

Conserving Biodiversity in a Changing Socio-economic Environment Is there a hidden lesson to be learned from Romanian situation?

Radu Moț
Asociatia Zarand

Conserving large natural areas is a challenging task. In Europe where, with the exception of the extreme North and the extreme heights of the continent, the anthropogenic transformation of the landscape is significant, this task seems to be even more challenging. Even if the North American approach of protecting vast natural parks would have been applicable, the very model is showing signs of weakness as isolated national parks, regardless of their size, won't protect nature in the long run, not only because of the climate change, but also because of island effects that will gradually lead to their degradation. [1]

The solution would be to design, by connecting protected areas through green corridors, a coherent system of natural or semi-natural landscape elements – “ecological networks” that not only would have to target natural biodiversity from within but also would suppose to gradually “export” the conservation principle to the neighboring areas. However, here the influence of human activities would be more brutal and the “chance” of conflicts will be higher.

The concept of connectivity is quite new and, although the associated terminology is still used with different meanings in different contexts, safeguarding connectivity was designated as one of the strategic goals of the European Union. What are the tools to achieve it is another matter as even achieving coherence of the Natura 2000 network is considered (one of) the Habitat Directive Achilles' heel.

The “sustainable development”, another relatively recent concept, apparently saved the situation by bringing all the parties at the table. In theory, it promises local communities to make rational use of their natural resources while preserving important natural areas as well. But if we admit that “rational use” is not an attribute of the human kind, the fear is that even extremely poor communities, at present genuinely hoping for a decent life, gradually will aspire to higher and higher “life standards”, on the expense of the natural resources. Moreover, there will be plenty of arguments that “renewable” resources, as forests, destroyed in the process, should not be seen as a total and irreversible loss.

More profit-oriented use of natural resources will escalate the conflicts with wildlife species requiring vast home ranges, like large carnivores. Situated at the top of the food pyramid, the presence of a large

carnivore's populations is a strong evidence of (still) viable ecosystems. For the same reason, large carnivores are considered key-species in the process of designing ecological networks. And there is also a practical reason and pro-active approach justification for that – being hard to evaluate all the natural processes in an ecosystem and to design specific conservation measures for each and every species of it, by aiming to preserve viable large carnivores population one can assume that all the species in the food-chain and their habitats will be protected as they are essential for the survival of the top-predators.

“Result of geography, geology, history and ecology <accidents>, Romanian Carpathians are an amazing biodiversity <hot spot>: a mere 2% of Europe still harbors almost half of continent's bears and wolves”
– Michael Soule, Wildlands Networks US.

Probably Romania is known as the European country with the largest number of brown bears, wolves and lynx. For a conservationist who never visited Romania, this may lead to the impression of an unexpected wilderness heaven in the hart of Europe. However, as there are no true wilderness areas in Europe, Romania is not an exception either. For example, at present, the percentage of forested areas today is below the European average and significantly below countries of similar climate and relief conditions.

Then, what is the magic ingredient that led to the present situation of Romanian Carpathians being considered as the “green back-bone of Europe”, the last bastions for large and awe-inspiring carnivores and herbivores. [2] Did Romania manage to find the solution of conserving biodiversity by successfully mitigate the human-nature conflicts? Is sustainable development really working in a country passing through a dramatic socio-economic transformation since the revolution of December 1989? Is Europe's “biodiversity reservoir” safe and resilient enough to sustain natural dispersal of wildlife gradually into central and Western Europe?

Some would say that the “human factor” has a role to play in the equation. Tolerance, so frequently associated with Romanians, would also translate, for instance, in the shepherd's acceptance of bears or wolves taking a sheep or two from the flock. More critical sociology observers will say that the Romanians' “gift” of managing not to finish any started project – as eradication of large carnivores in the '50's or replacing the natural forests with “more productive” plantations, had in fact been benefic for nature. The EU admission, for sure another turning point in the history of the country, should put this question into a broader, European perspective. In 2007, Romania designated its first Natura 2000 sites. Focusing on specific priority habitats and species, ecosystem connectivity was not a criteria for designation and, as a result, Romania failed to take the opportunity to establish a functional ecological network across the country.

In 2008, the European Commission asked Romanian authorities to address the issue of connectivity and, for example, to designate new Natura 2000 sites that should form a corridor between the main Carpathian bear population and a smaller separate population in Apuseni Mountains. But to properly solve the situation, one should take into consideration many aspects: the corridor would have to be more than 150 kilometers long and, in order to be resilient a sufficient buffer-zone should be applied. The surrounding areas are also very good habitat for bears but, lacking proper conservation measures, they are acting like mortality sinks, threatening the functionality of the future “green corridor”. [3] To make matter even complicated, within the corridor there are a lot of “bottle-necks” and the area with the tightest stripe of favorable habitat will be intersected by a motorway – actually, a situation that would be familiar for many Western European countries.

Not least important, local communities within the corridor are lacking the tradition of cohabitating with bears and already have a negative attitude about species re-appearance in the area. Mainly relying on subsistence agriculture, reactive snare poaching of wild boars that destroy the crops is widespread, thus the chance of human-bears conflicts being almost inevitable. [4]

Five years after, an EC funded LIFE+ project is aiming to develop demonstrative approaches both bottom up (by addressing these threats with concrete conservation measures) and top down (by presenting the issue to a wider range of stakeholders – from local farmers to national development authorities and engaging all of them in the process of development and implementation of model Regional Action Plans for large carnivores). A promising approach, but what will be the chance that after the end of such a project local people will see biodiversity as *theirs* and what will be their incentives to preserve it and to demand authorities to provide them with the means to do it?

At present, by not addressing concrete management of Natura 2000 sites after designation and only relying on presenting Natura 2000 as a miraculous solution to poor communities, responsible authorities generated the present situation when, by contrary, nature conservation is seen as a factor that denies economic development of the local communities.

“Payments for ecosystem services”, anybody? Another new, intriguing approach that aims to put a value on the benefits we get from environment. But can we put a figure on these, in a first place? And then, if somebody, somehow, will be willing to actually pay for these services – what should ask in return? Maybe not to “cash in” the commercial value of the natural resource? And if so, do we contradict the sustainable development approach or there is a middle way? It could be, but the line may be too thin for some not to be tempted to profit from both sides. And then, what about processes that do not have commercial value or would be

difficult to be considered as ecosystem services to us: how connectivity can be valued, for example?

“Re-wilding” is the newest concept, and quite a “sexy” one indeed - is there any conservationist who would not like to see abandoned land turning into wilderness? For sure, none. But don't we give up once again to the temptation of separating human factor from nature? Yes, focusing on “wilderness” areas will save conservationists from dealing with challenging social factors, but failing to understand that human influence is the most powerful force that affects the environment may lead to the failure of finding efficient solutions for nature conservation on the large scale and on the long run.

One may argue that in fact it is more important to accept sharing the land we use with wildlife rather than to set aside as “wilderness” pockets of land we don't use now. Others will say we are talking in fact about different tools that should be used as efficient as possible, opportunity arising, as long as we don't miss the large picture into the process (or debate).

And, no matter what the fashionable concept in conservation would be, the practical solution could be a simple but frustrating one: fighting fire with fire - to propose *and implement* economic model-projects that would meet communities' needs and will lower the anthropogenic impact on nature. For a pessimist looking on the long term, the effort seems futile as the humans' demands will grow continuously, affecting the conservation's goal, but an optimist looking on the short or medium term will find the solution acceptable as there is so much to be saved just by reducing the wasteful way we use natural resources today. And there are so many wasteful approaches out there just because there is no alternative ones presented and demonstrated. If the project model will prove to be economic-efficient, the acceptance of the conservation purposes will increase within the local community, and the probability for other communities to replicate the model, even without fully understanding its conservation background, will be higher.

Suffering the same historical abuses as in Western countries, Romanian nature has reborn especially where it was left alone, unmanaged. Targets of total annihilation, large carnivores have managed to survive in small pockets of land and from there to recolonize the unfragmented landscape. However, present situation in Romania is not a fortunate status-quo, but rather a phase of a dynamic process inevitable leading to results similar of what is happening in Western Europe. But at the same time, this phase could offer a rare opportunity for conservation community to examine the sensitive relationships between nature and human society, to find a way of de-turning historical evolution towards a much favorable outcome for biodiversity in Romania and to preserve and replicate a model of human tolerance to wildlife, extremely valuable for every conservation initiative in Europe.

Meantime, there is a question we would think at: isn't now the time when a new breed of conservationists would be more efficient for nature preservation - one being able and willing to play the role of a conservation-minded developer, sociologist or communicator?

[1], Michael Soule, Wildlands Network, US, www.twp.org

[2], Altenburg & Wymenga Ecological Consultants, ICAS Wildlife Unit, Carpathian Wildlife Foundation, The Wildlands Project (2004), *A vision for large carnivores and biodiversity in Eastern Europe: Safeguarding the Romanian Carpathian ecological network*

[3], R. Mot, M. Popa, A. Indreica, P. Nechifor-Moraru, R. Jurj (2010), *Designation of Natura 2000 sites for a functional regional ecological network between Western and Southern Carpathians*. A report.

[4], R. Mot (2010), *Human dimension importance in safeguarding connectivity between large carnivore populations*. Rufford Small Grant - Stage report.

Radu Moț – Contact
greenlightserv@gmail.com
44/63/E/10 Mihai Viteazul str.,
500187 Brasov, Romania
Tel: 004(0)788292131