 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 two bird crime cases reached the court phase.