

# *sonorensis*

Summer, 1992



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Museum News

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ASDM Long Range Plan

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Tropical Deciduous Forest Exhibit

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Desert Grassland Exhibit

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Special Events Calendar

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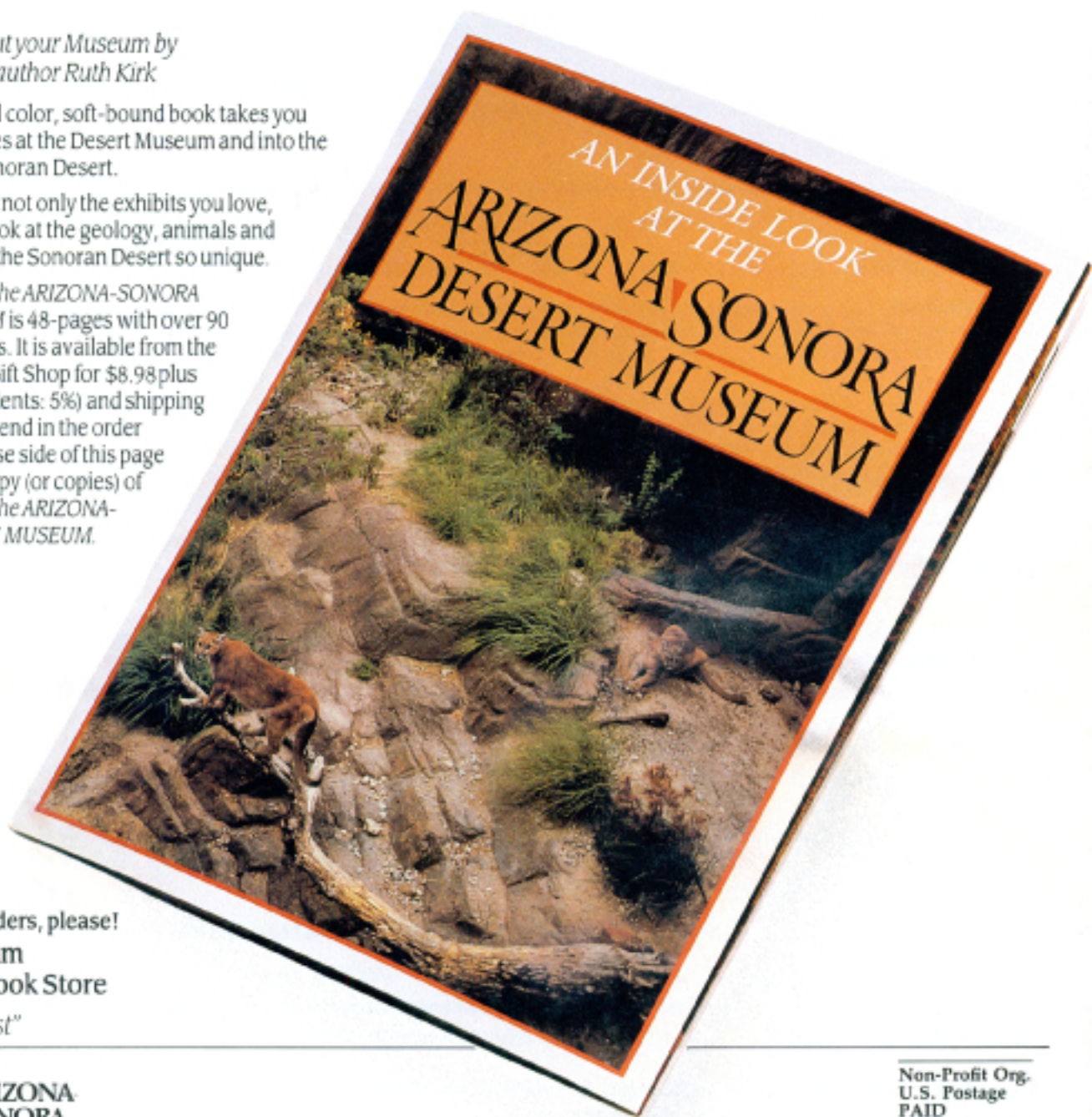
# ARIZONA-SONORA DESERT MUSEUM

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ASDM

## sonorensis

Arizona-Sonora Desert Museum  
Newsletter Volume 12, Number  
3 Summer, 1992

The Arizona-Sonora Desert  
Museum Co-Founded in 1952  
by Arthur N. Pack and  
William H. Carr

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Honorary Co-Founder

**David Morgan Hancocks**  
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*sonorensis* is the Latin, scientific term indicating the species classification of many plants and animals of the Sonoran Desert Region.

Printed on recycled paper

## MUSEUM NEWS

### Life begins . . . *ASDM celebrates a birthday.*

Believe it or not, the Desert Museum will be 40 years old this Labor Day. You're invited to the celebration. Throughout the weekend, we'll offer special interpretive programs for visitors and will display memorabilia from our Museum childhood. We'll also sell a birthday-edition ASDM T-shirt. We'll admit free anyone who was also born in 1952, and we'll have birthday

cake and refreshments for all.

We'd like to hear from you if you were among the visitors to the Desert Museum on Opening Day, 1952. We're collecting memories, to be shared at our celebration. Please call Georgia Eddy at 883-1380, if you would like to share your memories.



ASDM

*February 1956, visitors arrive at the Arizona-Sonora Desert Museum.*

## The Nominating Process for Members of the Board of Trustees and Councils

In 1990 an ad hoc Committee on Board Composition developed a matrix for the Board of Trustees which contained a list of 40 primary skills and 32 secondary skills deemed necessary for an effective and representative Board. Ethnic, gender and age representations were also charted. This matrix, filled out each year, listing the members of the Board and their terms of office, can quickly determine those areas in which we possess necessary skills and those which need strengthening. The Board Affairs Council carefully studies the outgoing Board members' areas of expertise to determine those individuals who should be nominated to the Board, either to replace skills we are losing or to strengthen areas of need. This careful plotting of the Board profile determines the selection of nominees each year and is the rationale for single slating.

In 1990 the Advisory Board was abolished, the number of Trustees was reduced in the interest of efficiency and a Council system was instituted. The Councils are Executive, Board Affairs, Finance, Management Evaluation, Planning and Research. This year, 1992, Planning will be split from Research, and a new Programs and Research Council will be formed. Also a De-

velopment Council will be added resulting from the merger of the Foundation Board with the Board of Trustees. Each Council (except Executive and Management Evaluation) has advisors who are not members of the Board. At the Council level there is no difference between advisors and Board members. Advisors are desirable for their expertise, and their service helps to determine their interest in and commitment to the Museum.

According to the Bylaws, no later than the 45th day prior to the Annual Meeting, the Council of Board Affairs presents a list to the Board for selection of nominees for the Board of Trustees. The Bylaws also provide for independent nominations on the part of the membership not later than the 35th day prior to the Annual Meeting.

The Council of Board Affairs welcomes suggestions for nominations from the membership, either to the Board of Trustees or to any of the Councils. Proposed nominee forms are available from the Desert Museum office. It is vital that any potential nominee understands that a proposal in no way guarantees nomination either to the Board or to a Council. The matrix determines the needs!

## New Development Director Selected



Kathi Wells

Kathi Wells has joined the Museum's management team as Director of Development. Kathi is the former Executive Director of the Catholic Foundation for the Diocese of Tucson. From 1976 to 1987, she worked for Carondelet St.

Joseph's Hospital and held the position of Vice President for Development and Community Relations. She is very active in professional organizations, participates in numerous community activities and is a Museum member.

## ASDM Foundation Merges with the ASDM Board of Trustees

In April, the ASDM Trustees voted unanimously to incorporate the Board of the Foundation for the ASDM within the Board of Trustees, where it will become the Development Council. The Foundation was established in 1987 as a separate entity for the purpose of fund raising. It directed a very successful capital campaign for the Sonoran Desert Habitats and has attracted competent and knowledgeable business and community leaders to its board. The Trustees recognize the need for strong fund raising and community outreach within their own body, particularly in light of the exciting new Long Range Plan for the Museum. Bringing the Foundation Board within the organization of the Board of Trustees will greatly facilitate the integration of fund raising and community outreach and promises to preserve and enhance the values and strengths of both.



Finance Director Christie Cobb (center) and Assistant Curator of Geology Anna Domitrovic (left) serve barbequed chicken to docent Anne Graf at the ASDM Volunteer Appreciation Party held in May.

## Volunteer Program to be Expanded

In May the Desert Museum hired Gayle Lipke as its Volunteer Coordinator. Gayle's job is to develop a program extending the opportunities for volunteering to all departments of the Museum in a variety of ways—from animal husbandry to gardening, from office work to research. The volunteer program will accept its first applicants in Fall 1992. Call Gayle for information at 883-1380.

## Trip to Alamos, Sonora

A very special visit to Alamos, Sonora has been arranged for friends of the ASDM. Planned events include opening night of the Alphonso Ortizerado Opera, natural history tours, Yaqui folk dancing, birding, and a ranch barbeque. Return trip (transportation is aboard comfortable buses) includes a luncheon at the fabulous new Howard Johnson Hotel in San Carlos.

Thursday, January 14 through Sunday, January 17, 1993.

\$325 per person, double occupancy.

Our space is limited, so please sign up early! Reservations and a deposit of \$100 per person should be sent to the attention of Robin Jolly, ASDM, 2021 N. Kinney Road, Tucson, Arizona 85743. Deadline is November 14, 1992.



## Margaret Twyman 1915 - 1992

The Desert Museum family lost a valuable friend and wise counselor on Monday, May 11, with the death of Margaret Twyman. She served on the Board of Trustees from 1985 to 1989 and during her tenure initiated and coordinated numerous operational improvements. Even more valuable than these achievements, however, was her consistent ability to offer sound advice, thoughtfully assessed and well considered, and her uncanny knack of knowing just when to lay the light hand of her gentle humor. More than anything, she was always gracious and considerate. Working with her was a delight, because she was extremely intelligent, always efficient, organized, polite, dedicated to service, perceptive, kind and thoughtful. All these qualities combined to create a woman of great strength and beauty. We will miss her enormously, as much as we are grateful for the honor to have known her. We remember her with great affection and respect.

### Mark your calendar:

**SATURDAY, OCTOBER 10, 10:00 A.M.:** Members' Day / Annual Meeting  
Special activities, refreshments and a speaker are planned, in addition to the yearly report on the health of the Museum. All members are encouraged to attend. Hosted by the ASDM Docents and members of the George L. Mountainlion Club. Details will follow.

**FRIDAY, NOVEMBER 13:** An evening with Roger Caras, formerly with ABC News, now with ASPCA, at the Savoy Opera House, Tucson, Arizona. Details will follow.

# Foundations of the 1992 Long Range Plan

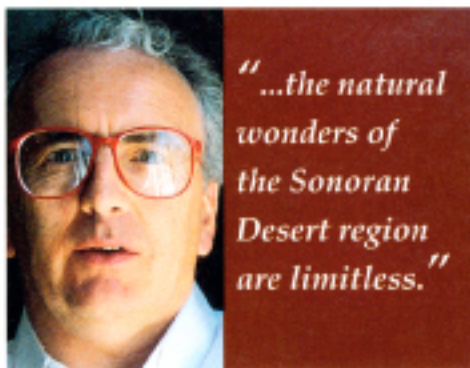
David M. Hancocks, Director

When in 1952 Bill Carr placed his dreams on the new site of the Desert Museum, the results must have been beyond all his expectations and, at the same time, not all that he wanted. Forty years later, those of us who carry on his dreams find ourselves in the same situation. We see opportunities for growth and for doing things better, yet we know these are possible only because of the exceptional standards established before our time. Through the 1960s and 1970s in particular, the ASDM set standards in exhibitry and interpretation for others to follow. Standing on that firm and tall foundation, we now have the rare chance to once again reach farther than others and to place ASDM on the front edge of natural history presentation and interpretation.

The new Long Range Plan, formally adopted by the Museum's Board of Trustees in April 1992, is far more than just an attempt to get organized or to set patterns to guide our physical development. Every decision marked on that Plan—from the parking lots to the layout of visitor trails, from the new staff offices to the placement of the exhibits, from the restaurant location to the water harvesting sites—represents a philosophical preference. The Long Range Plan is, indeed, a graphic representation of a philosophy, and it sets down some fundamental principles.

The Plan determines that the area for interpretation at the Desert Museum is to be the Sonoran Desert and its subdivisions, plus the adjacent communities of desert grasslands, mountain islands and tropical deciduous forest. Thus the Plan ignores the artificial boundaries that too carefully define and separate Arizona and Sonora.

Exhibitry will demonstrate the interrelationships within a natural community—the combinations and depen-



*"...the natural wonders of the Sonoran Desert region are limitless."*


dencies of plants, animals and geological features. In this way, whether they be cacti, cats, or crystals, each component becomes far more than just a collection of interesting objects. In this way also, we emphasize the importance of intact habitats or systems.

It may be noticed, and has been commented on by some, that the Plan specifies no animal exhibits for future development. This is because the Plan aims only to designate the pertinent landscape features of each habitat as a skeletal structure for future exhibits to build upon. Just what those future exhibits might be and what plants and animals they will contain is beyond our present vision. These components will be selected at future times, not just because they might be fascinating in themselves, but because of their value in illuminating the path of a story.

It is going to be enormously challenging but equally satisfying to find ways to exhibit, all around the Desert Museum, a variety of smaller life forms, those which are often secretive in habit, reclusive in lifestyle, short-lived, deceptively camouflaged and tiny. Yet knowledge of these very small animals is vital to our understanding of an environment and how it works. Moreover, we literally need a new perspective. As Henry Beston said, "We need another and a wiser view of animals." We give enormous prominence to mammals, especially to predators, presumably because of their closeness to us; as we move further away from our own likeness,

we shed layers of perception. When we eventually arrive at the level of very small life forms, with abilities and appendages beyond our knowing, we no longer recognize their importance, or even their needs. It is not surprising that we fail to see the ways in which we destroy our environment when our views of nature are so myopic and so concentrated on the charismatic, the cute or the cuddly. Adding a great number and diversity of small animals (sometimes very small) and showing their relationships to the whole will greatly enhance visitor appreciation and fascination for the desert and other biomes.

In the creation of the new Long Range Plan we have been well aware that many of our visitors may be making a once-in-a-decade or even once-in-a-lifetime call at the Desert Museum. What should we try to tell them? Others visit many times each year. How do we best serve their interests? We know, too, that some people visit the Desert Museum for mainly aesthetic reasons and spiritual refreshment, while others seek principally scientific information. Many find a mix of benefits. The Museum's plans must attempt to provide for the differing needs of all its visitors.

The Desert Museum's new Long Range Plan provides opportunities for creating an exposition sufficiently rich and complex to encourage detailed and continuous investigation by all people, of all ages, at all levels of inquiry, for the natural wonders of the Sonoran Desert region are limitless. 

# Beginnings of the Long Range Plan

## MISSION STATEMENT

*The Arizona-Sonora Desert Museum is a non-profit educational institution focusing on natural history and dedicated to fostering public appreciation, knowledge and wise stewardship of the Sonoran Desert region.*

In 1980, the Museum completed and published a Comprehensive Plan which was to guide the development of the Museum for ten years. Quite a bit was accomplished under the guidance of this Plan, including the building of the Mountain Habitat. However, in 1990, while looking to the Comprehensive Plan to direct the next major building phase, Museum staff realized that it was indeed ten years old and at the end of its usefulness. Needed was a new Plan which matched the maturity of the Museum's exhibits philosophy and ecological understanding and which responded to the challenge of a new decade. At just that time, the Museum's Board of Trustees hired a new director with the mandate to lead the Museum in new directions. These as-yet undiscovered destinations also called for the map of a Long Range Plan.

The preparation of this plan was to be a cooperative effort, involving the perspectives of many. The Planning Team was composed of Museum Director David Hancocks, Planning Coordinator Richard Barna, Education Director Dr. Carol Cochran, Curator of Botany Dr. Mark Dimmitt, Curator of Herpetology and Ichthyology Howard Lawler, Curator of Mammalogy and Ornithology Peter Siminski and Curator of Geology Dave Thayer. Consulting participants were Parks Superintendent Gale Bundrick, docent June Marie, University of Arizona professor Dr. William W. Shaw and architect Les Wallach. The architectural and landscape design firm Jones & Jones facilitated the process and drafted the plan.

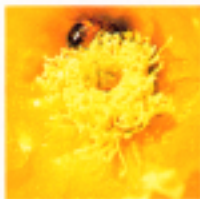
The first official step in the planning process was the Board of Trustees' retreat in October 1990. Board members and staff drafted a mission statement and set of objectives for Museum education, exhibits,

collections, research, conservation, fiscal resources, facilities, visitor services, human resources, publications and public responsibility. The mission and objectives were reference points for the details of the Long Range Plan.

The Long Range Plan itself was hammered out during nine intense and exhausting workshop sessions, which began in February 1991 and concluded in September 1991. In reality, however, planning began a year earlier during weekly tours of the Museum by the director and senior staff. During these tours, we tried to look at the Museum as though we'd never seen it before. Each week we focused on a particular area. Scrutiny was minute; it took three weeks to get from parking lot to entrance window and two years to cover the entire grounds. The group examined construction materials and colors of paint; read each graphic; observed visitors as they became lost, confused, crowded, animated, or bored. We analyzed visitors' and our own responses to exhibits; we noted the suitability of locations for docent interpretations. We questioned the appropriateness of every rock and tree. Looking back, one can easily see the importance of these site tours to the planning sessions to come. We lost our complacency and acquired an objective and critical eye; we learned to risk offering even the wildest ideas; and we saw the importance of an interdisciplinary approach to exhibitry and interpretation. Plus, we figured out what we wanted to be as an institution and what we needed to do to get there. When it came time to actually formulate the Plan, all of us were able to operate within the same framework, an as-yet unwritten but nevertheless clearly-understood charter. 🐾

# What We Are and What We Want to Be

**D**esert Museum exhibitry will focus primarily on natural communities or ecological concepts, rather than on separate species, isolated disciplines, or taxonomic arrangements.



The Desert Museum's current exhibits are not as integrated as they should be if the Museum is best to reveal the stories of connections and relationships. The Plan proposes modifications. The current hummingbird aviary, for example, displays one taxon—hummingbirds. It will be enlarged in both fact and philosophy to become an animal-plant co-evolution exhibit, telling the story of pollination—by bees, butterflies, moths, bats and other animals, as well as by hummingbirds. In addition to correcting the focus, the enlargement will also provide better viewing, immersion in the exhibit and increased opportunity to sit, relax and enjoy the closeness of these wonderful little animals.

The Mountain Habitat, which now centers on large animal enclosures,

will be renovated to include smaller life forms, distinct plant communities, geologic features and spaces to rest and meander, enjoying a mountain experience. Interpretation will be aimed at an understanding of mountain islands and their importance. The bears will be given opportunities for more activity. And the renovated exhibit will use much less water.

The current Cactus and Succulent Garden and Convergent Evolution exhibit will combine to tell the story of botanical adaptations to life with little water.

A new ethnobiological exhibit, People and the Desert, adjoining the new restaurant, will add the missing component of human/desert interactions to the Museum's interpretation.



*Preliminary drawing of renovated Mountain Habitat exhibit*

Drawing by Jones & Jones

**T**he area of interpretation at the Desert Museum will be the Sonoran Desert region, which we define as the ecological subdivisions of the Sonoran Desert as well as the adjacent biomes.

Beginning with Forrest Shreve in the 1940's, ecologists have identified different subdivisions of the remarkably diverse Sonoran Desert. All share essential Sonoran Desert characteristics but differ sufficiently in climate, topography or life forms to be considered unique. The Desert Museum will exhibit the subdivisions of the Lower Colorado River Valley, the Arizona Uplands, Vizcaino, Central Gulf Coast and Magdalena. These last three will be parts of the Baja California exhibit.

Biomes, or biological communities, are basic habitat types which occur around the world, wherever climatic conditions—mainly temperature and precipitation—are similar. They are defined by their typical vegetation, since that is the most obvious and easily recognizable



characteristic, but they include characteristic associations of animals as well. Major Museum exhibits will replicate grassland (the Desert Grasslands exhibit), desert (the Sonoran Desert subdivisions), temperate forest, woodland, chaparral (these three within the Mountain Island exhibit), thornscrub and tropical forest (the Tropical Deciduous Forest exhibit). All these biomes are found within or next to the Sonoran Desert, making our region remarkably rich and diverse.

*Continued on overleaf*



Vizcaino



Lower Colorado River Valley



Arizona Uplands



Central Gulf Coast



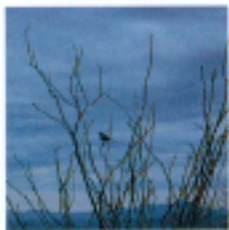
Magdalena



**T**he primary visitor experience should be immersion in the desert.



ASDM



David Hancock



Mark Dimmitt

The planners felt that the most important asset of the Desert Museum was its location in the midst of the wild and spectacular landscape of Tucson Mountain Park. The Plan includes ways to preserve or enhance this desert, views of it and opportunities to explore it. For example, a new entry drive will immerse visitors in desert vegetation, provide distant views of the landscape and will lead, not to a barren and wearying plain of asphalt, but to revegetated parking clusters. People will walk from parking space to Museum entrance in the shade of desert washes. The sweeping view of Avra Valley from the Museum's front patio will remain one of the visitors' first impressions and it will be enhanced by eliminating the clutter of redundant paths. Non-desert habitats (the grasslands or tropical deciduous forest, for example) will provide rich and varied experiences for the visitors within them, but will not intrude on the desert experience outside their boundaries.



David Hancock

### *These guidelines will govern exhibit design:*

- The design should reinforce the educational storylines and fit the exhibit habitat characteristics.
- All exhibit enclosures (such as aviaries, viewing structures, interpretive structures, ramadas, etc.) should fit into the natural land forms and elements of the site and should stay low.
- The view of the surrounding desert should not be blocked by any architectural element or non-Arizona Upland desert environment.
- Architectural forms and elements should not be evident from the main entry plaza; the desert should dominate.
- Natural materials should be used.
- Earth tone, muted colors should be evident.
- Disabled access is required to all spaces and places.
- Energy and water conservation should be the norm.
- Rainwater and storm run-off water should be reclaimed and/or recycled. 🐾



Mark Dimmitt

# The planning process at ASDM

Mark Dimmitt, Curator of Botany

During the last couple of years few things have changed more dramatically than the way we plan our future. Even though we all know the fundamentals of ecology (everything is hitched to everything else, etc., etc.), it is so easy to get caught up in the work load of one's own niche and neglect all that peripheral input as unimportant to my job. The vigorous dynamics of our planning team have made it very difficult to retreat into that safer, quieter corner; instead, we have greatly honed our ability to see the proverbial "big picture." This not only has improved our ability to do our individual jobs, it will lead to increasingly creative and fascinating exhibits and stories. (Bet you can't describe the links between hummingbirds and continental drift!)

The mental gymnastics required to develop a long range plan were incredible. The energy level in the room was palpable. I could almost see the cartoon light bulbs flashing inside my colleagues' heads. The ideas themselves, though, were a minor part of the process. Far more complex was juggling multiple ideas in the air until they could be fit neatly onto the map of the Museum grounds. Then phasing had to be made feasible. We couldn't disrupt visitor access, couldn't leave a curator without an office for a year, couldn't do this until that was done first, and on and on. The new lizard holding enclosure was to be built on the current site of the plant nursery, but the nursery couldn't be moved until the wolf breeding enclosure was relocated and the service road to the new restaurant was surveyed. Yet it all seems to have worked out smoothly. When the plan is fully implemented, few of the present structures on the grounds will remain, yet it looks very do-able with



On-site planning session

minimal disruption to visitors and staff.

Despite the high energy level, this was no smoke-filled room with serious business people methodically grinding out the product. (There was no smoke at all—what a pleasure!) It was definitely FUN. There were no constraints on practicality early in the process, so imaginations were careening freely. Some of the ideas that seemed crazy at first and triggered hearty laughter later became part of the plan. They weren't so silly or impractical after all; they just had never been done before. A tropical exhibit with 30-foot tall trees in a climate with frost? Outdoors? A 10,000 square foot portable cover for cold nights? Why can't we? . . . just because no one else has? A grassland exhibit that focuses more on insects than on pronghorns?

But, of course, we MUST. After all, calling our time the Age of Mammals is a ludicrous misconception; we know what really rules the planet, and we think others should too.

The Desert Museum always attempted to focus its interpretation more on ecological relationships than on the individual components of a community. The planning team has itself become a model ecological community. It is a smoothly integrated system that is greater than the sum of its parts; its output could scarcely be predicted by analyzing the functions of its individual members. If implementation of the plan is as successful as its conception, the next decade is going to be exhilarating. ♪

Joanne Broome

# Planning for the Visitor

**M**ost aspects of the Plan intend to improve the visitors' experience—physically, aesthetically and intellectually.



Jaime Broome

A current problem with respect to visitors is the imbalance in our attendance, with about 40% of our visitation occurring during February, March and April. The Plan includes strategies to relieve congestion during peak times and to attract more visitors during the off-peak season.

Right now the Museum is, and feels, overcrowded when it has 1200 visitors at one time. The quality of experience diminishes, and people, plants and animals are pressured. The Long Range Plan adds about 1/2 mile to the present trail system, diffusing visitors and raising the carrying capacity to 1600 visitors at one time. Parking will also be increased, but in a series of smaller spaces, making less impact on the desert and allowing visitors to walk between their vehicle and the Museum entrance along pathways in landscaped, shaded washes.

Those visiting between May and October, when temperatures are high, can have a difficult time exploring the Museum. The Long Range Plan adds a number of shaded and cooled facilities, not just for resting, but also as exhibit and interpretive opportunities. Life Underground is to be greatly expanded; a Nocturnal Exhibit is planned, with reversed cycle lighting in controlled environmental conditions; each ecological zone includes a covered Interpretive Center; and several multi-purpose gallery spaces are designated for traveling exhibits, art shows, lectures and performances.

The Plan adds new exhibits and new pathways in such a way that the visitor experience remains intimate and comfortable, but more varied and much less confusing than at present. The new circulation plan calls for a central, paved path which touches all

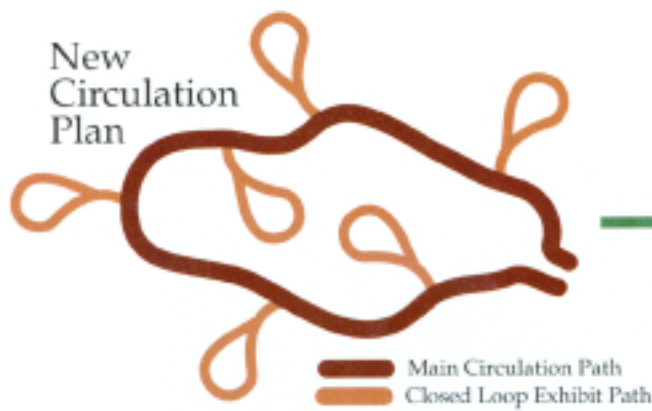
the highlights and which could be completed (just) in about 90 minutes. Leading off this central route are closed-loop pathways, each of which circumnavigates a specific habitat and brings the visitor back to the same spot on the main path. The decision to take or to bypass a particular zone can therefore be made without closing off future options and, most importantly, without getting lost.

The exhibits along the side loops offer an enticement to the repeat visitor. During future visits, one could concentrate on a particular biome or subdivision. For those with energy or desire to explore, the Plan promises some desert trails and single-file pathways leading to hidden places. No two visits to the Desert Museum need ever be the same.

In locating exhibits, buildings and pathways, the Plan has paid very careful attention to views, both open vistas and more close-up encounters, so that merely perambulating the grounds will be a more rewarding desert experience.

ITEM	EXISTING	PROPOSED
Peak Day Visitors	3,000	4,100
Comfortable Maximum		
at One Time	1,200	1,600
Average Visitor Day	1,500	2,000
Pathway Length (ft.)	7,350	10,300
Parking Spaces	288	520
Staff Parking	85	133
Restrooms	5	10
Food Services	2	5
Shops	1	3
Discovery Center/ Library	0	1
Interpretive Centers	4	10
Galleries	0	3

## New Circulation Plan



A large new restaurant is an important component of visitor services within the Long Range Plan. This new facility, to be opened in 1993, will seat about 250 people in a self-service area and 80 more in a full-service area. Small refreshment areas will also be included around the grounds, giving visitors the chance to rest and enjoy a drink in a shady spot. New restrooms will be fully accessible to the handicapped, and as funds become available all the existing restrooms will be

made so. In this regard it is worth noting that the new Long Range Plan not only provides a completely paved circuit of the Museum along its central route, but has carefully located all exhibits and zones to ensure gentle slopes and very easy going for the young, the elderly, or visitors with wheelchairs and strollers.

Near the proposed new entrance to the Museum will be an enlarged Gift Shop which can be entered from

without the Museum. In a Library, visitors can find answers to their questions by examining books, magazines or a computer program. A Discovery Center will let people explore natural objects and their stories. Interpretations throughout the Museum will be increased, offering something of interest to those of all levels of interest, age, or experience. 🐾



The Arizona-Sonora Desert Museum according to the Long Range Plan.

# Planning for Staff



Staff are needed, of course, to design, operate, maintain and interpret new exhibits. And staff need adequate offices and facilities. Right now, we're out of room. But the Long Range Plan provides for reorganization and expansion of operations and maintenance facilities. Curatorial, research and natural sciences staff offices and facilities will be consolidated into buildings clustered around

Within the present service area, the Plan proposes new holding buildings and adjacent outdoor enclosures for both large and small animals. The Botany Department, with its greenhouse and nursery facilities, will be expanded and will provide the necessary buffer between animal holding areas and service vehicle access roads and staff parking lots.

Future expansion and dispersion of the animal collection and required service access demand that an additional maintenance area and animal holding facility be located near the new exhibit locations. The Plan includes such a secondary service center that will provide efficient access to both exhibits and primary operations facilities.

Volunteers will have space to meet, to study and to socialize. Educational facilities will be improved: with new classroom space and audio-visual, graphics and publications studios; and with interpretive centers and docent stations in every major exhibit.

Two residences will be built on the Museum site: one for a member of staff, who will be on hand to respond to after-hours needs; the other for visiting researchers or staff on exchange from another institution, such as our sister facility, El Centro Ecológico de Sonora. 🐾



*Greenhouses & nurseries provide space to grow plants for future exhibits.*

courtyards within the present service area. The arrangement will create a small campus atmosphere, encouraging departmental communication and interaction. Administrative and business staff will retain their existing locations, thus continuing direct contact with visitors.



# Planning for the Land

The Desert Museum wishes to be a responsible member of the desert community and an example of an institution which practices a land ethic. Conservation strategies will be a part of all plans.

Perhaps most important of these is water conservation. Strategies such as rain water harvesting, installation of low water-using fixtures, use of arid-adapted plants whenever possible, careful monitoring of irrigation, water recycling, public education and immediate detection and repair of leaks—all are, or will become, part of the Desert Museum's conservation strategy.

Expansion plans will not overlook opportunities for solar energy and other energy saving technologies. In particular, the potential conservation from passive solar usage will be investigated and incorporated in all future Museum facilities.

Buildings, furnishings, landscape elements and other man-made features must be appropriate to the Museum's desert setting. In architecture, natural materials should be used; choice of these and any construction materials will be guided by the Museum's conservation ethic. The desert should be integrated into all areas; indoor and outdoor spaces should complement one another.

Washes should be left as natural corridors, and new structures should minimally impact pristine desert. ♪



Flood water, King Canyon, September 1982

# Planning for the Night



In our part of the world, summer evenings provide some of the loveliest moments. The air is clear, cool, softer somehow, and filled with intriguing, often beautiful, noises. An unknown world comes to life.

The Long Range Plan has established a Night Zone, especially for evening visitors. The Plan contemplates a completely natural exhibit, where nocturnal plants and animals act out their lives. The Zone might include a bat enclosure and a moth garden (to complement the hummingbird aviary and the butterfly garden). The strobe-lit photographic blind, once so popular with Tucson's film hobbyists, could be reintroduced here, too.

Evening lectures, slide shows, performances and other presentations can be given either in the

open air or inside the new gallery adjacent to the new restaurant. The gallery also can display art works and other temporary exhibits for evening viewing.

The Demonstration Garden (which we hope to remodel and expand) can be effectively illuminated, as can the pathways and features in the proposed People and the Desert exhibit. There might be an astronomy and/or night-sky viewing exhibit. Small exhibits might reveal the phenomena of fluorescence in objects as diverse as crystals and scorpions, or explain the many different senses that animals employ to find their way in the darkness. We hope a central focus of the Night Zone will be the new Restaurant, a stunning facility attracting people from the city to an evening in the desert.



David Hancock

# Taking Our First Step into the Next Century

Peter L. Kresan

*"If someone asked me to characterize the Desert Museum with one word, I would enthusiastically say 'Quality.'"*



*Peter Kresan, 1991-92 President of the ASDM Board of Trustees*

Imagine designing a new house or redesigning your old house. You'd get the whole family involved. Experts might be consulted to help on technical matters, and an architect probably would act as a facilitator and would draw up the actual plans as they evolve from family brainstorming sessions. It would be very exciting to think about how you could make your old house a more comfortable home. This is how it worked for the development of our new Long Range Plan. The whole Museum family (docents, staff and trustees) was involved. During the many brainstorming meetings, we shared, investigated and refined all kinds of ideas, considerations and concerns. The Museum staff, with help and guidance from Jones & Jones, then digested all this information, and out of it came a blueprint for sensible growth over the next five to ten years.

This is a working plan, published in a loose-leaf folder, not a manifesto written in stone. Some pages will eventually get deleted, many probably added. The only thing that is certain is that the Plan will evolve. The Plan recognizes the strengths and the traditions of the Desert Museum and builds on our solid foundation of excellent exhibitry and programs, plus

talented docents and staff. Our principal goal is to become much better rather than much bigger.

You will not have to wait long to see tangible results from this intensive planning process. Thanks to the fundraising efforts of the ASDM Foundation and generous support of the Desert Museum family and friends, three new habitat exhibits are in various stages of planning and design; one, the Desert Grasslands Exhibit, is presently under construction. Construction of a new restaurant and special events hall will begin soon, and various improvements are being made to existing exhibits.

If someone asked me to characterize the Desert Museum with one word, I would enthusiastically say "Quality." Quality, as seen in understatement, in accuracy, in attention to detail, in the work of staff and docents. Because of its quality, this Museum has become the envy of similar institutions across the world. The New Long Range Plan will ensure ASDM's pre-eminence by guiding its growth in size (we'll get a little larger) and most importantly in the excellence of the Desert Museum experience. ♣



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## A Planner's Poem

by Johnpaul Jones



*Frogs that bark underwater*

*Owls that live underground*

*A mouse that bays at the moon*

*Plants that cover themselves with  
pointed spines and are called  
teddy bears*



*Mountains that are called islands  
yet exist in a desert*

*A staff that shares, cares, educates,  
excites, and is concerned  
about the natural world—*

*We like working at the  
Arizona-Sonora Desert Museum,  
and especially being part  
of your place.*



*(Johnpaul Jones is a principal of Jones & Jones, Architects and Landscape Architects, of Seattle, Washington. He was Principal-in-Charge of the Long Range Plan.)*

## Working on the Long Range Plan

When I was asked to serve on the Long Range Planning Team, I had no idea how much the team would undertake. It took only a short time to realize what an experience it would be and what super expertise and guidance we would get from Jones & Jones. It was an exciting process from the first meeting, through all the LRP Workshops, to the ASDM Board of Trustees Annual Retreat, where the draft plan was presented and discussed.

Not once during the entire time did I feel we were not doing something truly beneficial for ASDM. Each Workshop was a sharing of ideas and concerns among all of the members of the team. What one team member didn't think of, another one did. So every avenue was explored, researched and talked about. . . always with the purpose and philosophy of the Museum in mind. Needless to say, some of our workshops were long! I am extremely pleased with the final plan and am proud to have had an active part in its creation.

— June Marie

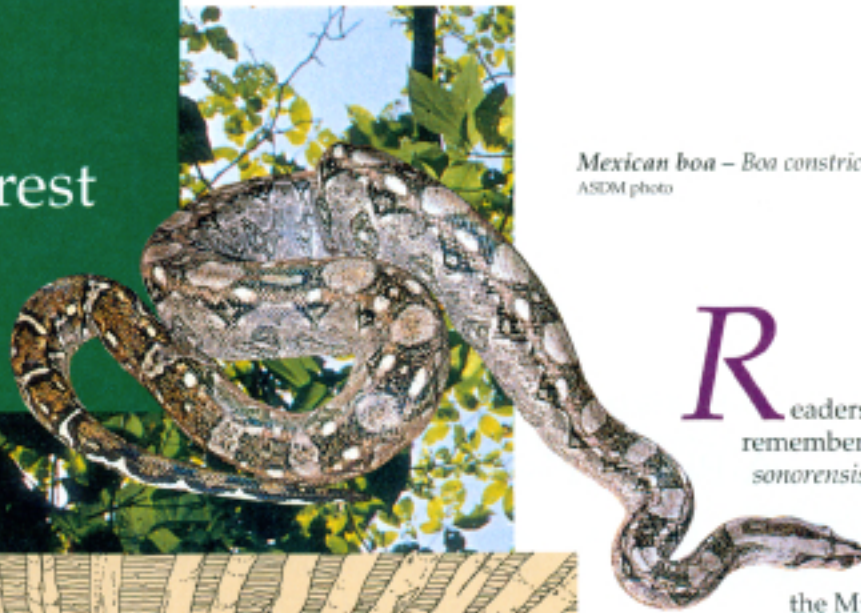
*(June Marie is a docent and served as the docent representative to the Board of Trustees from 1989 to 1991. She was a consultant to the Long Range Planning Team.)*





# The Tropical Deciduous Forest Exhibit

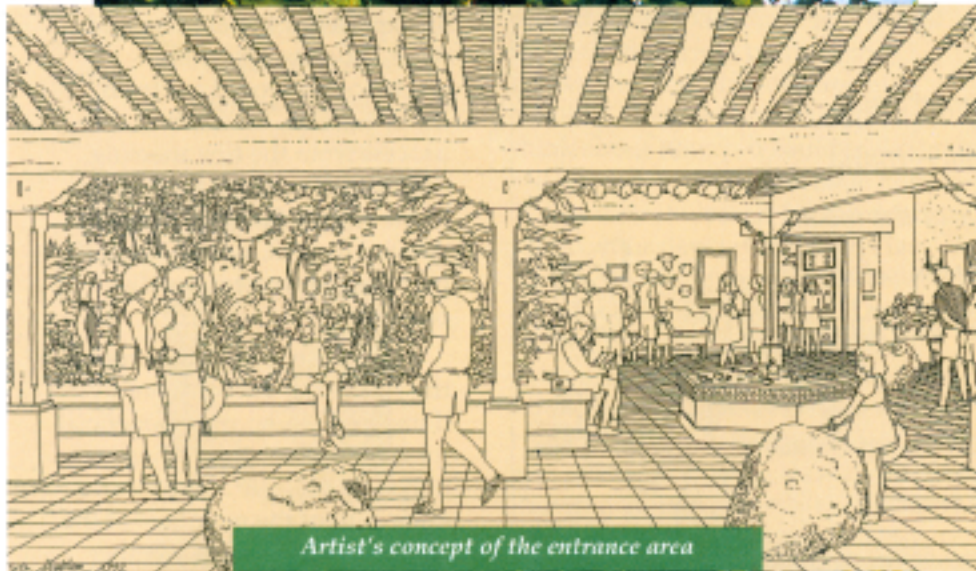
*Mexican boa – Boa constrictor imperator*  
ASDM photo



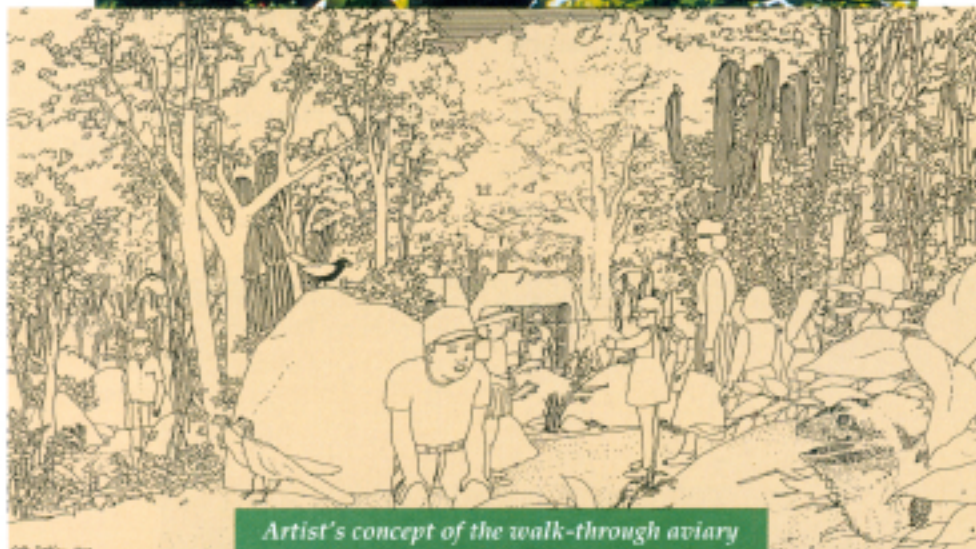
Readers might remember an earlier *sonorensis* (Winter, 1991) which recounted a trip made by the Museum's curators to the tropical deciduous

forest near Alamos, Sonora. The purpose of that trip was to gather inspiration and information for this exhibit. One year later, having chosen the exhibit's designers, we went back to Alamos, accompanied by Museum Director David Hancocks and Tom Atkins and Johnpaul Jones of Jones & Jones. These trips were necessary to the planning process, for in no other way but first-hand could we really understand the forest community we wished to replicate—its heat and humidity, its light and shadows, the noise and color of its insect life, its dense but penetrable vegetation, the textures of its rocks.

With memories more indelible than our photos, we returned to the Museum to plan the exhibit. From the beginning we were confronted by difficult questions. Many went right to the heart of our exhibit philosophy and therefore were useful in clarifying our thinking. Why were we doing this exhibit at all? The immediate answer—that it was called for by the 1980 Comprehensive Plan—though sufficient, was not intellectually satisfying. We did not want to be doing a tropical exhibit just because everyone else was, particularly since we were a Desert Museum, and the glamour of the tropics might literally and philosophically prove a distraction. Those with a deep understanding of time answered this question for us: many tropical deciduous forest plants, and some animals too, adapted to



Artist's concept of the entrance area



Artist's concept of the walk-through aviary

periods of dry as well as wet, remained rooted when the climate warmed and dried, and desert replaced forest. They or their descendants are the cacti, leguminous trees, lizards or tortoises that now inhabit the Sonoran Desert. In this sense, the tropical deciduous forest is the mother, or source, of much desert flora or fauna. A tropical deciduous forest exhibit would help us explain the desert.

Furthermore, we learned some-



David Hamrick

thing about the value of this biome in itself. The ecologist Daniel H. Janzen, who has studied it more than most, calls tropical deciduous forest the most diverse biome—not in terms of numbers of species (wet tropical forest has more)—but in variety of species activities—lifestyles and interactions. In other words, tropical deciduous forest is rich in stories, which are humanity's motive for assigning meaning and value to the natural world. Janzen also says that tropical deciduous forest is the most endangered tropical ecosystem. Few even know that this vanishing treasure exists in Sonora, only a day's drive from Tucson. The stories and the cloudy future of this biome convinced us of the importance of this exhibit.

What features of this biome should we exhibit? Should we exhibit a jaguar? How do we exhibit invertebrates, the most diverse, numerous, important and fascinating tropical creatures, but unwelcomed by importation laws. How do we grow tall trees, keeping them invisible from the rest of the grounds and frost-protected as well? How do we make a clear and dramatic transition between desert and tropical? How do we recreate a tropical stream without using much water? Can we trust visitors to admire but not touch free-ranging frogs, toads, lizards, ducks, or fish? Can we trust large tropical birds to do the same? What faith do we have in the wariness and "jungle smarts" of captive lizards, frogs, and other small animals? What lessons do tropical cultures teach us, and how do we exhibit these lessons? How can we provide essential experiences of solitude and adventure along a paved path which must accommodate a goodly crowd?

The perspective drawings on the facing page may give you some idea of how we've answered these and others questions. Construction of this exhibit will begin in 1995. 🐾



David Hamrick

*Gloria de la mañana –  
Ipomoea pedicellaris*

## Highlights of the Tropical Deciduous Forest Exhibit

- walk-through wire mesh structure (110' x150', 50% larger than the present walk-through aviary ) can be covered to protect tropical plants, will contain about 50 vertebrate species, many free-ranging, and many invertebrates
- dry wash for a large herd of javelina
- existing cat grotto modified to become orientation and entrance to tropical deciduous forest exhibit; overlook and views remain
- rural dwelling, illustrating sustainable lifestyle
- butterfly exhibit
- bats and mineral veins in mine shaft
- giant fig tree
- a side canyon of the Rio Cachujaqui
- Mexican colonial-style courtyard
- docent interpretation areas
- fish pools
- exhibits for cats and other small mammals

# Planning for Diversity

When it met in 1991, the tropical deciduous forest planning team determined that this exhibit should tell the story of biodiversity, the pre-eminent tropical story.

An immediate challenge was how to exhibit the exhilarating diversity of plant species when (a) many of these, 30' or so in height, might be visible from around the grounds, obstructing desert views, and when (b) several of the most spectacular and essential would not survive Tucson Mountain frosts. The response to both challenges was to place most of the exhibit low, so that treetops would not protrude and so that frost-tender plants might feasibly be covered. An ideal site was found in a ravine running south from the small cat grotto. The small cats would be included in the exhibit, as would dozens of species: coatis, opossums, owls, bats, butterflies, bees, ants, javelinas, tortoises, fishes, frogs, snakes and many birds. The team contemplated also exhibiting a jaguar.

Tucked into the ravine and adjacent hillside, the exhibit was restricted in size (as perhaps it should be anyway, given that the focus of the Desert Museum should be on desert exhibits). When a jaguar exhibit of suitable size and security was placed within this restricted space, something significant, and undesirable, happened. This large animal's facility reduced the space for other animals by about 1/3, thereby reducing the number and diversity of species exhibited. The jaguar would be contained by closely-spaced cable, state-of-the-art exhibitry but nonetheless "cage-like" in appearance and feel. Visitors would be on the outside, looking in at much of this exhibit, losing the sense of immersion we wanted.

Faced with these and other concerns, the planning team sought direction on whether or not to include a

jaguar exhibit. David Hancock appointed a 12-member Task Force representing all sides of the issue and all components of the Museum—staff, docents, members of the Board of Trustees and the Foundation. The Task Force considered all aspects of the question—museological, practical, economical, ethical, political, historical, philosophical—and sought advice from various members of its community.

The Task Force realized early on that, most likely, no decision would affect the Museum's present jaguar, which though healthy, is now 21 years old. The record longevity in captivity is 23; the exhibit would not be completed until 1995-96. Very shortly, this animal's life will improve; he will move to a larger enclosure, off-exhibit, to spend his remaining years in a richer, more interesting and more natural environment.

The Task Force also realized that its recommendation would pertain to the exhibition of this species only. Other large animals would be exhibited at the Museum, though many smaller animals would be added to diversify the collection and to more accurately represent the components of a community.

At the end of the process the Task Force recommended to the Director that the jaguar be excluded, and the Director accepted this recommendation. Though the decision will not please everyone, all should recognize the very careful, thorough and democratic process which led to the outcome. The Museum's staff asks all members for their understanding of the issue and their support for the Museum's progress. ♣



David Hancock

## A Perspective on Exhibit Planning:

*Susan Small is a docent and long-time Museum associate; she was a consultant to the Tropical Deciduous Forest Planning Team.*

Looking over the plan which is the result of four intense workshops, I still reflect with great amazement at the process which created this proposed tropical deciduous forest habitat. At the first meeting in September 1991, ideas from all members of the planning team were collected and recorded. Countless questions came up. How do we demonstrate the tremendous diversity of insects in the area? In what way shall maps be used in the exhibit? How can the colors of the plants and the hills on which they grow be reproduced? Gradually the sketches and plans grew as the architects from Jones & Jones drew upon lists of climatic, geologic and vegetative features as well as on extensive lists of animals native to the region. Enlargements of photographs taken on a field trip to the area near Alamos helped to create the mood of "tropicalness."

At the final session in April the architects presented a design simple in the story it tells, yet complex in the way many diverse elements are brought together. Before the construction begins plants must be grown and animals collected. Several years from now, visitors to the Arizona-Sonora Desert Museum will be able to enter into an environment they would not have been able to experience without a journey south of the border. I look forward to that day when the plans come to life.

—Susan Small

## The Secret Forest

*Paul Martin is an ecologist and a frequent explorer of the tropical deciduous forest. He was a consultant to the Tropical Deciduous Forest Planning Team*



David Henricks

We who live in the Southwest have a problem with friends from elsewhere. They think we exaggerate our patrimony. They have heard how a day's drive north through Phoenix and Flagstaff takes one to the Grand Canyon, one of the most popular natural wonders of the world. Now, they will learn a day's drive south through Nogales and Hermosillo takes one to an entirely different natural wonder, the northern outpost of "tropical deciduous forest," alias "monsoon forest," alias "dry tropical forest," alias "selva baja caducifolia." Tucson author Chuck Bowden calls it *The Secret Forest* in a book soon to appear. Novelist J.P.S. Brown calls them *Forests of the Night*. The cowboys (vaqueros) of the Sierran foothills, who know the forest best, call it "el monte" or "el monte mohino." When the new exhibit opens, visitors to the ASDM will have a chance to walk into a magnificent example of tropical deciduous forest. The habitat can be found throughout drier parts of the tropics from Mexico to Argentina, and around the world in Africa, Asia, Australia and Madagascar. Here on the borderlands, the secret is now out. We are the "gateway to the secret forest."

—Paul S. Martin

## A Conversation with Jeanne Broome

*Jeanne Broome is the docent representative to the Board of Trustees and was a consultant to the Tropical Deciduous Forest Planning Team.*

*Editor: Do you think that, as a docent, you brought a different perspective to the planning?*

*JB: Perhaps—at least as far as the physical plans. I almost became a joke with my repetition of the need for storage for hands-on interpretive material, or for wide spots in the paths for interpretation. I think I got to be funny with my insistence on spaces. Docents love to have the opportunity to explain things, to help people see what they're looking at. That's really what we're all about anyway—using exhibits to help people learn.*

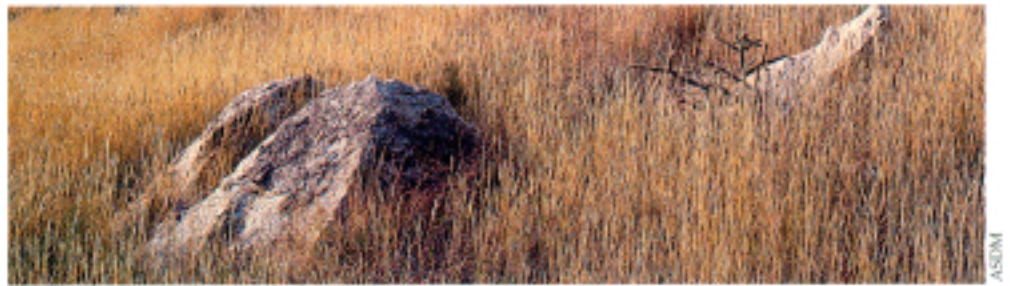
*Ed.: What might docents like about this exhibit?*

*JB: They'd be delighted to see that the small cats are still there, but in the context of their habitat. And that the coatis will have a better place in which to do what coatis do. Also the javelinas in the wash—this is just the way you find them if you go out looking early in the morning for javelina. Also I think the docents will love the opportunity of learning all these new plants. Even though this is the mother of the desert, these species aren't ones we know much about. I also think they're ecstatic about the bats, because they've wanted to interpret bats, really wanted to interpret them, forever. They'll also be pleased with the cultural aspects. These will help people understand that we are a part of the whole, too. That people are a part of nature. That's very significant. There's more to learn in this exhibit than we can ever master. But that's part of the reason we're docents—we want to keep on learning.*

*Ed.: When you think back on the planning process, what stands out?*

*JB: The brainstorming at the beginning of the planning, with the curators excited and interacting with one another to make the stories come alive. That was the very best part.*

# The Desert Grassland Exhibit



**T**he Desert Grassland Exhibit will be completed Fall 1992. It will occupy about 3/4-acre and will be primarily an outdoor exhibit, with some exhibitry and interpretation in a sod-covered ramada.

The exhibit interprets the grassland community—the plants, animals and geologic components which characterize a desert grassland and no other biological community. The exhibit will be shaped by such typical grassland landforms as erosional gullies, swales, rocky slopes and cienegas (marshy areas). The landscape will be sculpted to create the illusion of vast distances, of grass stretching beyond the horizon.

Over two dozen animal species will be displayed. Most spell “grassland” as plainly as does grass, for they evolved in a grassland or are specifically adapted to it. Such is the prairie dog, which eats grass, revitalizes soils with its digging and provides homes for many animals dependent on it for creating underground shelter from the elements and open spaces. These include western green toads, tiger salamanders, glossy snakes, burrowing owls and beetles. Rattlesnakes evolved in grasslands, their rattle probably a warning to hooved grazers. The all-female desert grassland whiptail lizard spells grassland, as do the grass-patterned kingsnake, box turtle and hognose snake, and, of course, the grasshoppers of which there are great numbers and kinds.

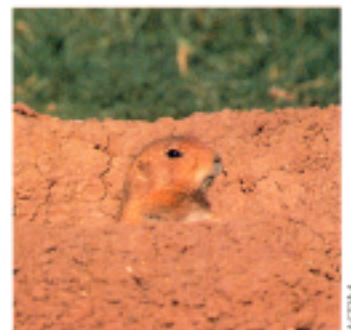
On a still day in the grassland, they say, you can hear termites chewing. The exhibit will interpret these essential little animals, as well as the small, even invisible, organisms which live underground: the nematodes, bacteria, or protozoa, which turn plants and animals into soil.

The habitat will be planted with over 25 species of grasses. Exhibits in the ramada will convince visitors that grass is not just grass, that it has wonderful diversity of lifeforms and lifestyles, that it can thrive when eaten or burned, that it promoted the rise of human civilization, and that it feeds the world, accounting for 3/4 the world's food.

The Desert Grasslands takes a new direction in the Desert Museum's exhibitry. It focuses, not on individual species, but on an entire community and its interrelationships. It demonstrates biological diversity. And it offers visitors a chance, not to look into an exhibit, but to walk in a habitat, immersing themselves and all their senses in its features, and developing an understanding of how grasslands work and why they are important. 🐾



David Hancock



ASOM

## July and August

### Nightstalkers

**Saturday, July 25 or August 1**

7:00 p.m. - 10:00 p.m.

**Saturday, August 8 or August 15**

6:30 p.m. - 9:30 p.m.

With the onset of summer rains, in the cool of the night, the desert comes alive. Our Nightstalkers program takes place on the Museum grounds after dark. Through staged interpretations, you will learn about venomous arthropods and night-flying insects, bats and owls. You'll also hear the songs of toads and will learn about their fascinating breeding cycle. This program also helps you develop night hunting and listening skills so you can go "nightstalking" in the desert on your own.

Nightstalkers lasts approximately three hours. Registration is by advance ticket sales only. Advanced tickets are \$12.00 for members and \$20.00 for non-members. Please indicate which date you would like to attend. Age limit 8 years and older.

### Composites Demystified

**Wednesday, August 19**

10:00 a.m. - 3:00 p.m.

The sunflower family (Compositae) is a large, diverse family of flowering plants with over 20,000 species worldwide. Composites constitute 1/6 of the total flora of the Tucson Mountains. Composite



Mark Dimmitt

taxonomy, like the family itself, is complex—the flower parts are unique, and minute differences separate species. A closer look at this family will reveal some of its mysteries and will add to an appreciation of these and all plants.

Becky Van Devender, one of Tucson's foremost composite taxonomists, will share her expertise with us. Using microscopes and samples of different composite flowers, we'll look at flower structures and their variations and will learn to differentiate between the various groups of composites. The majority of class will be lab and microscope work. A strong interest in learning about botany is the only requirement. Fee: \$30.00 ASDM Members/ \$38.00 non-members. Bring a sack lunch. Pre-registration required.

## September

### Turn on to Spiders

**Saturday, September 12**

4:00 p.m. - 8:00 p.m.

*Classroom activities and Nature hike*

What's your reaction when you see a spider? Do you scream, cringe, reach for bug spray, or grab your magnifying glass for a closer look? No matter what your current inclinations, after you complete this workshop we think you'll react with curiosity and fascination.

Spiders are fascinating creatures that have evolved over millennia with special

adaptations for hunting and capturing their prey, escaping from predators, protecting their egg sacks, and building unique homes. They are the most important predators of insects in world. Some spiders also have unique courtship rituals—songs and dances the males perform to attract females. And spiders can be enjoyed from a purely aesthetic view; they come in a multitude of colors, patterns, sizes and shapes. Approximately 30,000 species of spiders have been named, yet this is probably only 1/4 of the world's species.

In this workshop we'll introduce you

to the general biology and ecology of spiders, comparing and contrasting over five different groups. The majority of our time will be spent in the field looking for spiders and their homes. We'll hike a maximum of 2 miles in a sandy wash. Bring a sack dinner for our sunset and evening hike. Fee: \$20.00/members, \$28.00 non-members. Age limit 12 and older. Children must be accompanied by an adult. Pre-registration is required.

### Desert Grasslands Symposium

**Saturday, September 26**

9:00 a.m. - 4:00 p.m.

*Pima Community College West Campus, Proscenium Theatre*

In Fall 1992, the Desert Museum's Desert Grasslands exhibit is scheduled to open to the public. That exhibit is the inspiration for this symposium, designed for the general public and for scholars. It will focus on current research in the desert grasslands of the Southwest, particularly Arizona. Talks given by leading scientists in the field will cover the topics of grassland dynamics, grassland soils, grassland invertebrates, grassland vertebrates, historic changes in and restoration of desert grasslands. The ASDM is pleased to host what may well be the first symposium on desert grasslands and is certain to be an important and fascinating exchange of ideas. Fee: \$4.00 Members and students/\$5.00 Non-members. Admission by advance registration or payment at the door.



Mark Dimmitt

### Desert Grasslands Field Trip

**Sunday, September 27, 1992**

All day

Presenters of the Desert Grasslands Symposium held the previous day and other researchers will lead this field trip to grasslands within a day's drive of Tucson. Participants will visit disturbed grasslands, healthy grasslands and study sites and will see first-hand some of the interactions within a desert grassland community. The field trip is an ideal follow-up to the symposium, but it is open to symposium participants and non-participants alike. Participants will carpool in their own vehicles and should bring sack lunches. The Museum will provide snacks and interpretation. Fee: \$4.00 Members and students/\$5.00 Non-members. Advance registration necessary.

### Reception & Preview Tour of Desert Grasslands Exhibit

**Saturday, September 26, 1992**

5:00 p.m. to 7:00 p.m.

*George L. Mountainlion Patio, ASDM*

This event is open to all participants of the Desert Grasslands Symposium held earlier this day and to any one else interested. It offers a chance to speak with grassland researchers and to tour the soon-to-be-opened desert grassland exhibit in the company of ASDM curators who will explain the exhibit's design and interpretive goals. Refreshments will be served. Fee: \$4.00 members and students/\$5.00 non-members. This fee is separate from the symposium fee; it may be paid through advance registration or at the door.

Family specials include activities designed for family groups of children and adults. Maximum per class is 25 participants. We request a ratio of one adult per three children. Fees: Members: \$10.00/adult, \$3.00/child (ages 6-16); Non-members: \$12/adult, \$3.00 /child (ages 6-16). Fees include instruction, materials and refreshments. Location: ASDM Education Building.

## Starry, Starry Night



Saturday, September 5 &  
Sunday, September 6

6:30 p.m. Saturday to 7:30 a.m. Sunday

This family special will be an overnight campout, beginning on Saturday evening and ending Sunday morning. Through filtered telescopes, we'll watch the Sun set (sunspots and all). Jupiter with its moons, Venus, Uranus, Neptune, Saturn and the

first-quarter Moon will be in good positions for evening viewing. We'll map the Moon's craters, tell Indian Sky Myths, point out constellations, see star clusters, learn to identify meteorites, and make Star Clocks. Early risers can view the "morning stars," and all will go on a meteor hunt. Refreshments will be available throughout the night, culminating in a continental breakfast.



## Bats in Your Belfry and Wise Old Owls:

A Halloween Special  
Sunday, October 25

1:00 - 4:00 p.m.

Bats, owls, and spiders have long been associated with Halloween tradition. Join Education Department staff and explore some of the myths, legends and facts surrounding these Halloween characters. Craft projects, live animal interpretations and a special Halloween snack will round out the program. (No costumes, please.)

## FAMILY SPECIAL REGISTRATION

Please detach and mail to ASDM Members' Special Events Office, 2021 N. Kinney Road, Tucson, AZ 85743

**REGISTRATION AND RESERVATION INFORMATION:** Registrations are accepted *by mail or in person only* and are processed in the order they are received. Please fill out the form below and mail with a *separate check for each event*. If one of your chosen events is filled we will return the appropriate check. Notice will be sent confirming your reservation. Please call us if you do not receive your confirmation within 10 days.

**CANCELLATIONS AND REFUNDS:** All cancellations must be received in writing. Due to administrative planning costs and mailings, the charge for cancellations is \$5.00 for amounts under \$20.00 and 20% for events over \$20.00. No refunds can be made within seven days of any event, or 14 days of an overnight event. We reserve the right to change any route or arrangements should conditions necessitate, to offer substitutes of equal value, or to cancel the operation of any scheduled program or excursion. In the event of a program or tour cancellation, a full refund will be given. We reserve the right to refuse service to anyone in the interest of the group, if necessary.

**SMOKING POLICY:** In the interest of health and comfort, there is no smoking where people gather, whether indoors or out, at meals, group discussions, field interpretation, group hikes or in vehicles.

These Family Specials are created with children ages 6 - 12 in mind. Maximum 25 participants per event/1 adult per 3 children. Fees: Members \$10.00/adult, \$3.00/child (ages 6 - 12); Non-members: \$12.00/adult, \$3.00/child (ages 6 - 12). Fees include instruction, materials, and refreshments. Location: ASDM Education Building.

EVENT	DATE	NO. OF PERSONS	AGES (children)	AMOUNT OF CHECK
<i>Starry, Starry Night</i>	Sept. 5 & Sept. 6	_____	_____	_____
<i>Bats in Your Belfry and Wise Old Owls</i>	Oct. 25	_____	_____	_____

TOTAL AMOUNT ENCLOSED AS SEPARATE CHECKS \$ \_\_\_\_\_

**QUESTIONS?** Contact Barbara Yates at 883-1380, extension 274.

Send a **SEPARATE CHECK** for each event payable to: **Arizona-Sonora Desert Museum** and mail to:  
ASDM Members' Special Events Office, 2021 N. Kinney Road, Tucson, AZ 85743

### Complete information for all participants (attach list if necessary)

Participant #1 \_\_\_\_\_ Participant #2 \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Membership # \_\_\_\_\_ Membership # \_\_\_\_\_  
 Phone: Home \_\_\_\_\_ Work \_\_\_\_\_ Phone: Home \_\_\_\_\_ Work \_\_\_\_\_

**Interested in carpooling?** With a  in the box, you are giving ASDM permission to release your name, address and phone # to other event participants.

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EVENT	DATE	FEE PER PERSON	NO. OF PERSONS	AMOUNT OF CHECK
<i>Night Stalkers</i> <i>(Choose one. Indicate 1st, 2nd, 3rd, 4th choice.)</i>	July 25 —	\$ 12.00 members	_____	_____
	Aug. 1 —	\$20.00 non-members	_____	_____
	Aug. 8 —		_____	_____
	Aug. 15 —		_____	_____
<i>Composites Demystified</i>	Aug. 19	\$30.00 members	_____	_____
		\$38.00 non-members	_____	_____
<i>Turn on to Spiders</i>	Sept. 12	\$20.00 members	_____	_____
		\$28.00 non-members	_____	_____
<i>Desert Grasslands Symposium</i>	Sept. 26	\$ 4.00 members/students	_____	_____
		\$ 5.00 non-members	_____	_____
<i>Reception &amp; Preview Tour of Desert Grasslands Exhibit</i>	Sept. 26	\$ 4.00 members/students	_____	_____
		\$ 5.00 non-members	_____	_____
<i>Desert Grasslands Field Trip</i>	Sept. 27	\$ 4.00 members/students	_____	_____
		\$ 5.00 non-members	_____	_____
<b>TOTAL AMOUNT ENCLOSED AS SEPARATE CHECKS</b>				<b>\$ _____</b>

**QUESTIONS?** Contact Barbara Yates at 883-1380, extension 274.

Send a **SEPARATE CHECK** for each event payable to: **Arizona-Sonora Desert Museum** and mail to: ASDM Members' Special Events Office, 2021 N. Kinney Road, Tucson, AZ 85743

**Complete information for all participants (attach list if necessary)**

Participant #1 _____	Participant #2 _____
Address _____	Address _____
City _____ State _____ Zip _____	City _____ State _____ Zip _____
Membership # _____	Membership # _____
Phone: Home _____ Work _____	Phone: Home _____ Work _____

**Interested in carpooling?** With a  in the box, you are giving ASDM permission to release your name, address and phone # to other event participants.