

**The Early Conservation Movement in Argentina and  
the National Park Service: A Brief History of  
Conservation, Development, Tourism and  
Sovereignty**

by  
**Arthur Oyola-Yemaïel**

ISBN: 1-58112-098-2

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ISBN: 1-58112-098-2

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of Conservation, Development, Tourism and  
Sovereignty**

**By**

**Arthur Oyola-Yemaiel**

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To: Dean Arthur W. Herriott  
College of Arts and Sciences

This thesis, written by Arthur Oyola-Yemaiel, and entitled The Conservation Movement in 20th Century Argentina: A Case Study of the National Park System, having been approved in respect to style and intellectual content, is referred to you for judgement.

We have read this thesis and recommend that it be approved.

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Dr. Stephen Fjellman

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Dr. William Vickers, Major Professor

Date of Defense: March 22, 1996

The thesis of Arthur Oyola-Yemaiel is approved.

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Dean Arthur W. Herriott Ph.D.  
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Dr. Richard L. Campbell  
Dean of Graduate Studies

Florida International University,  
1996

## **DEDICATION**

To my family past, present and future with all my love.

## **ACKNOWLEDGMENTS**

I would like to thank my mentors in academe Janet Chernela, Stephen Fjellman and William Vickers, Dennis Wiedman and Walt Peacock all of whom have contributed enormously to my academic achievements. Special thanks must go to William Vickers who helped me clarify and narrow the scope of this work, encouraged me to do additional research in this area, and guided me through the original manuscript of this book.

My gratitude to Professor Stephen Fjellman who provided me with all sorts of constructive ideas and helped me acquire the tools to develop personally and professionally within the university system and academe. I especially wish to thank Professor Janet Chernela for her encouragement, support, valuable insights and tireless contributions to the theoretical analysis of my work. My gratitude also goes to Anthony Maingot for sharing his vast knowledge of historical political economy and sociological theory. Walter Peacock has my special appreciation for the assistance and background support that he always provided me. He helped me advance in the area of social vulnerability to natural hazards and disasters.

Thanks to the personnel of the National Park Service of Argentina for their invaluable disposition to share their knowledge and technical support which contributed greatly to my understanding of the environmental and administrative aspects of the institution. They are great people dedicated to benefit the world in which we live: Dr. Arturo Tarak, Francisco Erize, Enrique Monaglio, Diana Uribelarea, Marita

Ruiz, Carlos Sarceda, Pedro Benavente, Carlos Posadas and Carmen Montero, among many others.

No words could possibly describe my love to Jennifer Lyn Wilson, my wife. She is my friend, colleague and companion. We share our independent quest in this life and with admiration and devotion, I express to her my deepest gratitude.

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# Foreword

The purpose of this book is to explore the historical development of natural resource conservation in Argentina. Particular attention is given to the development and management of Argentina's National Park Service (NPS) because this institution's history embodies conservationist idealism and it was the first and foremost natural resource conservation agency in the nation.

Chapter 1. The purpose of this small chapter is to introduce the lector to Argentina's natural and social environment.

Chapter 2 describes the early exploration period from the seventeenth to nineteenth centuries. It focuses on the discovery, exploitation and extenuation of natural resources and the extinction of species and cultures.

Chapter 3 shows the affirmation of national interests in the frontier areas of Patagonia.

Chapter 4 discusses the origins and philosophy of the conservation movement within Argentina and in the international context and focuses upon the early conservation movement during the period of the 1870s to 1930s.

Chapter 5 concentrates on the early period of the National Park Service (1934-1955).

Chapter 6 describes how development, sovereignty and conservation were achieved by creating a nature based sustainable tourism industry in Patagonia.

Chapter 7 analyzes the National Park Service from 1955 to 1980. During this period, laws concerning the institution were changed. The modifications restricted the autarchic principle granted by the original National Park Service law.

Chapter 8 shows the changes in environmental policies from development and tourism to scientific research in the national parks from 1980 to 1995. I will focus on a third law concerning the National Park Service (22,351/80) which was intended to revitalize conservation policies and to broaden the scope and operational capacities of the institution. These policies increased the information about natural ecosystems including steps that were taken to link universities and other scientific research institutions to the Park Service. These were the first steps in establishing a comprehensive network for the study of Argentina's natural resources.

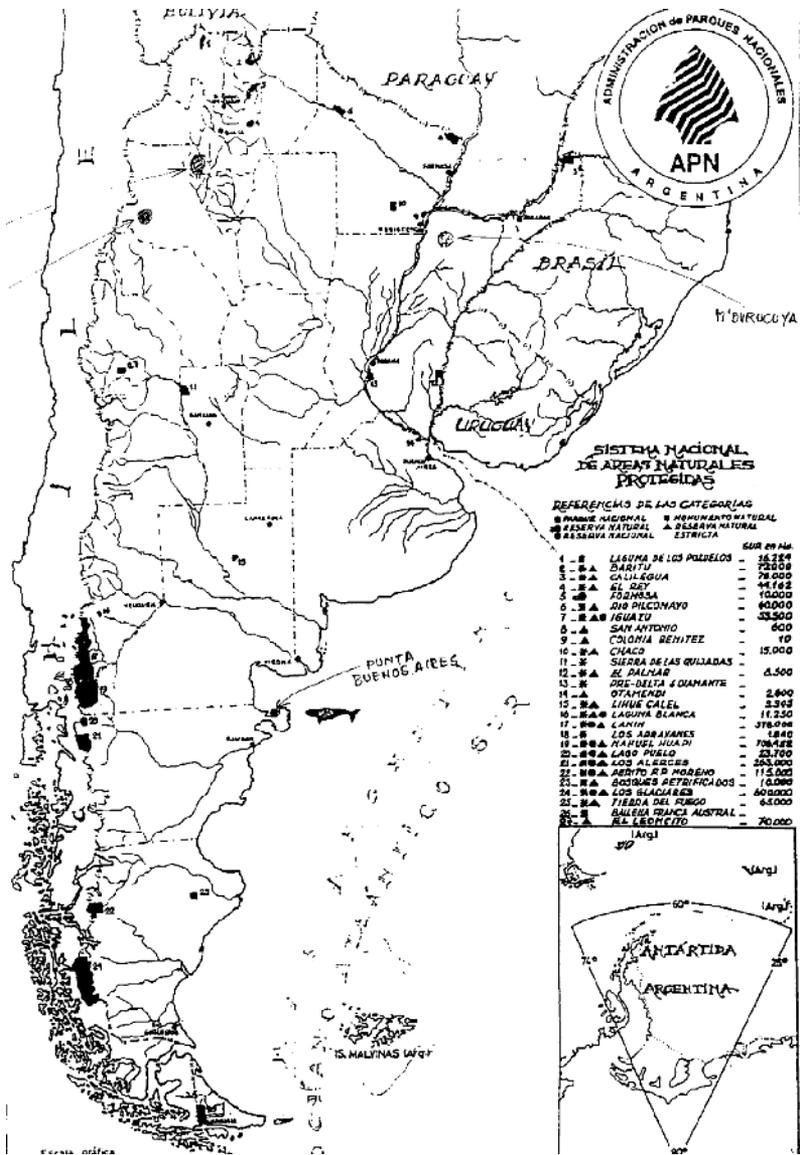
Chapter 9 presents the conclusions of this book. Entrepreneurs, naturalists and intellectuals with a vision of integrating the individual and society with the natural world furthered the conservation movement in Argentina. They worked and struggled to preserve natural habitats to make this communion possible. Finally, I will point out the limitations of this study and suggest future areas for research.

## **1. Situating the Lector: Concise Description of Argentina's Natural and Social Environment**

In order to familiarize the reader with the natural and social landscape of Argentina, I present here a very brief description of the country's physical and demographic geography.

Argentina occupies most of the land east of the Andes in the southernmost area of South America from the Tropic of Capricorn to Cape Horn. It is the eighth largest country in the world with an area of 1,073,399 square miles. It stretches 3,360 miles from its northern border with Bolivia to Tierra del Fuego and 884 miles from the Atlantic Ocean to the Andes Mountains. The Atlantic coast has a continental platform that extends approximately 150 miles east into the ocean and it stretches 1,936 miles from north to south.

Figure 1. Map of Argentina



Morello divided Argentina into seventeen biogeographical areas (1988) while others have suggested nineteen regions (Burkart et al. 1994). For this brief account, I use a simpler scheme composed of seven geographical regions: the Northern and Central Cordillera, the Humid and the Arid Pampa, Mesopotamia, the Humid and Arid Chaco, the Puna and Pre-Puna de Atacama, the Patagonian Andes, and the Patagonian Plateau.

Figure 2. Puna de Atacama (A. Oyola-Yemaiel 1982)



The steppes of the high Andes are located at the foothills of the highest peaks. The climate is very arid and cold. The high ranges are inhospitable to humans and most animals, and they remain covered with snow for most of the year. Very extreme temperatures and low oxygen levels make these mountains inhospitable for most human uses. In northwest Argentina the high mountain plateau associated with the high Andes is called the Puna de Atacama. It is a semiarid land with extreme daily temperatures ranging from -20 to 80° F in the winter and from 0 to 100° F in the

summer. It is inhabited by descendants of the Inca, Quechua, Aimara, Puno and Atacama Indians as well as the descendants of Spanish and European immigrants. The traditions of this area are associated with the pre-Colombian Indian and colonial Spanish cultures and are somewhat distinct from other regions of the country. Laguna de Pozuelos National Park is located in this region which is called Steppes of the Puna (Daniele and Natenzon 1994; Cabrera 1976; Udvardy 1986).

The Northern and Central Andes and its piedmont range from 16,000 to 23,000 ft in altitude with valleys at altitudes from 10,000 to 13,500 ft. The vegetation is xerophytic. The Andean cordillera runs from north to south with the high Puna Plateau in the north, the highest peaks in the middle latitudes and the lower altitudes in the south. Mount Aconcagua rises to 22,831 ft above sea level and stands together with other mountains that reach 22,000 ft some of which are volcanic. Farms and ranches extend through the valleys. This is a semiarid region but has been irrigated extensively by aqueducts. Most of the water comes from melting snow. This region corresponds to the Grassland and Hill Forest classifications (Cabrera 1976) and covers the central western and central provinces of Argentina.

The southern Andes are smaller in size and much cooler and more humid even at lower altitudes. They are situated within the path of the southern jet stream which brings constant moist, westerly winds. Because of this weather pattern the vegetation is exuberant and the forests are dense. The *Araucaria araucana* grows to 150 ft in height and to 7 ft in width. The giant of the region is the Alerce (*Fitzroya cupressoides*) which reaches up to 200 ft and stretches to 10 ft in diameter (Erize 1981). This area corresponds to the Sub-Antarctic bioregion (Cabrera 1976).

Figure 3. Alerce (*Fitzroya cupressoides*) (Arthur Oyola-Yemaiel 1983)



The Andes have a very cold climate and their peaks are covered with a permanent snow cap and glaciers. Los Glaciares National Park, situated at latitude  $50^{\circ}$  S and longitude  $73^{\circ}$  W, is a United Nations World Biosphere Reserve. It has one of the few weather stations that monitors global pollution.

Figure 4. Mount Fitzroy



Lanin National Park is the northernmost of a series of Andean parks that extends to Tierra del Fuego where the southernmost conservation unit on the continent is found. Most of these parks have their eastern boundaries in the desert-like Patagonian plateau and their western boundaries along the continental divide and the international border with Chile.

Figure 5. Mount Lanin (A. Oyola-Yemaiel 1993)



The Chaco stretches eastward from the Northern Andes. “Chaco” is a Quechua name for “hunting grounds.” This is a region with seasonal flooding and a subtropical and temperate climate. Flood plains are the main topographic characteristic with the exception of some hilly terrain. The rains occur mainly during winter months (up to 80 percent of the total). The temperature oscillates between 50 to 90° F. Deciduous trees and thorny hard wood bushes predominate in these areas which are covered with forest and savannah (Cabrera 1976; Udvardy 1986).

Mesopotamia is the area located between the Paraná and Uruguay rivers which drain the Gran Chaco and the coastal regions. Mesopotamia has very fertile soils. Portions of this region are composed of permanent and seasonal marshes.

Figure 6. Iguazu Falls (A. Oyola-Yemaiel)



Within Mesopotamia is Palmar National Park in Entre Rios Province and Cataratas del Iguazu in Misiones Province. There are also some provincial parks such as Esteros del Ibera which is in Corrientes Province (it may eventually become a national park). This is an area of difficult access, and it was partially left out of national development plans until the 1950s. Since then it has grown dramatically and has experienced great success in forestry, agriculture, and cattle ranching. The principal cities are Paraná, Corrientes and Posadas each inhabited by over 250,000 people.

The Pampas are located south of the Chaco. “Pampa” is a Quechua word for “flat lands.” They extend southward to the Colorado River and from the Atlantic Ocean in the east to the Sierras in the west. They are divided into the Grasslands of the Humid Pampas and the Arid Pampas. The first zone is close to the ocean and receives more precipitation (annual rainfall often exceeds 1500 mm). Mild temperatures and four seasons are its most salient climatic characteristics. The soils are extremely rich in nutrients and are the foundation of Argentina’s agricultural wealth. The Humid Pampa extends from southern Mesopotamia to the Province of Buenos Aires.

The capital city of Buenos Aires is located at the delta of the Paraná and La Plata Rivers. It is a megametropolis with over 12,000,000 people. Other cities like Mar del Plata, Rosario, La Plata, La Pampa and Bahia Blanca are found in the Pampas. About seventy percent of the national population lives in the Humid Pampas. Paradoxically, this region has few recreation and conservation areas. Since the 1980s, there has been a major push to acquire conservation lands in this region. Some of them are controlled for private and non-governmental

organizations (NGOs). The provincial authorities manage others.

Figure 7. Iguazu Falls Aerial Night (A. Oyola-Yemaiel 1997)



For example, the National Park Service has created the biological reserve of Otamendi in the outskirts of Buenos Aires. There is also a coastal reserve on the La Plata River margins within the Capital district.

The Dry Pampa is located west and south of the Humid Pampa and is the ecotone between the Patagonian Plateau and the Andes. The Dry Pampa partially covers the provinces of Cordoba, La Pampa and San Luis. The precipitation gradient goes westward and the fertility of the soil decreases inversely to its salinity. Annual rainfall varies between 80 to 250 mm.

The area west of the Pampas is the Steppe Brush which parallels the eastern Andes from the Bolivian border to the Patagonian desert (Morello 1985). Paleontological and archaeological sites here such as the Moon Valley and other important sites have been proposed as conservation areas. Some of these sites are under provincial protection and supervision.

Patagonian semi-arid grasslands extend from the Colorado River to Tierra del Fuego. This plateau of 200 m elevation is constantly battered by high winds from the west. Because it is located in a narrow land between the Pacific and Atlantic Oceans the climate is a cold oceanic one and relatively milder in relation to the latitude. Precipitation ranges from 250 to 350 mm annually.

In the oceanic littoral, there are some newly decreed marine sanctuaries such as Ballena Franca Natural Monument. The Provinces of Chubut, Rio Negro, and Santa Cruz administer other conservation areas which are not going to be address in this manuscript.

Most of Patagonia is uninhabited. The largest cities of the region are Trelew and Comodoro Rivadavia with over 350,000 people each. The remaining towns have fewer than 50,000 inhabitants each.

Figure 8. Patagonian Steppe Near Lago Argentino (A. Oyola-Yemaiel 1982)



## **2. Early Exploration and Exploitation of Natural Resources in Patagonia: 1650s-1850s**

Three major factors contributed to the development of Patagonia and specifically of Tierra del Fuego. These were hunting of mammals rich in oils and fur, the discovery and extraction of alluvial gold, and the implementation of sheep herding techniques in the northern plains. All of these factors contributed to the annihilation of the aborigines, the extinction of some mammalian species, and the reduction of other species to the point of endangering their existence. It also created the permanent settlements of European culture in Ushuaia, Punta Arenas, Rio Grande and other small localities. These three factors were propitiated by transnational forces of colonialism and by national forces securing hegemonic power over the land and its resources.