



Erik Orsenna @IAGF

Economist, reporter and writer, Erik Orsenna is the author of numerous novels such as L'Exposition coloniale (Goncourt prize, 1988), La Vie la mort la vie, devoted to Louis Pasteur, as well as reference works on globalization with cotton, water, paper, mosquitos or cities as key characters.

Ambassador of the Pasteur Institute and member of the French Academy, Erik Orsenna honoured us to share with IFGR an exclusive preview from his next book "L'unité de la vie" (unity of life) available in bookstores at the end of August 2020.

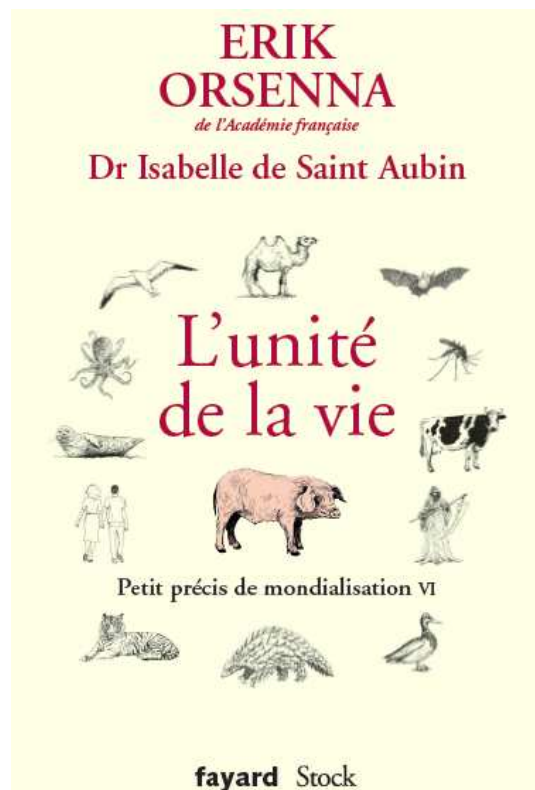
This excerpt, A treasure at Petit-Saut, looks back at the many discoveries made during the construction of the Petit-Saut dam in Guiana. In addition to its electric generation, covering more than half of the French Guiana electric consumption, this dam flooded an area three times larger than the surface area of Paris.

The 260-kilometre-long Sinnamary River originates in the central Guyana mountains. Crossing a (very small) part of the Amazon rainforest, it embraces one of the richest areas of the planet in terms of biodiversity.

"It took this dam, and therefore this aggression of the environment, to start taking an interest in the treasures it contains ».

It reminds me of my first arrival at Manaus airport. As soon as I landed, I came across a group of French people whose accent sounded in harmony with my northern French Brittany origin. The contact having been established, they explained to me that they were doctors and nurses and belonged to an NGO one of whose objectives was to help lepers, yes lepers, still today! They live in the heart of the forest to gash the rubber trees and collect their white blood, i.e. rubber. Are you coming with us?

Why not?



Erik Orsenna & Dr Isabelle de Saint-Aubin,
Fayard/Stock 2020

And so I spent nearly a month in lost villages along the Rio Branco with poor seringueiros whose disease had ravaged their noses and fingers. And in complete intimacy also with an infinite number of animals, birds, reptiles, rodents, felines, reptiles, insects, most of them invisible, the others sublime (like the enchanting prepona meander butterflies: blue stripes on a black background) or terrifying (Ah, the first time a tarantula climbs on your leg!).



Prepona meander butterfly

You could hear them screaming their terror, each in his own language, when daylight fell. And then sing for joy when the first light of dawn came up. For the rest of the night, they all seemed to gather around my hammock. Underneath, above, they kept passing me from underneath and from above, as if to give me the message that, as an inhabitant of temperate zones, I had known only a miserable and dreary little sample of life until then.

Let us return to Guyana and the Sinnamary River. At Petit-Saut, one of the thirty-nine rapids, EDF had decided to build a dam. What would happen to the animals living in the 365 square kilometres that were to be flooded between January 1994 and July 1995? A major "rescue" operation was decided. Which only imitates actions of the same kind accompanying the flooding of similar structures.

France was behind! The country would demonstrate a lack of interest in the treasure she

had with this piece of Amazon. The forest seems inexhaustible, no protected area had been created, not the least hunting policy implemented ... Petit-Saut will raise awareness, mobilize energies and collect some funding.

One can imagine the enthusiasm and determination of young researchers arriving in this threatened paradise. Anne Lavergne and Benoit de Thoisy are part of the commando. The first had just finished her thesis in Montpellier on "Biology and genetic structure of an opossum of the Didelphis genus". The second, who arrived at the age of two in this Guyana, had only left her to follow in Paris training in ... veterinary medicine. After graduation, he rushed back.



French Guiana map

I would have given much to participate in this battle against this new version of the Flood. In the Journal of Traditional Agriculture and Applied Botany, Jean-Christophe Vié relates. He oversaw the operation.

The scientific coldness of his report does not prevent us from imagining the extraordinary of the adventure! Eighteen months deep in the jungle, facing a water that kept rising. **A foretaste of the consequences of climate change ...**

35 people involved (hunters, students, biologists, veterinarians). Identification of the islets that would float the longest. Capture after systematic exploration of potential shelters (hollow trunks, burrows, treetops). Driving to the veterinary centre. Identification, examination and biological samples, markings, telemetric monitoring.

3278 mammals (47 species) were not only "saved" from drowning, but observed from every angle, as well as 799 snakes (68 species) and 1386 turtles. A new species of arboreal rodent, called *Isothrix sinnamariensis*, has been discovered, and many others, very rare, meticulously described. Traditional taxonomy could be either confirmed or questioned. A genetic information bank was created, rich in living cells stored in liquid nitrogen...

« And knowledge of diseases has tremendously progressed »

And knowledge of diseases has tremendously progressed. For example, it was discovered that 25% of individuals and 90% of mammals were carriers of trypanosomas and micro filaria. A list of fleas, potential carriers of the plague, has been drawn up. New parasites have been identified in snakes, opossums and porcupines. And, thanks to serological tests, Benoit de Thoisy and his team have advanced in understanding the role of mammals, and monkeys, in the cycle of certain arboviruses.

It took this dam, and therefore this aggression to the environment, to start taking an interest in the treasures it contains.

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