

## **AAWV NEWSLETTER**

### **INTERNATIONAL HIGHLIGHTS**

#### **Wildlife Conservation and Veterinary Sciences in Argentina**

How can veterinary sciences contribute to wildlife conservation? That was my question eleven years ago when I finished my graduated studies and no course or research project on this subject was being developed at my university. Nevertheless the authorities were interested in linking veterinary with wildlife and ecological sciences. We first thought that wildlife health was the only way. But we have been learning that two other ways exist: education for range management and wildlife ranching. We are trying to develop all these ideas in the Natural Resources and Sustainability Section of a College of Veterinary Medicine located in the center of Argentinean Pampas. This plain, fertile region has strong agricultural and livestock production activities that led to a replacement of its natural grasslands by pastures or crops on about a 70 % of its area. Native grassland are associated with flooded zones where cattle is bred for calf production. Based on these grasslands, an important part of Pampas' biodiversity waits for help... An extraordinary community of aquatic and grassland birds, including swans, rheas and flamingoes, are present here, as well as capybaras and pampas deer, although this latest species having only about 250 individuals remaining in the whole region. Jaguars, pumas and guanacos are now extinct.

About 60 % of the vets that study at this university develop farm and ranch activities, as large animal practice or animal production professionals. In Argentina veterinarians usually manage many of these lands where biodiversity and production are combined in one landscape receiving the consequences of proper or incorrect range management. This was the reason why we are giving a high input in teaching how to use rangelands not only for veterinarians but also for rural schoolteachers than show children, the future managers of these lands, how to produce in a sustainable way. Thus we developed a course of Ecology and Sustainable Agricultural Development that includes contents of energy efficiency, nutrient flows, population and communities dynamics, herbivory, values of biodiversity, grasslands ecology and management, sustainable wildlife ranching, hidrology and erosion, sustainable use of ponds for sport fishing and agroecosystems planning.

As in South Africa, wildlife ranching is another way of protecting wildlife. We are studying diet overlap in cattle, sheep and rheas as well as rheas health problems so that to develop rearing extensive production systems based on combined foraging systems. Economic use stimulates rearing protection and production by landowners and promotes wild habitats conservation. The same objectives are being developed in other parts of the country with species as guanacos, capybara and yacares (native crocodiles).

If range management and alternative production systems don't give economic revenues, the future of this lands is only one: economic pressure leading to a high input agriculture (even in lands with no aptitude for being culture) leaving a very low biodiversity status and the extinction of many wildlife species.

Finally, the last 10 years we have been working on wildlife health through non-invasive methods such as bone pathology and parasitological studies in species like pampas deer, guanacos, marine mammals and huemul. We have also collaborated with a national program for monitoring agricultural toxic compounds.

The WCS Field Veterinary Program give a high input in the study of wildlife health problems particularly in Patagonia and we have been collaborating with it.

Our current priorities in wildlife health are to capacitate vets and to plan a ecosystem monitoring system through wildlife health so that to analyze the whole events from the field work and biomedical results interpretation up to the possibility of analyzing them through mathematical modeling.

These three ways for contributing to wildlife conservation are being developed together for trying to reduce economic pressures on our natural treasures. The challenge is not easy... But we still have hope....