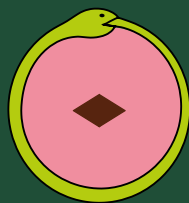
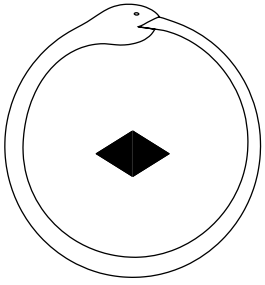




BRAZIL,
GUARDIAN OF THE FUTURE
Jeremy Narby



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BRAZIL, GUARDIAN OF THE FUTURE

Jeremy Narby

This article is a written consolidation of the ideas presented by the author on October 23, 2022, at Casa França-Brasil, in Rio de Janeiro.

At this in-person event of Selvagem, where the Portuguese version of the book “Plant Teachers: Ayahuasca, Tobacco, and the Pursuit of Knowledge”, also written by the author, was launched, Narby delivered two speeches. The first one can be accessed [here](#), and the second one [here](#).

The global population of wild species of birds, fish, mammals, amphibians, and reptiles has plummeted by 69% in the last 50 years. Only in the last decade, the average rate of decline for these animals was 1% per year. Wild vertebrate populations are disappearing, while humans observe and measure the phenomena¹.

This impressive drop in the number of vertebrate animals is caused by humans themselves, who occupy and use an ever-increasing portion of the Earth’s surface and resources. Humans continue to devastate forests to impose monocultures, plunder landscapes to extract minerals and oil, and engage in intensive fishing with the help of advanced technologies. Most of the time, they do this for short-term personal gain. But each time a species comes to an end, the web of life that surrounds the planet, or biosphere, becomes impoverished.

The biosphere is the only home we have. It is also the repository of true wealth. Humans can only enjoy a fertile existence on this planet because plants transform sunlight into organic energy and, along with bacteria, produce the oxygen-rich air we breathe. Humans may well believe that extracting oil and minerals from the ground creates consumer goods and financial prosperity.

But true wealth is biological and renewable. We cannot survive on a diet of gold, oil and money. We need plants and animals to nourish us

1. According to WWF’s “Living Planet Index”, published on October 13, 2022. Available at: <https://livingplanet.panda.org>.

and oxygenated air to breathe. A healthy biosphere is worth more than all the gold and oil in the world.

A healthy and diverse planet, region, or territory is more precious in the long term for humans and other forms of life than what has been devastated in the name of short-term profit. When an ocean is depredated and its fish population plummets, it becomes a depleted resource for humans. For centuries, humans could fish as much as they wanted in oceans around the world without impacting the fundamental existence of different fish. Nowadays, large fleets equipped with satellite technology and enormous, super-efficient nets locate shoals of fish and capture them on a large scale. That is why wild fish populations are declining worldwide.

Few people disagree that when a natural species disappears, all other living beings, including humans, ultimately lose. Life on Earth depends on a rich and diverse web of living beings, including plants, animals, fungi, bacteria, and viruses. This web of life sustains all forms of life, and our long-term existence depends on its well-being. Yet humans continue to multiply their activities at the expense of the complex biosphere web.

The world needs a vast and biodiverse country to act as the guardian of life on Earth. The position is open, and potential candidates are few. For Brazil, this is an opportunity to take the lead and show the rest of the world what it means to value natural riches.

When we talk about preserving the wealth of life on Earth, some countries are more important than others. One simple way to measure global wealth in living species is to define some categories of beings – such as plants, insects, amphibians, birds, fish, mammals, and reptiles – and calculate the percentage of species in these categories present in different countries around the world. In Brazil, for example, 12.7% of the already catalogued plant species live. No other country has a higher percentage in this category. This makes Brazil the world leader in plant species. There are more plant species in Brazil than in any other country.

By adding up all the categories, Brazil ranks first in terms of the total number of living species. It is first in plants, amphibians, and insects, second in mammals, and third in birds, fish, and reptiles. Only Indonesia has more mammal species than Brazil, and only Colombia and Peru have more bird species. It is in Australia and Indonesia that there are

more fish species. A recent study compiled all these numbers to create a global biodiversity ranking². Brazil leads this ranking with a score of 77.2%, divided as follows: 12.7% of the world's plants + 13.6% of the world's amphibians + 11.8% of the world's mammals + 17.6% of the world's birds + 13.7% of the world's fish + 7.9% of the world's reptiles.

This is the ranking of the world's most biodiverse countries:

1. Brazil	77,2
2. Indonesia	61,4
3. Colombia	57,6
4. China	54,3
5. Peru	50,9
6. Mexico	50,8
7. Australia	48,6
8. Ecuador	44,4
9. India	44,2
10. USA	40,6
11. Venezuela	39,9
12. Bolivia	33,8
13. South Africa	33,1
14. D.R. Congo	32,6
15. Malaysia	32,4
16. Tanzania	32,3
17. Papua New Guinea	32,2
18. Vietnam	31,4
19. Argentina	30,2
20. Thailand	29,9
....	
47. Russia	16,8

I decided to include Russia on this list because it is by far the largest country in terms of territory and water mass. It is possible to assume that the larger the country, the greater the chance of harbouring a greater number of species. But Russia has a cold continental climate. Its fauna and flora are much less diversified than those of tropical countries. Russia is twice the size of Brazil but is home to five times fewer natural

2. See "The top 10 most biodiverse countries", by Rhett A. Butler, May 21, 2016. Available at: <https://news.mongabay.com/2016/05/top-10-biodiverse-countries/>. This study does not include insects in its categories and classifications. About Brazil as the world leader in insect species, see Rafael et al. Knowledge of Insect Diversity in Brazil: Challenges and Advances. *Neotropical Entomology*, vol. 38, no. 5, p. 565-570, 2009.

species. This shows us that to understand global biodiversity legitimately, it is necessary to take into account the size of the country.

This is the ranking of countries by total territory size, calculated in square kilometres:

1. Russia	17,000,000
2. Canada	9,900,000
3. China	9,600,000
4. USA	9,400,000
5. Brazil	8,500,000
6. Australia	7,000,000
7. India	3,200,000
8. Argentina	2,700,000
9. Kazakhstan	2,700,000
10. Algeria	2,300,000
...	
14. Mexico	1,960,000
15. Indonesia	1,900,000
...	
21. Peru	1,300,000
...	
25. Colombia	1,100,000
...	
42. France	640,000
...	
51. Spain	500,000
...	
73. Ecuador	276,000

Ecuador is an interesting counterexample to Brazil. Its territory is 30 times smaller than Brazil's, but it encompasses more than half of all living species found in Brazil. Even though it is a small country, Ecuador harbours a spectacular number of species. Its biological wealth may be one of the most concentrated in the world, but that does not change the fact that the country is too small to act as a global leader in preserving life on Earth. A small country with an equally small population can experiment and create interesting policies and practices. But a large country in terms of territory and population is needed to take the lead and show the world that things can be done on a large scale.

Another counterexample is Canada. Even though it is the second-largest country in terms of territory, it has only 38 million inhabitants. This means it accounts for only 0.48% of the world's population.

And as a northern country, with long and cold winters, its score in the global biodiversity index is low. It ranks 56th, behind Sudan, Somalia, and Nepal³. Despite its immense territory, Canada would not be able to lead the biodiversity issue, even if it wanted to.

A large, biodiverse, and populous country would be needed to act as the guardian of life on Earth, in order to make a difference on a planetary scale. Brazil fits perfectly into this role: it is the world leader in absolute metrics of biodiversity, ranks fifth in territorial extension, and seventh in population size. But there are other countries that could apply.

This is the global ranking of human population by country, in millions of inhabitants as estimated by Wikipedia, with the percentage indicating the portion of the total worldwide:

1. China	1,400	(17.7%)
2. India	1,370	(17.2%)
3. USA	331	(4.0%)
4. Indonesia	275	(3.4%)
5. Pakistan	229	(2.8%)
6. Nigeria	216	(2.7%)
7. Brazil	215	(2.7%)
8. Bangladesh	165	(2.0%)
9. Russia	145	(1.8%)
10. Mexico	128	(1.6%)
...		
20. France	67	(0.8%)
...		
28. Colombia	51	(0.6%)
...		
30. Spain	47	(0.59%)
31. Argentina	47	(0.59%)
...		
37. Canada	38	(0.48%)
...		
42. Peru	33	(0.41%)
...		
53. Australia	26	(0.33%)
...		
66. Ecuador	18	(0.22%)

3. See <https://theswiftest.com/biodiversity-index/> for the ranking of the 201 most biodiverse countries.

This ranking shows that Brazil is among the ten most populous countries. Its 215 million inhabitants represent 2.7% of the total world population. This is four times more than Colombia, six times more than Peru, eight times more than Australia, and twelve times more than Ecuador – countries with high biodiversity scores but excluded from the heavyweight category in terms of population.

Only a handful of countries could lead the world in the protection of life on Earth. Besides Brazil, there are five other possible candidates: Indonesia, China, Mexico, India, and the USA. All these countries have sufficient size, population, and biodiversity, but none of them has shown interest in claiming the position.

China, in particular, would be a perfect candidate. It has the largest human population in the world, the third largest territory, and ranks fourth in overall biodiversity. However, the country seems to have other priorities at the moment.

The United States could also be one of the postulants. It ranks tenth in biodiversity, fourth in land area and third in terms of population. As an extensive country with a temperate climate, the United States encompasses various ecosystems, from the swamps of Florida to the deserts of Nevada, from the coastlines of California to the forests of New England. Often, the United States has claimed to lead the world in other matters. But, for reasons still unknown, the country remains silent when it comes to global biodiversity.

Brazil has all the necessary requirements to claim the role of guardian of life on Earth. Its biological wealth is still unparalleled. The sizes of its territory and population grant it influence at a planetary level and legitimacy. In a world where animals are disappearing at an annual rate of 1%, the value of Brazil's natural wealth will only continue to grow. The true wealth of Brazil lies in the future. And the same was said by the newly elected president in his victory speech.

By cultivating its own natural and cultural diversity, Brazil can show the world what really matters: life itself. And, by doing so, the country would become the global centre of life on Earth. *Can you imagine that?!*

Jeremy Narby was born in 1959 in Montreal, Canada. He studied History at the University of Canterbury and obtained his PhD in Anthropology from Stanford University in the United States. He spent many years in the Peruvian Amazon, alongside the Ashaninka people. With the aim of contributing to the fight against devastation of all kinds, he catalogued the indigenous use of forest resources. He has written many books dealing with indigenous knowledge systems and the use of ayahuasca to gain knowledge. Among his works are *Plant Teachers: Ayahuasca, Tobacco, and the Pursuit of Knowledge*, a book published in Portuguese by Dantes (2022); *The Cosmic Serpent: DNA and the Origins of Knowledge*, also printed in Portuguese by Dantes (2019); *Shamans Through Time* (Penguin, 2004); and *Intelligence in Nature: An Inquiry into Knowledge* (Penguin, 2006).

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I'm a translator living in São Paulo, proud to help Selvagem spread the culture and the ancient wisdom of Brazil's traditional communities.

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