

FROM SPECTATORS TO ACTORS. THE ROLE OF RURAL COMMUNITIES AS THE KEY TO SUCCESS IN PROJECTS OF BIODIVERSITY CONSERVATION. A LIFE PROJECT SUCCESSFUL EXPERIENCE IN ANDALUSIA (SOUTHERN SPAIN)

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The main biodiversity conservation actions developed in the frame of the LIFE project “*Preliminary actions for the reintroduction of the Bearded Vulture in Andalusia*” are a clear example of the potential of rural communities’ active participation regarding success in conservation projects. The key point is based in inverting traditional roles: rural communities should switch from collaborators to main protagonists, and conservation professionals should switch from main protagonists to collaborators/advisors. Our main work has been focused, in one hand, to help them to assume and feel the leading role befitting them in the return of the Bearded Vulture to their mountains and, in the other hand, to develop tools (*Networks for threats management*) that has been helpful to boost this leading role in the rural groups and to provide rural communities with self-sufficiency in the biodiversity conservation actions regarding their natural heritage.



The Project area covered, approximately, the Natural Parks of Cazorla, Segura y Las Villas –SPA ES0000035- and Sierra de Castril –SPA ES6140002- (more than 222.000 ha of a mountainous Mediterranean hotspot), where hunting and traditional stockbreeding, with one of the Europe’s ancient stockbreeding managements, form the main land exploitation activities. These traditional exploitation systems had contributed to the preservation of the biodiversity of the area. Nevertheless and paradoxically, malpractices in stockbreeding and hunting –poisoned baits use and lead ammunition use- are the main factors threaten the reintroduction of the Bearded Vulture into these mountains (four out of the 19 of the Bearded Vulture released died after consuming poisoned baits and other two died from lead intoxication). Nonetheless, this problem is not a local one. In Europe, a compilation study in the Pyrenees shows that 7 out of every 10 Bearded Vulture deaths is due to anthropogenic causes related to bad practice in the exploitation of natural resources. As in other European reintroduction or conservation programs (White-tailed Eagle, Red Kite, Wolf, Brown Bear...), bad practice is the major threat for the species.

Regarding this, after five years work we have realized that if a problem is related to the way in which people live, think and work, it is clear that attitudes must be changed before new habits can be adopted. If that problem has global consequences, the solution must also take into account the famous aphorism: *Think Globally, Act Locally*. In 2004 we knew that the long-term



success of our project would depend on our ability to actively involve the rural Andalusian population in controlling threats to the Bearded Vulture. Five years later, we have learned how to achieve this. Diminishing the effects of poisoning and lead is possible with the participation and active commitment of the people who live, think and work ‘in’ and, above all, ‘from’ the Bearded Vulture’s mountains. It is also essential to recognize these groups – hunters, stockbreeders, veterinarians, town councils – as valid conservation agents to create alliances with on the basis of shared interests, in short, as the real managers and stewards of the natural European legacy.

To promote this scenario, it was necessary to search for new strategies and tools to boost, as fast as possible, the active participation of rural collectives. The most successful strategies were based in the search for rural interlocutors and in the development of the *Networks for threats management*, composed at the same time for other social networks led by local actors who promote and channel actions against threats in the reintroduction area.

Example 1: “The Network of Municipalities against Poisoning (NMAP)”. In the frame of the aforementioned LIFE project, the authors developed the “*Network of Municipalities against Poisoning (NMAP)*”, a land stewardship agreement based in a commitment of the municipalities of the project area to fulfill 10 points on illegal poisoning fight being provided, with free legal, environmental and technical advice to efficiently fight illegal poisoning and related problems in their territory. By officially passing the agreement in the town plenary meeting, the municipality joins the NMAP and the aforementioned free services are provided. As an example of the level of commitment achieved by joining the NMAP, joining municipalities should act as private prosecutor in any trial related with illegal poisoning occurred in its territory (e. g. against one of its inhabitants), an initiative with no previous cases.





The agreements were promoted and signed during 2007 and 2008 by all the 32 project area municipalities covering 575.680 ha of high rural and natural value mountainous landscape where Bearded Vultures of the reintroduction project are yearly released. The development of the NMPA provided anti-poisoning actions with high quality and first-hand feedback on illegal poisoning trends and motivations. One of the most outstanding successes of the Network was achieved in 2009 when the first illegal poisoning case occurred in a NMPA member territory. For the first time in Europe, the municipality acted as private prosecutor against the alleged poisoner, a local stockbreeder who was eventually found guilty and was sentenced with 18 months of imprisonment (the 2nd highest sentence for this crime in Spain ever). The case had full media coverage at national level, including public statements of hunters and stockbreeders supporting the sentence, giving the NMPA goals and the project objectives an unparalleled public prominence. Other goals achieved was a protocol for the municipal police regarding how to act in a supposed poisoning episode, that was legally passed by all the NMPA members, or a leaflet intended for pet owners regarding what to do in a poisoning case, issued and distributed in all the veterinarian clinics of Andalusia in cooperation with the Andalusian Council of Veterinarian Associations (CACV).

Example 2: The “Action plan for the promotion of lead-free ammunition”. Other example of this innovative approach is the “Action plan for the promotion of lead-free ammunition”. The Plan targeted, among other goals, to achieve a voluntary and permanent shift from lead ammunition to free-lead ammunition on the big game hunting collective of the project area. The results of checking the availability of free-lead ammunition shows that there is enough supply of free-lead bullets in the market. However, the ignorance both of the lead-free ammunition existence and the environmental and health effects of lead bullets in the local hunting collective (as well as its reluctance to switch to an unknown kind of ammunition), were major obstacles against this switch. Moreover, the cost of lead-free bullets, mainly copper based, is only slightly higher than lead bullets. The effectiveness of lead-free bullets was personally tested on big game hunting by some of the authors, providing excellent results.



One of the premises of this approach was the belief that the local hunting collectives were able to understand, support and leader this ammunition shift if they were given the opportunity to try themselves the new ammunition and take part in the decision process – something considered as critical for the acceptance of the conservation initiative. To achieve this goal, instead of center the message and actions on spread the *problem* among the hunters, the message and actions were centered in the *solution*.

During 2009 hunting season, some national level ballistic experts were invited to take part in testing lead-free ammunition in the area of the project. The objective was to somehow certificate from within the hunting group the good suitability of the lead-free bullets to hunt different big game species. In the other hand the experts wrote some articles about their experience on national level specialized hunting magazines to spread the new bullets effectiveness among the collective, eradicating preconception and misinformation against free-lead ammunition.

Once performed this stage, several hunting associations of the project area were contacted to propose them to test with lead-free ammunition. This collaboration was framed in the “Program for the Improvement of the Hunting Management”, a land stewardship agreement implemented during previous years in hunting areas of the LIFE project reintroduction area. In the tests, hunters were provided with lead-free ammunition at no cost and, along the duration of the big game hunting day, one of the authors collected basic ballistic data (distance, caliber, etc.) and behavior of the piece shot, to quantify the good suitability of the new ammunition, having as result more than 100 samplings along the season. During these hunting days advantage was taken to raise the awareness of the hunters about the environmental and health problems related with lead intoxication. As result of all tests, hunters expressed their satisfaction with the new ammunition and their will to promote its use among the associates.



The European Commission has awarded in 2011 the LIFE project “Preliminary actions for the reintroduction of the Bearded Vulture in Andalusia” with the award “Best LIFE projects 2010”. The project was cofinanced by the European Commission (75%), having as beneficiary the Gypaetus Foundation and as partners, the Andalusian Ministry for Environment (Consejería de Medio Ambiente de la Junta de Andalucía), the Union of Small Farmers of Andalusia (UPA-Andalusia) and the Hunting Andalusian Federation (FAC).