

# NATURAL AREA NEWS

VOL. 6 NO. 1

A PERIODIC NEWSLETTER OF THE NATURAL AREAS ASSOCIATION

WINTER/SPRING 2002

## Branding Ourselves: Archetypes and Attributes

—Reid Schuller, Executive Director

**T**HE NATURAL AREAS ASSOCIATION IS working to refine its “brand image.” The goal is to find the one target audience that will have the most impact on the organization’s success. The refinement process includes an analysis of the programs and activities we offer, our organizational values, who we serve, and who else also works in the general area of natural areas and conservation biology.

A small but significant part of this process has involved asking our members about the personality traits and values which they believe best characterize the organization. What follows here is a discussion of the findings of this “survey.”

### WHO ARE WE?

Early this year, three groups of NAA members received the “Brand Solutions Organizational Value and Archetype Indicator Test.” The three groups were (1) randomly selected NAA members, (2) current NAA board members, and (3) former NAA board members.

Each respondent was asked to select from a list of 96 personality traits and value statements those attributes that they believed best characterize the NAA. Each selected personality trait or value statement was coded and assigned to one of twelve categories. Each category had attributes appearing eight times in the survey. By summing checked responses to each attribute, a composite picture of how respondents view the NAA

emerged. This composite is termed a brand archetype.

Each brand archetype represents a different way of seeing, perceiving, acting, and behaving in the world (see box on p.3). Almost every organization—profit, non-profit, government, or nongovernment—has one or two prevailing archetypes. Understanding the prevailing archetype(s) within the organization is central to developing authentic images that communicate with the customer/client/

constituent in a deep and meaningful way.

### WE ARE . . .

The following table summarizes the response rate for each surveyed group

there is fairly close agreement about the personality traits and values embedded within the organization

Group	Response		
	N	Response Rate	No. of Responses
Membership	20	50%	16
Board	13	76%	16
Former Board	23	58%	25

Because of the low number of respondents in each group, the results should be viewed more as hypotheses to be further tested than as definitive results. However, having said this, a number of preferences and patterns emerge which prove instructive by themselves.

All three groups, Membership (M), Board (B), and Former Board (F) ranked The Sage as the

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and Former Board (F) ranked *The Sage* as the predominant brand archetype. Responses especially focused on “expert” and “credible.” This brand archetype is the most commonly selected for environmental and conservation organizations (information provided by Chuck Pettis of BrandSolutions, Inc.).

*The Regular Guy/Gal* ranked second among board members, but ranked third among former board members and members at large. M and F ranked *The Explorer* second in importance, while B ranked it fourth. *The Ruler* brand archetype ranked third among B and M, while ranking fourth among F.

Perhaps as revealing to the organization are the low-level responses for *The Outlaw*, *The Lover*, *The Jester*, and *The Magician*—a reaction typical of a science-based organization.

Responses also begin to address the question of whether B embodies the values and personality traits of M. In most cases, B responses appear close to M. The most conspicuous differences are reflected in the 10%, compared to 15%, response for *The Explorer*. Perhaps this means that the membership is inclined to be more adventuresome than the Board. Perhaps low sample size obscures interpretation. Conversely, B ranks *Regular Guy/Gal* at 19%, compared to 12% by M. This may suggest the higher emphasis which B responses place on straight-shooting, practicality, and tradition.

Former board members responses are more similar to M than to B, with the sole exception of a 15% response to *The Sage* compared to the 21% M and B response. This pattern may indicate that B is less clearly reflective of M than it has

been in the past. However, it is also worth noting that overall, there is fairly close agreement about the personality traits and values embedded within the organization among all response groups.

Another way to look at responses is to look at which traits were selected the most often, and to look for similarities and differences among the three response groups on a particular personality trait or value statement. The traits selected most often by all groups were:

- Credible, expert
- Like to discover and disseminate truth
- Expert, advisor, teacher
- Reliable, dependable
- Research and quality oriented

Differences among groups appeared in the following responses:

✓ *Traditional values* was selected

## NATURAL AREA NEWS

*The Natural Area News is a periodic publication of the Natural Areas Association published three times a year in winter, summer and fall.*

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*THE MISSION OF THE NATURAL AREAS ASSOCIATION is to advance the preservation of natural diversity. The Association works to inform, united, and support persons engaged in identifying, protecting, managing and studying natural areas and biological diversity across landscapes and ecosystems.*

## BOARD OF DIRECTORS

Officers:

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*Charles E. Williams – Clarion University, Pennsylvania*

*Nancy Wogen – Bureau of Land Management, Oregon*

- 5% by M, but 46% by B
- ✓ *Enjoy the work itself* was selected 83% by F, 50% by M, and 23% by B
  - ✓ *Have more ideas than can be acted upon* was selected 61% by F, 38% by B, and 15% by M
  - ✓ *Stable, established, solid reputation* was selected 62% by B, 43% by F, and 35% by M
  - ✓ *Create standards* was selected 46% by B, 39% by F, and 25% by M

Results from this survey will serve as food for thought. Beyond that, however, results will be incorporated into a longer term effort to clarify and focus on our future constituency, and in any effort to broaden and deepen our membership base so that we can more fully succeed at our mission of advancing the preservation of natural diversity.

## The Brand Archetypes

### The Innocent

- Wholesome, pure
- Forgiving, trusting, honest
- Happy, optimistic, enjoy simple pleasure

### The Explorer

- Searcher, seeker, adventurous, restless, desire excitement
- Independent, self-directed, self-sufficient
- Value freedom

### The Sage

- Thinker, philosopher, reflective
- Expert, advisor, teacher
- Confident, in-control, self-contained, credible

### The Hero

- Warrior, competitive, aggressive, winner
- Principled, idealist, challenge "wrongs," improve the world
- Proud, brave, courageous, sacrifice for greater good

### The Outlaw

- Rebellious, shocking, outrageous, disruptive
- Feared, powerful
- Countercultural, revolutionary, liberated

### The Magician

- Shaman, healer, spiritual, holistic, intuitive
- Value magical moments and special rituals
- Catalyst for change, charismatic

### The Regular Guy/Gal

- Not pretentious, straight shooter, people-oriented
- Reliable, dependable, practical, down to earth
- Value routines, predictability, the status quo, tradition

### The Lover

- Seek true love, intimacy, sensuality
- Passionate, sexy, seductive, erotic
- Seek pleasure, to indulge, follow emotions

### The Jester

- Clown, jester, trickster
- Playful, take things lightly, create a little fun/chaos
- Impulsive, spontaneous, live in the moment

### The Caregiver

- Altruistic, selfless
- Nurturing, compassionate, empathetic
- Supportive, generous

### The Creator

- Innovative, imaginative, artistic
- Experimental, willing to take risks
- Ambitious, desire to turn ideas into reality

### The Ruler

- Manager, organizer, take charge attitude
- Efficient, productive
- Confident, responsible, role model

## We Need

### Your E-mail!

At times, the Association relies upon e-mail to communicate with the membership. Our list of e-mail addresses is incomplete. If you receive this newsletter you are a current member. Please send a message to [naa@natareas.org](mailto:naa@natareas.org) containing your name, address, and E-MAIL ADDRESS.

*Thank you very much!*

## Changes in NAA By-Laws

The NAA Board has recently recommended a host of changes to the organization's bylaws. Most of the changes address how we communicate and seek out information through e-mail and the Internet.

The proposed bylaw changes will be put to a vote of the NAA membership at the 2002 Natural Areas Conference, to be held in Asheville, North Carolina. The event will take place at the Renaissance Asheville hotel on Wednesday, October 2nd. Notification of the time and room location for the business meeting will be provided at the conference.

Please go to our new website, [www.naturalarea.org](http://www.naturalarea.org), to review the proposed bylaw changes. If you would like to make written comments to be entered as part of the record of the October 2, 2002 NAA business meeting, please respond by e-mail to [naa@natareas.org](mailto:naa@natareas.org) by September 1, 2002. If you have questions, would like a printed copy of the proposed bylaws, or would like to discuss this "live," contact the NAA office at 541-317-0199.

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# 29th Annual Natural Areas Conference

## October 2–5, 2002

# Asheville, North Carolina

## **The Power of Nature and the Empowerment of Natural Areas**

The 2002 natural areas conference will be held at the Renaissance Asheville Hotel and the Asheville Community Theatre in Asheville, North Carolina.



We hope to challenge all who attend with new information and new ways to think about natural areas conservation and management. We also hope to raise awareness and optimism about our potential for making a difference in natural lands conservation and encourage everyone about the future of natural areas and the conservation of biological diversity. Adaptive ecosystem management—and what it means to adapt conservation programs within the context of changing natural, political, economic and cultural dynamics—will receive special attention. Session themes include:

**Adaptive Management & Climate Change • Adaptive Management in Fire Dependent Communities**  
**Establishing Priorities & Managing Invasive Species in an Adaptive Context**  
**Site Conservation Planning • Designing Cohesive Nature Reserve Systems**  
**Building Local Capacity for Land Conservation & Long-Term Stewardship**  
**Developing a Sense of Place • Placing a Value on Nature**

In addition to plenary and contributed paper sessions, there will be a full range of field trips to exciting natural areas and conservation projects in the Southern Appalachians.

**For more information, please contact the conference organizer:**

**Doreen DiCarlo**

Florida Center for Environmental Studies • Florida Atlantic University  
3932 RCA Blvd., Suite 3210 • Phone: 1-561-691-8553 – Facsimile: 1-561-691-8540 • [ddicarlo@ces.fau.edu](mailto:ddicarlo@ces.fau.edu)

AND

see the Association's website: [www.naturalarea.org](http://www.naturalarea.org)

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## CONSERVATION RESOURCES

### CONFERENCES AND WORKSHOPS

Plans are underway to offer a *workshop for natural area professionals in northern Honduras* early next year. We will visit protected areas, view wildlife in a variety of habitats, tour Mayan ruins, and meet with government and NGO natural areas managers, researchers, community members, and environmental organization staff. We hope to provide training on volunteer programs, research methodologies, and natural area management to Honduran colleagues, and to offer consultation assistance on recently released management plans for some of the protected areas we visit. Price and dates are undetermined as yet, but eleven days in late February is the target. For more information, contact Abigail Rome: [abirome@earthlink.net](mailto:abirome@earthlink.net) (301-608-8094) and watch the Association's website: [www.naturalarea.org](http://www.naturalarea.org).

*Carnivores 2002: From the Mountains to the Sea*, Defenders of Wildlife's fourth national conference, will be held in Monterey, California, USA, Nov. 17–20, 2002. Contact Sharon Wilcox, 202-789-2844 ext. 315 or [carnivores2002@defenders.org](mailto:carnivores2002@defenders.org) or visit [www.defenders.org/carnivores2002](http://www.defenders.org/carnivores2002).

### INFORMATION RESOURCES

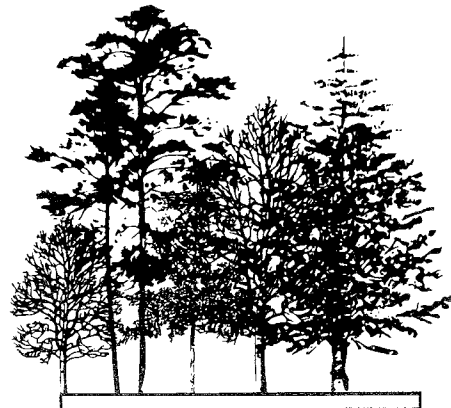
A report released 29 January 2002 by the Pew Center on Global Climate Change concludes that global climate change of the magnitude predicted for the United States over the next 100 years poses a serious threat to lakes, streams, rivers, and wetlands throughout the United States. Entitled *Aquatic Ecosystems and Climate Change: Potential Impacts on Inland Freshwater and Coastal Wetland Ecosystems in the United States*, the report is available on the Pew Center's website: [www.pewclimate.org/projects/index.cfm](http://www.pewclimate.org/projects/index.cfm).

### OPPORTUNITIES

The California Native Plant Society (CNPS) and the Center for Biological Diversity invite you to join us in a new project: the Native Plant Conservation Campaign. The goal of the campaign is to assemble a national network of native plant societies, botanical gardens, and other plant conservation organizations that will support each other's work, exchange information and work together to create a strong national voice in support of native plants. We will advocate for

- improved staffing and funding for federal botany programs on national parks, national forests, BLM lands, and within the U.S. Fish and Wildlife Service
- improved staffing and funding for prevention and control programs for invasive exotic organisms
- increased use of local native plants in restoration
- increased funding for plant science research and education
- changes in federal law better to conserve imperiled plants

A full project description is available at [www.cnps.org/NPCC/npcc.pdf](http://www.cnps.org/NPCC/npcc.pdf), or contact Emily Roberson at [emilyr@cnps.org](mailto:emilyr@cnps.org).



## NATURAL AREA REPORTS

### Challenges Ahead for Natural Area Protection in South Carolina

South Carolina's Heritage Trust Program, established 25 years ago, has permanently protected 66 Heritage Preserves covering a total of 79,758 acres. These preserves protect the state's most significant archaeological sites and habitat for rare plant and animal species and for the most part, are open year round for public visitation. Land acquisition and management is funded by the Heritage Land Trust Fund, which receives an annual allocation from the documentary stamp tax on real estate transfers.

The South Carolina Heritage Trust Program acquired six properties in calendar year 2001. Three were additions to existing preserves and three established new preserves. Pressures for new development across South Carolina are growing rapidly. Three acres of land are converted from rural to urban uses for every person that is added to South Carolina's population. As a result, land values in South Carolina have increased dramatically. At the same time, for some reason, donations of property have become less frequent. As a result, the Heritage Trust Program has recently been protecting half as many acres at four times the cost. Protected acres are not necessarily the best measure of our program's

success, but the trend is clear: we will be protecting fewer acres at a greater cost in the future.

*Stuart Greeter  
Land Protection Coordinator  
SC Heritage Trust Program*

### Old Growth Focus of Georgia Efforts

Georgia's Natural Areas Program is administered by the Nongame Wildlife & Natural Heritage Section (NWNHS) in the Georgia Department of Natural Resources. The department currently manages 20 state-owned natural areas with a total land area of approximately 21,000 acres. The most recent acquisition, Moody Forest Natural Area, is located along the Altamaha River and contains old-growth stands of cypress-tupelo and longleaf pine-blackjack oak. This 3400-acre tract was purchased last year by the State of Georgia and The Nature Conservancy for \$8.25 million, and is managed jointly by the two organizations under a cooperative management agreement.

*Jon Ambrose  
Program Manager  
Georgia Natural Heritage Program*

### Virginia Preserve System Plans for Growth

Virginia's Natural Heritage Program manages the state's rapidly growing

Natural Area Preserve System. In the past 11 years, the system has grown from zero to 33 preserves totaling over 20,000 acres. Three to four preserves are expected to be added during 2002, and significant additional acquisition funds are anticipated.

With this rapid growth comes the challenge of management. Thirteen new stewardship positions have been created over the past three years. Five regional stewardship ecologists and three regional operations stewards currently have frontline responsibility, supported by central office staff. Natural Heritage Inventory biologists and ecologists play a crucial role in follow-up inventory, vegetation classification, and management planning for the individual preserves.

Partnerships with other land management entities such as The Nature Conservancy and the Division of State Parks have facilitated the growth of our prescribed fire program and public access/security efforts. We are currently working to determine optimal staffing organization and number to manage this growing system. We project that with the addition of two regional stewardship ecologists and two operations stewards in the coming years, we will have reached a staffing level capable of managing a growing natural areas system over the next decade.

*Tom Smith  
Virginia Natural Heritage Director*

# Natural Areas Association Approves Invasive Exotic Species Policy

*Editor's note: The NAA Board of Directors recently approved the following policy on invasive exotic species.*

## BACKGROUND

**I**N RECENT YEARS NATIONAL AND international attention has focused on the issue of invasive exotic species and their impact on biological diversity. The Natural Areas Association (NAA) recognizes that this issue has ecological, economic and social facets at global, national, regional and local scales. Such topics as the protection of biological diversity, international relations, world trade and local economic development may all be affected by invasive exotic species.

Individuals and organizations working to protect and restore natural areas and other wildland habitats are directly affected by policies and on-the-ground decisions to manage invasive exotic species. NAA members identified invasive exotics as their number one management concern within natural areas during the 1999 Natural Areas Techniques Forum. As a leading professional organization whose mission is to advance the preservation of biological diversity . . . it is essential that the NAA define a position on the role of invasive exotic species in natural areas and other wildland ecosystems and couple it with a cautionary note regarding the selection process employed to categorize and subsequently take management action against invasive exotic species.

NAA recognizes the impacts that invasive exotic species are having on the structure, function and composition of natural areas and wildlands all over the world. NAA understands that the rate of undesirable change promoted by these species in wildland systems is increasing and in many areas control and prevention is often difficult or impractical. The specific issues are as complex and as varied as natural areas themselves, linked to both ecological objectives and social values that may or may not be compatible. NAA promotes through the appropriate application of scientifically derived technologies, the maintenance of biological diversity represented within natural areas. This includes the preservation of the adaptive capacity of these areas

for the organisms that depend on them and future generations. These goals can only be accomplished within a social network of common understanding and desire as well as mutual trust and respect.

### Criteria for Defining Invasive Exotic Species in Natural Areas Management

Not all exotic (non-native) species pose current or potential risks to natural areas or wildland ecosystems. Only those species that substantially affect (or could affect in the future) natural area or wildland ecosystem function, structure or composition in the short- or long-term should be targeted for management or monitoring activities within these respective settings.

### Guidance and Direction

1. NAA supports the exclusion and control of invasive exotic species as identified by the criteria above and encourages restoration of natural areas and other wildland habitats. NAA supports research and control efforts that lead to the identification and elimination of pathways through which invasive exotics enter the natural areas. NAA endorses the concept of adaptive management where the effectiveness of management techniques are evaluated through research and monitoring and modified where necessary. The NAA endorses a comprehensive integrated control strategy combining techniques that are determined to be effective.
2. NAA supports legislation and policy development on invasive exotic species exclusion and control where these mechanisms are consistent with the NAA mission and criteria listed above.
3. NAA provides information and/or resources directed towards filling information gaps for invasive exotic species management programs through a variety of means. NAA is committed to presenting the best science available through NAA journal articles, conferences,

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# Field Notes from Cuba

—Tim Kittel and Gwen Kittel

**H**URRICANE MICHELLE ARRIVED IN Cuba five days before we did. I wondered, watching satellite images of the hurricane as it proceeded across the Caribbean and over western Cuba, whether there would be much left of the landscapes we planned to visit and birdlife we hoped to see.

Our group of sixteen U.S. travelers arrived on Havana November 9, 2001, full of anticipation nonetheless, convening the NAA's fifth international workshop. Our task for the next ten days was to interact with land managers and scientists in Cuba's natural areas—to close the gap in communication and knowledge between Cuban and U.S. conservation biology communities isolated from each other by years of political circumstance. Our venues were a series of natural environments key to maintaining Cuba's high biodiversity, primarily in western Cuba. We met with staff of three national parks, a UNESCO-designated biosphere reserve, a sustainable rural development community, two botanical gardens, and two centers for ecological research and environmental education.

Our visit to Cuba was organized by Gary Markowski under a U.S. Treasury Department license for a humanitarian project for the environment, procured by a nonprofit organization. Guides and logistical services were

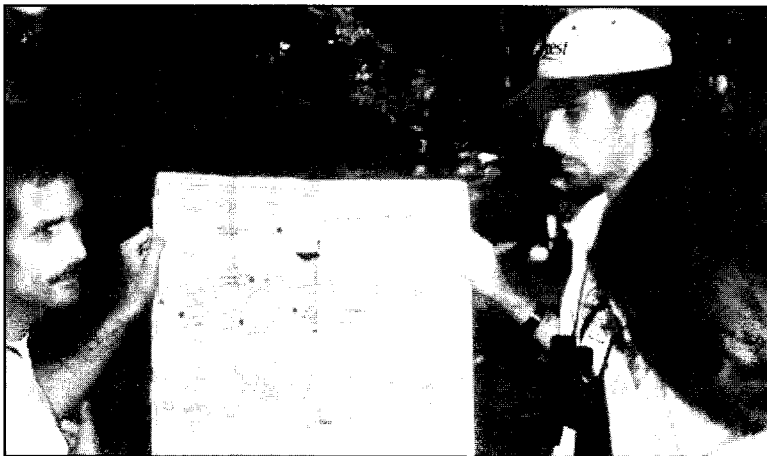
provided by Cubatur, a government tour operator. Since 1995, the humanitarian project, the Cuban Bird Survey, has promoted the preservation of bird biodiversity and bird habitats. A focus of the workshop was on understanding bird habitats and the status of habitat conservation efforts in Cuba. We conducted bird species counts in the natural areas visited, and found 66 bird species including 7 Cuban endemics and many winter migrants familiar to eastern U.S. deciduous forests in summertime.

From a natural areas perspective, why is Cuba of interest? What naturalist Alfonso Silva Lee calls the "Cuban Surprise" is the answer. This is a land of highly diverse landscapes—from white beaches bordered by thick mangroves to tropical forests on steep karst (limestone) towers locally known as *mogotes*. Cuba is conspicuously a biodiversity hotspot: over 350 recorded bird species and in excess of 6300 higher plants (but few native mammals). Even though it is only 48 miles from Hispaniola and 90 miles from Florida, Cuba has high rates of endemism across many taxonomic groups. Twenty-one birds are endemic, as are over half the plant species.

We left Havana for the Zapata Peninsula where Hurricane Michelle made landfall. Damage was patchy—devastating to some communities, others little touched.

Fruit in the citrus orchards had been blown to the ground, and oranges and grapefruit were being gathered and taken by truck to a local juice processing plant to recoup some of the losses. When we arrived at the interpretative center for the Ciénaga de Zapata (Zapata Swamp) National Park, we saw that the center's thatch roofs had been laid open, tall royal palms blown over, and pens for the crocodile farm no longer held their residents. Our host from the park discussed impacts of the hurricane. One concern was the danger of rapid spread of exotic species into the newly disturbed areas.

by hurricane damage that kept us out of the interior of the Zapata Peninsula—Cuba's most prolific birding area. We hiked in the periphery of the swamp forest among some fallen and yet many still upright trees. We



Impromptu questions and answers in the field regarding levels of natural area protection within the Mil Cumbres Resource Management Area. [Photo by the authors.]



were in search of the bee hummingbird, the world's smallest bird at 2.5 inches long, weighing less than 0.1 ounce. Wonderfully called Zunzuncito, this endemic eluded us here and elsewhere on the trip.

In search of Cuba's biodiversity, we discovered that the distribution of natural areas is a study in fragmentation. While roughly 90% of Cuba was forest when the Spanish arrived in the early 1500s, conversion to agricultural use (sugar cane, tobacco, coffee) left only 15% of the island in forest by 1970. Today, thanks to reforestation efforts, forest cover has crept back to 20%. This heavy modification of landscapes has had its toll on biological richness—three bird species are considered extinct and many more endangered. Many sites were preserved by default—that is, they are lands that were inaccessible or with poor soils (not appropriate for farming or ranching). Yet others were protected by design, including estates of wealthy landowners kept as preserves following the Revolution, and reforested areas.

Traveling west, we arrived in Soroa in the Sierra del Rosario mountains. In the morning, we hiked up through semi-evergreen broadleaf forest. There under the canopy, we had our first sighting of four endemic birds—the Cuban trogon (with iridescent green back, watermelon red and white underside, and violet blue crown), the much smaller but also colorful Cuban tody, the Cuban green woodpecker, and the Cuban solitaire. Though we seldom saw the solitaire, we were often captivated by its high pitched, flutelike song penetrating the forest. We arrived at the top of a steep-sided karst hill to a view of the Sierra del Rosario softly draped with closed-canopy tropical forest and emergent royal palms.

Soroa and the nearby community Las Terrazas represent, in Gary's words, "Cuba's most important venues with regard to promoting environmental awareness and sustainable tourism." Both are within the Sierra del Rosario Biosphere Reserve, designated by UNESCO based on importance of its natural resources, an extensive reforestry program (of a former coffee plantation), and a high number of endemic plants. Las Terrazas is a model sustainable development community supported by forestry, some ranching, and ecotourism; residents play a strong role in conservation activities of the reserve. We hiked and visited with specialists from the reserve's Ecological Research Center and the National Academy of Sciences. The Center is dedicated to

conservation research, reserve management, and environmental education programs for the community. Environmental education is integrated throughout school curricula, using, for example, local ecological concepts in math problem sets. We learned about Cuba's strict enforcement of environmental laws and its internationally recognized commitment to sustainable development.

At La Güira National Park, west of Soroa, we

had our first chance to explore a towering *mogote* up close, both outside and in. At the base of the *mogote*, forest abruptly gave way to a vertical landscape. The sides of the *mogote* were the bright white-gray of limestone, with bromeliads, filamentous cacti, and other hangers-on draped off cliff faces and, standing on any foothold big enough, trees and palms. Inside the *mogote*, a little above base level, was a large open cave—Cueva de los Portales—that served as Che Guevara's headquarters during the Cuban missile crisis in 1962.

Park staff explained how management for protection of natural areas is hierarchical—concentric patterns on the landscape. At the broadest level is the Mil Cumbres (Thousand Summits) Resource Management Area—66 square miles with the highest density of endemics in Cuba. It is managed for sustainable use including forestry. The next level is La Güira National Park, managed for educational and recreational uses. At the finest level, *mogotes* are set aside as special reserves within the park, protecting xeromorphic forests—local hotspots of endemism.

Our next venue was Valle de Viñales, a UNESCO World Cultural Heritage Site, and adjacent Viñales National Park. The vistas were breathtaking: a broad valley of rich red tilled fields, contrasting dark trees and hedgerows, and scattered royal palm groves abruptly broken by long precipitous ridges and dramatic towers of *mogotes*. Each *mogote* was a pedestal for an island of dense forest. Two worlds: one rural at base level, the other a discontinuous wilderness touching down on each

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a land of highly  
diverse landscapes  
from white beaches  
to tropical forests to  
deep karst towers

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*mogote* summit. This sight is unique in the Americas, but is close in form to karst landscapes of the Li River Valley in southeastern China, so familiar from paintings.

In the next few days, we became intimate with yet a third world of this domain—the extensive cave systems and underground rivers inside the *mogotes*. We visited with staff of the National Speleological School—the only such school in Latin America—who have undertaken ongoing cave zoological surveys and studies of *mogote* forests. On a subterranean tour through the nearby Santo Tomás Cave, where 28 miles of caverns are distributed across eight levels, we walked and scrambled through tight passages and broad caverns with an array of calcite deposits, including delicate pearls scattered on the floor and massive pendant stalactites. We emerged several levels up below openings to the sky, rimmed by forest.

We spent an evening in conversation with specialists from Viñales National Park. Levels of land management within the park are again concentric and hierarchical, but with the additional need for coordination with the Valle de Viñales Cultural Heritage Site. As in other parks we visited, there is an emphasis on research and inventory. Such parks and their neighboring management areas encompass sufficient territory and have enough control over land use to protect endemics. For example, in Viñales 59 of 79 *mogote* endemic plants are protected in the park and the rest in surrounding floristic reserves. Restoration of habitats is supported

by efforts to cultivate rare plants in botanical gardens in the city of Pinar del Río and Havana.

The specialists and managers we visited are highly knowledgeable about the ecosystems they work in, well educated about the issues facing them, and embody a strong sense of teamwork. They are hungry for intellectual and technical exchange. Scientific journals and reference texts are wanting in most research facilities. More often than not they lack even basic equipment to carry out their research—simple medical supplies and binoculars for studying birds and the phenology of canopy trees were among the gear we donated.

Our last visit was to a cay along the north coast, Cayo Jutía. Standing in the soft sand with waves lapping warm water of the Gulf Stream against us, we reflected on the kind people who had been our guides and hosts, and the others whom we'd met in casual encounters on the streets of Havana and rural towns. We understood the “Cuban Surprise.”

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*Tim Kittel is a scientist with the National Center for Atmospheric Research (Boulder, Colorado) and Natural Resource Ecology Laboratory, Colorado State University, Ft. Collins. Gwen Kittel is a regional vegetation ecologist with NatureServe in Boulder. For information regarding the Cuban Bird Survey, contact Gary Markowski (whsurvey@aol.com). For more information on NAA's international activities, contact Abi Rome (abirome@earthlink.net). Many thanks to workshop organizers Gary Markowski and Abi Rome, Cubatur staff—Juan Carlos, Enrique, Santos, and Julito, and our local hosts at national parks, reserves, and research centers who made the workshop a success.*

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workshops and other venues on a wide range of topic areas involving invasive species management.

4. NAA recognizes that managers, researchers and other people are actively engaged in the study and management of invasive exotic species and that there may be a wide spectrum of views and experiences on this topic. NAA seeks to provide a forum for the sharing of results of invasive species management programs and encourages open dialogue on the management of invasive exotic species in natural areas and wildlands. NAA promotes discussion and information exchange via *Natural Areas Journal* articles, *Natural Area News*, NAA website, NAA sponsored conferences and workshops, and other venues.

5. NAA seeks partnership studies and coordination opportunities with others conducting management of invasive exotic species. NAA recognizes that many land managers and institutions are engaged in management programs for invasive species and that partnerships are essential to overall exclusion, tracking, monitoring, control and restoration. Partnerships provide an opportunity to: (1) work collaboratively on varying geographical scales; (2) work across ownership and/or management boundaries; (3) share costs; (4) identify, coordinate and implement mutually agreed upon goals and objectives, thereby increasing the likelihood of effective exclusion and control of invasive exotics; and, restoration of natural resources and ecological processes adversely affected by such species and; (5) increase public awareness of the issues associated with invasive exotics.