



Celebration of the International Year of Camelids in Santa Catalina, a pastoral community in the Andean Altiplano of Jujuy, Argentina

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ABSTRACT

The United Nations (UN) declared the year 2024 as the International Year of Camelids (IYC), a term that includes both Old World camels and South American camelids. The official organization of the celebrations was in charge of the Food and Agriculture Organization (FAO), and local events were also encouraged to take place. In this context, in the Andean pastoral locality of Santa Catalina, Jujuy, Argentina, the Community Council (which is comprised of three local indigenous communities), together with the VICAM (“Vicuñas, Camélidos y Ambiente”) ethnobiology research group, planned to perform different activities to celebrate the IYC as well as to highlight the community’s livelihoods and the vital role of camelids, especially llamas, in their local culture. This work aimed to address the study of the valuation of camelids through the analysis of the activities and narratives that occurred in the context of the IYC celebrations in Santa Catalina. The activities involved different events conducted in the educational community, as well as with the entire town, engaging all the community from children to the elderly, and involving various local institutions. The results of our study reflect the diverse and multiple valuations of camelids, including their instrumental value as weaving material or for food sovereignty, intrinsic value in ceremonies, and relational value associated with life story narratives and childhood affection, among others. This work highlights the appropriation by an Andean community of an annual commemoration based on a UN resolution and aims to make visible their animals and livelihoods.

Keywords: International Year of Camelids, Plural valuations-Celebrations, Altiplano.

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SIGNIFICANCE STATEMENT

This paper documents the celebratory activities carried out in Santa Catalina, a small pastoral community in the Andean Altiplano of Jujuy, Argentina, by the Indigenous Community Council and the VICAM (“Vicuñas, Camélidos y Ambiente”) research group to celebrate the International Year of Camelids declared by the United Nations. The results obtained highlight the importance of local knowledge about these animals and their role as biocultural components of the Andean altiplano socio-ecosystem. The activities described show a strong identity importance of camelids in the local worldview, in addition to the diverse and multiple valuations of these animals in terms of their intrinsic presence, instrumental value as a material contribution to good living as food and fiber, and relational value, from the inspirational and affective role of camelids in the livelihood of local people. The paper also highlights the significant role of ethnobiology research in making valuable contributions to preserving biocultural diversity and biodiversity conservation.

INTRODUCTION

The special international observances by the United Nations (UN) are occasions to mark particular events or topics to promote the objectives of the organization, through awareness and action. In 2017, the Government of the Plurinational State of Bolivia proposed the year 2024 as the International Year of Camelids (IYC). The proposal was approved by the UN General Assembly in resolution A/RES/72/210, and the Food and Agriculture Organization (FAO) was invited to organize and implement the IYC.

This resolution encompasses all members of the family Camelidae, including both Asian and African or “Old World” camels, which include domestic camels (bactrian camels (*Camelus bactrianus*) and dromedary camels (*Camelus dromedarius*)) and wild camels (*Camelus ferus*); and South American or “New World” camelids, which include wild camelids (vicuñas (*Vicugna vicugna*) and guanacos (*Lama guanicoe*)), and domestic camelids (alpacas (*Vicugna pacos*) and llamas (*Lama glama*)).

The UN resolution states that “camelids constitute the main means of subsistence for millions of poor families that live in the most hostile ecosystems on the planet, and contribute to the fight against hunger, the eradication of extreme poverty, the empowerment of women and the sustainable use of terrestrial ecosystems”. It also recognizes that “these species are an important element of the cultural and spiritual identity of ancestral indigenous peoples, constituting an important social basis of the traditional and contemporary knowledge of these peoples, who have maintained, preserved and protected genetic biodiversity”. It also highlights that camelids are “a main source of protein, fiber for clothes and fertilizer for agricultural production, and that they serve as pack animals, transporting people and products in Indigenous communities throughout the extensive Andean highlands of South America, as well as through deserts in Africa and Asia”.

The resolution includes the instrumental, intrinsic and relational values of camelids. According to

Arias Arevalo et al. (2017), instrumental values are those of an entity as merely a means to an end; intrinsic values are those of nature, ecosystems, or life as ends in themselves, irrespective of their utility to humans; and relational values are those related to the importance attributed to meaningful relations and responsibilities between humans and between humans and nature. The UN resolution highlights the intrinsic value of camelids for their unique adaptations to harsh environments, their instrumental value as a material resource for humans, and their relational value as components of local cultures.

Since the IYC was proposed by Bolivia, which is a Plurinational State that incorporates “indigeneness” as part of its foreign policy (Querejazu 2015), the UN declaration of the IYC has a spirit attempting to incorporate indigenous peoples and local communities (IPLC) and their knowledge in the path to sustainability. However, UN declarations usually reach countries only through official national government mechanisms by foreign ministries or subnational political authorities and agencies, in a top-down mode that usually excludes or disregards the people of the territories where the owners of the good being celebrated (in this case, camelids) live. The IYC was not an exception, since most of the celebrations were planned to take place in governmental agencies and academic institutions. In this context of limited community participation, the experience of our research group, the VICAM (“Vicuñas, Camélidos y Ambiente” –Spanish for “Vicuñas, Camelids and the Environment”), provides a framework to present a place-based event.

As researchers, we have been studying the South American camelids and pastoral communities that live in the Puna or Altiplano of Jujuy province, Argentina, for several decades. Our work includes studies on the ecology (Arzamendia et al. 2018; Arzamendia et al. 2020a; Vilá and Arzamendia 2020b), conservation (Arzamendia et al. 2021; Vilá et al. 2010; Vilá and Arzamendia 2020a), sustainable use (Arzamendia et al. 2010; Arzamendia and Vilá 2012; Arzamendia et al. 2020b; Lichtenstein and Vilá 2003; Marcoppido et al. 2017, Vilá et al 2020; Vilá and Arzamendia, 2022),

and ethnobiology and education (Vilá 2015; Vilá and Arzamendia 2016; Vilá 2018; Vilá et al. 2020; Vilá et al. 2022a, 2022b; Vilá et al. 2023; Wawrzyk and Vilá 2013) of llamas and vicuñas.

The results of these previous studies highlight the fact that South American camelids are an essential part of the biocultural heritage of the Altiplano socio-ecosystem (Arzamendia et al. 2021; Vilá 2014, Vilá and Arzamendia 2020a). The collective identity of camelid herders in the Altiplano is not exclusively related to the practice of breeding animals as an economic activity, but also includes a social and symbolic dimension in specific historical situations (Nielsen 2025), a biocultural heritage that the IPLC of the area want to preserve. As stated by Albuquerque and Alves (2024), preserving knowledge goes beyond simply documenting interrelations between humans and the natural world and requires researchers to engage in actions to empower the IPLC. To achieve this, ethnobiology researchers can use a transdisciplinary sustainable approach, which is a tool that strengthens the production of collaborative knowledge (Staffa et al. 2020) as well as the co-production of specific activities, which are intercultural events designed to achieve these objectives.

Because of this, the present work focuses on the desires and demands of the local community of Santa Catalina, a small Andean locality in the Altiplano of Jujuy province, as well as on their right, to celebrate the IYC, their emblematic animals, trying to address equitable partnerships with interpretive agreements (Ladio 2017). These desires to carry out territorial celebratory activities arise from the need to counter the ineffective incorporation and marginalization of local knowledge in the activities proposed by national and international organizations, as described by Ladio (2025). Recognizing that international celebrations refer to material aspects of nature or cultural activities, it is important to highlight in which places on the planet these celebrations are more identifiable, in our case the Pastoral socio-cultural landscapes. The Altiplano of Jujuy province can also be understood as a socio-ecological productive landscape (SELP), a key concept in the Satoyama Initiative (a global initiative based on the traditional rural landscape which encourages the integration, conservation and sustainable use of biodiversity in production landscapes). This initiative, first proposed at the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity in Nagoya, Japan, is a global effort to establish “societies in harmony with nature” through landscape approaches. Because of this, for the celebrations of the IYC in Santa Catalina, we were able to obtain funding from the Satoyama Development Mechanism, a mechanism of the Satoyama Initiative that provides the perfect flexibility to meet communities’ needs and

develop these activities and celebrations.

Based on all the above, this work aimed to document the activities proposed by the Indigenous Community Council of Santa Catalina and the VICAM research group to celebrate the IYC. It is important to point out that in this Andean community, local forms of indigenous governance, particularly the existence of the Community Council, are notable. To this end, we worked with a transdisciplinary sustainability approach, which integrates knowledge from various academic fields and societal actors to address complex, real-world sustainability challenges (Reed et al., 2023). In addition, our study aims to highlight the community’s appropriation of a global event transformed into intercultural events.

We hypothesized that, in the celebratory activities of the IYC proposed by the Santa Catalina community, valuations of camelids as well as of nature emerge through discourses and activities, being these expressions inputs for ethnobiological qualitative research. We propose the existence of diverse and plural valuations of camelids that relate to the pastoralist livelihood resilience in the face of the challenges of today’s world.

Although this work was carried out in a specific temporal and geographical context (a thematic international year in a particular Andean locality), and thus lacks reproducibility, we assert that it can show some patterns that can be extrapolated to other years/territories as general activities for the conservation and valuation of biocultural heritage.

MATERIAL AND METHODS

Study site: Santa Catalina

Santa Catalina (21°56’47.47”S, 66° 3’7.32”W) is a small locality founded in the 17th century, located in the Biosphere Reserve of Laguna de Pozuelos (MAB-UNESCO) at 3800 m a.s.l. in Jujuy province, Argentina, and is the northernmost town of Argentina, close to the border with the Plurinational State of Bolivia (Figure ??). In this area, the main species of camelids are wild vicuñas and llamas (there are no guanacos or alpacas).

The region was previously occupied by pre-Hispanic communities, as evidenced by petroglyphs depicting camelid iconography found in the area (Yacobaccio et al. 2021). Santa Catalina serves as the center for administration, politics, healthcare, commerce, religion, festivities, and education for the surrounding rural areas. The entire department of Santa Catalina, with an area of 2,937 km², is home to approximately 2,600 people, with a population density of 0.9 inhabitants per km², the third lowest in the province of Jujuy. Approximately 300 people live in the town of

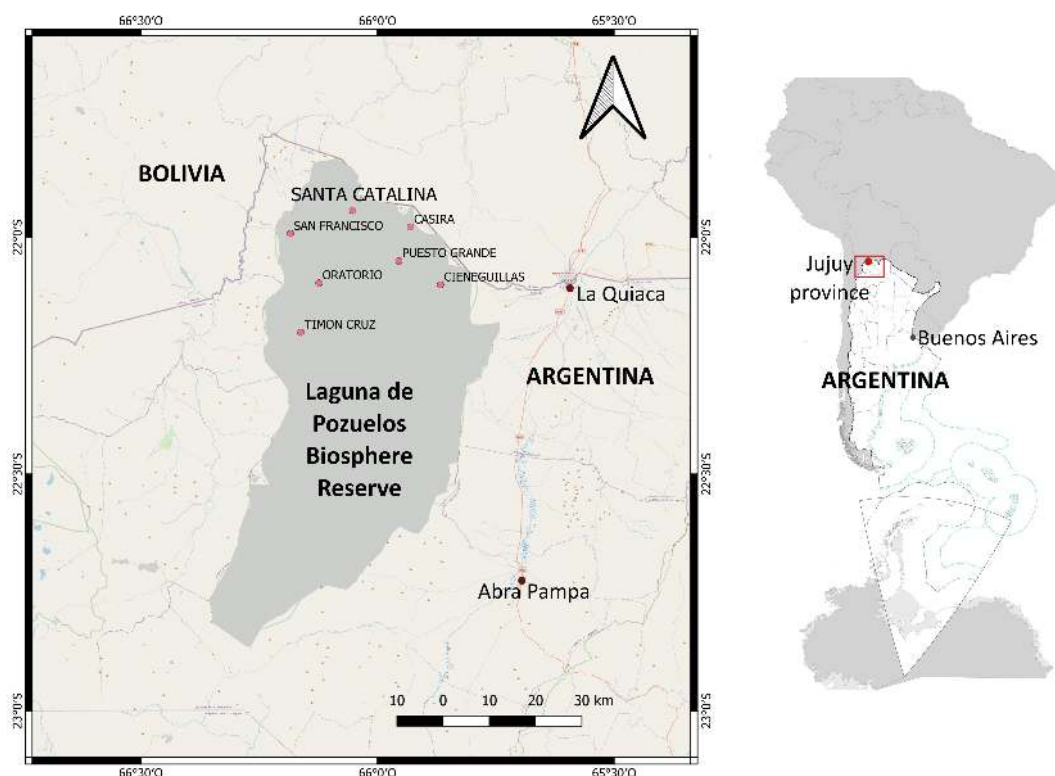


Figure 1. Map of northwestern Jujuy, Argentina showing the location of Santa Catalina (close to the border with Bolivia), the neighboring communities, and the Laguna de Pozuelos Biosphere Reserve (MAB-UNESCO).

Santa Catalina. Nearly 24% of households have unmet basic needs, and many people (updated statistical data are unavailable) receive government subsidies, state assistance through programs such as home-based food supplements and school meals for children. The primary sources of income in Santa Catalina include llama and sheep breeding for fiber, leather, and meat, and state employment.

The community of Santa Catalina includes three officially recognized Indigenous groups in their territory: Peña Colorada-Canchillas, Aucapiña Chambi, and Atu Saphis, which have joined together to form the Community Council of the Town of Santa Catalina.

Santa Catalina has two schools: an Elementary School (N°18 G. Rondeau) and a High School (Escuela Polimodal N° 7 “Santa Catalina”).

The importance of llamas in the community: The Ashka Llama festival

An important celebration annually held in Santa Catalina is the Ashka Llama festival.

Description: Ashka Llama is a term in Quechua (an indigenous language widely distributed in the Andes, including, but not limited to, the Altiplano), which can be translated as "many llamas". The

Ashka Llama festival is an expo-fair showcasing different types of llamas (the main domestic camelids in the area) annually held in Santa Catalina during the celebrations of the town's Patron Saint. It has been taking place since 2013 and is inclusive, participatory and with a strong cultural identity, involving actors and institutions committed to an Andean territorial development. The Ashka Llama fair not only allows the exhibition and sale of the llamas of the Argentine Puna, but is also an important celebratory event of llama herders and an Andean community gathering.

Institutions: The institutions involved in the Ashka Llama festival include the Municipal Commission of Santa Catalina (Department of Rural Development), the Corporation for the Development of the Pozuelos Basin (CO.DE.PO), and the National Institute of Agricultural Technology (INTA), the latter of which is an institution that provides advice and support for sanitary and reproductive livestock management and plays a key role in transporting animals from the herders' fields to the fair and back, as well as in donating prizes and serving on the jury. In addition, Provincial authorities, local radios (Santa Catalina and La Quiaca), the Secretary of Production, the Secretary of Culture and the Secretary of Livestock Development of Jujuy Province, the National Service of

Animal Health (SENASA), the National University of Jujuy, the Council of Aboriginal Organizations of Jujuy (COAJ), the VICAM ethnobiology research group, and the National Scientific and Technical Research Council of Argentina (CONICET) are also involved in this important local festival. The Community Council of Santa Catalina participates actively. In addition, some neighboring communities, such as El Angosto, La Ciénaga, Oratorio, Cabrería, San Juan y Oros, Timón Cruz, and San Francisco, are also involved. In 2017, Santa Catalina authorities and the VICAM research group applied for and received the declaration of "National Interest" for the Ashka Llama from three state institutions: the Ministry of Culture (017-1549-APN-MC), the Senate (S-2619/17), and the Chamber of Deputies (3292-D-2017). All three declarations highlight the fair's multisectoral, scientific, intercultural, and educational significance.

Arrival and housing of the animals: Llamas that enter the fair must comply with the requirements established by the control agencies. The animals arrive at a site with corrals specially designed for their exhibition. The space is approximately 350 m² and includes 12 corrals of 3x4 m to house 10 llamas each.

Stand space close to the corrals: The INTA Abra Pampa Cooperation Association, the CO.DE.PO, the Association of Municipalities of the Puna, the Department of Rural Development, the Provincial Directorate of Livestock Development, and the Jujuy Camelids Program usually mount "institutional" stands in the area. There are also stands selling local products such as ropes made of llama wool, ceramics and fabrics.

Collection of ethnobiological data

Ethnobiological data were obtained in 2024 during communal meetings and the different events performed to celebrate the IYC. Data were collected within a transdisciplinary sustainability science framework, where members of the Community Council of Santa Catalina decided on many of the activities in assembly, the educational community generated autonomous projects, and the VICAM research group facilitated tasks, recorded activities, and secured funding. We used an action research approach that integrated local knowledge, technical expertise, and scientific insights, while also co-producing artistic activities. We argue that this methodology effectively addresses complex sustainability challenges by actively engaging stakeholders in the research process (Reed et al., 2023).

To collect the data, during the different celebratory activities, we generated intercultural dialogs and exchanged information with several of the local actors involved, including:

a) The school community: Children aged from 4 to 13, who attend the kindergarten and elementary school, and students aged 13 and older, who attend the high school. Both schools operate full-time and provide meals. Some children, especially those who live far away, live at the school on a boarding basis during the week.

The elementary school, which is divided in seven forms, has one teacher for each form, in addition to special teachers for art and physical education. High school is divided into five years, with teachers for each subject. Teachers expressed that commemorative dates are significant within the educational agenda, and the school participated actively in celebrating the IYC.

b) Adults: The majority of the local population is Indigenous, known (and self-defined) as "Kollas". Some residents also speak Quechua. The primary economic activities in the area include livestock breeding (mainly sheep and llamas), employment in schools (with several teachers of indigenous origin), and government jobs.

c) Herders: The primary livelihood in the area is animal husbandry, particularly of llamas and sheep. Some herders spend the entire day with their animals and may return to town to sleep, depending on the distance they are from their herds.

The methodologies used to collect qualitative data included:

- 1) Performing *ad libitum* surveys during the different celebrations carried out to commemorate the IYC,
- 2) Observing participants during the celebrations,
- 3) Recording dialogs between participants,
- 4) Making specific questionnaires, especially regarding the evaluation and motivation related to the activities, and
- 5) Performing unstructured interviews and open surveys.

All the ethnobiological data collected were obtained under the code of ethics for research, research-action, and ethnoscientific collaboration in Latin America (Version two) of the Latin-American Society of Ethnobiology (SOLAE) (Cano Contreras et al. 2015). Informed consent was obtained verbally before participation. The consent was audio-recorded in the presence of an independent witness. In addition, verbally informed consent was obtained from the individuals (and their responsible adults in the case of children) for the publication of any potentially identifiable

images or data included in this article, especially of children. All the original words and dialogs (in Spanish) by the community members of Santa Catalina here presented were translated to English as literally as possible by the authors. It is important to point out that our research group has been working in the area for more than a decade and that we have thus established a very good and friendly relationship with local people.

The qualitative method used to collect ethnobiological data interprets the transcribed data, including thematic and content analysis (Carvalho Pires de Sousa et al. 2019). The process involved an analytical codification (in which we seek to apply criteria to refine the interpretation of the text, aiming at a deeper understanding of its content) for the detection of underlying valuations, such as: material importance (camelids' instrumental contribution as fiber or food sovereignty), nonmaterial importance (recognition of camelids particularities, esthetic appreciation, etc), and relationships associated with spiritual and artistic aspects and human well-being in general terms, among others.

Activities performed to commemorate the IYC

Five different activities were proposed to celebrate the IYC:

- 1) a workshop on the IYC with sixth- and seventh-form students at Santa Catalina Elementary School (in April),
- 2) an event at the stand of the National Scientific and Technological Research Council (CONICET) at the National Book Fair held in Buenos Aires city (with urban children and adults living way far from Santa Catalina) (in April),
- 3) a workshop on the IYC in both the Elementary and High Schools of Santa Catalina (in August),
- 4) celebrations co-organized by the Santa Catalina Community Council and the VICAM research group (in October), and
- 5) the Ashka Llama fair (in November).

The celebrations co-organized by the Community Council and the VICAM research group performed in October included the following activities: a traditional bonding ceremony, a spinning contest, a cooking exhibition of traditional dishes using llama meat and local products, preparation of llama meat sausages and charcuteries, and construction of a mural at the entry of the town. The mural was planned to show the typical landscape of Santa Catalina and the camelids (llamas and vicuñas) inhabiting it. The mural was a collective idea activity including the Community Council

and educational communities of both the elementary and high schools of Santa Catalina and other institutions of the town, including the political authorities. The VICAM group was committed to logistical, economic and participation aspects in the activities. It is important to point out that, in the history of our joint work with this Andean community, we have co-constructed numerous activities that have been described in previous works, such as a participatory calendar and the publication of a guidebook to local plant species.

The exact dates, locations, participants and main objectives of each of the celebratory activities performed to commemorate the IYC are summarized in Table ??.

Table 1. Summary of the activities carried out in 2024 to commemorate the International Year of Camelids.

Date/location	Activity	Main methods	Participants	Objectives
April 7th-13th Santa Catalina Elementary School	1) Workshop on the IYC with sixth- and seventh-form students	Observing participants. Performing open surveys.	School community (students, and teachers belonging to the indigenous community)	To introduce activities related to camelids. To make a craft with camelid fiber.
April 17th National Book Fair - Buenos Aires city	2) Event at the CONICET stand	Recording dialogs between participants. Making specific questionnaires.	General public. Urban children (three visiting schools and general public)	To introduce and familiarize urban children and adults with camelids
August 19th-24th Elementary and High Schools of Santa Catalina	3) Workshop on the IYC	Performing <i>ad libitum</i> surveys, unstructured interviews and open surveys.	Educational community, students, teachers, (two of them also members of the community council)	To present FAO's key messages related to the IYC
October 21st-27th Santa Catalina town	4) Local Celebrations of the IYC	Performing <i>ad libitum</i> and open surveys, observing participants, recording dialogs and unstructured interviews	Community Council. Local people (children, adults, elderly), Elementary and high schools, Town authorities	To develop five activities : 4.a. Bonding ceremony: Indigenous way to create an atmosphere of being together in harmony. 4.b. Spinning contest. To sustain the knowledge of spinning 4.c. Cooking exhibition with llama meat. To contribute to food sovereignty 4.d. Making llama meat charcuterie. To generate economic and food resources 4.e Construction of a mural. To artistically record the importance of camelids and their identity role.
November 24th Santa Catalina town	5) Ashka llama fair	Observing participants, questionnaires.	Llama herders, technicians, authorities	Llamas exhibition and selection of the best specimens through a jury panel. To carry out long-term genetic improvement of llamas.

RESULTS

Since FAO had a specific webpage for the IYC celebration activities and requested that each activity be recorded, links to the outcome of each activity are provided after their corresponding description.

Activity 1: Workshop on the IYC with sixth- and seventh-form students at Santa Catalina Elementary School. April 7th-13th, 2024.

The activity performed at the elementary school of Santa Catalina was a one-day workshop on camelids with 12 students from 6th- and 7th-forms, aged between 11 and 13 years old. First, children made articulated figures of camelids using templates to draw the silhouettes of vicuñas, llamas, and guanacos on cardboard and then glued llama fibers of different colors on some of them (Figure ??). In addition, children worked on identifying, from their worldview, the worthy causes that made the world want to celebrate the IYC. One of the questions we included in the questionnaires to collect qualitative data about this activity was: "Which do you think are the reasons for celebrating the year of the camelids?" In answer to this, one of the 7th-form girls expressed: "*I think it's the international year (of camelids) because camelids are cute, big, furry animals and give us many things.*" <https://www.fao.org/camelids-2024/events/event-detail/schoolchildren-and-camelids-in-santa-catalina-jujuy-argentina/en>

The girl's answer clearly identifies the relational value of camelids among children in Santa Catalina.

Activity 2: Event at the CONICET stand in the National Book Fair. Buenos Aires city, April 17th 2024.

The event at the Book Fair (which is an annual fair held in Buenos Aires city) took place in a thematic space dedicated to popularizing science, hosted by the Argentine National Council for Scientific and Technological Research (CONICET). There was a special day (co-organized with VICAM) dedicated specifically to camelids and four activities were performed (sensory experience, spinning technique, craft (model) and video exhibition) aimed to creating urban public awareness on camelids. We received students from three urban primary schools as well as visitors to the fair with their families. Over 50 children and adults (teachers, parents, general public) participated in the afternoon event. The presentation included interactive activities with school students from Buenos Aires (most of whom had never seen a camelid up close),

such as making them touch, feel and smell llama fiber (Figure 2b), and demonstrating how to spin llama fiber by using llama fleece and spindles, and concluded with a cardboard llama model-making activity. A video created by CONICET for the IYC was also showcased. <https://www.youtube.com/watch?v=UVj8qEBi5Xw>.

By comparing the two children's activities (activity 1 performed in the Puna and activity 2 performed in a large urbanized city far from Santa Catalina), which included some common materials and proposals, we found that the Puna children creatively crafted their articulated llamas by glueing llama fibers of various colors onto them and then "shearing" these llamas. They later used them to decorate their classroom walls. In contrast, only a few of the city children glued the fibers onto the cardboard figures because they were drawn to the fibers themselves, feeling their smell, texture, and colors. We gave them some fiber to take home, which they recognized as a valuable gift. Additionally, discussions about camelids, as those conducted in the city using digital presentations and videos, were unnecessary in Jujuy.

Activity 3: Workshop on the IYC in both the Elementary and High Schools of Santa Catalina. Santa Catalina, August 19th-24th, 2024.

These school activities included all students from both elementary school (52 children, 12 of whom had already participated in activity 1) and high school (24 teenagers). The main objective was to present the IYC using official FAO material (a presentation and a video in Spanish), showing the different types of camelids that exist all over the planet. One of the questions here included in the questionnaires provided to the children was: "Which of these camelids do you find most interesting?". The general answer was that the most interesting camelid was the dromedary, since this is an "unknown" species that can be ridden (Figure ??d).

One of the closing activities of this workshop was to decorate blackboards in the school's main hall with llama and vicuña drawings (Figure 2c). These decorations remained there for the rest of the year. Video: <https://www.youtube.com/watch?v=ccnzotps124&list=PLzp5NgJ2-dK5C0w5o16HgQVBbGKGY1QLo&index=3> <https://www.fao.org/camelids-2024/events/event-detail/school-and-community-activities/sff66931b-174f-412e-b3af-4bb4b42e19e6/en>



Figure 2. Photos illustrating the results of the activities performed to commemorate the IYC. (a) Cardboard articulated figures of camelids performed by elementary school children in Santa Catalina and a collage with these figures; (b) City urban children touching, feeling and smelling llama fiber, at the CONICET stand in the National Book Fair held in Buenos Aires city; (c) Decoration on the blackboard of Santa Catalina Elementary School; (d) High-school children from Santa Catalina and VICAM researchers at the celebration of the International Year of Camelids.

Activity 4: Local celebrations co-organized by the Santa Catalina Community Council and the VICAM research group. Santa Catalina, October 21st-27th 2024

As mentioned above, the Community Council, together with the VICAM research group, planned the following activities: a) a traditional bonding ceremony (as an opening ceremony for the rest of the activities), b) a spinning contest, c) a cooking exhibition of traditional dishes using llama meat and local products, d) preparation of llama meat sausages and e) construction of a mural at the entry of the town (Figures ?? and ??). As part of their commitment, the Community Council planned the activities and prepared a flyer with all the information, using the local colorful Andean esthetics (Figure ??). The VICAM group, together with the community, collaborated in advance in organizing the event and worked from morning to

night (more than 10 hours a day) for three consecutive days. The results of the four activities proposed are described below:

Activity 4a) Bonding ceremony.

In the Andean worldview of the Santa Catalina area, it is customary for the Community Council to conduct a bonding ceremony as the first activity during certain events. During this traditional ceremony, approximately 50 people meet and the participants feel and connect with the “Pacha Mama” (a quechua term meaning “Mother Earth”) for closeness and protection. All participants, forming a circle, are smoked with the smoke of the sacred plant coa (*Parastrephia* sp.) "for the cleansing of the soul" (Figure ??a). In the words of the Council leader: "During these days, we are going to share both scientific knowledge as well as ancestral and local knowledge. We are going to invite everyone to participate and to be part of it because 2024 will be the only international year of camelids, which are our animals". In addition, the female president of the Au-



Figure 3. Flyer with the general program of activities performed in October 2024 for the celebration of the International Year of Camelids, proposed by the Community Council of Santa Catalina and the VICAM research group.

capiña Chambi Indigenous Council said: “*Good morning everyone and thank you for participating in this day, which is the day of encounter with the camelids. I would like to welcome the researchers from the VICAM, and also thank them because they are the ones who told us that 2024 was going to be the international year of camelids. I ask the people from the communities who are already employees of the municipality to continue participating in the events that we organized, and I hope that we have three nice days and that everything goes well. Thank you all for being here.*”

Activity 4b) Spinning contest.

The first activity after the bonding ceremony was a spinning contest. This competition is a traditional annual event that has been held in Santa Catalina for several years, which has become very popular. As in previous versions of this activity, participants (39 in this opportunity) are classified into categories according to their age: children (9 girls, 3 boys), young people (6 teenage girls, 1 teenage boy), adults (13 women) and elderly (6 women, 1 man) (Figure ??b). <https://www.fao.org/camelids-2024/events/event-detail/santa-catalina-international-year-of-camelids-celebration--traditional-llama-fibre-spinning-contest/en>

One of the adult women who participated in the spinning contest expressed: “*I was born with llamas and I came here to Santa Catalina with llamas when I was 3 years old. I always wanted to have llamas. I started having llamas and they are beautiful and good, calmer than sheep. Llamas are much less work than lambs. You let them go and they remain there; they are calmer, kinder and bigger. I learned to spin when I was a little girl; that is why I like this contest that is held every year*”

Activity 4 c) Cooking exhibition of traditional dishes using llama meat and local products.

After the spinning contest, there was also a cooking exhibition of traditional dishes made with llama meat. A total of fourteen dishes, all prepared by women from the community, were received for the exhibition. The dishes presented included roasted meats and jerky (sun-dried meat or “charqui”), stew-like dishes, and soup-like dishes. There were also flan-like desserts with non-meat ingredients (such as quinoa). The dish most frequently presented was the “kalapurka”, which is basically a stew/soup that is sometimes heated before serving with one or more stones preheated over hot coals. Ingredients of the “kalapurka” include mote corn, llama meat (fresh or as jerky or charqui), pota-



Figure 4. (a) Bonding ceremony with the Council leader leading the event; local inhabitants of Santa Catalina connecting with the energy of the Pacha Mama (quechua term meaning “Mother Earth”) and being smoked with the smoke of the sacred plant coa (*Parastrephia* sp.); (b) Girls participating in the spinning contest; (c) Women from Santa Catalina who participated in the exhibition of traditional dishes using llama meat; (d) People from Santa Catalina preparing “chorizos” (sausages) made of llama meat.

toes, onions, garlic, and seasonings.

Mote almost always accompanies dishes with llama meat. It is a preparation of corn (*Zea mays*) kernels cooked with ash or lime, which dissolves the pericarp (in a process known as nixtamalization). They are then dried, after which they can be preserved for a long time and used in traditional dishes.

Another type of soup is the “machorra”, which is thicker because it includes toasted corn flour instead of mote corn. Llama meat was also used in empanadas (small pies), milanesas (breaded meat) and escabeches (marinated preserves). The jury of the contest was made up of members of the school community and the first prize was awarded to a woman who prepared “Cabeza guateada”, the Spanish name given to a meal in which the llama head is traditionally cooked in a mud oven (Figure ??c).

<https://www.fao.org/camelids-2024/events/event-detail/santa-catalina-international-year-of-camelids-celebration--cooking-competition-of-traditional-dishes-using-llama-meat/en>

Activity 4d) Preparation of llama meat sausages and charcuterie.

The day after the spinning contest and cooking exhibition, the following activity was a training course to learn how to prepare llama meat “chorizos” (sausages). A specialist in sausage production from the agricultural school of Abrapampa (a town close to Santa Catalina (Figure ??)) was hired to lead the training. Participants were trained on the preparation of various types of llama sausages. Participants were mainly women from the community (10 women and one man) (Figure ??d). The training course included the identification of specific parts of the llama carcass for each type of preparation. Participants learned recipes and how to make seasoning mixes. They prepared *chorizos* (sausages), *matambre* (a roll made from the thin layer of meat removed from between the skin and the ribs, which is then rolled out, stuffed with vegetables and egg, marinated and wrapped; it can be cooked boiled or baked), *mortadella*, and hamburgers (Figure ??d).

The data collected through dialogs with the different participants showed that people made mainly pos-

itive comments about the activity. Some of them are described below.

“What I liked was the food theme, the competition of regional dishes, the dishes made with llama meat and making the sausages. The truth is that I liked it, I liked it a lot.” (adult male who participated in the exhibition, 6-98).

“The sausage preparation course was good because it is for the community to learn and I would also like to practice making sausages. There are many courses and they are not continuous. It is necessary to promote them. Food production is for the well-being of a family. What I participated the most was the preparation of sausages because I also practice this; I make chorizos, minced meat, all with llama meat”. (adult male who participated in the exhibition, 9-101).

“It is beautiful that children and young people value culture because the truth is that some time ago there were many camelids, the elders lived with cattle, sheep and llamas, the thread, the barracanes, the suits (traditional costumes), and that was our lives. But now everything has changed and this event is beautiful, everything is nice. What I liked the most was the preparation of sausages because we can learn how to make chorizos to sell; we made matambre, mortadella, everything traditional with llama meat, there are many things to do”. (elderly woman, 13-105). <https://www.fao.org/camelids-2024/events/event-detail/santa-catalina-international-year-of-camelids-celebration--training-workshop-on-the-production-of-llama-meat-sausages/en>

Activity 4 e) Construction of a mural at the entry of the town of Santa Catalina.

The municipal commission (political authority) built a brick wall at the entry to the town, specifically for the mural.

The mural was prepared in three stages. The first stage (Figure 5a) took place in the school's ceramics workshop, where girls and boys of all ages, from kindergarten to high school, voluntarily modeled ceramic figures of camelids and other typical animals such as foxes to incorporate them into the mural. The second stage was the beginning of the design of the mural, with a corral, llama caravans and mountains, and the sticking of the first ceramic figures (Figure 5b). The third stage was the joint design and painting of the mountain landscape as well as the glueing of pebbles marking the corral and paths. The entire town, from children to the elderly, participated in the preparation of the mural (Figures ??c and ??d, Figure ??). <https://www.fao.org/camelids-2024/events/event-detail/santa-catalina-international-year-of-camelids-celebration--community-camelid-mural/en>

Once the design was completed, the molded animal pieces and pebbles were glued, and the backgrounds

and landscapes were painted, the mural was ready for its "official" inauguration. For the inauguration of the mural, the town authorities were present and there were speeches by people from the Community Council, the Municipality and the VICAM research group (Figure ??). All attendees (we could say almost the entire town) had a free lunch with the llama sausages made the day before during the training course on how to prepare llama meat sausages.

All the community enjoyed the activities proposed by the Community Council and making the mural. The comments made by both the children and adults who participated in the activities proposed highlight several key aspects related to the celebrations: the importance of collaborative work and the sharing of ideas, the connection between camelids as cultural heritage and their role in food sovereignty, and the significance of the mural as a testimony to these activities. Additionally, there is an acknowledgement of pastoralism as a livelihood and its influence on the relationship with llamas and their contributions to the community.

During some of our unstructured interviews, people expressed the following: *“Today, we are finishing making the mural, making the camelid celebration for the international year of camelids, so that is why we started working together with the VICAM. It is very nice working with the people, trying to share everything we did. And I hope that they remember those of us who made the mural forever, because this will be captured in something that we see and it is a memory. A mural is something that will last forever, and is made by many hands. And although those of us who made it will die, it will remain as a permanent part of our lives, it is a memory. So, it is something nice and thanks to the researchers of the VICAM for all these tasks. The llamas are a part of our lives because we have grown up seeing them. If you have them, it is as if they were your pets, it is a part of life. When I was a girl, they were my pets.”* (50-year-old woman, 8-100).

“I liked making the yarn for the contest in which we participate every year and yesterday I also liked making the sausages and the mural. I liked painting and making the little llamas with ceramics on the mural. The llama is what we have here in the town, on our lands on the hills, where we have our llamas. The llama is an important animal that represents us, in Santa Catalina, the llamas”. (38-year-old woman who participated in several of the activities proposed, 7-99).

“It was very nice, we did the bonding ceremony with respect for our land, with respect for our indigenous worldview, for our ancestors, for our grandparents, for the Apus, for Pachamama, all the activities and this mural especially to remember. It is important to work in reciprocity, and the truth is that everything went well. The mural is very nice; people from the communities and the schools joined in; the llamas were made



Figure 5. Preparation of the mural at the entry of the town of Santa Catalina. (a) School children with their hand-made ceramic camelids; (b) Women of the community beginning to prepare the mural and sticking some of the ceramic figures on the wall; (c) Women sticking pebbles and ceramic figures on the wall; (d) Women painting parts of the mural.

by 4-year-old children in kindergarten to children in 7th form; the kids from high school also joined in, and the people from the communities joined in by collecting the pebbles and also painting, sticking the stones. And also you* who made the valuable contribution of helping us to carry out these activities and to try to get together and it looks beautiful” (male leader of the community, 11-103). *Referring to the VICAM researchers.

Activity 5. Ashka Llama fair. Santa Catalina, November 24th 2024: <https://www.fao.org/camelids-2024/events/event-detail/santa-catalina-international-year-of-camelids-celebration--ashka-llama/en>

In 2024, the Ashka llama fair took place on November 24th (Figure ??). For the event, llama herders brought the llamas that they considered the most beautiful animals in their herds. Approximately 14 llama herders presented their llamas. The corrals and their management were in the hands of employees from the municipal commission’s production area. Around 10 local, provincial, and Bolivian government author-

ities attended the event, as well as dozens of public and visitors. The event featured excellent specimens of both types of llamas: the Q’ara llamas, or “cargueras” (Spanish word for “transporters”), which are large, tall animals with short hair on their heads, and the Tampulli ones, characterized by their abundant fiber, alpaca-like faces, and bangs. In general, the Q’ara llamas are used for meat and cargo, while the Tampulli ones are used for fiber; however, this is not a strict rule.

The jury selected the best animals with objective criteria according to the type of llama such as: fiber quality, coloration (for example, the homogeneous black color is rare and highly prized), straight legs and back, symmetrical and curved ears, non-prognathous bite, strength and general aspects of body harmony (Figure ??). The jury was made up of four people belonging to national, provincial and scientific institutions (CODEPO, INTA, CONICET and Santa Catalina Community) that promote camelid livestock breeding, including one of the authors of this work.

Choosing the winners was a challenging task. This



Figure 6. School children from Santa Catalina sitting in front of the just finished mural. The mural shows not only the llamas in their landscape, but also other local vegetation as cactuses (*Echinopsis atacamensis*) and wildlife such as a condor (*Vultur gryphus*), a fox (*Lycalopex gymnocercus*) and an Andean ñandú or suri (*Rhea tarapacensis*).

was because the quality of the animals was excellent, and because, in addition to selecting the best animals, awards are also given for certain aspects, such as unusual colorations or very gentle behavior (one prize was "Miss Simpatía" – Spanish term for friendliness). Each award-winning animal is brought to the front,

walked in front of the public, and the jury explains in detail the criteria that led to its victory (Figure 9). It is important to point out that the Ashka Llama fair is not only about selecting the best llamas but also a space for community meeting and sharing knowledge. The fair also showcases scientific and technological ad-



Figure 7. Participants of the mural making and inauguration of the mural at the entry of Santa Catalina.

vances that allow the inclusion of llama products in the trade chain and certification of origin.

After the selection of the winning animals, the award ceremony, which is an activity that included the presence of local and provincial political authorities, took place. Some authorities of the sister Plurinational Republic of Bolivia participated as well, denoting the importance of the Ashka Llama fair in a framework of regional integration. In addition, the National Radio broadcasted the central activities of the patronal festival, disseminating them in a wide area where the inhabitants lack internet or cell phone signal. The VICAM research group donated the rosettes for the prizes and participated as members of the jury panel (Figure 9a). A video about the Ashka Llama fair was edited with funding from the Satoyama Initiative. <https://www.youtube.com/watch?v=obMX0UoJ0dA>.

Based on the results of the activities presented, as well as on the analytical coding searching for different valuations (instrumental, intrinsic, relational) of llamas and nature, we found evidence that supports our hypothesis related to the emergence of diverse valuations of nature by the Santa Catalina community involved in the celebrations (almost the entire population). Table 2 shows some examples from the narratives recorded, where the valuations referring to the material aspect, intrinsic characteristics and associations between people and llamas can be clearly observed.

ASKHA LLAMA

AÑO INTERNACIONAL DE LOS CAMÉLIDOS

11ª EDICIÓN EXPO-FERIA DE CAMÉLIDOS Y PRODUCTORES

SANTA CATALINA 2024

PROGRAMA DE ACTIVIDADES

MARTES 12 DE NOVIEMBRE DE 2024

Hs: 10:00 Caravaneo y sangrado de los ejemplares de diferentes razas y categorías a cargo del Área Producción en Coordinación con la Dirección de Desarrollo Ganadero Jujuy – Oficina La Quiaca y SENASA.

SABADO 23 DE NOVIEMBRE DE 2024

Hs: 14:00 Recepción de los productores de las diferentes Comunidades participantes a la 11ª Expo Feria Askha Llama.
Hs: 15:00 Ingreso de los Ejemplares Camélidos al predio ferial "APOLINAR MORALES"
Hs: 18:00 Merienda a los productores.
Hs: 20:00 Cena a los productores.

DOMINGO 24 DE NOVIEMBRE DE 2024

Hs: 08:00 Desayuno a los productores participantes.
Hs: 09:00 Inicio de la Jura de los Ejemplares por los representantes de DESARROLLO GANADERO, INTA, SENASA, VICAM Y CO.DE.PO.
Hs: 09:30 Concentración de los Productores, Autoridades e Invitados especiales.
Hs: 10:30 Inicio del Acto Inaugural de la 11ª EXPO FERIA ASKHA LLAMA y ceremonia a la Pachamama.
- Izamiento del pabellón Nacional.
- Entonación del Himno Nacional Argentino.
- Palabras a cargo de un productor participante.
- Palabras a cargo de un representante de la VICAM.
- Palabras a cargo de un representante del INTA.
- Palabras a cargo de un representante de la CO.DE.PO.
- Palabras a cargo del MINISTRO DE DESARROLLO ECONOMICO Y PRODUCCION del Gobierno de Jujuy.
- Palabras a cargo del Presidente de la Comisión Municipal de Santa Catalina Sr.: Diego A. Solís
- Ceremonia a la Pachamama a cargo de los Productores, Co.De.Po., Desarrollo Ganadero y Senasa.
- Colocación de cucardas a los ejemplares participantes a cargo de la VICAM.
- Entrega de premios a los ejemplares ganadores en diferentes razas y categorías de la Expo Feria ASKHA LLAMA.
- Entrega de Reconocimientos a los productores participantes.
Hs: 13:00 Gran almuerzo para los Productores participantes y Autoridades visitantes.
Hs: 16:00 Traslado de los ejemplares a las respectivas Comunidades.
Hs: 17:00 Cierre de la 11ª Edición Expo Feria y Despedida a los participantes.

Santa Catalina Gobierno Municipal
gestión DIEGO SOLIS

JUJUY
Con la gente

GOBIERNO DE **JUJUY** el norte a seguir

MINISTERIO DE **DESARROLLO ECONOMICO Y PRODUCCION DE JUJUY**

INTA
Instituto Nacional de Tecnología Agropecuaria

VICAM
Vicufas, camelidos y ambiente

CO.DE.PO.
Comisión de Productores de la Dirección de Producción

Figure 8. Poster with the program of activities of the Ashka Llama fair held in Santa Catalina in November 2024.



Figure 9. Ashka Llama fair. a) Corral with llamas and the rosettes for the winners. (b) Male Q'ara champion; (c) Male Tampulli champion (homogeneous black color). (d) Young female Tampulli champion.

Table 2. Identification of the intrinsic, instrumental and relational values in the celebrations of the IYC organized by the Community Council of Santa Catalina. Some testimonies are presented as examples of these values in relation to llamas, the main domestic camelids in the area of Santa Catalina.

Activity	Instrumental value	Intrinsic value	Relational value
Bonding ceremony	Coa smoke	Ancestral ceremony led by the Quechua leader	<i>“2024 will be the only international year of camelids, which are our animals” “It is important to work in reciprocity” “We did the bonding ceremony with respect for our land, with respect for our indigenous worldview, for our ancestors, for our grandparents, for the Apus, for Pachamama”</i>
Spinning contest	The llama thread has high economic value <i>“the thread, the barracanes, the suits (traditional costumes), and that was our lives”</i>	Preservation of traditional knowledge related to fiber production and handling.	<i>“I was born with llamas” “llamas are beautiful and good, calmer than sheep”</i>
Exhibition of traditional dishes using llama meat and local products	Food	All meals have an ancestral cultural basis and include local ingredients	<i>“We learnt how to cook from our mothers and grandmothers”</i>
Preparation of llama meat sausages	Food <i>“We can learn how to make chorizos to sell”</i> The workshop products were consumed free of charge for two days.	Food sovereignty	<i>“Food production is for the well-being of a family”</i>
Mural	Construction of a wall at the entry to the town by the municipality. Construction of ceramic camelids. Use of local resources.	<i>“The llama is an important animal that represents us in Santa Catalina.” “The llamas are a part of our lives because we have grown up seeing them.”</i>	<i>“A mural is something that will last forever, and is made by many hands.” “Although those of us who made it will die, it will remain as a permanent part of our lives, it is a memory.”</i>
Ashka Llama	Selection of the best animals. Purchase and sale of breeding stock and females. Rosettes. Prizes.	Shows genetic variability	<i>“It’s nice to be a llama breeder because the llama is very intelligent, they understand you, they recognize you by your voice.”</i>

DISCUSSION

As expressed by Albuquerque & Alves (2024, page 2), “*The beauty of ethnobiology lies in what we can unveil from the observational and descriptive elements of phenomena*”. This paper demonstrates how the communal appropriation of a global celebration such as the IYC visualizes diverse valuations of nature, in this case, camelids. Our working hypothesis was precisely that the activities proposed by an IPLC pastoral community are underlain by multiple valuations of both camelids and nature.

Different values were identified in operational and analytical terms, showing that human expressions converge in the complexity and interweaving of the roles of camelids in the lives of Andean people. The basis for sustaining Andean pastoralism in times of the global crisis of traditional rural activities is the embeddedness of humans, camelids, and landscape. The connection between what is raised, eaten, woven, sold, admired, and loved by local Indigenous people is the foundation of Andean resilience. When these bonds, some of which are strong and others subtle, are broken (especially by external market pressures and foreign cultural influences), we can be concerned about the continuity of the pastoral socio-ecosystem. Fortunately, the results of the present ethnobiology study show that the “excuse” of the International Year of Camelids allowed us to see that many of these links between camelids and communities are still healthy and that it is possible to imagine promising futures. This is why we have been able to develop our hypothesis, showing the multiple valuations and the existence of sustained camelid-people interdependence, a condition for the resilience of pastoral livelihood.

The plural valuation valuations of both camelids and nature expressed by the inhabitants of Santa Catalina promote sustainability and reflect harmonious relationships and can be integrated into the “kosmos-corpus-praxis” complex, where beliefs, knowledge, and practices are indivisible (Toledo and Barrera-Bassols 2008).

In terms of the intrinsic and relational valuations of camelids, the people in Santa Catalina valued llamas as animals that “*identify us as people*.” Their cultural importance was not only notable in the school community but was also made visible in the idea, design and construction of the mural, which, as expressed by a woman of the community, transcends them and “*will always be there*”. A mural is like a point in a biocultural hologram that brings together different elements, including the children, the clay of the soil of the town, the pebbles, the adults, the school, the entire town and its wildlife and landscape.

In terms of the instrumental valuation of camelids, people of the community said “*we live off camelids*”,

and in addition to providing fiber and yarn, the role of llamas as a key element for food security and sovereignty is very important. The importance of llamas as food in this celebration was notable and it is worth noting that the prize for the best meal was the “llama head”, the dish that most embodies the animal. Not to mention the specific demand to make llama meat sausages, a way of giving added value to a meat that, although it has many good properties (Polidori et al., 2007), is associated with consumption by poor and marginalized people.

As stated in the key messages of the IPBES (2022), “Achieving sustainable and just futures require institutions that enable a recognition and integration of the diverse values of nature”, and IPLC that undertake valuation of nature in their places and territories following their own world-views can thus offer new perspectives to improve and advance valuation processes. It is recognized that the unsustainable use of nature is based on a narrow set of values prioritizing nature’s values as traded in markets (IPBES 2022). This proves once again that ethnobiology can make valuable contributions to preserving biocultural diversity, although the outer world market and exclusive monetary valuation of nature (in this case, camelids’ contributions to people) can override the “Buen Vivir” (good living) philosophy. Indigenous and local knowledge encompasses a variety of values that must be respected and upheld, especially when they collide with the realities of the marketing of camelid products, with a market that offers low prices based exclusively on instrumental valuation and its profit.

International years (or days or decades), such as those declared by the UN, are powerful advocacy tools to educate the general public, to mobilize political will and resources to address specific problems, and to celebrate and reinforce “*the achievements of humanity*”. These anniversaries often have a sense of “*concern*”, which is passed on to policymakers in member countries through their international relations offices, foreign ministries, and chancelleries, and which (hopefully) trickles down to the territories in a top-down, but somehow colonialist, way. In Argentina, in the territories where camelids live, almost no one knew anything about the IYC. So, our objective as an ethnobiology research group was to initially communicate the opportunity and then, participate in a transdisciplinary way by promoting a scenario to celebrate the IYC jointly with local communities. The joint work of the Community Council of Santa Catalina and our research group allowed the local community to take hold of the celebration, recognizing it as their own because, as expressed by one of the participants, “*they are our animals*”. The resilience emerges not from external aggression or the risk of disaster, as in the case of Mapuches (Atallah 2016), but rather as a way

of sustaining the indigenous llama herder being. The FAO advice for academics in the IYC was to recognize the importance of gathering and disseminating scientific data on camelids to inform relevant management and development models, particularly for adaptation to climate change and improving contributions to nutrition, food security and environmental sustainability, in a participatory manner that is sensitive to traditional knowledge. Thus, during 2024, at the VICAM, we worked in full observance of this mandate, even in a brief activity with urban people at the Book Fair in the city of Buenos Aires, which allowed us to observe that, through partial sensory interventions (smell, texture, and fiber colors), people can relate and have positive attitudes toward camelids.

Since the UN works with country governments as intermediaries for the celebration of important dates, this information generally does not permeate to citizens beyond school agendas. They are then perceived as top-down policies that do not have local importance. According to the FAO website, a total of 52 events were held in the Andean region in connection with the IYC, the majority (36) in Peru, three in Bolivia, and 13 in Argentina (8 of which are described in this paper). Most of these IYC events were organized by government institutions under UN mandates and typically included government officials, academic experts, international cooperation organizations, and representatives of civil society, as well as pastoralists. In contrast, our work is unique in that we carried out what the communities wanted without waiting for governmental authorities to take initiative. The IYC highlighted the potential to gather local political and community authorities and researchers, generating valuable exchanges listening to the needs and demands of camelid pastoralists. It remains uncertain whether this initiative has led to the redirection of policies that actively support long-term projects benefiting camel and camelid herders.

The IYC resolution stated that “recognizing that these species are an important element of the cultural and spiritual identity of ancestral indigenous peoples constitutes an important social basis of the traditional and contemporary knowledge of these peoples, who have maintained, preserved and protected camelids”. “Noting that camelids are a main source of protein and fiber for clothes (...), they can play a key role in addressing the effects of climate change, in particular in arid and semi-arid lands, and that recognition, advocacy and support for the promotion of the products and services that they provide is of paramount importance for the livelihoods of the communities that depend on them (...).”

This recalls the urgent need to raise public awareness of the importance of camelids for food security and ecosystem functions. With communities con-

stantly shelled by hegemonic values that ignore their animals and their way of life, and with a high erosion of knowledge (Vilá et al., 2022a), the celebrations of the IYC in Santa Catalina, rooted in the local governance of the Community Council, contributed to the conservation and biocultural appreciation of these animals.

Most participants in the activities described here were women, a fact that, applying a gender perspective throughout our ethnobiological study, highlights the significant visibility of women in terms of food sovereignty, textile skills, and emotional knowledge (as that associated with the construction of a mural as a form of memory). This is a result that can also be found in Argentine Patagonia, where rural women are key in the transmission of knowledge of food and medicinal plants and are responsible for maintaining legacies of community knowledge (Ladio 2020). Regarding this issue, Llanque (2019) analyzed the relationship of Andean women with food and found that, in traditional communities, food routines in the kitchen link production and consumption not only with love and affection but also with the political management of the community. Women’s efforts to ensure food security are an example of socio-ecological resilience, as they value the buffering capacity of the food system, foster social self-organization, and enable a diversity of food options. However, it is also interesting to note that when we look at the pastoral livelihood in this region, we can realize that women suffer loneliness since pastoralism in the Puna has become a feminized activity due to the emigration of men and young people and shows components of old age (Vilá 2023). As proposed by Ladio (2025), it is significant for ethnobiologists to create bridges of understanding with local people, in this case motivated by a celebration that also has importance to us. Thus, we decided to work with the Andean people who raise and live off of camelids, especially women, in their territories, and put ourselves at their disposal to obtain funds so that they could achieve their plans for the celebration. In this sense, the flexibility of the funds from the Satoyama Initiative allowed conducting collaborative research, making purchases for community activity expenses, such as buying llama meat to make the sausages, paints and other materials for the mural wall, and prizes for the spinning contest. These were essential expenses to carry out a project of this type.

A central component of socio-ecological systems (such as that of the Altiplano of Jujuy province), which plays a critical role in conservation planning, is the Traditional Ecological Knowledge (TEK) (Moller et al., 2004), i.e. the cumulative body of knowledge, practices, and beliefs about relationships between living beings and their environment, acquired by indigenous and local peoples over thousands of years, and

passed down through generations via language, stories, and subsistence methods. According to Tang and Gavin (2016), the TEK can suffer many threats, which can be identified and classified according to their origin and effects. The TEK about camelids also suffers from several of these global threats, particularly the loss of pathways of transmission and the change of traditional livelihood practices. Tang and Gavin (2016) also present some strategies to overcome these threats, and most of the IYC joint celebrations performed in Santa Catalina can be classified as TEK conservation actions. The skills to revitalize traditional culture, like cooking, spinning, designing clay camelids, and preparing a mural, were significant to improve the communal collective resources. Also, the genetic selection practiced by local pastoral people to have beautiful and strong animals to present in the Ashka Llama contest, as well as the “presence” of camelids “inside” the school (figuratively speaking), as a way to enhance students’ knowledge and both the local and scientific knowledge on camelids, were also significant contributions. We also made a partnership between the community and our research group to target the conservation of the traditional knowledge and practices on/with camelids, and were able to find resources to make the demands and wishes into reality. It is important to point out that Santa Catalina was the only town in the altiplano of Argentina which was incorporated in the FAO map of events for the IYC. The Community Council demonstrated the presence of the TEK in the raising of llamas, the care of vicuñas, the preparation of llama meat food, the spinning and weaving of fiber, and the creation of art, all of which influence people’s adaptive capacity to social-ecological change (Ruiz Mallen & Corbera 2013) and identify a set of mechanisms that contribute to such capacity in the context of community-based camelid conservation initiatives leveraged by the IYC.

It is no coincidence that the country that promoted the IYC declaration was Bolivia. In that country, the importance of indigenous self is a key element in the constitution of the identity that builds the nation. Based on this, a fundamental pillar of domestic and foreign policy is oriented toward proposing alternatives to the western way of life and its economic model, using an ethics system known as “*Suma Qamaña*” (in Aymara language) or “*Buen Vivir*” (in Spanish), which means “Living Well”. This living well, or good living, is based on local knowledge where vital decisions that feed from the bottom up to many of the UN Sustainable Development Goals are made. For example, the decision by the Community Council in Santa Catalina to hold a presentation of llama dishes and a workshop on preparing llama-meat sausages is a sign of leveraging the food contributions of camelids. Furthermore, the sausages were offered to the people of the town

and school children for free on the day of the mural’s inauguration (SG2 Zero Hunger). This somehow reinforces the concept that ethnobiology values the role of local knowledge concerning global goals (Ladio, 2025).

We want to remark the potential of international dates for work from the bases in the territory with a bottom-up framework, as could be exemplified with the camelids in Santa Catalina if we respect local governance. For example, we are currently living in the International Decade (2024–2033) of Sciences for Sustainable Development, whose resolution (A/RES/77/326) proposes us to reflect on the “unique opportunity for humanity to use the critical role played by the sciences in the pursuit of sustainable development in its three dimensions as one of the key means of implementation as well as in responding to the complex challenges of our time to ensure a safe and prosperous future for all” without realizing it. To achieve this goal, we need to embark on non-colonial transdisciplinary sustainability science, fostering sound human-nature interactions with the integration of knowledge from various scientific and non-academic backgrounds (Staffa et al., 2021). To this end, ethnobiology offers us a unique and valuable field of reflection and evidence (Ladio, 2025).

We are also living through the Decade of Ecological Restoration (2024-2033) (Res A/RES/73/284), which aims to support and scale up efforts to prevent, halt and reverse the degradation of ecosystems worldwide and raise awareness of the importance of successful ecosystem restoration. Unfortunately, at least in the global south, these UN International Decades have no influence on the research and academia agenda, public policies or information.

The good news is that soon, in 2026, we will have another opportunity to pursue transdisciplinary sustainability science, where once again the voice of local communities and indigenous peoples could be heard. At the proposal of Mongolia, 2026 will be the International Year of Rangelands and Pastoralists (IYRP) (A/RES/76/253). The experiences of countries with camelids and camels in 2024 provide a foundation for evaluating and planning more locally-driven activities in preparation for the IYRP in 2026, which has a wider global scope. Pastoralism is a dynamic and transformative livelihood linked to the diverse ecosystems, cultures, identities, traditional knowledge and historical experience of coexisting with nature, and healthy rangelands are vital for contributing to economic growth, resilient livelihoods and sustainable development of pastoralism. However, we have to recognize that rangelands and pastoralism are currently facing urgent and different challenges around the world. The events held in Santa Catalina were designed based on listening to the community’s wishes, rather than simply proposing activities. Perhaps this paper can

serve as a case study for 2026 activities.

As ethnobiologists, the IYRP will be a great opportunity to work together with pastoralist communities around the world, in our case, again with camelids and the pastoral systems where they inhabit. This can help to make visible this biocultural way of life, which listens to the rhythms of nature, its animals, and the climate, and harmoniously contributes to the good living of Andean people.

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DATA AVAILABILITY

The data used to support the findings of this study are available from the corresponding author upon reasonable request.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

CONTRIBUTION STATEMENT

All the data described here were collected under the code of ethics for research, research-action, and ethnoscientific collaboration in Latin America (Version two) of the Latin-American Society of Ethnobiology (SOLAE) (Cano Contreras et al., 2015). Informed consent was obtained verbally before participation. The consent was audio-recorded in the presence of an independent witness. Verbally informed consent was obtained from the individuals for the publication of any potentially identifiable images (especially im-

ages of children in activities at school and in the community) or data included in this article.

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