

### YAGUARETÉ (JAGUAR) PROTECTION INSURANCE PNUD ARGENTINA, IRFF & BIOFIN

### The story

The jaguar is a keystone species, playing a pivotal role in maintaining ecological balance across vast and diverse habitats. A symbol of power and strength in Latin American culture, jaguar populations are increasingly under threat from ongoing habitat loss, degradation, hunting and retaliatory killing from human-jaguar conflict.

A recent <u>report</u> has estimated the economic value of ecosystem services from 15 key jaguar landscapes in Latin American at up to US\$4 trillion annually. Covering 14 countries, including Argentina, these landscapes are vital not only for the survival of jaguars but also for the 62 million people living in the local communities whose health and wellbeing depend on thriving ecosystems.

In Argentina, jaguars have been <u>classified critically endangered</u>, with an estimated 200-250 jaguars still living in areas of the Chaco region, the Yungas and the Misiones rainforest. Argentina's National Parks Administration has calculated the economic cost of the loss of a jaguar at <u>US\$1.8 million</u>. In the Chaco region, where <u>only 10 confirmed jaguars remain</u>, losing one jaguar is the equivalent of losing 10% of the population, making it even more difficult for threatened populations to recover.

Innovative partnerships and financial solutions are charting new pathways to protect jaguars, the ecosystem services they provide and in doing so, supporting the economic resilience of millions of people across Latin America.

In Missiones, home to a population of <u>90 jaguars</u>, a bold new public-private collaboration for jaguar protection has emerged. UNDP, the Municipality of Andresito, Rio Uruguay Seguros, local NGOs and many more partners have designed and launched the world's first jaguar insurance pilot program with support from various government agencies involved in jaguar conservation.

More than just a jaguar insurance product, this global partnership is looking to the future, and how public and private actors can collaborate on many more innovative financial mechanisms working to ensure that key stone species, their habitats, and all the vital services they provide endure for generations to come.

### The Yaguareté - (Jaguar)

The jaguar is the largest feline in the American continent and the third largest worldwide, after the Bengal tiger and the lion. As a 'keystone species', jaguars play a critical role in maintaining the structural integrity of the ecosystems in which they reside.



Jaguars indirectly protect other species of flora and fauna by regulating herbivore populations, taking pressure of local vegetation, reducing soil erosion and mitigating the spread of disease. This nocturnal, solitary and territorial animal lives in tropical and subtropical rainforests, forests, wetlands, and savannas, including mangroves, deserts, and mountainous areas. It has the strongest jaw of all felines and is a cultural symbol of strength and power in Latin American civilizations.

In Argentina, fewer than 250 jaguars inhabit the rainforests and forests of the Yungas, the Chaco region, and the Misiones rainforest. The Misiones rainforest, which is the Argentine portion of the Atlantic Forest, accounts for just under half of this number.

The Jaguar was declared a Natural Monument in 2001 and is also protected in Argentina by National Law 22.421 of 2001 for the Conservation of Fauna.

#### The problem – jaguar populations under threat

At the beginning of the 20th century, Jaguars ranged from south-western USA to the province of Río Negro in central Argentina. Today, 90% of the world's jaguar population lives on the Amazon, which has lost an estimated 17% of its forest cover in the last 20 years. For jaguars, this means shrinking and fragmented territories, which increase the risk of human-wildlife conflict as they are forced into closer proximity to human settlements, where livestock becomes prey, intensifying tensions with local communities. In addition to habitat loss, jaguar populations are directly threatened by illegal hunting and the trafficking of their teeth and bones in a growing black market. The species has since vanished from large areas of the continent, due to deforestation, land-conversion, roadkill, illegal hunting (and hunting out of revenge) and the disappearance of its main preys.

The jaguar is listed in global the <u>IUCN Red List</u> as 'near threatened. In Argentina, the threats and impacts on Jaguar populations are critical, with the species now surviving in only 5% of its original range. The steady loss of adult jaguars has intensified their population decline, which is now limited to certain areas of the Chaco region, the Yungas and the Misiones rainforest.

Recognizing that the situation is dire, the Ministry of Environment and Sustainable Development, the national authority on wildlife in the country, in collaboration with Argentine researchers and experts from SAREM (The Argentine Society for the Study of Mammals) have classified the Jaguar species as Critically Endangered within the territory of the Republic of Argentina.

In the case of the Formosa Province, the species was declared a Provincial Natural Monument in 2018 through Provincial Law No. 1673.



One of the main causes of jaguar mortality is <u>retaliation killing</u>, in response to instances of jaguars preying on livestock or domestic animals. Livestock owners <u>kill the jaguar</u> either out of revenge or to prevent future losses.[SS1] [MB2] [MB3]

Hunting jaguars is <u>prohibited by law</u> in <u>Misiones</u>, Argentina, but despite the tracking, monitoring and other preventative efforts carried out by provincial and national park rangers, it remains the primary threat to the wildlife and eco-system integrity of the Misiones rainforest.

To reverse jaguar population decline, and prevent the jaguar from disappearing from Argentina, we must scale efforts to halt retaliatory killing across all jurisdictions in the country.

## The financial value of a jaguar - their habitats and the ecosystem services they provide

**Up to USD 4 trillion per year provided in ecosystem services:** A <u>study</u> of 15 key jaguar landscapes across Latin America and of the ecosystem services they provide, such as water and erosion regulation, climate control and food provision, estimated the annual value of jaguar habitats from USD 1.5 to USD4 trillion annually – more than six times the economic activity in the same areas.

**US\$1.8** million is the economic value of a living jaguar in Argentina: In 2024, following an illegal jaguar killing by hunters in Formosa, Argentina's National Parks Administration calculated the economic cost of the environmental damage caused by the loss of a jaguar, with the consideration of indexes related to the fragility and protection of the species and the potential recovery of the damage caused. The methodology included several factors such as the number of individuals affected, the conservation status of the species, the degree of protection, taxonomic isolation, strict endemism, size class, and its presence in captivity. The figure amounts to \$1,727,713,638 Argentine pesos, equivalent to approximately US\$1.8 million. Thanks to this <u>valuation</u>, US\$1.8 million is the economic compensation amount or penalty to the offender according to the relevant regulations and procedures.

#### Our solution – an innovative financial mechanism for protecting jaguars and people

In the context of habitat loss and the decrease in species that Jaguars normally prey upon, <u>jaguars occasionally prey on farm animals and pets in order to survive</u>. This results in tensions with local communities and retaliatory killings by ranchers.

<u>Compensation mechanisms</u> following a jaguar attack on property (livestock or domestic animals) have been <u>proven to reduce</u> the <u>likelihood</u> of <u>retaliatory killing</u> by the owners of those animals[MB4] .[SS5] [MB6] [MB7] [MB8] [MB9] [MB10] [MB11]

With the objective of strengthening coexistence between humans and jaguars,.UNDP and local insurer Rio Uruguay Seguros have designed an insurance policy (already approved



by the insurance supervisor), that will be purchased by the Government of the Province of Misiones to cover the assets of livestock and pets against attacks and losses caused by jaguars within the territory of the Municipality of Andresito.

The insurance will help reduce the risk of "retaliation killing" of the jaguar species and help rebuild its population in the Argentine rainforests.

# Key elements of the jaguar insurance product, and efforts to increase awareness of jaguar-related risks

The success of the insurance product is reliant on activating, incentivizing and implementing specific training to understand the behavior and characteristics of the jaguar in the area of the attack.

Close collaboration between specialists is essential to raise awareness about the species' extinction risk and the importance – both economically and culturally - of its survival in the local ecosystem.

It is important that livestock producers make an immediate report upon the presence of a jaguar to activate the claims protocol and protect the species.

The promotion and support provided for the implementation of <u>security measures to</u> <u>mitigate risks</u> is an aditonal step, strengthening <u>preventative actions</u> and encouraging more widespread use of these measures by livestock producers.

The insurance launched in Misiones, Argentina is a pioneering solution at a global level. It is acquired by the provincial government, free of charge for citizens, without any deductibles and supported by an NGO expert in conservation of biodiversity which will verify claims. Provincial Park Rangers will oversee the verification process. Once a depredation is confirmed, the affected farmer receives prompt economic compensation to a digital wallet or bank account, and an accompaniment plan is activated with periodic technical visits to improve livestock management and prevent future incidents.

The insurance covers cattle, pigs, sheep, goats, poultry and pets (dogs and cats).

### Why choose Misiones as a pilot?

Iguazú National Park, located in the province of Misiones, Argentina, is home to the largest jaguar population in Argentina, with an estimated 90 jaguars inhabiting the province of Misiones. When factoring in the entire Green Corridor, which includes neighboring areas in Brazil that share a border with Misiones, the jaguar population rises to 105. Thirty years ago, the jaguar population in the Green Corridor was approximately 800.



The pilot program will be launched in the Municipality of Andresito in the province of Misiones where the jaguar has been declared a <u>natural monument</u>. For many years, the municipality has been struck by <u>several</u> jaguar predations.

At the provincial level, a compensation fund has been established. However, the fund faces several operational issues in disbursing payments to affected farmers. Due to low payment rates and excessive bureaucracy, farmers are no longer inclined to submit claims.

The province has signed an agreement with BIOFIN, and within the framework of this working alliance, expressed interest in developing the jaguar insurance, with the support of various government ministries and agencies involved in jaguar conservation and farmers development.

### The UNDP BIOFIN and Insurance and Risk Finance Facility (IRFF) alliance

The Insurance and Risk Finance Facility and BIOFIN have a global strategic alliance within UNDP to address risk transfer issues to protect biodiversity and natural capital.

In this regard, the local coordination of Argentina for both initiatives have joined forces to work on this topic together.

Thanks to the work carried out by BIOFIN in collaboration with the province of Misiones in Argentina, it has been possible to propose to the provincial government the solution of insurance as a funding alternative for biodiversity conservation.

The various government actors involved in the protection of the jaguar with jurisdictional competence in the province have expressed their interest and support for the development of this risk transfer tool.