

More than Cashmere: Engaging herders and buyers in Wildlife-Friendly Certification to help save endangered Andean Cat in Patagonia.

Abstract

Arguably the main threat to Patagonian ecosystems is human-wildlife conflicts. Goat herders (*crianceros*) kill animals that threaten their subsistence goat husbandry, including the endangered, Andean Mountain Cat (*Leopardus jacobita*). Current conservation strategies focus on providing tangible benefits to *crianceros* to prevent Andean cat extinction through Wildlife-Friendly Certification of cashmere. Future efforts to continue this market-based strategy need to understand what drives *criancero* participation and how to increase demand options for wildlife-friendly products.

Report

Leveraging market forces to empower local communities to conserve nature can have long-lasting effects on the conservation of wild landscapes like Patagonia (Southern Argentina). Here, biodiversity is intimately linked to local people (*crianceros*) whose traditional livelihood systems focus on small-scale herding of goats and sheep produce cashmere, wool, and mohair. Patagonian ecosystems are arguably most threatened by human-wildlife conflicts. Ranches are often overstocked and attract native predators, causing an increase in contact rates between wild cats and the overabundant prey (livestock).

Conservation efforts have focused on providing benefits to herders to avoid population decline and avert extinction of wild cats. In 2011, cashmere herders obtained the Wildlife Friendly Certification from the Wildlife Friendly Enterprise Network. This certification “promotes products and practices that conserve threatened wildlife, while contributing to the economic vitality of rural communities”. Participants commit to not kill native carnivores in return for technical assistance to improve their herds. As a result, some herders have been able to maintain and even improve their goat-centered income. This strategy has been successful at increasing market access of wildlife-friendly cashmere and decreasing hunting of Andean Cats and Pumas. Nonetheless, this arrangement remains fragile, and we intend to solidify it.

Future efforts that will help ensure the continuation of current market-based strategies to promote wildlife-friendly cashmere need to better **understand what drives project participation as well as understand decision-making processes of buyers**. Understanding the perceived benefits and motivations of local cashmere producers will help ensure long-lasting continuation of benefits at the local level, which will in turn maintain the production of raw material. Similarly, understanding the demographics and attitudes of manufacturers who buy processed cashmere fiber will help project directors focus market efforts in product promotion. Consequently, exploring buyers’ behaviors can help increase demand options.

Through this research, we will provide key data for a community-based project that attempts to concurrently improve livelihoods and conserve wildlife. The Wildlife Conservation Society (WCS) has spearheaded this initiative since 2011 and our findings will raise the odds of success and continuance

of this wildlife-friendly initiative. Once we complete data collection, we will provide preliminary results, information, and conclusions to WCS-Argentina. Our first research question intends to provide useful information for creating project incentives that retain current herders as well as incorporate others. Our second research question aims to generate insights and guidance regarding buyer behavior and preferences to more effectively target buyers, improve products and services, and expand WCS project directors' knowledge base in the field of markets.

Field surveys. Starting June 2015 in the province of Neuquén (population centers of *Loncopue* and *Rincón de los Sauces*), we will engage local cashmere producers that participate and do not participate in the market-based strategy implemented by WCS and identify: *What perceived monetary and non-monetary benefits and costs are related to project participation?* Crianceros will be asked to free list both monetary and non-monetary benefits and costs of cashmere production. Our goal is to interview the whole population of participant herders (12 herders) and a random sample of non-participant herders using a pair-matching design (i.e. the number of surveyed non-participants will equal the number of surveyed participants). Non-participants will be selected from areas of conservation importance for the Andean cat. Secondly, we will engage cashmere manufacturers from Neuquén and Buenos Aires to better understand: *What are the buying processes and buyer preferences of local and regional manufacturers?* We will carry out interviews to explore which manufactures buy animal fiber, when, and how; and find opportunities for cashmere fiber commercialization. We will use snowball sampling to locate manufacturers that are currently purchasing or might be potential buyers of certified cashmere fiber. Snowball sampling is a non-probabilistic sampling method in which the researcher chooses initial respondents and asks them for additional respondents, such that the initial sample group grows like a *snowball*. These research methods will allow us to explore information about current and potential buyers' attitudes, perceptions, product choice, brand choice, and purchasing decisions (frequency and amount).

Data analysis. We will use descriptive statistics to identify quantities of production and reveal herder demographics (e.g. age, size of land, number of goats, education level, gender). Descriptive statistics are appropriate since we will interview all participating herders. Data obtained through free listing will be analyzed to highlight the importance and salience of benefits and costs, by showing the frequency and the moment (by measuring the average rank) each benefit and cost appears on the list. The data collected from manufactures will be analyzed through categorical and ordinal methods. These methods are recommended for Likert-scaled data (i.e., strongly important, somewhat important, neutral, somewhat unimportant, not at all important). Thus, the data collected will be organized into coherent categories to identify patterns or relationships among categories such as purchasing power, quality perception, or product availability. Additionally, descriptive statics will be employed to present the information, for instance, in a frequency table (this table will allow us to present buyer's preferences) and Pareto's diagram (this diagram will allow us to see which factors are most important in a situation when buyers choose not to purchase cashmere).