

### **An Indomitable Beast: The Remarkable Journey of the Jaguar**

By Alan Rabinowitz. 2014. Island Press, 2000 M Street, Suite 650, Washington DC, USA, 20036. 241 pages, 30.00 USD, Cloth.

The iconic jaguar is surprisingly one of the least known of the big cats that also includes tigers and lions. The largest spotted cat is more secretive and leery of humans, which has probably also contributed to the jaguar's relatively better conservation status. The author has traveled around the world to research and save not only many different species of endangered felids, but also their habitats. In this book, he gives a personal journey beginning in childhood and developing into a professional career spanning over 30 years that has primarily revolved around the jaguar, which is aptly

referred to as the indomitable beast and the reluctant warrior.

At the age of 5 years, Rabinowitz developed a mysterious fascination with the jaguar when his father regularly took him to the Bronx Zoo in his hometown of New York. Gravitating to the sciences in college and feeling more at home in the outdoors led him to complete an MSc on the biology of the endangered gray bat and a PhD on raccoon ecology in Tennessee. Then a serendipitous meeting with the legendary conservation biologist George Schaller brought Rabinowitz full cir-

cle back to his animal of first love. He jumped at the chance of conducting research on the poorly known jaguar in equally unknown Belize.

Afterwards, a two-decade hiatus took Rabinowitz to Asia and the study of other species in need of conservation, but the largest cat in the Americas was always back of mind. It wasn't until 1999 that he got back into jaguars when he organized a meeting on the current state of research and conservation of this species. This book, his second on jaguars, begins here when he sees the revelation of genetic data coalescing with corridors of fragmented forested habitats that gives a better understanding of how the indomitable beast can survive in the face of humanity.

But the story actually starts further back in the Pleistocene ice ages about 2 million years ago when now extinct species and/or subspecies lived in Europe and the Americas. However, only the tropical jaguar survives today with a range from the southern United States to northern Argentina. The big cats, including jaguar, are thought to have their origins in Asia and the likely route of New World colonization was across the Bering Strait land connection in the northern hemisphere. The corridors in these colder, harsher climates were the precursors to the present-day fragmented landscapes that the jaguars now need to navigate and that governments need to preserve.

After the jaguar became established in the Americas and the Eurasian jaguar went extinct, modern man crossed the same land bridge into the New World as early as perhaps 40,000 years ago. With the gradual change from hunter-gatherers to farmers, humans began to have a profound influence on the distribution of jaguars by altering the natural habitat. Early civilizations such as the Olmecs in 1,500 BC Mexico further

modified the landscape but also established a cultural and spiritual link with the jaguar, a mystique that still exists to some extent today.

Paradoxically, the European colonization of the New World in the 15<sup>th</sup> century was devastating to the indigenous pre-Columbian civilizations but enabled the jaguar to re-establish itself in a reforestation of previously modified landscapes. However, by the 19<sup>th</sup> century population growth and development were slowly reclaiming again the forested jaguar habitats. The double-edged sword of overhunting of jaguars for the fashion industry and hunting its prey species such as deer and peccaries for human consumption further endangered the chances of survival. This prompted the Convention on International Trade in Endangered Species (CITES) and the US Endangered Species Act to protect the jaguar and its habitat beginning in the 1970's.

Rabinowitz does a stellar job in weaving the complex and compelling stories of the jaguar by telling them through the lens of evolutionary and cultural history. This starts from day one in the Bronx Zoo during his childhood to the Cockscomb of Belize in his earlier groundbreaking research and the recent drive to ensure its survival through the Jaguar Corridor Initiative that preserves the connections between fragment habitats in the New World tropics. He tells this life-long journey through his association with the Wildlife Conservation Society and now the charitable organization Panthera. This is an inspirational read for not only professional biologists but also amateur naturalists with an interest in the passion of science and environmental conservation.

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