



Minnesota State Zoological Board.
Zoo-Related Organizations Files.

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Editorial/Content Reviews

12101 Johnny Cake Ridge Road
Apple Valley, MN 55124
612/432-9010

March 12, 1980

T. A. Gornall, III, D.V.M.
Director
Marine Animal Resource Center
4002 West Prosper
Seattle, Washington 98199

Dear Tag:

I have reviewed the project proposal for the cross-media effort about marine mammals, and would like to compliment you on the purpose and magnitude of the undertaking. I concur that the Marine Animal Resource Center's approach to the problem, in theory, addresses the situation and has articulated a comprehensive "battle plan."

We are interested in learning more as the project proceeds, and in further investigation of an inland zoo's constructive participation.

Good luck with the proposal, and we look forward to continued information on the project.

Sincerely,

Ralph Waterhouse
Executive Officer

RW:gd

cc Ed Kohn



4002 West Prosper, Seattle, Wa. 98199

(206)

copy given to
RW for
response
f

February 11, 1980

Mr. Edward Kohn
General Director
Minnesota Zoological Garden
12101 Johnny Cake Ridge Road
Apple Valley, Minnesota 55124

Dear Ed:

Just recently, the Marine Animal Resource Center submitted a preliminary proposal to The National Science Foundation's Public Understanding Of Science Program for funds to develop the Marine Mammal Television Laboratory Project, a cross-media effort at informing the general public about marine mammals. We are hopeful this project will receive a favorable response and that we'll be invited to submit a formal proposal by April 1.

In the interim, we are keenly interested in your initial reactions to the project and would be most appreciative if you would take the time to read the enclosed synopsis. Any suggestions, criticisms, or words of support would be most welcome. If possible, please try to get your comments back to us by March 9, as we'd like to consider them before submitting the final version.

We look forward to hearing from you.

Sincerely,

T. A. Gornall, III, D.V.M.
Director

Joan Raider Rawlings
Television Producer

~~325-6812~~

362-3212

TAG:cw
Enclosure

The Marine Mammal Television Laboratory Project

BACKGROUND:

In the Marine Mammal Protection Act of 1972, Congress sought to achieve a cohesive, national policy safeguarding marine mammals and their marine ecosystems. The charge for administering the Act was given to no fewer than five separate Departments of the U.S. Government, in addition to an independent advisory body of experts, the Marine Mammal Commission, with whom each of the Secretaries of Commerce, Interior, State, Treasury and Agriculture are required to consult. Cross-coordination of responsibilities among these federal agencies is intricate. And the economic, political, scientific and moral considerations involved in understanding the Act are many and complex. While the Marine Mammal Protection Act did much to codify rules against the capture, slaughter and harassment of marine animals, they still remain threatened by interpretations of the law, by the pressures of special interest groups, and by the intricacies of international relations.

Each year, thousands of marine mammals wash up on America's coastlines. While a few animals are found alive, stranded, injured or diseased, most are found dead. Precisely why these animals die or suffer isn't easily determined. While the research that is being carried on by marine mammal scientists reveals a variety of reasons, from natural causes to genetic abnormalities to outright, indirect, or unintentional human interference, it is the conflict between man and marine mammals for food and territory that is at issue. And the conflict is accelerating. Commercial fishermen have clashed with governmental agencies over the taking of porpoise while tuna fishing. Sea otters have been displaced to new breeding grounds to ensure profitable, high yield abalone harvests. Deaths of seals by gunshot clearly point to man's frustrations in the competition for salmon. Emotions and causes run high. Environmental groups have championed the plight of the whales by intervening in dramatic fashion with foreign whaling fleets. The songs of humpback whales are heard on the national air waves. Popular slogans to "Save The Whales" stimulate the purchase of whale and seal buttons, bumper stickers and T-shirts. Commercial fishermen, shipping companies, off-shore drilling operators, sports enthusiasts and environmentalists all forcefully repeat their viewpoints about how man should relate to and deal with marine mammals. And yet, the amount and quality of factual, documentary, and scientific information that reaches the American public is small, randomly produced, often incomplete, and on occasion, biased or misleading.

STATEMENT OF THE PROBLEM:

The problem is that as of today, there is no single, comprehensive information program designed to help the average American understand the issues surrounding the life and ecology of marine mammals. As a result, many people learn bits and fragments about these animals, never fully comprehending the big picture, and often responding more to the emotion of an argument than to its basis in fact. With 70% of America's population living within 50 miles of a coastline, the potential for contact with marine mammals is

significant. Whether as voters, consumers, beachcombers or competitors, Americans are being called upon to make personal and political decisions regarding these animals.

The intent of this project then, is to offer to the public an accurate, thorough, and balanced look at marine mammals. Our ultimate goal is that individual citizens will be better prepared to make more thoughtful judgments and more intelligent decisions about the future and treatment of marine mammals as they compete with them for the ocean's resources.

PLAN OF ACTIVITIES:

The information program we propose is The Marine Mammal Television Laboratory Project, a cross-media approach to the public understanding of marine mammals.

The Marine Mammal Television Laboratory Project is designed in two phases. Phase I involves a regional pilot program in the Northwest, which will include Washington, Oregon and British Columbia. Phase II involves a full-scale national project. The television programs produced for the Phase I pilot would be applicable in Phase II.

There are four concurrent aspects to The Marine Mammal Television Laboratory Project. First, and central to the project, is the production of television programs and spot announcements about marine mammals for broadcast. Some of the topics we are considering are:

- What are we protecting? Why and How?
- Our aquatic counterparts: cross-comparisons to man.
- The marine mammal food chain.
- Extinction as a natural process.
- Death on the seashore.
- "Tagging" marine mammals.
- Marine mammal communication.
- Marine mammal stranding networks.

Each program would be an hour long, and produced to accommodate commercial use as well as uninterrupted viewing for public television. Special attention would be given to the production of promotional spots for each program, as well as for collateral activities to be described next.

The second aspect of the Project is institutional support from science centers, aquariums, zoos and national and state marine park visitor centers and ranger stations. We envision this support in the form of exhibits, displays, demonstrations, illustrated lectures and print materials, which would be located in their respective facilities, as well as in "outreach" locations such as the lobbies of major high-trafficked buildings, resort hotel lobbies, and so on. The themes and content of these inter-institutional efforts would be coordinated with the television programs.

The third aspect of the Project involves providing people in the print media, newspapers, magazines and newsletters, with camera-ready art, fact sheets and well-articulated analyses of problems about marine mammals. Again, release dates would coincide with television programs and institutional activities.

*sounds like a
Council
marine biology*

*not emotional
enough to grab*

The fourth aspect involves the private sector, encouraging industry, particularly the marine, recreational and resort industries to participate financially in the printing and dissemination of literature designed for the project, and for broadcast sponsorship of programs where necessary. It should be stressed here, that while we envision The Marine Mammal Television Laboratory Project to be a shared undertaking with the private sector, the Marine Animal Resource Center would maintain scientific content control in all cases.

TIME SCHEDULE:

Scheduling for Phase I of the Northwest Pilot would be as follows:

Fall-Winter '80-'81

Research content
Research distribution (TV & Print)
Collaborate with science centers
Private sector fundraising
Collateral materials development
Scriptwriting/reviewing process
Television pre-production

Spring '81

TV production (4)
Materials production

Summer '81

TV production
TV broadcast
Science center activities
Outreach activities
Print distribution
Audience feedback

Scheduling for Phase II of the National Project would follow the same seasonal planning sequence in 1981-1982. National underwriting and/or sponsorship would be sought, as well as national air time either through PBS, SPC, or commercial networks. Localizing institutional participation would remain a high priority across the country. Attempts would be made to take advantage of regional marine mammal concerns, e.g., manatees in Florida.

ANTICIPATED RESULTS AND IMPACT:

What we expect the overall effect of this cross-media approach to lead to, is broader participation in the community in marine science activities, and the attraction of new audiences to the subject matter. On a local level, the concurrent institutional activities, together with the time-limited nature of the airing of the television programs will take on an "event" quality, a kind of "marine mammal fair". This would likely happen because the themes at the participating science centers, while all different and unique, would be complimentary to the television programs. The topics about marine mammals would take the television viewer beyond the television set, hopefully out to explore other resources in the community, including the beaches themselves. The "event" would take place in the four consecutive months of May through August, when there is high population density on the coastal shorelines.

ASSURING BALANCE, OBJECTIVITY AND ACCURACY:

It is our expectation that balance, objectivity and accuracy can be achieved and maintained by thorough research, and by requesting marine mammal specialists, as well as persons representing special interest groups, to critique scripts. We would, for example, expect to receive valuable, but differing comments on a script dealing with the Marine Mammal Protection Act from the Indian Tribal Council, National Marine Fisheries personnel, Sea World personnel, and the All-Coast Trawlers Association. While content control would rest ultimately with the Marine Animal Resource Center, every effort would be made to represent contrasting opinions fairly.

SHARED COSTS/POTENTIAL PARTICIPANTS:

The Marine Animal Resource Center recognizes that National Science Foundation monies are limited. For this reason, we are attempting to stimulate shared costs on two fronts: participation from science-related institutions, and from private industry. First, insofar as major displays and exhibits are concerned, we intend for the grant to cover the costs of development and production, and then follow up by asking the science centers to bear the costs of replication. Second, we intend to approach industries for a major part of the print and dissemination costs of the project. However, until such time as firm commitments are made, we will include these costs in our budget.

Finally, we recognize that another reason for approaching science-related institutions and private industries to share costs is that such activities generate enthusiasm. It is our feeling that grass-roots support in the local communities would ensure a highly visible and successful public education effort. In this way, the Marine Animal Resource Center would act not just as a producer of television programs, but as a catalyst for cooperation among the educational, governmental and private entities in an effort to reach as many citizens as possible with marine mammal information.

Vesta Shaffer

? Rev. Brunell . 85

Source: Mss checking

Animal Kingdom

MEMORANDUM

TO: Editorial Advisory Board
 FROM: Eugene J. Walter, Jr., Editor
 SUBJECT: MANUSCRIPT CHECKING
 Edward Kohn
 Minnesota

*10/27/80
 (12) 320-5121*

Would you please review the attached manuscript "Did You Read That Label?" assess its accuracy and give me your general opinion of its value for ANIMAL KINGDOM. A detailed analysis is not required. If the author clearly doesn't know what he or she is talking about, you can probably give your assessment in one sentence. But if it's just a matter of some questionable items or an occasional error, just point them out. Feel free to make notes on this copy.

Sometimes the literary quality is weak on the first draft. Our skillful editors can supply help on that score, but faulty knowledge is best avoided altogether.

Please remember that this is intended to be a "popular" article aimed at the general reader. While we hope that our articles have some substance, most of them are unlikely to have the same sort of detailed data that you expect in a journal article. Also, the approach is far more personal, and often more light-hearted, than would be true in a technical publication.

Please return your comments to me by *11/17/80*.

Many thanks for your help.

17 Nov 80

I believe the manuscript is apt, and accurate. I have no questions regarding any of its content or presentation.

EJW telephoned 11/19/80 10:55 am

GD

JC to AK

Did You Read That Label?

A graphics researcher, disguised as a casual zoo visitor, stands among the crowd at Brookfield Zoo's fruit bat exhibit. Data sheets concealed in a guidebook contain a checklist for the age, sex, group size and type (family or peers) of the visitor the researcher is observing. A stopwatch ticks off the seconds this randomly-selected subject is spending at the exhibit. Behaviors, such as talking, pointing, and label reading, are noted.

"Oh, look! Bats! Ugh. What are they doing?"

"Hey, it says here that they're only fruit bats!"

New Versus Old Labels

During a recent label research project at the Brookfield Zoo, the average amount of time spent by visitors at the bat exhibit was fifty-four seconds, and approximately fourteen percent of the people who stopped at the exhibit read the label. When a new label was exchanged for the old one, readership increased to fifty-six percent. What was it about the new label that made such a difference?

Several interrelated factors were at work: the placement of the label, the label's design, and the content. Each factor may encourage or distract readers. In the case of the fruit bats, both the placement and content of the old label were making it difficult for readers. The label was mounted on the wall, away from the windows which looked in on the exhibit, and the text began: "Hispaniolan Fruit Bats, Artibeus jamaicensis. This tropical American fruit bat is one of several related species living as

far north as Mexico and ranging south through Central America into Brazil..."

While zoo labels are integral to the exhibits, and they contain many of the zoo's important messages of conservation and animal adaptations, many labels in zoos--and other institutions, such as museums--are boring. Often they seem too long, or contain technical or Latin terms unfamiliar to the non-specialist. The traditional label is a mini-encyclopedia of abstract, natural history facts.

Zoos are attempting to upgrade their images, and new labels are one way to improve the amount and quality of educational services offered to the general public. Zoo and aquarium labels have, therefore, become the subject of study, controversy and frustration as to how they can communicate best with the visitors. Numerous problems plague each label's creation and existence: poor placement, obscure messages, misdirected intuition--all work to make many labels uninteresting, unreadable and not worth the visitor's effort.

Research Uncovers Effective Techniques

Fortunately, label research, visitor behavior studies, and timely trial-and-error experiments offer some solutions to these problems. Techniques do exist which can increase visitors' attraction to labels, hold their attention long enough to read the entire message, involve ^{visitors} them in making observations, and have them leave with some demonstrable gains in short-term learning.

"Excuse me. I'm doing a research project this summer on zoo labels. Did you read the label at the bat exhibit?"

"Why, yes, I did."

"Do you remember what it said?"

"Hmmm, let's see. Yes, it said that bats live in trees, eat fruit and nuts, drink water while they're flying, and they hang upside down."

"OK. Very good, and thanks a lot."

The readers of the old bat label took longer to read a shorter text. The new label was much easier to read, and visitors who were observed reading for at least 20 seconds could recall information as in the conversation above. The new label began: "A Day in the Life of a Fruit Bat. First thing in the morning, go to sleep. Sleep hanging by your feet with wings folded around your body. At night, fly around the tropical forest..."

Each exhibit has its own inherent ability to stimulate visitors interest. Research by Sherman Rosenfeld at the San Francisco Zoo showed that visitors prefer exhibits which have interactive features--where they can feed, pat, or watch interesting animal behaviors. While labels cannot make a dull exhibit exciting, they can help visitors with their "search for interaction" by telling them what to look for in the exhibits, and helping them experience the real animals. Concrete rather than abstract messages seem to work better. So do catchy titles, familiar language, directions, questions, and a limited number of concepts.

Not all zoo labels are bad, but the present majority of them do not contain information that the visitor can grasp and use quickly and easily. The small percentage of visitors who are motivated to wade through a catalog-style label of natural history facts will learn something, but

what about the rest of us? Learning in the zoo should be geared to the immediate, informal, experiential nature of the zoo visit.

Good Examples

There are good examples of labels--those which involve readers and show some concern for visitor comfort and competency.

In a refreshing departure from the traditional sign format, the John Ball Zoo focused their new sign system on three major themes--predator-prey interactions, man-animal relationships, and animal names. The themes provided guidelines for limiting the amount of information, so that the over-all feeling was one of restraint and brevity, rather than "tell-'em-everything." The amount of copy ranged from sixteen to 126 words, depending on the complexity of the concepts, the popularity of the species, and the available label space.

Labels installed at the San Francisco Zoo in 1977 made a conscious attempt to use more casual language and an entertaining writing style. They also focused on more concrete aspects of the exhibits, and answered commonly asked questions. Labels were still traditional in that they usually had a single paragraph format into which was put diet, range, habitat, and the scientific name, along with the other information.

Fort Wayne Zoo also demonstrated considerable restraint in their approach to interpretive animal labels. Done on a very low budget, the labels are durable and easy-to-read, although they probably will never win a graphics contest. Brevity prevails--they are written to be read completely (approximately 60 words), and they are often relevant to what the zoo-goers can experience.

The Changing Faces of Zoo Labels

Many zoos are in the process of experimenting with different types of interpretive labels. Some seem to be struggling to "find themselves" graphically. Often a wide variety of label types, styles and vintages can be seen together in older zoos. Even at the Minnesota Zoological Gardens--a relatively young zoo--such diversity exists. Graphics in some areas seem to serve more of a design function than one of communication. Other presentations, while extremely legible and attractive, are quite traditional. Still others use colloquial terms, give visitors helpful directions for observing the animals, and answer obvious questions.

Intentional variety can be stimulating to zoo-goers. But variety as a result of haphazard changes in direction, purpose and designer's taste may leave the impression of a lack of cohesiveness.

Next time you're at the zoo, notice which labels are being read by the most visitors. Chances are it will be at the more exciting or dramatic displays, since it is usually the exhibit itself which will arouse curiosity in the viewers to learn more and seek out the sign. Which labels hold your interest and leave you with the feeling that you've learned something new? Let your zoo know!

As zoos begin to place more emphasis on graphics as an educational medium and begin to wonder about the effectiveness of their labels, the stage becomes set for evaluating and improving zoo signs.

"Hey, Martha. Come over here and look at what it says here..."

End

Animal Kingdom

Accept Checking File
D. Bender

MEMORANDUM

TO: Editorial Advisory Board
FROM: Eugene J. Walter, Jr., Editor
SUBJECT: MANUSCRIPT CHECKING

10/31/80

Ed Kohn
Minnesota

Would you please review the attached manuscript *Trying to Design Naturally* assess its accuracy and give me your general opinion of its value for ANIMAL KINGDOM. A detailed analysis is not required. If the author clearly doesn't know what he or she is talking about, you can probably give your assessment in one sentence. But if it's just a matter of some questionable items or an occasional error, just point them out. Feel free to make notes on this copy.

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Please return your comments to me by 11/24/80.

Many thanks for your help.

I find no technical inaccuracies. Reads well and seems interesting.

*Ear Bender
Visual Arts Manager*

TRYING TO DESIGN NATURALLY.

Newspaper and TV reporters have a tendency to take things literally. Even worse, they are quite likely to pick up one statement from an interview and hang a story around it. An English Archbishop making his first visit to the U.S. was warned of this. Determined, therefore, to guard his tongue he braced himself for the first question when he was presented to a group of reporters at JFK Airport. A reporter immediately asked him if he intended to visit any of the famous New York clubs with their strip tease dancers.

The Archbishop thought carefully and then replied with a smile "Are there any such clubs in New York?"

Everyone laughed, and he was still congratulating himself upon his clever reply the next morning when the newspapers were delivered. There, staring from the headlines, was the bold caption: 'Limey Bishop's First Question: "Are there any strip clubs in New York?"

I experienced a similarly frustrating moment some months ago, and it serves to illustrate a useful point. We had just opened the world's largest and most naturalistic exhibition habitat for gorillas and in talking to reporters I found the most persistent question was "Can they escape?" The exhibit had been carefully designed to give visitors the feeling they were seeing gorillas in a wilderness setting. All barriers were carefully obscured, to give the illusion that the gorillas could come and go at will, as if they were there, in a forest clearing, almost by chance.

Perhaps, then, I should not have been surprised that everyone was puzzled about the methods of confinement for the animals. However, as every Zoo Director knows, there is no such thing as an escape proof exhibit. Even if we had built a steel cage, or used 40 foot high concrete walls, one could not swear to a guarantee that it was impossible for gorillas, under some unforeseen circumstances, to escape.

We had employed skilled rock climbers to test our new facility, and carefully measured and analyzed every aspect we could think of. Even so, when I was asked point blank if the exhibit was "100% safe" I replied that I was "90% certain" it was so. To my chagrin the reporter of a local newspaper wrapped a complete story around this point. The story suggested that a team of so called experts had used taxpayers' money to devise a facility that wouldn't even hold in the animals; and had an admitted 10% chance for failure.

All the efforts we had made to create a feeling of mystery and magic around the gorillas, to create an authentic wildlife experience for zoo visitors, to replicate a small piece of African rainforest in Seattle, to give the animals a space that was rich in quality, to give them an environment suited to their behavioral and psychological needs, to try for the first time to build a natural habitat for gorillas - all these efforts were ignored for the sake of sensationalism. The article didn't go quite so far as to say "Limey Architect Admits Gorillas May Escape", but that was the implication.

On reflection I can see that I shouldn't have been so dejected about this piece. Zoo architects, after all, have spent the last two centuries designing public zoos in which nothing other than the question of animal confinement was ever considered.

Design of animal enclosures in the past has concentrated on little more than the barriers which separated animals from people. Even now, talking to zoo people, you will find they often start talking about a new exhibit by discussing only methods of enclosure. They make sketch plans which never show anything but the walls and moats. All emphasis is on the enclosure, not on the type of space inside for the animals, or the quality of environment outside it for the viewing public.

This emphasis may be understandable but is not forgiveable. Architects employed to put the zoo's ideas into reality are, from the start, bamboozled by this preoccupation with enclosure. Their client may talk of no ~~any~~ other factor in the design, and all their energy and talent then goes into detailing the barriers.

Time was when we were ignorant of animals' needs. Little or nothing was known of their life in the wild. Consequently all emphasis went into designing a cage to confine the beasts. And since people had no other interest than merely to see just what a tiger or a baboon or some other strange animal from some equally strange land, actually looked like, the designers merely made sure that people had a convenient method of satisfying this need.

TV, films, books and magazines, as well as zoos themselves, have taken us beyond the basic point of only wanting to see the shape and size of an animal. Moreover there is a new ethic and a new understanding today. We are the first generation to speak of animal rights as well as animals' needs. This new awareness is based on knowledge: compassion is always based on understanding.

Far from wanting to see animals in cages, people today are actually repulsed by the spectacle.

For some time an argument bounced around that zoos were made redundant by nature films. Magnificently photographed wildlife movies can be seen each week, at prime time, in our living rooms. Some therefore argued that these were more than satisfactory substitutes for zoological parks. Nothing, of course, could be further from the truth.

There is no technological innovation, not even holographs, which can capture the thrill of seeing a living wild animal in the wild. There are, however, technical skills and design talents which can be used to recreate that experience in a zoological park.

It has always seemed to me unfortunate that we are stuck with the term "zoological" park. (Or, worse yet, the word "zoo" with all its unfortunate connotations). "Zoological" implies that we are dealing with nothing other than animals. True enough, that is all that zoos have been doing for a long time. But there is more to it than that. Instead of only showing animals we should be concentrating on showing them in their natural habitats; because a solitary gorilla in a cage, sitting on concrete, walking in its own feces, hanging on a tire suspended from a chain, sleeping on a concrete shelf, is no longer a gorilla. In such a setting the gorilla is reduced to a mere caricature of itself.

At Woodland Park we set about to reverse the usual situation. Rather than display gorillas, we have tried to exhibit the natural habitat - a habitat in which visitors, almost as if by chance, happen also to see gorillas.

We hope, and believe, that subconscious links will be made in the minds of those viewers. It is our intent that visitors will never again associate gorillas with cages, in settings designed only to enclose and contain, but will always have images of gorillas amid lush vegetation, climbing trees and mossy boughs, lounging among thick plantings of shrubbery, living in a green world.

Perhaps then, when people hear or read of destruction of the habitat, they will understand why gorillas cannot survive without their forests.

A great deal of care has to go into choice of plants for such an exhibit, as well as placement. Simply forming an enclosure and putting plants in the ground is not enough.

Following the advice of Heini Hediger in the 1950's zoo administrators learned how to use furnishings for the caged animals. Barriers could provide security and an opportunity to avoid eye contact if needed, climbing devices had to be considered for the behavioral abilities of different species. So it is, too,

with "natural furnishings". The placement of each tree and shrub has to serve a purpose. The overall effect must, in the first place, duplicate an authentic wilderness experience for the visitor, to serve the best educational impact, but each part of the whole must also meet a variety of utilitarian needs.

It is a belated but exciting time to be designing natural habitat exhibits. There is virtually no information to draw upon in choosing species of plants which may be used. But this only adds to the excitement of the challenge.

Sometimes, in hindsight, some decisions prove obviously wrong. At Woodland Park we provided matured maple trees in the gorillas' exhibition habitat. Early in the spring the animals began displaying an interest in these trees, especially at the base of the trunk. Then one morning they all sat around and began to eat the tree! Great chunks were being taken out of the bark, like biting into a crunchy apple. At first we were confused by this behavior until it dawned on us that the sweet sap was starting to rise in the maple, and the gorillas could obviously smell this delicious attraction.

Surgery on the trees may save the maples, but the wisest precaution in the future will be ^{to} avoid using maple trees for primates. What mustn't be avoided, however, is an attempt to always make every effort to replicate the essential characteristics of a wilderness habitat for captive animals. The educational and inspirational potential for displaying animals in such settings to millions of zoo visitors each year is too important to be missed. An important part of this design effort, ironically, relies on the attention to detail of the barriers. Originally, as we have seen, these were designed only for convenient enclosure. Exhibition habitats which duplicate nature, however, must avoid visual recognition of the barriers. The line between the animal world and the people world needs to be as subtle and inobtrusive as possible, so that visitors can be encouraged to believe that, as an escape from their urban environment, they have entered the world of wildlife.

This means, among other things, that people should not have views of other people standing around the enclosure, or be aware of moats and fences. It means, too, that the design of the habitat should extend beyond the barriers. If people are standing on broad concrete walkways in a manicured park setting, leaning against concrete walls, and looking into a naturalistic setting, their sense of appreciation is limited only to their view of the exhibit. All other senses are aware of the artificial environment in which they are standing.

A much more authentic experience is possible for zoo visitors if they can be immersed in the landscape. In the case of the gorilla exhibition habitat at Woodland Park we have tried to design an area in which people can take photographs of gorillas which would look exactly like views of gorillas in Africa. But while watching and photographing this scene the visitors are standing in an area of equally lush vegetation. Moreover they have approached this area through narrow, twisting pathways overhung with trees and vines which simulate that same tropical rainforest habitat.

Admittedly this effect is easier to obtain in some parts of the country than others. California and Florida have ideal climates for growing tropical vegetation. In Seattle we can only achieve a close approximation of the effect, through careful choice of plants, during the summer months. In the winter it is not at all as convincing. But, like most zoos, we receive many more visitors in the summer months. So we can fool most of the people some of the time.

In parts of the country with harsher climates a similar approach can be adopted. An outdoor habitat could be maintained for the summer, with an indoor viewing facility for winter.

Whereas people used to stand in the harsh and dismal corridor of the Ape House in Seattle, and make dumb jokes about the gorillas inside their concrete rooms, we now find that zoo visitors approach the new scene with a sense of awe. Dense plantings of exotic species create the effect before one gets to the viewing area. And when visitors emerge at the clearing, and see the gorillas in their simulated habitat, they often speak in whispers, just as one would in the wild. There is a magic and mystery about gorillas, and that is what we have tried to convey.

If such efforts are a success it will bring tremendous repercussions. Zoological Parks will, with such habitats, begin to meet their full potential as unique and valuable educational institutions, bringing genuine pleasure to visitors, as well as a new and great opportunity for developing a citizenry which is conversant with, supportive of, knowledgeable and sympathetic to the conservation goals of wild animals and their wilderness habitats.

OPEN FILE

For Animal Kingdom
Manuscript Checking

MEMORANDUM

23 May 80

TO: Ralph Waterhouse, Minnesota
Editorial Advisory Board

FROM: Eugene J. Walter, Jr., Editor

SUBJECT: MANUSCRIPT CHECKING

Would you please review the attached manuscript on Philadelphia Zoo's Bear Country, assess its accuracy and give me your general opinion of its value for ANIMAL KINGDOM. A detailed analysis is not required. If the author clearly doesn't know what he or she is talking about, you can probably give your assessment in one sentence. But if it's just a matter of some questionable items or an occasional error, just point them out. Feel free to make notes on this copy.

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Please return your comments to me by *see below*.

Many thanks for your help.

Hope you can read promptly - it's short - and we're trying to be timely and put it in next issue. Please call us - collect: 212/220-5121 - with your comments ASAP.

Thanks.

GW

Ⓚ

Done

Sometimes when you live through a major zoo construction like Bear Country, you begin to wonder if the whole thing's going to be worth it. All the planning, the navigating around mounds of mud and trucks of every description, long months worth of constantly reassuring the public that the bears will definitely be back soon, eternal building and planting and digging and spraying gunite. Then, one bright sunny April morning, you stand in front of a 200,000 gallon swimming pool with its see-through window and watch a large white bear submerge and paddle its way across the pool. The sun creates a thousand sparkling arches through the water and rainbow bubbles dance around the bear's body. It is an incredibly beautiful sight. And you know, without any hesitation, that it was worth every moment.

We began the planning of Bear Country seven years ago with architect Henry Mirick and his colleagues. The challenge was a big one. It would be the Philadelphia Zoo's first new major exhibit in many years. It was to stand on the site of the old Bear Pits. These Bear Pits were among the Zoo's original structures and antiquated though they were in both concept and utility, they were historically significant. The difficult decision to dismantle them was the first of many we'd have to make. Another, soon after, was what to do with the discovery of an unexpected natural spring where deep dry moats had to be built. The architects finally decided on something called a riprap - a ^{re}sustaining wall of natural stones piled without specific order. Some say that if you stand quietly at the top of the moat, you can still hear the bubbling of the spring. Wild stories circulated about that old spring during Bear

Country construction. It is supposed to date back to Indian times. A reportedly genuine Indian ax head was unearthed by Zoo gardeners and eerie "Indian groans and moans" were even said to have been heard by workers on the job.

There were other problems, both major and minor, that somehow got solved as we went along - pool pumps that needed fixing, T.V. monitors for the cubbing dens that weren't the right size, the usual assorted breakdowns, foul-ups and leaks.

A good many of the problems that we did anticipate, however, never did materialize, specifically those dealing with the landscaping of Bear Country. Our intention was to create environments as close to those in nature as we could manage. Since the polar, spectacled and sloth bears we would exhibit come from vastly different habitats, the challenge was complex. One thought was pervasive, though; that was to leave as much in the way of trees and grass as was possible.

Bear Country is roughly circular in shape, with a diameter of over 200 feet. It is divided into four sections, one for each species and one for switching bears around when we need to. Because Zoo staff unanimously agreed that muddy polar bears are not especially attractive, a great effort was made to use more stones and pebbles than grass in their section. Spectacled bears are supposed to be great climbers so we made sure to keep several trees in their quarters, although the latest reports indicate no tree climbing as yet.

The ones we genuinely had nightmares about were the sloth bears. They came to us as babies and were first housed in the Children's Zoo where they methodically ate their exhibit every day. Sloth bears also have huge claws used in the wild to dig up termite mounds. The bears found that huge claws dig up new zoo exhibits just as efficiently. We were, however, pleasantly surprised to find that the damage thus far is minimal. The addition of a

big old sycamore stump and some large tree trunks that they can demolish at their leisure has probably helped.

According to those who work most closely with the bears, all seems to be going well from the bears' point of view. Each bear has developed a distinctive personality and is adapting to its new environment with relative ease. The female spectacled bear, "Zoomar", is gentle and tractable and has learned to go in and out when expected to. A male companion will join "Zoomar" in the near future. Our two adult polar bears, "Nibbles" and "North Star" were introduced to each other in mid-March and after preliminary altercations have developed a wary truce. Once they achieve *détente*, they'll eventually be joined by our third polar bear, a young female named "Frosty". We were told that the sloth bears, "Panji" and "Rajah", are the easiest to work with, mostly because they are inveterate "chow hounds" and the call to food elicits the

desired response at once. Unfortunately, they also ripped the lights from the interior walls and dug up all the expansion joint caulking.

One of the most exciting challenges we face with Bear Country is still to come - breeding. All three species are considered to be endangered in the wild, mostly due to habitat destruction. It is hoped that the large spaces and private denning quarters of Bear Country will provide the proper climate for reproduction.

We had two grand openings for Bear Country in April - a private preview for Members and a public dedication. Record crowds attended. Many city officials were there. Honor guards carried flags. Bands played. Miss Philadelphia was there. So were Jan and Stan Berenstain of the Berenstain Bears. Zoo Board members were there. So were the architects. The artists who made sculptures for Bear Country were there, too. Yogi Bear and Winnie-the-Pooh made special appearances. All of the Philadelphia Zoo staff was there. So were the Bear Country bears. They were the stars.

DATE: March 12, 1979

TO: Editorial Advisory Board Animal Kingdom representative of
the Minnesota Zoological Garden

FROM: Chase Davies

Animal Kingdom editors need to have some information about those of you
who are on the Minnesota Zoological Garden Editorial Advisory Board of AK

According to a letter dated March 5, 1979 the information needed is:

Name Arnold Kohr

Title or what you do General Director, Minnesota Zoological Garden

Areas of zoological expertise -- should be quite specific; not just mammals but
mustelids or vivverids or similar, or maybe a particular species or two, or
rainforest ecology or courtship behavior in frogs and the like.

*Prokimity studies of the long-term captive management
of endangered zoo directors*

Any non-zoological area of expertise for example anthropology, art history, etc.
and try to be specific as possible (Egyptian art, tribes of New Guinea, etc.)

*General management of zoological parks; science administration;
public education; the politics of conservation*

Geographic area where the person has considerable knowledge of the locale
perhaps because of field work, service assignment, Peace Corps or other reason for
being in that area.

*Isthmus of Panama (7 years as Deputy Director, Smithsonian
Tropical Research Institute)*

Other data you feel of importance:

The purpose of the above is to know better what advisors can be called upon to
evaluate information, manuscripts etc.

THANKS FOR YOUR HELP. Please send this form to: Chase C. Davies, MN Zoological Society
555 Wabasha Street North, Saint Paul, Minnesota 55102.

I will collect these and send along to New York when they are all in hand.
I would like to mail all by April 1, 1979. OK?



MINNESOTA ZOOLOGICAL GARDEN FOUNDATION

33 Wentworth Avenue East, Suite 218

West Saint Paul, Minnesota 55118 Phone (612) 457-2579

March 21, 1979

Edward Kohn
General Director
Minnesota Zoological Garden
12101 Johnny Cake Ridge Road
Apple Valley, Minnesota 55124

Dear Ed:

Enclosed, for your information, is the final draft of the article for the June/July Animal Kingdom insert. My general impression is that it "will do," although it certainly shouldn't win even local awards for creative journalism.

Very honestly, with Bob gone, we have been "busy as beavers" and I am glad to get this "monkey off my back." With everything else that needs to be accomplished this week, this article was nearly the "straw that broke the camel's back."

Perhaps for the next issue, I could do an article on zoological cliches...

I do appreciate your spending time discussing this with me when I know you have so little to spare. Thank you.

Sincerely,


Kathryn Rosebear
Administrative Assistant

KR/me

Enc.

TITLE: _____

To the pioneers of the Western Frontier, enormous herds of the large, shaggy humpbacked animal they misnamed "buffalo" were not at all uncommon. Stories by early explorers told of bison herds which stretched twenty miles in length, or 100 miles, or even across two entire prairie counties. Yet, by 1960, this native wild cattle was nearly extinct, due primarily to its rapid and nearly complete extermination by man. Only through the conservation efforts of concerned groups and a few zoos did the bison ever recover from possible extinction. In all likelihood, they will never be seen in their original numbers again.

"New at the Zoo"

This summer, new developments will bring the bison to the Minnesota Zoo in a combined prairie exhibit with the North American wapiti. With the moose, already on display in the Northern Trek, these animals comprise the three largest North American hoofstock species.

Situated at the Mid-Trek area along the Zoo Ride monorail, the bison exhibit is a particularly appropriate addition to this display of northern temperate animals. Perhaps no other animal has had a greater impact on the culture and history of this country.

In pre-European times, bison ranged over the greater part of this continent. For the Plains Indian, they provided the actual basis for existence; literally each part of the bison was in some way put to use. To European settlers, prior to the establishment of domestic herds of livestock, the bison was a welcome source of free meat. The inevitable growth of human settlement contributed to the disappearance of the bison in the East.

Around 1830, the systematic destruction of bison herds began; the trading of bison robes and tongues became a major industry. The construction of western railroads furthered the destruction of these animals, dividing the bison into southern and northern herds. Although some people began to think about saving the bison, state laws forbidding the waste of bison meat were not enforced; proposed federal legislation was never voted on. Government officials often overlooked the extermination, realizing that the demise of the bison would hasten the collapse of Plains Indian culture, leading to their peaceful dependence on other means of livelihood.

In the 1880's, states and territories began enacting protective laws. By this time, for all practical purposes, the bison were gone. By the turn of the century, it is believed that all bison disappeared from the wild in this country, and that fewer than 500 existed in North America. The approximately 30,000 to 40,000 animals that exist today are the descendants of animals bred in the protection of private ranches, national parks, refuges and zoos.

At the Minnesota Zoo, bison will share 15 to 20 acres of prairie habitat with the wapiti, or elk. Ten animals of each species, both well adapted to prairie winters, will be on view outdoors the four seasons of the year. This summer, zoo visitors may observe the bison from the Zoo Ride monorail; by next summer, a pedestrian walkway will lead to the exhibit area.

Other developments along the Northern Trek will include modifications to the musk oxen and Siberian tiger exhibits and, later this summer, the addition of a pheasantry.

The musk oxen exhibit will be expanded to include several acres on the south side of the pedestrian walkway; a tunnel constructed under the walkway will allow animals to pass between the original and new exhibit spaces.

This musk oxen expansion should improve viewing potential; additional animals may be placed on exhibit, and zoo visitors will have a choice of observation points along both sides of the walkway. The expanded exhibit should also increase animal management flexibility, providing additional space in which to exhibit musk oxen and to isolate specific individuals, such as surplus bulls, when necessary. Experience at other zoos has indicated that sufficient space encourages breeding and the successful birth and rearing of calves.

The zoo currently has eight musk oxen, all from captive stock. New animals for display will be acquired in the future from wild herds in Canada.

The Siberian tiger exhibit will be modified with the addition of a fence through its center, creating two display areas from the original one. Again, this modification is expected to increase animal management capabilities and tiger visibility, allowing for the simultaneous exhibition of a greater number of tigers.

Construction will also begin this summer on a simple, "walk-in" pheasantry. Six representative species of pheasant will be housed in the fan-shaped exhibit, comprised of six planted, nature-imitating habitats. By

offering zoo visitors the chance to see pheasants "close up," the exhibit should provide an interesting contrast to the large animal panoramas surrounding it. The opportunity for close observation of these species should become one of the best reasons for "walking the Trek."

Asiatic in origin, pheasants are extremely varied in color and conformation, ranging from the size of a small quail to the much larger peacock, a pheasant species. Most are successful breeders in captivity. Species selected for exhibition at the Minnesota Zoo originate from temperate and alpine habitats and should be quite adaptable to the variable Minnesota climate. With their vivid colors and showy plumage, these spectacular animals should prove popular with zoo visitors.

Funds used in the construction of new exhibits and exhibit alterations have been provided by the Minnesota Zoological Garden Foundation. To date, the Foundation has raised more than \$1.8 million in donations and pledges from corporations, foundations and individuals in support of future construction at the zoo; \$600,000 of these funds have been earmarked for the completion of these and other short-term developments.

"Buddy, can you spare a buffalo nickel?" Your donation can maintain the momentum of this new and growing zoo. Gifts to the Minnesota Zoological Garden Foundation will be used for future development of the Minnesota Zoo. Only with your support can new exhibits and facilities be constructed to delight and educate future zoo visitors. Gifts to the Foundation, a non-profit corporation,

are tax-deductible.

For more information, contact:

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