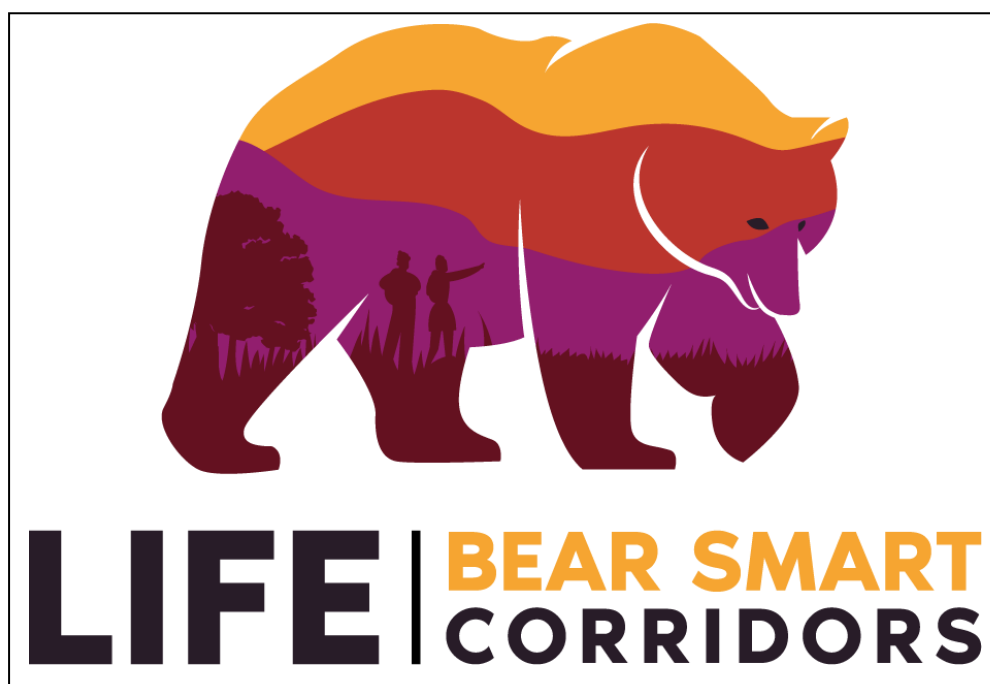




LIFE20 NAT/NL/001107
LIFE Bear-Smart Corridors

*Assessment and identification of specific
factors affecting bear conservation in the
project area of Trikala-Meteora (EL)*

ACTION A3



December 2022

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1. SUMMARY (IN ENGLISH IF THE REPORT IS WRITTEN IN ITALIAN OR GREEK) – 1 page

In the frame of action A3 titled “Assessment and identification of specific factors affecting bear conservation in the project area”, the project’s crew from Callisto and KENAKAP project partners have focused their relevant surveys, investigations and data collection in the project sub-area of Trikala Meteora.

In the frame of this procedure they have identified (5) categories of specific threatening factors affecting brown bear conservation status as follows: a) the imminent construction of a large number of Wind Farms units in the core mountainous area of the most sensitive part of the targeted species population and habitat. b) Human caused bear mortality generated from the damage caused by bears on farming production. c) A specific aspect of human caused bear mortality which deals with the use of poison baits. The intensity of the problem as well as the degree of correlation between threats (b) and (c) was also investigated using spatial mapping tools and statistics, d) the existence of dangerous structures (man made or natural) such as water tanks and natural soil depressions which potentially of effectively may constitute a deadly trap for free ranging wildlife including the targeted species. In total (37) such spots have been investigated and (11) (so far) have been judged as dangerous and finally e) the existence of easily accessible garbage bins functioning as food attractants to bears causing habituated food conditioning. Thirty one (31) spots have been investigated. The next steps will include final evaluation of the most compromising locations and spots under (c) and (d) in order to appropriately implement the relevant concrete conservation actions foreseen in the project.

2. INTRODUCTION – max 1-2 pages

The present report was produced in the frame of Action A3 (titled: *Assessment and identification of specific factors affecting bear conservation in the project area*) of the LIFE Bear Smart Corridors project. This action aims at surveying, screening and weighing in the different project sub-areas the potential and actual threats possibly/probably affecting the targeted species (brown bear) conservation status and local range expansion. On the basis of Action’s A3 outcome, the interventions foreseen under concrete conservation actions C1-C5 will be optimized in terms of final stage designing and spatiotemporal implementation. The present activity reports refers to the 2nd project sub-area in GR that is: Municipalities of “Meteora” and “Trikala”.

The characterization of the potential and/or actual factors affecting bear conservation in the surveyed area and identified as “threats”, have been initially based on the codification and categorization in force under the HD92/43. This list of identified and codified threats to the targeted species has also been described and analyzed in the frame of the Bear National Action Plan elaborated in 2020 by Callisto and Arcturos NGO’s in the frame of the ongoing LIFE IP 4 Natura project in Greece. (LIFE16IPE/GR/0002). The extent of the analysis has focused on the entire project sub-area and on three main aspects as follows:

- a) the identification , definition and spatial designation (mapping) of these factors
- b) the evaluation of their intensity (where possible to score them) by category or spatially
- c) their characterization in relation the human factor (factors generated by human-bear conflict situations



The surveyed project sub-area had made in the past the object of similar surveys under previous LIFE projects (LIFE07NAT/IT/00502 – LIFE “EXTRA”) with the use of questionnaires and interviews performed in situ with local inhabitants and also through processing of existing data. These previous surveys were not exhaustive in terms but focused on specific negative factors to the targeted species CS such as: a) bear damage on farm production and generated conflicts and b) subsequent human-bear caused mortality (i.e. use of poisoned baits) (see references in the end of this report). However these surveys did not take into account other categories of negative factors (“threats”) that have been identified following the survey conducted under this current project.

According to the project’s “GANTT” timetable the activities dealing with the sub-tasks of Action A3 were initiated in April 2022 with data entry of a first data slot. A second stage of data processing including mapping and intensity evaluation was performed in summer 2022 and a third phase of complementary surveys regarding specific categories of new threats (such as identification of dangerous water tanks and attractive spots nearby human settlements with garbage bins and related food remains) was conducted from September to mid December 2022.

The main constraints encountered dealt mainly with the spatial localization of the dangerous water tanks (w/t). Since the fire brigade authorities were not able to provide any relevant data the field team had to contact local communities as well as the local forestry services and also to perform intensive field surveys in order to spot the exact locations or risky W/T.

3. PROJECT AREA

3.1 Main features of the Project sub-area: Meteora - Trikala

The southern project sub-area in Greece comprises the two municipalities of Meteora and Trikala. They include the mountain complexes of Antichasia and Kalambaka-Meteora in the north and NEastern part of the area as well as a considerable portion of the central Pindos mountain range in the west. The entire area shows a notable contrast between the western and eastern parts as follows: The N/Eastern-eastern part is characterized by a smoother topography with forested hills and mountain massifs reaching ~1.500m a.s.l. as well as (3) main river valleys, formed by the rivers Ion, Lithaios and Mourgkas. The geological substratum mainly consists of flysch and alluvial rocks. The area is characterized by a mosaic of landscapes combining deciduous forests shrublands and agricultural lands all shaped by long standing human activities. Habitats include siliceous grasslands, broadleaved deciduous woodlands, alluvial and very wet riparian forests with *Platanus orientalis*, *Salix alba* and *Alnus glutinosa* and various scrub species. The dominant tree species in the deciduous forest is *Quercus frainetto*, mixing occasionally with *Q. cerris*, *Q. pubescens* and *Q. coccifera*. The area was much more densely forested in the past but has been degraded with much of the area now dry pasture, with bare rock in places. The agricultural land, with cereals and vineyards, is extensive.

On the opposite, the western part of the area shows a very marked topography composed by high mountain massifs of Central Pindos mountain range reaching above 2.000m, deep valleys shaped by a sinuous hydrographic network which comprises the springs and upper stream of river Acheloos, one of the largest rivers in the country as well as dense coniferous and deciduous forests. The geological substratum mainly consists of limestone and ophiolites.

The biodiversity value of the area is exceptional as of great botanical and zoological value due to the presence of a large number of endemic and threatened species, legally protected at a national and international level. More specifically the area comprises entirely or partly (5) Natura 2000 SCI's (2 SPA's GR1440005, GR1440006 and 3 SAC's GR1440001, GR1440002, GR1440003).



A large portion of the project sub-area has been also characterized as one of the Important Bird Areas (IBA) of Greece. In addition to its ecological value, the site has a great aesthetic and cultural value. The singular rock formations of Meteora have been designated as a World Heritage Site (UNESCO). Finally the western part of the project sub-area belongs to the Management Unit of Epirus' protected areas.

This area hosts the last pairs of the critically endangered Egyptian vultures (*Neophron percnopterus*). Other priority EEC 92/43 priority birds of prey species include: *Aquila pomarina*, *Circus gallicus*, *Milvus migrans*, *Falco biarmicus* and *Falco peregrinus*, and is also one of the most important areas for wolves breeding in the region of Thessaly. The eastern part of the area has recently been recolonized (since approximately late 90's) by *Ursus arctos* from the western part of the area which holds a permanent *Ursus arctos* population, and functions as the dispersal centre for recolonisation.

As such, the *Ursus arctos* subpopulation present is a crucial part of the overall bear population in the country (at ca. 25-30%) also functioning as the main source population for bear recolonization eastwards while at a wider geographic scale it maintains a gene flow through a mega-corridor that connects the two project sub-areas over the Pindos mountain range (Karamanlidis 2018).

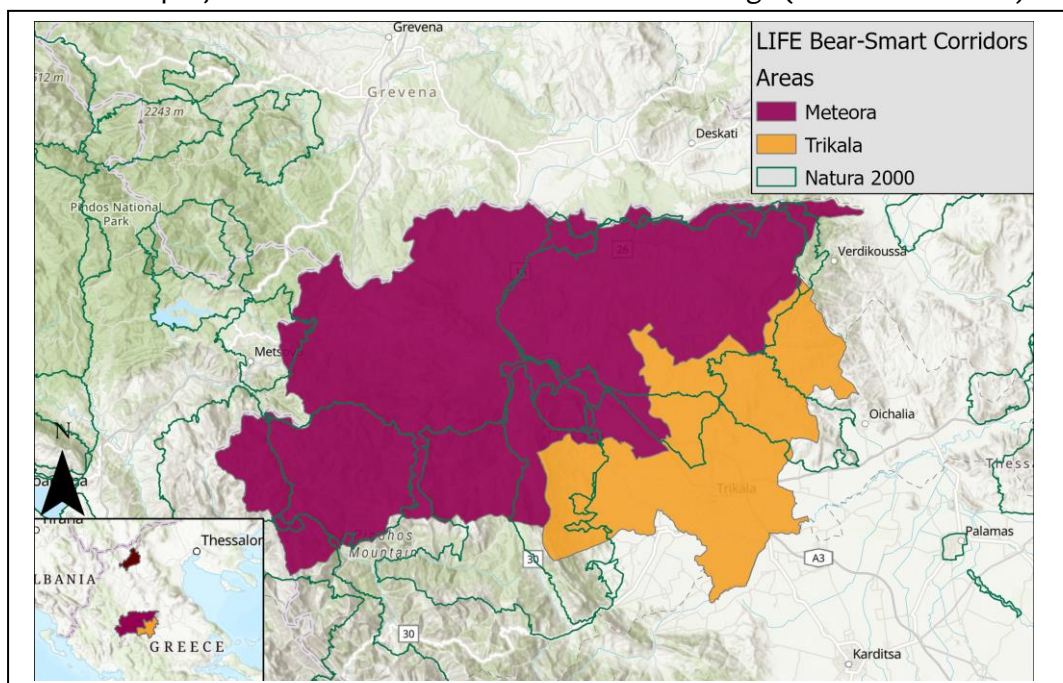


Figure 1. Map of Project sub-area in Municipalities of Meteora and Trikala.

4. METHODS (optional) – action coordinator should provide guidance on length and level of detail

The different categories of surveyed threats/factors and the corresponding methods deployed are as follows:

- 1) Regarding RES (Wind Farms) installation projects: screening and data export from the geo-portal of the National Authority for Energy (RAE) (<https://geo.rae.gr/>) was operated.



Data entry in xls format of all characteristics for each one of the planned Wind Farm plants in the project sub- area was performed.

- 2) Hydro-Electric Dams construction projects: screening and data export from the geo-portal of the National Authority for Energy (RAE) (<https://geo.rae.gr/>). Data entry in xls format of all characteristics for each one of the planned Hydro-Electric Dams in the project sub- area.
- 3) Bear damage on farm production (generating farmers' retaliatory behaviour) resulting on bear human-caused mortality incidents: processing (mapping and statistics) using QGIS and R package of systematic data bases on bear damage on livestock and crop, kept yearly and updated by the National Farmers Insurance organization (ELGA). The processed data covered a 9 years period (2013-2021).

In particular: Given that the conflict between humans and carnivores usually involves losses in livestock (in the case of brown bear also in agriculture), ELGA's database with records of all compensations given to farmers/ livestock farmers for damage caused by wild life in the years 2013-2021 was used. From these, a selection was made of the incidents involving wolves and bears in the prefectural unit of Trikala, where the project is implemented. As indicators of the human-carnivore conflict in relation to animal husbandry, the total number of damaged animals and the total number of attacks, by wolves and bears separately but also cumulatively per community over a 9y period (2013-2021), were processed cumulatively and yearly, plotted and mapped. For bear damage on crop, the estimated loss in production caused by the bear over the same 9y period (2013-2021) per community was calculated, as well as the total area in hectares of damaged crops. Similarly, maps were produced, using QGIS software, for all the above indicators where a higher class was depicted in a more intense shade on a colour scale. The "Natural Breaks (Jenks)" method was used to determine the different classes. This method was selected as the only tool that could produce integer class boundaries in the case of livestock losses, which at the same time does not make a simple arbitrary distinction (e.g. equal intervals), but maximizes the variation between individual classes and minimizes the variation within them (QGIS project, 2022).

- 4) Bear mortality due to the illegal use of poison baits in the project sub-area. Processing with QGIS mapping and R statistics. Correlation with bear damage intensity within the project sub-area was also visualized through QGIS mapping. In particular: since a major threat for carnivores is the use of poison baits, maps were produced depicting the number of incidents as recorded by the Hellenic Ornithological Society based on data shared with CALLISTO. Occurrence number classes /community were projected with different notation and increasing intensity of blue colour on maps depicting the aforementioned conflict variables in order to investigate whether in areas with intense livestock losses the use of poison baits appears to be more frequent. We also produced a map showing the total detected losses by poison baits for different wildlife species (including bears), separated into classes per community, in order to visualize the spatial impact of poison baiting on wildlife species. Cumulative poison baits maps were also produced including additional information layers such as: the boundaries of Wildlife Refuges and Natura 2000 SCI's in order to visually determine if the use of poison baits is differentiated by the protection status of an area. For all classifications and categorizations, the "Jenks" method was used again, except for bird death classes where non-useful classes were produced and replaced by manual determination.



- 5) Localization, typology and mapping (google earth format) of the locations with dangerous water tanks (w/t) or other types of similar human-made or natural water formations. For each such structure measurements of the dimensions were also taken.
- 6) Localization and mapping of potential/effective hot spots with accessible and attractive garbage bins to bears. It is well known that human related domestic garbage containing food remains exerts an attractive effect on bears causing over time a food dependent/conditioned behaviour of the animal due to “easy food”. This fact may result to bears exhibiting a habituated behaviour that could degenerate to a more problematic behaviour needing aversive conditioning.
- 7) Finally, in an effort to depict spatially and quantitatively (where possible) all threats categories and in relation to their importance by sector in the project sub-area for the targeted species, a synthetic map was created visualizing the following layers: a) the sectors with foreseen RES stations (in different stages of installation/operation), b) the use of poison baits per community, c) the Natura 2000 SCIs, d) the wildlife refuges and finally e) the zones of sensitivity and importance for the brown bear (extracted from the National Bear Action Plan, Mertzanis et al. 2021).

5. RESULTS – action coordinator should provide guidance on length and level of detail

5.1 Negative factor related to RES (Wind Farms plants) foreseen installation:

EU codification: this threat category has been codified as **Do1** and **Do2** with the following definitions: Do1=Wind, wave and tidal power, including infrastructure and Do2= Hydropower (dams, weirs, run-off-the-river), including infrastructure and with the following descriptions respectively:

Do1= “Renewable energy (wind, wave and tidal power) generation including development and use of associated infrastructure (e.g. building wind turbines or tidal barrages, collision of birds with wind turbines, damage to coastal habitats or disturbance of marine mammals due to operation of tidal or wave barrages).”

Do2 = “Hydropower generation including development and use of associated infrastructure (e.g. building dams or weirs, changes of hydrological functioning rivers or chemical and thermal properties of water due to operation of dams and weirs).”

In SAC GR1440001 (ASPROPOTAMOS) the development and installation of seven (7) Wind Farm plants is foreseen with a total power of 263.35 MW and a total number of circa 67 wind turbines.

In SAC GR1440002 (KOZIAKAS) and SPA GR1440003 (KORYFES OROUS KOZIAKA) the development and installation of ten (10) Wind Farm Plants is foreseen with a total power of 286,9 MW and a total number of circa 71 wind turbines.

Outside of N2K areas but still within the project sub-area borders another five (5) Wind Farms units are foreseen to be installed totaling a power of 81,6 MW and a number of circa twenty (20) wind turbines.



An increasing number of studies and existing literature demonstrate the direct impact of Do1 and Do2 upon bears habitat degradation/destruction as well as disruption of eco-corridors. Also they demonstrate the impact of these two threats and especially of threat Do1 upon denning sectors abandonment, denning disturbance and subsequent loss of reproductive success. (Kuzak et al. 2011, Whiteman et al. 2017, Manscarenhas et al. 2018, <https://www.wind-watch.org/news/2022/12/02/deerfield-black-bear-wind-turbine-study-ongoing/>).

If the above WF development projects of industrial scale materialize in the project sub-area, then it is highly expected that the bear population and habitat will be severely impacted by not only the 158 wind turbines but by all the accompanying infrastructure such as high roading, diggings and landscape alteration.

The locations of the aforementioned Wind Farm plants included in the project sub-area Trikala-Meteora are illustrated in the following figure 2.

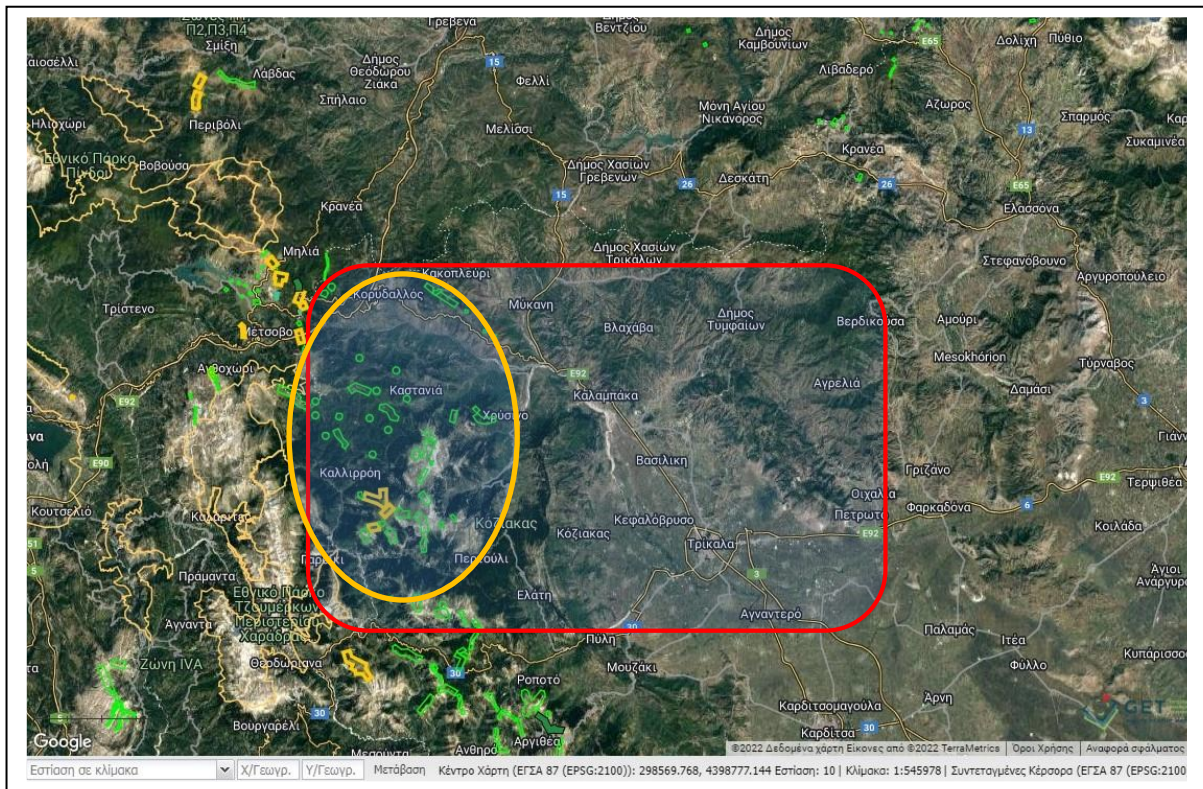


Figure 2. Map of planned Wind Farm plants (green polygons) in Trikala – Meteora project sub-area (red line).(source RAE e-portal)

From the above map we may note that the highest concentration of the planned Wind Farm plants development is appearing in the western part of the project sub-area (yellow ellipse) where the source bear population resides with permanent presence.

The negative effect of this impacting factor will be sensed at two levels: a) at the source population per se by radically affecting habitat and population status and b) by undermining the bear recolonization dynamics and potential eastwards as well as the subsequent corridor functionality from the west to the east part of the project sub-area due to corridor status deterioration.



5.2 Bear damage on farm production related to bear-human caused mortality (retaliatory killing).

EU codification: the bear human caused mortality threat has been codified and defined as **G10**= “Illegal shooting/killing”. It has been described as follows:

“Illegal shooting, killing or collecting of animal species. This includes, for example, illegal killing of game species, illegal taking of fish, illegal collecting of strictly protected animal species. Also includes hunting, capture or killing using methods and forms referred to in the Article 8 of the Birds Directive (e.g. 'indiscriminate' forms of hunting for birds such as snares) or in Article 15 of the Habitats Directive; or the practice of hunting and fishing activities that do not conform to e.g. quotas or seasonal restrictions.”

In order to evaluate quantitatively and spatially the risk of bear-human caused mortality related to bear damage on farm production we have elaborated different maps in order to visualize the problem as follows: Maps (fig. 3, 4, 5 & 6) processed under QGIS and scored accordingly shows the intensity of the bear damage problem on livestock and crop according to the two aforementioned quantitative indicators: (a) the total distribution of bear attacks and (b) the total number of animals losses from depredation over a 9y period (2013-2020) in the project sub-area.

Total number of bear attacks on livestock per community in the project sub-area – over the period 2017-2020

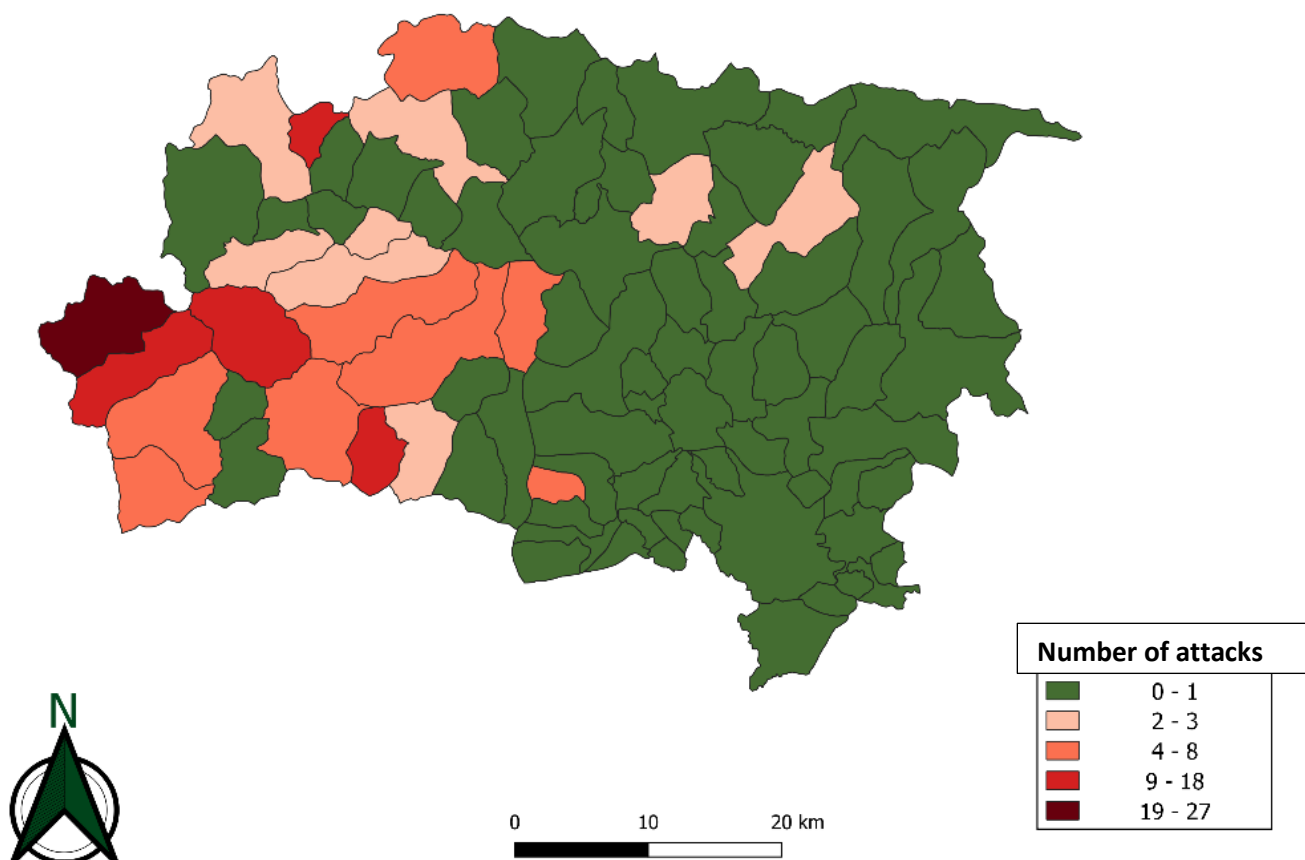


Fig. 3: Map of bear damage on livestock in the project sub-area of Trikala-Meteora over a 4 years period (2017-2020). The map indicates the spatial distribution of bear attacks by administrative unit (communities/villages). It also indicates the bear depredation intensity with a classification gradient on a colours scale. (data source ELGA).

It is interesting to note that the highest frequency of bear attacks as well as the highest depredation intensity over this 4y period occurs in the western part of the project sub-area which forms the optimum habitat for the species and hosts the source population of brown bear both in the project sub-area and in the central part of Pindos mountain range which is the core part of the species distribution as regards to the western population nucleus.

What is also interesting to note on this map is the presence of two patches with bear depredation activity in the eastern part of the project sub-area considered to have been recolonized by the species in the recent years.

Total number of bear attacks on livestock per community in the project sub-area – over the period 2013-2016

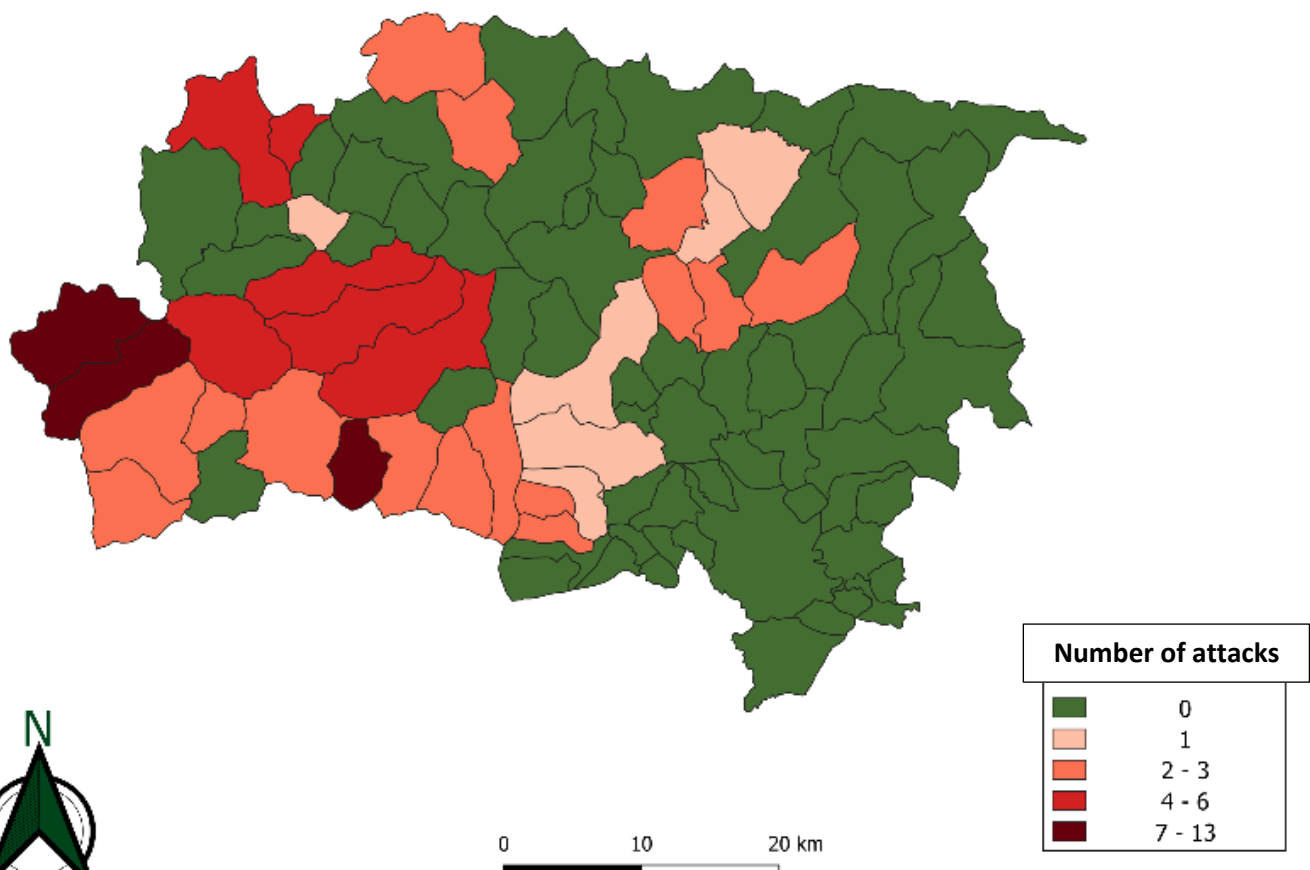


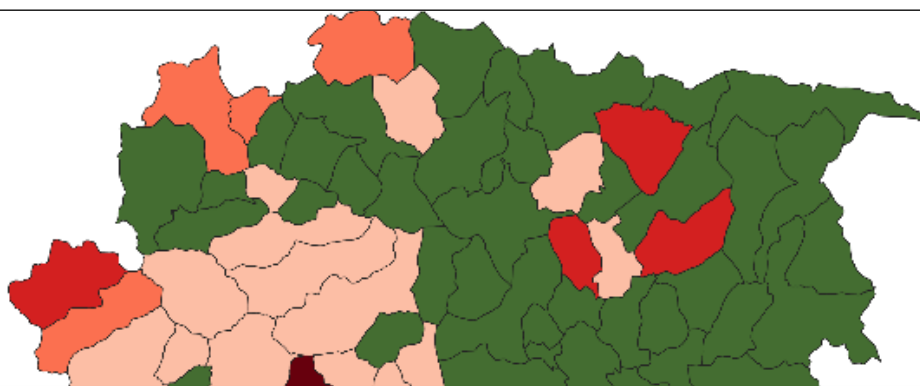
Fig. 4: Map of bear damage on livestock in the project sub-area of Trikala-Meteora over a 4 years period (2013-2016). The map indicates the spatial distribution of bear attacks by administrative unit (communities/villages). It also indicates the bear depredation intensity with a classification gradient on a colours scale. (data source ELGA).

What is interesting to note on map 4 is one hand the similarity between the two periods in the bear attacks frequency distribution and spatial patterns regarding the western part of the project sub-area. On the other hand the eastern part presents a higher frequency of bear attacks over the first

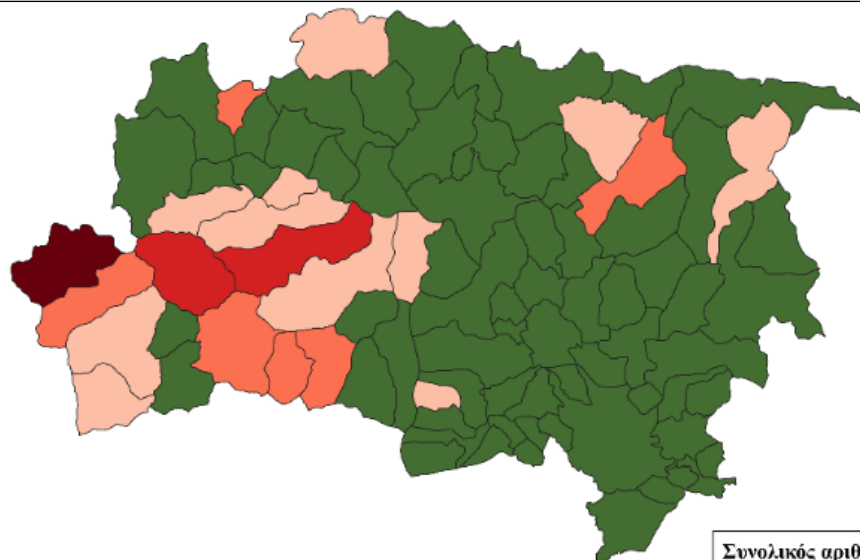


4y period (2013-2016). The decrease of bear attacks frequency on livestock over the second surveyed period (2017-2020) in the eastern part could be attributed to several factors from the use of preventive measures by farmers to proactive killing in this recolonized portion of the species range. On the following maps (5 & 6) the bear depredation on livestock is illustrated according to the second quantitative indicator: “number of domestic animal losses”. The patterns present similarities both in spatial distribution and intensity showing again a light shift toward a decrease of animal losses between the two survey periods, the latter (2017-2020) showing less animal losses in the eastern sector. In both cases we have strong reasons to expect higher bear human-caused mortality probabilities in the western part of the project sub-area and this is the reason why the project’s actions (C) have to be oriented appropriately.

Total number of domestic animal losses from bear depredation in the project sub-area over the period 2013-2016



Total number of domestic animal losses from bear depredation in the project sub-area over the period 2017-2020



0 10 20 km

Συνολικός αριθμός ζημιωθέντων ζώων	
0 - 2	0 - 2
3 - 6	3 - 6
7 - 14	7 - 14
15 - 22	15 - 22
23 - 40	23 - 40



Fig. 5 & 6: Maps of bear damage on livestock in the project sub-area of Trikala-Meteora over a 9 years period (2013-2020). The maps indicate the spatial distribution of animal losses by administrative unit (communities/villages). It also indicates the bear depredation intensity with a classification gradient on a colours scale. (data source ELGA).

5.3. Bear human-caused mortality due to the use of poison baits.

EU codification: the threatening factor “bear human caused mortality with the use of poison baits” has been codified and defined as **G13**= “Poisoning of animals (excluding lead poisoning)”. It has been described as follows: “Deliberate poisoning of animals including the effect of secondary poisoning”.

With the contribution of the Hellenic Ornithological Society making available the online data base on poison based incidents in combination with the relevant data base on bear human-caused mortality kept and regularly updated at Callisto project partner as well as the sourcing of relevant literature (Ntemiri et al. 2018) we have compiled and plotted all poison baits incidents having occurred in the project sub-area over an 8y period (2015-2022) (fig. 7/map).

12

Spatial distribution and frequency of casualties in domestic and wildlife species from poison baits in the project sub-area (2015-2022)

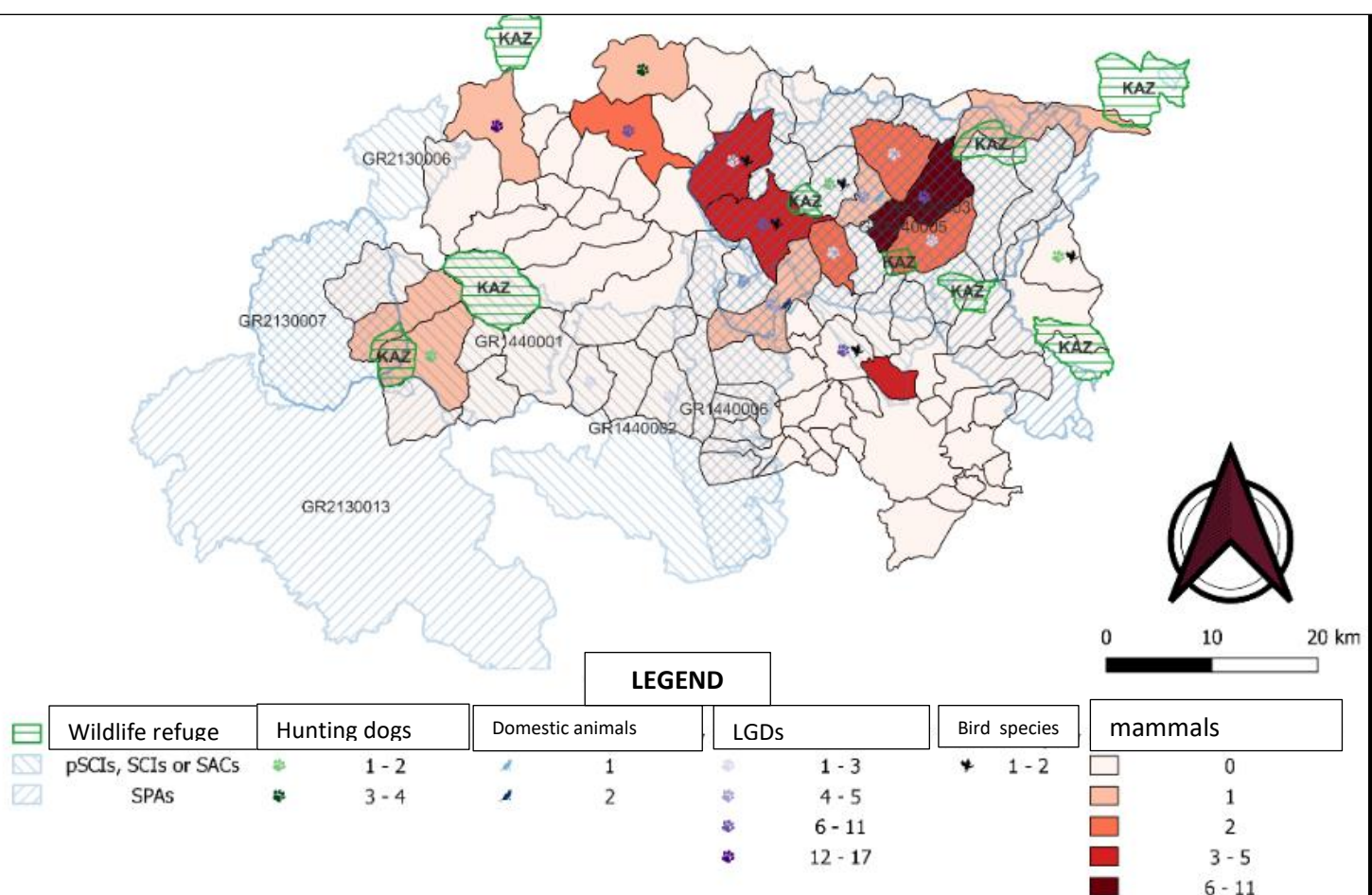


Fig 7: Map distribution and frequency of casualties in domestic and wildlife species (including bears) from poison baits in the project sub-area (2015-2022)



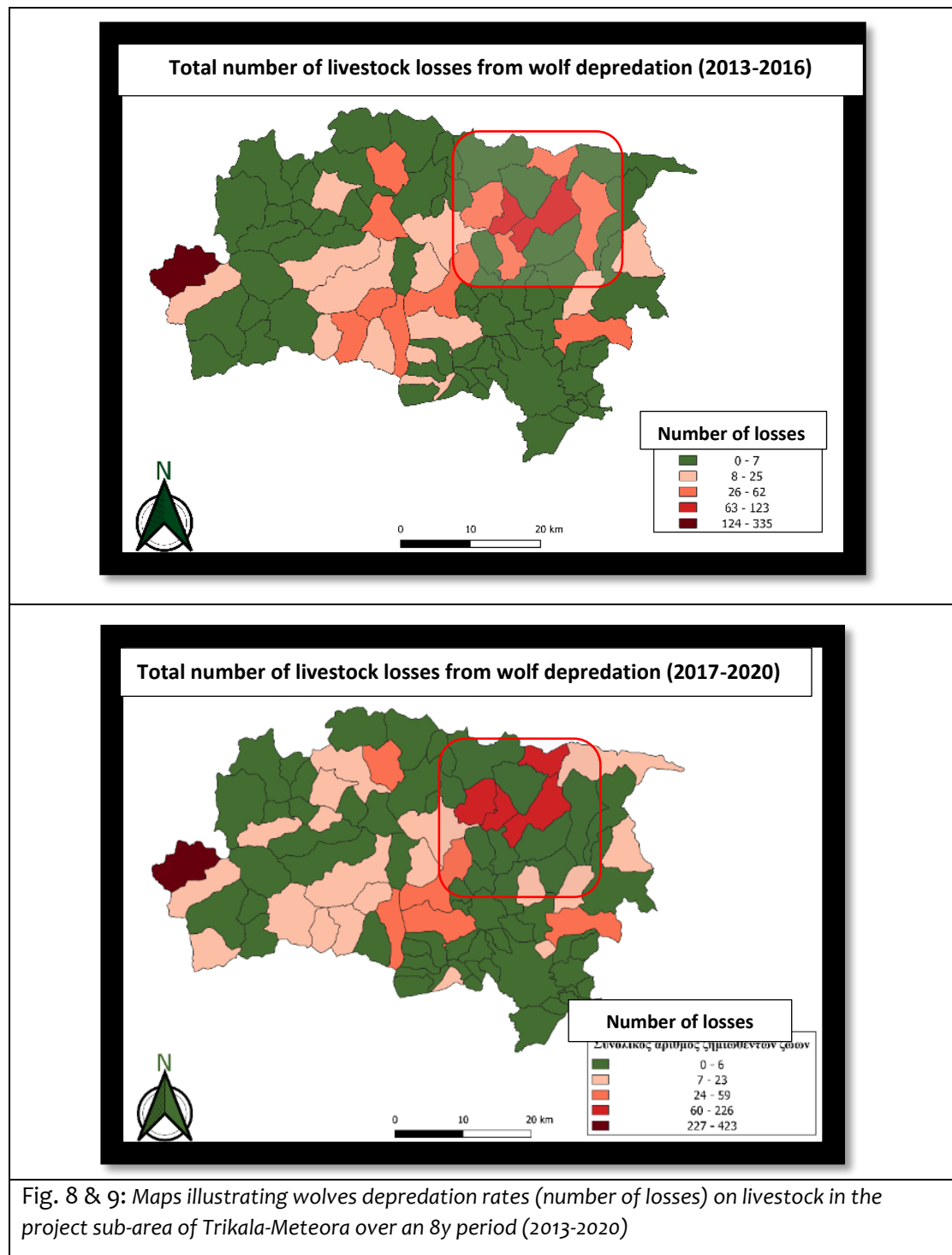
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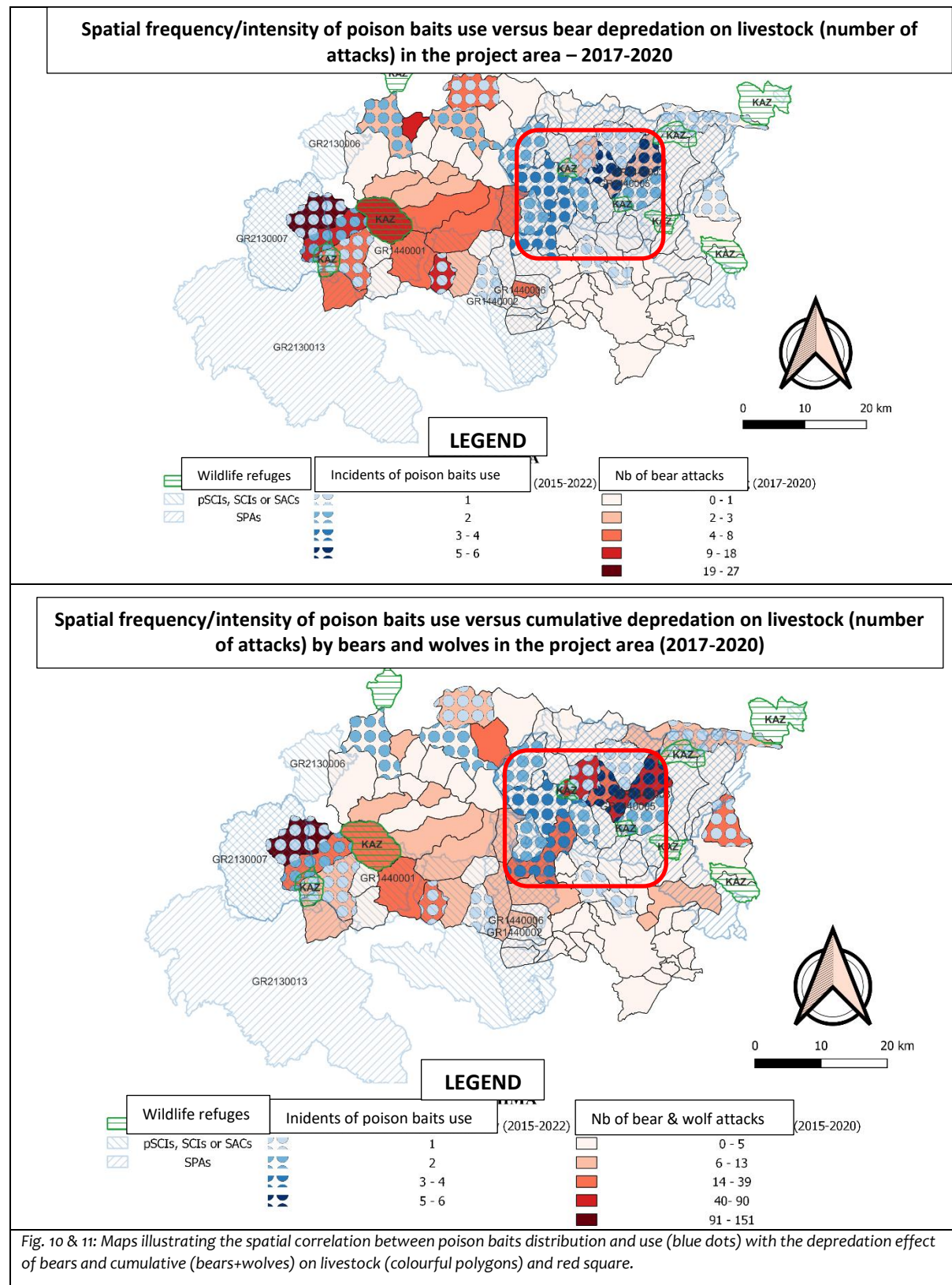
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From the above figure it is important to note that the highest spatial frequency of casualties from poison baits regarding wildlife species (birds and mammals) occurs in the eastern part of the project sub-area and notably within SPA 1440005. The reasons of this phenomenon and the incentives behind this illegal act with disastrous consequences upon wildlife can be explained following two main arguments: a) the sympatric permanent presence of wolves (*Canis lupus*) in the project sub-area, causing higher damage rates on livestock compared to bears (see maps in fig. 8 & 9) and thus triggering a cumulative effect on retaliatory killing and b) the progressive recolonization dynamics of bears in the same sector finding the locals unprepared for the arrival of such a species and the related damage caused on farm production.



The following maps (fig. 10 & 11) illustrate the spatial correlation between frequency/intensity of use of poison baits and damage caused either by bears or under the combined depredation effect on livestock by bears and wolves cumulatively. Fig (11) illustrates the poison baits intensity coinciding with sectors with the highest cumulative bear/wolf depredation on livestock.



Comparing the two maps (10 & 11) we observe that the number of cumulated attacks (bears+ wolves) (map 11) presents a notable difference compared to those perpetrated only by bears (map 10). This proves that the wolves predatory behaviour (as an absolute carnivore) accentuates the overall livestock damage problem and losses. In this type of scenario we could presume that bears could be the side effects victims from an illegal act (poison baiting) that mainly targets wolves.

Data from records on bear human-caused mortality related to the use of poison baits give a total number of nine (9) incidents in the project sub-area with the most recent having occurred in July 2022!. These are only the known incidents with findings that provide sound proofs. We have strong reasons to believe that the real number of bears killed by poison baits is higher.

The following graphs (fig. 12 – 15) illustrate over the period 2015-2022: a) the spatial distribution of poison baits incidents among different sectors under a certain protection status in the project sub-area, b) the frequency of dead animal species (domestic and wildlife) in the same areas, c) the overall number of animals killed by poison baits in the project sub-area and d) the type of poison baits used in category of protected area in the project sub-area.

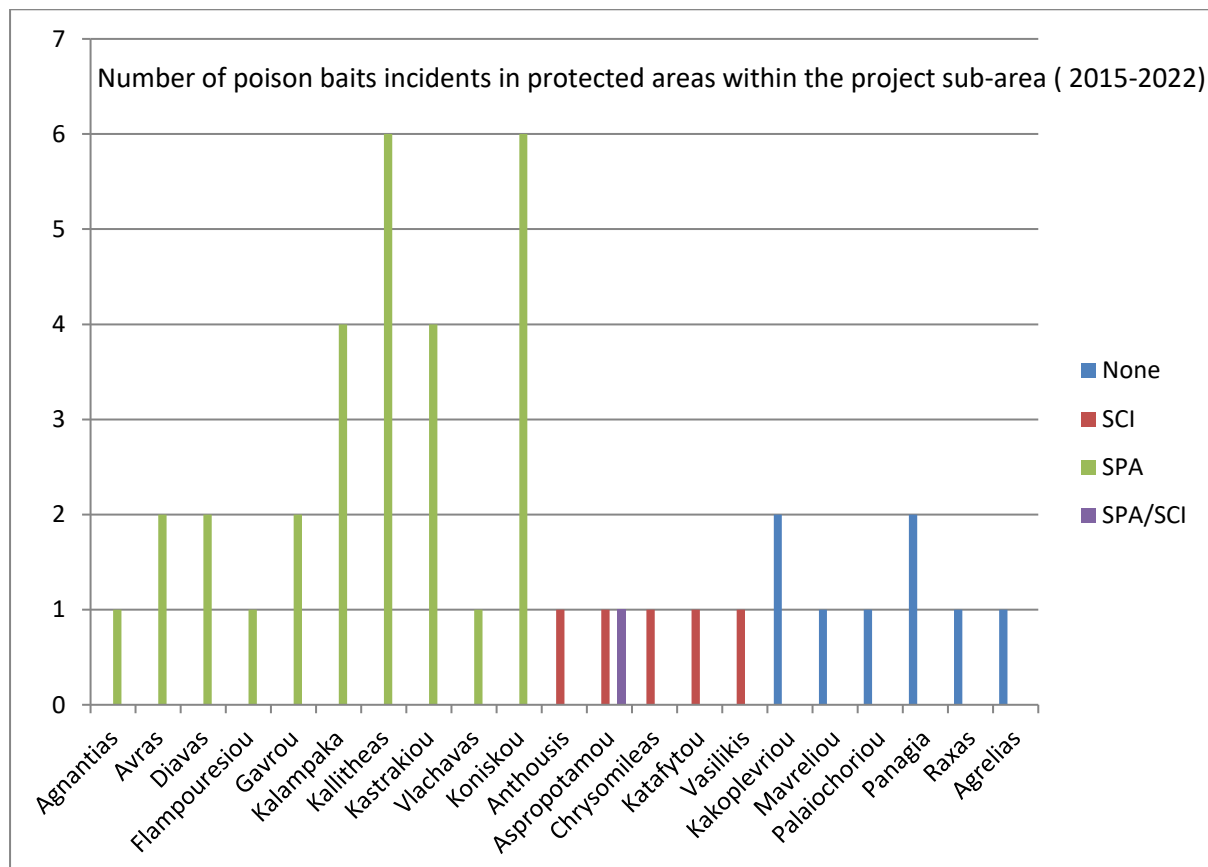


Fig 12: Distribution of poison baits incidents in different categories of protected areas within the project sub-area Trikala- Meteora (2015-2020).

Following the above figure it is worth noting that the highest number of poison baits incidents has occurred in the SPA's (and notably in SPA GR1440005) a bear recolonization area where critically endangered species of birds of prey such as the Egyptian vulture (*Neophron percnopterus*) are also dangerously exposed to this illegal practice.



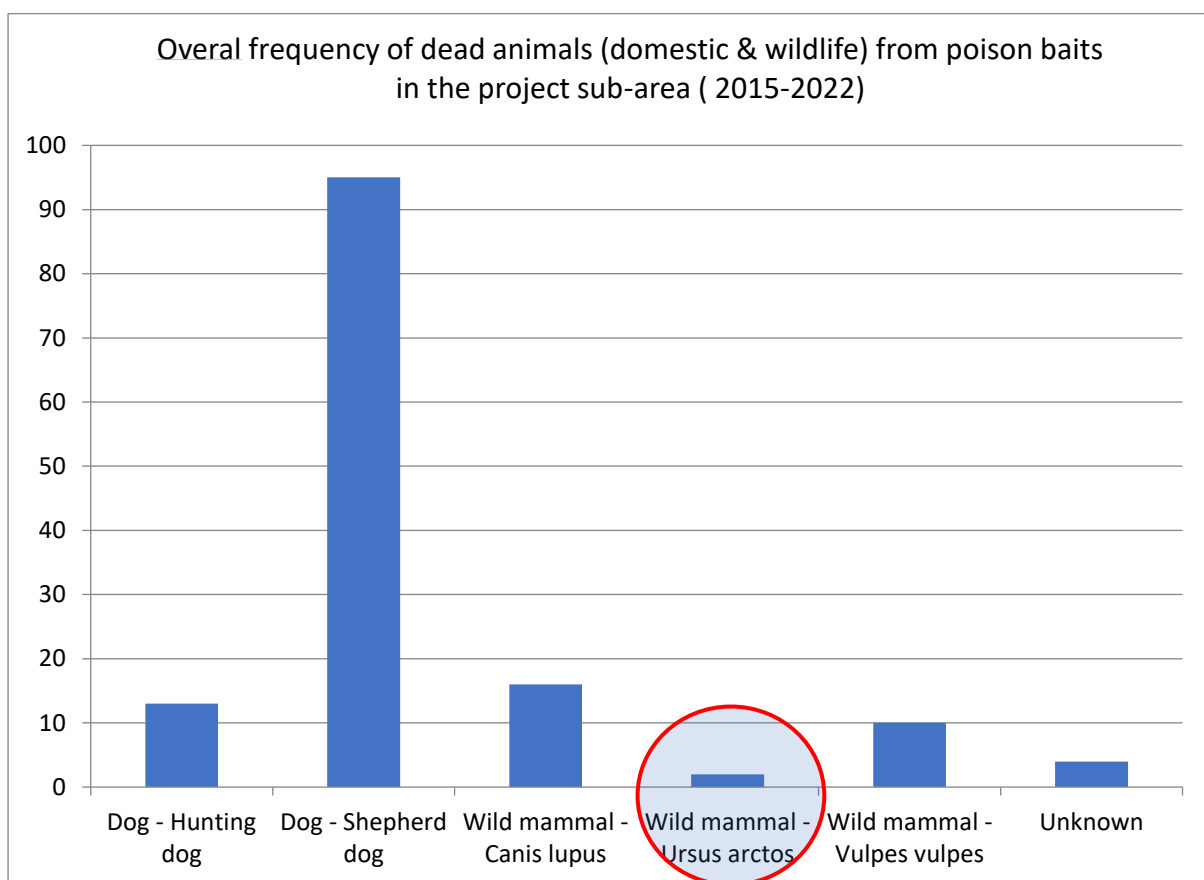
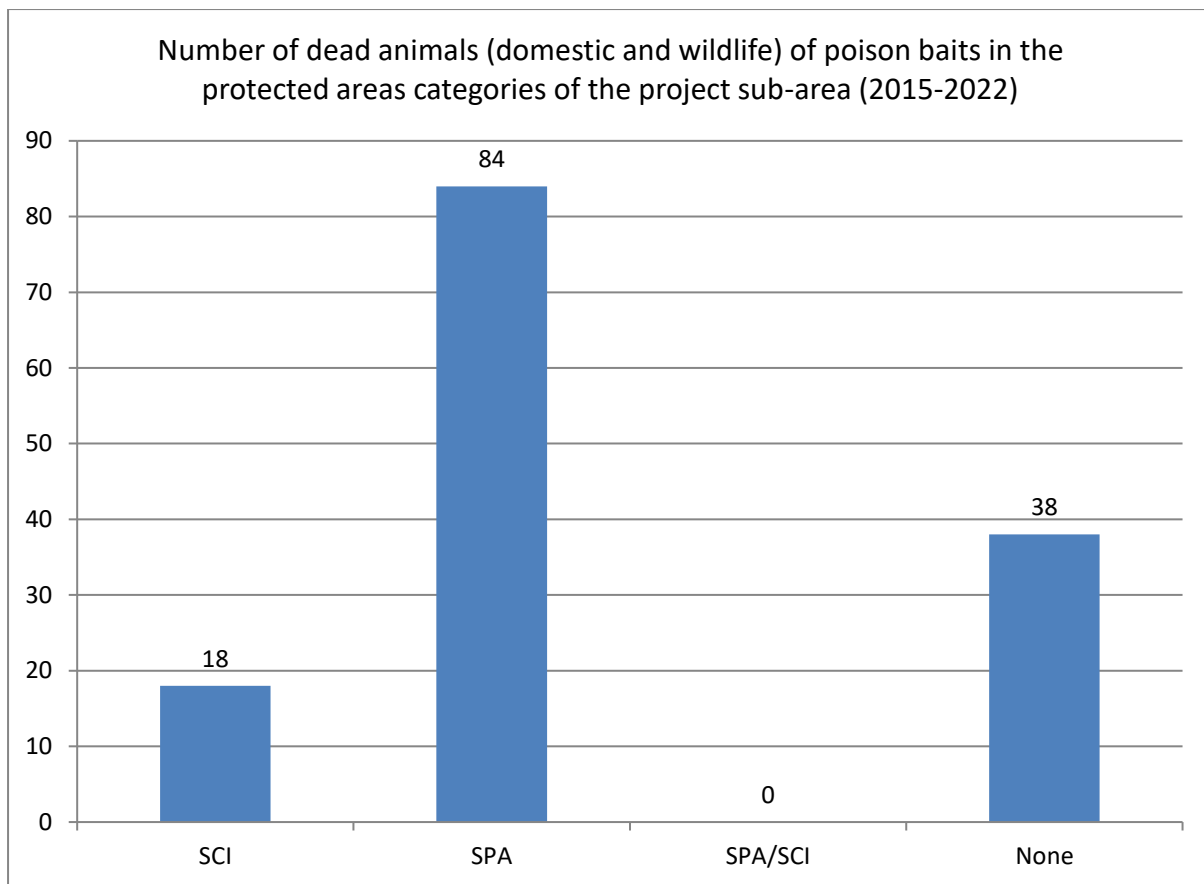


Fig. 13 & 14: Number of dead animals (domestic and wildlife) per protected area category and per category of taxa



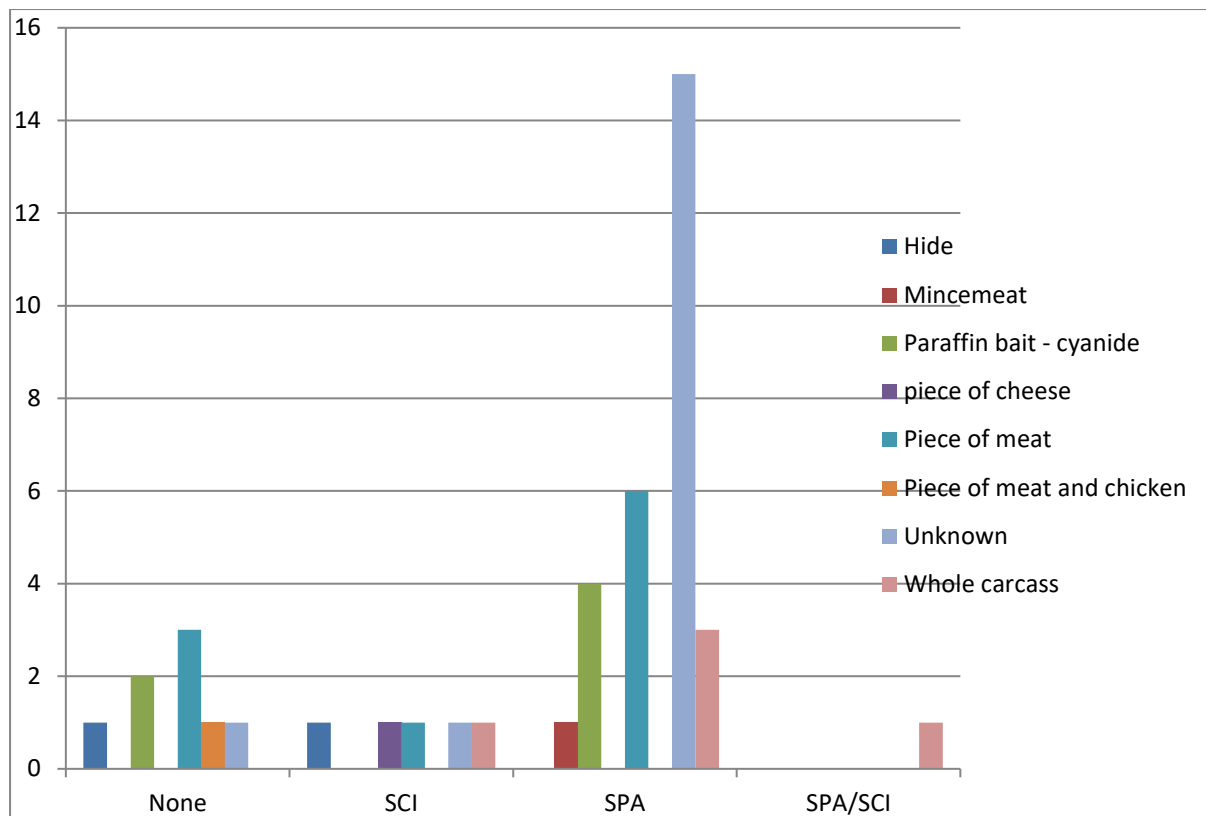


Fig. 15: graph with frequency of types of poison baits used in the different categories of PAs in the project sub-area Trikala-Meteora (2015-2022).

5.4. Localization, typology and mapping of the locations with dangerous water tanks (w/t)

Water tanks (w/t) in the form of concrete structures with a certain depth are rather frequently present in the project sub-area but also across the species range in the country. They are used for (3) main purposes as follows:

- 1) Irrigation purposes
- 2) fire extinguishing purposes
- 3) water collection for water reservoirs

Incidents of bears falling in these types of structures at the risk of drowning is rare but not exceptional. The most recent incident occurred in 2018 in the Rodopi eastern population nucleus where an adult female bear fell and was trapped inside a water tank with high concrete walls. Fortunately the water inside was frozen and the bear was rescued and radiocollared. In the case of a bear falling in such a structure full of water, the intervention needs to be prompt otherwise the animal dies of exhaustion trying vainly to escape and/or of hypothermia (in winter).

In the case of our project sub-area Trikala- Meteora a thorough survey was performed by the field crew from Callisto and KENAKAP project partners over the total area in order to localize such dangerous structures and spots and to profile them adequately. In order to facilitate the localization process the necessary contacts with competent authorities, local communities and inhabitants were made before.



Following several trip visits and after screening thirty seven (37) different structures and spots across the entire project area (see fig. 15-photo/map), we have managed to identify so far at least eleven (11) spots with dangerous water tanks structures or natural formations which are listed below and also illustrated on the following pictures.

1. w/t at Ag.Triada
2. w/t at Kerasoula
3. w/t/ at Trikoukia
4. water reservoir at Koniskos
5. water reservoir at Gavros
6. natural chasm on Mt. Koziakas («Spilaio Bei») (30 m deep).
7. Natural karstic depression («Chionotrypa») (7m depth) on mt. Koziakas
8. Natural well/water depression at Mavroviros-Agrielia
9. w/t at Pefki
10. w/t at Malakasi
11. w/t at Stefani.

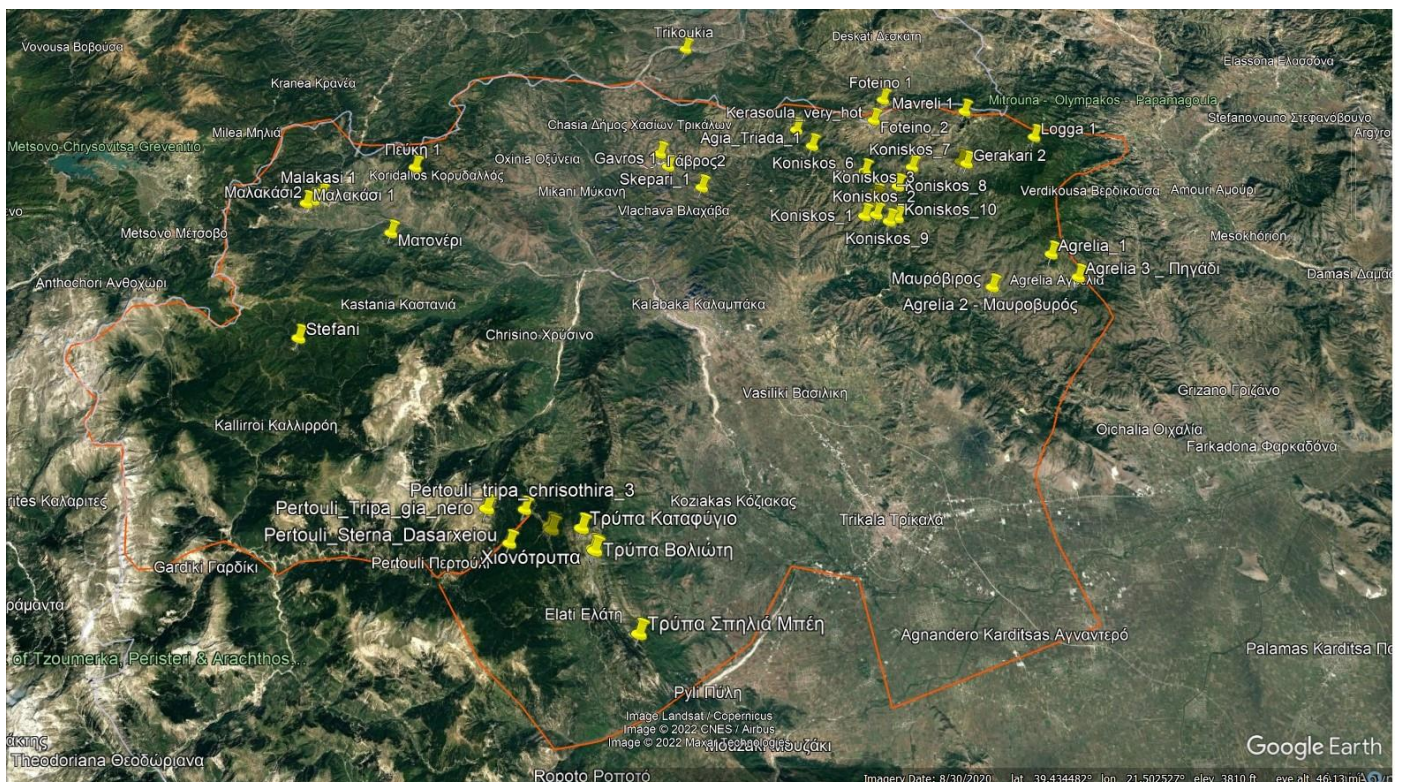


fig. 15 : Photo map extracted from google earth that illustrates the thirty seven (37) visited spots with w/t or water natural structures and formations presenting potential or effective risk for brown bears in the project sub-area.





Fig. 16-19: Photos of characteristic man made and natural water tanks/formations that represent a danger for brown bears in the project area.



5.4. Localization and mapping of potential/effective hot spots with accessible and attractive garbage bins to bears

Similarly to the survey protocol applied for the localization of dangerous water tanks, the field crew from KENAKAP thoroughly investigated the most obvious spots with accessible garbage bins to bears, as human related food attractants, across the entire project sub-area of Trikala-Meteora. In total thirty one (31) such spots with accessible garbage bins have been identified so far. In their majority these spots are located nearby human settlements (villages and small restaurants). Their locations are illustrated

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Fig 21-24 photos of attractive garbage bins in characteristic spots in the western part of the project area.



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6. DISCUSSION/CONCLUSIONS – action coordinator should provide guidance on length and level of detail

The above part of the activity report shows that the main negative factors/threats in the project sub-area of Trikala-Meteora have been identified, investigated and recorded.

For some specific categories of threats the necessary contacts had to be made with competent authorities which is not always an easy and productive process. The fact that KENAKAP is a local entity and in good terms with all the relevant competent authorities facilitated the process of first level information collection.

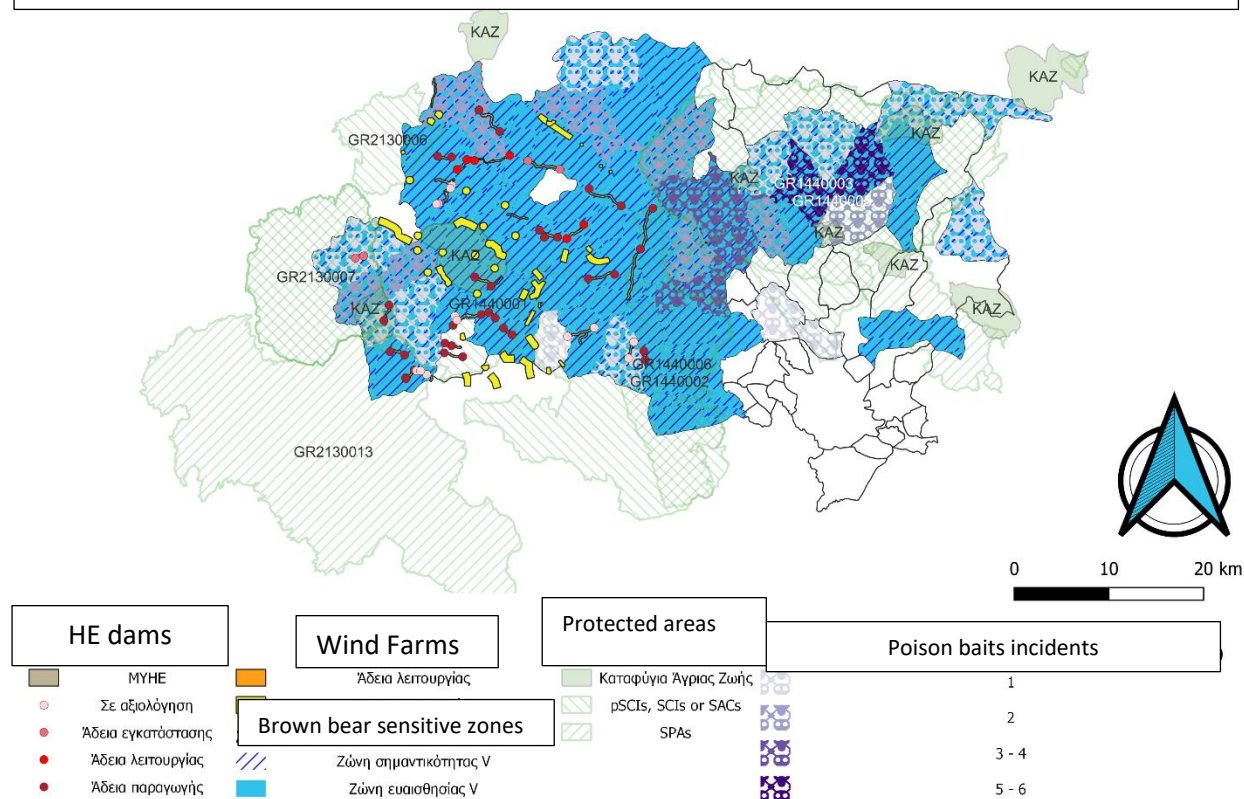
The main problems encountered were mainly connected to the slow response rate on behalf of the relevant competent authorities. In most cases it was overcome either with direct contacts of the crew field team members or with contacts with local inhabitants who provided very useful information and tips.

The next steps to be followed at the present stage are as follows:

- 1) Final screening and evaluation of the most dangerous water tanks and formations as well as definition of the type of intervention to be performed in order to make them safe for wildlife and bears.
- 2) Final screening and evaluation of the most attractive spots for bears with accessible garbage bins.
- 3) Continue to advocate by all means against the construction of the numerous and disastrous Wind Farms in the project sub-area.

A synthesis of the most important investigated negative factors (Wind Farms, HydroElectric dams and poison baits) to the targeted species is illustrated in the following map (fig. 25).

Fig. 25: Map of major threats to brown bear in Meteora-Trikala sub project area



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ANNEX

Annex 1 – Name of document

Annex 2 – Name of document...



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