LIFE13 NAT/IT/000311

LIFE PLUTO project's Final Report - Summary

The LIFE PLUTO project aimed at counteracting the illegal use of poison in order to favour the conservation of large carnivores and scavenging raptors.

The project developed activities aiming to discover if poison is used, to prevent the use of poison, to minimize its impact on wild animals and to favour the appropriate management of poisoning cases by the competent personnel. These actions were implemented in 11 regions of the Italian peninsula and, in particular, in those areas which play a relevant role in the conservation of species vulnerable to poison (i. e. Parks and protected areas).

The LIFE PLUTO project has led to the creation of a method for preventing and tackling the illegal us of poison which is working in the majority of the Italian peninsula enabling:

- to bring out the illegal use of poison. This is made possible by the periodic an urgent inspections performed by the Anti-poison Dog Units. (ADUs). Furthermore, the awareness-raising initiatives implemented in the project framework promoted the notification of suspicious poisoning event and hence the intervention of the ADUs.

- to clean up in a fast and effective way the areas affected by poisoning. The action of the ADUs mitigates the impact of poison on wildlife and allows to detect and collect items useful to the investigation.

- to have specialised people for the management of the poisoning cases (including the investigation). Thanks to the project ten courses were held targeting 400 members of CUFAA. The procedures for the management of the poisoning cases were established and an handbook on them was spread among the CUFAA's personnel.

- to prevent the illegal use of poison. The action of the ADUs and the greater attention given to this crime by the CUFAA's personnel working in local areas play an important deterrent role, which has been enhanced by the information and awareness-raising initiatives which were carried out.

In the Gran Sasso and Monti della Laga National Park the project aimed at preventing the use of poison. A feeding station for scavenging raptors was built and it's managed with the cooperation of local livestock farms: this virtuous method favours raptors species

vulnerable to poison and mitigates the conflict between farmers and wild animals. In order to increase awareness in the new generations an impactful didactic campaign was implement in schools.

Here below are described the actions carried out in the project framework.

The project allowed to establish six Anti-poison Dog Units, each composed of one dog handler, two dogs trained for searching poison (a Belgian malinois sheperd and a labrador retriever) and two support units (Act. C.1).

The activity of the ADUs started in July 2016 (Act. C.2). The headquarters of the ADUs are located in five National Parks (Foreste Casentinesi, Monte Falterona eand Campigna; Monti Sibillini; Abruzzo, Lazio and Molise; Cilento; Pollino) and in Isernia (Frosolone, Molise Region). Each ADU is provided with a kennel, a pick up set up for transferring the dogs, materials and equipment necessary for the dog management, the dog training and the performing of inspections and investigation (cameras, tablet, collection kit etc.).

The dogs working in the ADUs were trained by an expert Spanish dog trainer; a first group of six dogs was acquired in May 2016, a second one in October 2016. At the same time of the arrival of the two groups, the dog handlers attended two training courses for a total duration of four weeks, aiming at learning the techniques for the dog training and for performing the inspections in the field (Act. C.1).

Furthermore, the ADUs' dog handlers attended a course on the dogs' wellness and the emergency techniques (first aid) in October 2016 and a refresher and qualification course in September 2019 (Act. C.2).

All the ADUs' personnel attended a three days course in June 2015 which focused on the correct methodology of managing poisoning events, also through simulated field inspections. A further five days refresher course was held in December 2019 (Act. C.2).

Poison baits and toxic substances necessary for training the dogs have been provided by the Experimental Zooprophylactic Institute of Umbria and Marche Regions, which also cooperated in the implementation of the training activities targeting the CUFAA's personnel (Act. C.1, C.3). During the greater part of the project the dog feeding was provided thanks to the sponsorship by the Italian pet food company Trainer.

In total, the six ADUs carried out 1.539 inspections (1.042 preventive and 497 urgent). The average number of inspections per month has been progressively increasing, passing from 13,3 in 2016 to 46 in 2019, as evidence of the ever-growing knowledge and mobilisation of this tool. 181 inspections came back to be positive, leading to find and remove suspect material related to the use of poison or to other crimes against wildlife. The ADUs found

and removed a minimum of 198 poison bait, 58 carcasses and 5 groups of baits which were proved or strongly suspected to be poisoned.

A study carried out by the CRNMFV of the Experimental Zooprophylactic Institute of Lazio and Toscana Region showed a general stationary trend of poisoning cases in Italy (Act. D.1). In the last years, a slight decrease in the number has been registered in some regions, sometimes preceded by an increase in cases. This trend could be related also to the activity of the ADUs which has firstly favoured the emersion of the practice and then played a deterrent role.

The CUFAA organized ten training courses in eight Italian regions aiming at increasing the knowledge of the problem of the illegal use of poison and at improving the management of poisoning cases (Act. C.3). The courses counted about 400 participants among the CUFAA's personnel and members of other involved institutions (police corps, veterinarians, voluntary environmental guards etc.).

In order to improve the skill of its personnel the CUFAA published and distributed the manual "*Arrangements for the management of poisoning cases and the use of the Anti-poison Dog Units*".

In the northern part of the Gran Sasso-Laga Park a feeding station for scavenging raptors of about 1 hectare was realized; it was supplied with old sheep coming from eight local livestock farms (Act. C.4). The Park obtained the permission to use the station from the local sanitary authority and the needed inscription in the ministerial register.

Some activities were undertaken in order to stimulate the involvement of the livestock breeders (telephonic campaign, public meeting etc.), allowing to create a ranking list of supplying farms which were subsequently authorized by the local sanitary authority at providing the service (Act. E.1). The management of the feeding station started in April 2016 after having entrusted a local company to pick up the carcasses and bring them to the station and after the purchase of a car for this purpose; some slaughterhouses of the area were involved.

67 supplies were carried out for a total of 133 sheep's carcasses, amounting to 6.541 kg. All the activities were managed by the Park's veterinarian with the support of an external contracted veterinarian.

A video control system installed in the feeding station (Act. D.1) enabled to ascertain that it was used by the Golden eagle (*Aquila chrysaetos*) and the Common raven (*Corvus corax*), more rarely by the Red kite (*Milvus milvus*).

The impact of the project on the socio-economic and the ecosystem services has been evaluated by means of two surveys addressed to a large target. The study showed a general wide appreciation of the actions carried out in the project framework and the need that they are continued and broaden in the future.

Many activities were carried out to promote the project, to share the obtained results and to raise the common awareness among common people and stakeholders.

Within the project 26 press releases were diffused; the press review is composed of about 170 articles including both paper and online editions (Act. E.1).

The CUFAA organised nine events enabling the public presentation of the ADUs and 14 meetings with the stakeholders in ten different regions (Act. E.7) in order to increase the awareness on the impact of the illegal use of poison. They were attended by over 500 persons.

The ADUs participated to 63 public events of various type (field schools, exhibitions, visit in schools and hospitals etc.) which reached a minimum of 15.300 persons. The LIFE PLUTO project was presented by the staff within five congresses and workshops organised by different subjects (Act. E.1).

The PNGSML was responsible for the development of an effective didactic campaign in schools which ended in 2018 with a drawing contest and four award ceremonies (Act. E.1). The campaign especially targeted the primary and secondary school and registered a great success: it involved 580 pupils belonging to 36 classes. For the classroom lessons a didactic copybook and four didactic kits on large carnivores and scavenging raptors were produced.

To support the project dissemination were produced a brochure, a leaflet on the ADUs and a documentary film (Act. E.1); didactic panels were also installed (Act. E.4).

The project website www.lifepluto.it is online since February 2015 (Act. E.3). It shows 41 news and allows to download in PDF format all the produced dissemination materials and the presentations made within the two congresses organised with Act. E.5. The website has recorded 30.288 visits and 56.356 webpage viewings.

In the project framework two conferences were organized, both of them having a great success of participation (Act. E.5). In October 2016 the PNGSML organized in Teramo a congress with the title "*Endangered large carnivores and scavenging raptors in Europe*" which involved 21 speakers coming from six European countries which made 26 presentations. The event counted about 200 participants.

In November 2020 the CUFAA organised the project final conference "*Wildlife poisoning - Measures to tackle the illegal use of poison and mitigate its impact on European wildlife*" within which ten presentations were made by experts working in wildlife conservation in Europe and Africa. The event took place online and it was streamed on Zoom platform. It was attended live by 530 person on Zoom platform and by 10.000 persons on various linked Facebook pages.

In the framework of the networking activities (Act. F.2), the LIFE PLUTO project was presented in eight congresses, workshops and courses organised within other LIFE projects. Among others, the CUFAA is cooperating with the LIFE16 NAT/IT/000659 - LIFE Egyptian vulture and the LIFE18 NAT/IT/000917 - LIFE MILVUS in the implementation of activities counteracting the use of poison in sensitive areas for the Egyptian vulture (*Neophron percnopterus*) and the Red kite (*Milvus milvus*).