

THE ILLEGAL USE OF POISON BAITS IN GREECE ANTIPOISON TASK FORCE

TECHNICAL REPORT FOR ACTION C1

LIFE+ PROJECT
"THE RETURN OF THE NEOPHRON"
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1. EXECUTIVE SUMMARY

The present report describes the characteristics of the illegal use of poison baits in Greece based on the analysis of the data recorded by the Antipoison Task Force during the period 2012-2015. It further proposes different actions that could help address the issue more efficiently. The Task Force consists of six environmental NGOs (ARCTUROS, Hellenic Society for the Protection of Nature, Hellenic Ornithological Society, Hellenic Wildlife Care Association ANIMA, Callisto and WWF Greece) and the Natural History Museum of Crete. The report was prepared under the framework of the LIFE+ project “Urgent measures to secure the survival of the Egyptian vulture (*Neophron percnopterus*) in Bulgaria and Greece” (LIFE10 NAT/BG/000152). The project’s central objective is to prevent the extinction of the Egyptian Vulture in these two countries by means of studying and tackling the species’ main threats; among them, the illegal use of poison baits has been identified as the most important reason for the population’s decrease in Greece.

The analysis of the poisoning events recorded by the Antipoison Task Force in its data base – 163 events in the period 2012-2015-, aims to shed some light on the consequences, reasons and factors driving this practice. According to the results, on most occasions (61%) the motives remain unknown. However, on those occasions in which the motive is known (or suspected), disputes among stakeholders - usually between hunters and stockbreeders - are found to be the most common reason leading to poisoning events (10%) that target working and stray dogs, along with the control of “vermin species” (14%), usually foxes that prey on game or wolves and bears that cause losses to livestock and crops.

The data also reflect the wide variety of types of poison baits used, ranging from a piece of meat, bone or fat to a whole animal carcass, depending on the targeted species. The toxicological analyses carried out show that there is a wide range of chemical substances used, usually legal or banned pesticides such as organophosphates, organochlorine and carbamate insecticides. Cyanide baits covered with wax are also commonly used. Additionally, the existence of a widespread black market of illegal pesticides all over Greece has been proven thanks to these toxicological analyses, as Carbofuran and Endosulfan -both banned- are in fact the most common pesticides detected together with Methomyl (legal).

Another important finding is that scavenger bird species is the wildlife group most affected by the illegal use of poison baits (30% of all poisoned animals). However, not only wildlife is harmed. Working dogs (shepherd dogs 20% - and hunting dogs – 19%) are severely afflicted by this practice. In addition, although most of the poisoning events took place outside protected areas, the number of those that did - 20%- is still worrying.

During the two years that the Canine Teams were active (2014-2015), 28% of the total poisoning events recorded in the database were detected thanks to the use of the Teams, proving just how effective these units can be and underlining the importance of having such a tool in the fight against poison.

In nearly 86% of the poisoning events no official complaints were made either to the prosecutor/police or to other relevant authorities (i.e. Forestry Services). This is in part due to the lack of a clear legal framework determining the responsibilities of all relevant authorities; this also has negative consequences regarding the removal of poisoned animals and baits from the field as well as the collection of evidence and samples for toxicological analyses that could subsequently be used for the investigation of the crime and at court. In addition, the fact that most of the poisoning event records come from areas where the organizations of the Antipoison Task Force are active indicates that the cases registered are only the tip of the iceberg.

In brief, the situation in Greece regarding poison baits can be described as critical. Since 2012, at least six Egyptian vultures have been poisoned (national population is estimated to be less than 10 breeding pairs). What’s more, the European Commission has started an infringement procedure against Greece due to the mass poisoning event in Nestos Gorge in February 2012 which wiped out a whole colony of Griffon vultures and the local breeding population of the Golden eagle. Beyond the negative impacts on protected wildlife species, the illegal use of poison baits is an extremely complex problem which has deep socio-economic implications. An integrated National Strategy against the use of poison baits is needed in order to effectively address this problem. This Strategy should be supported by a National Action Plan that includes targeted actions to prevent this practice, to eradicate the motives, to specify the responsibilities and the role of competent authorities, as well as aiming to inform and increase public awareness.

2. INTRODUCTION

The present report describes the characteristics of the illegal use of poison baits in Greece and proposes different actions that could help address this problem. The report analyses the data on poisoning incidents compiled by members of the Antipoison Task Force (ANIMA, ARCTUROS, Hellenic Society for the Protection of Nature, Hellenic Ornithological Society, Callisto, WWF Greece and Natural History Museum of Crete) during the period 2012-2015, following the first attempt by Korbeti and Politi (2012), regarding the proposals of the environmental NGOs and institutions for addressing the poison bait issue. This analysis attempts to depict the illegal practice of the use of poison baits in Greece and its characteristics (motivation, species affected, toxic substances used etc.). The existing limitations and difficulties that the State faces to address these incidents efficiently are also extensively reported. Finally, measures for the reduction of motives and handling of the problem by the State are proposed.

The present report was prepared under the framework of the LIFE+ project “Urgent measures to secure the survival of the Egyptian vulture (*Neophron percnopterus*) in Greece and Bulgaria” (LIFE10 NAT/BG/000152), which started in October 2011 and will be completed by the end of 2016. This project was a common initiative of the Bulgarian Society for the Protection of Birds (BSPB), the Hellenic Ornithological Society (HOS), WWF Greece and the Royal Society for the Protection of Birds (RSPB). It is implemented in 27 Special Protection Areas (SPA) of Natura 2000 Network (15 in Greece and 12 in Bulgaria). The project’s central objective is to prevent the extinction of the Egyptian vulture in these two countries by means of studying and tackling the threats, the causes of breeding failure, the low rates of survival and, finally, the species’ status in its wintering grounds in Africa.

The main cause of the population decline of the Egyptian Vulture in Greece is the illegal use of poison baits (Saravia *et al.* 2016). This practice is one of the main causes of non-natural death, not just for the Egyptian vulture but for many other protected wildlife species as well (Berny 2007; Guitart 2010) that inhabit agricultural, woodland and montane areas. Poison baits afflict scavenging birds of prey (vultures, Golden eagle, Black kite etc) which are usually not the target species. Although poison baits are usually used by a small minority of individuals, their effect on vultures can be catastrophic as the phenomenon is uncontrolled, “invisible” and rarely reported to the authorities.

Many scavenging birds of prey went extinct in different areas of Greece or declined greatly due to the use of poison baits. The Bearded vulture (*Gypaetus barbatus*) went extinct from mainland Greece and is now found only in the island of Crete (Xirouchakis *et al.* 2001). The distribution range of the Black vulture (*Aegypius monachus*), is now restricted to Thrace, mainly around the National Park of Dadia-Lefkimi-Soufli (Xirouchakis & Tsiakiris 2009; Skartsi *et al.* 2012; Vasilakis *et al.* 2016). The population of the Griffon vulture in mainland Greece has crashed, mostly because of the poison baits (Legakis & Maragou 2009). A single poisoned animal or a single poisoning incident can lead to mass deaths or the complete extinction of a species, like the Griffon Vulture colony in Nestos Gorge in February 2012¹.

Although their use is strictly prohibited, poison baits continue to be a widely practiced and deeply rooted habit for the control of “vermin” (foxes, badgers, wolves, etc) that may cause damage to crops and livestock (Woodroffe *et al.* 2005; Mateo-Tomas *et al.* 2012; Korbeti & Politis 2012; Skartsi *et al.* 2014; Veleviski *et al.* 2015). Population control of these animals through the use of poison baits is a widespread practice worldwide, especially in areas with stock-farming and hunting activity (Graham *et al.* 2005; Sotherton *et al.* 2009). According to Márquez *et al.* (2012), poison baits are the most widespread method of predator elimination in the world. Poison bait use also targets the fox, which is supposed to affect the population of the hare and other game species (Lozano *et al.* 2010).

Even though the use of poison baits was banned in Greece in 1993, it is still common practice to stakeholders (stockbreeders, farmers, hunters and beekeepers). The main motivation for the use of poison baits is the damage induced to farm animals and crops, pressure to game species (e.g. hare predation by foxes) and

1 http://www.ornithologiki.gr/page_cn.php?aID=1422

personal disputes between land users, usually between stockbreeders and hunters (Skartsi *et al.* 2014; Xirouchakis *et al.* 2000). In addition, poison baits often target dogs, especially stray dogs but also shepherd and hunting dogs, a result of disputes between stockbreeders and hunters (Korbeti & Politis 2012; Skartsi *et al.* 2014; Kret *et al.* 2015; Vavylis *et al.* 2016).

There are several types of poison baits, the most common being pieces of meat, bones or fats or even a complete carcass, depending on the target species (Kret *et al.* 2015; Vavylis *et al.* 2016). There is a wide range of chemical substances used (mainly pesticides), like organophosphate, organochlorine and carbamide pesticides (Korbeti & Politis 2012). Cyanide baits covered with wax (Vavylis *et al.* 2016) are also widely used, while strychnine was used until recently.

According to toxicological analyses of the poisoned animals and/or baits, during the period 2012-2015, the most commonly used substances were Methomyl, Carbofuran, Endosulfan and cyanides. The same analyses show wide use of banned pesticides (Kret *et al.* 2015; Vavylis *et al.* 2016).

The bulk of the data presented in this report were collected under the framework of two LIFE+ projects: the LIFE+ Biodiversity project “Innovative Actions Against Illegal Poisoning in EU Mediterranean Pilot Areas (LIFE09 NAT/ES/000533)² and the LIFE+ Nature project “Urgent measures to secure the survival of the Egyptian Vulture (*Neophron percnopterus*) in Bulgaria and Greece” (LIFE10 NAT/BG/000152)³. At this point, we should give special citation to the Canine Teams of the Hellenic Ornithological Society and WWF Greece, under the framework of the aforementioned project; with the help of specially trained dogs, poison baits are detected in Thessaly and Thrace, respectively (Kret *et al.* 2015; Vavylis *et al.* 2016).

The severe effect of poison baits in the Egyptian vulture in Greece became evident during the implementation of the actions of the LIFE+ project “The Return of the Neophron”. Since 2012, six Egyptian vultures have been poisoned (one of them twice, surviving the first time but not the second⁴), and the species’ population in Greece is now less than 10 pairs. The total impact of this illegal practice on the Greek population of the species and on other protected species of wildlife is hard to estimate with precision as poisoned animals’ retrieval is very difficult.

2.1. Antipoison Task Force

Illegal poisoning of wildlife in Greece is out of control, and has pushed several species to the brink of extinction. This situation led to the creation of the Antipoison Task Force (henceforth Task Force). More specifically, the Task Force was formed in 2012 and consists of environmental NGOs (ARCTUROS, Hellenic Society for the Protection of Nature, Hellenic Ornithological Society, Callisto, WWF Greece and Hellenic Wildlife Care Association ANIMA) and the Natural History Museum of Crete, a department of the University of Crete. Since 2014, under the framework of LIFE+ project “The Return of the Neophron”, the Hellenic Ornithological Society is coordinating the Task Force and managing the Poison Incidents Database.

The main objective of the Task Force is to promote proposals and institutional changes to eradicate the killing of wildlife by poison baits and to make known the extent of this conservation problem at local and national level.

Poison bait use is a complex issue with important social implications and, as such, it was a matter of repeated discussion among the members of the Task Force in the past. However, the triggering event for the creation of the Task Force was the very serious poisoning incident of scavenger birds of prey that took place in Nestos Gorge in February 2012. More specifically, two wild horses were shot dead and were soaked with Carbofuran. The result was two dead Griffon vultures (*Gyps fulvus*), four Golden eagles (*Aquila chrysaetos*)

2 LIFE09 NAT/ES/000533 which was completed in October 2014, was implemented in Eastern Crete (Mount Idi GR4330005, Mount Dikti GR4320002, Mts Asterousia GR4310013) and in Mts Antichasia-Meteora (GR1440003) by the Natural History Museum of Crete (NHMC) and ARCTUROS respectively. From January 2015 to June 30, 2017 several actions are still implemented in Crete, under the framework of the project Innovative Actions Against Poison Baits – After-Life Project».

3 In short LIFE+ “The Return of the Neophron”

4 http://www.ornithologiki.gr/page_cn.php?aID=1507

and a Common buzzard (*Buteo buteo*) around them. However, as time showed, the entire colony of Griffons (30-40 individuals) disappeared as a result of this incident. This was the largest of the remaining six colonies of this species in mainland Greece (Bourdakis 2003; Xirouchakis & Tsiakiris 2009) where, according to the Red Data Book of Greece (Legakis & Maragou 2009) the Griffon vulture is now classified as “Critically Endangered”. Based on available scientific data, counts and evidence, the Nestos Gorge colony has not been recolonized ever since. The breeding population of Golden eagles (two pairs) found in the gorge was also wiped out. The population of this eagle is now less than 150 pairs in Greece and the species is classified in the Red Data Book as “Endangered”.

This environmental crime led the European Commission to start an infringement procedure against Greece (case file 2013/4154). More specifically, due to the Greek State’s inaction in taking proper measures to address the poison bait issue, the European Commission’s Directorate-General for the Environment sent a letter of formal notice to the Greek authorities in September 2013⁵. The Commission evaluated that Greece infringed its obligations towards articles 6 (2) and 7 of Directive 92/43/EEC “on the conservation of natural habitats and of wild fauna and flora” and towards articles 2 and 5 (a) of Directive 2009/147/EU “on the conservation of wild birds”. Since then, the Commission has repeatedly sent new letters to the Greek authorities asking for further information regarding actions implemented in order to handle the poison bait issue in Greece. The Task Force is in direct contact with the delegates of the European Commission, keeping them updated on its actions against poison bait use and on the Administration’s acts regarding this issue.

One of the first things that the Task Force did was the preparation of a report describing the present status, the relevant legislation and the environmental NGOs and authorities proposals for addressing the poison bait use in Greece (Korbeti & Politis 2012). This report was based on available data that was entered in a database of poisoning incidents, created by the Task Force in order to record all poisoning incidents systematically. Poison bait use is an unseen crime and as such, the vast majority of incidents are not recorded. It is estimated that only 10% of the animals killed by poison are located (Layman’s Report LIFE09 NAT/ES/000533)⁶. Focused action of the Task Force members and their continuous effort to collect as much information as possible is supporting the database and provides a better perception of this practice’s characteristics, as well as its underlying reasons. A consistent and continuously enriched database can lead to the identification of high-risk areas for poison bait use (hot spots) and consequently to a better prioritization and more efficient utilization of the relevant authorities’ already limited resources.

Until now, poisoning incident data collection is carried out mainly by the members of the Task Force and secondly by the public authorities. A specific protocol (see Annex) is filled in for each incident and the data is sent to the HOS who is responsible for the database update and management. This report presents all the poisoning incidents, along with their characteristics, that have been recorded from early 2012 to late 2015.

2.2. Legal Framework

There is a wide range of laws that clearly express the ban in poison bait use for eliminating vermin species (wolves, foxes etc.), until the landmark decision of the Council of State (CoS)⁷, or for hunting etc. (Korbeti & Politis 2012).

2.2.1. Poison bait use ban in Greek law

Greek law strictly prohibits poison bait use for vermin control or elimination⁸, due to the extensive negative consequences to wildlife, especially to rare and endangered species. There are special provisions that regulate everything about poison use (special procedures, terms, prerequisites and criteria that would allow this practice).

5 http://ec.europa.eu/atwork/applying-eu-law/docs/swd_2014_359_en.pdf

6 <http://www.nhmc.uoc.gr/sites/default/files/announcements/Layman%27s%20Report-EL.pdf>

7 The CoS declared all relevant ministerial decisions, that gave the potential to hunt species referred as (wolf, fox etc), void, because there were no studies on the species’ population status.

8 Vermin species are those that cause damage to quarry species and livestock

The very first law that refers to poison bait use is Law 3077/1924 “On Forest Code”. More specifically, according to article 116 par.1b, the Minister of Agriculture is authorized “...to order...elimination of certain harmful birds or animals...by any means and upon remuneration...”. This provision was directly included unchanged in the next forest law (Law 4173/1929 “On ratifying and amending the 11/11 May 1929 Law on Forest Code”, article 201 par.2b), while the same provision, with some minor changes, was included in the following acts (M.L. 1926/1939 art. 2 par. 2, M.L. 525/1968 art. 6 par. 6 and Law 86/1969 “Forest Code” (Official Government Gazette 7/v. A/18.01.1969) art. 261 par. 6⁹).

The present legal framework for the fight against poison baits is determined by the provisions of Presidential Decree 67/1981 “On the protection of indigenous Flora and Wild Fauna and on the determination of the coordination procedure and the Control on their Research” (OGG 23/v. A’/30.01.1981)¹⁰, which was issued under authorization of article 16 of Law 998/79. This act is a radical initiative of the Greek legislator, aiming towards a more coherent and integrated protection of wild flora and fauna “...as it provides special, more strict, protection measures for indigenous flora and wild fauna (endemic species, debatable endemic species, non-endemic rare and endangered species) that should be imposed consistently during the implementation, by the relevant authorities, of the provisions of CITES convention in regards to these species”¹¹.

More specifically, article 9 of P.D. 67/1981 provides that “Toxic substance or any other poison use for the elimination of identified harmful species is prohibited, as these substances endanger protected species of wild fauna and indigenous flora”.

For the reinforcement of wildlife protection and strengthening of the exclusion of non-selective means of killing these species, the following criminal sanctions provided in article 282 of the Penal Code also apply (“Poisoning of livestock fodder”), according to which: “1. Any person who intentionally poisons pastures, meadows, lakes or other sites of livestock watering is sentenced to a minimum of six months imprisonment. If this act caused deaths or serious and permanent damage to livestock of another person, then the maximum sentence is ten years incarceration. 2. Any person who is unintentionally found guilty of the criminal act of par. 1 is sentenced to a maximum of two years imprisonment or to pay a fine”. In addition, animal killing is punished under the provisions of article 1 par.2 Law 1300/1982¹² with a minimum sanction of a two (2) year imprisonment and a fine. Even further, regarding the provided administrative and criminal sanctions for cases of poison bait use, according to article 8 par. 1 (“Prohibited hunting gear/means”) of Joint Ministerial Decision 37338/1807/E.103/01.09.10¹³ “During hunting, capturing or killing birds, the use of any means, installation or method of mass and non-selective capturing or killing that may cause local extinctions of a species is prohibited, especially these means, installations or methods cited in Annex III (case 1) of article 14”. Poison bait or tranquilizer use is among these methods. According to article 11 par. 2.a.c. of the foresaid JMD, offenders of the aforementioned article are sentenced to a fine of 100 to 300 Euros. Moreover, according to article 11 par. 2.b.c. of the same JMD, offenders of the aforementioned article are sentenced to up to a year imprisonment and a fine. Furthermore, according to article 11 par. 2.b.2 of the same JMD, apart from the aforementioned criminal sanctions, when this is necessary, supplementary administrative sanctions can be imposed, according to article 28 paragraph 9 of N. 1650/1986, such as hunting license withdrawal, confiscation of gear etc. In addition, intentional poisoning (with the use of poison baits) may be covered by article 3f,

9 According to Forest Code, art. 252 par. 5 (“Hunting gear”) the use of poison baits is prohibited: “...5 The placement and use of...baits...or other similar means that aim to kill, capture or tranquilize, wild animals and birds, along with the trade, making and import of such gear, is prohibited”. Article 261 is no longer applicable regarding the bird hunting, since Ministerial Decision 414985/29.11.1985 came in force

10 As modified, amended and validated according to GG 43/v.A’/18.02.1981, and P.D. 256/1987 (ΦΕΚ 114/v.A’/07.07.1987).

11 “Species of Indigenous Flora and Wild Fauna of P.D. 67/1981 included in the Annexes of the CITES Convention and the Tables of EU Regulations, in EU Directives relevant with species’ protection and other International Conventions”, <http://www.ypeka.gr/LinkClick.aspx?fileticket=fLzNzvQ8LLM%3D&tabid=538&language=el-GR>.

12 “On preventing and suppressing animal stealing and animal killing” (OGG 129/v. A’/13.10.1982)

13 “Definition of measures and procedures on the conservation of wild birds and their habitats, in compliance with the provisions of Directive 79/409/EEC, “On the conservation of wild birds” of the European Council of April 2nd 1979, as codified by Directive 2009/147/EC.. », (OGG 1495 / v. B’ / 06.09.2010).

Law 4042/2012¹⁴, (counterpart to article 3f of Directive 2008/99/EC), which provides that “...*(f) killing, elimination, possession or capture of protected species of wild flora or fauna, are punished according to article 28 of Law 1650/1986, as modified by article 7 of the present law, with the exception of cases where this act pertains to a negligible quantity of these species and has a negligible impact on the conservation status of the species*”. Regarding pets especially, art. 16 (“Pets maltreatment”) of Law 4039/2012¹⁵ applies, according to which the cruelty, maltreatment, bad and crude treatment of any kind of animal, as well as any act of violence against any kind of animal, such as poisoning, hanging, drowning, burning, crushing and amputation, is strictly prohibited. These offenses are punished under art.20 of Law 4039/2012 with imprisonment of one (1) year at least and a fine ranging from five thousand (5.000) to fifteen thousand (15.000) Euros.

2.2.2. European Union legislation

On a European level, the then EEC laid down prohibition rules regarding poison bait use and the Greek environmental legislation was harmonized with the correspondent Community legislation, increasing even further the level of protection of wild fauna and flora. More specifically, the Greek law implemented the following directives:

a) Directive 79/409/EEC of the Council of April 2, 1979 on the conservation of wild birds, which was integrated to the national legislation by the MD 414985/29-11-85¹⁶. This Directive was codified by Directive 2009/147/EC on the conservation of wild birds, which was in turn integrated to the national legislation by the JMD 37338/1807/E.103/01.09.2010¹⁷ and the JMD 8353/276/E103/17.02.2012^{18, 19}.

The aforementioned Directives aim at the long-term protection and conservation of all species of wild birds that occur in nature in European terrain of all member states, including eggs, nests and their habitats, and in the regulation of these species exploitation. The integration of these Directives obliges the Greek State to safeguard, conserve or restore birds’ habitats²⁰. In this case, there is a specific reference to poison bait use in article 8 par. 1 of the JMD 37338/1807/E.103/01.09.2010 (corresponding to art. 8 of the Directive 2009/147/EC), according to which, “*During hunting, capturing or killing birds, the use of any means, installation or method of mass and non-selective collection or killing that may cause local extinctions of a species is prohibited, especially these means, installations or methods cited in Annex III (case 1) of article 14*”, and in Annex III of the aforementioned JMD (“*Prohibited means and methods of hunting*”) which corresponds to Annex IV of Directive 79/409/EEC, as codified by Directive 2009/147/EC, and according to which the use of poison or tranquilizing baits is prohibited.

b) Directive 92/43/EEC of the Council of May 21, 1992 on the conservation of natural habitats and wild fauna and flora, which was implemented in the national legislation by the JMD 33318/3028/11.12.1998²¹ and the

14 “Protection of the environment under criminal law– Harmonization under Directive 2008/99/EC – Waste production and management framework – Harmonization under Directive 2008/98/EC – Regulation of issues of the Ministry of Environment, Energy and Climate Change”, (OGG 24/v. A’/13.02.2012).

15 “On pets and stray animals and the protection of those from exploitation or their use for profit” (OGG 15/v. A’/02.02.2012). This Law was amended and complemented by Law 4235/2014 (OGG 32/v. A’/11.02.2014)

16 “Management measures of wild birds” (OGG 757/v. B’/18.12.1985). Refer to art. 17 par.1e according to which: “1. During hunting of wild bird fauna species, the use of the following is prohibited: [...] e) [...] poison or tranquilizing baits [...]”.

17 “Definition of measures and procedures on the conservation of wild birds and their habitats, in compliance with Directive 79/409/EEC, “On the conservation of wild birds”, of the European Council of April 2, 1979, as codified by Directive 2009/147/EC” (OGG 1495/v. B’/06.09.2010).

18 “Amendment and supplementation of Joint Ministerial Decision 37338/1807/2010 “Definition of measures and procedures on the conservation of wild birds and their habitats, in compliance with Directive 79/409/EEC...” (B’ 1495), in compliance with the provisions of the first subparagraph of article 4 paragraph 1 of Directive 79/409/EEC “On the conservation of wild birds” of the European Council of April 2, 1979, as codified by Directive 2009/147/EC» (OGG 415/B/23-2-2012).

19 Ministry of Environment and Energy, ENVIRONMENT » NATURAL ENVIRONMENT» LAWS, <http://www.ypeka.gr/Default.aspx?tabid=236>

20 Conservation of wild birds <http://eur-lex.europa.eu/legal-content/EL/TXT/?uri=URISERV%3A128046>

21 “Definition of measures and procedures on the conservation of habitats and the wild fauna and flora” (OGG 1289/v. B’/28.12.1998).

JMD 14849/853/E103/04.04.2008^{22, 23}.

This Directive, also known as the Habitats Directive aims at the conservation of the biological diversity in the state members, defining a common framework on habitat conservation and on plants and animals that are of community interest. Natura 2000 network was created by the aforementioned Directive. Natura 2000 is the largest environmental network in the world. It consists of “Special Areas of Conservation” that were identified by state members according to the Habitats Directive. In addition, it includes Special Protection Areas that are classified according to the provisions of birds Directive 2009/147/EC.

Annexes I and II of Directive 92/43/EEC include those habitat types and species, the conservation of which requires that certain areas are identified as Special Areas of Conservation. Some of these are defined as “priority” habitats or species (threatened with extinction). In Annex IV is a list of animal and plant species that require strict protection²⁴.

Article 13 par.3 of the implementing JMD must be specifically cited (and the correspondent article 15 of the aforementioned Directive²⁵), according to which: “As regards to the capture or killing of wild birds species listed in Annex V (point a) of article 20²⁶ when deviations laid down in article 14 are applied for specimen collection, capture or killing of species listed in Annex IV (point a)²⁷, the use of all non-selective means that may cause local extinctions or heavily disturb the populations of a species is prohibited. More specifically: a) the use of means of capture or killing listed in Annex VI (point a), of article 20, b) any form of capture and killing by transportation means listed in Annex VI (element b) of article 20²⁸ are prohibited.

2.2.3. International level

On an international level, Greece is a contributing member to the Convention on the conservation of European wildlife and natural habitats (also known as Bern Convention) that was compiled by the Council of Europe and signed in Bern, Switzerland on 19/09/1979, and was consequently ratified by Greece under Law 1335/1983 “Ratification of International Convention on the conservation of European wildlife and natural habitats” (OGG 32/v. A’/14.03.1983)²⁹. Bern Convention was a leading light to species and habitat protection in Europe and was the base for the creation of Habitats Directive 92/43/EEC and Directive 2009/147/EEC (former 79/409/EEC) on the conservation of wild birds. The convention’s main goal is to promote cooperation among contracting members for the conservation of habitats and wild fauna and flora, and the protection of threatened migratory species as well³⁰. Regarding the use of poison baits, article 8 of the Ratification Law of

22 “Amendment of Joint Ministerial Decisions 33318/3028/1998 (B’1289) and. 29459/1510/2005 (B’992), in compliance with the provisions of Directive 2006/105 of the Council of November 20, 2006 of the European Union.” (OGG 645/B/11-4-08).

23 The aforementioned Directive was amended and corrected by Directive 97/62/EC of the Council of October, 27 1997 for the technical and scientific readjustment of Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora, of (EC) Regulation 1882/2003 of the European Council and the Council of September 29, 2003 on the adaptation to decision 1999/468/EC of the Council of the relevant provisions to the committees assisting the Committee on its implementing powers, which are provided by article 251 of EC treaty, and Directive 2006/105/EC of Council of November 20, 2006 for the adaptation of Directives 73/239/EEC, 74/557/EEC and 2002/83/EC in the environmental sector, due to accession of Bulgaria and Romania.

24 Natural Habitats (Natura 2000) <http://eur-lex.europa.eu/legal-content/EL/TXT/?uri=uriserv:l28076>

25 “Regarding the capture or killing of species of wild fauna listed in point a) of Annex V, when deviations are applied according to article 16 for sample collection, the capture or killing of species listed in point a) of Annex IV, the member states prohibit the use of all non-selective means that may cause local extinction or heavily disturb the populations of a species, and more specifically: a) the use of means of capture and killing listed in element a) of Annex VI; b) any form of capture or killing by means of transport referred to in element b) of Annex VI.”

26 PLANT AND ANIMAL SPECIES OF COMMUNITY INTEREST WHOSE EXTRACTION FROM THEIR NATURAL HABITAT AND EXPLOITATION MAY BE REGULATED BY MANAGEMENT MEASURES – ANIMALS

27 ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST THAT REQUIRE STRICT PROTECTION - ANIMALS

28 Prohibited methods and means of capture and killing and prohibited means of transport– non-selective means, means of transport

29 Ministry of Environment and Energy, PROTECTION OF NATURE, FLORA AND FAUNA, [http://www.ypeka.gr/Default.aspx?tabid=559&language=el-GR&SkinSrc=\[G\]Skins%2F_default%2FNo+Skin&ContainerSrc=\[G\]Containers%2F_default%2FNo+Container&dnnprintmode=true](http://www.ypeka.gr/Default.aspx?tabid=559&language=el-GR&SkinSrc=[G]Skins%2F_default%2FNo+Skin&ContainerSrc=[G]Containers%2F_default%2FNo+Container&dnnprintmode=true)

30 Hellenic Ornithological Society, Bern Convention on the conservation of European Wildlife and Natural Habitats (19.9.1979), http://www.ornithologiki.gr/page_cn.php?aID=423

the International Convention provides that *“In order to capture or kill species of wild animals listed in Annex III and in cases for which deviations of article 9 occur in regards to the species listed in Annex II, contracting Members prohibit the use of any non-selective means of capture or killing as well as of means that may induce local extinction or heavily disturb the populations of a species, namely means listed in Annex IV”*, while in Annex IV of the same Law, which is entitled *“Prohibited means and methods of hunting and other forms of exploitation”*, *“Poisons and poison or tranquilizing baits”* are included. Art. 9 of Law 1335/1983 provides deviations regarding the ban on the use of non selective means of killing, such as poison baits, in cases where no other satisfactory solution can be made up for the control of the population of a species, taking into consideration that the survival of such a population is not at stake. The Permanent Commission of the Convention is reliable to monitor such deviations on behalf of the contracting parties since those, in their turn, submit deviation reports biennially.

2.2.4. Council of State legislature

The legislature of the Council of State (CoS) has been particularly important to the subject of the prevention of the use of poison baits, in accordance to the spirit of the abovementioned provisions. The following decisions are worth mentioning:

CoS 366/1993 (Fifth Chamber): With this decision, the Council of State upheld the annulment against M.D. 79579/3109/07.16.1992³¹. In accordance with Paragraph B of the said M.D., certain species were classified as *“harmful”* game, and their elimination was allowed under the terms and conditions set by the M.D. 164168/1572 / 04.23.1985. However, according to the decision (paragraph no. 9), the M.D. in question should be annulled because the necessary qualified scientific study for the classification of these species as harmful was not preceded.

CoS 540/1993 (Commission on suspensions): With this decision the Council of State accepted the suspension of the execution of M.D. 74257/2036/04.05.1993³². Under this M.D. many mammals and birds were classified as harmful (fox, ferret, wolf, crow, magpie, starlings and sparrows). Under this MD the use of poison was authorized, particularly potassium cyanide, in order to be impaired the population of these species, which, on the grounds of this M.D., are harmful for the agricultural economy, the livestock, fisheries, forestry and game species population. In the grounds of the decision, *“... the general and vague invocation of the need for killing of populations of certain species in order to prevent serious damage, without further corroboration on the size of the threatened loss and the possibility of survival of harmful species populations, or the possibility for milder measures etc. (see CoS 366/93) is not, at the discretion of the Commission, sufficient to offset the hard to rectify damage caused to these populations, because of the killing, from the immediate execution of the contested decision..”*.

2.2.5. Remits of Services

The remits of services over poisoning incidents handling are fragmentary and there is often a confusion on which service is responsible for the collection of poison baits or animals. For information purposes, some of the remits of the services, based on the legal framework, are presented below.

Forest Service

Forest Service’s remits on poison bait use are described on the Forest Code and the JMD 8353/276/E103/17-2-2012 (OGG 415/v. B/23-02-2012)³³. According to article 5G of the aforementioned JMD, measures against the use of poison baits include the following:

“1. Information campaigns and regular on-the-spot checks are carried out by local forest services, for the

31 *“Measures regarding hunting for the season 1992-1993”* (OGG 508/v. B’/29.11.1985).

32 *“Harmful game species and control of their population”* (OGG 420/v. B’/14.06.1993)

33 *“Amendment and supplementation of Joint Ministerial Decision 37338/1807/2010 “Definition of measures and procedures on the conservation of wild birds and their habitats, in compliance with Directive 79/409/EEC...”* (B’ 1495), in compliance with the provisions of the first subparagraph of article 4 paragraph 1 of Directive 79/409/EEC *“On the conservation of wild birds”* of the European Council of April 2, 1979, as codified by Directive 2009/147/EC» (OGG 415/B/23-2-2012)».

detection of poison bait use.

2. *The same authorities promote all legal methods of carnivore animals' control according to the provisions of the Forest Law regarding killing of individuals. They also promote for the installation of fences and other relevant constructions as well as for the use of Greek shepherd dogs for the protection of livestock."*

Veterinary Service

PD 107/2014 (OGG 174 /v. A'/29.08.2014) "Organization of the Ministry of Rural Development and Food" provides that the Veterinary Service is responsible, in principle, for the collection and transfer of corpses of productive animals, in order to achieve the prevention and combating of diseases transmissible from animals to humans (see Article 7 "General Directorate for Sustainable Animal Production and Veterinary Medicine, Section E, "Animal Health", par. a, b and c).

PD 211/2006 (OGG 211 /v. A'/05.10.2006) introduced further necessary measures for the implementation of Regulation 1774/2002 / EC of the European Parliament and of the Council of October 3, 2002, laying down health rules concerning animal by-products not intended for human consumption. However, the above said Regulation was repealed under Article 54 of Regulation 1069/2009/EC of the European Parliament and of the Council of October 21, 2009, on health rules for animal by-products and derived products not intended for human consumption, with effect from March 4, 2011. This Regulation expressly does not apply to "a) whole corpses or parts of wild animals, other than game species, for which there is no suspicion of being infected or affected with a disease that can be transmitted to humans or animals, except for aquatic animals landed for commercial purposes "(Article 2 par. a " Scope"). Therefore there is a gap in the Greek legislation on the transport of wild animals.

The Veterinary Directorate of the Region is, in accordance with the PD 211/2006 (OGG 211 /v. A'/05.10.2006), the competent body for granting transfer authorization (Article 8 "Transport license - Vessel-disinfection obligation") and for approving the accompanying documents (Article 12 "Documentation") the dead (productive) animals for disposal or management.

Centre of Athens Veterinary Institutions

The Centre of Athens Veterinary Institutions (CAVI), established by P.D. 455/1990 (FEK) is responsible for the detection of toxic substances and poison.

Public Prosecutor's Office

The Prosecutor may give an order to detect toxic substances and poison, under article 3, par. 3, element P, c of P.D. 455/90 (OGG 174/v. A'/14.12.1990). This order is addressed to the Animal Toxicology Department, Institute of Animal Biochemistry, Nutrition and Toxicology, the Centre of Athens Veterinary Institutions.

The Prosecutor may investigate the origin and trading of the poison. Articles 422, 423, 479 of the Penal Code apply for poison traders and users. Articles 279, 282 of the PC and article 1 of Law 1300/82 apply for the prosecution of pet animal poisoning. Article 28 of Law 1650/86, 9 of P.D. 67/81 and 3, f of Law 4043/12 apply for the prosecution of wild animal poisoning.

2.3. Administrative acts and Antipoison Task Force participation

Since June 2012, the Task Force has convened seven times. After intervention of the Ombudsman, representatives of the competent services of the Ministry of Environment and Energy (MEE) and the Ministry of Rural Development and Food (MRDF) participated in three of them. At the same time, HOS, as a representative of the Task Force, held meetings with local and regional administration, for the effective tackling of poison bait use. Furthermore, the Task Force, via the Hellenic Society for the Protection of Nature, has been in contact with the Ombudsman and the General Directorate of Environment of the European Commission.

In cooperation with the Task Force, the outcome of the aforementioned meeting with representatives of the competent services was the publication by the MRDF (Crop Protection Directorate - Agrochemicals Depart-

ment and Animal Health Directorate) on March 3, 2014, the following directions³⁴ for public awareness on agrochemicals and handling of poison bait incidents:

1. “Management of poison baits made of agrochemicals”.
2. “First aid for animals poisoned by agrochemicals”.

The Agrochemicals Department of the MADF also responded positively to a request by the Task Force for the control of the use of agrochemicals containing Methomyl. The MADF sent directives to the Regional Directorates of Agricultural Economy and Veterinary Medicine (DAEVM) and the Crop Protection and Quality Control Centers, with the “extremely urgent” document N. 7856/85384/17.07.2014, in order to inform the agrochemical dealerships to provide plant protection products containing Methomyl only to professional users of agrochemicals and to record any sale of this product in the official electronic listing service for pesticides sales. The Ministry also requested that the aforementioned services promptly inform the competent department of each poisoning incident by agrochemicals they know of. Moreover, Du Pont Greece S.A. was requested to submit detailed lists with the agrochemical dealerships that had received plant protection products containing Methomyl.

In July 2014, the Task Force sent a written request to the then General Secretariat of the MEE asking for a meeting with the participation of all competent services and institutions focusing on the problem of poison baits, but never received an answer.

The Directorate of Animal Health of the MRDF, after the intervention of the Ombudsman, is currently compiling directives towards the local veterinary services regarding the handling of poisoned animals (under preparation).

3. METHODOLOGY

3.1. Poison bait incidents database

The recording of incidents was based on the Poisoning Incidents Recording Protocol (see Annex). The poisoning incidents are recorded in a Microsoft Access 2007 database, created by HOS in 2012.

This base contains all the poisoning incidents that were known to the members of the Task Force or have been notified by land users (stockbreeders, farmers and hunters), Forest Service, Management Bodies of Protected Areas, Hunting Federations and civilians. After an assessment of their validity, a small number of poisoned animals’ incidents that the Task Force found on the internet or from mass media (printed or digital) were also included in the base. Incidents that had been handled by the two Canine Teams were also included in order to present the full picture of the poisoning incidents although there are also separate technical reports of the results of these teams (Kret *et al.* 2015; Vavylis *et al.* 2016).

In every poisoning incident, the following data are recorded:

1. Basic information
 - Date of poisoning and notification
 - Geographical position, coordinates
 - Area type (agricultural, forest, pastoral, close to settlements, urban, unknown)
 - Protection status of the area, according to the classification under article 4, par. 3 of Law 3937/2011 “Conservation of biodiversity and other provisions”
 - Filing of complaint to the competent services or not

34 <http://www.minagric.gr/index.php/el/for-farmer-2/crop-production/fytoprostasiamenu/525-elenxoifitoprostateytikon/ethniko-sxe-drashs/2245-dhlhtiriamena-doloma>

2. Involved animals
 - Wild or domestic, identifiable or not
 - Number of animals
 - Sample condition (fresh, decay, advanced decay, feathers or/and bones)
3. Information on the bait
 - Detection of bait, type and number of baits
 - Toxicological analysis (type of poison, active ingredient, status of use, lab name)
 - Clinical examination, autopsy
 - Cause of poisoning
4. Canine Team.
 - Presence of the Canine Team

Korbeti and Politis (2012) analyzed a total of 551 incidents recorded in the database that took place in Greece during the period 2000-2012³⁵. These include incidents that took place in urban environment, such as gulls sent to ANIMA with symptoms of poisoning mainly due to feeding in rubbish dumps. We should point out that before 2012, there was no uniform recording protocol and data collection was inconsistent.

The present report presents the analyses of the poisoning incidents, as recorded from January 2012 to December 2015 and is the continuation of the report of Korbeti and Politis (2012).

4. RESULTS

From early 2012 to late 2015, 207 poisoning incidents were recorded in total. For the purposes of the present report, only the incidents in non-urban areas were included, with the exception of wildlife poisoning within urban limits and intentional poisoning incidents, in order to reflect more precisely the magnitude of the issue. All the gull species poisoned in rubbish dumps were excluded, along with Barn Owls (*Tyto alba*) that are indirectly poisoned by feeding on small rodents killed by rodenticides etc.

4.1. Poisoning incidents per year

In the following analysis, only the incidents that met the aforementioned criteria were included (163 out of 207).

³⁵ This data derive from records or questionnaires during the implementation of projects and complaint recording by the environmental organizations for the following periods: Antidote Project (2000-2007), WWF Greece (2000-2012), ANIMA 2007-2012, Natural History Museum of Crete (2007-2012), ARCTUROS 2007-2012, Callisto (2007-2012).

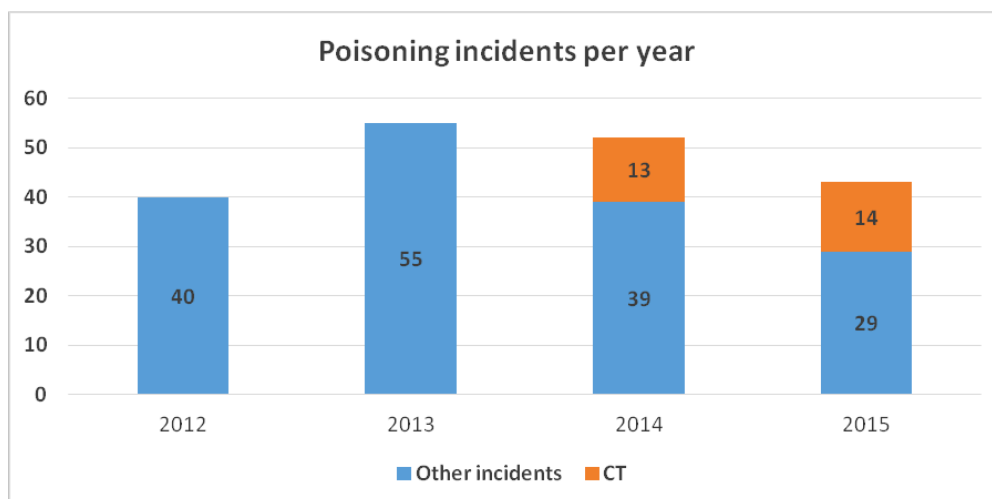


Chart 1: Poisoning incidents for the period 2012-2015 (a total of 163). For 2014 and 2015 the incidents showed in orange are those detected by the Canine Teams (CT).

2013 was the year with the highest number of incidents recorded (Chart 1) and were detected mainly under the LIFE+ projects “Innovative Actions against Illegal Poisoning in EU Mediterranean Pilot Areas”³⁶ and “Urgent measures to secure survival of the Egyptian Vulture (*Neophron percnopterus*) in Greece and Bulgaria”. Incidents detected with the help of the Canine Teams (CT), during their two-year operation, are also depicted in this graph. More specifically, for the period 2014-2015, the CT carried out 155 patrols, covering 376 km and detecting 66 poisoned animals and 52 poison baits in 35 of these patrols, which correspond to 27 poisoning incidents (Kret *et al.* 2015, Vavylis *et al.* 2016).

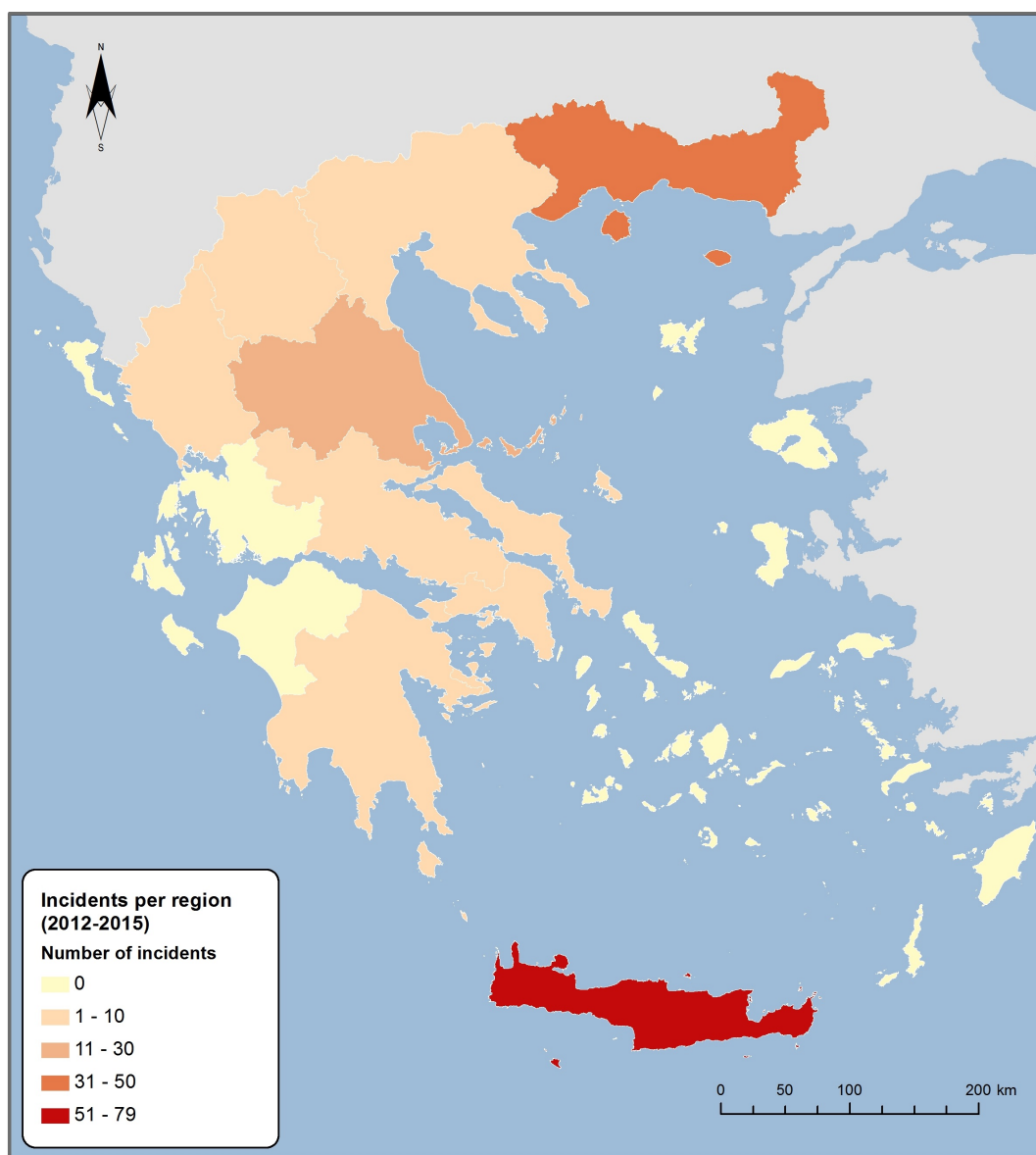
No firm conclusions can be drawn for the trend of poison bait use in the implementation areas of the aforementioned LIFE+ projects, as the time series of the data is short and incident recording is based on an effort to collect data by the Task Force members per area of action that is of varying scale. Poisoning incident recording is also based on the random notification by civilians in areas with or without presence of Task Force members.

4.2. Geographical distribution

Crete is the region with the highest number of poisoning incidents for the aforementioned period; the NHMC has recorded 78 poisoning incidents (Map 1). The Griffon vulture, a protected and highly recognizable species, is frequently poisoned in Crete. Civilians notify practically all incidents involving this species to the NHMC, as opposed to incidents involving poisoned stray dogs. Eastern Macedonia and Thrace follows with 32 incidents; WWF Greece has been active for more than two decades in this area in projects for the protection of birds of prey and has also been implementing actions of the LIFE+ project “The Return of the Neophron” since 2011. Thessaly is next with 30 incidents; HOS is implementing actions of the aforementioned LIFE+ project in this area. ARCTUROS was also active in this region, working on the LIFE+ project “Innovative actions against poison”. Regarding the regions of Western Greece, Ionian Islands and South Aegean, there is a lack of knowledge as no data is available, while there is a very small number of incidents in the rest of the regions (less than 10 incidents).

Map 1. Poisoning incidents per Region

36 <https://lifeagainstopoison.wordpress.com/about/>



4.3. Seasonal distribution

Poison bait use is a year-round practice. However, in terms of seasonal variation, it seems to be more intense in spring (April) and autumn (September – October) (Chart 2). This trend leads us to the conclusion that poison bait use is not a random and aimless practice, but systematic and deliberate. Most poisoning incidents occur in September (21 incidents). This increase may be connected with the opening of the hunting season in late August and mid-September (when the hunting season opens for mammals). April is second with 19 incidents, probably due to fox extermination after the end of the hunting season, when hunting dogs are trained and exercised. The driving force for poison bait use is also the intense dispute between hunters and stock-breeders, the latter using poison baits to dissuade hunters from using their pastures for hunting or dog training, the former to eliminate shepherd dogs that can attack and harm their dogs during hunting. Increased of poison bait use in spring may be also caused by the start of extensive grazing in montane ecosystems.

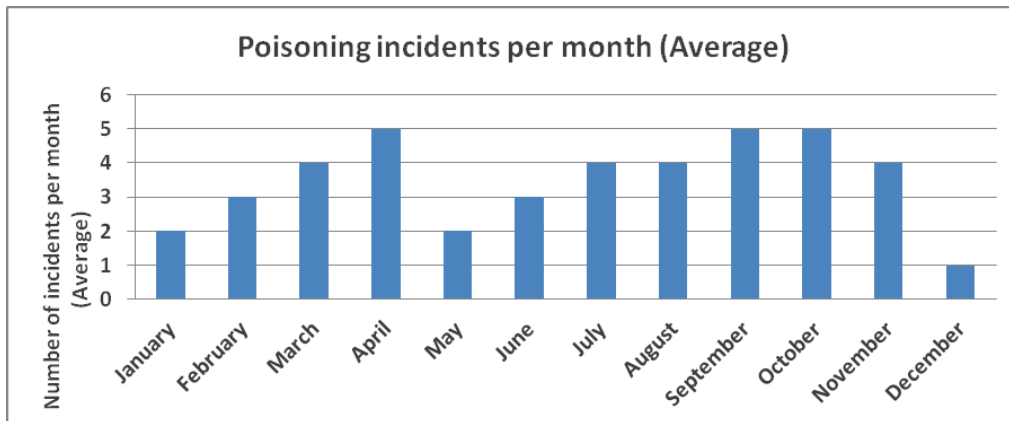


Chart 2: Mean value of poisoning incidents per month for the period 2012-2015.

4.4. Poisoning inside protected areas

33 out of 164 known incidents occurred inside protected areas. More specifically, 12 incidents (7%) occurred inside a National Park – the majority in the National Park of Dadia-Lefkimi-Soufli (Chart 3). The fact that 20 poisoning incidents (12%) occurred in Natura 2000 sites and more specifically in Special Protection Areas (SPA), is also noteworthy. Finally, one incident (c. 1%) occurred inside a Wildlife Refuge (WR).

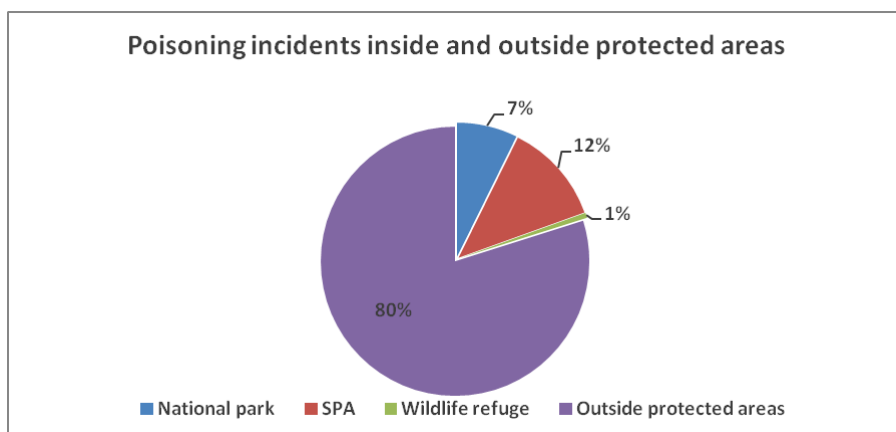


Chart 3: Poisoning incidents inside and outside of protected areas 2012-2015.

A rapid increase in the incidents inside SPAs is noted over time (Chart 4). This is mainly due to the patrols carried out by the Canine Teams from 2014 on, in or close to Egyptian vulture territories, which are all within SPAs.

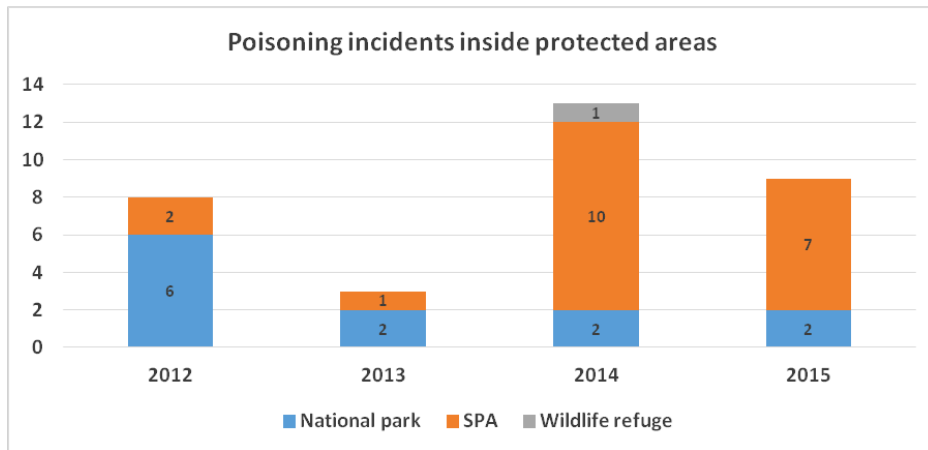


Chart 4: Poisoning incidents inside protected areas for the period 2012-2015.

4.5. Motives behind the use of poison baits

It is not always possible to verify and confirm the motive behind the use of poison baits. We should point out that in 61% of the incidents (Chart 5) the motive remains unclear. Available data on the motives come from land users' testimonies and found evidence. As regards to the latter, a typical example is the use of poison baits following the damage made to bee hives by bears or the appearance of wolf in areas with grazing cattle. The most common motive for the use of poison baits, according to the best available data, is local disputes between land users, as confirmed by Korbeti and Politis (2012) and Skartsi *et al.* (2014). For the period 2012-2015, local disputes account for 10% of the incidents. Typical examples of such disputes are the use of poison baits targeting shepherd dogs when there's a risk that these may kill hunting dogs, as well as disputes between neighboring stockbreeders over the property or right of use of grazing pastures.

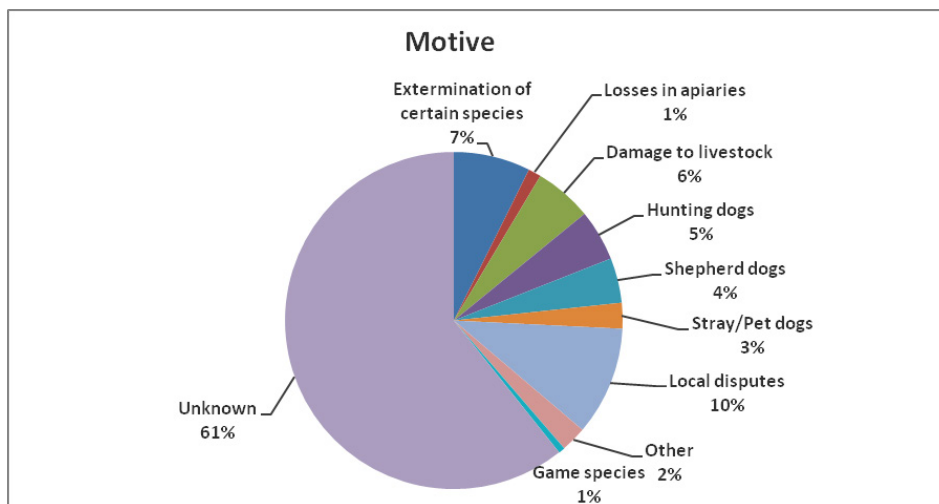


Chart 5: Motivation behind poison bait use for the period 2012-2015.

Local disputes between persons regardless their social status, fall in the same category. Confirmed disputes between stockbreeders and hunters or other stockbreeders, are included in the distinct category "Hunting dogs" (5%) and "Shepherd dogs" (4%). A major motive for poison bait use is the damage to animal production (6%) caused mainly by bears and wolves.

Poison baits are often put by individual hunters for the control of the fox population (7%, elimination of competitive predators). The fox is considered to be the main limiting factor in the hunting of hares and it also poisoned to facilitate hunting dogs to train and chase hares, as they may chase foxes instead of the desired

quarry.

Apart from the aforementioned land users, farmers may also put poison baits if bears, wild boars or even smaller mammals, like badgers and martens, cause damage to their crops.

Poison bait use for the control of stray dog population inside or outside of settlements is a common practice. In this case, this practice aims to control the presence of abandoned hunting, shepherd or pet dogs.

4.6. Fauna groups and poisoned species

Poisoned animals found in the period 2012-2015, were grouped during data analysis (see Chart 6). The group “Large carnivores” includes the Brown bear, the Wolf, the Golden jackal and the Red fox. The group “Small carnivores” includes the Badger and the Stone marten. The group “Scavenger birds of prey” includes vultures, the Golden eagle, the Greater spotted Eagle, the Marsh harrier and the Common buzzard. Finally, the group “Other birds” includes the Saker falcon and the Short-toed eagle.

Scavenger birds of prey is the wild fauna group most affected by poison bait use, as 88 individuals have been found poisoned (30%, Chart 6). Vultures and eagles like the Golden eagle are indirectly poisoned when feeding on animals that have died of poison bait ingestion.

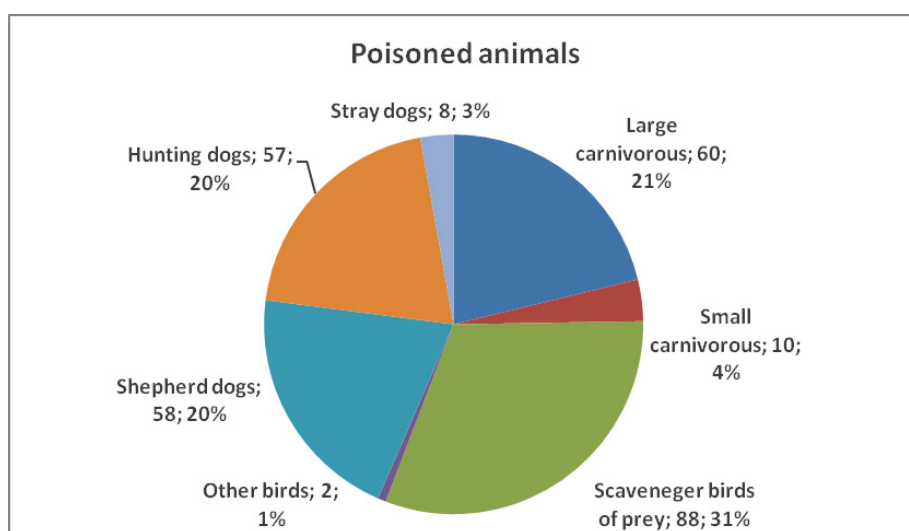


Chart 6: Fauna groups affected by poison bait use in the period 2012-2015.

Several protected species, some of which endangered, were poisoned in the period 2012-2015. More specifically, at least 31 Griffon vultures were poisoned (Chart 7), the mainland population of which is classified as “Critically Endangered” in the Greek Red Data Book, while the Cretan population is “Vulnerable”. We should note that all the vultures of the Nestos Gorge colony are not included in the analysis as only two carcasses were found.

Five Egyptian vultures were mortally poisoned in three incidents. There is a case of a bird being poisoned twice; it survived the first time, but not the second. The species is classified as “Critically Endangered” in the Greek Red Data Book, as the Greek population being on the verge of extinction. The Red fox is the species of wild fauna most frequently poisoned (49 individuals). The Common buzzard is second (40 individuals, most of them from Crete).

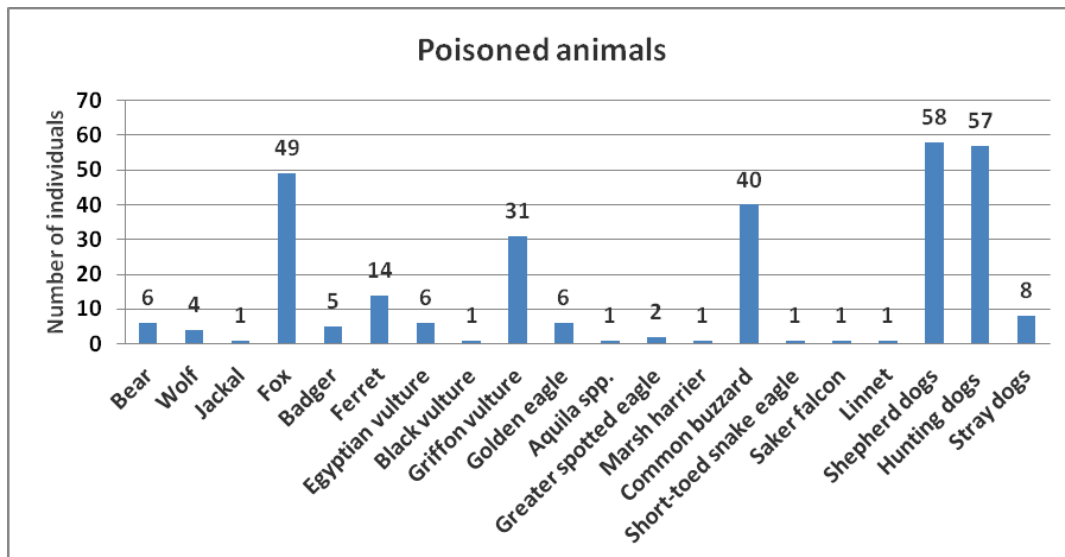


Chart 7: Poisoned species for the period 2012-2015. “Aquila spp.” refers to eagle species that couldn’t be identified due to advanced decay

In the same period, six bears, four wolves and small carnivores (badger and marten) were also recorded. Dogs account for a large percentage (43%) of the poisoned animals. Shepherd dogs are first (20%, 58 individuals), followed very closely by hunting dogs (20%, 57 individuals). Stray dogs are next with at least eight individuals (3%) as there are 14 incidents but there is no available data of the actual number of individuals poisoned. Dogs found in montane, forest and agricultural areas that were not identified as shepherd, hunting or stray dogs are included in the analysis as “stray”.

4.7. Type of bait

No bait was found in the majority of the incidents (78%, Chart 8). Poison baits are often very difficult to detect as they may be small in size and hidden to plain eyesight. Moreover, weather (e.g. heavy rains) or ageing may alter the baits. Finally, the bait may have been digested by the animal or the victim has perished away from the spot where the bait was placed. In cases where poison baits were found, the most widespread type is the use of a piece of meat, often a liver or a sausage, laced with an approved or illegal pesticide. For large carnivores, like the Wolf, whole carcasses of livestock laced with poison are commonly found to be used. Cyanide poison baits are frequently found as a capsule covered with wax. This type is different to the others in that it doesn’t cause secondary poisoning, meaning an animal feeding on a poisoned animal will not be poisoned itself. Cyanides are extremely toxic and when the capsule breaks they can cause instant death though inhalation, digestion or skin contact.

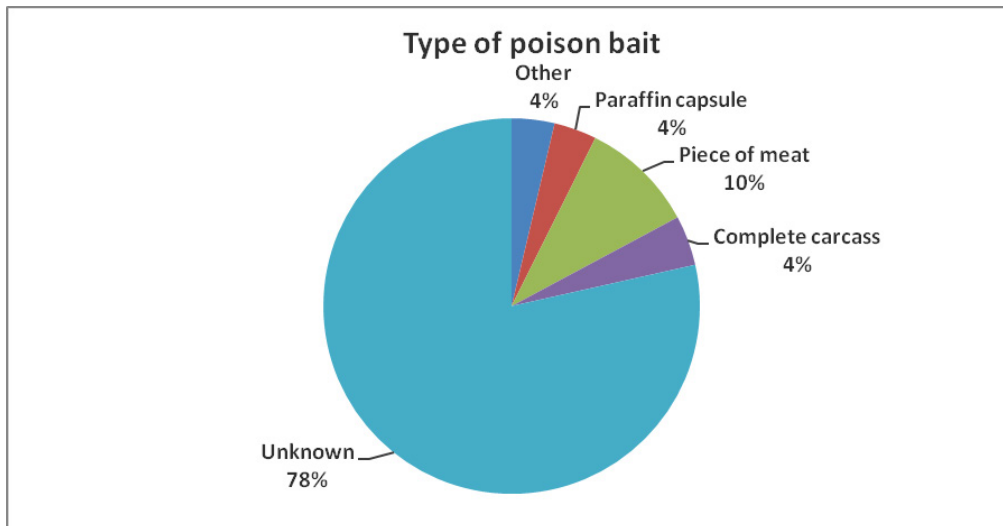


Chart 8: Type of bait in poisoning incidents in the period 2012-2015

4.8. Toxicological analyses and complaints

Available information on substances used on baits is by no means satisfactory, as toxicological analyses are rarely performed. Out of 163 incidents, toxicological analyses were performed only in 27 (Chart 9).

The low number of toxicological analyses is mainly due to the following reasons:

- In some cases the specimens were in advanced state of decay and unsuitable for toxicological analysis.
- Despite the fact that many incidents are actually reported by civilians to members of the Task Force, the former are unwilling to proceed with official complaints or have already buried or destroyed the specimens and as a result, no samples could be taken for toxicological analyses (Chart 12).
- In some cases, services were unable (as they were undermanned or due to lack of funds) or unwilling to handle poisoned animals and take or send samples (difficulty in finding the culprit/extra bureaucracy).

The procedure for toxicological analyses conducting is also hindered by the fact that to date there is no clear legislative framework to define the competent services for the safe handling of poisoned animal incidents (animal removal, extraction of samples and delivery to specialized labs for analyses). The financial crisis is making the situation even more complex, as the regional veterinary services are undermanned and funds are scarce. Samples are sent by local veterinarian offices only to the Institute of Biochemistry, Toxicology and Animal Nutrition Pathology of the Centre of Athens Veterinary Institutions (CAVI) of the MRDF. The CAVI is also affected by the financial crisis and it is severely undermanned. Indicative of the state of CAVI is that all the samples are treated by just one person. These samples do not come just from poisoned animals but also from animals suspected to have rabies, under the JMD for the Project to Monitor and Combat Rabies in Greece (331/10301/25.01.2013 GG B' 198).

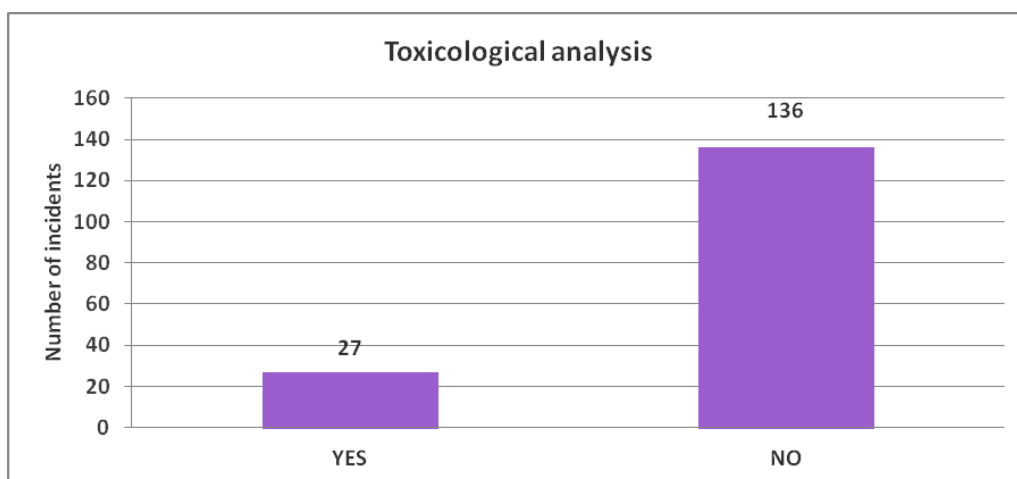


Chart 9: Toxicological analyses performed in the period 2012-2015.

The results of the toxicological analyses, in regards to the chemical substances used for the preparation of baits showed that plant protection products are the most popular. These include approved and legally available products but also products banned at national, European or international level. Carbamates are the toxin group that is found in most of the incidents (11) (Graph 10). These are highly toxic insecticides, including Carbofuran, which was banned in 2008 and has been used in seven poisoning incidents and it is also responsible for the poisoning of 25 animals, among which two Egyptian vultures, six Griffon vultures and four Golden eagles. Another active ingredient of the same group is Methomyl which has been detected in four incidents. The use of Methomyl as powder was banned in Greece in 2008 but its use was reappraised in liquid form in early 2013³⁷, and is also available in the market as a powder³⁸.

Organochlorides come second in frequency, including the banned Endosulfan that has been detected in three incidents, two at Meteora and one in Iasmos (Rhodope), during 2014. Organophosphates (Phorate and Chlorpyrifos) have been detected in two incidents. Chlorpyrifos was detected in the Egyptian vulture found poisoned at Meteora in July 2015 while Phorate was detected in the poisoning incident at the University Forest in Pertouli. Chlorpyrifos is legal. In another two incidents the results of the toxicological tests showed the presence of organophosphates but no active ingredient was cited.

Cyanide capsules covered with wax are still commonly used. These capsules were detected in six incidents, whether alone or with other ingredients. This type of poison bait has caused the death of 66 animals, among which 32 foxes, a hunting dog and eight shepherd dogs.

37 <http://www.minagric.gr/greek/data/LANNATE-20SL-14410.pdf#>

38 <http://www.minagric.gr/greek/data/LANNATE-25WP-14540.pdf>

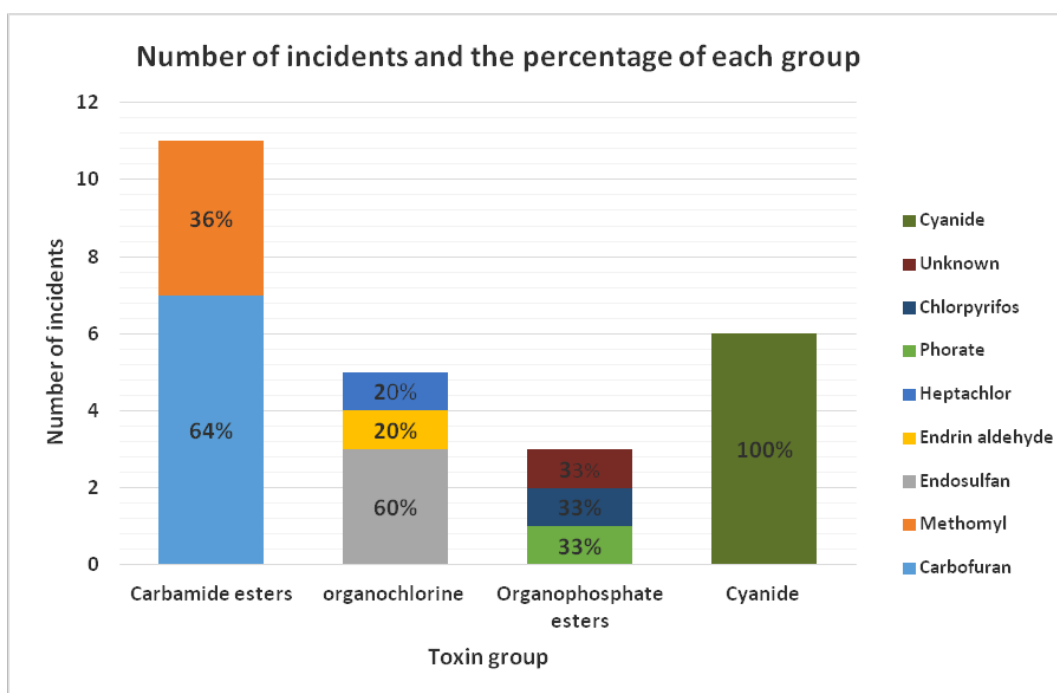


Chart 10: Number of incidents per toxin group and percentage of each active ingredient in the period 2012-2015.

Competent prosecuting authorities (public prosecutor, police and forest services) receive complaints for a small percentage of the poisoning incidents as victims do not address to justice (Chart 11). There is a dual interpretation of this phenomenon. On the one hand victims consider that competent authorities will not respond as the felony of poisoning is not considered a priority issue. This attitude is also encouraged by the fact that it is almost impossible to locate perpetrators with the existing resources.

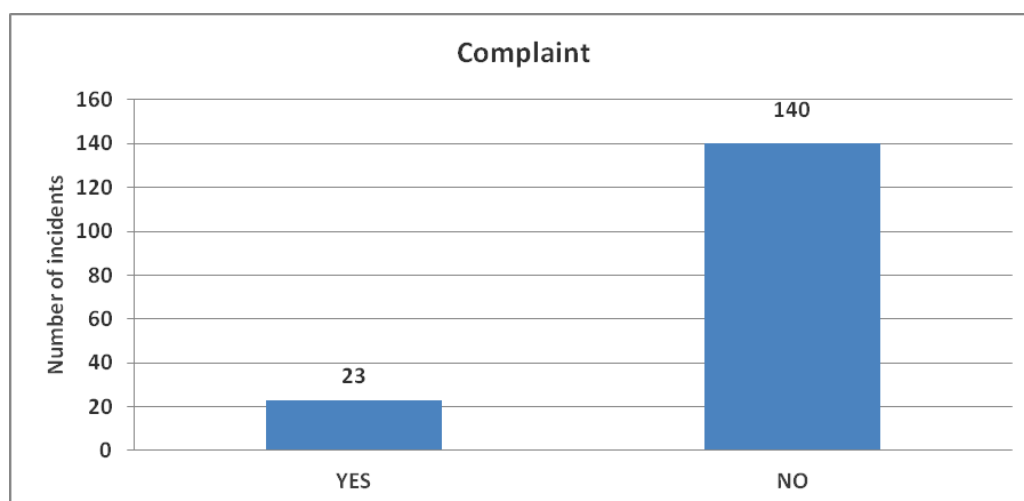


Chart 11: Complaints filed to prosecuting authorities in the period 2012-2015.

5. CONCLUSIONS - DISCUSSION

The illegal use of poison baits is a widespread practice in the Greek countryside that has a very large negative impact on biodiversity, as it constitutes one of the most important causes of non-natural death of many endangered species. Poison baits are also a non-selective method of wild fauna elimination, especially carni-

vores and scavengers which are most susceptible to poison due to their feeding habits, as the results of the present report show.

The handling protocol of poisoning incidents by Korbeti and Politis (2012), proved to be an important tool for the integrated and unified recording of poisoning incidents for the period 2012-2015. It contributed to the ample collection of information per incident, rendering the comparison and the correlations throughout the years feasible. Increase of available information contributes to a more thorough understanding of the motives and to a better estimation of the extent of this phenomenon.

The real number of animals and birds that die of poisoning is still unknown, as carcass retrieval is very difficult. Therefore, the number of incidents recorded is by no means representative as only a small percentage of poisonings, especially of wild fauna, is located and even fewer incidents are made known. The recorded incidents may be thus compared to the tip of the iceberg. Biases in the available data must be also taken into consideration. A typical example is that in some areas the number of poisoning incidents is high compared to other areas where there are no records at all. This is due to the fact that data come mainly from areas where either LIFE+ projects were implemented or from areas like Thrace and Crete where WWF Greece and the Natural History Museum of Crete are present and active. There is a large gap in knowledge regarding poisoning of wildlife in all the other regions where no relevant projects and actions are implemented, even on a regional level, as there is no active recording mechanism of these incidents. A major underestimation of the incidents is thus unavoidable. This is indicative of the insufficient management of this issue by the State.

Forest Service, which are the number one competent service to safeguard the countryside and protect wildlife, do not record poisoning incidents on a regular basis. The illegal use of poison baits is placed very low on the agenda of the Forest Service; illegal logging and other criminal activities are of higher priority. The financial crisis has hindered the Forest Service considerably and many departments are undermanned or have reduced financial resources. Forestry agents are sometimes not able to patrol as there is no fuel for their vehicles or because the limited number of vehicles available have already reached the maximum number of kilometers they can travel every month (there is a limit of 1,500 km/month per vehicle).

As Kret *et al.* (2015) and Vavylis *et al.* (2016) cite, the Canine Teams are a groundbreaking and effective preventive action. During their two-year operation they have located poisoned animals and/or baits in 31 of the 79 incidents that have been recorded in the same period. Apart from being a preventive means, the Canine Teams contribute to the dissemination and increase of awareness regarding this conservation problem and they also assist the competent authorities in their pre-trial work, collecting findings that can be used as evidence during the investigation and the judicial procedure.

Many poisoning incidents occur inside SPAs. Poisoning cases inside protected areas demonstrate once again the State's inability to effectively protect these areas.

The analysis of the incidents recorded in the database show that the main causes of poison bait use was attributed to personal disputes between land users, mainly between shepherds or/and hunters with the most frequent victims being their dogs, followed by fox or wolf elimination.

As Korbeti and Politis (2012) quote, poison bait use as a means to control and kill fauna is particularly easy and "effective" as it has the following features: a) low cost, b) no specialized equipment or means are required, c) it is silent and therefore remains easily anonymous, d) no special planning or preparation is required and e) it is effective in relation to the means used.

The illegal use of poison baits, as already mentioned in previous sections, is indeed a complex socio-economic issue with many implications. Motives leading to this sick practice vary and differ depending on the social group and the problem that the perpetrator chooses to solve in this way. Perpetrators often take such action because it is the easy way or because they feel that there is no other option nor will they receive any help from the State. Stockbreeders are a typical example, as they may use poison in an attempt to avoid the attacks of wolves or bears to their livestock. Although there is an official system to financially compensate all the insured producers, this system proves to be non-functional and complicated and, as a result, producers seek

alternative ways to deal with the problem. The main arising issue is that in most cases there is no retrieval of the animals within the limited timeframe given by the Greek Agricultural Insurance Organization (GAIO). More specifically, the regulations of the GAIO state that *“the policyholder whose livestock was damaged by the insurance risks must make a phone call (he or the local Correspondent) to inform of the damage on the same day or the following working day that the damage occurred to the relevant GAIO branch. In the same day of the phone call, or no later than the following working day, he must submit a damage declaration to the local Correspondent”*. This is not a flexible procedure for stockbreeders living in mountain and inaccessible areas, as it is not always feasible for them to go to the local GAIO branches. At the same time, in order for the criteria for financial compensation to be met, in the case of goats and sheep, at least four animals must be killed in each attack, a condition which is not always met (less than four animals killed, or killed in successive attacks). Furthermore, crop damages by wild boars are compensated only in Ramsar sites, leaving a large number of insured producers without the right of compensation.

Baits are also used precautionarily in remote areas, where wolf passages during the winter are known. Poison baits are often reported to be used against shepherd dogs which may attack hunting dogs. According to the law, there is a minimum distance from barns from which hunting or dog training can be practised but this is either not respected or, in most cases, shepherd and hunting dogs roam free making their movements impossible to control. Proper training of shepherd dogs can reduce this effect, while a more effective land planning of hunting activities, taking into consideration the active pastures, is necessary. In many cases, shepherd dog losses are very serious and the stockbreeder has no protection against carnivore attacks. Stray dogs abandoned in the countryside are also frequently poisoned. The current legislation on pet animals, addresses also the stray animals' problem, forbidding pet animal abandonment. Pet animals, under Law N. 4039/12, must be microchipped and recorded along with their owner's personal information in the National Database. Microchipping of pet animals is obligatory, including shepherd dogs (article 46 par. 2.b of Law 4235/2014). There is a 300 Euro fine for every pet animal not microchipped and recorded in the database. Legislation provides for the temporary accommodation, vaccination and sterilisation of stray pet animals in shelters. The municipal kennels, however, are understaffed and there are several issues with the database. In addition, most pet animals are not actually microchipped as law enforcement on this matter is lax.

Poison baits have several traits that render them very dangerous for the environment and public health. Three of these are their toxicity, their endurance and the fact that they are made in such a way that they pass unnoticed. Particularly dangerous are the cyanide baits covered with wax, because they resemble small pieces of wax and people not aware cannot identify them but they can cause instant death when the wax breaks.

Toxicological tests should be performed promptly in order to diagnose poisoning. Without the results of these tests, which are the most sound evidence that the animal died of poisoning or any other cause, even if the poisoning incidents end up to court, they cannot be finally tried.

In the majority of the incidents, no toxicological tests could be performed as animals had been poisoned in remote or inaccessible areas and their transport to the veterinary office was not feasible. Very frequently, the samples were not suitable for toxicological tests as they were too old or spoiled due to weather conditions. In those cases where toxicological tests are performed, it is common for the test results to be delayed due to the large workload in the lab, a fact that interferes and hinders the processing of the case by the Public Prosecutor.

In addition, the need to perform rabies tests has complicated the implementation of toxicological tests in poisoning cases. The JMD on rabies establishes a certain procedure in which the animal is collected by private game wardens of the Hunting Clubs, the Forest Service agents and members of Environmental NGOs³⁹. The animal is then sent to the local veterinary offices of the Region and the head is cut by a licensed vet and sent to the National Reference Laboratory for Rabies of the CAVI for diagnosis. The rest of the carcass must be

39 As defined by Joint Ministerial Decision 1049/41498/5.4.2016 which amends the JMD on the rabies surveillance and battling project in Greece (331/10301/25.01.2013 GG B' 198)

quarantined until the rabies results are notified. This means that it must be put temporarily in freezers of the regional veterinary services which, however, on many occasions lack of this infrastructure.

The perpetrators have, unfortunately, easy access to toxic substances, as these are available in the market (legal or black), as active ingredients of a wide range of approved agrochemicals or as illegal products available in the black market⁴⁰. The frequency of use of the latter and their spread all over the country reveals the extensive illegal trafficking of banned pesticides in the country. According to data of the European Crop Protection Association (ECPA), 10% of the pesticides trafficked in the EU are illegal while Europol⁴¹ raises this percentage to 25% in some member states. Illegal pesticides come from third countries, mainly from China and India, usually through the ports of Hamburg, Antwerp and Rotterdam, and are transported to state members, including Greece. It is worth mentioning that since 2012, when Law N. 4036/2012⁴² on the disposal of agrochemicals in the market started to apply, the MADF has handled more than 160 cases and has imposed fines of several hundred thousand euros for trafficking of illegal formulations⁴³. According to the Greek Association of Plant Protection (GAPP), pesticides illegally imported from third countries, mainly from Turkey, FYROM and Albania, are products withdrawn from the market of Greece and the EU many years ago.

A serious obstacle for poison bait use prevention is the ineffective application of the law, which is often related to the inadequate surveillance and supervision of poisoning incidents and the minimal enquiry of the complaints.

Greek society, especially in the countryside, despite the fact that this is a criminal offense, often do not see illegal poison use as a crime against wildlife. This is mainly due to the absence of adequate knowledge on the adverse effects that this practice has to biodiversity and public health.

The Task Force against Poison Baits, with the mediation of the Ombudsman, has succeeded to mobilize to some extent the competent services, while it constantly pursues to put the burning issue of poison high up on the political agenda of the Ministry of Environment and Energy and the Ministry of Agricultural Development and Food.

6. MEASURES - PROPOSALS

Increase of available data

All competent services and institutions should contribute to the systematic recording of poisoning incidents to the Task Force database. The Forest Service can considerably assist to incident recording because of its continuous presence in the countryside. The same goes for Management Bodies of Protected Areas in their areas of responsibility, the Federal Game Wardens and the Environmental Organizations that are engaged in actions in the countryside. The aforementioned services and institutions are advised to fill out the poisoning incident recording protocol and notify data to the Task Force Against Poison. This data will be publicized in reports in order to increase available information on the illegal use of poison baits and their consequences to biodiversity, public health and the countryside's economic activities. In the future, the competent departments of the Ministry of Environment and Energy (MEE) must update and manage the poisoning incidents database. Then, the MEE, will utilize the available information in order to create a risk assessment map indicating areas with high intensity of poison bait use and which will be posted on its website. In this way, increased knowledge of the trend of this phenomenon will allow the Ministry along with the competent services of the Subcentral and Regional Administration to allocate their limited resources in the high risk areas,

40 Layman's report: Innovative actions against illegal poisoning in European Mediterranean pilot areas

41 <https://www.europol.europa.eu/content/press/europol-warns-growing-trade-counterfeit-pesticides-worth-billions-euros-year-1237>

42 Law 4036/2012 (ΦΕΚ Α-8/27.01.2012) Agrochemical disposal in the market and their rational use and relevant provisions

43 <http://www.capital.gr/story/3037344>

in the best possible way, contributing to the effective handling and tackling of this issue.

Reduction of motives

Poison bait use is a complex socio-economic issue and solving it rests on motive elimination or at least its reduction. If the motives for poison bait use are limited then poisoning incidents will be also reduced. Proper tools and alternatives should be given to stockbreeders and farmers for their losses in livestock and crops due to animal attacks, so that they will not resort to poison use but to other alternative and legal practices, like such as for instance the use of electric fencing for livestock protection from carnivores. Under the new Rural Development Programme 2014-2020⁴⁴, stockbreeders, farmers and beekeepers who live and work close to or inside bear habitats can be funded by 100% for the installation of electric fencing. This is Measure 4.4.1 “Protection of mixed farming from Bear”, an individual measure of 4.4 “support to non-productive investments linked with the achievement of agro-environmental and climate goals”, a measure which was not sufficiently implemented in the previous programming period. Extending this measure to also include the wolf’s distribution range is essential. Electric fencing will help reduce the mortality of these two protected species as a consequence of the reduction of illegal use of poison baits.

Another important prevention measure with proven benefits for the protection of livestock from large carnivores is the provision of properly trained dogs combined with livestock supervision by stockbreeders, which will prevent to a great extent carnivore attacks and, subsequently, poison bait use. ARCTUROS has created a Greek shepherd dog breeding center⁴⁵ and puppies are given free of charge to livestock breeders who sign a special contract. This means that livestock breeders are bound to follow certain guidelines regarding the well-being and health of the dogs. Callisto has also created, under the LIFE Project Pindos/Grevena (LIFE07 NAT/GR/000291) a network of Greek shepherd dog owners that supplies stockbreeders with shepherd dog puppies. The aforementioned organizations have repeatedly proposed to include Greek Shepherd dog provision as a measure of the Agricultural Development Project, but this is still not possible as this dog breed hasn’t been officially certified yet. Experience and similar pilot actions have proved that electric fencing and shepherd dogs help reduce damage and, subsequently, change the attitude of people of the countryside towards large carnivores, leading to the reduction of poison bait use (Karamanlidis *et al.* 2011). At the same time, these measures are socially acceptable among rural communities.

Furthermore, the compensation system of GAIO for damage caused by animals to livestock or plant production must be improved. As quite rightly pointed out by Korbeti and Politis (2012), farmers and livestock breeders face a series of issues with GAIO compensations and they may not claim them at all or, if they do, the amount of money they receive is much smaller than the one they lost because of the inflicted damage or the compensation is received with a great delay. As a result, in a relevant survey carried out with the use of semi-structured questionnaires in the study area of the Egyptian vulture (Skartsi *et al.* 2014), 52% of the livestock breeders/farmers were barely or not content at all with GAIO compensation system. In order to improve the GAIO compensation system, we quote the proposals made by Korbeti and Politis (2012):

- a) The Regulation of Plant Production Insurance (GG 1668/B/27-7-2011) and the Regulation of Livestock Insurance (GG 1669/B/27-7-2011) must be updated, adding species to the compensation system, like bird species (corvids) and the Badger. Compensation for wild boar damage must be extended to areas outside Ramsar wetlands.
- b) Declaration of damage induced and the autopsy procedure must be simplified because livestock breeders living in remote areas (e.g. subalpine meadows in the summer) often avoid declaring any damage induced by large carnivores.
- c) The minimum number of animals or the limit of damaged capital for which compensation is given must be lowered (e.g. one instead of more than four sheep and/or goats).
- d) The time needed to pay the compensation must be shorter.

44 <http://www.agrotikianaptixi.gr/>

45 <http://www.arcturos.gr/gr/druseis/anaparagogi-ellinikou-poimenikou/>

e) Damage induced must be fully compensated, as compensation systems, due to their inherent weaknesses, do not cover 100% of the real losses. We should note that the total percentage of compensation paid by GAIO for plant and animal production damages caused by wildlife is many times lower than that paid for other natural disasters (e.g. hail, frost etc.).

An important step to reduce poisoning is controlling the stray dog population. To reduce the number of stray animals, we must first change attitude, promote animal welfare and enhance the sense of responsibility towards pet animals. Adopting a dog when still a puppy and abandoning it when it grows is still common practice and this irresponsible attitude leads to the increase of stray dogs in cities and the countryside. Legislation for pet animals tries to combat this phenomenon by microchipping, the creation of an internet database for microchipped animals and their owners, the imposing of strict sanctions (prison sentence, penalty payment of up to 15,000 Euros, administrative fine of up to 30,000 Euros per animal etc.). Microchipping, however, has been so far incomplete. Therefore, local authorities must strictly apply Law 4039/12, as well as its amendments by Law 4235/14 that provide for stray animal collection, treatment, vaccination, sterilization, tagging, relocation, hosting, adoption and society awareness.

Poison bait incident handling

Every poison bait and/or animal found in the environment constitutes, as already mentioned, a serious threat to biodiversity and public health. Therefore, their removal is an action of high priority. Forest Services' agents, Management Bodies of Protected Areas agents and private Game Wardens of hunting clubs must attend specialized seminars of poison bait and/or animal identification, their safe collection and the proper completion of the poisoning incidents record protocol. These seminars will certify that the attendees are able to rightly handle poisoning incidents, following at the same time biosafety rules for the protection of their personal integrity. The seminars must be carried out under the auspices of MEE and MRDF.

Following the example of other EU countries, Canine Teams could be part of local Forest Services. They could also be part of Management Bodies and Federal Game Guard Body, as a proper tool of poison bait and animal prevention and detection. Emphasis should be given to high risk areas.

Combating of pesticide trafficking

To combat the unaccountable illegal trade of agrochemical products, their obligatory prescription was introduced⁴⁶ according to article 44, par. 4 of Law 4235/2014 (Α' 32). The pilot electronic prescription service launched in March 2015 and the initial goal was to fully operate by August 2015; a short time extension for November 2015 was given later on. However, the MRDF issued a press statement⁴⁷ on December 3rd, 2015 stating the indefinite postponement of the electronic prescription operation of agrochemical products as there was the need to enrich it with data and parameters that would contribute more efficiently to the achievement of its goals. Electronic prescription must start its operation as soon as possible, as it is expected to contribute to agrochemical trafficking control. We must point out that certified pesticides restricted for professional users, like Methomyl, are very often used for the preparation of poison baits. Recording the users of these pesticides under the electronic prescription service will discourage perpetrators from using them in poison baits and might facilitate investigations of poisoning incidents.

Apart from the illegal trade, however, there are also pesticides that have not been withdrawn and are still stored in warehouses several years after they were banned. For their safe removal from the countryside, Greece can follow the successful example of the United Kingdom's "amnesty". More specifically, producers having banned pesticides had a reasonable period of time to hand them in the local competent services, after being reassured that no charges would be pressed and there would be no record of personal data. Those who would be caught with banned plant protection substances after that period of time would face all the legal sanctions provided for by law.

46 N.4036/12 «Διάθεση γεωργικών φαρμάκων στην αγορά, ορθολογικής χρήσης τους και συναφείς διατάξεις» και τροποποιητικές διατάξεις Ν.4235/14

47 <http://www.minagric.gr/index.php/el/the-ministry-2/grafeiotypou/deltiatypou/3130-dt031215>

Incident denunciation – crime investigation

We must never forget that the illegal use of poison baits is a criminal offense and, as such, it is punished by law with fines and imprisonment. All poisoning incidents should, therefore, be treated as felony and denounced to competent law enforcement authorities. A formal complaint must be submitted either directly to the District Court Prosecutor or to the competent authorities (Police and Forest Service). The target is to file a brief over these complaints, which must be enriched with the necessary material collected by general and specialized investigators for the purpose of investigating and identification of the crime during the preliminary investigation process. The brief is then sent to the competent Public Prosecutor in order to send the case to court. Even though the chance of finding the perpetrators is very small, it is not impossible. Therefore, there must be an exemplary punishment to any person found guilty so as future perpetrators may be dissuaded. Targeted investigation by competent services may also be used as a deterrent. Representatives of law enforcement authorities should also attend specialized training seminars on poison baits.

Toxicological tests are a basic tool for poison documentation and the sound establishment of the crime in court. Guidelines by the MRDF should be sent to the local vet services in order to facilitate the performance of toxicological tests so that rabies samples are not tangled with poison samples, the incidents are handled smoothly and both protocols are implemented without any obstructions. Regional veterinary services and CAVI must be staffed with properly trained personnel and equipped for the proper handling of poisoning incidents.

Furthermore, preparation and implementation of local action plans, under the auspices of MEE, to combat the illegal use of poison baits in high risk areas is expected to greatly contribute to the fight against poison. These plans will aim at the operational coordination of the competent services and stakeholders for proper measures, depending on every case, on handling poisoning incidents and the prevention of this phenomenon. When the present report was compiled, the first local Action Plan to combat poison baits in the Regional Unit of Trikala was already in its early stages. It is an initiative taken by the Hellenic Ornithological Society, under LIFE+ Project “The Return of the Neophron” and the MEE; it will be a result of cooperation with local services and stakeholders. The pilot action plan will be implemented in the Regional Unit of Trikala and is expected to become a model for other areas of Greece.

Understaffing of forest and veterinary services hampers the efficient handling of poisoning incidents and the control of this phenomenon. Rural Police personnel that has joined the Forest Service could be used to handle the poison bait incidents. Since 2011, there has been a pending Presidential Decree specifying the rural police responsibilities. Mileage limitation for Forest Services is also limiting their capacity to conduct regular patrols for the detection of poison bait in the areas under their responsibility. This mileage limitation must be modified or lifted in areas where protected species of wildlife occur and the use of poison baits is intense.

Public Awareness

Public awareness campaigns on the detrimental effect of poison to biodiversity, public health and economic activities in the countryside are necessary. These campaigns should be addressed to all land users and must be broadcasted nationwide on TV, radio and all mass media in general, under the auspices of the MEE. Through this campaign it should be made clear that poison use is a punishable criminal activity.

Land users must also be constantly informed by the competent services on the important role that carnivores play on maintaining the ecosystems in good health. Scavenger birds of prey, the collateral victims of poison, should be specifically referenced as they are very vulnerable to secondary poisoning. These birds play a very important ecological and socio-economic role, as they are actually the “cleaning crew” of nature, removing the sources of contamination and disease transmission from the countryside.

National Strategy – Action Plan Against the Illegal Use of Poison Baits

In order to handle this issue efficiently, a national strategy is needed for the planning of a single policy. This strategy must be accompanied by a national action plan that will include targeted measures for the prevention of this situation, motive limitation and the clarification of competent services and stakeholders’ respon-

sibilities and roles while, at the same time, it will be a tool of continuous awareness of the public.

The EU Action Plan to prevent Illegal Poisoning of wildlife could be integrated to the National Strategy of Greece Against Poison; this Action Plan was compiled in the framework of the European Network Against Environmental Crime (ENEC) project. It is a result of a participatory process, as representatives of 20 EU state members, judges, prosecutors and land users took part in its formation. Furthermore, all the EU partners of BirdLife approved it and it was filed to the European Commission, which will include it in the Roadmap towards Elimination of Illegal Killing, in order to promote joint and harmonized actions across the EU.

The Action Plan proposes a coordinated strategy for all member states on the prevention, deterrence, monitoring and, finally, the persecution of the illegal poisoning of wildlife inside the European Union. The Action Plan is also expected to add to the implication of the Convention for Migratory Species (CMS)⁴⁸ guidelines on EU state members for the prevention of the risk of migratory birds poisoning.

48 <http://www.cms.int/en/document/guidelines-prevent-risk-poisoning-migratory-birds-unepecmscop11doc2312annex2>

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8. ANNEX

POISONING INCIDENT RECORD PROTOCOL

1. INFO OF STAKEHOLDER/PERSON HANDLING THE INCIDENT

Full name	Professional Status	Service/ Stakeholder	Telephone No.

Notification

Date of poisoning (suspected)	
Date of notification	
Source of information	

2. INCIDENT LOCATION - CHARACTERISTICS

Coordinates or location description from the closest settlement (e.g. 500 m NW of Kalampaka)	
Regional Section	
Municipality	
Municipal District	
Site – placename	
Protection status (if any)	
Primary area type*	
Secondary area type*	
Weather conditions(of previous days)	
Other info- e.g. close to stream, stable, animal farm, etc.	

*rural, urban, forest, close to settlements, pastoral

6. OTHER POSSIBLE CAUSE OF DEATH

Electrocution	Shooting	Natural Causes	Other (clarify)

3. DEAD ANIMALS (mammals, birds)

SPECIES	NUMBER	CARCASS DESCRIPTION (fresh, in decay, in advanced decay, feathers or/and bones)	NOTES – OTHER FINDINGS

4. POISONING METHOD

Bait use

Bait type*	Number	Distribution on site**	Other facts

*Use of complete carcass, use of piece of meat, wax bait, other

**e.g. at a radius of 30 m, along a forest road

5. CAUSE OF POISON USE – OTHER FACTS ON PERPETRATOR MOTIVES (*description*)

Motive	Description – More facts	Possible liable for poison bait use
Plant production damage		
Livestock damage		
Beehive damage		
Stray animals		
Hound dogs		
Shepherd dogs		
Elimination of competitive species		
Local disputes		
Other		

7. FINDINGS COLLECTION

Findings (dead animals, baits, gloves, bags etc.)	Storage	Transport to Veterinary Office, CAVI, other	Final disposal of dead animals

8. COMPLAINT

Date	District Public Prosecutor/Competent Authorities (Forest Service, Police Department)

9. AUTOPSY FACTS

Autopsy Date	Autopsy Veterinarian in charge	Stakeholder	Autopsy results	Date and protocol number of report
Other facts				

10. TOXICOLOGY TESTS FACTS

Date of delivery	Sender info	Receiver info	Delivery method	Number & type of samples	Results (Active ingredient)
Other facts					