TEAM CODE: 55

30TH ANNUAL STETSON INTERNATIONAL ENVIRONMENTAL MOOT COURT COMPETITION, 2026

BEFORE
THE INTERNATIONAL COURT OF JUSTICE

AT THE PEACE PALACE,
THE HAGUE, NETHERLANDS

GENERAL LIST NO. 303

THE CASE CONCERNING
QUESTIONS RELATING TO PRIOR INFORMED CONSENT AND BENEFIT SHARING IN THE CONTEXT OF DE-EXTINCTION

ANECOYON(APPLICANT)

V.

RIDUS (RESPONDENT)

WRITTEN SUBMISSION ON BEHALF OF THE APPLICANT

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TABLE OF ABBREVIATIONS

ABBREVIATION	FULL FORM
¶/ Para	Paragraph
AHTEG	Ad Hoc Technical Expert Group
Art.	Article
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CONF.	Conference
COP	Conference of Parties
CRISPR	Clustered Regularly Interspaced Short Palindromic Repeats
DNA	Deoxyribonucleic acid
Doc.	Document
DSI	Digital Sequence Information
e.g.	Example given
ed.	Edition

et al.	**et alia**
EU	**European Union**
ICESCR	**International Covenant on Economic, Social and Cultural Rights**
ICJ	**International Court of Justice**
Id.	**ibidem**
ISIC	**International Standard Industrial Classification**
IUCN	**International Union for Conservation of Nature**
MAT	**Mutually Agreed Terms**
pg	**Page**
PIC	**Prior Informed Consent**
SAP	**Sidney Animal Park**
UN	**United Nations**
UNEP	**United Nations Environment Programme**
USD ($)	**United States Dollar**
VCLT	**Vienna Convention on the Law of Treaties**
WTO	**World Trade Organization**

QUESTIONS PRESENTED

I.

Whether Ridus's conduct complied with or violated the prior informed consent provisions of the CBD and the Nagoya Protocol, to the extent they are applicable?

II.

Whether Anecoyon's refusal to consent based on its objections to de-extinction is counter to the CBD's objectives?

III.

Whether, as an initial matter, DSI used for de-extinction activities is "biotechnology" for purposes of the CBD and the Nagoya Protocol?

IV.

If so, whether the Sidney Animal Park is a user of DSI on genetic resources for purposes of CBD Decision 16/2 and whether the Sidney Animal Park is engaged in commercial activity covered by a sector currently listed in CBD Decision 16/2?

STATEMENT OF JURISDICTION

In accordance with Article 40(1) of the Statute of the International Court of Justice, the States of Anecoycon and Ridus have submitted to the International Court of Justice their Special Agreement pertaining to questions relating to the Prior Informed Consent and Benefit Sharing in the context of De-Extinction. The Parties transmitted a copy of the Special Agreement to the Registrar of the ICJ on 14 July 2025,

The Registrar of the Court addressed a notification to the parties on 28 July 2025. Therefore, the Parties have accepted the jurisdiction of the ICJ pursuant to Article 36(1) of the Statute and request the court to adjudge the dispute in accordance with the rules and principles of international law, including any applicable treaties.

STATEMENT OF FACTS

Anecoyon and Ridus are range states of the extinct Royal panther (Puma Royali).[1] The states are parties to CBD, Nagoya Protocol, CITES and VCLT.[2] The Royal panther went extinct 6,000 years ago with the best-preserved fossil found in Anecoyon in 1901.[3]

In 2009 Anecoyon loaned the fossil to Ridus's National Museum for twenty years for "education and scientific research."[4] In September 2020 Ridus announced DNA extraction from the fossil for de-extinction purposes.[5] Anecoyon objected, claiming it is the "country of origin of genetic resources" under the Nagoya Protocol requiring prior informed consent per Article 6.[6]

Ridus argued that the Protocol is not retroactive and that the conditions of consent were fulfilled in the loan agreement. Anecoyon stated that the DNA extraction post-dated the 2015 Protocol, Article 15 calls for consent, and the consent on the loan was uninformed about possibilities of de-extinction.[7]

Anecoyon refused consent, despite discussions, and passed banning legislation in December 2023.[8] Ridus returned the fossil but completed genome sequencing in August 2024.[9] Two panthers were engineered in December 2024 and placed at Sidney Animal Park, where viewing fees netted 4 million USD yearly and current revenues topped 130 million USD.[10]

[1] Record ¶ 6.
[2] Record ¶¶ 9-11.; Record ¶ 14.
[3] Record ¶ 7.
[4] Record ¶ 15.
[5] Record ¶ 16.
[6] Record ¶ 18.
[7] Record ¶ 19.; Record ¶ 20.
[8] Record ¶¶ 21-24.
[9] Record ¶ 27.
[10] Record ¶¶ 32-34.

At the CBD COP16/NP-MOP5, Ridus committed to the financial thresholds of Decision 16/2 for the Cali Fund but refuses classification as commercial DSI utilization, avoiding the obligations of benefit-sharing. Negotiations failed and both states referred the matter to the ICJ.[11]

[11] Record ¶ 13.; Record ¶ 41.

SUMMARY OF ARGUMENTS

I. RIDUS VIOLATED PRIOR INFORMED CONSENT UNDER CBD AND NAGOYA PROTOCOL.

Ridus's retroactivity defense fails because obligations attach to post-2015 use, such as DNA extraction and the creation of DSI, not the 1901 loan itself. Specific consent for de-extinction is lacking in the 2009 agreement in violation of PIC and MAT under Nagoya Article 6. Transboundary claims disregard territorial sovereignty under Article 15 of the CBD, and community consultations do not replace state consent. Continued use of DSI without PIC is a violation of good faith negotiation duties.

II. ANECOYON'S REFUSAL TO CONSENT IN LINE WITH CBD OBJECTIVES.

Refusal maintains the primacy of conservation, precautionary principle, and sovereignty over high-risk de-extinction to prevent ecological harm. It embodies due diligence, rejects commercial pretexts for "research," and ensures ethical stewardship, thus consistent with Articles 1, 3, 8, 10, and 15 of the CBD.

III. DSI FOR DE-EXTINCTION CONSTITUTES BIOTECHNOLOGY UNDER CBD AND NAGOYA.

The test to Article 2(d) is satisfied by CRISPR editing, genome sequencing, and the creation of bio-objects. The de-extinct panthers are unnatural, engineered biotic entities rather than replicas, embodying an integral set of biotechnological processes.

IV. SAP IS A COMMERCIAL DSI USER UNDER CBD DECISION 16/2.

Breeding and exhibition of CRISPR-engineered panthers qualify as DSI use in animal breeding

sectors. Activities are not wholly non-profit due to revenue derived from ticket sales, viewing fees, and merchandise, which thereby triggers benefit-sharing contributions.

ARGUMENTS

I. WHETHER RIDUS'S CONDUCT COMPLIED WITH OR VIOLATED THE PRIOR INFORMED CONSENT PROVISIONS OF THE CBD AND THE NAGOYA PROTOCOL, TO THE EXTENT THEY ARE APPLICABLE?

1. RETROACTIVITY DEFENCE FAILS.

a. Obligations attach to utilisation, not the original loan.

The Nagoya Protocol and Article 15 of the CBD regulate the utilisation of genetic resources, such as the extraction of DNA and the creation of Digital Sequence Information (DSI), rather than the mere transfer of materials.[12] Although the fossil was loaned before the Protocol entered into force, Ridus extracted and used DNA later. These post-entry acts constitute utilisation governed by current obligations. The ICJ in Dispute regarding Navigational and Related Rights confirmed that treaty duties attach to the use or exercise of rights after a treaty enters into force, not to prior arrangements.[13]

b. Continuing acts are governed by current obligations.

The non-retroactivity rule in VCLT Article 28 excludes application to completed acts but not to continuing conduct.[14] The ICJ in *Armed Activities on the Territory of the Congo* held that continuing actions are governed by obligations arising during their continuance, while *Certain*

[12]Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity art. 2(c), Oct. 29, 2010, 3008 U.N.T.S. 179.
[13]Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicar.), Judgment, 2009 I.C.J. 213 (July 13).
[14]Vienna Convention on the Law of Treaties art. 28, May 23, 1969, 1155 U.N.T.S. 331.

Phosphate Lands in Nauru affirmed that ongoing violations can fall within a treaty's temporal scope.[15] Ridus's extraction, sequencing, and dissemination of DSI are continuing activities and therefore fall within the Nagoya Protocol's definition of utilisation (Art. 2(c)).[16]

c. A restrictive view of retroactivity defeats the treaty's purpose.

Allowing Ridus's claim would let users exploit pre-Nagoya resources indefinitely, undermining the CBD and Nagoya's objectives of equitable benefit-sharing and state sovereignty over genetic resources.[17] The ICJ in *Gabčíkovo–Nagymaros Project* emphasized that treaties must be interpreted to preserve their object and purpose.[18]

d. The transboundary defence misconstrues "country providing genetic resources".

Ridus argues that the species' ancient habitat extended beyond Anecoyon's borders, making the fossil transboundary. However, CBD Article 2 define the "country providing genetic resources" as the state from whose *territory* the resource is taken.[19] The ICJ in *Pulp Mills on the River Uruguay* and *Whaling in the Antarctic* affirmed that sovereign rights over natural resources are territorial.[20] Accordingly, since the fossil was excavated from Anecoyon's territory, only Applicant state possessed the lawful authority to grant Prior Informed Consent (PIC).

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[15]Armed Activities on the Territory of the Congo (Dem. Rep. Congo v. Uganda), Judgment, 2005 I.C.J. 168, ¶s. 62-64 (Dec. 19).; Certain Phosphate Lands in Nauru (Nauru v. Austl.), Preliminary Objections, Judgment, 1992 I.C.J. 240, ¶. 63 (June 26).
[16]Nagoya Protocol, supra note 1, art. 2(c).
[17]CBD pmbl., June 5, 1992, 1760 U.N.T.S. 79; Nagoya Protocol art. 1; VCLT art. 31(1).
[18]Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), Judgment, 1997 I.C.J. 7, ¶. 140 (Sept. 25).
[19]CBD art. 2.
[20]Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. 14, ¶s. 175-77 (Apr. 20).; Whaling in the Antarctic (Austl. v. Japan), Judgment, 2014 I.C.J. 226, ¶. 83 (Mar. 31).

2. RIDUS BREACHED ARTICLE 6 OF THE NAGOYA PROTOCOL.

a. Anecoyon is the party providing genetic resources.

Article 6(1) provides that "access to genetic resources for their utilization shall be subject to the prior informed consent of the Party providing such resources, which is the country of origin."[21] Anecoyon is the Party that provides genetic resources. The CBD defines a "country providing genetic resources" as the State supplying resources collected from in-situ sources.[22] The Royal panther fossil was discovered and collected from Anecoyon in 1901, which is an in-situ source.[23] As noted by Morgera et al., "in-situ conditions" include natural geological formations where fossils occurred.[24]

The determinative factor is the physical origin of the genetic material in Anecoyon's territory. Although the fossil was loaned in 2009, because the Protocol regulates post-2015 utilization, DNA extraction (2020), genome sequencing (2024), and de-extinction activities fall within Nagoya Protocol obligations.

b. The loan agreement did not constitute valid prior informed consent.

The loan agreement from 2009 fails to fulfill prior informed consent criteria. As Article 6(3)(g) states, consent must contemplate "the possibility of change of intent, where appropriate." Informed consent requires particularity about the proposed intent to be valid. As Morgera et al. note, a general consent for "scientific research" cannot capture activities

[21]Nagoya Protocol art. 6(1).
[22]CBD art 2.
[23]Record ¶ 6.
[24]Elisa Morgera, Elsa Tsioumani & Matthias Buck, Access to Traditional Knowledge Associated with Genetic Resources, in Unraveling the Nagoya Protocol: A Commentary on the Nagoya Protocol on Access and Benefit-Sharing to the Convention on Biological Diversity 141 (2015).

fundamentally different in nature, such as genetic engineering or commercial exploitation.[25]

In 2009, animal de-extinction technology was neither a feasible commercial prospect nor even under consideration. Article 6(3) demands legality, certitude, and written confirmation for specific uses. Ridus proceeded with the De-Extinction Product without acceptable terms and despite Anecoyon's unambiguous dissent from September 2022 onward.

c. Article 11 does not eliminate consent requirements.

According to Article 11(1), cooperation is needed "where the same genetic resources are found in situ within the territory of more than one Party."[26] However, this provision does not negate Article 6's prerequisite for prior informed consent. As the commentary explains, indeed Article 11 provides for cooperation obligations, but it "does not prevent States from making unilateral decisions." Importantly, the genetic material was sourced solely from Anecoyon's territory. The territorial sovereignty to genetic resources always reigns and Article 11 is not a permissible basis to undermine Anecoyon's sovereign rights of consent.[27]

d. Consultation with panthera communities does not remedy state consent violations.

Ridus's 2024 consultation with Panthera communities does not fulfill the need for consent at the state level from Anecoyon. The Protocol contains distinct requirements, for instance, Article 6 requires consent from the Party that provides the genetic resource, and Article 7 concerns the consent of Indigenous communities concerning traditional knowledge. Morgera

[25]Id.
[26]Nagoya Protocol art. 11.
[27]Gurdial Singh Nijar, The Nagoya Protocol on Access and Benefit Sharing of Genetic Resources: Analysis and Implementation Options for Developing Countries (2011).

et al. further clarifies that community consent "is separate from and potentially additional to State PIC." [28]

State authority regarding genetic resources defined in Article 15(1) CBD and Article 6(1) Nagoya Protocol is separate and independent from rights of Indigenous community rights to genetic resources. Community consultation per Article 7 cannot replace Anecoyon's sovereign right to approve the giving of genetic resources as a Party to the genetic resources.

3. RIDUS HAS VIOLATED THE CBD.

a. Sovereign rights and consent are mandatory.

CBD Articles 3 and 15[29] affirm states' sovereignty over genetic resources and require access based on Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT). Anecoyon, as the provider country, retained control over the fossil's genetic material. Respondent state never obtained PIC or MAT before extracting DNA and creating DSI. Even if the fossil was loaned for paleontological study, that consent cannot be stretched to cover genetic utilisation[30].

b. Independent consent is required for new use.

Under CBD Article 15(4)[31], access must be granted on mutually agreed terms, and consent must be specific to the intended utilisation. The loan agreement did not authorise de-

[28]Morgera, Tsioumani & Buck, supra note 11.
[29]CBD arts. 3, 15.
[30]Nagoya Protocol, supra note 1, art. 6(1)-(2).
[31]CBD art. 15(4).

extinction or DSI exploitation. PIC is a condition precedent to lawful use;[32] its absence makes subsequent acts unauthorised. Ridus therefore breached both procedural and substantive obligations.

c. Continuing use without PIC breaches sovereignty.

Ridus's ongoing use and distribution of DSI derived from Anecoyon's fossil constitute a continuing violation of Anecoyon's sovereign rights. [33] The ICJ in *Pulp Mills on the River Uruguay*[34] held that procedural environmental duties such as prior consultation form part of a state's due diligence. Likewise, the obligation to obtain PIC and negotiate MAT is a procedural duty of care. Ridus's omission parallels the procedural negligence condemned in *Pulp Mills.*

d. "Scientific research" cannot justify unauthorised use.

Ridus may contend that its de-extinction work is legitimate research. Yet the ICJ in *Whaling in the Antarctic*[35] ruled that scientific exceptions in environmental treaties must be narrowly construed. Japan's whaling programme, though labelled research, was held commercial in substance. Similarly, Ridus's de-extinction project involving synthetic biology and potential commercialisation exceeds bona fide research and lacks transparency or benefit-sharing.

[32]CBD art. 15(5).
[33]CBD, supra note 5, art. 3.; Nagoya Protocol, supra note 1, art. 6(2).
[34]Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. 14, ¶¶ 197-205 (Apr. 20).
[35]Whaling in the Antarctic (Austl. v. Japan), Judgment, 2014 I.C.J. 226, ¶¶ 226-30 (Mar. 31).

e. Sustainable development cannot override consent obligations

Ridus might rely on the *Gabčíkovo–Nagymaros Project*[36] to argue that de-extinction serves sustainability. However, that decision stressed that environmental protection and development must be balanced through legality and cooperation. Acting unilaterally without PIC or MAT disturbs that balance and breaches the cooperative framework underlying sustainable development.

4. RIDUS VIOLATED GOOD FAITH OBLIGATIONS UNDER INTERNATIONAL LAW.

a. Ridus's actions clearly violated their responsibility to negotiate in good faith.

Indeed, the *North Sea Continental Shelf Cases,* reiterated in the Lake Lanoux Award, obliges the parties "to conduct themselves in a manner so that the negotiations have some meaning, which will not be the case when one or the other insists that its position is the only valid one and nothing would persuade them to consider or entertain any possible modification of their position.".[37] Even though Anecoyon's objections were made manifestly clear in September 2022, Ridus unilaterally initiated DNA extraction activities, engaged in genome sequencing and even some de-extinction functions and did not attempt in good faith to resolve it.[38]

The *Lake Lanoux tribunal* recognized that violations of the duty to act in good faith included behavior such as "unjustified breaking off of agenda, abnormal delays, derogation of the

[36] Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), Judgment, 1997 I.C.J. 7, ¶¶ 140-42 (Sept. 25).
[37] North Sea Continental Shelf (Ger./Den.; Ger./Neth.), Judgment, 1969 I.C.J. 3 (Feb. 20).
[38] Record ¶ 18.

agreed procedures, and systematic refusals to consider options."[39] Ridus engaged in the good faith duty violations by moving the project forward over Anecoyon's explicit refusal; proceeding with DSI publication in August 2024; and continuing to engage in project actions after negotiations ended in October 2023.[40]

Good faith obligates parties to exert "good efforts to reach agreement" and to conduct project themselves "honestly, sincerely, reasonably" and "respect the legitimate interests of the other party."[41] Ridus's one-sided movement of the de-extinction project is an act of bad faith and prevented any meaningful consideration of Anecoyon's interests in sovereignty and the environment, which were legitimate interests under Article 15(1) of the CBD, in the de-extinction and its development.

[39] Lake Lanoux Arbitration (Fr. v. Spain), Award of Nov. 16, 1957, 12 R.I.A.A. 281
[40] Cameron S.G. Hutchison, The Duty to Negotiate International Environmental Disputes in Good Faith, 24 Can. Y.B. Int'l L. 165 (1986).
[41] Steven Reinhold, Good Faith in International Law (2013).

II. WHETHER ANECOYON'S REFUSAL TO CONSENT BASED ON ITS OBJECTIONS TO DE-EXTINCTION IS COUNTER TO THE CBD'S OBJECTIVES?

1. ANECOYON'S REFUSAL UPHOLDS THE CBD'S CORE OBJECTIVE OF CONSERVING EXISTING BIODIVERSITY.

The Convention on Biological Diversity (CBD) consists of three interconnected goals: conservation, the sustainable use of biodiversity, and the fair and equitable sharing of benefits, as stated in Article 1. Conservation is the most important goal that is the basis for all others.[42] According to Article 15(1) affirms States' sovereign rights over natural resources and their authority to regulate access through national laws, while Article 15(2) obliges Parties to facilitate access for environmentally sound uses consistent with the Convention's objectives.[43] As noted by Birnie, Boyle & Redgwell, this provision gives states the power to limit access where biodiversity might be harmed by use.[44]

Anecoyon's refusal corresponds with this mandate. De-extinction involving the re-creation and reintroduction of an extinct species via genome engineering bears very high ecological uncertainty and risk. The above-mentioned scientific and ethical issues are entirely covered by the CBD's objective of protecting current biodiversity.[45]

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[42] Elisa Morgera, The Need for an International Legal Concept of Fair and Equitable Benefit Sharing, 27 Eur. J. Int'l L. 353 (2016).
[43] CBD, supra note 5, art. 15(1)-(2).
[44] Patricia Birnie, Alan Boyle & Catherine Redgwell, International Law and the Environment 381 (4th ed. 2021).
[45] Stuart L. Pimm et al., The Biodiversity of Species and Their Rates of Extinction, Distribution, and Protection, 344 Science 1246752 (2014).

In the case of *Pulp Mills on the River Uruguay*,[46] the ICJ established that states have both procedural and substantive discretion to control environmental activities and prevent harm. Consequently, Anecoyon's national measures intended to limit de-extinction[47] are, therefore, a legitimate exercise of the duty to conduct diligence under the Convention.

2. THE REFUSAL EMBODIES THE PRECAUTIONARY PRINCIPLE AND RESPONSIBLE ENVIRONMENTAL GOVERNANCE.

The refusal embodies the precautionary principle and responsible environmental governance. The Precautionary Principle, explicitly stated in the Preamble of the CBD and in Principle 15 of the Rio Declaration,[48] requires States to take preventive action to avoid environmental degradation even when scientific certainty is lacking. The MOX Plant[49] held that precaution forms part of a State's due diligence obligation, while Trouwborst recognised its emergence as a binding customary principle[50]. Anecoyon's 2023 moratorium on de-extinction projects constitutes a precautionary measure to prevent irreversible ecological consequences such as disease transmission and genetic instability.[51] The ICJ in the *Gabčíkovo-Nagymaros Project* affirmed that environmental protection is integral to development.[52]

3. THE REFUSAL IS CONSISTENT WITH THE ETHICAL AND SCIENTIFIC FRAMEWORK

[46]Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. 14, ¶s. 197-205 (Apr. 20).
[47]Record ¶ 24.
[48]Rio Declaration princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Annex I (Aug. 12, 1992)
[49]MOX Plant (Ir. v. U.K.), Case No. 10, Provisional Measures, Order of Dec. 3, 2001, ITLOS Rep. 95, ¶¶ 82-84.
[50]Arie Trouwborst, The Precautionary Principle and the Ecosystem Approach in International Law: Differences, Similarities and Linkages, 18 Rev. Eur. Cmty. & Int'l Envtl. L. 26 (2009).
[51]Record ¶¶ 18, 26
[52]Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), Judgment, 1997 I.C.J. 7, ¶¶ 140-42 (Sept. 25).

OF THE CBD.

The CBD not only recognises the ecological and ethical obligations but also upholds the principles of stewardship and respect for life. In relation to biodiversity, Articles 8 and 10 advocate for in-situ preservation and sustainable utilisation of the living and non-living components of ecosystems, respectively. Performing genetic reconstruction of long-gone species goes against these provisions as it will be changing the ecosystem in an artificial way instead of bringing it back to its original state.[53] The rejection of Anecoyon indicates not only ecological authenticity but also moral limitation in accordance with the CBD's spirit.

Ridus's assertion that de-extinction falls under the category of scientific research, as per the CBD, should be dismissed. The ICJ in *Whaling in the Antarctic* indicated that the term "scientific research" can only be applied to very specific and narrow cases, and any program primarily commercial in nature does not qualify. [54]Ridus's project which involves a private company[55] and earns tourism income[56] is an instance of commercial activity. As a result, the educational research loan in 2009 cannot be used as a ground for genome extraction or de-extinction. Thus, Anecoyon's refusal is both procedurally and morally justified.

4. THE INTERPRETATION OF THE CBD SUPPORTS PRECAUTIONARY RESTRAINT AND SOVEREIGNTY.

As per Article 31(1) of the VCLT,[57] the interpretation of treaties is to be done based on their

[53]Ralph Bodle & Sebastian Oberthür, Climate and Biodiversity Regimes 215-17 (2022).
[54]Whaling in the Antarctic (Austl. v. Japan), Judgment, 2014 I.C.J. 226, ¶s. 226-30 (Mar. 31).
[55]Record ¶¶ 29–33.
[56]Record ¶¶ 34–35.
[57] VCLT, supra note 2, art. 31(1).

object and purpose. By adjudicating in the *Iron Rhine Arbitration*,[58] it has been stated that the interpretation of environmental treaties is to be dynamic so that the treaties keep their effectiveness in the face of changing ecological conditions. The reading of the CBD as placing an obligation on States to permit genetic manipulation of high-risk would be contrary to its object, which is the conservation of biodiversity.

The *Trail Smelter case*[59] has clarified that the States have a duty to ensure that no environmental damage across borders is caused by activities of their jurisdiction. In denying Anecoyon the de-extinction approval the activity with uncertain ecological effects aligns with both the interpretation of treaties and the established principles of preventive responsibility.

[58] Iron Rhine Arbitration (Belg. v. Neth.), Award of May 24, 2005, 27 R.I.A.A. 35, ¶. 52.
[59] Trail Smelter (U.S. v. Can.), 3 R.I.A.A. 1905 (1941).

III. WHETHER, AS AN INITIAL MATTER, DSI USED FOR DE-EXTINCTION ACTIVITIES IS "BIOTECHNOLOGY" FOR PURPOSES OF THE CBD AND THE NAGOYA PROTOCOL?

1. PLAIN DEFINITION UNDER CBD AND NAGOYA PROTOCOL.

a. The acts of Salols Co. satisfy the definition of biotechnology under Article 2(d) of the Nagoya Protocol and the CBD.

According to Article 2(d), biotechnology means "any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use."[60] This means there are three parts to the qualification: (1) technology application, (2) biological systems, living organisms, or derivatives thereof; and (3) make or modify a product or process for a particular purpose.

In the present instance, Salols Co. (a) compared the DSI of the Royal panther and the North American cougar, (b) genetically engineered cougar cells using CRISPR technology to resemble the traits of the Royal panther, and (c) implanted the resulting placenta in a host cougar.[61] These steps demonstrate a technological application (CRISPR), use of biological derivatives (DNA sequences as digital representations of genetic resources), and modification for specific use (creating organisms resembling the extinct Royal panther), satisfying all three elements of Article 2(d).

[60] CBD, supra note 5, art. 2(d).; Nagoya Protocol, supra note 1, art. 2(d).
[61] Record ¶ 31.

b. DSI utilization for de-extinction constitutes biotechnology under Articles 2(c) and 2(e).

Article 2(c) defines utilization of genetic resources as "research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology."[62] In the present instance, Salols Co.'s CRISPR-based research on the Royal panther genome constitutes such utilization.

The applicant state relies on the Article 2(e) which defines derivative as "a naturally occurring biochemical compound resulting from the genetic expression or metabolism of biological or genetic resources, even if it does not contain functional units of heredity."[63] CRISPR employs such derivatives: the DNA sequences to create new organisms. The Nagoya Protocol thus extends beyond tangible genetic material to include biochemical compositions, acknowledging the manipulation of both genetic and biochemical compositions as part of biotechnology.[64]

The definition of biotechnology in the CBD is broader than "modern biotechnology" understood merely as genetic engineering, thereby covering biological technologies involving materials not containing functional units of heredity.[65] Hence, DSI-based de-extinction, which uses biochemical derivatives, clearly falls within the ambit of biotechnology under the CBD and Nagoya Protocol.

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[62] Nagoya Protocol, supra note 1, art. 2(c).
[63] Nagoya Protocol, supra note 1, art. 2(e).
[64] Morgera, Elisa, et al. "Use of Terms." *Unraveling the Nagoya Protocol: A Commentary on the Nagoya Protocol on Access and Benefit-Sharing to the Convention on Biological Diversity*, Brill, 2015, pp. 59–74. *JSTOR*, http://www.jstor.org/stable/10.1163/j.ctt1w76vvq.9. Accessed 14 Nov. 2025.; Glowka and Normand, "The Nagoya Protocol on Access and Benefit-sharing," op. cit., 28.
[65]Convention on Biological Diversity, Report of the Expert Meeting on Definitions, U.N. Doc. UNEP/CBD/WG-ABS/7/2, ¶19 (2009).

c. The panthers created through de-extinction constitute bio-objects and products.

The Respondent State contends that classifying the Royal panthers as "biotechnology" or "products" is inappropriate.[66] However, this position fundamentally mischaracterizes the nature of de-extinct organisms.

i. De-extinct organisms are bio-objects by definition.

The Applicant state relies on the fact that De-extinction exemplifies "bio-objectification", the process by which life is transformed into an object through human intervention.[67] Ixchel and Itzamna exemplify this process: created through DNA extraction from the Royal panther fossil, genome sequencing, CRISPR editing of cougar cells, and artificial implantation.[68] These organisms are bio-objects because they are simultaneously "living beings and yet at the same time objects that can be used, controlled, and traded for human purposes."[69]

Born in laboratories, raised in captivity at the Sidney Animal Park, and displayed to paying visitors for 40 USD per viewing, they exist entirely within human-constructed systems.[70] They are fundamentally "out of place," living their entire existence outside nature in zoos and exhibitions, a characteristic feature of bio-objects.[71] Questions inevitably arise concerning their

[66] Record ¶ 39.
[67] Andrew Webster, Introduction, in Bio-Objects: Life in the 21st Century 1, 1-10 (Niki Vermeulen et al. eds., 2012).
[68] Record ¶ 32.
[69] Laura Martinelli et al., De-extinction: A Novel and Remarkable Case of Bio-objectification, 55 Croat. Med. J. 423, 423-27 (2014).
[70] Record ¶¶ 31, 32, 34.
[71] Bettina Bock von Wülfingen, From Re-pair and Re-production to (Re) Generation: Bio-objects as Indicators of Cultural Change, 53 Croat. Med. J. 502, 502-04 (2012); Pieter Maeseele et al., Bio-objects and the Media: The Role of Communication in Bio-objectification Processes, 54

identity, since live specimens of extinct species cannot replicate the original species precisely.[72]

ii. **Ridus's own characterization confirms product status.**

The Respondent state itself acknowledges that Ixchel and Itzamna are property of the state under domestic law.[73] When the State of Ridus expressly considers the panthers to be state property, it cannot simultaneously claim they are not objects or products.[74]

iii. **De-extinct panthers are technologically created products distinct from naturally evolved panthers.**

De-extinct creatures are unnatural in both creation method and physical constitution.[75] De-extinction methods cannot perfectly mimic the lost ones because the differences in the whole ecological systems plus the epigenetic factors that influence the animals' appearance, physiology, and behavior differ substantially.[76] The U.S. Supreme Court has ruled that "non-naturally occurring" organisms produced through human genetic intervention are patentable "manufactures" rather than being classified as natural life forms.[77]

The IUCN Guidelines on De-Extinction accept only the fact that the animals brought back to life are not like the original extinct ones.[78] These panthers are not the same as the extinct species but

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Croat. Med. J. 301, 301-05 (2013).
[72] *Id.*
[73] Record ¶ 32.
[74] Record ¶ 39.
[75] C. Mason, The Unnaturalness Objection to De-Extinction: A Critical Evaluation, 6 Animal Stud. J. (2017).
[76] *Id.*
[77] Diamond v. Chakrabarty, 447 U.S. 303 (1980).
[78] IUCN SSC, Guiding Principles on Creating Proxies of Extinct Species for Conservation Benefit 1 (Ver. 1.0, May 18, 2016).

are gene modified cougars made to look like the Royal panther.[79] The scientific agreement supports the view that Ixchel and Itzamna are biomaterial created by technology and not naturally existing living beings.

2. IN WHOLE, DE-EXTINCTION IS A BIOTECHNOLOGY.

a. De-extinction encompasses multiple integrated biotechnological applications.

The characterization of de-extinction as biotechnology does not depend solely on CRISPR technology rather, it encompasses the entire integrated process of DNA extraction, genome sequencing, DSI creation, comparative genomics, CRISPR editing, cell manipulation, embryo creation, implantation, birth. [80]Each of these steps involve "technological application," the process utilizes "biological systems" throughout, and the result constitutes a "modified product" under Article 2(d).[81]

b. De-extinction constitutes biotechnology a *fortiori*.

An a *fortiori* argument demonstrates that if animal breeding constitutes biotechnology (undisputed) and genetically modified crops constitute biotechnology (undisputed),[82] then CRISPR-based de-extinction is a *fortiori* biotechnology. De-extinction represents a more technologically intensive application than traditional biotechnology, thereby satisfying the definition with greater certainty.

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[79] Record ¶ 31.
[80] Martinelli et al., *supra* note 57, at 423-27.
[81] Nagoya Protocol, supra note 1, art. 2(d).
[82]Bayer, GMO & Biotechnology, https://www.bayer.com/en/agriculture/gmo-biotechnology (last visited Nov. 14, 2025).

c. The extent of genetic modification confirms biotechnology classification.

The Applicant state relies on the fact that 20 edits were made to 15 genes of the North American cougar to produce Ixchel and Itzamna. This substantial genetic modification far exceeds minimal intervention.[83] The North American cougar was genetically engineered to resemble the Royal panther.[84] This constitutes quintessential "modification" under Article 2(d).[85] The amount of genetic modifications used during de-extinction, demonstrates the technological aspect of the process and how it constitutes a technology application that is biotechnology.

3. THE PURPOSE AND OBJECT OF THE NAGOYA PROTOCOL SUPPORT BROAD INTERPRETATION OF BIOTECHNOLOGY.

Article 31 of the VCLT mandates interpretation of treaties in accordance with their purpose and object.[86] The respondent state claims that "Nagoya was never intended to cover de-extinction projects" and invokes the UN Secretary General's statement that benefit sharing was designed to "make those profiting from nature contribute to its protection and restoration."[87] This argument fails on multiple grounds.

a. Commercial profit and conservation purposes are not mutually exclusive.

The respondent state's interpretation creates a false dichotomy between profiting from nature and restoration activities. The SAP generates 130 million USD annually, including 4 million USD

[83] Clarification A8.
[84] Record ¶ 31.
[85] Nagoya Protocol, supra note 1, art. 2(d).
[86] VCLT, supra note 2, art. 31.
[87] Record ¶ 39.

from panther observation fees.[88] The Court must evaluate the respondent state's activities based on their commercial reality of 130 million USD in annual revenue rather than asserted conservation purposes.[89] The state cannot escape benefit-sharing obligations by claiming conservation purposes while generating millions in commercial revenue. The Nagoya Protocol does not provide an exception for biotechnological activities related to conservation and this is done intentionally.

b. Use of technology-neutral language

While de-extinction technology did not exist in 2010 when the Nagoya Protocol was adopted, the Protocol has been intentionally drafted with broad technology-neutral terms to include emerging biotechnologies. The meaning of the words "research" and "development" in defining "utilization" was deliberately to make the framework adaptable to the technology in advance.[90]

[88] Record ¶ 45.
[89] Whaling in the Antarctic (Austl. v. Japan: N.Z. intervening), Judgment, 2014 I.C.J. 226, ¶ 88 (Mar. 31).
[90] Morgera et al., *supra* note 52, at 59-74.

IV. IF SO, WHETHER THE SIDNEY ANIMAL PARK IS A USER OF DSI ON GENETIC RESOURCES FOR PURPOSES OF CBD DECISION 16/2 AND WHETHER THE SIDNEY ANIMAL PARK IS ENGAGED IN COMMERCIAL ACTIVITY COVERED BY A SECTOR CURRENTLY LISTED IN CBD DECISION 16/2.

1. INCLUSION OF SIDNEY ANIMAL PARK'S ACTIVITIES TO 'USE' UNDER CONVENTIONS.

a. Scope and Application of "Digital Sequence Information".

The scope and intent of the CBD[91] extend to usage of Digital Sequence Information conducted by Sidney Animal Park. CBD Decision 16/2 (3)[92] requires users of DSI in sectors that directly/indirectly benefit from its use in commercial activities to contribute to global fund. In AHTEG Report on DSI,[93] it was recognized that DSI is used for number of different purposes including breeding, monitoring and control. Sidney Animal Park's primary activity regarding the Royal Panther is breeding and caretaking,[94] which expressly comes within the use of DSI as stated in the report above.[95]

[91] CBD, supra note 5.
[92] Conference of the Parties to the Convention on Biological Diversity, Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity, U.N. Doc. CBD/COP/DEC/16/2, annex ¶ 3 (2024).
[93] Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources, Fact-Finding and Scoping Study on Digital Sequence Information on Genetic Resources in the Context of the Convention on Biological Diversity and the Nagoya Protocol, U.N. Doc. CBD/DSI/AHTEG/2018/1/4, at 7, ¶ 14 (2018).
[94] Record ¶ 35.
[95] *Supra* note 81.

It is important at this moment to turn to the judgement of *Diamond v Chakrabarty*[96]**,** where court recognised genetically engineered organisms as 'product'. In application to present case DSI with CRISPR/Cas9 synthesis have been used to breed the Royal Panther[97] which qualifies as a product. In use of the product, in accordance with the AHTEG report, it is categorized as 'use of DSI'

Further, the use of DSI in formulating conservation strategies were explained in Addendum 1 to the Nagoya Protocol[98], with a case study on conservation of Eastern Lowland Gorilla in Congo**.** Such interpretation is in line with the breeding and conservation activities of Sidney Animal Park, hence qualifying as a 'User' of DSI.

b. DSI's utilization through Product Creation.

The de-extinction of Royal Panther is resultant product of use of DSI[99]. The applicant's position is founded upon on Example 12 of Addendum 1[100], where AHTEG has demonstrated the inclusion of CRISPR Cas9 system in role of DSI in animal and plant breeding. Royal Panther being genetically engineered with CRISPR technology is product derived from DSI. The applicant state asserts that SAP utilization of the 'product' by possession and breeding comes within the scope of utilization of the resource. In support of this position, the applicant relies on report of experts on concepts, terms and definition[101]

[96] Diamond v. Chakrabarty, 447 U.S. 303, 308-18 (1980).
[97] Record ¶ 31.
[98] Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources, Examples on the Use of Digital Sequence Information on Genetic Resources: Addendum, U.N. Doc. CBD/DSI/AHTEG/2018/1/2/Add.1, at 3, example 5 (2018).
[99] Record ¶¶ 31-34.
[100] *Supra* note 8, at 6, example 12.
[101] CBD, Report of the Expert Meeting on Concepts, Terms, Working Definitions and Sectoral Approaches, U.N. Doc. UNEP/CBD/WG-ABS/7/2, at 8 (2009).

which specifically considers "Preservation of non-human organisms for conservation of genetic diversity, genetic resource or reintroduction purposes through activities such as captive breeding and deposition in Zoos". This report clarifies that Sidney Animal Park's activities of deposition in zoo[102] and long-term captive breeding[103] is expressly categorized as use of DSI.

c. Sidney Animal Park's activities as Utilization of Genetic Resources.

It is the applicant's contention that SAP being a user of Genetic Resource and Biotechnology and hence a sector benefiting from DSI is a user of DSI. Referring to Explanatory guide to the Nagoya Protocol[104], which explains that "utilization covers any material of biological origin with functional units of heredity that has either an actual or potential value because of them". Further this interpretation is cemented by inclusion of "breeding and selection" and "conservation" within the definition of 'genetic resources' in the report.[105]

Additionally placing reference on Nagoya Protocol[106] which defines "biotechnology" to be technological application that uses biological systems to make or modify products, SAP is a beneficiary of the resultant product of biotechnology. From the applicant's perspective, considering the caretaking and breeding activities to the Royal Panther, it is a product of genetic material by Sidney Animal Park, it comes within the scope of 'Utilization of Genetic

[102] Record ¶ 33.
[103] Record ¶ 35.
[104] Thomas Greiber et al., *Explanatory Guide to the Nagoya Protocol on Access and Benefit-Sharing* 64 (IUCN Envtl. Pol'y & L. Paper No. 83, 2012).
[105] *Supra* note 11.
[106] Nagoya Protocol, supra note 1, art. 2(d).

Resources' under Nagoya Protocol.[107]

2. SIDNEY ANIMAL PARK'S ACTIVITIES BEING COMMERCIAL

a. Commercial Activity under the Conventions

The CBD Decision 16/2 provides that users of DSI that benefit from its use in commercial activity should contribute to the global fund[108]. SAP commercially benefitting from the activities through revenue generated by panther viewing charges and additionally the base ticket sale[109]. CITES[110] defines "commercial" which is described as activity obtaining economic benefit and is directed towards provision of a service or any other economic use or benefit, additionally it places stricter restrictions on inclusion to non-commercial activities by stating "any transaction which is not wholly 'non-commercial' will be regarded as commercial"[111] and in terms of Primarily commercial purposes "it is agreed that all uses whose non-commercial aspects do not clearly predominate shall be considered to be primarily commercial in nature"[112]

Intention of CITES is to tightly regulate the commercial trade in endangered species, despite this commercial trade continues by misuse of purpose code Z: Zoos, rather than purpose code T: commercial transaction.[113]. There is significant evidence of commercial trading under the

[107] *Id.* art. 2(c).
[108] *Supra* note 2, annex ¶ 3.
[109] Record ¶ 34.
[110] Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, Definition of Terms 'Primarily Commercial Purposes', 'Personal' and 'Household Effects', Res. Conf. 5.10 (Rev. CoP19) (2022).
[111] *Id.*
[112] *Id.*
[113] EMS Foundation, Commercial Zoos: Locking Up CITES Potential to Ban the Commercial Trade in Critically Endangered Species (2022.

disguise of 'Zoo' including the case of Elephant imports from Lao in China[114], this explains that an activity labelled zoo can still be for a primarily commercial purpose under CITES, considering the revenue generating activities SAP comes within the scope of '*commercial*'

A crucial reliance can be placed on UN Secretary-General's observation that benefit sharing is to make those profiting from nature contribute to its protection[115], read in relation with judgement in *Pulp Mills Case*[116]where it is stated that State is obliged to avoid causing damage to environment of another state. In conjoint reading the inclusion of SAP within term '*commercial*' would provide avenues for preservation of environment through the 'Cali Fund'.[117]

b. ISIC Classifications and Commercial Applications

SAP qualifies as a *user of DSI* as the CRISPR engineered Royal Panther places its activities within ISIC[118] Class A (Animal Breeding) expressly reflected in CBD Decision 16/2's Indicative List of sectors benefiting from DSI.[119] Additionally, ISIC Class 7210**[120]** includes research and experimental development in natural sciences and engineering, covering biotechnology. Since SAP directly benefits from biotechnology-based outcomes derived from DSI, its activities fall squarely within the sectors contemplated by CBD Decision 16/2, necessitating treatment as a DSI user for benefit sharing purposes.

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[114] *Id.* at 4.
[115] Record ¶ 39.
[116] Pulp Mills on the River Uruguay (Arg. v. Uru.), Provisional Measures, Order, 2006 I.C.J. 113, at 56 (July 13).
[117] Cali Fund: A Guide to the Cali Fund (2024).
[118] United Nations, International Standard Industrial Classification of All Economic Activities, U.N. Doc. ST/ESA/STAT/SER.M/4/Rev.4 (2008).
[119] *Supra* note 2, enclosure I ¶ 2.
[120] *Supra* note 28, at 227.

c. Inapplicability of Non-Profit nature of Zoo.

The respondent's position relying on non-profit motive and usage of revenue for caretaking of Panthers absolving them of any commercial gain is incorrect. The argument lacks merit on the ground that the whole transaction is not non-commercial, taking into account the 119.00 USD one-day base ticket[121] that is required in order to enter the park is sufficient economic benefit. CITES[122] states that "any profit gained must not inure to personal economic benefit". The SAP states only the excess fund generated by panther-viewing charge will be utilized for the captive breeding program[123].

The respondent state's assertion that Use of DSI is purely scientific purpose and it lacks nexus to breeding in 'commercial motive' lacks merit as considering respondent state's future plan to commercialize through eco-tourism and safari[124], the objective of scientific research will also be considered 'commercial' as established in *Whaling in the Antarctic Case*[125], The applicant states claim of "conservation" can be analyzed as being similar to Japan's claim of "Scientific research" in this case which the court looked past.

Additionally, SAP derives commercial benefit from sale of merchandise and food[126], moreover the commercial intent of SAP is observable through explicit advertisement of the Royal Panthers[127]. As per the CITES interpretation, Sidney Animal Park's activity not being 'Wholly Non-Commercial' will be regarded as '*Commercial'.*

[121] Record ¶ 34.
[122] *Supra* note 102.
[123] Record ¶¶ 34-35.
[124] Record ¶ 36.
[125] Whaling in the Antarctic (Austl. v. Japan: N.Z. intervening), Judgment, 2014 I.C.J. 226, ¶ 97 (Mar. 31).
[126] Record ¶ 45.
[127] Clarification A5.

SAP qualifies as a '*user*' of DSI considering breeding and conservation activities constitute '*utilization of resource*' and within recognized uses in AHTEG reports. The park operates directly benefitting from the use of DSI and moreover the operations are commercial in nature in accordance with CITES principles, thus is a Commercial User of DSI and is subject to contribution obligations under CBD.

PRAYER FOR RELIEF

Anecoyon respectfully requests the Court to adjudge that:

I. Ridus's conduct violated the CBD and Nagoya Protocol provisions on prior informed consent.

II. Anecoyon's refusal to consent, based on objections to de-extinction, is consistent with the CBD's objectives.

III. DSI used in de-extinction constitutes "biotechnology" under the CBD and the Nagoya Protocol.

IV. Sidney Animal Park is a user of DSI on genetic resources under CBD Decision 16/2 and is engaged in commercial activity within a listed sector.

Respectfully Submitted,

AGENTS FOR APPLICANT