

BIOMA

Venezuela's Green Machine

A satellite photograph of Venezuela and the surrounding Caribbean Sea. The land is shown in shades of green and brown, with white clouds scattered across the terrain. The ocean is dark blue with white waves breaking along the coast.

Elizabeth Kline

# **BIOMA**

## *The Venezuela's Green Machine*

by Elizabeth Kline  
1994

Published by Aldemaro Romero Jr. 2020

Kline, Elizabeth (author); Romero Jr., Aldemaro (editor, preface, appendix)

BIOMA: The Venezuela's Green Machine

vi + 65 pp. Bibliography in appendix

1. Nature Conservation - Venezuela
2. Venezuela – Environmental History
3. Venezuela – Environmental Politics
4. BIOMA: The Venezuelan Foundation for the Conservation of Biological Diversity

All photographs from BIOMA's archives

## Editor's Preface

In 1994 BIOMA, The Venezuelan Foundation for the Conservation of Biological Diversity celebrated its 7th. Anniversary. As the founder and Executive Director and CEO of the organization, I felt that someone should write its history. Thus, I contacted Ms. Elizabeth Kline, a journalist, and writer whom I knew for some years during my encounters with the press to write that history. As she tells in this book, she was given full independence to write whatever she deemed appropriate. She was provided with full access to BIOMA's personnel, archives, and facilities. She delivered her MS early in 1994. When it was about to be sent to the press, I had to flee Venezuela under death threats. Shortly after, under government pressure, the board of directors decided to dissolve the institution.

Twenty-six years later, I thought it was time to make her manuscript available to the public. To that end, I used the original manuscript she gave me. That manuscript -together with other BIOMA documents- has been deposited in the archives of the Lovejoy Library of Southern Illinois University Edwardsville (<https://www.siu.edu/lovejoy-library/romero/>). I did very few and minor editing to it, basically, correcting some typos. I added the pictures that were supposed to be included by electronically scanning the original slides. Because of the passage of time, the color sharpness has been somewhat lost. However, I tried to correct them by using some photographic software.

After all this time, I tried to contact Elizabeth. The last thing I heard about her was from some Venezuelan press reports on the Internet that said that she had left Venezuela for the United States in 2015 at the age of 70. Although I tried to locate her using some Internet-based services, I was unsuccessful.

Some of you may want to know more about the controversial issues that affected the existence of BIOMA. Links to that documentation can be found as an appendix at the end of this book.

I hope you enjoy reading Elizabeth's journalistic but rigorous approach with which she approached this project. I am sure that many will find some lessons about Venezuelan politics, society, and human nature.

Aldemaro Romero Jr., Ph.D.  
Professor  
Baruch College, City University of New York.  
July 2020.

## TABLE OF CONTENTS

<b>Editor's Preface</b> .....	<i>i</i>
<b>AUTHOR'S NOTE</b> .....	<i>iii</i>
<b>PROLOGUE</b> .....	<i>v</i>
<b>CHAPTER 1. HISTORY</b> .....	<b>1</b>
<i>BORN FROM ADVERSITY</i> .....	<i>1</i>
<i>OBJECTIVES</i> .....	<i>3</i>
<b>CHAPTER 2. RAISING FUNDS</b> .....	<b>7</b>
<i>A DISTINCTIVE APPROACH TO RAISING FUNDS</i> .....	<i>7</i>
<i>BIOMA TOURS</i> .....	<i>10</i>
<i>MEMBERSHIP</i> .....	<i>13</i>
<b>CHAPTER 3. COMMUNICATIONS AND OUTREACH</b> .....	<b>15</b>
<i>COMMUNICATIONS AND CORPORATE LINKS</i> .....	<i>16</i>
<i>OUTREACH</i> .....	<i>24</i>
<b>CHAPTER 4. ALERTS AND CAMPAIGNS</b> .....	<b>33</b>
<i>INFORMING THE PUBLIC</i> .....	<i>33</i>
<i>WORKING TO PROTECT THE DOLPHIN</i> .....	<i>33</i>
<i>LEAD POLLUTION</i> .....	<i>37</i>
<i>PESTICIDES</i> .....	<i>39</i>
<i>DIRTY BUSINESS</i> .....	<i>39</i>
<b>CHAPTER 5. GATHERING AND SHARING ENVIRONMENTAL INFORMATION</b> .....	<b>41</b>
<i>SURVEYS AND ENVIRONMENTAL AUDITS</i> .....	<i>41</i>
<b>CHAPTER 6. RESERVES AND PARKS</b> .....	<b>45</b>
<i>BIOLOGICAL RESERVES</i> .....	<i>45</i>

<i>PARAGUANA PENINSULA RESERVES</i> .....	45
<i>MERIDA RESERVE</i> .....	51
<i>NATIONAL PARKS</i> .....	57
<b>CHAPTER 7. SUCCESS, CONTROVERSIES, &amp; RECOGNITION</b> .....	<b>61</b>
<i>CONTROVERSIES</i> .....	61
<i>RECOGNITION</i> .....	65
<b>EPILOGUE</b> .....	<b>67</b>
<b>ABOUT THE AUTHOR</b> .....	<b>68</b>
<b>APPENDIX</b> .....	<b>69</b>

## AUTHOR'S NOTE

When Aldemaro Romero approached me about writing the story of BIOMA, I never had the slightest hesitation. Between having frequently covered activities of the foundation when I was a reporter for *The Daily Journal* (Venezuela's English language newspaper), and having done various translations of BIOMA publications, I felt I had a fair knowledge of its activities and positive rapport with Romero and other personnel encountered up to that point.

I soon discovered that what I knew about BIOMA when I started could only be compared to the tip of the iceberg. Subsequent investigation revealed a much more complex and far-reaching organization than I ever imagined.

During the years I had worked with *The Daily Journal*, I had numerous contacts with Romero due to his unique style of public relations. I underscore unique (and memorable) in that he made the effort to personally visit newspapers, even at the hour that best suited each journalist (for me, the earlier the better, preferably before 8 a.m., which was unheard of by others), for one-on-one interviews. Compared to the standard in the trade of the calling of endless press conferences (which never started on time and seemed to always be scheduled around 11 a.m., the busiest and therefore worst possible hour for reporters in the Living Section with early deadlines), with the caller of said meetings holding court or simply reading declarations (which could just as well have been transmitted by press release to save everyone's time), believe me, Romero's personal approach stood out.

The situation did not change when I started this project, now working as a freelance writer.

Ever in keeping to his atypical style of efficiency and accommodation, our initial interviews were scheduled at a mutually convenient time: daily at 6:30 a.m. - perfect for me to beat Caracas' morning rush-hour traffic into downtown and find parking, and for him to be able to talk without the customary incessant ringing of the telephone and other interruptions in his office.

As author of hundreds of publications, Romero could well have written the history of BIOMA himself. However, with an overriding desire to have its development and activities related from a completely objective viewpoint, he chose someone outside of the organization to write it.

From the very beginning, what has been the most impressive factor about gathering information for the book has been the 100% openness and

cooperation of Romero and his insistence that any information or opinions at all that I requested from him, his staff, or from the foundation's files would be given to me without hesitation. This included the invitation to visit BIOMA's reserves to not only see how they operated but to be able to talk with people in the communities where they are located to get feedback from them about the projects.

When the subject of controversies BIOMA has faced came up in the course of interviews with Romero, with those in charge of the reserves, or were encountered in the files of newspaper clippings they maintain, I asked Romero if he would rather these were left out of the book. His immediate reply: "Of course not! Those are part of the history of BIOMA and it is to be understood that our purpose is to supply you with any information you need, but there are absolutely no restrictions about what you write. The whole idea is to present a totally uncensored report about BIOMA and its activities."

With the many hours spent in the BIOMA offices reading volumes of newspaper clippings (both positive and negative), asking questions of and observing the personnel, and going through files; with visits to all of BIOMA's reserves and chats with the nearby residents; and with the interviews conducted with Romero himself, the genuine enthusiasm by everyone on the payroll and who BIOMA's work touches (such as neighbors of the reserves) was clearly evident.

Undeniably, the greatest contributing reasons for BIOMA's success have been Romero's personal example of action ("doing, not just talking about conservation"), not just demanding others to carry out his ideas, and untiring dedication to what he believes in; and the realization on the part of BIOMA's team and by the community that they are genuinely making a concrete contribution to the cause of conservation of the nation's biodiversity.

The more of the BIOMA iceberg one discovers, the more there is to appreciate.



## PROLOGUE

As it celebrates its seventh anniversary, BIOMA (The Venezuelan Foundation for the Conservation of Biological Diversity) can reflect with satisfaction of a string of accomplishments that have distinguished it as the most recognized and most active private environmental organization in Venezuela.

BIOMA has earned high respect and recognition not only in Venezuela, but worldwide for its action, its absolute independence, and for having the courage to speak out on any environmental issue, regardless of *who* touches - always with its arguments firmly based on thoroughly researched and documented information.

Adhering to its theme, "we do conservation, we don't just talk about it" BIOMA has avoided empty rhetoric (instead, presenting concrete, feasible solutions) and means of preventing problems of the environment. And, taking that most significant "one step more," BIOMA has designed and implemented programs involving young and old, rural and urban communities, barrio dwellers and corporate giants alike which have set the pace and example for sustained development and conservation of the environment.

There is no doubt that the key element to BIOMA's success has been the dynamic leadership of its founder, Aldemaro Romero Díaz. He sets the pace in BIOMA with the style and head for business of a corporate director, the constant flow of new approaches and ideas for projects of a top ad man in a brainstorming session, the enthusiasm of a cheerleader, dedication and belief in what he is doing of an evangelist, organizational skills and discipline of a scientific researcher, and the drive of an incurable workaholic.

This combination of elements has not only directed Romero's personal work, but more importantly, has infected his staff of 40 professionals, board of directors, and the general public with the same enthusiasm for the cause of conservation.

BIOMA has made a name for itself. It has weathered the controversies which seem to go hand in hand with being different and successful. It has earned nationwide and international respect. It is getting its message across and truly making a difference.

## CHAPTER 1

# HISTORY

*With a clear vision of objectives since its serendipity beginning*

### **BORN FROM ADVERSITY**

One would hardly expect to be able to credit Venezuela's adverse economic conditions with being the impetus for the creation of the country's most widely-known, largest, most active, and well-respected, private organization dedicated to the preserving the environment, but that is precisely how BIOMA, The Venezuelan Foundation for the Conservation of Biological Diversity, came to be.

Aldemaro Romero Díaz, like many of Venezuela's most promising young adults in the 1980s, had gone to the United States on a government-sponsored Fundayacucho scholarship. His destination: The University of Miami. His goal: to blaze a trail as the first recipient of a doctorate degree in tropical biology.

True to his innate penchant for action, not talk, Romero skipped the master's program altogether, launching straight away into the work for his doctorate.

A scant two years and three months later (a record which still stands at the university for the shortest period ever taken to complete work for a doctorate degree), he had earned his PhD (with grades average by his thesis committee of 3.76 of a possible 4.0 points, equivalent to "magna cum laude") and headed back to Venezuela full of ambition and enthusiasm to begin work...only to find there were simply no jobs available in his chosen profession.

At the time, this could hardly have been viewed as a stroke of good fortune. But, for Romero, neither was it the end of the world.

"I saw that The Nature Conservancy in the United States was offering a grant for a Latin American who would work in the area of conservation and return to his own country to continue activity in this discipline," he said. "I applied for and got the grant and, in March of 1985, my family and I arrived in Washington D.C. to begin."

"Within the first week after arriving, I began to realize that there were important

things that I could do in the area of conservation. I was very romantic before - with a notion more on the line of bird watching and operating in a hypothetical manner."

This realization that he could make a difference had a profound effect on his way of looking at conservation.

He recalled an observation which had remained in the back of his mind: During his intensive job hunt when he returned to Venezuela after earning his degree, in the process of making countless contacts with groups and companies whose work was related to his profession, there was not a single private conservation group that concentrated on managing and monitoring land use. He had likewise noted that rather than doing anything about problems in this area, people were sitting back waiting for the government to take care of it. Taking full advantage of his time in the United States, Romero traveled extensively to visit groups such as World Wildlife Fund in other parts of the country and observe their methods and labor.

He had been going back to Venezuela for about one week out of each month to see how the situation was and to make contacts with groups and companies, he said. "When I returned to Venezuela in July of 1986, my plan was very clear of forming an organization which would concentrate on identifying, managing, and protecting natural habitats and wildlife in Venezuela. My proposal was presented to the John D. and Catherine T. MacArthur Foundation in Chicago. The result was their providing me with a \$225,000 grant which made it possible to set up a base of operations, the offices we still occupy in the centrally-located building of the Chamber of Commerce of Caracas."

While this money from the MacArthur Foundation would make it possible to construct the base for BIOMA's operation, Romero felt that for it be successful, he would have to have firmly established support from Venezuelan sources. This was in complete contrast to other local conservation groups who focused their main attention on obtaining funds from outside of the country.

As with everything he had done up to now - and would continue to do in the future - Romero chose a distinct approach: not traditional, but very effective in getting results.

He went directly to people with a great deal of influence and money with his "pitch" and got a group of people who had never been involved in conservation work - purely financial giants - to agree to serve on the board of directors of the foundation he was starting: Pedro Tinoco (then president of Banco Latino and later to become president of Venezuela's Central Bank, BCV), Luisa Elena Mendoza de Pulido (executive vice president of the Mendoza Foundation),

Gustavo Cisneros Rendiles (head of the nationwide CADA supermarket chain, Maxy's department stores, and Venevisión television station, among others), Guillermo Rodríguez Eraso (former president of Lagoven, an affiliate of Petróleos de Venezuela S.A. - PDVSA), Siro Febres Cordero (president of Cementos Caribe), Arnoldo Jose Gabaldon (founder of Venezuela's Environment Ministry), Jose Joaquín Cabrera Malo (former environment minister), Carlos Galavís (president of the real estate giant, Inmobiliaria 91), Brígido Natera (geologist and former president of PDVSA), and Alejandro Rivero (president and general manager of IBM de Venezuela). With the groundwork firmly laid, BIOMA officially came to be on October 8, 1986.

## **OBJECTIVES**

BIOMA has distinguished itself by having followed a clear-cut set of objectives and path based on action. "We have a great advantage in achieving credibility in following a policy of speaking of concrete things" said Romero. "One of the errors of many conservation groups which have failed is that they do nothing but talk about the philosophy of conservation; that we have to take care of the birds and animals ... but what is behind this?"

"When we talk about conservation," continued Romero, "we do so in attention of concrete areas in size, place, how much it will cost, and we have people working in them. That is, we have the advantage of having tangible products to show people."

BIOMA works in three specific areas: 1) the protection and management of natural areas through biological reserves it has established and in cooperation with other institutions; 2) in scientific and technical research directed toward knowing the ecological situation of the country, its biodiversity, problems of contamination and others on the national as well as local level, all presented in great detail in an Environmental Audit of Venezuela published annually (with part of this directly related with environmental impact studies and environmental audits done for companies); and 3) disseminating information to create awareness about environmental problems of the country through a complete range of media and means: radio and television, newspapers and magazines, messages on billboards and on product packaging, and special community participation outreach and educational programs.

"BIOMA's success in its projects is linked to a commitment to community-based management, stressing local input and involvement." said Romero. "It doesn't matter how much money you throw into a country or a project, if the inhabitants don't want to solve the problems, they will never be solved. You have to think globally and act locally – locally meaning working with the people

so that they in turn work for conservation and involve others in a multiplier effect.” With this simple philosophy, BIOMA strives for community involvement in all of its projects.

With the high-profile, activist image that BIOMA and Romero have acquired through their work, several months ago a columnist in one of the major newspapers of the capital offered his opinion that the objective of these efforts was Romero's desire to be named environment minister.



*Fig. 1. Dr. Aldemaro Romero Jr., at his BIOMA's office in Caracas.*

“I couldn't stop laughing,” exclaimed Romero. “What would I do as soon as I would come in is to throw out half of the people there who either don't work or are totally ineffective. I have no interest in politics, nor do I feel it is necessary to get involved in politics to accomplish our goals. Look at the tremendous impact people like Mahatmas Gandhi and Martin Luther King made - and without any affiliation with political parties or special interest groups. I do, however, have one objective ties to government,” said Romero: “Is to make the government realize that they work for us (the people). It is too often a matter of trying to protect the country from its own government in environmental issues either because of the things they are doing which seem to demonstrate open disdain for the

environment or by inaction which allows its unchecked destruction.”

Through the placing of information in the hands of the people to create awareness of problems confronting the environment, BIOMA has given the public the reason, backing, and motivation to pressure national leaders to take appropriate action. "Our aim is to become the channel of social and philanthropical responsibility toward our environment, with a mission of preserving Venezuela's natural heritage for future generations," said Romero.



## CHAPTER 2

# RAISING FUNDS

*Diversity, community involvement, and results:  
Keys to BIOMA's fund-raising success*

### A DISTINCT APPROACH TO RAISING FUNDS

"In the past, this country's major conservationist groups all sought and had their principal financial backing from either the government or from outside of the country," said Romero. "Venezuelans do not have a tradition of philanthropy - except to the church - so everyone was surprised, with not only our focus on sources in this country, but also success with the fundraising-approach of BIOMA."

While Romero has not eschewed foreign support as important, actively pursuing funding sources outside of Venezuela, his desire and emphasis has always been to have the greatest balance of support from within the country. This goal has become a reality through a very aggressive and multi-faceted approach aimed at every sector of the public and through a wide and creative variety of means.

"To avoid the constant ups and downs that come with just depending on donations to come to you, especially from foreign foundations (particularly if you consider that of the 14,000 philanthropic foundations in the United States, there are only seven that have donated to environmental causes in Venezuela)," said Romero. Diversifying as much as possible is essential to assure a constant flow of operating funds.

The first step was with the unique, high-powered board he got. "They not only came through with significant financial support right from the start, but they are incomparable "fundraisers." When BIOMA needs money, a letter signed by figures of the stature of Pedro Tinoco or Patricia Phelps de Cisneros (the new president of BIOMA's board following the recent death of Tinoco) gets results. The board members do not go knocking on doors humbly begging. The doors are already permanently open for them to the leaders of the nation's top companies and financial institutions because they are in that same upper echelon. They can make suggestions' directly to board chairmen and presidents who are in their everyday business and social circle that a contribution to BIOMA would be effectively-used and



beneficial to their corporate image..."

The "seal of approval" given to BIOMA by a powerhouse board, along with Romero's realization of the importance of personal contact and action instead of words, have obviously been effective with the foundation's membership as it celebrated its seventh anniversary counting on an impressive list of over 26,000 members, ranging from students to international corporations and foundations.

Marta Briceno, BIOMA's development director, explained, "To become corporate members, the current figure is for a company's minimum contribute a minimum of Bs. 25,000 annually. However, in many cases the figure written on the membership check does not begin to reflect the amount of support they actually give to BIOMA."



*Fig. 2. Marta Briceno at work.*

For example, while some only pay the minimum required amount to earn this status, they also donate services equivalent to sums which far exceed that - such as logistical and technical assistance for research projects or covering publishing costs of or educational material, and so on.

Looking at one example, in the period from January to October of 1990, the equivalent value of publicity space donated by Venezuelan media of communication amounted to Bs. 9 million. "Among this were 16 full-page ads in *Economía Hoy* worth over Bs. 1 million," noted Romero, "which allowed us access to a very special audience and brought enormous response."

"Since we do not budget anything for advertising (counting on the collaboration of the media) to be able to use our available funds to the fullest for the realization of our research and outreach programs, this has been very important to us for creating awareness about environmental problems, educating the public about our biodiversity and what they can do to protect it, and soliciting members."

Another example of significant assistance which has come in the form of collaboration, rather than direct monetary donations, has been with IBM, a relationship which dates back to 1986. This includes its donation of \$500,000 worth of computer time for BIOMA's satellite mapping project for identifying ecological zones and even designing the management plans for two national parks; and in 1993, access to new equipment of computer hardware and software for the studies in the Amazon region of the country to allow the rapid discovery of environmental impact there.

In tapping foreign sources, Romero has maintained a policy of always making direct personal contact. "While there is no 'cook book' for what works, one thing I learned long ago was that 'people give money to people.' But, going just beyond meeting with them face to face, listening to what they have to say, paying attention to the focus that is important to them, is essential to present your project in a way that appeals to their style and interests. And, for continued support or to tap new sources, being able to show them concrete results produced from donations received in the past is the bottom line."

Special "one-shot" fund-raisers in the form of premiere movie showings have proven to be excellent sources of income, invariably completely sold out. Among these have been the debut showings in Venezuela of the movies "Benji" (1988), "Gorillas in the Mist" and "Batman" (1989), "FernGully" (1992), "Jurassic Park" and "Free Willy" (1993).

"A number of companies started making contacts with us on their own asking for advice about what they could do to resolve or prevent this or that environmental problem," said Romero. "The increasing number of such requests made it apparent that there was a need and market for a consulting service specializing in issues of the environment."

"Thus, in August of 1992, we became officially inscribed in the Registry of Consultants of the Environment Ministry and, in February of the following year, registered with that ministry as Environmental Laboratories to perform sampling and analysis of the quality of air and suspended particles."

Adhering to the established Venezuelan norms of COVENIN, BIOMA now offers a full line of specialized, confidential consulting services, anywhere in Venezuela or in the world. These include: environmental audits; studies of environmental impact; technical advice; air quality studies; smokestack emissions testing; water analysis; design of systems of ventilation, extraction, and removal of contaminants; evaluation of noise levels; control and removal of asbestos; removal of paint with high levels of lead; identification of environmental risks in outside and inside areas; expert information and tests in environmental matters for law offices, companies, courts, etc.; social action and environmental education in communities near industries; and the creation of ecological murals.

"Obviously, we do not have a full-time staff prepared to handle all of these distinct, specialized services. Depending on the situation, we contract experts in the specific areas needed to work with us to execute the job contracted," explained Romero. "To date, we have conducted environmental audits for around a dozen companies."

One of the most encouraging aspects of this is that it serves as evidence of growing awareness on the part of industry of the need to take an active role in protecting the environment, starting in their own back yard. With their having taken the initiative to come to us for information on the means to do this, one can be confident that they will follow through with implementing these measures.

## **BIOMA TOURS**

BIOMA has been informally involved in ecotourism almost from the beginning of its existence, fulfilling requests to organize small-scale trips to national parks, reserves, and other sites of special ecological interest on a personalized basis.

Following BIOMA's Environmental Audits, one of the unexpected outcomes was many requests for suggestions for places to visit in Venezuela for ecotourism.

Within the framework of events associated with the 4th World Congress on National Parks and Protected Areas held in Caracas February 10-21, 1992, 70 well-known artists donated their works for an auction whose proceeds were destined for BIOMA.

The operation of an "Ecology Shop" has been another source of funds. This was an initiative of Romero's wife, Ana Mayayo. Sold through it are typical handicrafts from the Andes, Paraguaná Peninsula, Lara and Amazonas states; different designs of T-shirts and hats with environmental themes; animal design pins; mobiles; books and posters, etc.

Though Mayayo is now occupied as BIOMA's environmental education director, she started the Ecology Shop idea on a voluntary basis and still travels frequently to remote places in the country to acquire handicrafts directly from the artisans, to the benefit of both parties. The creators realize the full wholesale price without a middleman taking a cut, and the cost to BIOMA is much lower so they can sell the goods to the public at very reasonable prices while still realizing a profit.



*Fig. 3. BIOMA's Ecology Shop.*

The permanent shop is located in the site of BIOMA Center for Attention to the Public in the Chamber of Commerce of Caracas Building in downtown Caracas, but BIOMA also sets up stands at various expositions in which it participates. Furthermore, in conjunction with the traveling exposition created by the Smithsonian Institution on tropical forests which is being presented in Maxy's

stores in eight cities throughout the country, the owner of that department store chain (coincidentally, a member of BIOMA's board of director) has provided, free of charge, the services of a cashier to permanently man the BIOMA Ecology Shop outlet at the show, turning over all of the proceeds of the sales to the foundation. More than Bs. 1 million in sales have resulted thus far from that source alone.

Through an agreement reached between Banco Progreso and BIOMA, in 1993, that bank launched the first environmental credit card in Venezuela, with the promotional theme, "carry nature in your pocket." The cards come with four different photos of landscapes of the central coast, the plains, Andean páramo, and the tropical jungle. Each time the card is used, Banco Progreso donates a percentage of the charge to BIOMA to finance its programs for the conservation of flora and fauna.

Subscribers to this credit card receive a year's membership to BIOMA free, special discounts in BIOMA's Ecology Shop, discounts on car rental, and Civil Responsibility and total loss insurance coverage for their vehicles.

With the succession of thoroughly researched and very professionally and objectively presented reports on the environment and its ails plus the proposal of feasible solutions (which In answer to this demand), the foundation has considered the establishment of BIOMA Tours as part of its activities. As a non-profit organization, the funds resulting from the offering of these ecotourism packages would go toward its conservation programs while arousing more interest and respect for the great biodiversity in Venezuela.

Just as an example, proposed by BIOMA's Director of Regional Projects Yves Lesenfants as a starting point for its operations a 12-day "Ecological Discovery Expedition of Venezuela" for \$2,120 (covering all lodging, three meals a day, national air and land transportation) which would also include a one-year membership to (a newly created for this purpose) BIOMA's Conservation Expeditioner's Club which would permit members to maintain close contact with the institution and to be informed about its current programs and activities, expeditions available, and opportunities for active participation in conservation projects.



*Fig. 4. One of the excursions throughout the Páramos.*

The proposed 12-day expedition would begin with a flight from Caracas to Mérida to visit BIOMA's Páramo de Piedras Blancas Biological Reserve with excursions on horseback into the páramo; visit to Mucubají glacial lake in the Sierra Nevada National Park; transfer to the Hato El Cedral wildlife reserve in the plains of Apure state for wildlife observation there; flight to Puerto Ayacucho in Amazonas state with exploration by river of the depths of the jungle with stay in that virgin area and visit to a Piaroa indigenous community; flight from the Amazon to Caracas then on to Los Roques Archipelago National Park for three days of cruising through the park's islands, keys, and coral reefs before returning to Caracas.

Tours could be custom tailored to each client, depending on time considerations and specific interests.

## **MEMBERSHIP**

BIOMA maintains a constant and aggressive membership drive, aimed at involving everyone from school children to giant transnational companies in working toward the conservation of Venezuela's biodiversity.

"We have never spent a cent of BIOMA funds on any kind of promotion of the foundation or to attract members," said Romero. "Every bit of printed advertising space or air time on radio or television has come through the generosity of those medias of communication or by companies who have joined with us in carrying out our programs or special projects."

With BIOMA's increasing emphasis on raising funds from local sources, membership is an important element for these purposes as well as the commitment to the cause of environmental protection.

BIOMA offers a variety of options for membership which include: student Bs. 600; regular Bs. 1,500; family Bs. 5,000; benefactor Bs. 5,000; sponsor Bs. 10,000 or more; corporate Bs. 30,000 or more. The membership as of October, 1993, counted on some 120 corporate members, 20 foundations, 1,800 individuals and families, and 25,000 students.

## CHAPTER 3

# COMMUNICATIONS AND OUTREACH

*Effectively getting out the message of conservation spurs  
community and corporate involvement*

## COMMUNICATIONS AND CORPORATE LINKS

With the recognition that an accurate, complete, and constant flow information is vital for the process of awareness and education, BIOMA has placed heavy emphasis on providing a steady stream of information about the problems of the environment which need resolutions, natural beauties and resources which should be protected to assure their continued existence for future generations, and concrete guidelines of things that the public can do in benefit of the environment.

Playing a very important role in this dissemination of information has been the generous cooperation of major companies and foundations who have donated their expertise, covered costs for the research and/or preparation of printed and visual information and research, and provided the means for publicity of the message of environmental conservation in countless forms which would have been far beyond the economic capabilities of BIOMA alone.

The means to this end have been extremely diverse to reach the maximum audience possible - both on the national and international level - for the greatest impact. Among these have been publications of BIOMA's own production as well as providing copy for reproduction in magazines, newspapers, and bulletins; radio spots; documentary films used on television and for live presentations; participation in conferences and forums; presenting seminars aimed at the communications media as well as people working in the area of conservation; taking part in expositions, relating to ecology... in other words, any and every manner for mass communication.

This has had the two-fold effect of providing the public with a great deal of information which has stimulated interest in and awareness of environmental issues, as well as maintaining BIOMA's high-profile image of action, not just words.

In 1988, with the donation of expertise of the CORPA Group (Venezuela's largest publicity corporation associated with Ogilvy & Mather Worldwide) and its affiliates Voz y Vision and Imagen Luz (audiovisual productions), a strategic



communications campaign was designed and mounted which covered TV, radio, press, and letters.

With the recognition factor created by the promotion on television and through other media and follow-up communication through nearly 3,000 letters sent to distinct potential members, within the first three weeks, among the responses were the recruitment of 24 corporate memberships.

"Television is a very important tool to get across our message," stated Romero. "In reality, very few people in Latin American countries read newspapers. Most of our information comes from either radio or television. You can go to even the most remote places in Venezuela and you will always find TV antennas."

Though BIOMA has incurred no cost of its own in the production of television programs, just through January of 1992 alone, it was calculated that time donated was worth Bs.4,329,240, with this figure not even including the costs of production which were covered by Venevisión and Lagoven (with subsequent shows produced and aired through the cooperation of other television channels pushing that figure even higher).



Fig. 5. Romero (left) directing one of BIOMA's documentaries in the Páramos.

One of the most far-reaching projects for BIOMA's outreach has come through documentaries it has produced for television which have reached millions of viewers.

Eleven programs have been aired on Televen, including "La Insólita Paraguaná," made in 1990-91 and funded by the Lagoven oil company through its series "Cuadernos Lagoven." Of special note was that this production counted on the involvement of over 150 people from the Paraguaná Peninsula which had great impact on them as well, awakening renewed pride and appreciation of the land they had always taken for granted.

"La Insólita Paraguaná" was aired throughout the month of April, 1991, on Televisora Nacional Canal Cinco and Venezolana de Television.

Other BIOMA nature documentaries have been: "La Otra Paraguaná" (Part I and II), "El Nacimiento de un Parque Nacional," "Páramos para la Eternidad," "En Busca del Oso Frontino," "Nuestros Primos los Delfines," "Nuestros Bosques, Nuestra Herencia," - "BIOMA en Acción," and "BIOMA: Los Primeros Cinco Años."

In October of 1992, BIOMA signed a convention with Venezolana de Televisión to jointly produce a 13-program series to be aired weekly under the title "Saving the Planet."

-

Initiated in November of 1992 was a 13-chapter series on the environment conducted by Romero and transmitted weekly in the space, "Un Solo Mundo" (One World) on Television Andina de Mérida (TAM).

In 1991, a series of micro-videos were produced by BIOMA and transmitted as a public service every Saturday by Venevisión (channel 4) during its informative space, "Lo que pasa en el mundo" (What is happening in the world). More than 20 one-minute micros were produced on topics including biodiversity in Venezuela, the Conservation Olympics, economy and the environment, contamination of beaches in Venezuela, and the greenhouse effect, among others.

Getting commercial stations to run environmental programs is not always easy, however. BIOMA obtained permission from TVE - Television for the Environment in the Netherlands - to show 30 excellent-quality programs on the environment. "Even though it would not cost the stations one cent, not one station was interested in transmitting them because the programs 'don't have commercial value'."

"My dream," said Romero, "is for BIOMA to have its own television program to provide a constant source of information. But I know we would be facing the same difficult situation: without sex and violence, TV station

programmers think that they lack commercial 'value'."

Through the media blitz early in its life, the name of BIOMA came to be widely recognized, but the foundation discovered that the general public often was not aware of precisely what BIOMA really was or did.



*Fig. 6. Romero giving an interview to Venezuelan television channels at the BIOMA's Páramos de Piedras Blancas nature preserve.*

With the collaboration offered free of charge by the J. Walter Thompson advertising group, a six-month campaign was launched to eliminate the mystery of "What is BIOMA"? This was based on concisely and clearly answering 10 key questions: What is BIOMA? Where does its name come from? How did it begin? Who makes up its personnel? Upon whom does BIOMA depend economically? How does it carry out its work? What is the difference between BIOMA and other environmental groups? Why is BIOMA's mission so urgent? How can the general public communicate with BIOMA? How can one participate in the work of BIOMA?

In November of 1988, BIOMA began the trimestral publication of "BIOMA en Acción" to inform the public on a regular basis the current activities of BIOMA, environmental events, etc.

Romero himself has been the greatest contributor to the steady flow of information from BIOMA. A prolific writer, to date, Romero has written over 300 books and research or informational articles on themes of the natural sciences. He constantly makes personal visits to the mediums of communication and has been asked to be a speaker in countless national and international forums, conferences, seminars, and other programs.

BIOMA has also organized or participated in numerous conferences, forums, and seminars.

Mérida was the site February 29-March 18 of 1988 for a training course BIOMA offered for mid-level technicians and supervisors of Venezuela's national parks system and other protected areas.

In October of that year, Romero and Kathy Phelps shared the podium in a Worldnet transmission (a television equivalent to an international conference call coordinated through the U.S. Embassy). In October of 1990, Romero again participated in this program which was focusing on the theme of "Debt conversion for protection of the environment."

In March of 1989, BIOMA was responsible for the organization of the "2nd Workshop for Financial Auto-Sufficiency for Private Conservation Organizations in Latin America." This brought together representatives of seven countries and resulted in the signing of bilateral accords among conservationist organizations of Panama, Brazil, Colombia, and BIOMA.

That November, BIOMA in coordination with Alianza Francesa of Mérida and the National Parks Institute (Inparques), with support from the World Wildlife Fund, U.S. Fish and Wildlife Service, U.S. National Park Service, and The Nature Conservancy- offered the three-week-long "2nd International Course on National Parks," with participants from Colombia, Ecuador, Peru, the United States, and Venezuela.

The "4th International Workshop on Environmental Journalism" was organized by BIOMA for February of 1990, with 16 panelists from the Environment Ministry, Inparques, the Environment Commission of the National Congress, the petroleum industry, Corporación Venezolana de Guayana, World Bank, the Inter-American Development Bank, and environmentalist groups.

In 1990, the "South American Summit on Parks in Danger," promoted by The Nature Conservancy, was organized in Venezuela by BIOMA and presided over by Romero.

During Romero's participation in the American Assembly in New York in April of 1990 entitled "Preserving the Global Environment: The Challenge of Shared Leadership" (which was attended by 70 specialists from the United States, Europe, Asia, Africa, and Latin America where Romero was coordinator of the group to study leadership in Latin America for the preservation of the environment), he was elected to serve as president of the March 4-7, 1991, "1st Hemispheric Assembly on Economy and the Environment" held in Caracas. This was financed by the Inter-American Development Bank and was attended by 80 representatives from 30 countries, including representatives from the World Bank, planning and economic ministers, and environmental organizations.

At the end of the same month, BIOMA, Audubon, University of Zulia, and Pro Vita Animalium organized a week-long "Workshop on Migratory Shorebirds" sponsored by the Hemispheric Network of Shorebird Reserves with six professors from throughout the continent and 26 participants from universities, research centers and national conservation organizations, environment ministries, and non-governmental organizations.

A result of that meeting was the creation of the Venezuelan Network for the Study of Migratory birds whose prime objective is the protection of marshland birds.

In September of 1991, Romero and Venezuela's environment minister were the speakers for the conference "Economy and the Environment: Challenge of the '90s" during the "2nd Exposition of Financial Systems" held in Caracas' Poliedro.

In October, Romero participated in a forum organized by the Fundación de la Vivienda Popular entitled "Environment and Urban Development" where he addressed the topic of environmental impact studies and urban development.

Art was next on BIOMA's agenda for sensitizing people to the environment.

From November 17 of 1991 to January 17, 1992, BIOMA joined forces with UNESCO, PDVSA, and the Foundations of Inlaca, Uruyen, and Previsora to present a multi-media exposition entitled "Ecology in Action." It consisted of works of well-known artists Carlos Zerpa, Miguel von (J)angel, Mariana Bunimov, Ricardo Benafm, Claudia Bardasano, Ruben Falcon, and Oscar

Zanartu; a series of 16 graphics on the theme of water created by members of the Taller de Artes Gráficas (TAGA); the installation of a bamboo mobile on the facade of Torre La Previsora, suspended from the 27<sup>th</sup> floor of that business tower; a construction, of microclimates; concerts of environmental music and choral groups; and ecological films.

In December, BIOMA organized an exhibition in the National Art Gallery (GAN), featuring 109 paintings plus 13 manuscripts and letters (loaned by the Gallery of Berlin and the German government) of the impressions of Venezuela's natural beauty captured by 19th-century German painter Ferdinand Bellermann along with works of other contemporary artists whose themes focused on environmental conservation.

Coinciding with this exhibit was another collective show extending from December 1991 to February 1992, "Venezuela: Nuevas cartografías y cosmogonías," incorporating satellite maps of the planet in works of art.

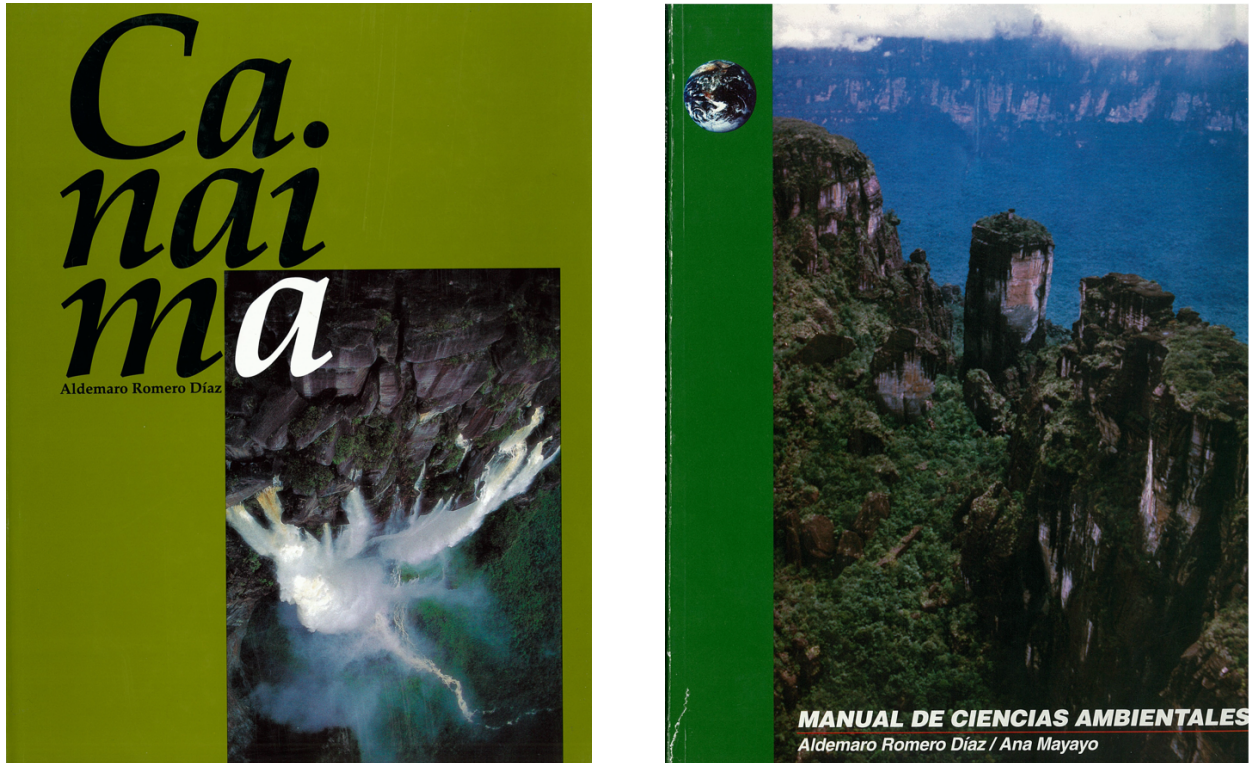
During the "4th World Congress on National Parks and Other Protected Areas" celebrated in Caracas February 10-21, 1992, Romero was selected as environmental specialist and conference panelist representing Venezuela.

As an example of the range of BIOMA's impressive list of publications have been the book "Canaima," produced by Palmaven (affiliate of Petróleos de Venezuela S.A.) and written by Romero (also including many of his photos of this 3-million-hectare national park as well) - printed in both Spanish and English versions; the "Manual of Environmental Sciences," written by Romero and his wife biologist Ana Mayayo, with the sponsorship of the Colgate Foundation; "Lead: The Invisible Enemy," written by Romero and BIOMA's Chief of Geographic Research Roberto Prato Ochoa (published in Spanish and English); and "Evaluation of the national parks and wildlife refuges of Venezuela as areas of protection of units of vegetation," written by BIOMA's Alfredo Paolillo O., and Silvia Pardi L., Bruce Wright of the U.S. Geological Survey, and Edward Bacus of Conservation International, and produced by BIOMA with funding from The Conservation and Research Foundation, MacArthur Foundation, and Conservation International... to name some of them.

As can be noted, as well as working independently, BIOMA has joined forces with various highly-respected groups and individuals in carrying out the research for many of its publications and has received financial backing from sources throughout the world to cover the costs of production.

"The radio has been one of the methods of communication with the public which has brought much greater response than we ever anticipated," said Romero. "In 1991, we produced 200 one-minute micro-spots with information

about the environment and tips for conservation, which, thanks to Adolfo Martínez Alcalá and his press team, were broadcast three times per day at prime time, Monday through Friday, as a public service on Caracas' Radio Capital, 710 AM (with the reach of an FM). Many people who have become members of BIOMA specifically cited the radio messages as having motivated them to join.



*Figs. 7A and 7B. Covers of the books “Canaima” and “Manual de Ciencias Ambientales”*

In February of 1991, Radio Caracas Radio began daily broadcasts of the micros at 7:30 a.m., a prime hour for radio listeners driving to work.

In 1991, in a project with Industrias Lara-Carabobo (Inlaca) and Envases Internacional (who financed the printing), 24 messages about Venezuela's fauna (especially emphasizing threatened species), 24 on its flora, and an equal number of varied notes about conservation were produced by BIOMA and printed on cartons of Carabobo brand milk and orange drink. It was estimated that these messages reached some 3 million consumers per month.

In a project that began in 1992, Bayer de Venezuela contracted the space of 200 billboards along the nation's Highways bearing a conservation message with changing color photos of native flora and fauna and BIOMA's logo at the bottom, further reinforcing the identification of the foundation in its work with conservation and the cooperation received from corporate sources.

With a different kind of billboard, VEPACO in 1993 began showing messages about BIOMA on a giant, full-color electronic screen with moving images which is located along the side of Caracas' main through freeway, Autopista Francisco Fajardo.

In October of 1993, four giants joined forces with BIOMA to launch projects to promote environmental awareness: Colgate - with the sponsorship of four television spots with BIOMA and the inclusion of messages about recycling on its aluminum toothpaste tubes; Burger King - with a project aimed most particularly at reaching children with the message of the need to protect tropical forests; Pizza Hut - with an awareness campaign for "Day of the Dolphin" on October 23; and CADA - with a massive recycling program involving the 84 supermarkets as collection points.

In yet another visual approach, various posters and maps have been printed and distributed by BIOMA, including a vegetation map of Venezuela and another one, made with the cooperation of IBM de Venezuela, entitled "Technology for Conservation," with its central theme the use of satellite images for conservation work. Posters have included ones featuring the Andean páramo, the forest of BIOMA's Monte Cano Biological Reserve on the Paraguaná Peninsula, and cetaceans of Venezuela, among others.

Three annual reports entitled "The Situation of the Conservation of Cetaceans in Venezuela," written by Romero and Fundacetácea's Ignacio Agudo, have been published by BIOMA.

"With the great support we have gotten from so many sources, surprisingly, one of the weakest areas for communications has been with newspapers," said Romero. "Since their interest seems to lie mostly with what politicians are saying, environmental issues are often relegated to the category of space fillers when they don't have anything else. Even though these are things which affect all of us now and will become even more serious in the future if we ignore them, unless it is something which manifests itself as a crisis or scandal like a major oil spill or discovery of some huge toxic dump site, environmental news isn't given priority status."

Spreading the message of the importance of preserving Venezuela's biodiversity has been aimed at the nation's youth as well as its adults by BIOMA. One of the avenues of communication used to reach Venezuela's majority age group has been illustrated articles in children's supplements of such publications as the widely-read *Estampas* magazine of the nationally-distributed newspaper.

In 1991, two BIOMA bulletin boards with the theme "Paraguaná: treasure of



nature” - were installed in Falcon state - in the airport of Coro and the other in the Las Piedras airport on the Paraguaná Peninsula. These show details of the geography, flora, and fauna of the region, accompanied by descriptive texts. They point out such sites as Los Médanos de Coro National Park, Cerro Santa Ana Natural Monument, Laguna Boca de Cano Wildlife Refuge, and the BIOMA biological reserves of Monte Cano, Cueva del Guano, and Piedra Honda. Another one was subsequently produced for placement in the San Fernando de Apure airport with information about the natural attractions of the llanos or plains area, specifically in reference to Santos Luzardo (Cinaruco-Capanaparo) National Park.

## **OUTREACH**

With the desire to reach and involve as wide a spectrum of the population as possible, the logistical and financial collaboration of large companies and foundations has played an invaluable role in assisting BIOMA to communicate its messages of conservation.

In an overlapping situation, they have likewise been an extremely important factor in the implementation of some of BIOMA's most ambitious outreach projects as joint efforts.

Five years ago, the Smithsonian Institution in Washington D.C. had an exposition on tropical forests. Representatives from 11 Latin American countries, one of which was Venezuela. BIOMA's Romero, asked that institution if it couldn't prepare a version in Spanish which could be presented in their countries where tropical forests are part of the environment.

The request met with positive results. The MacArthur Foundation supplied funding for the translation of the material into Spanish, with Romero acting as one of the advisors. The final product was the exhibit "Nuestros Bosques: Nuestra Herencia" (Our Forests: Our Inheritance).

Though the Smithsonian donated use of the exposition to the 11 countries, each would have to cover the costs of transportation to the respective country and for mounting the exhibit there. In order to bring the exhibition to Venezuela, Romero approached Gustavo Cisneros Rendiles (a member of the BIOMA board and owner of the Maxy's - formerly Sears of Venezuela - department store chain, among other business interests) and his wife Patricia Phelps de Cisneros (who is the current president of the board of BIOMA, selected following the death of Pedro Tinoco) who picked up the \$12,000 cost of shipping and other associated costs.

They also provided space in the stores at no charge and had their personnel take care

of setting up the exhibit in Maxy's Bello Monte store in Caracas, where, since its July 1993 inauguration, it has met with tremendous public response, thus serving as a very effective tool for education about tropical forests. It has also proven to be an excellent vehicle for BIOMA to disseminate information about its activities, attract members, and more than Bs. 1 million in sales of its T-shirts and other merchandise were made through an outlet of its Ecology Shop set up at the exposition.

There are plans to take it to eight other cities in the country where Maxy's stores are located (with the Cisneros likewise donating the space and personnel to mount the show and handle the sales at BIOMA's shop).

Both Sheraton Macuto Resort on the central Caribbean coast north of Caracas and the huge Poliedro events center in Caracas have asked about obtaining the exhibition to set up in their facilities. This will be considered after the Maxy's tour which is expected to last through December of 1994.

Romero reported that one of BIOMA's most successful associations has been with Owens-Illinois.

"The question kept bouncing around in my head, 'What can we do about education?'," recalled Romero. "One day an idea struck me that seemed the perfect solution. I had once seen something about a Geography Bee that the National Geographic Society had sponsored, why don't we hold an Environmental Bee?!"

The brainstorm quickly took on a more fleshed-out form with the thought of expanding even more on the "bee-idea" to include two other activities as well - one of designing environmental projects and another for recycling, all part of a proposed "Environmental Olympics."

With the design of the project clearly defined, he approached Owens-Illinois for sponsorship.

"I enthusiastically embraced the project, contributing extensively for materials and logistics to implement it plus for a massive publicity campaign about the Olympics." The Education Ministry likewise collaborated with the program.

It was such a success, that it has become an annual event. In the three years that the Conservation Olympics have been held since the debut in 1990, participation and enthusiasm, has climbed steadily from 5,000 students participating in the first year to over 7,500 last year (in spite of the teachers' strike in public schools that year, together with the attempted coup d'état, which played havoc with the school year and continuity of activities).

Other companies have also joined in to provide scholarships, insurance sporting goods, educational materials and more. Among these are Dow Venezuela, Fundación La Previsora, Pequiven, Maraven, Kodak Venezuela, Banco Latino, Colgate-Palmolive, CADA, Colegio Bolivariana, Plus Sistemas C.A., Kapina, Yukery, Tio Rico, Pizza Hut, Sonorodven, Spalding, Inlaca, ICI, Corpoven, Felicitaciones Nacionales, Editorial Sopena Venezolana, Sanford de Venezuela, Editorial Biosfera, Editorial Excelencia, Encyclopedia Britanica, Burger King, Lagoven, Everhard Faber de Venezuela S.A., Pepsi-Cola, and Metro de Caracas.

Initially, the Olympics were just directed to students in their last years of high school. This has now been expanded to include younger children as well.

The participants can enter the competition individually or in groups and in the projects of glass recycling; in designing creative projects which would benefit the environment, are feasible, and would not cost the community or school a great deal of money to implement; and for knowledge about environmental subjects. For the Environmental Knowledge Bee category, BIOMA provides material for the students to study. Nationwide examinations are then conducted, with the finalists appearing on television for a sudden death session of question answering.

"The youngster who won the knowledge part the second year is from a remote part of Mérida state where he has to walk an hour each way to get to and from school every day," said Romero.

His excellent knowledge of environmental information earned him a home computer and a scholarship to pay for his education. When asked what he liked best about the contest, there was no second thought in his answer: "Appearing on TV!"

The year after the first Olympics were held, Romero was talking to the people of Kodak who said they wanted to do something too.

Out of that conversation developed the project, co-sponsored by BIOMA and Kodak, "El ambiente en imágenes" (The Environment in Images), a drawing contest for grade school children with the theme of the environment. The first year there were 10,000 participants; last year 15,000.

The extremely talented young man, Fidel Pirona (9th-grader in Colegio San Agustin of the Caracas neighborhood of Caricuao at the time) who was the 1992 winner of the "Imágenes" contest, was contracted by BIOMA to do the illustrations for all of the graphic material for one of its most recent campaigns, "Let's recycle with BIOMA." For that work, BIOMA submitted Pirona's name and he was chosen from among thousands of students throughout the world in a United Nations competition as "Young Environmentalist of the Year for 1992." This

was the first time someone from Venezuela had ever won the award, bringing both international recognition to Fidel Pirona and to BIOMA.

In another example of success guaranteeing its continuation, the "first edition" of the "Let's recycle..." project was launched March 16, 1993, and ended July 15. It was reinitiated with the beginning of the 1993-94 school year due to popular demand.

The program counts on the sponsorship of Colgate-Palmolive and Alentuy and cooperation of the Education Ministry, with the objective of proposing specific, practical exercises for recycling and the management of solid wastes.

The key element of the support material, a 104-page "Guide for activities in the school" (with Pirona's drawings), contains information about the characteristics of recycling, answers the question of what are garbage and solid wastes, and with five units each designed for the kindergarten to 6th-grade level and 7th grade through high school level which address questions such as: Where do wastes go? How does garbage affect natural resources? How can we make less garbage? What can we do with garbage? Also included is a complete listing of the locations of all of the recycling centers in Venezuela.

The nationwide contest is aimed at reaching a population of 4 million students through their schools' science programs.

As motivation for actively taking part in recycling, not just talking about it, through the campaign, schools in each state which have sold the greatest amount of aluminum, by weight, to recycling centers receive a prize of Bs.25,000 destined to cover necessities of the school such as books, sports equipment, repairs, etc. The school which recycles the most on the national level wins Bs. 100,000.

The program has been accompanied by a media blitz promoting the contest and the proposition that with this very easy project, not only can educational institutions benefit through the money earned for the aluminum recycling (and possibility of winning the prizes offered top collectors); but that community groups and individuals could copy this idea by recycling this metal- as well as other materials - as a way of raising funds with no investment involved while contributing to the clean-up of the environment and conservation of natural resources.

One of the points emphasized in BIOMA's educational campaign in this project is the emphasis on pre-recycling to reduce garbage to the minimum as well as costs for its collection. BIOMA has appealed to manufacturers to reduce the quantity of packaging used to cut down on the amount of material this represents in garbage, and underscoring the point which should have the most appeal to them: the incentive that it would lower their costs as well (with

industry figures showing that 10 percent of the cost of manufacturing of packaged goods goes into the packaging).



*Fig. 8. Cover of the packet of the school material for the recycling campaign.*

In a co-op program with BIOMA, CADA supermarket chain (whose owner is on

BIOMA's board of directors) has agreed to establish collection centers at its 84 outlets throughout the country.

Pre-recycling, that is, taking goods out of packaging, where feasible, right at the check-out stand to dispose of wrappers and boxes bins placed there for the purpose is one of the manners of collection that will be used, with funds from the recycled materials to be donated to BIOMA. The supermarket chain is also planning to introduce photodegradable plastic grocery sacks.

Promotion of the campaign for recycling in the "barrios" (marginal or slum areas) to cut down on garbage and associated health problems, while providing a welcome source of income, is being done through workshops and the distribution of brochures there to inform people of the location of the more than 100 collection centers for recycling throughout the country and prices being paid for aluminum, glass, and paper, as an economic stimulus.

Because of the very large response, contented participants, and excellent public image created for the companies involved through publicity about the project, other corporations have approached BIOMA on their own, asking to do projects with the foundation.

"SIDOR (the national steel manufacturing company) contacted us about jointly planning a project for recycling in the barrios," said Romero. This plan is currently being prepared.

MANPA (Manufacturas de Papel C.A.) has also taken the initiative to contact BIOMA to suggest a cooperative effort for the recycling of paper and Cartones de Venezuela for a program of environmental education.

With his typical infectious enthusiasm, Romero indicated that besides these, BIOMA has various other plans in the works, never seeming to be at a loss for new ideas to involve the community and companies in the work of conservation.

Taking environmental education to the universities has been another accomplishment of BIOMA.

In 1990, an accord was reached between BIOMA and state-run Universidad Central de Venezuela to develop a work-study program for students in the School of Geography in Applied Techniques for the Conservation of Natural Reserves.

In October of that year, the first environmental education course ever offered in Venezuela debuted at the private Universidad Metropolitana, jointly organized by that institution and BIOMA. Themes included biodiversity, deforestation, water

contamination, environmental legislation, and others, with the courses at UM dictated by Romero and his wife, biologist Ana Mayayo, along with field activity carried out in various parts of the country.

In gathering source material to provide to students for the Environmental Olympics "bee," Romero became aware that nearly all information that he was able to find locally on environmental sciences was in English, leaving a major vacuum in the area of research material and teaching tools for this subject in the nation's school system.

This served as the incentive for the publication in 1992 of the extremely comprehensive - *Manual for Environmental Sciences*, written by Romero and Mayayo and funded by the Colgate Foundation, which has since become the basis for the teaching of this subject throughout Venezuela. As a complement to the text, BIOMA has offered a number of workshops for teachers to show them the most effective ways to use the material in the manual in classroom instruction and suggesting supplementary activities, field trips, projects, etc., to make the lessons more vivid and leave a more lasting impact on students.

In the Los Roques Archipelago National Park, BIOMA and the Venezuelan Institute for Scientific Investigation (IVIC) installed a research laboratory and have established hatcheries for green sea turtles (*Chelonia mydas*) which are in danger of extinction.

Yet another distinctive media tapped for passing on the conservation message came, with the issuing of a series of 10 stamps allusive to Venezuelan species in danger of extinction by the Postal Telegraphic Institute (Ipostel) in June of 1992. Through the initiative of BIOMA which suggested the project to the postal institute. With the idea embraced, Romero was asked to serve as advisor, with BIOMA selecting the animals to be featured and World Wildlife Fund providing the drawings for them and printing.

In November of 1992, "Environmental Tuesdays" made their debut with the presentation of video-forums each Tuesday at 10 a.m. in the auditorium of the headquarters of Seguros Nuevo Mundo in the Caracas neighborhood of Altamira. The program was developed by BIOMA with the objective of offering students the opportunity to expand their knowledge about certain environmental themes which interested them.

The idea came about when Luisa Elena Mendoza de Pulido, who in addition to being a member of the board of BIOMA is president of the insurance company Seguros Nuevo, offered the use of the 150-seat auditorium in the company's headquarters for the development of some type of educational activity related to the environment. The site of the activity and day will soon be changed, but the program continues with full force.

In February of 1993, BIOMA inaugurated its "Green Line" phone number where calls can be placed 24 hours a day (with messages taken on an answering machine by night and weekends and calls returned by staffers during working hours) with questions regarding how to make complaints about environmental abuses, what to do about solving ecological problems, information on specific issues. They receive up to 60 calls a day.

It is curious to observe the evolution of BIOMA - one of the most conservative conservationist groups in the country, which, through its many campaigns and publications is, at the same time, one of the most activist ... but, he quickly added, "responsible activists, serving as a stimulus for people to become more aware and participative in resolving problems of the environment."





## CHAPTER 4

# ALERTS AND CAMPAIGNS

*Blowing the whistle on environmental abuses*

### INFORMING THE PUBLIC

Keeping the public informed about problems and abuses of the environment which are occurring in Venezuela, particularly those which have been ignored, denied, treated as unimportant, or even covered up by the government or its entities, has been an important responsibility assumed by BIOMA.

Issues such as the unnecessary killing of thousands of dolphins, uncontrolled and health-threatening lead pollution, pesticide contamination, and attempts to use Venezuela as the world's toxic waste dump, have been among vital issues addressed by BIOMA's alerts to the public.

BIOMA's comprehensive annual Environmental Audits have likewise provided comparative hard data pointing to areas where problems are continuing unabated, or are even on the rise.

Major far-reaching campaigns, such as the ones on dolphins, lead pollution and environmental brigades – top name a few – have been the outgrowth of alerts and issues of concern revealed in the audits.

### WORKING TO PROTECT THE DOLPHINS

"When news began emerging several years ago in the press sounding an alarm over the plight of the dolphins," said Romero. "Various things that I read about the situation struck me hard - one of them being the attitude of the government."

J. L. Mendez Arocha, director of Profauna, the arm of the Environment Ministry charged specifically with animal protection, made a public comment that "in the case of dolphins, the Environment Ministry would not oppose the deaths of dolphins (through tuna fishing with seine nets) since they represented an excess

of that population and that fauna is there to be used.” He further commented that “there is a certain sensitivity (by the public) about dolphins because they think of Flipper.”

Echoing similar sentiments in the face of the U.S. embargo against Venezuelan tuna due to excessive dolphin deaths, Francisco Herrera Terán, director of the fishing division of the Agriculture Ministry, stated, “Should we let half a million people die of hunger because of Flipper?”

“When I reproduced these quotes in the press, Mendez Arocha and representatives from the Agriculture Ministry tore into me. But they made the statements publicly as official representatives of the respective government entities and I felt then, and still do, that the joking manner about something of this nature reflects a lack of professionalism and ethics on the part of those whose job it is to protect these species. They cannot go on denying the fact that this is indeed a serious problem.”

To have precise information at its disposal to be able to know the extent of the situation of dolphins and other related mammals to be able to form conclusions and propose recommendations, BIOMA, jointly with biologist Ignacio Agudo (initially through his foundation Fundatrópicos, and later through Fundacetacea which he founded to more specifically focus on cetaceans) initiated in 1990 work on what has developed into an annual research report entitled “The Situation of the Conservation of Cetaceans in Venezuela” (having been published in 1991, 1992, and 1993).

(It is interesting to note that Agudo previously worked in Mendez Arocha's Profauna-MARNR developing a research project entitled “Conservation of Marine Dolphins in Venezuela” and participating in the course offered by the Inter-American Commission on Tropical Tuna, CIAT, to receive the qualification of “CIAT scientific technical observer” with the Tuna-Dolphin Program.)

They found that the two principal causes of dolphin death were from their being caught in seine nets used to trap tuna with them, and by their being purposely caught to be used as bait to fish for shark.

“In researching the killing of dolphins which has resulted from being trapped in seine nets, we found for some unknown reason, dolphin in the eastern Pacific (where Venezuela's fleets concentrate their tuna fishing activities) swim with the highly prized (since they are much larger than most and bring top per-kilo price) yellow-fin tuna” reported Romero. “Since the dolphins are very visible, leaping at the surface, spotters with the commercial fishing fleets using helicopters radio to the boats when they see schools of dolphins. The boats then circle the area with the large seine nets to trap the tuna – and consequently the dolphins with

them. With their need to get to the surface for air, the trapped dolphins drown. This method of tuna fishing has accounted for the deaths of 6 million dolphins in the past decade. Yet, they are unnecessary deaths since 95 percent of the tuna are found in waters where there is no association with dolphin.”

To draw attention to the enormous loss of dolphin by seine fishing for tuna, with videos taken on a boat of the Venezuelan fleet made by a person who they had planted on the crew as rather eccentric cook, BIOMA produced a documentary with the sponsorship of Bayer of Venezuela and the cooperation of the Education Ministry to inform the public about what is happening and create pressure against the fishing fleets using this practice.

In another practice menacing their population, the killing of dolphins for use as shark bait was something done on a large scale by Korean boats operating in Venezuelan waters in 1989, with calculations that 10,400 dolphins died that year as a direct result of this practice by 26 boats in that fleet.

Fundatrópicos, led by Agudo from 1989-1990, reported its findings to the Agriculture Ministry. The ministry denied the dimension of the problem as reported by Fundatrópicos, saying the Korean boats weren't in Venezuelan territorial waters. Nevertheless, due to the scandal caused by his group, Agudo reported that these boats voluntarily left the country, shifting their operations to Trinidad.

However, this did not end their activities in Venezuelan waters. Rather, it served to legalize them.

"Trinidad & Tobago has an agreement with Venezuela permitting such fishing in its waters," said Romero. "This then allowed 40 Korean and Taiwanese who shifted their operations to those islands, flying the flag of Trinidad & Tobago, to fish for shark using dolphin meat as bait, now unmolested because they are 'legal'."

Having learned the method from their oriental mentors, Venezuelan fishermen took up the practice of using dolphin meat for bait in the belief that shark are particularly attracted to it. Since this operation was being done on a very clandestine level, they found that going directly to the source was the only way to get documentation that this was still going on.

“We made friends with fishermen near Cumaná who are involved in this practice” said Romero. "From them, we learned that the fishermen can get Bs.6,800 per kilo for shark fins from buyers who sell it to foreign markets - far more than what they can get for any other fishing - so they use what they believed to be the best possible bait for sharks: dolphin meat.”

As a result of gaining their confidence, the fishermen allowed Romero to go out

with them and make videos of everything from the huge hidden graveyards full of dolphin skeletons to the fishermen harpooning dolphin and cutting them up for bait.



*Fig. 9. A long-beaked common dolphin, *Delphinus capensis*, being dragged on a Venezuelan beach to be butchered in situ.*

"It absolutely turned my stomach to watch, but it was the only way to be able to get the visual documentation needed to demonstrate what was happening and to get the public to react," said Romero.

"When we made the video public in a press conference," said Romero, "once again the Agriculture Ministry was on the attack, accusing BIOMA of having staged the whole thing!"

He cited as further evidence of the Venezuelan government's negative attitude toward dolphin protection the fact that it has paid the firm of Arnold & Porter of Washington D.C. \$2 million to defend the position of Venezuela in the killing of dolphin (with the aim of getting the embargo on our tuna lifted), arguing that the embargo is causing great economic harm to the country's fishing industry and that the situation isn't really as bad as environmentalists would have one believe.

As a means of protecting cetaceans in Venezuelan waters, Fundacetacea, with the full support of BIOMA, has proposed the creation of a sanctuary for those mammals which are largely found in the waters off the country's northeast coast. It would be in the form of a national park forming a triangle extending from Puerto La Cruz, touching La Orchila Island, passing via Boca de Dragon off the eastern tip of the Paria Peninsula, and back to Puerto La Cruz.

With the creation of this sanctuary, not only could the mammals be protected but BIOMA is promoting this as providing a potential economic alternative to shark fishing (using dolphin meat as bait) for the local fishermen, switching their activity to carrying tourists to the sanctuary to view dolphins and whales in their natural setting.

In 1992, BIOMA initiated a campaign to create an annual "Day of the Dolphin," choosing for that celebration date October 23.

As part of an awareness campaign for this event, with funding from Bayer de Venezuela and the collaboration of the Education Ministry, BIOMA published a 10-page insert for distribution in the national press. Written in simple enough language to be understood by young readers, yet with detailed information as well to appeal to adults, it included data about dolphins and their historic friendly relationships with man, their habits and habitat, an activities page with crossword puzzles and other games using dolphins and other cetaceans as the theme, and information about BIOMA and the part companies could play - underscoring Bayer de Venezuela's environmental consciousness with its support of this effort - in promoting conservation.

For the 1993 celebration of "Day of the Dolphin," the Pizza Hut restaurant chain joined in the awareness campaign, printing and distributing propaganda about dolphins and their plight in anticipation of the October 23 celebration date.

For a special act on that day, BIOMA gathered 45,000 signatures petitioning the official designation of October 23 for the annual celebration "Day of the Dolphin," presenting them to the National Congress on its proposed date - along with a copy of the 1993 report on "The Situation of the Conservation of Cetaceans in Venezuela" and requests for the government to change its lax policies in relation to the unnecessary killing of dolphins.

## **LEAD POLLUTION**

As a follow-up of statistics which had come forth in the course of its annual Environmental Audits, in May of 1993, BIOMA presented the 51-page publication, "Lead: The Invisible Enemy," a report on lead contamination in Venezuela. The work was written by Romero and Roberto Prato Ochoa, BIOMA's chief of

geographic research.

The report, aimed at making the public aware of the gravity of the situation in Venezuela, is fully documented with statistics which came from confidential information provided by sources within the national petroleum industry and Environment Ministry (who, for obvious reasons, requested anonymity) as well as from published reports by universities, gasoline companies, independent newspaper investigations, international studies, and their own research.

The findings revealed extremely high levels of lead in blood among inhabitants of the urban areas in Venezuela. In fact, in all the Venezuelan cities where tests have been conducted to screen the content of that metal in blood, it has been shown to be well above the international permissible levels and that 62.75 percent of newborn children in urban areas of the country already show blood lead levels above the allowable limits as a result of placental transfer from mother to the unborn child.

Estimates of the cost for providing medical assistance to the most urgent cases of lead poisoning in Venezuela were reported to be on the order of \$ 19 billion, with this not making any consideration for the permanent neurological damage which is already irreversible among a large percentage of the nation's pre-teen population.

The use of lead tetraethyl in the gasoline that is consumed in Venezuela was blamed as the origin of 85 percent of the lead contamination in the country. The authors pointed out that although the state-owned petroleum monopoly produces lead-free gasoline, all of it is for export, making Venezuela one of the few countries in the western hemisphere which still does not offer unleaded gasoline to its residents.

They likewise underscored the fact that there are no governmental controls enforced for lead in water, food, or paints.

The alert was sounded that because of this lack of controls, there are already reports of lead poisoning among waterfowl in Venezuela, representing a serious health problem through water and soil contamination with lead and threat to the country's biodiversity.

Along with the report of its disturbing findings, BIOMA proposed a program for eliminating lead as an environmental and health risk and, at the same time, contributing positively to the country's economy by lowering medical treatment costs for lead poisoning and of the exit of its foreign exchange for the importation of lead to use in products manufactured in Venezuela with that element.

As with its other public awareness programs, BIOMA has mounted highly-visible media campaigns to disseminate this information and to appeal to the public to demand changes in national policies regarding this life-threatening product.

## **PESTICIDES**

One of BIOMA's environmental alerts was sounded in October of 1991 by Romero in a letter sent to the agriculture minister denouncing the fact that the existing weak regulations regarding imported pesticides were constituting a severe threat to the environment, ecosystems, and the health of Venezuelans.

He particularly singled out countries exporting pesticides to Venezuela which do not include instructions for proper use or warnings of potential harm, stressing the necessity for developing the infrastructure within this country for the testing of said products as well as calling for labeling in Spanish of specifications, composition, and use.

Romero likewise pointed to the widespread use of DDT which, despite its having been prohibited in nearly all the world for its dangerous residual effects, is freely used here, entering as contraband from Colombia and ignored by the government.

## **DIRTY BUSINESS**

Toward the end of 1991, a U.S. company, the Environmental Development Corporation, was planning to export 40,000 tons of sewer dregs to Venezuela and Argentina.

This is one of the by-products of treated domestic waste waters which is used as fertilizer due to its high content of organic material. However, in that Venezuela generates a great quantity of this product on its own, there is no reason to for this unnecessary importation.

Based on this fact, BIOMA contacted the offices of Greenpeace in Buenos Aires and Clean Ocean Action of New Jersey. Through a coordinated effort of environmental groups and pressures focused on the municipal authorities of New York and the exporting company, the sewer dregs never entered Venezuela.

The news had great impact, with the action reported on the front page of the nationally distributed newspapers, *El Universal* and *El Diario de Caracas*, along with extensive reports via other communications media.





## CHAPTER 5

# GATHERING AND SHARING ENVIRONMENTAL INFORMATION

*Computerized data base and audit findings provide a rich source· continually up-dated environmental information*

### SURVEYS AND ENVIRONMENTAL AUDITS

"In 1989, we conducted the first survey ever made in Venezuela to find out what people thought about the environment," said Romero.

"It revealed that there was a great deal of uncertainty and ignorance about who should be doing what to protect the environment and pointed out that the environmental issues of most concern to the public were very definite and not what international media emphasize at all", he said. "While we hear constantly about protecting the rain forests, global warming, or the hole in the ozone cap; what our survey revealed to be the prime concerns expressed by 90 percent of the Venezuelans questioned were: garbage, air pollution, and contamination of the water; that is, the problems they confront every day. Almost no one mentioned things like saving the rain forests."

This has had a decisive effect on the direction of BIOMA's efforts since then. "What good would it do for us to spend millions of bolívares to concentrate our efforts on something which has great merit - such as protection of the rain forests - but about which the majority of people have little interest? By addressing issues which concern and touch them directly, we could better help the community and get the general public motivated to participate in sustaining programs to conserve the environment."

This first survey got Romero to thinking and led to BIOMA's initiation of annual "Environmental Audits" of Venezuela.

These audits have revealed not only what are the areas of contamination and causes but facts and figures as support, providing concrete data necessary for alerting the public to the extent of the problems and for exerting pressure on those involved for resolutions not to mention garnering a lot of press space to increase general awareness (in 1991, for example, BIOMA amassed 114,441.71 cm of coverage).

As an indication of the revelations of these audits, some of the information (which led Romero to introduce BIOMA's finding with the estimation, that the overall figures pointed to the fact that "in the last 30 years, Venezuela has been destroying its ecology") resulted from the one done for 1990, presented in January of 1991:

The good news is...

- Venezuela's biodiversity is one highest in the world.
- Venezuela has achieved positive results in the matter of recycling of solid wastes.

... And the bad news:

- From 1960 to 1990, Venezuela's population increased by 290.66 percent, the highest increase in Latin America and five times the world average.
- By 1990, deforestation reached 30 percent of the national territory, three times the most extreme calculations about the Amazon area of Brazil.
- Venezuela's percentage of urban population is the sixth largest in the world and largest in Latin America.
- A good part of the areas under the regimen of special administration suffer from some type of problems.
- Diverse zones of the country show alarming signs of soil erosion and desertification.
- Over 90 percent of the air contamination of Caracas is from vehicles.
- In 1990, Venezuela contributed almost 30 million metric tons of gases which generate a greenhouse effect and correspond to 0.5 percent of the world's production.
- In 1990, Venezuela produced 5 million metric tons of gases which destroy the ozone layer.
- Various cities in Venezuela exceed the internationally recognized allowable limits of air contaminants (among them carbon monoxide and lead).
- The average temperature in Caracas has increased steadily in the past 100 years.
- Ten hydrologic basins in Venezuela suffer from serious problems of water contamination.
- The greater portion of the country's beaches frequented by swimmers are not apt.
- There has been an increased generation of solid wastes per capita per day, arriving at levels of developed countries.
- There is a need /in the educational process.

The ten key findings underscored in the second Environmental Audit of Venezuela, conducted in 1991, were:

- 101 species of animals and 185 species of plants are in danger of extinction. Fivespeciesofplants have become extinct.
- 32 percent of the natural areas of the country have disappeared.
- Permissible limits of various contaminants are being exceeded in six cities of the country and in nine areas of Caracas.

Beginning with the entry of a census of the country's flora and fauna it had conducted, BIOMA has steadily built on that foundation to the point where it now has over 200,000 entries of data, including information they have obtained about plants and animals from the past century which has helped greatly in studies about changes that have and are taking place in Venezuela's biodiversity.

Contributing to the great quantity of information in the system has been its successful efforts at incorporating data from multiple national and international sources.

One of these was The Smithsonian Institute of Washington D.C. which, through an accord reached with Romero agreed to make available to BIOMA computer records of 50.000 pieces of data from its archives on Venezuela's flora and fauna.

Through an agreement with the La Salle Foundation signed in 1989, BIOMA included registry of the contents of the collection of vertebrates of the La Salle Museum of Natural History in its computerized base. The entire collection of mammals of Universidad Simon Bolívar was also added.

In 1990, through another convention, BIOMA added part of the inventory of Venezuela's National Herbarium and of the animals of the Zoological Museum of Universidad Central de Venezuela to its rapidly expanding data files.

During the 4th World Congress on National Parks and Protected Areas held in Caracas February 10-21, 1992, BIOMA penned an agreement with the World Conservation Monitory Center which would permit Venezuela to repatriate all of the information about biodiversity in this country found in the scientific collections of the United Kingdom for inclusion in its data base.

The work of computerizing all of the information for the data base is done free of charge by BIOMA for the mutual benefit of the foundation and the institutions sharing their information.

Aside from the computerized data bank, BIOMA is continually adding printed material to its ample library about the country's biodiversity and general environmental issues.

December 1, 1988, BIOMA began opening its personal library (which includes videos as well as printed matter) to its members.

Among sources for material included in the library have been donations from the National Library of Venezuela and the library of the Venezuelan Institute for Scientific Investigation (IVIC). These have been supplemented through accords signed with the U.S. Library of Congress in 1987 and the library of the British Natural History Museum in 1991 whereby they agreed to donate publications on ecological themes to BIOMA. environmental scientists to England to take part in the college's program, in which representatives from NASA of the United States and the European Space Agency would also be joining, to then return to Venezuela to apply his newly-acquired knowledge following this technology transfer.

In 1988, together with the Environment Ministry, BIOMA published a vegetation map of Venezuela which had been prepared by Otto Huber and Clara Alarcon. This is available through BIOMA's Ecology Shop.

"This is a fundamental tool for doing ecological research, planning, land management, environmental impact studies, wildlife conservation, and environmental education," observed Romero.

Another example is the "Evaluation of the National Parks and Wildlife Refuges of Venezuela as Areas of Protection of the Units of Vegetation" produced through the joint effort of BIOMA and Conservation International in 1993. This detailed study provides precise measurements (with accompanying maps showing the location of protected areas, condition of protection of areas over the entire country, and the distribution of vegetation) of the surface area covered by every type of vegetation in Venezuela, broken down by its representation within and outside of protected areas (with further breakdown on a park by park - or refuge - basis).

## CHAPTER 6

# RESERVES AND PARKS

*BIOMA becomes a pioneer as a private manager of Venezuelan biological reserves and as first in the world to use satellite imaging to design national parks*

### BIOLOGICAL RESERVES

"One of things I always wanted was a way to show that areas can be protected without being isolated, cordoned off behind fences to look from the outside" said Romero. "Besides, the sanctuary approach isn't practical, considering the only way to enforce it would be with the difficulty and cost of providing 24-hour vigilance. It is necessary to take into account the inevitable human factor, such as the impact of tourists and activity of adjacent populations using a multi-disciplinary approach."

"More logical and effective is to involve the neighboring communities who are part of the cause of the impact on the area in question and/or which, because of their proximity, are the most logical ones, with education, to play an active role in protecting the land."

With this consideration, BIOMA applied the concept when it became the first private group in Venezuela to create and manage a biological reserve - actually, at this point, four such reserves: one in the high Andes of Mérida state, and three on the Paraguaná Peninsula of Falcon state - with the cooperation of the local communities.

While land was purchased for the Mérida reserve, because of the particular characteristics of hereditary land ownership on the Paraguaná Peninsula, rights to use the land, not the land itself, were obtained there.

Offices were established, manned by BIOMA personnel, in the city of Mérida (in Mérida state) and in Pueblo Nuevo (on the Paraguaná Peninsula) as bases of support, operations, for the management of the reserves and to develop programs of involvement with the local community, not only in connection with the reserves themselves, but with environmental education and other activities which would better the economic and social situation of the local communities and subsequently strengthen their relationship with BIOMA.

“For one, to be effective in gaining the confidence and cooperation of the community, you have to be part of that community and present ideas which they see as bringing direct benefit to them,” emphasized Romero. “It does not work to come from the outside and try to dictate or teach people about conservation techniques or the need to protect the land, animals, or plants. They will nod their heads and as soon as you leave, go back to doing things the way they have always done them. Being there and showing people by doing, not talking about what can be done, is the way to get local communities to listen and cooperate.”

“The second thing which is vital to remember anytime you are trying to bring about changes (of community impact),” said Romero, “is that the economic effect on those involved will be the most decisive factors in whether your ideas are accepted. If people are not presented with alternatives which will produce the same, or even greater economic benefit, you might as well forget it.”

## **PARAGUANA PENINSULA RESERVES**

The first of BIOMA's biological reserves was established in 1987 at Monte Cano, in the rural neighborhood of San José de Cocodite near the town of Pueblo Nuevo on the Paraguaná Peninsula. It is a 1,600-hectare site encompassing the last unprotected area of natural forest on the peninsula which was being endangered by progressive deforestation for farms and by overgrazing.

BIOMA reached an accord with residents of the community of San José de Cocodite who ceded use of the land to BIOMA for a period of 30 years, without cost, in exchange for services and concrete aid to the farmers and rural community of that region.

With the extension of cultivation and overgrazing into the fragile forest area in the desert environment, the objective was to protect the land by teaching the locals more effective methods of farming and for providing feed for their animals, while creating an awareness of the importance of protecting the forest to assure that there would be a continued source of water for their crops in this arid land - all of which would benefit them financially.

Since the establishment of the reserve, researchers have discovered 17 species of plants there which are in danger of extinction (due to uncontrolled removal on the part of plant collectors), including species such as the “oreja de Burro” (burro's ear) orchid. They have also rediscovered two species of trees which had been thought to be extinct. Some 120 species of birds have been identified which frequent the reserve land and like the cotorra cabeciamarilla, and a rare species of tree rat.



*Fig. 10. BIOMA's station at the Monte Cano biological reserve.*

BIOMA had the financial assistance of Maraven, the Inter-American Foundation, and the MacArthur Foundation in addition to using its own funds in establishing the reserve. The costs incurred from 1987 to October 1991 alone mounted to Bs.10,416,154.08.

BIOMA manages the reserve completely with its own human resources, materials and, in the first two years alone, invested Bs.725,000 in the project. It now counts on continuing financial support from Maraven, an affiliate of Petróleos de Venezuela S.A., which has a refinery on the peninsula.

Emphasizing the concept of community outreach, the headquarters in Pueblo Nuevo serves as more than just office space. It has a modest library of material on environmental topics, a display of archeological relics of past indigenous populations which have been uncovered at the Monte Cano and other nearby sites, preserved examples of various types of fauna encountered on the reserves, a multi-purpose area where Bracho gives frequent lectures to school and community groups about the ecology of the area, and even a modest dormitory with bunk beds to sleep four and hooks for hanging 10 hammocks plus adjoining kitchen facilities which are put at the disposal of researchers, free of charge, while they are conducting studies at the reserves.



Extending the concept of community involvement beyond the scope of ecology, through the Paraguaná office, BIOMA was part of the organizing committee of the 10th Festival of Violin of Pueblo Nuevo and purchased a bus for the village so the older children could attend high school.



*Fig. 11. Monte Cano community leaders with the bus BIOMA donated for the transportation of high school students.*

With financial support from Lagoven (which, like Maraven, also has an oil refinery on the peninsula), in 1990, BIOMA introduced an improved system of intensive grazing that benefitted the ecology and economy of the community of San José. "This program is not only serving to increase income and production through the development of more profitable livestock, but is setting an example for other regions of the country of how they can put into practice the model of sustained, harmonic development for management of the quality of life for rural populations and preserve the natural patrimony of all of Venezuela," opined Romero.

More than 100 residents of San José de Cocodite were also featured in the documentary "La Insólita Paraguaná" produced by BIOMA and Lagoven for the Cuadernos Lagoven television series.

“Let me tell you, once they saw their small village and the land around it presented on national television,” observed Romero, “San Jose's residents came to the conclusion that this really is important and we ought to preserve it. These things have been something very significant in gaining the confidence and cooperation of the local residents.”

With the success and public acceptance of BIOMA's work with the Monte Cano Biological Reserve, residents in other areas granted them rights to land use in the same manner to create two more reserves on the peninsula: Cueva del Guano and Piedra Honda.

Cueva del Guano (with land ceded to BIOMA by the community of Sabanas de Guacuira on March 21, 1989 for use as a reserve) - comprised of 25 hectares, with a 188-meter-long gallery open on both ends; and Piedra Honda Biological Reserve (initiated in 1990) - covering 800 hectares (with a large cave with extensive gallery) were created principally to protect and investigate a rare subspecies of bats (*Pteronotus pamellii paraguayensis*). This animal was first studied scientifically in 1970 by a group of the Venezuelan Speleology Society. Another bat species, *Glossophaga longirostris*, also lives in these caves.

From the time of the creation of these two reserves until October of 1991, BIOMA invested Bs. 938,560 for the Cueva del Guano and Bs. 756,427 for Piedra Honda of funds completely originating from the foundation's members.

BIOMA has primarily been involved in the protection of the area of the caves and carrying out surveys of the population of the bats and their movement. Biologists from Universidad Experimental Francisco de Miranda have been active in studying the bats themselves and investigators from Universidad Simon Bolívar have been carrying out research into the relationship between the *Glossophaga longirostris* and its important role of pollinating cactus and many other plants of the region.

Because of the fact that the caves of both Piedra Honda and Cueva de Guano contain a type of fungus whose spores can cause harm to humans if inhaled, these areas are restricted to researchers and carry posted warnings not to enter them without special protective masks.

Educating the public about the ecological importance of the Monte Cano site to foster concern for protecting it was the motive behind the creation of a visitor's center there, built with the design of the traditional houses of the peninsula as a gesture toward conservation of cultural traditions as well as nature.

Information about the reserve and a small library of material on ecological themes is found in the center. Marked nature trails of various length have been created, extending from the center. In the company of a reserve guide, visitors are offered didactic walks along the trails, with explanations about the different geological features, flora (much of which has been identified with small markers), and fauna (with the very plentiful and varied bird populations a delight to lovers of wildlife), areas of transition between distinct zones of vegetation, and to demonstrate the dramatic change between the natural forest and land which had been cleared for farming and has demonstrated an extremely low rate of recovery.

BIOMA has also conditioned two areas on the reserve - one in a low section, the other in a high zone - for campsites near the visitor's center.

Day-long field trips and overnight camping have been particularly popular with school and scout groups as a means for a vivid first-hand experience with nature with the in situ visual and verbal lessons leaving a lasting impression on the youngsters (as well as adult visitors) about the biodiversity there and need to protect it.

With its concern for the ecology of the entire Paraguaná region, in March of 1989, BIOMA began conversations with the Environment Ministry proposing the possibility of BIOMA's participation in the coordination of vigilance and protection of Laguna Boca de Cano, situated along the Paraguaná Peninsula's eastern coast north of El Supí. An agreement was reached with the state office of the Environment Ministry in 1990 for BIOMA to assist in the area's protection. From the time of the signing of that accord until October 1991, BIOMA had invested Bs.756,427 in the effort.

This shallow 3 km x 0.9 km mangrove-ringed lagoon attracting numerous migratory birds such as flamingos, ibis, and herons is actually within an officially declared (in 1989) wildlife refuge and fish reserve covering 380 hectares under the responsibility of Profauna (the wildlife arm of the Environment Ministry). However, protection and vigilance on their part has been virtually non-existent.

A sign bearing Profauna's name identifies the main access point to the refuge, but has more aptly marked the gateway for invasion into the lagoon every weekend by vehicles along the fragile shoreline, campers who leave behind mounds of uncollected garbage and beach-goers with blaring sound equipment which frightens away the birds.

BIOMA has mounted efforts, with the assistance of residents of the adjacent community, to erect a barrier to prevent vehicles from entering the area and urging visitors (on foot) to carry their trash out with them for proper disposal and to leave

their radios behind to savor the tranquility of the setting and do a favor to the wildlife there. They have also carried out clean-up campaigns (removing more than 20 tons of garbage) during key holiday periods to sensitize visitors to the need to care for this natural attraction.

With the collaboration of Maraven, neighborhood associations of the area, and local environmental groups, BIOMA prepared a brochure for distribution to people visiting the lagoon which explains a bit about its history, environmental problems it faces and viable solutions, data about its designation as a refuge and the objectives of that action, and advice to the public on what they can do to protect Laguna Boca de Cano.

Another area on the Paraguaná Peninsula which BIOMA has postulated for reserve status under its management is a compact area known as Agua Sabrida near the town of Miraca, southwest of Adícora.

It is a zone with a rich diversity of unique features including mineral-rich natural underground springs feeding a stream through it and an outcropping of mangroves visited by water birds such as roseate spoonbill, herons, and ibis; and sandy bluffs where they have uncovered skeletal remains of long extinct animals.

## **MERIDA RESERVE**

Protection of frailejón plants of the Paramo of Piedra Blanca was one of the main reasons for seeking protection of this area. Catalogued by UNESCO as unique in the world for their age which often surpasses 200 years, they were being threatened by grazing cattle and by local farmers who were cutting them down to clear continually expanding farming land as the fragile soil became depleted, and even using them to fuel fires.

Supplementing BIOMA's financial investment in this project were donations from the MacArthur Foundation, Conservation International, the Inter-American Foundation, and the Heinz Foundation. The Heinz Foundation provided a three-year, \$225,000 grant through its interest in sustained development in Latin America.

In 1987, the Inter-American Foundation of Washington D.C. entered an agreement with BIOMA to provide \$ 103,500 for the development of its work of community extension in the 12,000-hectare reserve and surrounding area. This marked the first time the Inter-American Foundation had given a donation for conservation to a Latin American country, motivated by its concern for education of rural workers.

The grant, which extended over a period of three years, beginning from September 15 of that year, was designated to be used for the recovery and protection of the páramo, community extension, environmental education, a management plan for the area and decontamination of sources of water for human consumption.

Following hot on the heels of the announcement of the IAF donation, for its being such a large sum and from a non-traditional source (which was often considered somewhat radical), it was announced by reporter Rolando Dugarte Amparita in the newspaper *Correo de Los Andes* that the "Gabinete Ambiental de Mérida" called for an investigation into what the real reason behind this donation to BIOMA, suggesting that it were trying to buy up large extensions of land in this zone at low prices to develop a large tourist development for its own gain.

On September 21, the same reporter wrote another article with quite a different tone, stating that, "for the seriousness and maximum legality demonstrated by BIOMA, the 'Gabinete Ambiental de Mérida' (which turned out to be a self-proclaimed watch-dog group composed of some half a dozen members) decided to go ahead with joint programs with BIOMA and entities such as the Environment Ministry and Inparques (in this area)."

For the past five years, the development of the BIOMA's Mountain Program for the Páramo de Piedras Blancas Biological Reserve and the adjacent community have been under the direction of Yves Lesenfants, a transplanted Belgian biologist with a passion for conservation and integrating rural communities in these efforts, who fell in love with Venezuela's Andes and set up permanent residence there. From overseeing the Mérida office and nearby reserve, his responsibilities have been expanded to the position of assistant to Romero, and director of all of BIOMA's regional programs.

"The whole concept of environmental preservation is changing" said Lesenfants, "with more emphasis all the time that protected areas should be part of the community, not areas off limits to them. For this reason, the programs we are carrying out are not what could be strictly labeled as 'conservation.' Rather, they are of sustained development."

"One of the errors in conservation has been to attack symptoms, not causes." He pointed to the zone bordering the Piedras Blanca reserve as a case in point.

With the acknowledgement that the unique frailejón plants and fragile land were being destroyed, the first reaction was to put up fences around the land to conserve them by preventing the "campesinos" from trespassing there.



*Fig. 12. Sign at the entrance of the Páramo de Piedras Blancas biological reserve.*

"This was only attacking the symptoms" observed Lesenfants. "The real question to address was 'Why are they progressively destroying this land?' ... with the answer being that their poor farming techniques were forcing them to continually seek new and more extensive plots of land to compensate for low production, depleted soil, and overgrazed pasture land. Thus, the obvious solution to protect the land in question and improve the social and economic situation of the local community at the same time, was to deal with the cause by teaching them how they could use better methods for sustained development."

Having observed from the experience of others - such as state extension agents - that it was totally ineffective to lecture or show films to the rural farmers to try to convince them that such things as the uncontrolled use of pesticides was doing more harm than good, etc., BIOMA attacked the problem with a different tactic: showing them by doing what they preached. In this way, farmers would be able to see the economic and production results for themselves that BIOMA was able to achieve in test plots which they actively farm. This land has been leased from local farmers in the farming village of La Toma (the main source of human impact on the reserve land), just below the limits of the reserve.



*Fig. 13. BIOMA's station at the Piedras Blancas biological preserve.*

The first experimental plots were established in La Toma in 1990, under the direction of a resident technician, agricultural engineer Carlos Crespo, part of the BIOMA team. The great success of the pilot program has been based on example and community involvement.

The infrastructure includes a Permanent Center of Community Attention (CPAC) where information about agricultural techniques can be disseminated, all activities associated with a community support subprogram can be carried out, and cultural activities of the local population can be developed and coordinated.

Farmers of this zone have habitually grown primarily a single crop: potatoes. This has come to be anything but favorable for them. If something damages the crop, their income for the year is eliminated.

Since the harvest by everyone in the zone takes place in the same time period, it serves to drive down prices when potatoes flood the market. Their income is concentrated just at harvest time, which means that without a tradition of saving and proportioning their income over the year, they quite literally go from feast to famine between harvests. With the single crop, it not only depletes the soil but

accounts for a high concentration of pests which specifically attack potatoes, having "spread the word" among their population that this is where the feast is to be found.

After conducting a scientific analysis of each plot of the test area, Crespo planted a wide variety of crops which were most appropriate to the soil of each parcel and which would mature at different periods over the entire year.

"When the other farmers were enduring the customary very economically difficult period between harvests and my small plot with beets netted Bs. 30,000 and another of lettuce followed with top prices per crate in the local market and others of beans and corn and cilantro and radishes were in progressive stages of reaching the point they could be sold, the farmers took notice immediately," said Crespo.

"When another of our neighbors lost his entire crop of potatoes, the single basis for his income, by far exceeding the recommended dosage of pesticides, while they could see that I had half a dozen different crops maturing, and was using primarily natural methods of repelling insects with only very controlled use of pesticides (which cut down on costs too, since the pesticides are very expensive), that was the clincher. The next thing you knew, we had a number of 'converts,' with farmers asking for advice about how they could do like I was doing," said Crespo. "How a new idea affects their wallet will always be the most compelling motivation for accepting new ideas."

An innovative technique instituted to provide self-sufficiency for the project and get the farmers started in the direction of sustained development was the introduction of a co-op program. "If we asked the farmers to loan us land for the project, they would naturally give us the worst land," said Crespo. "And, if we rented it, they would lose identification with the traditional method of land ownership. Thus, we worked out a system to get them started in trying these new methods without having to make a monetary investment. BIOMA provides the seed, fertilizer, and advice. They provide the land and labor. And when the crop is harvested, the profits from the sales are shared 50/50 between BIOMA and the farmer. BIOMA recovers its investment and generates income to maintain the program. The farmers make a nice profit to live on and so they can then purchase their own seeds and fertilizer for the next plantings (or they can continue with the co-op method). It has met with great acceptance and is creating a very desired multiplier effect, with the farmers not just following our lead, but that of their neighbors who have already adopted the idea."

He observed that an additional positive effect of the move toward more diversification of crops has been an improvement in the alimentary regimen of these people whose diet had been extremely limited and lacking in many



nutritional elements before.

Another co-op concept introduced to help the farmers' families even out the periods of economic peaks and valleys was the idea of diversification in sources of income as well as crops, particularly encouraging the women to revive a tradition of making handicrafts which had all but been lost.

"In the CPAC," said Crespo. "We have offered classes in leatherwork as the first step in redeveloping local handicrafts which the villagers can make and sell to tourists to supplement their farming income. BIOMA pays for the teacher and supply the materials and equipment for the students to get started. Each participant got to keep the first piece made as an incentive. The rest were sold, with the income going back to BIOMA to cover the costs of the initial investment. Now with the equipment paid for, the students are beginning to realize a profit for themselves as they purchase new materials with profits from the sale of finished products through a neighborhood cooperative.

In 1989, BIOMA was responsible for the opening of a school in La Toma Alta. A building for this purpose existed, but had stood in a state of abandonment with no funds to provide a teacher or materials, leaving some 40 children in that community without primary education. BIOMA took it upon itself to petition government authorities to fulfill their responsibility for providing a teacher for this basic education. They also mounted a campaign, with the assistance of the community, to put the school house back into usable condition.

The school is now in operation and BIOMA continues to donate materials for it and for sports programs for the youngsters. They have also introduced the concept of school garden plots there to get introduce youngsters, most of whom will continue in the traditional occupation of farming of this area, to effective agricultural techniques and give them a source of income too.

Experiments are likewise being carried out with recovering land which has suffered from erosion through overuse. Wild plants of the same zone are being sown in the deteriorated soil to prevent further erosion and start its recovery process. Cultivation of natural grazing plants has also prevented the necessity of the framers' seeking new land in the fragile higher land for their animals to forage.

The unique nature of the reserves has attracted international attention and visits by experts wishing to know more about the experiences of BIOMA in the area of protection and of the integration of the community in conservation work. Among these have been visits to the Paraguaná reserves by Enrique Bucher of the Institute of Applied Zoology of the University of Cordoba, Argentina; and Thomas Frizke, from the Center for Future Studies of Vermont.

Active participation as members of the communities where BIOMA is working has created a very positive image for the foundation and earned it the confidence and cooperation of its neighbors.

The reserves are a commitment which is complicated, costly, and without end since they were entered into with the intention of being on-going projects. But have also provided very rewarding results and have set an example as pilot projects which can be adapted throughout the world.

## **NATIONAL PARKS**

BIOMA served as the impetus for the creation of two of Venezuela's national parks.

In 1986, BIOMA initiated a study entitled "Preliminary Diagnosis for the future Cinaruco-Capanaparo National Park with emphasis on its ecological characteristics and propositions for its boundaries." This led to the decree in 1988 creating the Santos Luzardo (Cinaruco-Capanaparo) National Park.

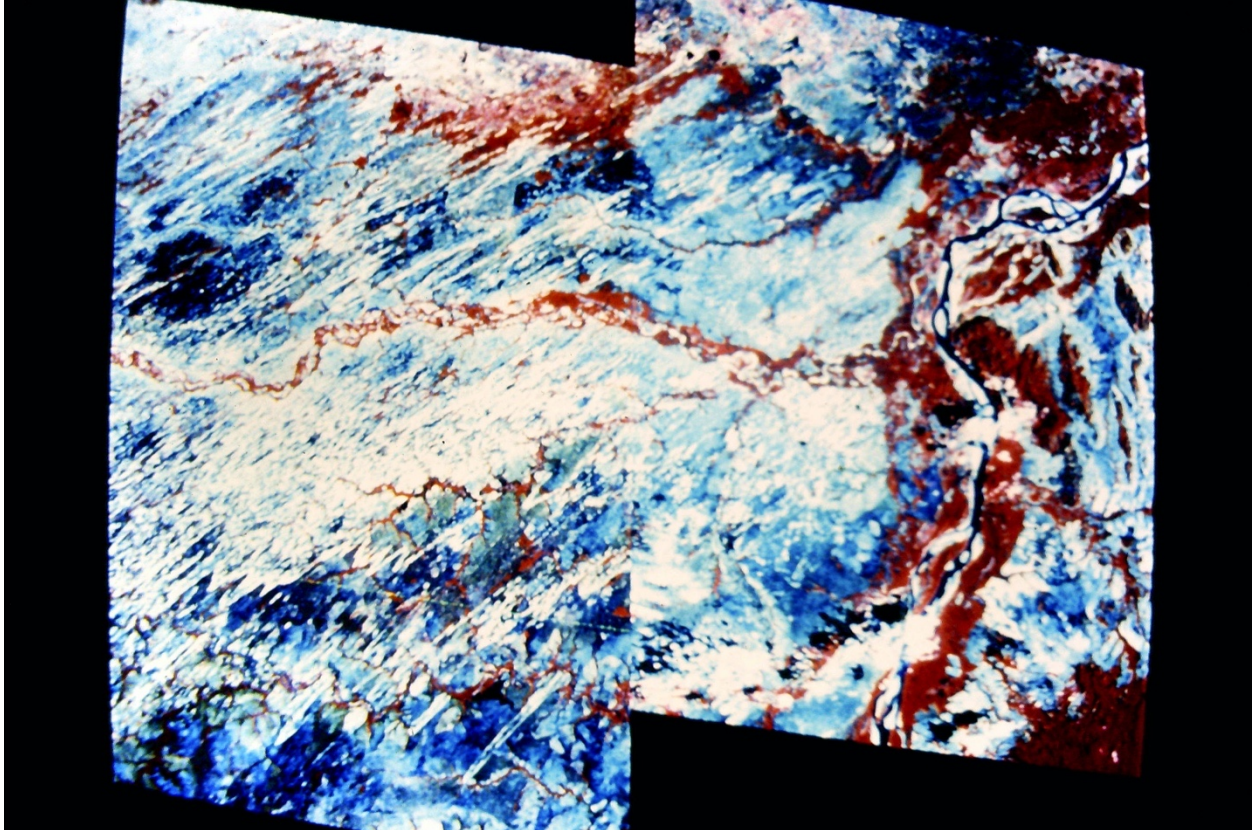
On the same date as the decree, BIOMA signed an agreement with the Environment Ministry to prepare, free of charge, a management plan for the park.

In 1988, BIOMA received a \$40,000, two-year grant from The Tinker Foundation to assist with costs for the development of the management plan.

Along with this donation, besides using funds of its own, BIOMA received assistance from the W. Alton Jones Foundation, the MacArthur Foundation, and The Nature Conservancy. The total cost to BIOMA for the diagnostic and for creation of the park and elaboration of the management plan amounted to Bs.2,705,585.92. In its proposals for national park management, BIOMA has placed strong emphasis on the human element, ways to accomplish sustained development, and for the parks to generate funds for their own protection and maintenance.

'Inparques should look at ecotourism as a source of income for the national parks,' said Romero, 'such as has been the case in Ecuador where fees produced by controlled visits to the Galapagos Islands National Park cover the operating costs of all the national parks in that country.'

To demonstrate the feasibility of doing this in Venezuela, BIOMA is setting an example in its management plan for its Paramo de Piedras Blancas Biological Reserve in Mérida state.



*Fig. 14. A satellite image of the Cinaruco-Capanaparo national park used by BIOMA to develop a management plan for the park.*

Yves Lesenfants, director of regional projects, explained, “we have constructed a traditional-style stone house, constructed completely by local artisans using materials at hand in the same manner as they were built centuries ago in the páramo, but fitted with modern bathrooms and with electricity provided by non-polluting solar panels. This guest house can accommodate up to a maximum of 10 visitors. It also has a conference room where lectures can be presented about the ecology of the area and stocked with information such as maps, books about the flora and fauna, and details for suggested routes for exploring the páramo to better appreciate its beauty and identify the plants and animals there.

“The idea is to give tourists the opportunity to know the unique biology of the páramo, staying in a place that is typical, beautiful, and comfortable,” Lesenfants continued. “The income generated from its rental is expected to cover costs for maintaining the former reserve master's house which will be used as a place where researchers can stay while carrying out their work in the reserve and adjacent national park as well as the community outreach center located in the village below. Moreover, it offers a new source of income in this economically depressed area, with locals

providing services to the tourists as guides (BIOMA will offer them courses to prepare them for this work, providing them with information about the geology, flora and fauna, ecological importance of the páramo), rental of horses or mules, and tending the guest house."

Following its establishment of the Páramo Piedras Blancas Biological Reserve in 1986, BIOMA went on to do a complete analysis of the economic, ecological, and social value of the zone adjacent to its reserve, which was presented to the government and provided the technical justification for the creation of a national park there.

The result of BIOMA's three-year effort was a presidential decree on December 7, 1989, creating the 400,000-hectare Sierra de La Culata National Park (now known as the Dr. Antonio Jose Uzcátegui National Park) in the northwestern Andes between Mérida and Trujillo states.



## CHAPTER 7

# SUCCESS, CONTROVERSY, & RECOGNITION

*Controversy seems to go hand and hand with success: while public recognition underscores respect for BIOMA*

## CONTROVERSY

Right from the start, BIOMA,'s distinctive style attracted a great deal of public attention not always exactly the type that has been expected or desired.

BIOMA did not fit the stereotypical 1960s image which prevailed in Venezuela of the environmental movement – “if they're not left-wing, they can't be conservationists” - with the vision of hippies in marches chanting “save the Earth.” Rather, the impression relayed from the appearance and manner of operation of Romero and his staff seemed more in keeping with that seen in corporate offices than of a “green group.”

The make-up of its board, manner of fund-raising, and very high-profile, results-oriented approach was unique - and successful.

"Unfortunately, when you accomplish things that others have not attempted or have even said couldn't be done, it has a way of creating jealousy and resentment against those who succeed," observed Romero. "The tendency by the less successful is to attack and/or try to discredit those who have produced results to compensate for their own inaction or lack of vision."

"Since the concept I had for BIOMA was absolutely clear in my own mind, and 100% directed toward the end of doing the most effective, responsible job possible in the protection and conservation of our environment," said Romero, "it never occurred to me that our method of operation, and theme for that matter - that 'BIOMA does not talk about conservation, we do it,' and what some considered excessive frankness would cause the reaction it did on some fronts."

"I realize now," reflected Romero, "that while I have a penchant for taking action - NOW, because we are so often blazing completely new trails with the things we do and how we go about them, that it is important to prepare the public first with detailed explanations about what we are doing - or going to do - to smooth the way."

"We quickly found out that many people to view with suspicion anything that is new or that they do not understand," said Romero, "with reactions even to the point of making outlandish insinuations or accusations."

Citing an example of the, sometimes, incredible reactions which they have encountered, Romero recounted an experience when he was invited to the Environmental Commission of the Chamber of Deputies to discuss the concept of debt for nature swaps. "One of the presenters was Ecuador's Roque Sevilla. When he finished and asked if there were any questions, there was total silence, which quite surprised me. The session was adjourned and I was riding down in the elevator behind one of the deputies who, in absolute seriousness, stated that narco-trafficking must be behind it!"

He smiles now while relating some of the wild rumors - or even published articles in the national press which have emerged.

But, at the time, the controversies surely caused some ulcers and kept BIOMA representatives hopping as declarations to the press and public meetings were scheduled to dispel any doubts, making it perfectly clear that BIOMA was neither a front for any occult special interests or about to abuse the very land it was working to protect.

Underscoring his point, Romero pulled out one of his "treasured" clipping from the Mérida state newspaper *Correo de Los Andes* (which has run more than its share of articles attacking BIOMA) written by Francisco Valles which appeared on March 14, 1991. This refers to the sector of the Andean páramo in Mérida state known as La Culata which BIOMA had researched to prepare its recommendations to the government for designation as a national park because of its fragile and distinctive ecological features, with the land subsequently being declared a national park due to BIOMA's efforts.

The blazing headline, quoting information provided by Deputy Carlos Ramos, second vice president of the Legislative Assembly of the state of Mérida stated: "TRANSNATIONAL COMPANIES WANT TO EXPLOIT DEPOSITS OF URANIUM IN LA CULATA." According to information received in the Legislative Assembly, the BIOMA Foundation and satanic sects are involved in this exploitation. The article continued that investigations were being opened, with those involved solicited to provide detailed explanations of their activities and intentions in La Culata.

When this accusation was promptly demonstrated to be pure fantasy, the same paper switched to a new theme the following month, stating that BIOMA was investigating cobalt mines in La Culata. That sensational claim likewise silently faded away.

March of '91 must have been a month of high aspirin consumption for Romero and BIOMA staffers. With the explanations disclaiming their "uranium and cobalt exploration activities" being fully accepted by the Mérida Legislative Assembly just two days before, on March 20 a new headache presented itself in the form of a feature article in the Caracas daily, *El Nacional*.

The damning article was more disturbing since, rather than being founded on simply verbal insinuations, it was based on a letter signed by the Deud Dumith, president of the National Parks Institute (Inparques) which had come into the hands of the article's author, stating that despite its claims to the contrary, BIOMA had done absolutely nothing to design the protection or management of any national park in Venezuela and, furthermore, was using claims that it had to obtain funds from international sources which it was misusing to finance propaganda campaigns to promote its image.

The next day, the same newspaper ran a follow-up article, by the same author, featuring the results or, rebuttal interview with Romero during which, among other things he demonstrated the 500-page "nonexistent" management plan for Santos Luzardo National Park which had been prepared, as agreed, for the Environment Ministry and Inparques - completely at BIOMA's expense. He also reported that the first calls he received the morning the first article appeared were from the minister of the environment and from Dumith himself manifesting their solidarity with BIOMA. "Dumith apologized and explained that the letter in question had been written by a subordinate and he had signed it without reading it... Meanwhile, copies of that letter bearing his signature had been circulating throughout the country with quotes of its contents appearing in various sources. With what casualness some of our public officials sign their name to anything..."

After not so much as having received a thank you from Inparques or the Environment Ministry for its work on preliminary diagnoses or management plans for the La Culata and Santos Luzardo National Parks, then the letter being distributed bearing Dumith's signature that BIOMA was falsely claiming it was doing any work in management plans or protection of national parks, BIOMA withdrew from another very costly (to the foundation) project with the National Parks Institute where, in 1990, BIOMA had been called upon by Inparques specifically to assist in the survey and protection of La Neblina National Park in the southern extreme of Amazonas state.

BIOMA's international connections also managed to elicit unexpected responses at times.

"When the Inter-American Foundation (an international entity which has a rather radical image) donated a large sum of money to us, a rumor started that it must be a CIA front for the purpose of installing secret bases in Venezuela!" reported



Romero.

"It's one of the prices you pay for being different and successful," he laughed. "you just have to develop the hide of an elephant, sticking to what you believe in, knowing that you are not doing anything wrong, and becoming indifferent to this type of unfounded criticism or you'd never be able to accomplish anything."

Another factor which immediately created something of a radical image for BIOMA was its establishment of an unswerving policy of never asking for nor ever accepting any government funding.

In a country where decades of a paternalist system of government has converted a large portion of the public into dependents of state subsidies - even coming to expect them as a right, BIOMA's attitude struck many as being anything from daft to suspect.

"The mentality is that only the state can do things like dealing with the environment," said Romero. "Thus, when we have taken on projects which have always been left to them - or assumed that only they could do, we have often been viewed as screwballs. When we have demonstrated that it is not their exclusive domain and that with a staff of 35 professionals, we have been able to accomplish things in a very short period of time that the 11,000 employees of the Environment Ministry have not been able to do, it has created resentment.

"Our stand has not been intended as a statement against the government," emphasized Romero. "Maintaining good relations with the government and its entities has naturally been necessary for our activities. However, not only are there many things which we feel we can more effectively accomplish without government mediation, but to maintain a reputation of absolute independence from the influence of any individual, economic or political group, or organization, it is best that there could never be any possible implication that we might have conflict of interests or are behold to or willing to 'overlook' something that the government was (or not) doing in relation to conservation as a felt 'obligation' because we were receiving funding from them."

Moreover, as Romero unhesitatingly states, "that was one of the first to openly point out that the state is one of Venezuela's biggest polluters. Fifty percent of the beaches are not apt for swimming because of the dumping of untreated waste from the cities. CVG and PDVSA are huge toxic waste producers. Many conservation groups wouldn't think of launching a campaign without first consulting with the environmental ministry for its opinion. If we asked permission of them, forget it."

As a case in point, Romero cited, "In 1990, when Enrique Colmenares Finol was environment minister, he stated that if we published such information that 'people might think Venezuela has environmental problems.' I ask you, if Venezuela 'doesn't have' any environmental problems, then why do we have an Environmental Ministry with 11,000 employees?"

"People don't want to face the fact that Venezuela has environmental problems," said Romero. "We do have problems, but like an alcoholic, we have to admit that the problem exists before we can start doing something to resolve it." BIOMA's desire to underscore this influence-free position has also extended to non-governmental relationships.

"Because of the fact that we have received the financial support of many different companies and groups for our projects, some people think that they direct what we do," said Romero. "This is not the case at all. For example, when we approached Colgate Foundation about funding for preparation of the *Manual of Environmental Sciences*, they never once said what we could or could not include."

In fact, any effort to try to manipulate what BIOMA does has been manifestly rejected. Such was the situation with The Nature Conservancy. "Because they offered at the beginning, when the name and reputation of BIOMA were an unknown, to act as an intermediary in soliciting and channeling funds from other source (including the MacArthur Foundation's grant which got BIOMA started) to us, there was a misconception that BIOMA was a branch of that organization."

While it was referred to, even in literature of that U.S. group, as a "partner organization," Romero emphasized that BIOMA has always been completely independent, without affiliation with any national or international organization.

"We worked well with The Nature Conservancy in the beginning, but when they started trying to impose their philosophy on BIOMA," stated Romero, "despite the important in I assistance they had provided, we were not about to be pressured or dictated to by anyone. Since the pressure continued, the only solution was to sever the relationship with them completely. It was and is a rather sensitive matter, but was necessary to be true to our principles."

In spite of the occasional isolated scandalous rumors and damning notices which have emerged in the course of its first seven years of existence, BIOMA enjoys an excellent. image in the street, demonstrated by the steady growth of BIOMA's national and international prestige, membership, and activities.

## **RECOGNITION**

Recognition of BIOMA has gone beyond simple awareness of its name, with various of its projects and personnel having been named the recipients of important awards.

Darío Bracho, director of BIOMA's Pueblo Nuevo office and the biological reserves on the Paraguaná Peninsula of Falcon state, in 1990 was named as winner of the John Dunning Prize. This international prize is awarded annually to the most outstanding conservationist technician in field work. Bracho was singled out for his development from the beginning of an intense labor of extension with local Paraguaná communities, especially near Pueblo Nuevo.

In December of 1991, Bracho was honored with the award "Batidor Dorado" in its first class by the Environment Ministry for his efforts in the prevention and extinction of forest fires in Falcon state.

Fidel Pirona, winner of the national BIOMA/Kodak environmental drawing contest in 1992, after having been contracted by BIOMA to do all its illustrations for the campaign "Let's recycle with BIOMA," was postulated by BIOMA for these efforts-, and was chosen from thousands of students throughout the world in a United Nations competition as "Young Environmentalist of Year for 1992," the first time a Venezuelan had ever won the honor.

In the area of films, in 1989 Romero/BIOMA received honorable mention of the Alexander von Humboldt Environment Prize for documentaries about national parks. In 1990, a special mention award of the Seguros Lara Prize for Environmental Journalism was received for the television programs "La Otra Paraguaná," "Páramos para la Eternidad," and "En Busca del Oso Frontino." And, in 1993, "La Insólita Paraguaná," personally directed by Romero and produced with Lagoven, earned the first prize for professionals of the 5th Alexander von Humboldt Prize for environmental films and videos for the 1992-1993 period.

Among recognition which has been received by Romero personally have been the Feijoo Prize of the Spanish Association for the Advancement of Science (1974), awards for the Best Teaching Work in Biology at the University of Miami (1981, 1982), Gold Medal of the Maytag Scientific Society (1982), the Municipal Environmental Award (from Sucre district of Miranda state), honorable mention in 1990 for the Annual Prize for the Best Scientific Work presented by CONICIT (Venezuela's National Council for Scientific and Technical Investigation) and, in 1992, the Henri Pittier Award in its third class, presented by the Agriculture Ministry and Environment Ministry.

## EPILOGUE

After having looked at the multitude of accomplishments BIOMA has achieved in seven short years, it's interesting to try to do a bit of crystal ball gazing.

With the track record it has thus far established for action and well-documented, professional research reports which have earned it considerable recognition and respect at home and abroad, the debut of its new office in Washington D.C. to supplement those in Venezuela will, surely provide the springboard for a much greater extension of BIOMA's activities on the international level.

Particularly because of its policy of complete independence, it would seem to be a perfectly natural step for BIOMA to take on an ever-increasing role as spokesman for the public's environmental concerns in Venezuela - and conceivably for other Latin American neighbors - and as an authoritative lobbyist in gaining U.S. support for attacking problems which involve parties on both sides of the Caribbean.

If the recently-established BIOMA Endowment Fund achieves its goal of growth to a minimum of \$1 million, this should give the foundation a greater degree of freedom from constant fund-raising activities to provide a steady flow of operating funds so that even more time and effort can be dedicated to conservation projects.

Considering the involvement by private industry, community participation, and extensive reach of the recycling and environmental education programs BIOMA has brought about to date, one would expect to begin seeing a measurable abatement in many of Venezuela's ecology-destroying trends in the near future as more and more citizens become motivated through these efforts to take an active role in conservation and applying pressure for the cessation of environmental abuses.

While the research, publications, data base, and countless other admirable efforts undertaken by BIOMA are certainly cause for pride, without a doubt, the foundation's greatest accomplishment has been its awakening of the Venezuelan public - of all ages, of all walks of life - to the need to conserve our biodiversity, and the role they can play in prevention and correction of ecological abuses.

The tremendous growth in enthusiastic community and corporate involvement BIOMA has generated through its individual and joint programs promises to infect an ever-greater portion of the nation's population to adopt BIOMA's motto of doing conservation, not just talking about it in years to come.

## ABOUT THE AUTHOR

Elizabeth Kline, a U.S. citizen who has lived in seven different states as well as Germany, Japan, and Mexico, has resided in Venezuela for 12 years.

She earned a bachelor's degree in fine arts with English literature minor from Seattle University in 1968 and since then has pursued a wide variety of interests and talents including art (with specialties in drawing, sculpture, and painting); cooking professionally; the restoration of four houses ranging in age from 85 to 150 years (with two of those featured on homes tours) in Michigan and Ohio; and, while living in Michigan, served as president of the Ann Arbor chapter of AAUW (as well of its Gourmet and American interest groups), of the Tecumseh Historical Society, and of Ridgeway Elementary School PTA (which her two sons, now 24 and 26, attended).

After setting down roots in Venezuela following her divorce a decade ago, she has pursued what has proven to be her overriding passions: writing and photography. For five years, she was freelance correspondent for Venezuela's English-language newspaper, *The Daily Journal*, while living in Valencia (as well as spending 1986-88 as the administrative assistant to the general manager of the Hotel Inter-Continental Valencia).

In 1988, she moved to Caracas to work full time for the DJ, specializing in the areas of travel features, doing the social and gastronomy columns, as well as covering ecology, community, and regularly contributing to the monthly banking and other supplements.

Since May of 1993, she has been working as a free-lance writer, photographer, and translator as well as being Venezuela's correspondent for International Securities Regulation Report of Washington D.C.

Aside from thousands of articles in the DJ over the course of the 10 years of work with that newspaper, she has had numerous articles published in English and Spanish in World Wide Fund for Nature (WWF) features, *Business Venezuela*, Viasa airline's in-flight magazine, *El Dorado* magazine of the Latin American Division of Inter-Continental Hotels, *Entonces* tourism magazine, and *Excelencia* diplomatic newspaper; with her photography appearing in these and many other publications.

She wrote the soon-to-be-released *Traveler's Guide for Venezuela* for Editor Ernesto Armitano and was co-author and principal photographer of the 1993-94 edition of *Living in Venezuela* for the Venezuelan American Chamber of Commerce. Among her many Spanish to English translations are Aldemaro Romero's *Canaima*, *Lead: The Invisible Enemy* by Romero and Roberto Prato Ochoa, and Miro Popic's 1994 *Caracas Restaurant Guide*.

## APPENDIX

### Sources for additional information on controversial issues

#### On the killing of dolphins in Venezuela:

Romero, A.; I. Agudo & S. Green. 1997. [Exploitation of cetaceans in Venezuela](#). *Reports of the International Whaling Commission* **47**:735-746.

Romero, A.; A. I. Agudo, S. M. Green & G. Notarbartolo di Sciara. 2001. [Cetaceans of Venezuela: Their Distribution and Conservation Status](#). *National Oceanographic and Atmospheric Administration Technical Reports NOAA Technical Report NMFS* **151**:1-64.

Romero, A. 2008. [Nobody's dolphins](#), pp. 11-19, *In*: Trauth, J. & A. Romero (Eds.). *Adventures of the wild: experiences from biologists from the Natural State*. Fayetteville: University of Arkansas Press.

#### Documentary:

<https://www.youtube.com/watch?v=zLThG3pfaYo>

#### On lead pollution in Venezuela:

Romero, A. 1996. [The environmental impact of leaded gasoline in Venezuela](#). *Journal of Environment and Development* **5**(4):434-438.

