

Going over the wall: insights into the illegal production of jaguar products in a Bolivian prison

ANGIE ELWIN, EYOB ASFAW, ROBERTO VIETO and NEIL D'CRUZE

Abstract As the largest felid in the Americas, the jaguar *Panthera onca* has both ecological and cultural significance in Bolivia. Yet jaguar populations are declining because of multiple pervasive anthropogenic pressures, including domestic and international demand for their body parts. Since 2013, Bolivia has become a centre of the illegal trade of jaguar body parts, driven by demand from Chinese markets. From 2021, there have been anecdotal reports of jaguar body parts being sold to prisons in north-western Bolivia, where inmates use them to make crafts to be sold at local markets. Here we provide further insights into this illegal wildlife trade activity. Specifically, we show that inmates at Mocovi prison in Trinidad purchase skins of jaguars and other wild animals directly from hunters and from vendors at local markets. Goods (wallets, hats and purses) produced from the skins are sold back to vendors by the inmates to provide income for their daily sustenance. Testimony from an inmate also stated that large bulk orders for wildlife products had been received from a non-Bolivian client base. The San Borja municipality in Beni was indicated as a key location where jaguars are being targeted for their skins to supply the illegal production of wildlife products in Mocovi prison. Further studies are required to determine the extent of this illegal activity in Mocovi prison and other prisons in Bolivia, and in other Latin American countries.

Keywords Bolivia, jaguar, *Panthera onca*, prison, wildlife trade, wildlife trafficking

The jaguar *Panthera onca* is categorized as Near Threatened on the IUCN Red List and is disappearing throughout most of its range in the Americas (Quigley et al., 2017). Wild jaguar populations are suspected to have declined by 20–25% since 1996 (Quigley et al., 2017). Bolivia is considered a high priority area for the conservation of jaguar habitats and populations (Sanderson et al., 2002). The species has retained most of its historical distribution in the country and plays an important role in the structure and function of habitats (Ministerio de Medio Ambiente y Agua, 2020). Jaguars also feature prominently in the culture, folklore and religious practices of many Indigenous Peoples



in Latin America, who view them as a symbol of spiritual strength, fertility, beauty, courage and power (Figel et al., 2022). Yet jaguars are categorized as Vulnerable in Bolivia, and their populations are declining because of multiple pervasive anthropogenic pressures (Romero-Muñoz et al., 2019; Thompson et al., 2020). The main threats are deforestation and habitat fragmentation because of agriculture and infrastructure expansion, along with persistent deliberate and retaliatory killings in response to livestock depredation, fuelled by negative attitudes towards the species (Knox et al., 2019; Caruso et al., 2021).

Jaguars are also threatened by domestic and international demand for their body parts, which is driving targeted poaching and illegal trafficking in Bolivia (Nuñez & Aliaga-Rossel, 2017; Braczkowski et al., 2019; Verheij, 2019; Arias et al., 2021). Since 2013, Bolivia has become a centre of the illegal trade of jaguar body parts, driven by demand from Chinese markets (Nuñez & Aliaga-Rossel, 2017; Arias et al., 2021) linked to increasing Chinese investments in infrastructure projects across Latin America (Morcatty et al., 2020). Other studies have highlighted the prominence of illegal domestic trade in jaguar body parts (e.g. skin, fat, teeth, meat, claws, tails and skulls) in Bolivia for decorative, medicinal, nutritional and cultural purposes (Arias et al., 2021). However, the drivers of the trade and the relationship between jaguar poaching, domestic use and international trade are not yet fully understood (Arias et al., 2021).

Included on CITES Appendix I, the jaguar has been legally protected against commercial international trade since 1975. At the national level in Bolivia, the species is also protected by a total ban on the capture, commercialization and export of wild animals and their by-products (Decreto Supremo 21312 of 27 June 1986). However, law enforcement is weak because of corruption, insufficient resources and lack of public awareness about the legal protection of jaguars (Verheij, 2019; Arias et al., 2021).

Since 2021, there have been anecdotal reports of jaguar body parts being sold to prisons in north-western Bolivia, where inmates use them to make crafts to be sold at local markets (Arias et al., 2021). A news article from April 2022 (Spredemann, 2022) named Mocovi prison, located in Trinidad, the capital city of Beni Department in Bolivia, as a source of leather products made from protected species, including the jaguar. It was reported that inmates were forced to produce leather products as part of a prisoner rehabilitation programme.

Footage of an inmate displaying samples of finished wildlife-based products inside Mocovi prison was provided

NEIL D'CRUZE (Corresponding author,  orcid.org/0000-0001-8006-3084, NeilDCruze@worldanimalprotection.org), ANGIE ELWIN ( orcid.org/0000-0001-8583-3295), EYOB ASFAW and ROBERTO VIETO Word Animal Protection, 5th Floor, 222 Gray's Inn Road, London WC1X 8HB, UK

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to World Animal Protection in September 2022, with the anonymous source stating that the footage was taken during the prior 6 months. The 5 min 37 s video also shows the inmate relating information on the sourcing of the wildlife derivatives used to create the products, and details regarding the sale, pricing and orders received for such products. This footage confirms anecdotal reports concerning such illegal wildlife trade activities and provides further insights. Inmates primarily acquire wild animal skins from at least two different sources. Firstly, they purchase jaguar and boa (*Boa constrictor* and *Eunectes* sp.) skins directly from hunters, who often sell less desirable or damaged pieces to the inmates for a low price (Anon., pers. comm., September 2022). Inmates who engage in this activity reportedly receive money from their families to buy the skins and negotiate prices with hunters from within the prison. Secondly, there are vendors in local markets who sell strips of jaguar skins to inmates so that they can produce goods such as wallets, hats and purses (Anon., pers. comm., September 2022). These items are then purchased back by the vendors and sold in markets in Trinidad (Plate 1). Caiman (Caimaninae) and peccary (Tayassuidae) skins and their by-products are also processed into leather items, both as single-species and combined (mixed-species) items. Products made using leather from multiple species are cheaper

because they are made of less valuable leather scraps (Anon., pers. comm., September 2022). These scraps are stitched together into items such as wallets, thereby maximizing the profits from each animal skin purchased by inmates.

An interview with a vendor of jaguar skins at El Campesino market in Trinidad indicated that the San Borja municipality in Beni was the primary location where jaguars are being targeted to supply the illegal production of wildlife products in Mocovi prison (Anon., pers. comm., September 2022). However, contrary to previous anecdotal reports, the footage provided showed no evidence of inmates being coerced into this illegal activity; instead, an inmate stated that they did so willingly to ‘earn a living for daily sustenance’ (Anon., pers. comm., September 2022). It was impossible to determine the full scope and scale of the production of illegal wildlife products at Mocovi prison from the footage provided; however, one inmate stated that they could produce up to two dozen items over the course of 3–4 days (Anon., pers. comm., September 2022). In addition, although no information on the intended destination of the wildlife products was provided, the inmate shown in the footage stated that large bulk orders had been received from a non-Bolivian client base (Anon., pers. comm., September 2022). This corroborates findings from previous studies that have described a diverse foreign market for



PLATE 1 Products made from jaguars *Panthera onca* and other wildlife on sale at a market in Trinidad, north-western Bolivia: (a) wallets made from jaguar and caiman (Caimaninae) skin, (b) hats made from jaguar and caiman skin, (c) belts made from jaguar and caiman skin, (d) ‘tigre’ oil (note that the word ‘tigre’ is commonly used to refer to *P. onca* in Bolivia). Photos: Emi Kondo/World Animal Protection.

jaguar products in Bolivia (Arias et al., 2021). Vendors at El Campesino market also described sales of jaguar (fangs and skin) and caiman (leather) products to resident Chinese buyers (Anon., pers. comm., September 2022).

The evidence of illegal wildlife trade activity at Mocovi prison, as shown in the obtained footage, is corroborated by information presented in a series of publicly available videos that have recently been shared on social media platforms. In these videos (the most recent of which was shared on Facebook on 13 February 2023), the director of Mocovi prison is inviting the public in Trinidad to visit a craft fair held at the prison to acquire products on sale made by the inmates. These products include items such as wallets, keyrings and hats made from the skins of jaguars and other wild animals.

There have been several recent initiatives to help combat jaguar poaching and aid conservation efforts. The Action Plan for the Conservation of the Jaguar, 2020–2025, in Bolivia includes efforts to counter increased trafficking of body parts through expanding research and knowledge about the species, strengthening regulations and institutions, and educating, raising awareness and promoting social participation in its protection (Ministerio de Medio Ambiente y Agua, 2020). In addition, a CITES decision on jaguars was adopted in August 2019 to encourage the implementation of four main actions aimed at improving habitat conservation, legislation and enforcement controls to help ‘eliminate jaguar poaching and illegal trade’ (Arias, 2021a, p. 17). The CITES CoP19 meeting in Panama in 2022 saw the adoption of a decision to help strengthen the mapping of the drivers and effects of the illegal jaguar trade (CITES, 2022). Regionally, February 2020 saw the inclusion of jaguars in the Convention on the Conservation of Migratory Species of Wild Animals under Appendix I, the strictest protection category, which requires Bolivia to prohibit the removal of the jaguar from its natural environment and prioritize tackling illegal trade, amongst other initiatives (Arias, 2021b).

Illegal wildlife trade is one of the most pressing threats to wildlife conservation. An integral part of initiatives aimed at protecting jaguars is the identification of the complex and often concealed processes and facilitators driving illegal trade activity. Here we provide new information and insights focused on a largely unknown criminal structure that facilitates the illicit processing and trade of jaguar and other wildlife products in Bolivia. Further studies are required to determine the extent of this illegal activity in Mocovi prison and other prisons in Bolivia, and in other Latin American countries. To support existing efforts to protect jaguars and other wildlife in Bolivia, there is also a need for improved law enforcement and political will to take action against illegal activities. In addition, awareness must be raised on how wildlife products are being produced and the effect that such production has on the wildlife and the

people involved. To support these efforts, all information provided here on this illegal wildlife trade activity has been reported to the Bolivian authorities (Ministry of Environment and Water).

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Conflicts of interest All authors are employed by the animal welfare organisation World Animal Protection (NDC holds the position of Head of Animal Welfare and Research; AE is Wildlife Research Manager; EA is Wildlife Investigations Advisor; RV is Global Animal Welfare Advisor). Our results pertaining to this study were in no way influenced by our own personal views on animal welfare.

Ethical standards This research abided by the *Oryx* guidelines on ethical standards and conformed to the standards set out by the British Sociological Society.

Data availability The data that support the findings of this study are available on request from the corresponding author, NDC. The data are not publicly available because they contain information that could compromise the privacy and safety of the research participants.

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