



# *Examples of good practices of large carnivores management in Romania*



# Enhancing the protection system of large carnivores in Vrancea county

starting date 1 November 2005  
ending date : 1 November 2009

- University of Bucharest, Centre for Environmental Research and Impact Studies
- Association for Sustainable Development “Focul Viu” Focsani
- Focșani Forestry Department
- Vrancea County Council





## The aim:

The aim of the project is to enhance the large carnivores protection system from Vrancea County and to correlate the local network for large carnivores protection with the European ecological network Natura 2000



# Project objectives:



- to include the protected areas belonging to the local network for large carnivores protection in the Natura 2000 system;
- to implement the management plans for the protected areas included in the local network for large carnivores protection in accordance with the Natura 2000 requirements and the forethoughts of the local plan for the large carnivores protection;
- to prevent the loss of the large carnivores population due to the direct or indirect poaching phenomenon;
- to prevent conflicts between large carnivores and local inhabitants;
- to raise awareness on the social-economic benefits that are generated by the inclusion of the protected areas in the Natura 2000 system



# The establishment of the Standard Data Forms for the proposals on the establishment of Natura 2000 sites and the submission to the competent authorities



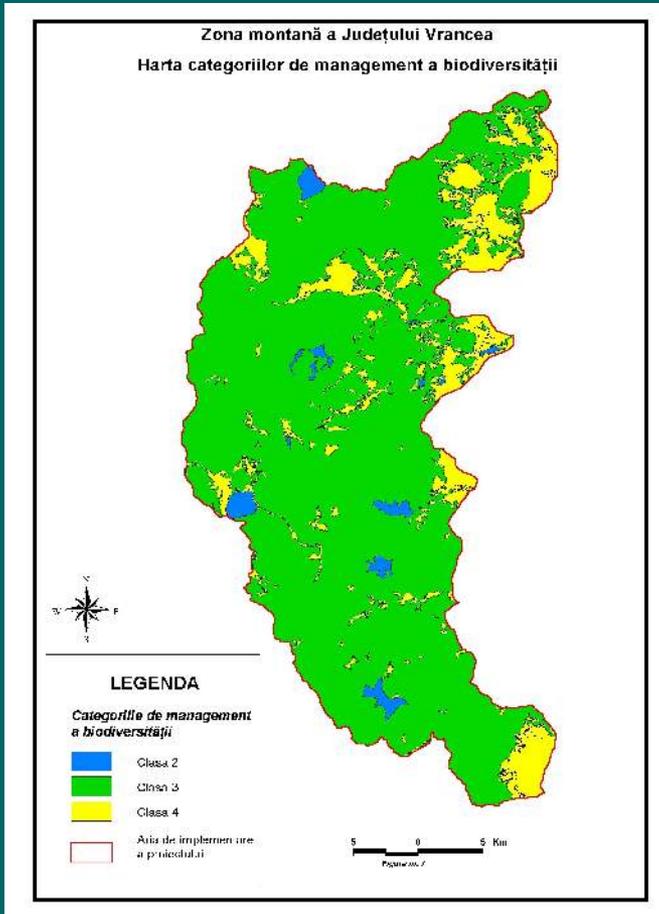
- Achieving of a data base with habitats and species listed on Habitat Directive which there are in the project implementing area
- Identifying and mapping the limits of identified sites
- Transmitting the database to ARPM si MMGA
- Transmitting of a first version of Standard Data Form in word format to MMGA – 17.08.2006
- Obtaining the access right and password for ON-LINE-<http://n2000.biodiversity.ro> database
- Starting filling in the information for database
- Transmitting the address to MMGA through which we ask transmitting SDF to the independent experts
- In 05.10.2006 all proposed sites has been validate, being submitted to public debate



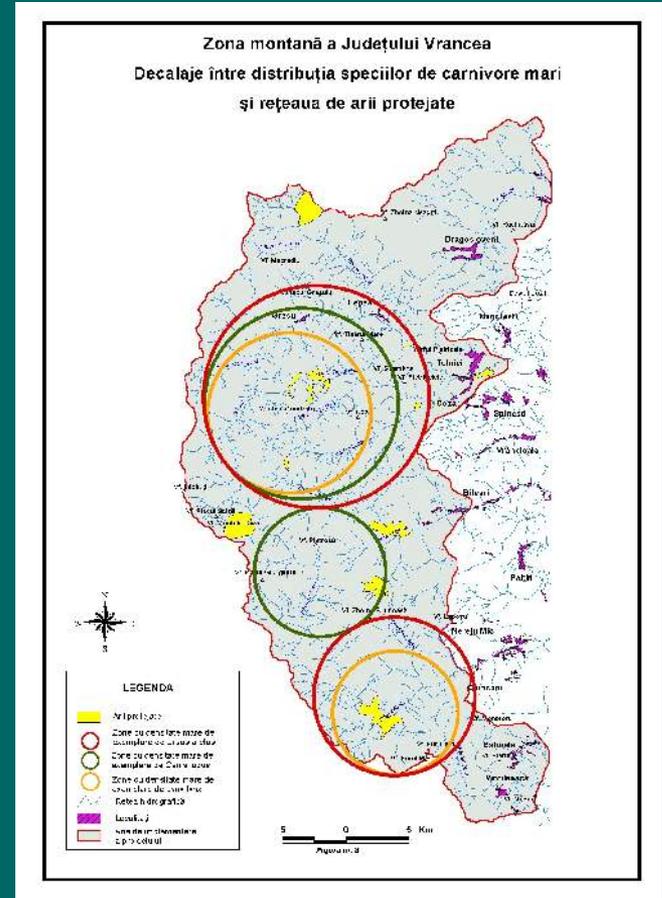
Nat2000.Ink



# ANALIZA GAP

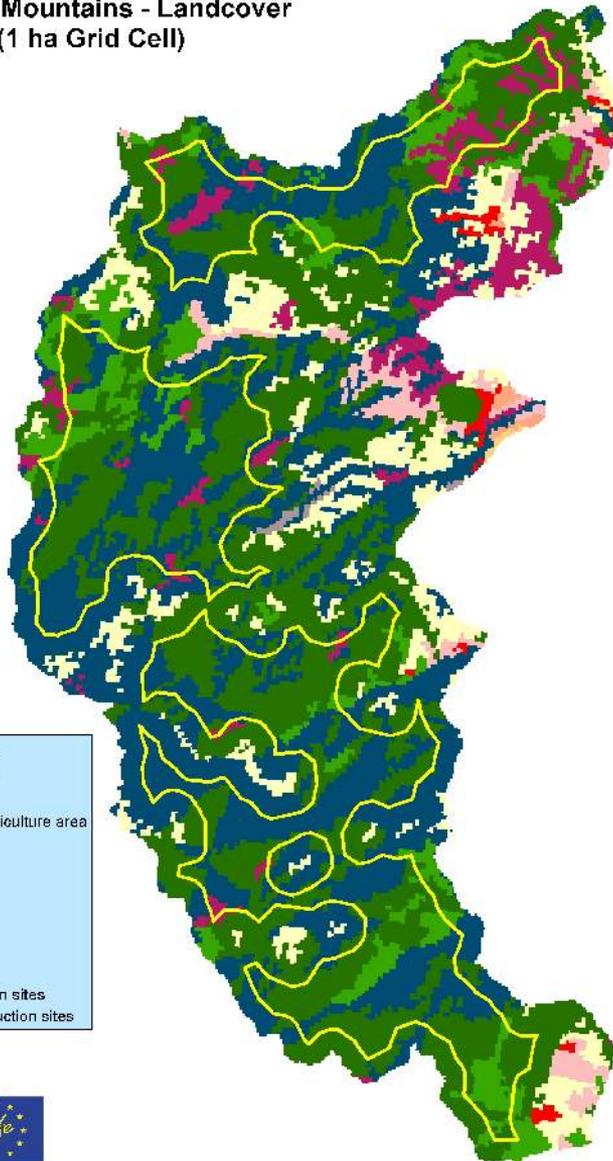


- Analiza modului de utilizare a terenurilor
- Distribuția spațială a carnivorelor mari în funcție de modul de utilizare a terenurilor



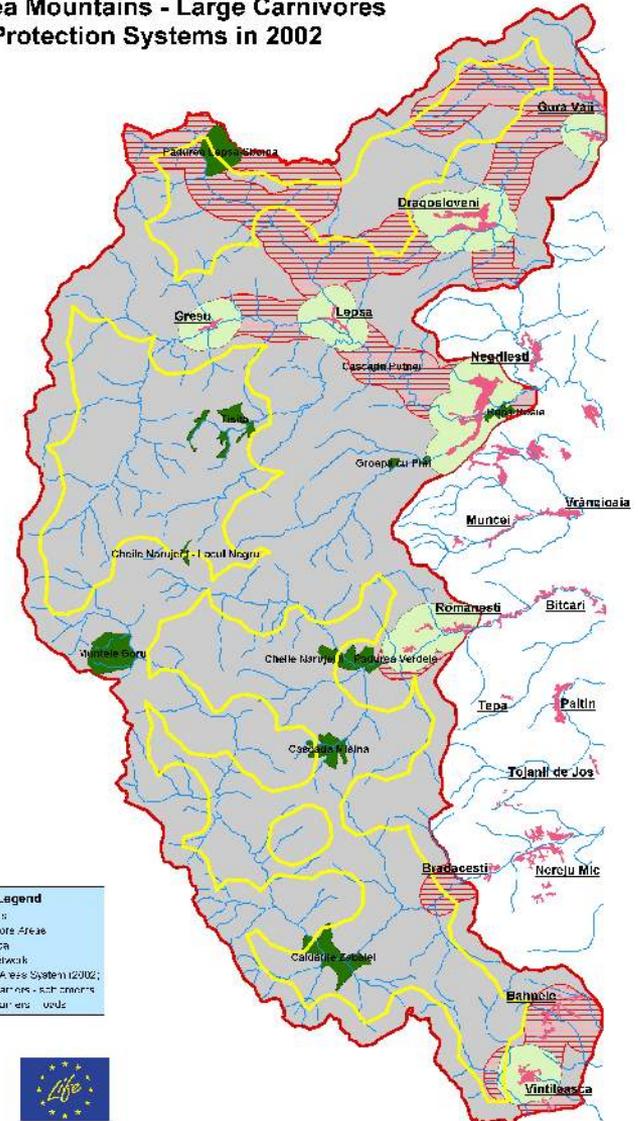
# Crearea rețelei ecologice pentru protecția carnivorelor mari în Vrancea

Vrancea Mountains - Landcover  
(1 ha Grid Cell)



In situ conservation of large carnivores in Vrancea County  
- 2002/NATURA/0578  
Source: ICPDR/2002

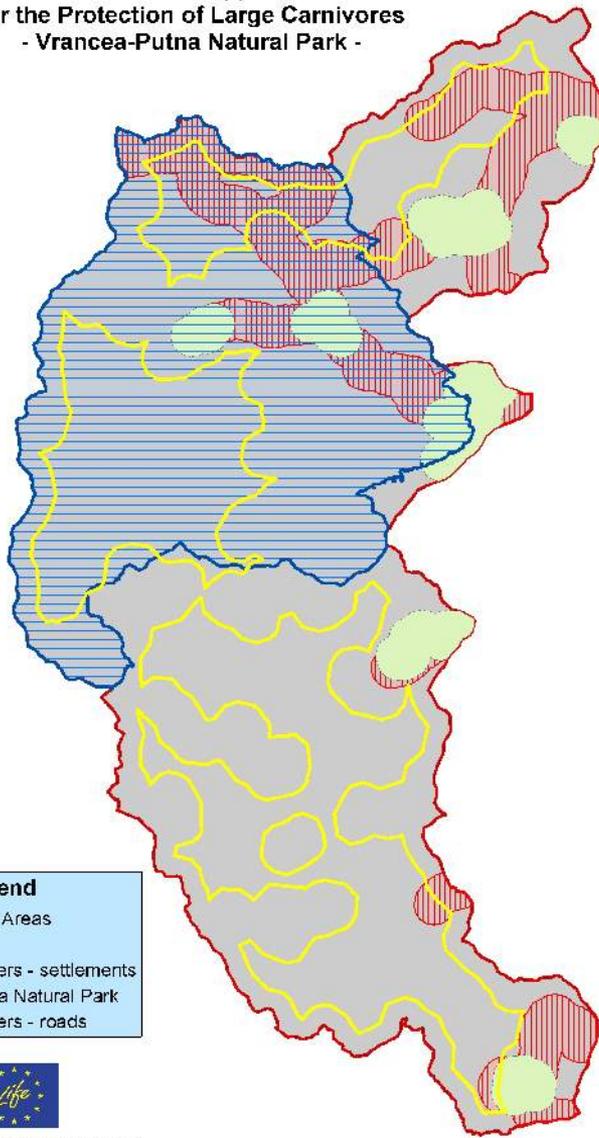
Vrancea Mountains - Large Carnivores  
Protection Systems in 2002



In situ conservation of large carnivores in Vrancea County  
- 2002/NATURA/0578  
Source: ICPDR/2002

# Crearea rețelei ecologice pentru protecția carnivorelor mari în Vrancea

Vrancea Mountains - Barriers Suppression Area established for the Protection of Large Carnivores  
- Vrancea-Putna Natural Park -

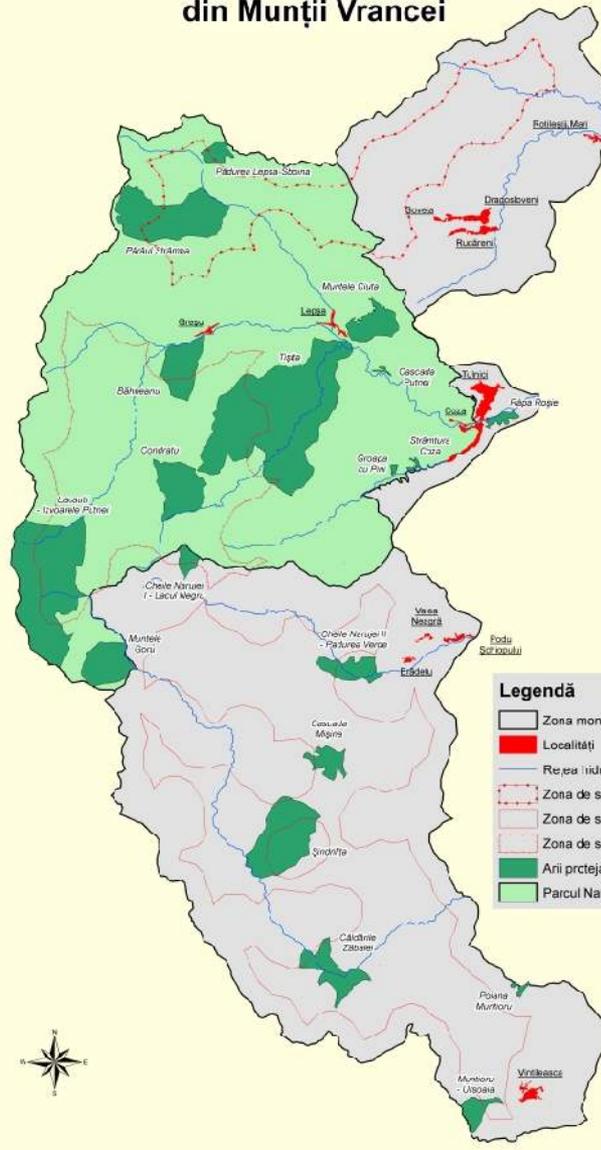


- Legend**
- Security Core Areas
  - Project Area
  - Anthropic Barriers - settlements
  - Putna-Vrancea Natural Park
  - Anthropic Barriers - roads



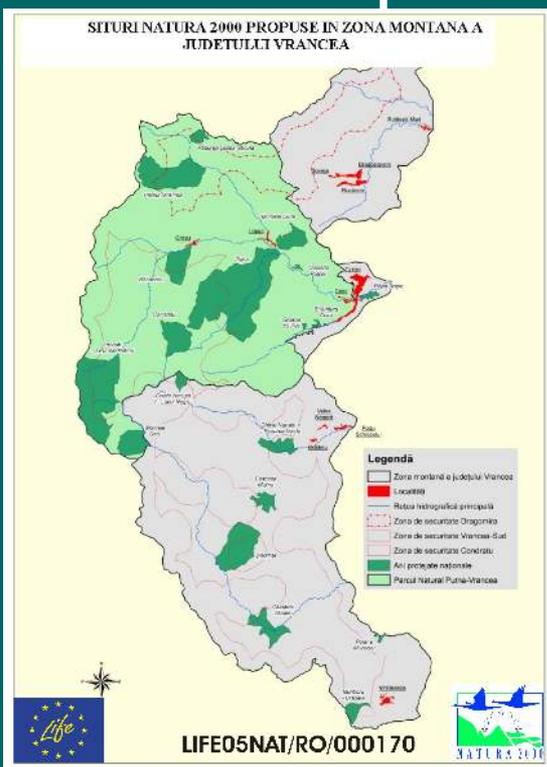
Valul corbelișilor de argă carnivora în Vrancea County  
LIFE-02/2014/2/38/1/1  
www.life.ro

Rețeaua ecologică pentru protecția carnivorelor mari din Munții Vrancei



- Legendă**
- Zona montană a județului Vrancea
  - Localități
  - Rețeaua hidrografică principală
  - Zona de securitate Dragomira
  - Zona de securitate Vrancea-Sud
  - Zona de securitate Condratu
  - Arie protejate naționale
  - Parcul Natural Putna-Vrancea

# The establishment of the Standard Data Forms for the proposals on the establishment of Natura 2000 sites and the submission to the competent authorities



## Finalizing Standard Data Form for 8 sites having a total surface of 40 102, 71 ha:

1. The Natural Park Putna Vrancea ( 38 204 ha)
2. Lacul Negru (88,3 ha)
3. Padurea Verdele (250,00 ha)
4. Cascada Misina (183,5 ha)
5. Caldarele Zabalei (350,00 ha)
6. Muntiorul-Ursoia (102,06 ha)
7. Poiana Muntioru (20,00 ha)
8. Sindrilita (883,81 ha)

Special conservation areas in Natural Park Putna Vrancea	Surface (ha)
Valea Tișției	2726,3
Lăcăuți - Izvoarele Putnei	1791
Muntele Goru	410,6
Pădurea Lepșa - Zboina	107,8
Strâmtura Coza	55,9
Groapa cu pini	11,1
Cascada Putnei	10,0
Strâmba	1041,7
Condratu	495,7
Muntele Ciuta	302,2
Băhneanu	420



# Establishing the intervention unit and a rehabilitation centre at regional level for injured animals in poaching activities (mainly large carnivores)



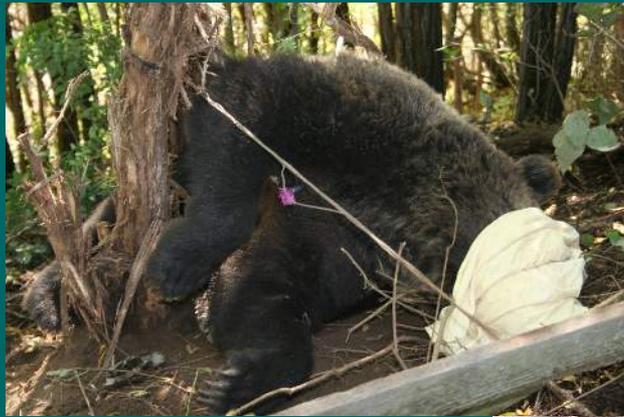
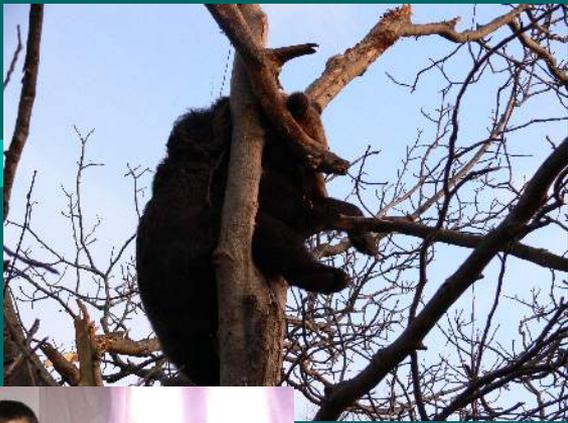
## achieving the Monitoring and Rehabilitation Centre

- purchasing and assembling the modular system of metallic fences and doubling it with electrical fences
- rehabilitating the building and its enclosure provided by Forestry Department Focsani and partitioning the building in accomodation places and the hall for surgical interventions, endowed with veterinary instruments
- achieving the functioning regulation for the Monitoring and Rehabilitation Centre

## achieving the Animal Rescue Mobile Unit (A.R.M.U.)

- purchasing the autovehicle
- manufacturing the transport cage and assembling it on the car platform
- endowing A.R.M.U. with the necessary instruments and aparatus for field interventions
- achieving the functioning regulation for the Animal Rescue Mobile Unit





# The assessment of large carnivores populations in Vrancea County by radio monitoring activities



Updating the capturing/monitoring methodology in concordance with previous experience and with requirement imposed by the new types of GPS collars (between November 2005 – June 2006); It has been achieved the radio-telemetry tracking procedure, which establish an intensive monitoring period (once at 3 days) in the first month of releasing from the enclosure, after the medical assistance; There have been selected the tips of collars which are going to be applied to the released animals: ATS body implant M1200 and M3400 ear tag, being started the acquisitioning procedure for these collars; Periodical monitoring of exemplars having signal at the end of previous project and stocking the information into the database ;

Between October 2005 and October 2006 there have been realized intensive sessions for radio-monitoring of VHS collars and for recovering the GPS collars, in December 2005 being recovered the GPS collar belonging to 808 bear, data being stocked and processed at the LCMC;

For recovering the GPS 829 collar there were realized intensive sessions between February-June 2006 in entire area of Vrancea Mountain and neighboring regions, this collar hasn't been recovered, probably being spoiled;

At this moment almost all animals are out of the signal period, now the data following to be processed and presented in the first telemetry report, also in the specialized journals;

There are also the bear 133 having signal, at present this being localized in Coza area;

Pourchasing of 4 GPS collars (2 for lynx and 2 for wolf) also Yagi antennas and VHS receivers;

Installing until present 4 trapping lines for lynx and wolf capturing. The capturing activity is realizing with humanitarian traps which combine the condition imposed by European Union, being used those from the previous project (Victor 3 Soft Catch, Belisle Foot Snair și Fremont), also some new ones following to be purchase;



# Monitoring of large carnivores and prey species population using remote techniques

There were been established the methodologies of assessment for large carnivores and their prey using remote techniques, methodologies which contain mark-recapture with the assistance of passive automatic photo cameras and DNA profiling (captured through hair snares);

The methodologies include: succinct description of the used techniques, sampling mode, installing mode for equipments, installing sites (randomized selected), registration and archiving data forms;

Having in view the choused study type, there have been evaluated 10 types of automatic photo cameras, being selected and purchased the model Tallon Extreme having day/night dual functioning (20 pieces + accessories: accumulators, CF, voltmeters);

Cameras were initial installed for the trial, following that at the beginning of November to be start the study for bear species, the photo cameras following to be active for abut 45 days;

There have been achieved as prototypes 3 types of hair snares, these been tested 2 months, following to be activated, conform with methodology calendar, samples following to be stocked into the refrigerator at the Monitoring and Rehabilitation Centre for 6 months at -200C;

Assessing the large carnivores populations based on animals' tracks, signs and scats will be achieved by using the methodology already created in the previous project;

Along the monitoring actions there are described the tracks made by large carnivores, data being stocked and processed Monitoring and Rehabilitation Centre at Lepsa Funicular;

Bear scats proceeded from periods with different food reserves, are stocked at the Monitoring and Rehabilitation Centre into the refrigerator and analyzed for establishing the diet;

Obtained data (routes, tracks frequency) are processed in GIS for establishing the area using mode of large carnivores in the project implementing area.



● ● ● | **Brown bear (*Ursus arctos*)**



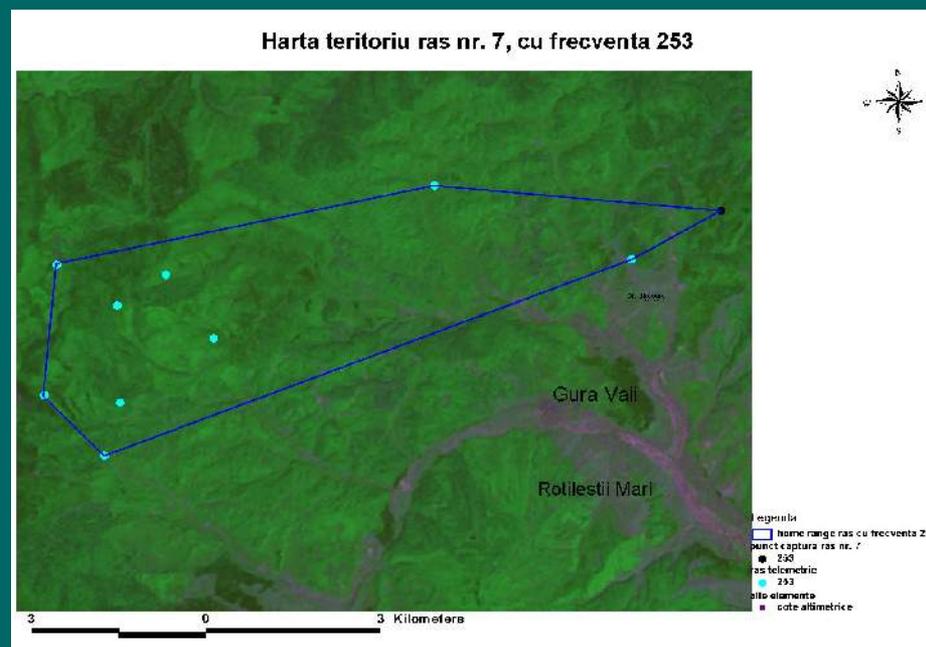
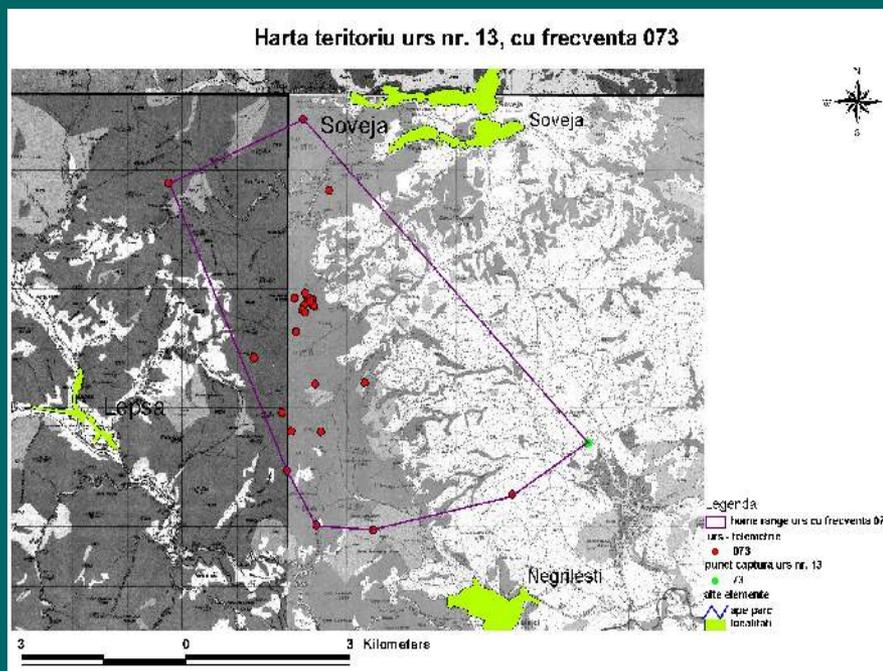
● ● ●  
Wolf (*Canis lupus*)



● ● ● | Lynx (*Lynx lynx*)



# Crearea bazei de date cu informații obținute prin telemetrie VHF și GPS





# Implementing the sheepfolds' electrical protection system and extending it to orchards and crops



- Totally degradation of forestry roads along floods from 2005 determined livestock to remain in village areas;
- Assembling 5 electrical fences at the sheepfolds beginning with 10 May 2006:

Barsesti/Catinis – Besa Costel  
Barsesti/Coasta – Chirila Costica  
Vintileasca Plai – Tufanoiu Ion  
Vintileasca Furu – Noaptes Dinu  
Bahnele – Noaptes Ion

- Periodically monitoring of electric fences functioning and damages evaluation;
- Permanently components maintenance;





## Eficiența gardurilor electrice la stânele protejate cu garduri electrice în anul 2006

<i>Nr. crt.</i>	<i>Stână</i>	<i>Animale domestice</i>	<i>Lung. gard (m)</i>	<i>Nr. câini</i>	<i>Nr. animale ucise de carnivorele mari în interiorul gardului electric</i>	<i>Nr. animale ucise de carnivorele mari în afara gardului electric</i>
1	Bârsești/Cătiniș	250	150	4	0	3
2	Bârsești/Coasta	345	150	5	2	2
3	Vintileasca Plai	276	200	5	0	2
4	Vintileasca Furu	174	120	4	0	0
5	Bahnele	244	150	3	1	4
					3	11

# Animal Rescue Mobile Unit (A.R.M.U.) acting at regional level for interventions in poaching cases



## Training the A.R.M.U. staff

Between 15 April-30 June, at the Monitoring and Rehabilitation Centre there has been trained 6 persons ( 2 persons from ADDFV, 1 person from EPA VN, 2 persons from Forestry Department Focsani, 1 person from CCMESI). The training sessions have been performed by experimented members and by the team veterinary in separately sections: large carnivores species biology, behavior poached individuals, tranquilisation techniques, emergency intervention techniques.

## Poached animals releasing activities

Between April 2006 –October 2006 there have been released 4 bears (*Ursus arctos*):

- one of the bears has required surgical intervention at the Monitoring and Rehabilitation Centre. After recovery, this individual has been released
- a juvenile bear individual having 3 months has been took over a family from Coza village and ulterior it has been transferred at the Rehabilitation and Breeding Centre for Orphan Bears of Vier Photen Foundation from Harghita County;
- 2 mature individuals have been released from traps assembled for illegal capturing of wilde boars. The surgical intervention was not necessary at the Monitoring and Rehabilitation Centre
- In all the four cases, at the bears rescue activity the game funds administrators and the local police have been announced. The investigations have been started, all the four cases now being investigated.

Ensuring the permanent shifts at the Large Carnivores Rehabilitation and Monitoring Centre is achieving by the project partner institutions based on a scheme which assure the service of minimum 2 trained persons. The veterinary take also part of the team and he is present in this centre all along animals captivity period.





# Promoting the project objectives and results



- A4 color promotional leaflet for project's presentation (3000 RO, 1000 EN)
- A2 poster containing project information (10 exemplars)
- Project's folder - 1000 exemplars.
- Sticker (500 exemplars) and plastic pens (500) with the LIFE and project logos
- Project web page ([www.carnivoremari.ro](http://www.carnivoremari.ro))
- Project newsletter.
- A0 project presentation panel placed at the entrance of EPA Vrancea
- Press conferences: at the beginning of the LIFE05/NAT/RO/000170 project, at the painting contest in Tulnici, for project promotion, promotion the Natura 2000 network and the Local Ecological Network for large carnivores protection
- Articles and press releases in local and national mass-media (16 articles in local and national newspapers regarding the actions developed in the project, 6 TV appearances at the local and national media (it has been also broadcasted documentary "In situ conservation of large carnivores in Vrancea County"), internet articles)
- Participating at national scientific conferences: in Galati, Tusnad, Predeal, Brasov
- Notice boards displayed in the field: at the Large Carnivores Monitoring and Rehabilitation Centre in Lepsa Funicular
- 4 big panels (min 2 m x 1, 5 m) made for the entrances in Park



# Raising awareness campaign – promoting the protected areas network for large carnivores conservation

-Web page of the Vrancea protected areas ( [www.carnivoremari.ro/ariiiprotejate](http://www.carnivoremari.ro/ariiiprotejate) )

-Publishing articles related to the protected areas in the local newspapers: working at (information about ecological network, general notions about each protected area, the areas conservation purpose, landmarks (routes), visitation rules, maps (it will be indicated if there is an information centre, monitoring centre, the Park – objectives for visiting, pictures, accommodation opportunities)

-presentation of LIFE project “Enhancing the protection system for large carnivores in Vrancea” and of the Ecological Network for large carnivores protection, at the Popular Athenaeum “Maior Gh. Partia” in Focsani, for celebrating the Biological Diversity Day

- presentation of LIFE05/NAT/RO/8576 project and of the Ecological Network for large carnivores protection, in order to celebrate the Environment Day



# Raising awareness campaign – Promoting the social and economic benefits of implementing the Natura 2000 network and local network for Large Carnivores protection



Organizing a meeting with stakeholders and local authorities from the proposed Natura 2000 sites area

The meeting took place at Focsani in 29.09.2006 and it been organised by EPA Vrancea and County Council. There were participated 35 persons (foresters, land owners, mayor, teachers)

Discussions had as objectives:

- informing about proposed surfaces as Natura 2000 sites, accustoming with basic notions of Natura 2000;
- presenting the benefits and attributions imposed by implementing the Natura 2000 network on the Romanian territory;
- financing opportunities

Achieving a leaflet about Natura 2000 notion (3500 pieces)



# Raising awareness campaign – promoting the concepts of large carnivores conservation and Natural 2000 in the children’s environment



## 3 meetings with children in schools:

Meetings has developed on 1, 2 June 2006 in Coza, Tulnici and Paulesti schools, being presented different themes referring to the large carnivores ecology and coexistence necessity between local inhabitants and large carnivores;

It has been broadcasted the film “In situ conservation of large carnivores in Vrancea County” achieved in the previous LIFE project and there were distributed promoting materials like leaflets, posters, brochures;

Pupils were informed about the drawing contest entitled “Large carnivores-our friends” which was going to develop between 05-12 June 2006;

There were presented the contest rules, participation condition, central theme of the contest, also the offered prizes.



# Raising awareness campaign – promoting the concepts of large carnivores conservation and Natural 2000 in the children’s environment



## Drawing contests:

Between 05-12 June 2006, children from Coza, Paulesti and Tulnici were realized and sent at the EPA VN about 600 drawings illustrating the large carnivores;

On 16 June 2006, at the House of Culture Tulnici, it has been developed the drawing exhibition “Large carnivores-our friend” where there were participated children drawings from the three schools;

The most relevant drawings were choused through the children vote, the prizes consist in photo camera (prize I), binocular (prize II) and an illustrated encyclopedia “Animal World”(prize III). The school with most interesting drawings was gained an excursion in areas proposed as Natura 2000 sites;

All participant children and visitors have received promoting materials consisting in posters, leaflets, brochures, badges.



# Raising awareness campaign – promoting the concepts of large carnivores conservation and Natural 2000 in the children's environment



## Field trip with children:

A number of 40 pupils from Tulnici School have benefited of a thematic excursion, on 17 July 2006, at the protected areas Putna Waterfall, Tisita Gorges, Golul Lepsei;

In the field there were presented to the children themes like:

- monitoring modalities through telemetry
- ecological network for large carnivores protection
- large carnivores characteristics
- necessity of nature protection

This practical lesson was an encouraging element for awareness about wild flora and fauna vulnerability, also for understanding the role of protected areas in the general context of environment protection.





Thank you!