

conservation. Education programmes and eco-tourism are increasingly being used as ways of developing tolerance for endangered wildlife outside protected areas. Participation of communities in decision-making, conservation strategies to reduce conflict and consumptive use of wildlife outside protected areas have also been attempted with various degrees of success. However, methods of providing benefits to communities and interacting with them need to be widened beyond eco-tourism. For example, livestock vaccination campaigns aimed at reducing transmission of disease to wildlife result in an immediate health and economic benefit to the local community and provide a vehicle through mobile clinics and health support for effective public education.

Our interest on the subject of carnivores and the local community arose from our surprise at finding in the Bale Mountains of Ethiopia an apparently peaceful coexistence between the rare Ethiopian wolves (*Canis simensis*) and the Oromo shepherds, their livestock and dogs. The main aim of our conservation programme for the Ethiopian wolf was to strengthen that relationship, compelling us to determine how to translate our scientific knowledge into action, how to overcome the practical difficulties of knowledge barriers and the differences in human attitudes between the recipient countries and countries which supply the funds and scientific background. In this paper we suggest reasons why large carnivores frequently find themselves at the wrong end of the stick, we look at the importance of community involvement and education in carnivore conservation programmes and consider the role of disease transmission and prevention in carnivore conservation using our experience in Bale. Furthermore, we review the relative success and approaches of working with the local community to protect a critically endangered carnivore from persecution and disease. We also review a variety of other examples where the community approach has, or could be attempted, ranging from the Arctic to the equator, from polar bears to Asian lions.

## Reintroductions

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The problems met in reintroduction programmes of carnivores differ from those of herbivore or bird reintroductions in three aspects: (1) the eradication of carnivores was often the result of a conflict with humans (menace to humans, competition for game with hunters, depredation of livestock), and their reintroduction causes massive controversies; (2) although many carnivore species are rather tolerant towards habitat quality – as long as there is an adequate prey base – a viable population needs extended living space, as the abundance of carnivores is generally low; (3) carnivores are elusive animals, and to monitor the progress and the success of a reintroduction programme is a difficult, expensive, and long-lasting task. In spite of the fact that over the past 30 years many carnivore reintroduction projects have been carried out in Europe, North America, or Africa, we have little knowledge about the final outcome and the factors determining the success or failure of a programme. In this paper, we review the criteria identified as important for a successful reintroduction from theoretical works and recommendations for the categories “environmental conditions”, “intrinsic population factors”, and “conflicts with humans”. We review the influence of these factors for the progress of sufficiently documented reintroduction projects, in order to rank and to discuss their significance for carnivore reintroduction programmes. For large carnivores, conflicts with humans (depredation and competition to hunters) seem to be the most important hindrance for a successful reintroduction, whereas for smaller carnivores, demographic factors and the quality of the living space are more important. However, for many carnivore reintroduction programmes at present classified as successful, the information is too sparse or the time since releasing the animals too short to allow us to judge the viability of the population.