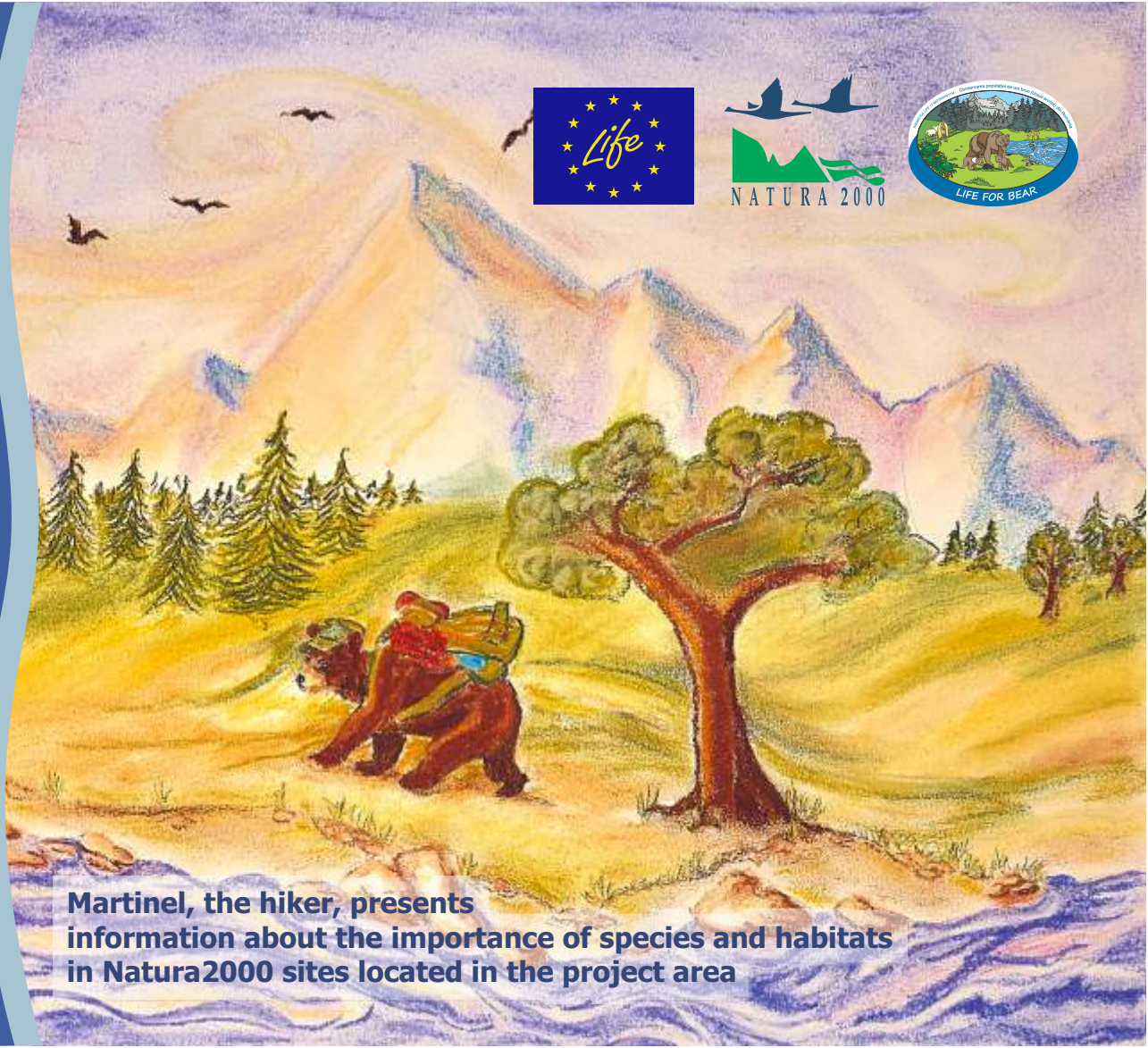
Conservation of the Brown Bear (Ursus arctos) population in Romania
LIFE FOR BEAR – LIFE13 NAT/RO/001154



Martinel, the hiker, presents information about the importance of species and habitats in Natura2000 sites located in the project area

About Natura 2000

Natura 2000 is the central element of EU policy on nature and biodiversity. It is the largest network of coordinated natural protected areas in the world, established based on the stipulations of the Habitats Directive in the 28 Member States of the European Union (EU 28).

The goal of the network is to ensure the long-term survival of the most valuable and threatened species and habitats.

The Natura 2000 network is made up of Special Areas of Conservation (SAC) designated on the basis of the Habitats Directive and the Special Protection Areas (SPAs) designated under the Birds Directive by the EU Member States.

The purpose of special areas of conservation is to ensure the favorable conservation status of the species or habitats for which they have been designated. Countries have an obligation to monitor and report these issues to the European Commission.

According to data currently in place (2013), around 18% of EU territory (787.767 km² of EU 28 land area in 2013) is protected under the Natura 2000 network; both on public administration land and on private land.

*source: http://www.emenatura2000.ro/wp-content/uploads/2013/04/Manual-Curs-LIFE-RO-1.pdf, material realizat în cadrul proiectului MANAGERI EFICIENȚI PENTRU O REȚEA NATURA 2000 EFICIENTĂ
http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm

Natura 2000 in Romania

On the territory of the European Union, 9 biogeographical regions were identified.

Romania has the greatest biogeographical diversity. There are 5 biogeographical regions in Romania: continental (present in 14 EU member states), alpine (present in 12 EU member states), Pannonian (present in 4 EU member states), Pontic (only in Romania and Bulgaria), steppe (only in Romania).

Romania is home to more than half of the Carpathian Mountains, the largest and wildest mountains in Europe, identified as one of the most important ecoregions globally, which hosts almost half of Europe's large carnivorous population (bear, wolf, lynx) and the Danube Delta, which is the most important wetland in Europe, home to colonies of pelicans and hundreds of other bird species.

Romania, through the high value of its biodiversity, makes an important contribution to the European Ecological Network Natura 2000.

According to the existing data in December 2015, the Natura 2000 ecological network in Romania includes a number of 383 sites of Community importance (SCI) and a number of 148 special areas of avifauna conservation (SPA), in total covering approximately 22% of Romania's surface.

Many Natura 2000 sites overlap with protected natural areas of national interest (national parks, nature parks and reservations).

Bear conservation measures in all Natura 2000 sites:

✓ limiting the fragmentation of habitats and the reduction of their surfaces;

✓ ecological education in local communities to ensure a positive attitude of the inhabitants towards the bear species;

✓ public awareness at the national level through mass media regarding the management of the bear and the rules of visiting a protected area;

✓ adequate management of household waste in local communities;

✓ making a plan for waste management and self-defense of the property;

✓ conditioning the issuance of approvals for new investment works or modernization of existing ones;

✓ proper signaling of areas with frequent conflicts caused by bears.

Measures specifically addressed to bear specimens that have deviated behavior:

✓ relocation of problem specimens - This measure is addressed to specimens that stay for a long time near tourist attractions or roads and that cause damage and may endanger the safety of people.

✓ removal of aggressive specimens from the population, that do not respond to removal measures (gunfire, hitting with rubber projectiles, sound systems, etc.) and endanger the safety of people and / or cause significant material damage.

Complementary measures for bear conservation in certain Natura 2000 sites (Piatra mare, Ciucas and Bucegi)

✓ promoting the use of modern means of protection (electric fences, lighting and acoustic systems, repellents), both in the case of isolated tourist objectives (cottages, camping), as well as in sheepfolds and orchards;

✓ supporting the owners in order to obtain compensations in case of damages caused by bears;
✓ compliance with the optimal load of domestic animals, established by the Management Plan;

Complementary measures for bear conservation, only in the Natura 2000 site Bucegi:

✓ identify the bear movement lanes in mountain massifs;

✓ equipping field personnel with non-lethal weapons with rubber projectiles and irritating sprays.

Braşov
ROSCI0120
Mountain
Tampa
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Săcele
BRASOV

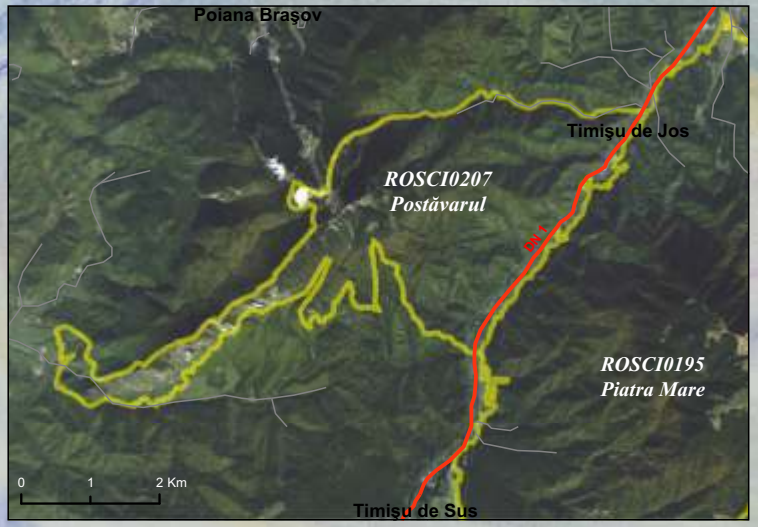
Protected natural area Natura 2000 ROSCI 0120 - MUNTELE TAMPA

The surface of the site is 214 hectares.

Location: The protected natural area Tâmpa is located in region 7 Center on the administrative territory of Brasov Municipality. The site is located in Brasov and separates, on the one hand, the Schei neighborhood and the fortress from the historic center, and on the other hand, the newer neighborhood of the city called Valea Cetăţii.

Flora and fauna of Community importance priority for conservation in protected natural area Muntele Tâmpa:

- **Habitats:**
  - 40A0*Peri-Pannonian subcontinental bushes;
  - 9150 Central European beech forests in Cephalanthero-Fagion;
  - 91V0 Dacian beech forests (Symphyto-Fagion);
  - 9110 Luzulo-Fagetum type beech forests;
  - 9180*Tilio-Acerion forests on steep slopes, rubble and ravines;
- **Species**:
  - **Mammals:** Brown bear (Ursus arctos);
  - **Amphibians –** reptiles: Yellow-bellied toad (Bombina variegata);
  - **Invertebrates:** Alpine longhorn beetle (Rosalia alpina);
  - **Plants:** The lady's slipper (Cypripedium calceolus); Austrian dragonhead (Dracocephalum austriacum); Steppe iris (Iris aphylla ssp. hungarica);


Poiana Braşov
Timişu de Jos
ROSCI0207
Postăvarul
DJ
ROSCI0195
Piatra Mare
0
1
2 Km
Timişu de Sus

Protected natural area Natura 2000 ROSCI 0207 – POSTĂVARUL

The surface of the site is 1303 hectares.

Location: The Postăvarul site is located between Valea Cheii, Valea Timişului and Poiana Braşov.

Flora and fauna of Community importance priority for conservation in protected natural area Postăvarul:

- **Habitats:**
  - 91V0 Dacian beech forests (Symphyto-Fagion);
  - 9110 Luzulo-Fagetum beech forests;
  - 6520 Mountain meadows;
  - 9410 Acidophilous forests with Picea from the alpine mountain floors;
  - 9180 *Tilio-Acerion forests on steep slopes, rubble and ravines;

- **Species:**

  - **Mammals: Brown bear (Ursus arctos);** Wolf (Canis lupus); Lynx (Lynx lynx);
  - **Amphibians – reptiles:** Yellow-bellied toad (Bombina variegata); Northern crested newt, Great crested newt or Warty newt (Triturus cristatus); Carpathian newt, or Montadon's newt (Triturus montandoni);
  - **Invertebrates:** Alpine longhorn beetle (Rosalia alpina); Water beetle (Rhysodes sulcatus); Transylvanian dark bush-cricket (Pholidoptera transsylvanica);
  - **Plants:** Bellflower (Campanula serrata); Ligularia (Ligularia sibirica); The lady's slipper (Cypripedium calceolus);

DJ 101 H
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Protected natural area Natura 2000 ROSCI 0195 - PIATRA MARE

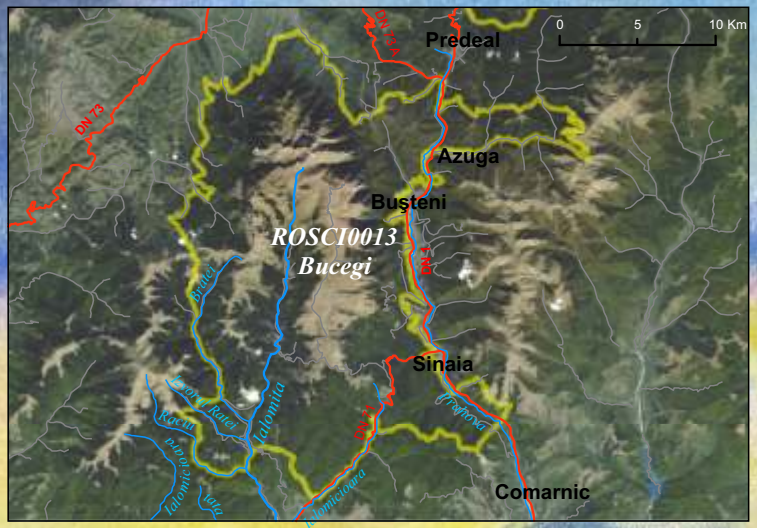
The surface of the site is 4274 hectares.

Location: The ROSCI0195 Piatra Mare site is located in the south of the Brasov depression, within the Curvature Carpathians.

Flora and fauna of Community importance priority for conservation in protected natural area Piatra Mare:

- **Habitats:**
  - 7220 * Petrified travertine springs (Cratoneurion);
  - 9180 * - Tilio-Acerion forests on steep slopes, rubble and ravines;
  - 6230 * - Nardus mountain meadows rich in species on siliceous substrates;
  - 91E0 * - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae);
  - 91V0 Dacian beech forests (Symphyto-Fagion);
  - 9410 Acidophilous forests of Picea abies from the mountainous region (Vaccinio-Piceetea);

- **Species:**
  - **Mammals: Brown bear (Ursus arctos);**
  - **Amphibians – reptiles:** Yellow-bellied toad (Bombina variegata); Carpathian newt, or Montadon's newt (Triturus montandoni);
  - **Plants:** The green shield-moss (Buxbaumia viridis);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ROSCI0013
Bucegi
Sinaia
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DN 1
DN 1A
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DJ 102
Prahova
Prahova
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Ialomita
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Ialomita

Protected natural area Natura 2000 ROSCI 0013 – BUCEGI

The surface of the site is 38787 hectares.

Location: The Natura 2000 site ROSCI 0013 Bucegi is located in the eastern part of the Southern Carpathians, it fully includes the Bucegi Massif, delimited by cliffs that frequently exceed 1000 m and a part of the Baiului Massif (approx. 2000 ha).

Flora and fauna of Community importance priority for conservation in protected natural area Bucegi:

On the territory of the Site were identified 14 Nature Reserves, as well as a number of 46 Natural Monuments.

- **Habitats:**
  - 4070*Shrubs with Pinus mugo and Rhododendron myrtifolium; 6110*Calciphilic rupicolous communities or basified grasslands of Alysso-Sedion white; mountainbstrates; meadows rich in species on siliceous su 9180*Tilio-Acerion forests on steep slopes, rubble and ravines; 91E0*Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae); 8160*Middle European limestone rubble of the hilly and mountainous floors; 4060 Alpine and boreal bushes; 6520 Mountain meadows; 91V0 Dacian beech forests (Symphyto-Fagion); 9410 Acidophilous forests of Picea abies from the mountainous region (Vaccinio-Piceetea);
- **Species:**
  - **Mammals: Brown bear (Ursus arctos);** Lynx (Lynx lynx); Wolf (Canis lupus); Lesser horseshoe bat (Rhinolophus hipposideros); Barbastelle bat (Barbastella barbastellus);
  - **Amphibians – reptiles:** Yellow-bellied toad (Bombina variegata); Carpathian newt, or Montadon's newt (Triturus montandoni);
  - **Fish: European bullhead (Cottus gobio);**
  - **Invertebrates:** Alpine longhorn beetle (Rosalia alpina); Transylvanian dark bush-cricket (Pholidoptera transsylvanica); Banaticum snail (Chilostoma banaticum); Flat bark beetle (Cucujus cinnaberinus); European stag beetle (Lucanus cervus); Danube clouded yellow butterfly (Colias myrmidone); Marsh fritillary butterfly (Euphydryas aurinia); Bush crickets (Isophya costata); Grasshopper (Odontopodisma rubripes); Dragonfly (Cordulegaster heros);
  - **Plants:** Bellflower (Campanula serrata); Ligularia (Ligularia sibirica); Tozzia (Tozzia carpathica); Whitlow-grasses (Draba dorneri); The green shield-moss (Buxbaumia viridis); Wind-blown mosses or fork mosses (Dicranum viride); Long seta hump moss (Meesia longiseta); Steppe iris (Iris aphylla ssp. hungarica).

0
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Buzăiel
Vama Buzăului
Zăbrătău
Crasna
Dălghiu
Chicăiran
Buzău
Dălghiu
Strâmbul
Buzău
Pârâul de Câmp
Crasna
Mreaja
ROSCI0038
Ciucaş
Siriul Mare
Tarhung
Cheia
Doftana
Basca Chiojdului

Protected natural area Natura 2000 ROSCI 0038 - CIUCAŞ

The surface of the site is 21,864 hectares.
Location: The protected area is located in the sector of the Curvature Carpathians in the Eastern Carpathians ecoregion and is arranged in a relict conglomerate area represented by unusual shapes. The average altitude being 1216 m (797 m - 1944m).

Flora and fauna of Community importance priority for conservation in protected natural area Ciucaş:

- **Habitats:** *91E0*Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae); 6230*Nardus mountain meadows rich in species on siliceous substrates;4070*Shrubs with Pinus mugo and Rhododendron hirsutum (Mugo-Rhododendretum hirsuti);9180*Tilio-Acerion forests on steep slopes, rubble and ravines; 7220*Petrifying springs with travertine formation (Cratoneurion);4060 Alpine and boreal bushes;6520 Mountain meadows; 91V0 Dacian beech forests (Symphyto-Fagion);*

Species:

- **Mammals:** Brown bear (Ursus arctos); Lynx (Lynx lynx); Wolf (Canis lupus); Otters (Lutra lutra); Lesser horseshoe bat (Rhinolophus hipposideros); Greater mouse-eared bat (Myotis myotis);
- **Amphibians – reptiles:** *Yellow-bellied toad (Bombina variegata); Carpathian newt, or Montadon's newt (Triturus montandoni);*
- **Fish:** Ray-finned fish (Barbus meridionalis); European bullhead (Cottus gobio);
- **Invertebrates:** Jersey Tiger (Callimorpha quadripunctaria); Alpine longhorn beetle (Rosalia alpina); European ground beetle (Carabus variolosus); Fenton's wood white butterfly (Leptidea morsei); Banaticum snail (Chilostoma banaticum);
- **Plants:** Bellflower (Campanula serrata); Ligularia (Ligularia sibirica); The lady's slipper (Cypripedium calceolus); Field Macewort (Mannia triandra);

TIPS TO PREVENT HUMAN - BEAR ENCOUNTERS

Positive experiences when it comes to meeting bears are more frequent than unpleasant ones. Sometimes, less often, the encounter between human and bear is violent, so we recommend preventing these encounters:

- **Only use forest roads, paths and marked trails!**
- **Walk in groups and only during the day!** If the bear hears you coming, he will usually avoid you. Your voices will help the bear identify you as people.
- **It's good to talk, whistle or sing while walking,** especially in the bushes, where visibility is low, beside rivers or when the wind blows from the front. Bears feel threatened if taken by surprise.
- **Be careful and watch for bears tracks:** back or broken stones, logs or rotten roots may be signs that a bear sought after earthworms, worms or insects; scratch marks on trees, paw footprints in the mud or snow, berries on the ground, traces of digging for roots, tree bark with strands of fur on it are all signs that a bear is nearby.
- **Keep away from sources of abundant food** and dead animals because the bear might be nearby.
- **Keep dogs on a leash and under control!** Dogs may be helpful to detect the bears, but they can fight with bears and bring them to you.
- **Avoid walking in the woods where indicated there is a presence of bears!**
- **Do not store food in your tent!** The camping tent is recommended only in specially designated areas.

BEHAVIOR TIPS IF YOU ENCOUNTER A BEAR

It is good to be prepared for such a meeting. In this case: **Stop! Evaluate the situation!**
Each encounter may be different. The following reactions from people have been effective in the past:

If you see a bear from a distance:

Respect the space the bear needs⇨ **Turn around and leave the area!**

If, unexpectedly, you meet a bear nearby:

Stay calm and leave the area without running. Talk slowly or move your hands while you withdraw!
Move in the direction from which the wind blows, so that the bear can smell you;
Respect the bear's space without crowding it, and it will retreat!
Don't provoke the bear! Don't face him!
Watch the bear's reactions, but avoid looking him straight in the eye! (because it may interpret this as aggressive behavior on your part)

If a bear attacks, in the event of an unexpected encounter, you could:

Lie on your stomach with your legs slightly apart and wrap your hands around your head. In this position you will protect your face and neck. Stay still. Once the bear feels that you are no longer a threat to him, he will leave the area.

If the bear is chasing you:

(Rarely do bears exhibit predatory behavior, meaning to chase before attacking).
If he still follows you: stay put, but don't face him! Speak slowly and don't run!

If the bear keeps following you:

Leave your luggage or something else to attract his attention.

TO REMEMBER:

The bear reacts defensively when protects its cubs or food. Taken by surprise, while looking for food or when he has cubs, the bear reacts defensively, but is not a predator.
If it senses the presence of a human, the bear may try to intimidate: it usually rises on two paws, menacing. In the language of the bear it means that it warns you not to advance on its territory;
The brown bear does not eat humans. He doesn't like fresh meat.
The danger comes only from direct combat because a bear paw blow can be fatal.
You can have a pepper spray with you, it would be useful in case of an encounter with an aggressive bear. The bear doesn't like the smell of pepper and walks away.

NATURA 2000 CONTRIBUTION TO GLOBAL BIODIVERSITY

The general objective of the Habitats Directive and the Birds Directive is not only to stop the decline and extinction of species and habitats, but to restore them so that they are maintained in the long term. The Natura 2000 network ensures the protection of approx. 2000 endangered species and natural habitats in Europe, covering an area of almost 20% of EU territory 28 (including the marine area), contributing to the obligations assumed by acceding to the Convention on Biological Diversity (CBD) and achieving the objectives of the EU Strategy on biodiversity for 2020, adopted by the European Commission in 2011.

The main conservation objective for the protected natural areas presented in this material, is to maintain the harmonious interaction of human with nature by protecting the diversity of habitats, species and landscape, promoting the preservation of traditional land uses, encouraging and consolidating activities, practices and culture of the local population, offering the public opportunities for recreation or tourism.

These protected natural areas are located in the project implementation area, which covers an area of up to 290000 ha. The area is particularly important in terms of conservation of the brown bear species, because here is the highest density of bear specimens in Romania and there are essential habitats for the species, as well as many other valuable species of flora and fauna and natural habitat types.The Brasov-Prahova Valley area (Romania) is also important from the point of view of implementing effective management measures to ensure human-bear coexistence, in the context of socio-economic development and intensification of anthropogenic pressure.

Our actions are important to leave to future generations a clean environment with a rich diversity of flora and fauna!

Bears are the kings of the forests in Romania ...

Let's protect them! Let's respect their territory and habitat!

Romania | Brasov | 2016 |

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Associates Beneficiary

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Carpathian Wildlife Foundation
www.fundatiacarpati.ro

Ministry of the Environment
www.mmediu.ro

www.osrasnov.ro

www.bucegipark.ro

www.rplpk.ro

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