



BEAR-SMART COMMUNITY GENZANA BEST-PRACTICE MANUAL



Comune di
Pettorano Sul Gizio



Comune di
Rocca Pia

The brown bear features in the human culture since unmemorable time through rituals, myths, legend and tales. Humans have pictured bears as gods, heroes, friends, foes, and even devils.

Some consider bears dangerous, others a special animal. There are some bear species that can be dangerous for humans, for instance the grizzly bear, but this lives in North America! The Marsican brown bear however is not dangerous if respected and left alone.

Before becoming a protected species, it was the object of ruthless hunting which has led to its near-extinction. Despite this persecution, the cases in which a bear has been cornered or wounded by hunters and then reacted to defend itself, can be counted on the finger of one hand. The Marsican bear is a shy animal, but it can occasionally be encountered on our mountains, and the most typical behaviour of the bear in this situation is to flee or to stand on his hind legs to see us better, and then to leave.

False attacks are extremely rare but possible, these can happen in case of a close encounter with a female with cubs, where the female feeling threatened by our presence, and would try to scare us away by feigning an attack, but without actually touching us.

Seeing the bear is the dream of many! It is the symbol of courage, strength and affection. Words that appear to be in contradiction, but that are complementary and well describe this animal. Think of the female bear, maternal and caring of her cubs and at the same time so strong and fearless when needing to protect them from other animals.

The bear is a fascinating and mysterious animal, the incarnation of wilderness. For some, however, sight of them in inhabited areas or the loss and damage of crops and livestock is not a pleasure. Therefore, we should neither sanctify it, nor demonise it, but we should understand that co-habitation with bears is possible, following few simple rules and adopting the best practices summarised in this short manual.





Marsican brown bear

The population of **brown bear of the central Apennines** was classified as a subspecies with the name of *Ursus arctos marsicanus* by Giuseppe Altobello, a naturalist, native to the Molise region, in 1921. Male Marsican bears usually reach a body weight between 130 and 200 kg, and a height of 180-190 when standing up, while the females are smaller and rarely exceed the 120 kg.

The average life span of the Marsican bear is 20 years. It is the largest Italian carnivore. Despite being taxonomically in the order Carnivora it is in fact an omnivore, and its diet is over 80% fruit (acorns, beechnuts, berries, apples and pears), and herbaceous plants, which the animals integrate with insects and meat. This is primarily obtained from carcasses of ungulates (red deer, roe deer and boars) that have been predated upon by wolves or died from other causes.

The habitat types occupied by the bears vary depending on the season. In spring the bears utilise more frequently woody areas intermixed with open patches at lower elevation (when they feed on herbaceous plants and ants); in summer they use more frequently the alpine meadows at high elevation (when they feed on berries); in autumn they are found in woody areas at lower elevation and in the valleys (feeding on beechnuts, acorns, apples and pears).

The mating season starts in spring. During summer and autumn, the animals feed intensively (a behaviour termed hyperphagia), to accumulate the fat necessary to overwinter in hibernation. In the case of mature females, the animals have to store extra fat to increase the chances of a successful pregnancy the following season.

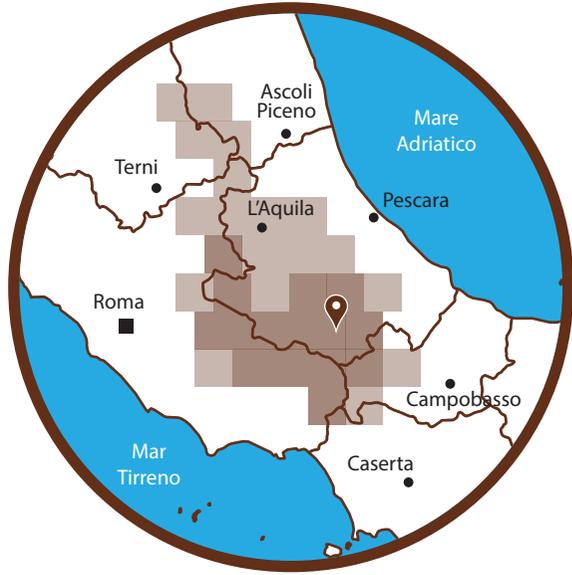
During hibernation, which can last up to 5 months, the bears do not normally feed themselves and choose a den in inaccessible and quiet locations. However, especially during bumper crops of beechnuts, the bears can interrupt their “sleep” and make short excursions to forage and take advantage of the large availability of food also during winter.

In the den, between January and February, the females give birth to 1 to 3 cubs, who weight between 200 and 500 grams. The high calories content of the female’s milk allow for a rapid growth of the cubs, who start to feed

autonomously already in spring despite weaning does not occur until Autumn. The cubs remain with the mother for one and a half year, until their second spring. The females normally reproduce every 3-4 years and the age of first birth is at 4-5 years.

The Marsican brown bear lives only in a restricted area of the Central Apennines, with no more than 60 individuals. It is therefore classified as *Critically Endangered* by the International Union for Conservation of Nature (IUCN). For these reasons is protected by Italian and European legislations. The primary factors threatening Marsican bears are human-induced mortality, habitat loss, infectious diseases transmitted by domestic animals, strikes on roads and railways, and finally the reduced population size which can cause inbreeding depression, leading to lower fertility and higher vulnerability to diseases.

Seeing bears or signs of its presence in our mountains is certainly a special event. However, it is important to be prepared for encounters by following simple rules. This will avoid turning a special occasion into a stressful or dangerous situation for both the animal and the observer.



Bear Smart Community Genzana 
Marsican brown bear core area 

Signs of presence

When walking in our mountains it might be possible to find signs of bear presence such as excrement, tufts of hair, tracks in mud or snow, and scratches on tree trunks.

You must not follow the tracks so as not to encounter the bear, instead you may photograph any evidence and forward these photos together with any relevant information, including GPS coordinates, to the authorities (see below). Never handle excrements and tufts of hair without latex gloves as there might be a risk of contamination by bacteria, parasites and spores.

All information on bear's presence should be reported to the Monte Genzana Alto Gizio Nature Reserve or the Forestry Corps (contacts below).



Direct encounters

The Marsican brown bear is considered weary of the human presence and generally avoids confrontation, however it is still a wild animal and if threatened, will react accordingly, especially a female with cubs, wounded, disturbed, feeding and trapped animals.



In case of a bear encounter, you must keep a calm and respectful attitude, refraining from quick or springing movements and screaming, as this may prompt the bear to feel threatened and react aggressively.



In case the animal has not noticed your presence and it is at a distance further than 100 m, you can enjoy the observation keeping still and silent.

In case of a sighting less than 100 m, if the bear is not aware of your presence, it is advisable to walk back calmly and discreetly not to disturb the animal. If the bear is aware of your presence, it could rise on its hind legs to see and smell better in our direction - it is not a threatening gesture, but curiosity - after which it will walk away. If it does not happen, it is recommended to walk back or divert away from the trail without rushing, observing the bear at a distance, but not staring at the bear so that it does not feel threatened.



If you encounter a bear at a very close distance, always remember to keep calm, to make it aware of your presence slightly moving your arms. Speak out in a calm voice. If you hold a rucksack or something alike, lay it on the ground to divert the bear's attention away from you and walk back without rushing or any harsh movements. To avoid close encounters with a bear, you have to make it aware of your presence while you walk, stamping leaves and branches and speaking in a calm and regular voice – it does not matter what you say, but the sound of our voice is sufficient.



Never approach the bear less than 50 m, especially in case the bear is wounded or in difficulty. In this case, call the authorities in charge.



In the presence of cubs, even without the adult, it is recommended to walk away immediately and report their presence to the competent authorities. To approach the cubs may prompt a defence reaction from the mother. Walk away also from bears feeding on a carcass.



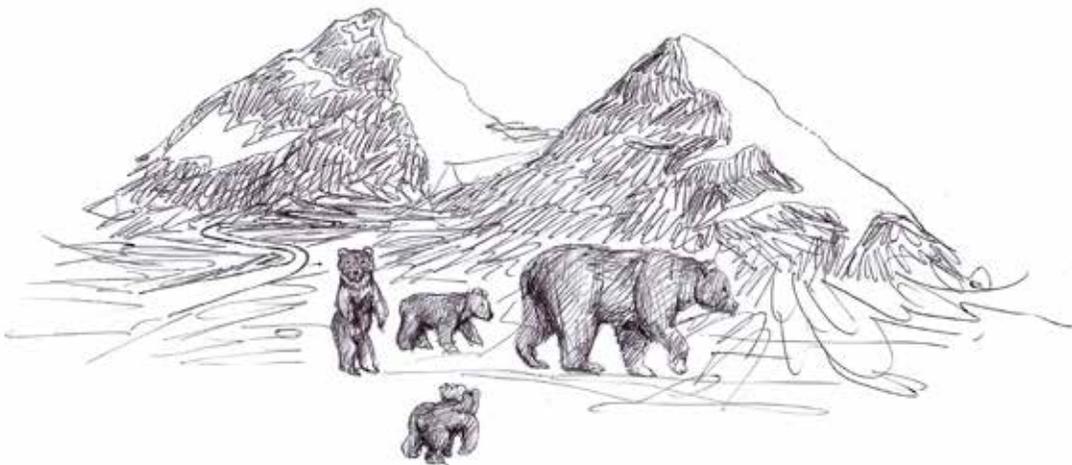
In case the bear comes intentionally towards you growling, it is likely that it is a bear which feels threatened by your presence or behaviour - a female with cubs, a bear close to a carcass or a bear pursued by your dog. In these conditions usually the bears do not attack, but they pretend to (threatening behaviour). You have to use the same countenance as above: keep calm, speak in a calm voice, try to divert its attention by slow movements, dropping an object to distract it and walk away without rushing. If all this does not work, it is recommended to crouch on the ground in foetal position. The bear will realise that you are subduing and not threatening, and should leave you alone.



In case of bear encounter while in your vehicle, it is important to stop the car, and lower the beams, not to frighten the bear, and let the bear leave the area of its own accord. Never follow the bear with your vehicle or on foot, which could prompt the animal to run away and put the animal, ourselves and incoming vehicles in danger.



It is good practice when driving in these mountains where wildlife crossing are frequent, to maintain a speed of maximum 50 km/h as animals can suddenly jump to the road and we may not have time to avoid them otherwise.





What is the Bear-smart community?

The project Bear-smart community encourages actions from local communities, businesses, and individuals to prevent conflicts between bear and humans by removing any potential source of attraction for the bears in urban areas and promoting simple but effective measures to avoid damages from and to bears. In central Italy, the few remaining Marsican bears are forced to live in territories which, while suitable and mostly protected, are characterised by a strong human presence. Preventing the conflict between humans and bears is therefore fundamental to rescue this subspecies from the brink of extinction.

Where?

The pilot project Bear-smart community will take place in Pettorano sul Gizio, managing body of the Natural Regional Reserve Monte Genzana Alto Gizio (NRRMGAG) and Rocca Pia, two villages in the L'Aquila province, in the Abruzzi region of Italy. This territory lies between the mountains of the Abruzzo, Lazio and Molise National Park and the Majella National Park and represents a natural corridor between the two protected areas.

The NRRMGAG has protected part of this corridor for bears since 1996; not by chance this species is the reserve's symbol. While the reserve is too small to maintain a viable population of bears, is sufficiently large to guarantee a safe passage to bears transiting between the two protected areas.

Why?

On the 12th September 2014 a young male Marsican bear was found dead near Pettorano sul Gizio. In the weeks preceding the death, at least 4 different bears were sighted near the village and few villagers reported damage to beehives, hen pens and vegetable gardens. The exceptional events alarmed the population, especially the affected households.

Due also to badly-informed media coverage, the presence of the bear was considered as a direct threat to humans, which lead to the killing of the bear by a local villager, who later pleaded guilty. The deliberate killing of a bear is a penal crime punishable with imprisonment (article 544 bis of the Penal Code), besides being an enormous loss for this subspecies, already threatened with extinction.

What occurred in Pettorano highlights the need to intervene with preventive measures to avoid self-made justice. Conflicts between men and bears are generated by few animals that get used to finding "easy food" in urban areas, for instance unprotected beehives and domestic animals enclosures.

These are generally young bears or females with cubs which get closer to inhabited areas to avoid natural areas occupied by adult males. These males can, and do at times kill any cubs which are not their offspring, to induce the females to reproduce, or would kill young males who are competing for territories and females.

To co-exist with bears is fundamental to prevent losses to crops and domestic animals, and to inform the population over the right behaviour and practice to maintain in case of a sighting of bear in the surroundings.



When?

Immediately, because there is no time to lose. The damages from bears are concentrated between August and October, when the bears need to fatten to prepare for the winter, but the actions required to avoid “easy food” in urban areas need to be implemented throughout the year and with continuity. This will allow the presence of the bear to be felt as a privilege and resource, rather than a problem.

Starting in spring 2015, the association Salviamo L'Orso (Save The Bear), the Natural Regional Reserve Monte Genza Alto Gizio, the associations Dalla Parte dell'Orso (On the side of the Bear) and Rewilding Apennines will implement the following actions:

Bear-proof beehives and animal enclosures

This action entails completing the installation of electrified fences around domestic animal enclosures and beehives, already started by the association Rewilding Apennines, and the Abruzzo, Lazio and Molise National Park.

The required fences will be purchased through the funding granted to this project by the International Bear Association, through the crowd-funding campaign “A passage for the bear”, of Salviamo L'Orso, and through analogous initiatives of Rewilding Apennines and Dalla Parte dell'Orso.



Electrified fences are a barrier that prevent bears from entering an animal enclosure, a vegetable garden or a beehive. By touching the metal filaments of the fence, the bear receives an electric shock, strong enough to be painful to the bear without harming it. In order for the fence to be effective, it is important that the fear of crossing it is higher than the desire of doing so to reach food. It is also important that the fence is active during the whole period of bear activity from spring to autumn.

It is important that the landowner together with the volunteers of the partner associations and the Reserve staff, perform regular checks and reparations to the electrified fences. **Bee keepers and farmers** in the villages of Pettorano and Rocca Pia are invited to contact the reserve NRRMGAG for a survey of their property and to assess the need of electrified fences at protection of their orchards, vegetable gardens, beehives and animal enclosures. Where required, the fences will be donated and installed free of charge by our staff and volunteers.

Bear-smart orchards and urban vegetable gardens

It is necessary to **pick ripe fruits before the fall, and remove any fallen fruits.** We will organise days in which our volunteers will help remove all these food resources that attract bears and other animals, such as deer and boars to inhabited areas.

Bear-smart management of organic waste

A correct management of organic waste is necessary to avoid bears being attracted to waste bins.

Where there is door-to-door rubbish collection, it is necessary that people keep their rubbish in the house or in the garage until the day of pick-up.

Where there is not a door-to-door rubbish collection, the organic material waste-bins will be fitted with a special closure that is bear-proof.

In any case, it is recommended not to add meat left-over to the compost, which will need to be regularly mixed and always covered it developing strong smells that can attract animals. Domestic animals food will need to be stored closed in places that are inaccessible to bears and must never be left in gardens or close to inhabited areas.



Bear-smart sanitary management of domestic animals.

The conservation of bears is strongly linked with the correct sanitary management of areas within its range. Some of the infectious diseases potentially harmful for bears can be transmitted by dogs, these include *Canine distemper*, *leptospirosis*, *hepatitis* and *parvovirus*. The transmission of these diseases can be avoided through vaccinations and correct management of dogs. Dog vaccination is recommended in any case to protect them from these potentially deadly diseases.

All dogs owners resident in Pettorano sul Gizio and Rocca Pia can have their dogs vaccinated and microchipped for free thanks to the voluntary work of Salviamo L'Orso's veterinaries and the funding donated by AISPA, Anglo-Italian Society for the Protection of Animals.

Correctly managing our dogs means...



Register the dog to the canine registry and have it microchipped by a professional veterinary. The microchip is mandatory by law, and is inserted permanently under the skin. It ensures that the dog is identifiable at the regional canine registry and that it is possible to track its ownership in the case of the dog going missing.



In case of change of ownership, loss or death of the dog, or when the owner changes address of telephone number, it is **mandatory to inform the local office of the regional veterinary service** who will update the personal information of the dog and its owner in the regional canine registry.



Have the dog wear an identification tag on its collar or bib. This tag should report all information required to reach its owner (e.g. a telephone number).



Have the dog vaccinated and regularly checked by a veterinary.



Never let the dogs roam free. Always have them under close control.



“The observation of these simple and practical rules will assure a peaceful coexistence between the man and the bear with which we have been sharing these mountains for millennia and that today is at risk of disappearing because of us.”

This project, written by **Mario Cipollone** and **Piero Visconti** of **Salviamo l’Orso**, was financed in April 2015 by **IBA – International Association for Bear Research & Management**. It will be carried out by **Salviamo l’Orso**, in cooperation with the **Natural Regional Reserve Monte Genzana Alto Gizio**, the municipalities of **Pettorano sul Gizio** and **Rocca Pia**, the associations **Dalla parte dell’Orso** and **Rewilding Apennines** and the local communities.

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