



"Best practices and demonstrative actions for conservation of Ursus arctos specie in Eastern Carpathians Romania - LIFEURSUS "

LIFE08 NAT/RO/000500



APM Vrancea

Parteneri: APM Covasna, APM Harghita, ACNV, ACDB



PROJECT LOCATION: Vrancea, Covasna and Harghita County

BUDGET INFO:

Total amount: 515.066 €

% EC Co-funding: 75% - 386.300 €

DURATION: Start: 15/01/10 - End: 20/12/13

PROJECT'S IMPLEMENTORS:

Coordinating Beneficiary: LEPA Vrancea

**Associated Beneficiary(ies): LEPA Covasna, LEPA Harghita,
ACNV, ABC**



APM Vrancea
 Parteneri: APM Covasna, APM Harghita, ACNV,
 ACDB



Background and aims

- Brown bear (*Ursus arctos*) is the target specie of the project.** The main threat identified on the project area is the **intensification of the conflicts** with local people due to the damages caused by bears on livestock and crops. Other threats are related to:
- the degradation of the brown bear habitat,
 - the lack of optimal methodology for brown bear population monitoring and number estimation,
 - the negative image of the brown bear among local people and
 - the lack of understanding of the Natura 2000 network goals and importance.



Project objectives

Main objectives of the project:

- Maintaining the actual conservation status of the brown bear population using some of the best practices and demonstrative actions and promoting these practices and actions at national and European level,
- To prevent the decline of the brown bear population due to poaching, habituation and juvenile mortality,
- To reduce and prevent the conflicts between bears and local people,
- Maintaining the actual conservation status of the target specie in the 15 Natura 2000 sites overlapped on the project area.

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Parteneri: APM Covasna, APM Harghita, ACNV,
ACDB



ACTION A.1: Creating the project's implementing team and the Steering Committee

- **Objective:** Establishing each partner responsibilities, communicate the main terms according to contracts and creating the main bodies of the project
- There were established the responsibilities for each member of project coordination equip and was signed the detailed agreements with each partners. The agreements with partners were signed according with CP and Romanian legislation.
- After delivering the mid-term report, in November there will be organised the Annual Meeting of Partners, following to be analysed the plans for continuation of implementing the activities.





ACTION A.2: Creating an integrated GIS database to support and demonstrate conservation actions of the project

Objective: Support for long-term monitoring strategies for the conservation and management of the bear's population for 15 Natura 2000 sites is assured.

Expected results: An up to date consistent online database in compliance with EU INSPIRE Directive, serving as good example of cooperation for the common conservation action on brown bear within three counties.

Progress:

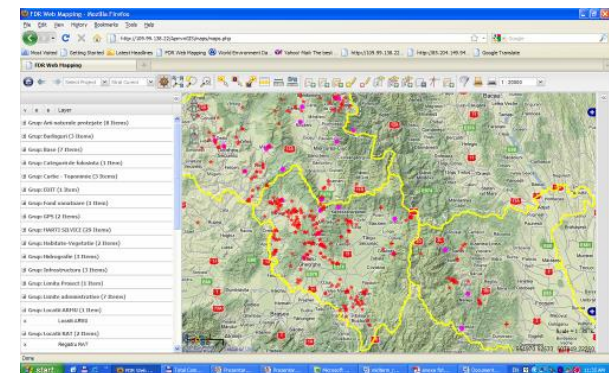
In accordance with the proposed planning, beginning with 12/07/2011, the database and the web-GIS geo-portal were installed on the server purchased and installed at the EPA Vrancea.



The web-GIS portal developing a on-line client application through the project web page www.carnivoremari.ro where there are available two versions of the database:

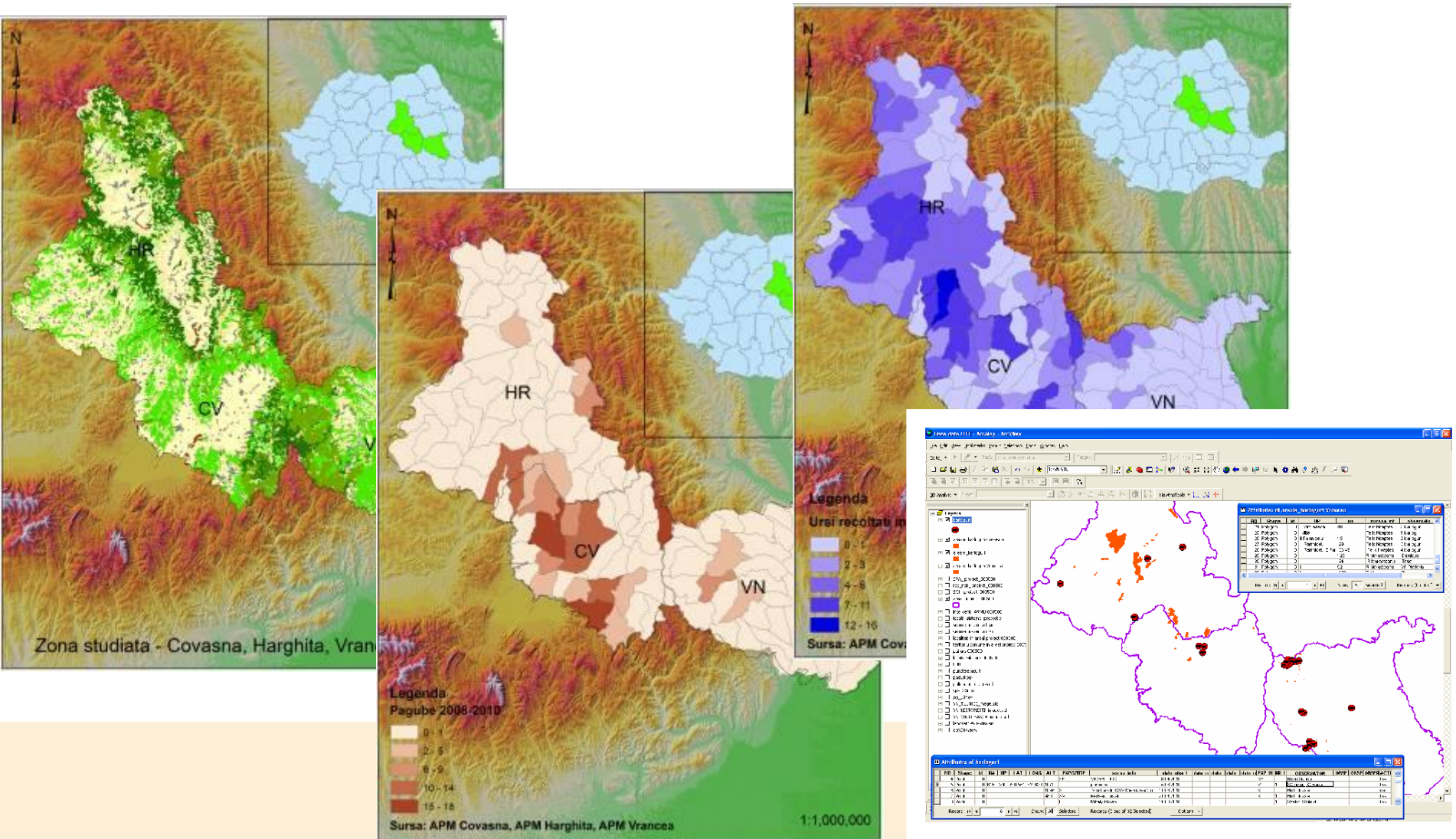
→ **a public version** with limited access for general public (contains thematic maps and information on project activities, conflict areas, limits of national protected areas and Natura 2000 sites areas in different conservation status, contacts data and territorial jurisdiction of public institutions, managers of protected areas and wildlife management funds etc.

→ **a full and secure version**, up-dated by EPA Vrancea at which they have on-line access the partners in this project. This version provides analysis and sustainable decisions in real-time, ensure completion with information by all partners and first of all ensure coherence of activities implemented to achieve project objectives.





ACTION A.2: Creating an integrated GIS database to support and demonstrate conservation actions of the project

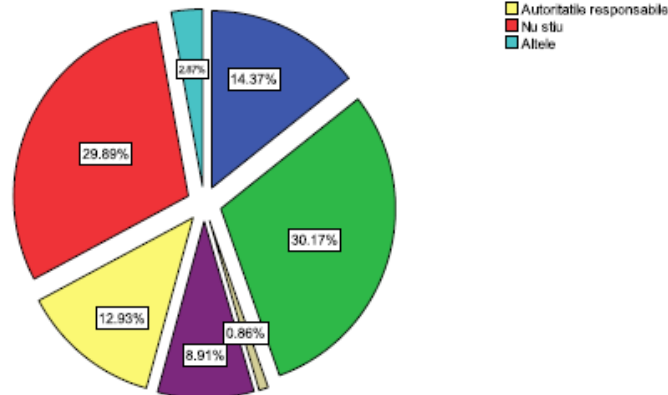
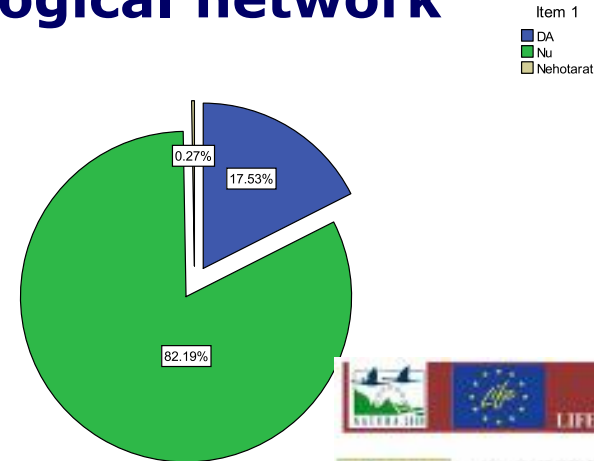




ACTION A.3: Elaboration of a strategy for implementing the raising awareness actions, based on the assessment of the local people's perception of the target specie in the Natura 2000 site's ecological network

The elaboration of the strategy was based on a sociologic study targeting the level of knowledge of people about Natura 2000 sites and the brown bear.

The research had a total sample of **433 people** in the above areas, aged between 16 and 60 years.



Realizat la cadrul acțiunii A3.4r către:

Leonardo Berendes,
Xavier Anagnostou,
Robert Korman.



ACTION A.4: Analyze the bear damages at the entire project's area level in order to establish the protection system's implementing sites

→ Database on the damage caused by bears is GIS compatible

→ Analysis of collected data in the field were completed through achieving and editing of a "Methodology for implementing the protection systems for crops, orchards, sheepfolds and apiaries for reducing the damages caused by bears" that directs how the project team implements protection systems for sheepfolds, crops, bee farms and orchards.



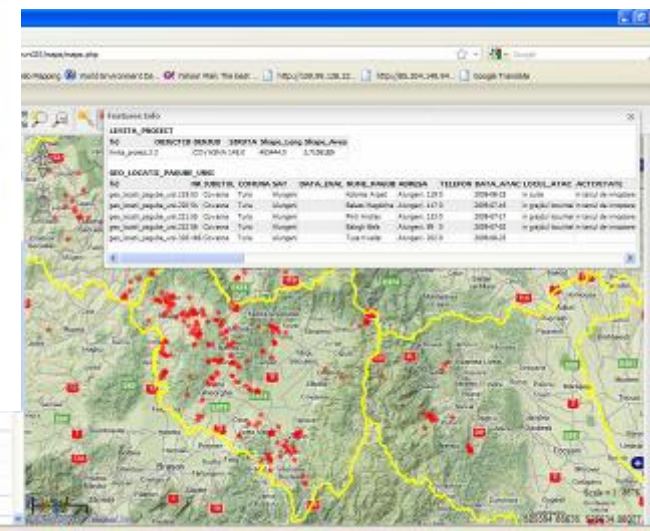
Metodologie pentru implementarea sistemelor de protecție a culturilor agricole, șeptelului și stupinelor în vederea reducerii pagubelor produse de urși



2010

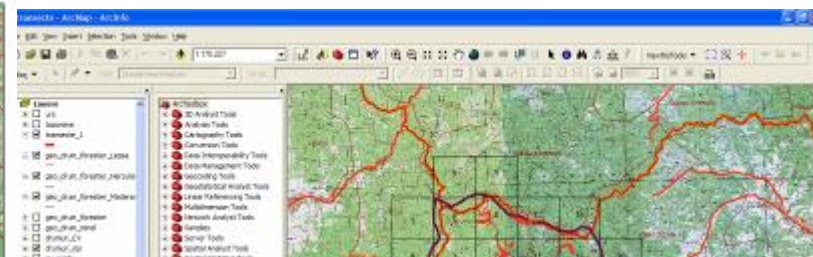
LIFE06NAT/RO000600 - LIFEURUS

2010





ACTION C.1: Demonstrative application of a method set for quantitative and qualitative assessment of the bear population in areas strictly demarcated and administrated from game management point of view



$$\begin{aligned}
 & \text{where } FC = M = 4 \\
 & N = F + M + CUBS + YEAR + TWO = \\
 & F = \frac{FC}{PFC} = \frac{4}{1-0.5} = 8 \\
 & CUBS = \frac{REPR \times F}{1-0.5} = \frac{1.42 \times 8}{1-0.5} = 22.72 \\
 & YEAR = \frac{CUBS \times 2}{1-0.5} = \frac{22.72 \times 2}{1-0.5} = 90.88 \\
 & TWO = \frac{YEAR \times 2}{1-0.5} = \frac{90.88 \times 2}{1-0.5} = 363.52 \\
 & N = 2 \times \frac{m}{1-PFC} + \frac{REPR \cdot m}{1-PFC} + \frac{REPR \cdot m \cdot 2}{1-PFC} + \frac{REPR \cdot m \cdot 2 \cdot 2}{1-PFC} \\
 & N = 2 \times \frac{4}{1-0.5} + \frac{1.42 \cdot 4}{1-0.5} + \frac{1.42 \cdot 4 \cdot 2}{1-0.5} + \frac{1.42 \cdot 4 \cdot 2 \cdot 2}{1-0.5} \\
 & N = 2 \times \frac{4}{1-0.5} + \frac{1.42 \cdot 4 \cdot (1+2+4+8)}{1-0.5} \\
 & N = 2 \times \frac{4}{1-0.5} + \frac{1.42 \cdot 4 \cdot 15}{1-0.5} \\
 & N = 2 \times \frac{4}{1-0.5} + \frac{85.2}{1-0.5} \\
 & N = 2 \times \frac{4}{1-0.5} + 170.4 \\
 & N = 2 \times 8 + 170.4 \\
 & N = 16 + 170.4 \\
 & N = 186.4 \approx 186
 \end{aligned}$$

LIFE URSUS – LIFE08NAT/RO/000500

PRELIMINARY REPORT
FOR 1.03.2011 – 01.08.2011 FIELD ACTIVITY RESULTS
ACTION C1

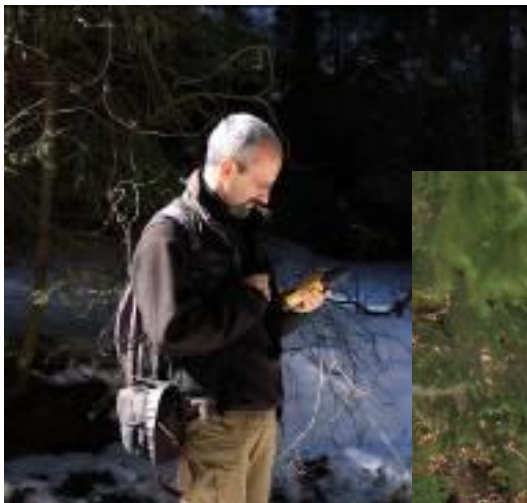


Parteneri: APM Covasna, APM Harghita, ACNV,
ACDB

Authors: Mihai Pop, Viorel Popescu, Silviu Chiriac
AUGUST 2011



ACTION C.1: Demonstrative application of a method set for quantitative and qualitative assessment of the bear population in areas strictly demarcated and administrated from game management point of view



APM Vrancea

Parteneri: APM Covasna, APM Harghita, ACNV,
ACDB



ACTION C.2: Creation and demonstrative working at the entire project's area level of an entity which will establish the risks and necessary measures in situations created by problem bears



Metodologie pentru evaluarea riscurilor ridicate de prezența urșilor în zonele locuite

RAT (Risk Assessment Team)



2010

LIFE08/NAT/RO/000500 - LIFEURSUS

De provocate de urs?
De az ön gazdaságában
által okozott problémák?

În primejdie gospodăria sau siguranța ta?
A, hogy ez veszélyeztetli a biztonságát?



situații
mp util un
Primăriei,
gestionarul
re din zonă.
u solicită
ormeze
ntiel
Mediului.

Ilyen esetekben azonnal
értesítse a Polgármesteri
Hivatalt, a helyi Rendőrséget
vagy a vadásztársaságot.
Kérje ezek képviselőit, hogy
mielőbb hívják a Megyei
Környezetvédelmi Ügynökség
csoportját.



LIFE08NAT/RO/000500 – LIFEURSUS



Risk Assessment Team

Activity report
on LIFE08/NAT/RO/000500 project
March 2010 – December 2010

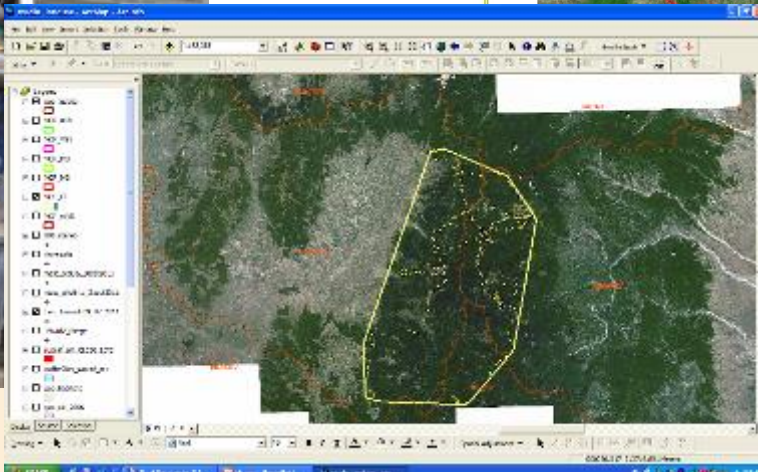


Responsible for the action: EPA Covasna
Authors of the report:
Ioan Mihai Pop, Szabo Szilard, Radu Mihai Sandu

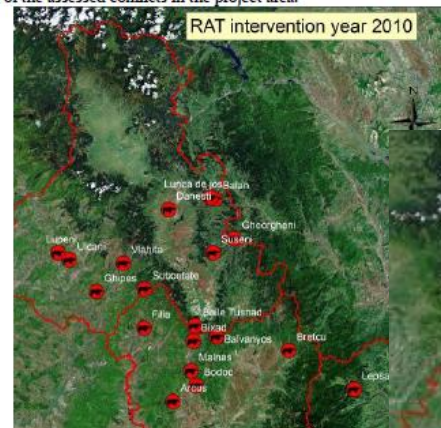
December 2010



ACTION C.2: Creation and demonstrative working at the entire project's area level of an entity which will establish the risks and necessary measures in situations created by problem bears



Map of the assessed conflicts in the project area:





ACTION C.3: Extending of the Animal Rescue Mobile Unit (ARMU)'s action range at the entire level of the project area and insuring of rapid interventions for capturing, relocating and monitoring of problem bears

Objective: Prevention through different actions of rescue, trap release, relocation, monitoring of brown bear population decline caused by poaching, accidental killing of specimens from human-bear conflict areas.

Animal Rescue Mobile Unit - ARMU team - and the **Center for Monitoring and Rehabilitation of Large Carnivores** - CRCM - were established in LIFENAT05/RO/000170 project, "Enhancing the protection system for large carnivore in Vrancea County"

The Center for Monitoring and Rehabilitation of Large Carnivores - represented by the building in Lepsa Funicular, which implies the existence of areas of care medical and temporarily held of animals, representing the base of shelter and work for the field team.

The second component is the **Animal Rescue Mobile Unit** materialized in the field pick-up having function of veterinary ambulance.



Between January 15, 2010 and August 30, 2011 ARMU worked in actions aimed at 28 exemplars of the species *Ursus arctos*;

- 1 exemplars released from improvised traps and returned to the natural environment;
- 5 exemplars captured and relocated;
- 22 exemplars (cubs) taken in rehabilitation programs in the centers of Lepsa - Vrancea and Balan, Harghita. Seven of these specimens were taken from the project area;



In the same period, ARMU has been duly of 5 cases of bears immobilized by poachers in traps in the project implementation area, but of these, one died before ARMU arrival, for another exemplar the hunting manager, due to irrecoverable state decided to euthanize the bear, and in three cases the team has not found the bears, which were self-released.





Supporting RAT !





In order to inform local authorities and locals in the area of project implementation about the existence of ARMU and the Center, it was designed a **poster** and a **leaflet** promoting their actions, following to be published and distributed in the area of project implementation

Centrul de Reabilitare și Monitorizare a Carnivorelor Mari
Situat la Lepșa, în Parcul Natural Putna-Vrancea, centrul dispune de un sistem modular care permite cantonarea simultană a animalelor și dimensionarea optimă a spațiului; spații și echipamente medicale pentru intervenții chirurgicale și

Unitatea Mobilă de Salvare a Animalelor Sălbătice (ARMU)
Reprezintă echipa ce dispune de o auto-ambulanță pentru animale, echipată cu o cușcă de transport, arme pentru tranchilizare, brațe de contenție și instrumentar medical necesar în intervenții medicale pe teren.

În arealele în care spațiul umanizat și habitatul ursului se suprapun pot apărea situații de conflict între oameni și urși. Acestea se concretizează adesea în capturarea urșilor cu capcane improvizate de braconieri, sau în izolarea puilor față de mame.

În cazul observării unui urs captiv se recomandă:
Păstrarea unei distanțe de siguranță (de minim 30 m) față de animalul sălbatic aflat în gospodărie, liber, captiv ori rănit.
Evitarea acțiunilor ce ar putea atrage atenția animalului.
Anunțarea imediată a Poliției, autorităților locale, administratorului fondului cinegetic și a unității ARMU.

Pentru a confirma existența unor animale sălbatice rănite, capturate, deținute ilegal sau braconate (în special carnivore mari) contactați-ne la telefon:
0727774144 sau 0237206788

LIFE8 NAT/RO/000500 LIFE+ Nature
Cele mai bune practici și acțiuni demonstrative pentru conservarea populației de *Ursus arctos* din zona central estică a Carpaților Orientali

unitatea mobilă de intervenție pentru salvarea animalelor sălbatice
centrul de reabilitare și monitorizare a carnivorelor mari

www.carnivoremari.ro

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LIFE8 NAT/RO/000500 LIFE+ Nature

LIFE8 NAT/RO/000500
Cele mai bune practici și acțiuni demonstrative pentru conservarea populației de *Ursus arctos* din zona central estică a Carpaților Orientali

adresa Centrului de Reabilitare și Monitorizare a Carnivorelor Mari
Sat Lepșa, Comuna Tulnici, Județul Vrancea, drum auto forestier, Valea Lepșei, km. 3,6

date de contact
Agenția pentru Protecția Mediului Vrancea
FOCSANI, Str. Dinicu Golescu Nr. 2
tel. +40+237+206788
mobil. 0727774144

www.carnivoremari.ro



ACTION C.4: Reducing of juvenile mortality caused by human disturbance with the protection of hibernation dens in the cub nourishing period

Objective: Reducing of juvenile mortality caused by human disturbance with the protection of hibernation dens in the cub nourishing period

In achieving the objective of the action it has pursue touching these goals:

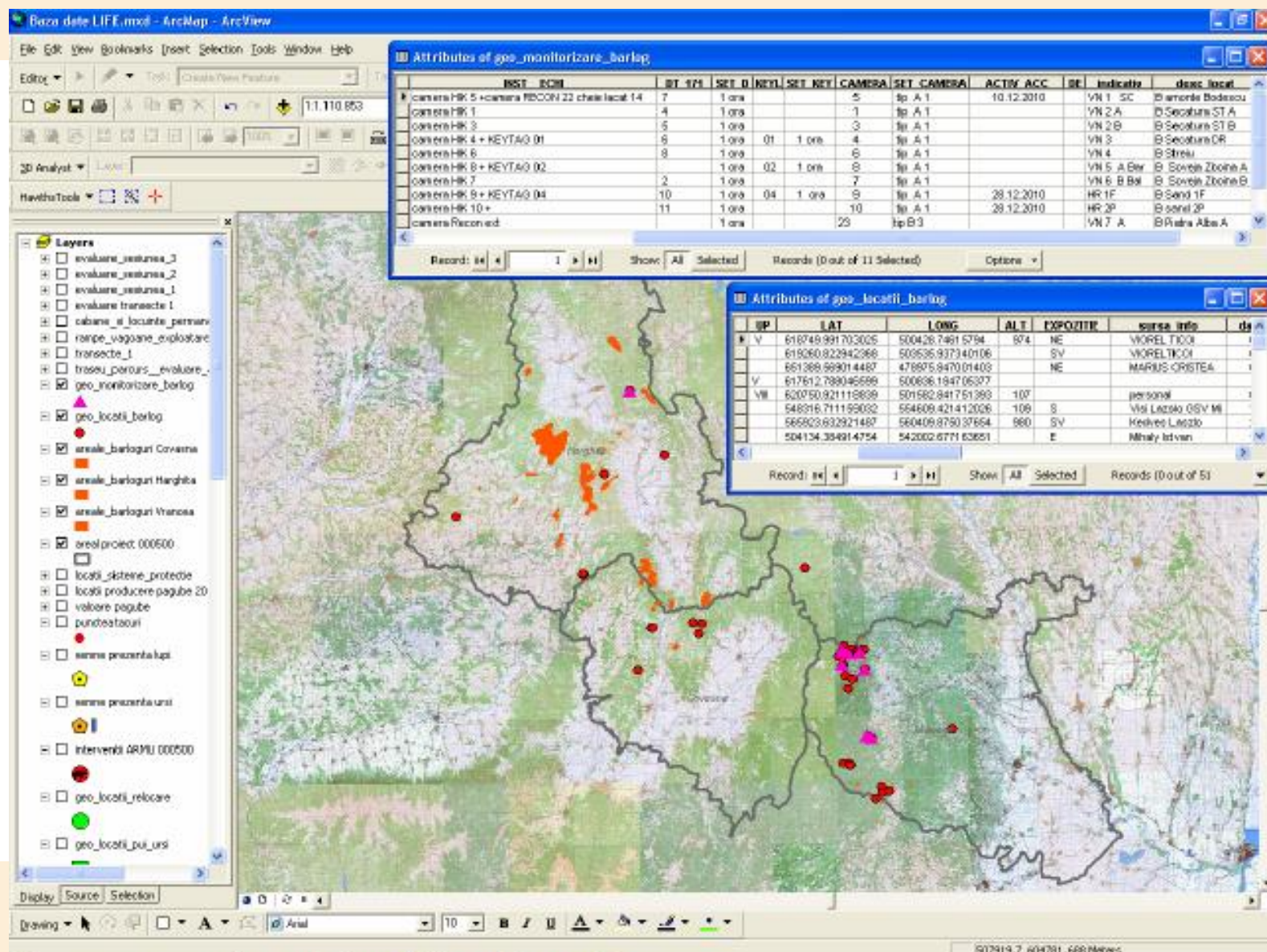
- Identifying the dens location and implementation in GIS format of this information for their analysis in relation to the position of exploitation prosecution or of potential plans/projects;
- Identify of occupancy periods of dens correlated with values of measured climatic parameters (temperature, humidity, dew point);
- The establishment of direct or indirect correlation between temperature changes imposed by global warming and behavior of bears during winter sleep;
- Analyze the impact of human activities on juvenile mortality;



Based on these sources
there have been identified
until **01 September 2011**
on the area of project
implementation:

- 76 areas with dens and areas where bears have repeatedly wintering in the last 5-7 years.
- 61 dens for which it has been achieved precise location and there were made measurements of physical parameters.





Transpunerea in baza de date GIS a informatiilor



Monitoring systems of bear dens include:

camera network IP HIK VISION, model: DS – 2 CD 802PF, *storage environment* card SDHC 16 GB;
unidirectional microfon;
spot led 12V;
recorded (temperature, humidity, dew point) *SYN DT - 171* installed inside the den set to record parameters every 60 minutes;
recorded (temperature, humidity, dew point) *Trix 8* installed outside the den;
camera Talon Extreme 3.0MP *Digital Scouting Camera, Recon* installed for monitoring the space outside den, body camera and also the recorder of climatic parameters were installed in metal skeletons against destruction by bear.





Imagini fotografice si secvente de filme capurate cu echipamentele instalate in vecinatatea sau in interiorul barlogurilor in sesiunea de monitorizare septembrie 2010 - mai 2011



ACTION C5: Lobby for adopting by the Environmental Ministry (MM) and the Ministry of Agriculture, Forestry and Rural Development (MADR) of a methodological guide on the optimal methods of assessing the brown bear population



Spacial and time planning in the framework of the action C1

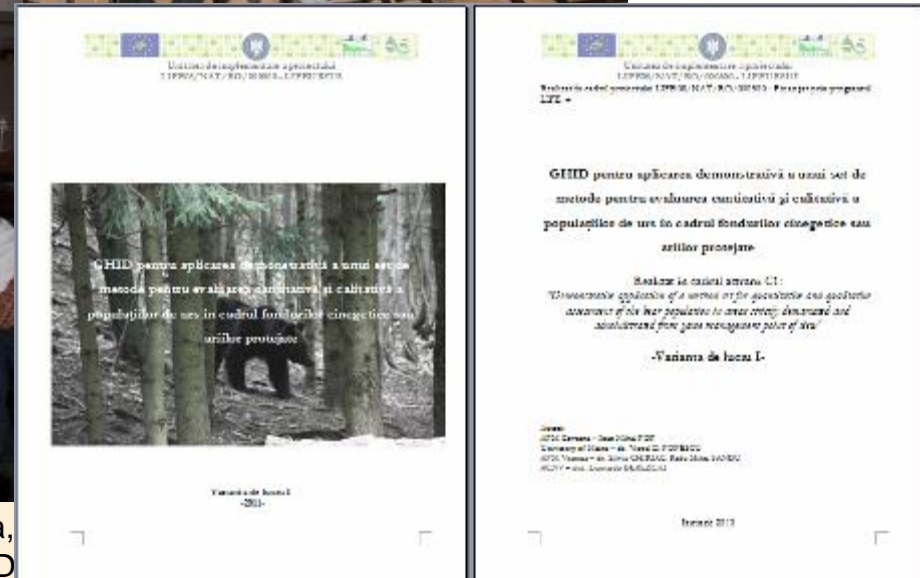


"Demonstrative application of a method set for quantitative and qualitative assessment of the bear population in areas strictly demarcated and administrated from game management point of view"

LIFE08/NAT/RO/000500 - LIFEURSUS



Parteneri: APM Covasna, ACD





ACTION C.6: Implementing at the entire project level of several demonstrative crop, livestock and farm protection systems by using repellent equipment and substances

Based on the analyze made in action A4 and on data regarding the conflict areas saved in the GIS data base during the implementation of action A2, in every spring (until May) each year are going to be mounted at least 30 protection systems around live stocks, crops, and farms in every site where existed conflicts or damages made by bears.

electric fences



flags cords



audio-visual systems



repellent substances



Li Cl Adversive substances



1. Implementation the protection systems.

- ➔ The 30 protected perimeters are located in the Vrancea, Harghita and Covasna counties in areas where human activities and bear habitat overlap, conflicts being generated by the existence of some trophic offers. Mixed protection systems consisting of electric fences, flags cords, audio-visual systems and repellent substances, have been installed in: 14 sheepfolds with sheep and goats, 1 cattle ranch, 8 crops, 6 orchards and 1 apiary (in 2010).
- ➔ In 2011, respecting the same procedure needed to select the location in which to be implemented the damage reduction systems, there were installed in the three counties 28 mixed protection systems (9 sheepfolds with sheep and goats, 3 cattle ranch, 4 crops, 2 orchards, 6 mixed farms and 4 apiary).

2. The supervise the system's work by visits of the sites and completion of the supervising surveys in order to avoid technical problems and the mission's success assessment.

3. Analyze the cost and benefit balance. Will be realized a file of every protected site, in order to evaluate the action's efficiency.



BEFORE
LIFE



AFTER
LIFE





ACTION C.7 Analyze of the degradation and fragmentation level of the brown bear habitats.

The aim of this action is to analyze the degradation of habitats caused by human activities in Natura 2000 sites and neighborhood in the whole project area, pinpointing the most affected areas, which becomes improper for the brown bear.

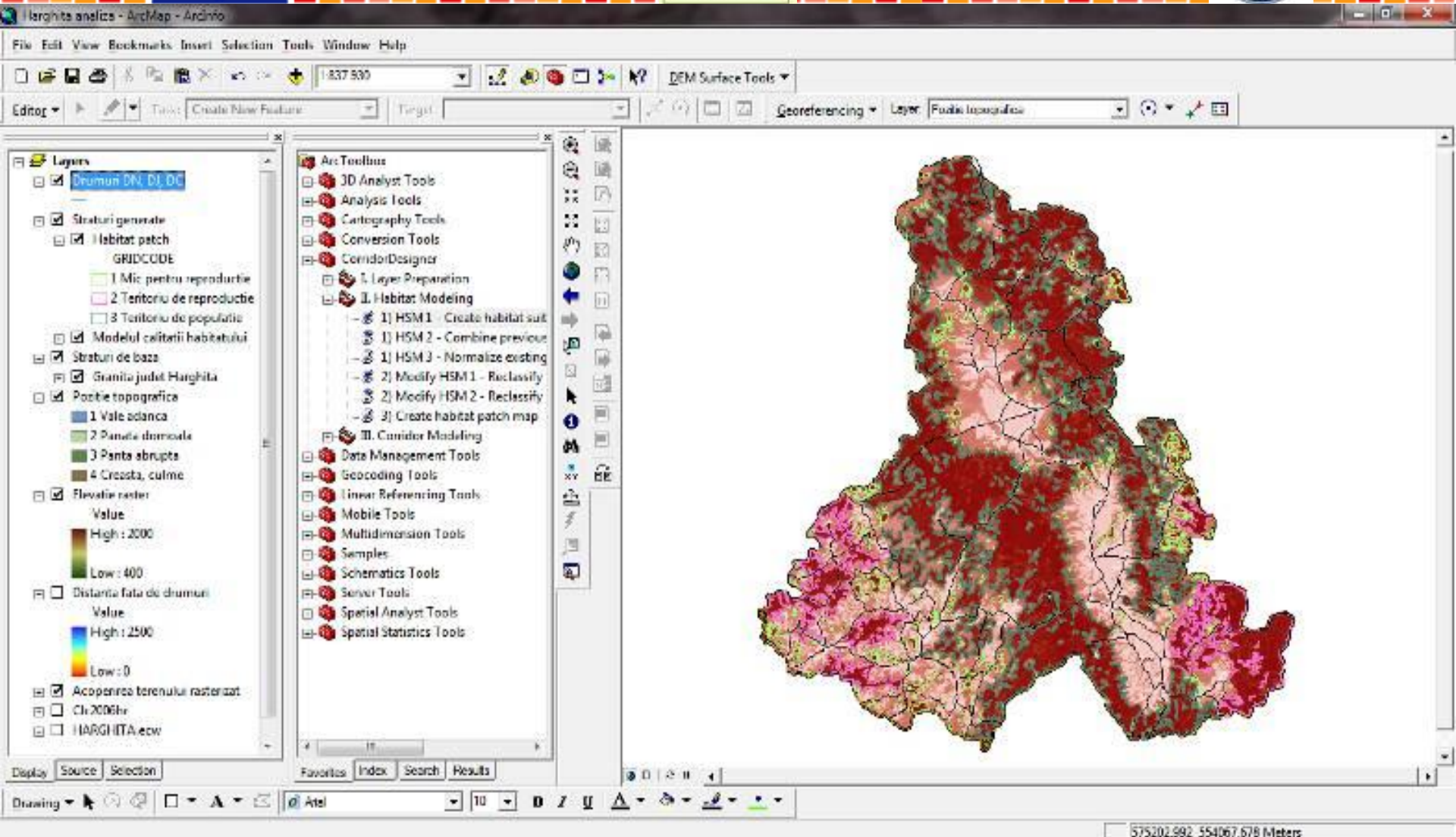
As a preceding phase of GIS analysis, there has been preparing layers in vector format, stereo 1970 compatible with GIS portal, having regard to:

- a. Land characteristics (category of use, degree of degradation etc)
- b. Altitude
- c. Distance to towns, roads, rivers
- d. Sources of attraction (nourishing, orchard, sheepfolds, landfills etc).

The proper GIS analysis will take place in the next phase of the project and will be realized

After obtaining the results and it will be realized verification and correction of model obtained based on field checking in critical areas. Based on these, it will be developed the final model and the set of measures proposed to reduce degradation and habitat fragmentation.





APM Vrancea
Parteneri: APM Covasna, APM Harghita, ACNV,
ACDB



ACTION D.1: Promotion of the project, it's objectives and results

98 articles in local and national press

7 articles on internet, there have been registered

10 appearance at local TV 4 appearances on local radio.

leaflets achieved in RO (3000 pieces) an EN (1000 pieces)

personalised paper folders (200 pieces), plastic pens (500)

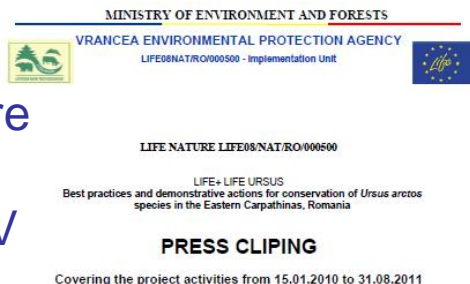
T-shirts (300)

calendars (300).

the annual newsletter, covering the period

15.01.2010 – 31.01.2011

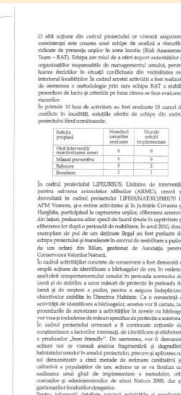
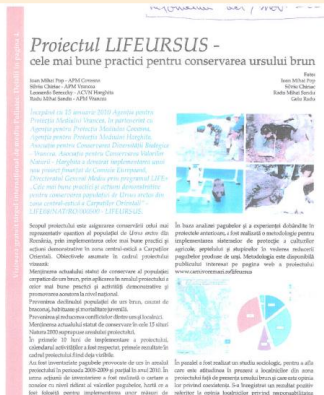
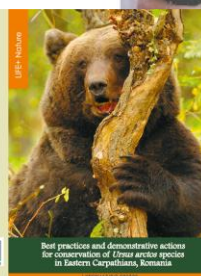
presentation posters at each partner headquarter



Septembrie, 2011

Strada Dinu Gheorghe, nr. 2
Focșani, Județul Vrancea

www.carpathians.eu
Email: vrancea@carpathians.eu



LIFE+URSUS - LIFE and European partners improving their conservation status

Demonstrating the co-existence of humans and large carnivores

Several LIFE projects have focused on demonstrating the possible co-existence of large carnivores - in particular, bears and wolves - and human beings. Reducing poaching through close co-operation with farmers and hunters, and improving the protection of livestock and crops through the use of electric fences and sheepdogs, have shown how large carnivore conservation can have a beneficial socio-economic impact at a local level.

in Carpathian Mountains, Eastern Carpathians, Romania) LIFE+URSUS, focusing on tackling the threats to the region's brown bear (Ursus arctos) population, which was estimated at 2 200 at the start of the project.

While the problem of poaching was nearly eradicated from some demonstration sites in the early 2000s, it has since re-emerged.





ACTION D.2: Install notice boards

- 10 informative panels contain the main data about LIFEURSUS project, its aims and objectives and all elements that promote LIFE + source program and financial support of European Commission.
- 10 informative boards having de 200 x 150 cm, metal frame and protection against ultraviolet radiations were installed in areas of visitor traffic in Natura 2000 sites. The panels contain information about the project, targeted species, proposed conservation actions, rules of conduct in sites inhabited by bears, site map.





ACTION D.3: Awareness campaign for promoting the brown bears conservation and conflict reduction methods.

Two seminars
with stakeholders

Three press
conference and
field trip.





ACTION D.4 Awareness campaign in order to promote the best practices and actions necessary to protect the hibernation dens and diminishing the causes which lead at the cub's abandon.

ACNV conceived and printed 3 types of leaflets:

- *Don't disturbing me in my den and I will not disturbing you!* - for tourists (3000 pieces)
- *Dens protection is essential for species conservation* - for forest exploiting companies and personnel from rural area (100 pieces)
- *Dens protection is essential for species conservation* – for wildlife managers and their field personnel in the project's area (500)

In Harghita County there were organized two seminars with stakeholders in direct relation to the den protection



ACTION D.5: Awareness campaign for promoting the communitarian interest sites, designated for large carnivore conservation, and for promoting the socio-economical benefits generated by the Natura 2000 site status.

- DVD multimedia
- General knowledge about Natura 2000
- Knowledge LIFEURSUS project
- Natura 2000 sites in the project
- General knowledge about the brown bear
- Contact and links
- Leaflet with information about the Natura 2000 network
- Bookmarks
- Complex map of Natura 2000 sites

15 events related to the nature protection





ACTION D.6: Awareness campaign for promoting local traditional products of farmers and handcrafters as tool to improve coexistence with brown bears in Natura 2000 sites

At the date of the report preparation, it was achieved a database (Excel format) containing information about manufacturers and products which meet our requirements



APM Vrancea

Parteneri: APM Covasna, APM Harghita, ACNV,
ACDB



ACTION E.1: Project coordination, project management and financial administration

Project management team with following members:

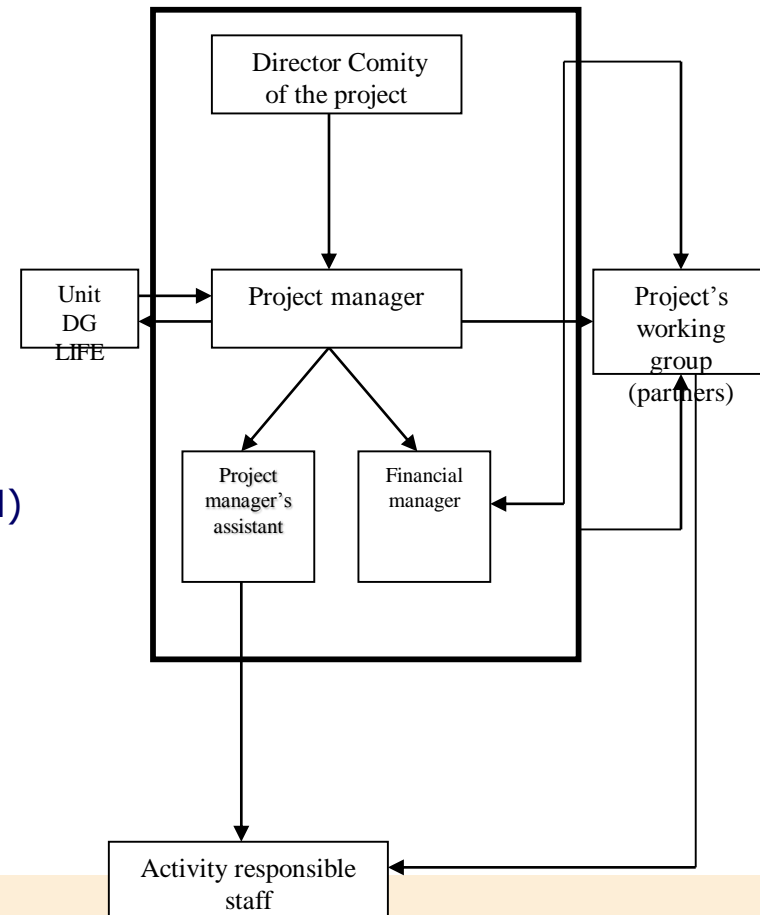
- Mr. Silviu Chiriac, – *project manager*
- Ms. Mariana Gheorghiu – *project administrator*;
- Ms. Maria Plesa – *financial administrator*;

The activities work packages are coordinating by responsible for activities:

- Data base analyze, GIS, SFC- (Szabo Szilard- EPA HR)
- Monitoring, evaluation of conflict situations- (Ioan Mihai Pop, EPA CV)
- Capturing, tranquilizing, relocation- (Sandu Radu, EPA VN)
- Damage reducing methods (Radu Gelu, ACDB)
- Public awareness, education activities (Bongeac, EPA VN)

The members of the Director Council are:

- Bernadt Zelma – Executive Director, EPA HR
- Benedek Kaplar Gabor - Executive Director, EPA CV
- Giurca Paul - Executiv Director, EPA VN
- Cosmin Adrian Stîngă – President of ACDB
- Leonardo Bereczky – President of ACNV





ACTION E.2: Measuring the project success (project monitoring)

Scientific Council :

- ➔ Associate Profesor Dr. Laurentiu Rozylowicz
- ➔ Associate Profesor Dr. Cristian Ioja
- ➔ Dr. Cristian Tetelea Demostene
- ➔ Biologist Ciurescu Stefan
- ➔ Forestry engineer Vlad Radu
- ➔ Forestry engineer dr. Candrea Bogdan

External monitoring.

Sources of verification.

- ➔ Quantifying the project and conservation actions success is permanently achieved through using of some pre-established indicators.



ACTION E.3: Networking with other projects

- ➔ LIFEXTRA project –consultation related with damage, participating to seminars
- ➔ International conferences
 - two IBA Conferences – 1 oral presentation and 5 posters
 - two Conferences related to ecology – three oral presentation
- ➔ WWF-DCP – Developing of the management plan for Herculian Natura 2000 site
- ➔ Photo exposition – Romania Student Tour
- ➔ Voluntary/research programme – 9 volunteers



Thank you!

www.lifeursus.carnivoremari.ro

www.carnivoremari.ro