

vicuña conservation and sustainable use

The vicuña, writes **Cristian Bonacic**, is giving conservationists more questions than answers. He provides us with an update on the situation in South America and offers interested readers an opportunity to experience working with these wonderful animals at first hand.

We are all familiar with the vicuña (*Vicugna vicugna*) the smallest wild counterpart of the llama and alpaca. We all suspect they remain in the wild and from time to time a little bit is heard about people using them in a sustainable way. But, what is a sustainable way? Currently a simple answer is not possible. The vicuña is facing a difficult and somewhat controversial path. In some areas of the Andes is being captured, sheared and released back to the wild. This is a way of management that tries to emulate the ancient chaku technique that the Inca Empire developed to utilise this sacred animal. In some other areas people are fencing plots to enclose vicuñas as if they were domestic livestock. Moreover, vaccinations, deworming and even breeding selection for fibre production are now a real possibility in the schedule of the vicuña management. Behind this is an economic interest in its fine fibre because a kilo of the 'golden fleece' can easily cost £200 to £300 in the European market. Indeed, this is a 'golden fleece' for poor local communities who earn less than £300 per year.

The international conservation media is taking the vicuña as an example of people protecting wilderness while obtaining an economic benefit. Conservation groups, governments and politician are desperately looking for positive messages about sustainable conservation. The vicuña is indeed a species that can be conserved in large areas by sustainable use, the problem is what is sustainable use? Where do you set the limits for sustainable use? Even in the local scientific community you cannot find a single position about the vicuña conservation. Some scientists are promoting captive breeding, the use of sophisticated artificial insemination, hormone control, crossbreeding vicuñas with alpacas and nutritional management (flushing) to increase fertility. Others are against captive breeding and any kind of management that drives the vicuña into the list of domesticated species. Domestication is not possible in the short term. The lack of understanding of many people about



'Vicuña management is one of the most curious cases of selection by semi-civilised people, or indeed by any people. The Incas sheared the wild guanaco and vicuña; the old male and females were killed, and the others set at liberty; the young animals selected from the most beautiful and strong were given their freedom. Here then, we have selection by man aiding natural selection'

how domestication is produced – a slow and progressive change of behavioural and physical traits after hundreds of generations – does not contribute to the discussion or clarify the controversy.

Where are we now, then? There are nearly 250,000 animals estimated by not very precise population censuses with more than 60% located in Peru and in lesser numbers in Bolivia, Argentina, Chile and Ecuador. The market and international regulations (CITES mainly) allows the trade of vicuña fibre and products derived from vicuñas sheared alive either to Europe or the USA with no quota or any other restriction. The problem is that CITES and the US Fish and Wildlife Service do not make any distinction between a kilo of vicuña fibre sheared from a wild animal living in open and protected environments with community based management practices from a privately owned farmed vicuña with no clear benefit to

conservation. The questions are:

If I can keep a vicuña in a corral for my own benefit, feed the animal with alfalfa and take care of the herd as a llama herd, why should I conserve the vicuña in the wild?

How does a captive vicuña even outside the natural ecological range of the species contributes to conservation?

Is this economically viable and convenient for local communities who traditionally herd domestic camelids with no fencing in the altiplano?

Vicuñas in captivity are no bad thing as such; the problem is the argument that captive breeding is the way of conserving the species and its environment. Confusion about conservation and economic interest is driving the vicuña into a scenario where current and future decisions are more driven by profit than ecological principles.

Farming of vicuña aims to develop a new animal production system to produce fibre and to promote small captive farming units throughout the Altiplano varying from less than one hectare to 30–50 hectares. Captive management units or semi-wild management although less intensive than farming constrains the

animals' movements and sets a limited space for the animals to graze and reproduce. However, the decision to promote captive farming does not take into consideration the following:

- The evolutionary consequences of captive farming.
- The image of such a programme world-wide in terms of the conservation value of such an approach.
- Animal Welfare concerns about captive farming as a way of exploiting a wild animal.
- Ecosystem conservation to avoid overgrazing of the altiplano.
- The risk of disease transmission between captive vicunas and wild vicunas and a closer contact with domestic livestock may also increase inter species diseases.
- The local peoples' wishes and perception about wild and domestic animals.



Photo: Robert Lenk

The harvest of vicuña fibre could potentially be one of the few instances where a wild species has the potential to meet the stringent criteria of sustainability if managed with animal welfare in mind. However, it is not clear now whether the future direction of the programme will meet truly sustainable criteria if no distinction is made between managing the animal in the wild or in captivity.

The vicuña plays an important ecological role as one of the main large herbivores of the low productivity grassland of the central Andes. With the assistance of an extensive conservation programme, the vicuña should recover its role as key species of the Puna and potentially become a valuable resource for local people in the Altiplano. However, before sustainable use can begin, factors such as the ecological constraints on the species and its habitat should be considered. In particular, the effects of shearing on population changes after large-scale captures needs to be addressed.

Animal welfare, though not yet identified as a priority in conservation projects, could become a key area in the future if exploitation activities are unregulated, resulting in public concerns about perceived unnecessary cruelty or bad management practices.

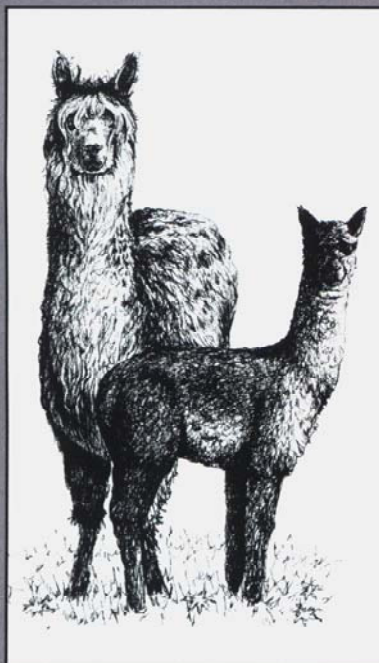
The development of a sustainable system of management for the vicuña is a potential alternative for land use in the marginal ecosystems of the South American Andes. Currently, it is not clear whether promoting captive farming will guarantee conservation of the species or be internationally accepted as a valid tool. It is also a matter of debate whether the end point of any programme should be captive farming. I believe captive farming was not the premise upon which we sought and gained the support of the international community and the future path for vicuña conservation should consider ecological and welfare aspects as well as economic and social ones.

Dr Cristian Bonacic is DPhil from Oxford University and has worked in the Conservation of South American Wild Camelids since 1986. He created Fauna Australis (www.fauna-australis.puc.cl) in 2001, a wildlife conservation research group in Chile aiming to promote wildlife conservation and animal welfare. Dr Bonacic chairs The SSN South American Board and is an active member of The Wildlife Trust Alliance as conservation medicine coordinator. His current research

is about animal welfare standards for the sustainable use of the wild camelids funded by a European Union project (www.macs.puc.cl).

Fauna Australis own two experimental herds with guanacos for teaching and conducts research in vicunas and guanacos in the wild which can be joined by camelids breeders within 'The Fauna Australis scientific expeditions'. For more information please contact Dr Bonacic at Bonacic@puc.cl

NOT EVERYTHING ABOUT OUR ALPACAS IS BLACK AND WHITE.



In fact, at Lightfoot Alpacas you'll find most other colours available.

Chilean and Peruvian colours are our speciality, and we are currently offering over 130 blacks, fawns, browns, greys and whites from stock.

Call Graham or Barbara at anytime....



Lightfoot Alpacas

07802 263589
www.alpacabreeder.co.uk