

A **MERICAN**
A **SSOCIATION OF**
Z **OO**
K **EEPERS**



NEWSLETTER

JANUARY - FEBRUARY 1970

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AMERICAN ASSOCIATION OF ZOO KEEPERS

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8024 Tommy Drive
San Diego, California 92119
714 - 463-0738

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Dear Member,

The AAZK is planning its first National Conference for May 4 and 5 at Topeka, Kansas. It needs your participation in order to be a success. Why not plan to attend and share in the benefits of this Zoo Keeper's meeting.

The downtown Holiday Inn in Topeka will serve as Conference Hq. and all conference activities will be centered there. Many important AAZK activities are being planned. Tuesday, May 5, will be devoted to papers prepared and presented by keepers, and guests from all over the U.S. Many subjects concerning animal husbandry, conservation, and other subjects will be discussed.

A conference banquet will be held at the Holiday Inn on Tuesday evening May 5, preceded by a cocktail party. Registration fees for the conference are \$10.00 per member, \$8.00 for wives. (This fee will include the banquet, and a luncheon on Wednesday, May 6th.)

A tour of the Topeka Zoological Park is planned, and a special tour of interesting Topeka sites is planned for wives of members attending.

It is hoped that AAZK will be represented by members from each of our member zoos throughout the nation and Canada.

If you plan to attend, please fill in the attached form and return it as soon as possible. You will receive a packet of conference materials, including an outline of the program by return mail.

Help us make the AAZK Conference a huge success. Plan for a good time at Topeka.

Sincerely,

Conference Committee
John Wortman, Chairman

-----Detach Here-----

PRE-REGISTRATION FORM
NATIONAL AAZK CONFERENCE
TOPEKA, KANSAS
MAY 5-6, 1970

- ☐ I plan to attend the National AAZK Conference. Number in party _____
☐ I would like to present a paper at the general session on May 5, 1970.
☐ I will need: ☐ Projector ☐ Slide Projector ☐ Black Board

NAME _____

ADDRESS _____

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SEND TO: CARL PYLE, BOX 145, ALPINE, CALIF. 92001

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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TYPIST AND MIMEOGRAPHER-----VIRGINIA L. SWEENEY

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in all financial dealings.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the sampling process and the statistical tools employed to interpret the results.

3. The third part of the document presents the findings of the study. It shows that there is a significant correlation between the variables being studied, and that the results are consistent across different groups and time periods.

4. The fourth part of the document discusses the implications of the findings for future research and practice. It suggests that the results could be used to inform policy decisions and to guide the development of new programs and initiatives.

5. The fifth part of the document provides a summary of the key points and conclusions of the study. It reiterates the importance of accurate record-keeping and the need for ongoing monitoring and evaluation of all activities.

6. The sixth part of the document includes a list of references to the sources used in the study. It also includes a list of appendices that provide additional information and data related to the study.

7. The seventh part of the document is a conclusion that summarizes the overall findings and their significance. It states that the study has provided valuable insights into the relationship between the variables being studied, and that the results are likely to be useful to a wide range of stakeholders.

8. The eighth part of the document is a list of acknowledgments that thank the individuals and organizations that provided support and assistance during the course of the study.

9. The ninth part of the document is a list of footnotes that provide additional information and references for the study.

10. The tenth part of the document is a list of appendices that provide additional information and data related to the study.

WE THE KEEPERS by W. Townley "Scotty" Roy, Columbus Zoological Park

Those of us who are zoo keepers belong to a very unique profession dedicated to the care, well being, management, and conservation of wild animals in captivity. This alone seems like a tremendous responsibility, but actually it is a small portion of our job.

Many in our field are graduates in zoology, animal husbandry or other related fields. However, as we all know, the first prerequisite for our work is a genuine love and dedication for the animals. This to me is more important than any degree granted by any college or university.

The knowledge we must possess is tremendous and includes anatomy, physiology, biology, disease and its control. One of the most important phases of our work is to understand the psychological makeup of our animals. All animals, snake, fish or gorilla, possess feelings. To help our animals express these feelings can be one of the greatest rewards of our field.

When you look at some of the facts and figures you realize the impact that our work carries. There are approximately 300 zoos, public and private, in the United States, which have a keeper force of 10,000. These 300 zoos average 82 million visitors annually, more than many professional sports. We are in front of the public more than all the Arnold Palmers, Mickey Mantels, and Wilt Chamberlains in the world.

We must be ready to accept the responsibility we have to the staff of members of our respective zoos, for we are in more direct contact with the animals than they are. We must also be willing to present any new ideas we may have concerning the welfare of the animals, regardless of how insignificant it may seem at the time. This is the way the staff can come up with new ideas on how to better serve us, the public, and, most important, the animals.

We should always be ready to upgrade our profession, whether it be by way of formal education or through the organization, if there is not a keeper training program in our individual zoos.

I suppose by now you realize how much our profession means to me. I wish to thank all of my fellow zoo keepers for allowing me the opportunity to express my views through our newsletter.

BABY HOOFED STOCK FORMULAS--FRANKLIN PARK ZOO HOSPITAL, DORCHESTER, MASS.

(In response to recent article on baby elk from Turtle Back Zoo, N.J.)

by Anno Davidson

We have had good success using the following basic formula for our abandoned young hoofed stock, fed from a lamb's bottle:

Basic Formula (A)	4 oz. canned evaporated milk
	3 oz. water
	1 oz. limewater

For the first several days, distilled water is used; then we change to tap water.

Limewater, made from Calcium Hydroxide and water, appears to make the milk easier to digest, and helps prevent diarrhea. If the animal does get soft stools, the amount of limewater is increased, water decreased in the formula to make;

Formula (B)	4 oz. canned evaporated milk
	2 oz. water
	2 oz. limewater

This treatment is usually adequate.

For persistent or very severe diarrhea, we give penicillin-streptomycin injections, or, where possible, Polymagma is given orally either mixed in the formula or straight. Polymagma is claysorb with streptomycin, made by Wyeth laboratories.

A formula change always causes a temporary stomach upset; therefore we change only when absolutely necessary, and then try to do it gradually. The initial formula is chosen with care for the animal; he then must be given the opportunity to get

used to it before any changes are made.

If the animal is weak, premature, or delicate, we immediately put it under our intensive care program, which briefly consists of; an alerted staff; an individual attendant assigned to the animal; complete recording of the animal's intake, output, temperature, etc., by that attendant. Rubber mats or anything to allow easier and more sure footing are substituted for routine bedding. The formula is diluted; we reduce the amount of milk, increase the water and maintain the limewater to make;

	3 oz canned evaporated milk
Formula (C)	4 oz. water
	1 oz. limewater

Then over a period of time, work up to the Basic Formula (A) above.

The first few days, we feed four or five times daily, then cut down the number of daily feedings when the animal "requests" it by drinking very little at one feeding, more than the normal the next, etc. As a rule, they are not fed during the night unless they are sick and intake has been obviously insufficient during the day. Vitamins are added to the formula after the first week--1 or 2 drops of infant multivitamin (Dapta) in the first bottle each day.

We use a human formula such as SMA, Enfamil, or Similac only when a digestive system much like a human baby's requires it--that is, for infant primates. Borden's Esbilac is used for cats, bears, foxes, etc.

In short then, we carefully choose the formula to be used for the animal, adapting from the Basic Formula (A) if necessary; then stick with it. The same idea goes for nipples to be used. Records are kept for an idea of immediate progress, plus a permanent reference.

This system of raising baby hoofed stock has worked well for us, I believe partly because it is a system rather than an emergency procedure. In most cases our handraised babies compare favorably in size, weight, and resistance to disease to those raised by their natural mothers.

However, for three years of raising baby mouflon, we have found them to be smaller, and more delicate than those raised naturally. I would appreciate hearing from others who have had experience with baby mouflon.

REPTILE DEPARTMENT-CINCINNATI ZOO by Johnny R. Arnett

The reptiles and amphibians are housed in a building that is one of the few remaining structures left from the original Cincinnati Zoo. The present reptile house was constructed in 1873, as a primate building. In 1961, it was remodeled for use by reptiles. There were approximately 80 specimens that comprised the reptile collection at that time.

The building is constructed of native rock that is topped by a very high dome. The architectural design is of the old Germanic type which adds a great deal to the beauty of our zoo.

There are fifty-five exhibits situated circumpherically around the building with a fairly large pool for young crocodilians and turtles located in the center. Although this mode of exhibiting reptiles and amphibians is considered obsolete by many zoos, this particular building with its sixty foot high dome and tall white pillars surrounding the lobby area lends a quaint beauty that is seldom matched by the new zoo building.

The majority of the displays are terrariums with four large cages situated on the four sides of the building. These exhibits are all decorated as naturalistic as possible with plastic plants, rocks, and gravel of different textures and colors. Since this technique of exhibiting our reptiles and amphibians was instituted, the reptile building has become the most popular section of the zoo.

The Aldabra and Galapagos tortoises are housed at the veldt with the hoofed animals and share a large outside enclosure with tapirs, anteators, and rheas in the summer months. The larger crocodilians are kept in the bird house with adjoining inside and outside pooled exhibits. Live tropical plants are used in the inside exhibits that remind one of tropical rain forests.

At this time the reptile building houses 197 species and 307 specimens. Noteworthy among these are:

20 species of crocodilians with such rarities as the broad nosed caiman, true gavial, and the dwarf caiman that is the living type specimen from Venezuela. A breeding pair of Indian fat-tailed geckos, a five foot-20 pound puff adder, a twenty foot reticulated python, six varieties of tri-colored kingsnakes that includes Blair's kingsnake, and four Aruba Island Rattlesnakes.

The entire reptile collection is not at all comprised of rarities, but rather a good, well rounded collection well represented with snakes, lizards, turtles, and crocodilians and a few amphibians with emphasis given to them all equally. All the exhibits have individual signs that are educational in nature. These signs include the common and scientific names of the exhibited specimen, their ranges and general habits. There are also four museum type displays that deal with the following subjects: What is a reptile? What is an amphibian? Where reptiles and amphibians evolved from. Venom, (The most popular.)

Because of the limited space, a new reptile building will be constructed within six years. The present structure will probably be utilized for an amphibian building that will combine with the prospective new reptile building to comprise a department of herpetology under a common supervision.

We of the reptile department of the Cincinnati Zoo are proud of the collection of herpetozoans that we care for. This pride is not based on the rarities that we have, because the bulk of our specimens are not rare, but we pride ourselves in the health of our specimens, and the fact that all cages and every area in the building is kept as clean as possible. We have not had a single snake mite in the building for more than 2½ years, due to the use of neguvon, and have not lost one specimen from the use of this miticide. We are especially proud of the fact that our mortality rate is approximately 35%, which includes the caimans, turtles, boas, and iguanas that are donated to us each year..

ZOOS OF THE WORLD-CRANDON PARK ZOO by John Hale

The Crandon Park Zoo is located on Key Biscayne, a small tropical island six miles from the mainland at Miami, Florida, and is accessible by the Rickenbacker Causeway. It is open every day free of charge. The zoo began in 1948 when Dade County bought three Monkeys, two Black Bears and a Goat from a stranded traveling show that bedded down on the key each winter. Because of the tropical climate, the animals can live outside year round. Unlike so many other zoos, and because of the island setting, the grounds are flat, and only a foot or two above sea level. The park is beautified by tropical plants and shrubs, including the hibiscus bush, spreading banyan trees, and many varieties of palms. There are three small lakes in addition to the duck pond, in which graceful Whistling Swans can be seen swimming and feeding. Several rest shelters known as "chickens" are set about the zoo for the comfort of the public. They are reproductions of Indian shelters, built by Seminole Indians for the zoo.

We have several departments as: Reptile house and moats which features a good collection of Galapagos Tortoises and Crocodiles. The reptile department has also recently constructed display quarters for keeping vipers and Cobras-this collection is still expanding. The Children's Zoo (also free), has a farm yard area complete with a little red barn, silo and farm animal corral. The petting area is always popular, and a variety of young zoo animals can be seen and handled by visitors. The bird department features a large flight cage and duck pond with seventy-two species of ducks. It also has a good collection of Ostrich, Rheas, Emus, Cranes, Storks, etc. The mammal department has a new Elephant house, a man made Aoudad mountain, cat and monkey cages, and small mammal area, etc. We have about all the standard zoo animals. We also have an administration office, zoo hospital, bird hatchery, a storage and equipment building and a zoo kitchen.

Some of our outstanding births have been: a baby Aardvark born on September 24, 1967, first born in the United States, and first captive born Aardvark to survive;

twenty-five tiger cubs from a single female, including a litter of five of which all survived, Flying Fox Fruit Bat, Phalanger, Banded Palm Civet, Fennec Fox, Fishing Cat, Clouded Leopard, and Hyrax. We have also raised rare species of waterfowl including Hottentot Teal, Radjah Shelduck, White Faced Tree duck, Marbled Teal and Black Necked Swan. The most valuable animal in the collection is "Princess", the White Tiger, who is valued at \$35,000.

We serve the population of Dade County, which is 1,200,000 and also many winter and summer visitors. During the summer, tram train lecture tours circle the zoo. A free educational program is carried on which features live animals on television, lectures to schools, clubs and churches. The zoo is gradually expanding to the south. At present, we have twenty five developed acres, and twenty yet undeveloped. Future plans include an African veldt enclosure in which visitors can see the animals roaming free.

Our zoo staff numbers about thirty, plus concession and maintenance men, part time summer help and volunteer workers. Keepers are occasionally rotated to different areas for the sake of flexibility. We do not have a morning sign in, but a keeper's report must be filled out at the end of each day giving information concerning births, deaths, breeding, new acquisitions, or any other special comments he may think necessary. It is hoped this brief description will give you an idea of what the Crandon Park Zoo is like, and that you can visit us in the future.

HAPPENINGS FROM ASSINIBOINE PARK ZOO, WINNIPEG, CANADA reported by Mrs. T.A. MacKendrick

Births:	1 Parma Wallaby	0.2 Alpacas
Acquisitions:	4 Red-breasted Geese	5 Blue Scaled Quails
	1.1 Caucasian Porcupines	1.1 Reeve's Muntjac
	1.1 Pronghorn	1.0 Polar Bear

AAZK CELEBRATED its second anniversary with a dinner-party at the San Diego Zoo restaurant on Dec. 12, 1969. Approximately eighty persons enjoyed a fine turkey buffet.

Guest speakers for the affair were Perry Alexander, AAZK Board of Trustees member, and Dr. Paul Chaffee, Director of Roeding Park Zoo, Fresno, Calif. The topics of both talks centered on the necessity of education for today's zoo keeper.

Dr. Chaffee explained the training course presented at his zoo, and also emphasized what he felt has now become imperative, a change of attitude in zoo administrations, to make this training available to interested, dedicated personnel.

The party was a huge success, and we thank all those who helped us celebrate the second birthday of our organization.

UENO ZOO, JAPAN, purchased an adult pair of maned wolf on October 25. This is the first of its kind in Japan.

CALGARY ZOO will honor National AAZK membership cards for free admission to their zoo.

A BRIEF HISTORY OF THE CALGARY ZOO by George Croome, AAZK

The Calgary Zoo was started officially in 1918, but until 1929, when a Zoological Society was formed, the Zoo was very small. From this latter date, the Zoo started to grow and in 1933, the now world famous dinosaur display was started. In the years following, the number of animals increased rapidly as the Zoo became reorganized. At this time, there were 238 specimens of mammals and 286 specimens of birds. In contrast to this, the Zoo now rates as Canada's largest Zoo with the following inventory: 145 species of mammals, 178 species of birds, 21 species of reptiles, 1 species of fish, and 3 species of amphibia, totally 1341 specimens.

The Society has endeavored, with the assistance of the City of Calgary Parks & Recreation Dept. to complete a major building project each year, with the result that

all but two of the building that were used in 1954 have been replaced. In 1954, a board of directors was appointed.

On staff at present are 9 zoo keepers and 11 apprentice keepers who are engaged in a comprehensive training program. The Zoo Director is backed up by an Assistant Director and a General Foreman, plus a very active board of directors appointed by the Zoological Society. Last year a Zoo attendance record was set, with more than 750,000 visitors.

NEWS FROM COLUMBUS ZOOLOGICAL PARK reported by W. Townley "Scotty" Roy

Winter is upon us here in Central Ohio. Many of the animals have been moved to inside quarters and various outside displays have been closed. The animals remaining outside are doing fine, despite the cold winds from the river.

In March, 1970, the zoo's authority will be changed from the City of Columbus to the Columbus Zoological Park Association, a private organization. We hope this change will mean a larger and better zoo for the people of Central Ohio.

We also are looking forward to the opening of our Children's Zoo next May. Displays will include a contact area, mouse house, gibbon flight cage, otter pool and many other exhibits of special interest to children. Also beginning operation next spring will be a replica of a Mississippi River boat, which will carry 70 passengers for a two mile ride on the Scioto River. Our next summer season should bring many visitors to the zoo.

Mr. Robert C. Reck, Curator of Mammals, will be leaving the zoo January 1, 1970, to become superintendent of a privately owned zoo in Pennsylvania.

We are sorry to report that Harold Edmonds, AAZK member and a former reporter from our zoo, has left the field to join a toy distributionship. What a shame to lose such a fine man because of low wages, a common problem in our profession.

NEW BIRTHS AND ARRIVALS INCLUDE THE FOLLOWING:

2/1 Black Bucks	1 Wallaby (Dama)
1/1 Camaroom Goats	1/1 Squirrel Monkey
0/1 Thompson Gazelle	1/1 Aoudad
0/1 Giant Anteater	1 Spider Monkey
1 Eastern Weasel	1/0 Striped Skunk
1 Albino Raccoon	

NEWS FROM STANLEY PARK submitted by Ken Kennedy

NEWLY ACQUIRED ANIMALS FROM JULY 1, 1969 TIL NOVEMBER 15, 1969:

1 Young South American Tapir	1 California King Snake
1 3½ foot long Anaconda	1 Gopher Snake
2 Rheas	10 Bufflehead
2 European Hedgehogs	10 Lesser Scaup
7 Wood Duck	

On July 16, 1969, a young Hoolock Gibbon was born at 5:00 A.M. This was the second one to the pair. The first one was born in March of 1967. Everything seemed to be going fine until October 2, when the black-capped gibbon in the cage beside was removed because of a cut hand and a white-handed gibbon put in his place. This seemed to upset the family to the point that they were more concerned about the neighbor than the young. The mother handed the young to the young of 1967 and the two of them decided that they didn't want it so let it go. It died almost immediately.

We also had the misfortune of losing a female polar bear on August 30th. She showed no sign of being hurt until the day before she died. The Dr. who did the Post Mortem said that the wound could be as much as 3 months old and the origin of the wound was believed to be a bite. After her death, the remaining 5 bears, especially the 3 which were her friends became much more relaxed.

Our River Otter contacted pneumonia (*Klebsiella pneumonia*), and we lost 2. The pool has been drained and disinfected and there won't be any put back until there is an improved den put on the side of the pool, hopefully in the early part of the new year.

The 3 young Arctic wolves, born in the early part of July are doing fine. Also the 2 Slender-tailed Meerkats born October 21, are doing fine.

TRIAL AND TRIBULATIONS OF CAPTIVE SIAMANGS AT MILWAUKEE COUNTY ZOO by Sam La Malfa
Department of Primates

Our story begins just a little over ten years ago on July 20, 1959, when Unk, our very majestic specimen of a siamang, arrived at Milwaukee County Zoo from Hanover Zoo, Germany. Eight months later, on March 31, 1960, Suzy arrived. Unk was seven years old and Suzy was six on arrival dates which makes them 17 and 15 years respectively. The female was purchased from H. Morgan Berry, Seattle, Wash.

The species was discovered by the naturalist T.S. Raffles in 1821.

Largest of the gibbon-like apes, the species known as siamang (*Symphalangus syndactylus*) is the most distinctive form of lesser ape, standing about three feet and weighing somewhere around 45 pounds, depending on sex. Our male is probably larger than average as he weighs in at around 60 pounds. Both sexes are always found to be a shiny jet black in coloration with no variation such as that found in gibbon species. Both sexes also have an inflatable vocal sac on the throat as opposed to gibbons--excepting the male concolor gibbon. This sac by nature is naked and bright red in color.

Siamangs are generally very aggressive, ill-tempered animals especially males. Unk has just that type of disposition in contrast to Suzy's very passive and gentle nature. From the very first, these two were incompatible. Upon their first meeting in July of 1960, Unk immediately attacked Suzy with intent to kill in spite of the fact that tranquilizers had been administered to him. He was driven back with hoses and returned to his quarters. Several weeks later, a second attempt was made using a greater dosage of tranquilizers. Once more there was a failure to succeed in an introduction of the two. A month later, female hormones were given to Unk. After several days of treatment, tranquilizers were again used. The third attempt proved successful. The effects of the drug left the male rather groggy. As he slumped to the floor he maintained a readiness for attack. As the effects began to wear off, he made another attempt to attack but was stopped in his tracks when the female decided it was high time she took things in hand. Suzy attacked Unk and bit him on his foot. From that time on both have been living in complete harmony. In fact, both have proven to be better than ideal parents as well as partners.

After almost two years of happiness and togetherness, Suzy gave birth to a six ounce baby female on July 10, 1962. The gestation period was 230 days. The youngster was born bright-eyed and alert in spite of looking rather pathetic and almost devoid of hair--excepting a little on her head. This event was the first time a siamang had given birth and reared her offspring in captivity. That year we were awarded a citation for the rare birth in captivity which we shared with Portland for their birth of an Indian elephant.

There were no problems whatsoever as Suzy proved to be an excellent mother taking the greatest care of her first offspring.

The second, born March 20, 1964, after a gestation period of 235 days, died 18 days later of pneumonia. That one was a male. A female was born Dec. 25, 1964, after 231 days gestation. She died five days later, also of pneumonia. Because the young of the siamang are born almost naked, it seems they are highly susceptible to pneumonia in captivity; mother stirring up drafts as she swings on ropes and chains probably doesn't help much.

The fourth was a premature birth on May 31, 1966, after 200 days gestation period. The eyes were still closed at birth whereas in normal births, they are open and alert. This one lived a few hours.

Two hundred thirty nine days of gestation produced a little male--bright and alert, on May 22, 1967. He's proven to be the most playful and active of all including his

parents. He's got quite the personality. Recently, on Sept. 13, 1969, after a gestation period of 238 days. Suzy once again became a mother. Everything is going along fine with the youngster growing each day. We haven't yet been able to sex this one as Suzy is such a protective mother it is virtually impossible to see well enough to sex it. So we have quite a nice family group of siamangs--Mom, Dad, daughter, son and the new arrival. It's been quite an experience from everyone's standpoint that was involved.

The siamang's ability to move about in captivity as well as in the wilds is quite a sight for man to witness. This locomotion known as "brachiation" is so graceful a style and is done with such precision it makes the best human acrobat appear clumsy. With their five foot armspan, they readily launch and hurl their bodies easily 30 to 40 feet between branches and perches. We have good examples of this swinging ability in our siamangs. With an adult pair, a 7 year old, a 2 year old and an upcoming youngster, this makes quite apparent all phases of brachiating at various ages. Each one seems to invent its own style and varies patterns enough to show its individuality. At times in between vigorous displays of brachiation, one or more may stop along the way to perch and perhaps catch a breath. When sitting or perching, they sit on what is known as "ischial callosities." Siamangs and gibbons are the only apes with seat pads although they do share this special adaption with many species of monkeys. Siamangs are able to perform to this great extent because they are able to move their forelimbs freely in all directions. In contrast to the siamangs and gibbons, most monkeys are true quadrupeds (traveling on all fours). This mode of travel does not make it necessary to move their limbs overhead as do siamangs. You can easily see why the gibbon forms are predominantly arboreal living in the upper canopy of mountain forests of Sumatra and the Malay Peninsula. They travel about in small family units as opposed to the greater apes excluding the orangutan.

Along with this interesting pattern of mobility is the unbelievable ability to vocalize to the extent that they do. Primarily at dawn and dusk, troops literally make the valleys ring with shrill melodious barks begun by a single animal only to set off a chain reaction causing a chorus-like union of sound. The calls build momentum until a deafening ear-piercing climax is reached only to end quite abruptly. This communal calling can be heard over two miles in the wild state. One only has to hear it once in a zoo to know what I mean.

Man can induce such calling in these animals in captivity by merely mimicking their barks until they respond. I've done this on many occasions for staff members, groups, and public visitors. It never fails to draw expressions of awe and sounds of wonder from onlookers.

As the young continue to grow and mature, they become a threat to their parents regardless of what sex they are. Both parents become so jealous of members of the same sex that the young are forced to go off on their own as soon as they are sexually mature.

This can be visually noticed among our group. Sometimes daughter, apparently envious of Suzy, cuffs her mother on head or shoulder as she swings by. Suzy may or may not react. Frequently, Unk does-by baring his fangs at his daughter. I would imagine that this is a protective measure taken in respect to his mate.

The life span of siamangs is somewhere between 20 and 30 years. Like any species, some could possibly survive to an older age.

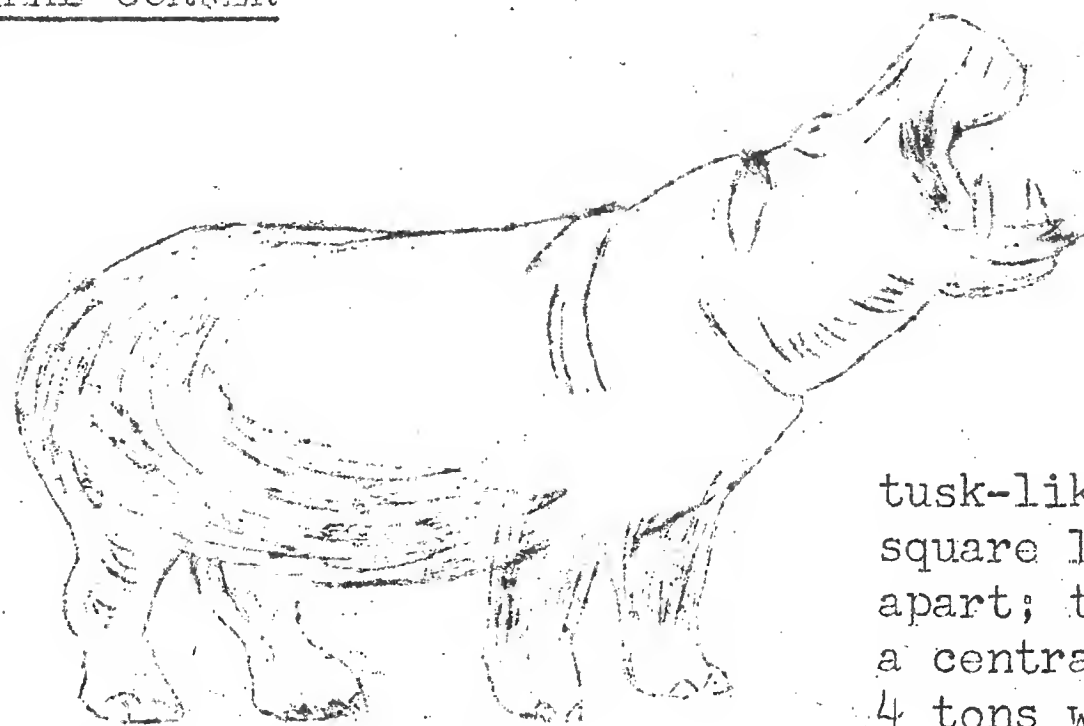
References: "The Monkey Kingdom" by Ivan T. Sanderson
"The Primates"-Life Series
"The Apes" by Vernon Reynolds

WE NEED KEEPERS AT OUR NATIONAL CONFERENCE IN MAY--PLAN TO ATTEND.

HAPPENINGS AT SAN DIEGO ZOO reported by Carl Pyle

Births & Hatchings: Male White-bearded Gnu, 2 Water Buffalo, 3 Red-tailed Rat Snakes, 1 Hartman's Mt. Zebra, 2 Rothchild's Red Lories, 1 Australian Brush Turkey, 1 Guanaco

THE ANIMAL CORNER



HIPPOPOTAMUS or RIVER HORSE *Hippopotamus amphibius*

General characters: Distantly related to pigs; feet have 4 well developed toes, all supporting the animal's weight; muzzle without terminal disc-like snout; lower jaw greatly enlarged; enormous

tusk-like canines, long & straight incisors; great square lips; short, column-like legs, placed well apart; tract shows two separate deep ruts with a central ridge. Up to 14' long, 4'10" at shoulder, 4 tons wt., enormous head, mouth 2' wide. Eyes

raised on top of flat head, ears small, slit-like nostrils on top of muzzle. Body hairless except for a few hairs on muzzle, inside ears and on tip of short tail. Large canine tusks exceptionally to 5' 4½" long (average 30") including root.

Habits: Aquatic but comes on land to feed, mainly at night. Can remain submerged for 4½". Lethargic, basking in sun either half-submerged or on sand-bar. "Yawning" is aggressive gesture, preliminary challenge to fight. Combat may be bloody, wounds quickly heal, but aim of contestants is to break fore-leg of opponent, an injury which is fatal. Community living with females and young in center and males in separate territories outside.

Habitat: Large rivers.

Food: Herbage, especially grass.

Breeding: Gestation 210-255 days, 1 young 3' long, 1½' high, 60 lbs. wt., walks and swims 5 mins. after birth.

Present status: Much reduced.

Range: Africa, formerly from Nile Delta to Cape. Now, extinct north of Khartoum, and south of Zambezi (except in protected areas).

Life Span: Over 49 years.

Other statics: Temp. 81.4 Degrees F. This is skin temperature, not body temperature.

Pygmy Hippopotamus (*Choeropsis liberiensis*), of Liberia, Sierra Leone and part of S. Nigeria: Forest streams, singly or in pairs, 5' length, 2'8" at shoulder, 600 lbs. wt., head relatively less bulky than in Common Hippo, only two lower incisors.

HORNBILL

Family: Bucerotidae

(1/12 life size)



General Characteristics: Awkward looking, immonse horny bill which is filled with air cells, has a large base, a pointed end, and saw-toothed edges. Red Hornbill coloring is white to blackish-gray with a red horn-like portion of its bill, while the rhinoceros

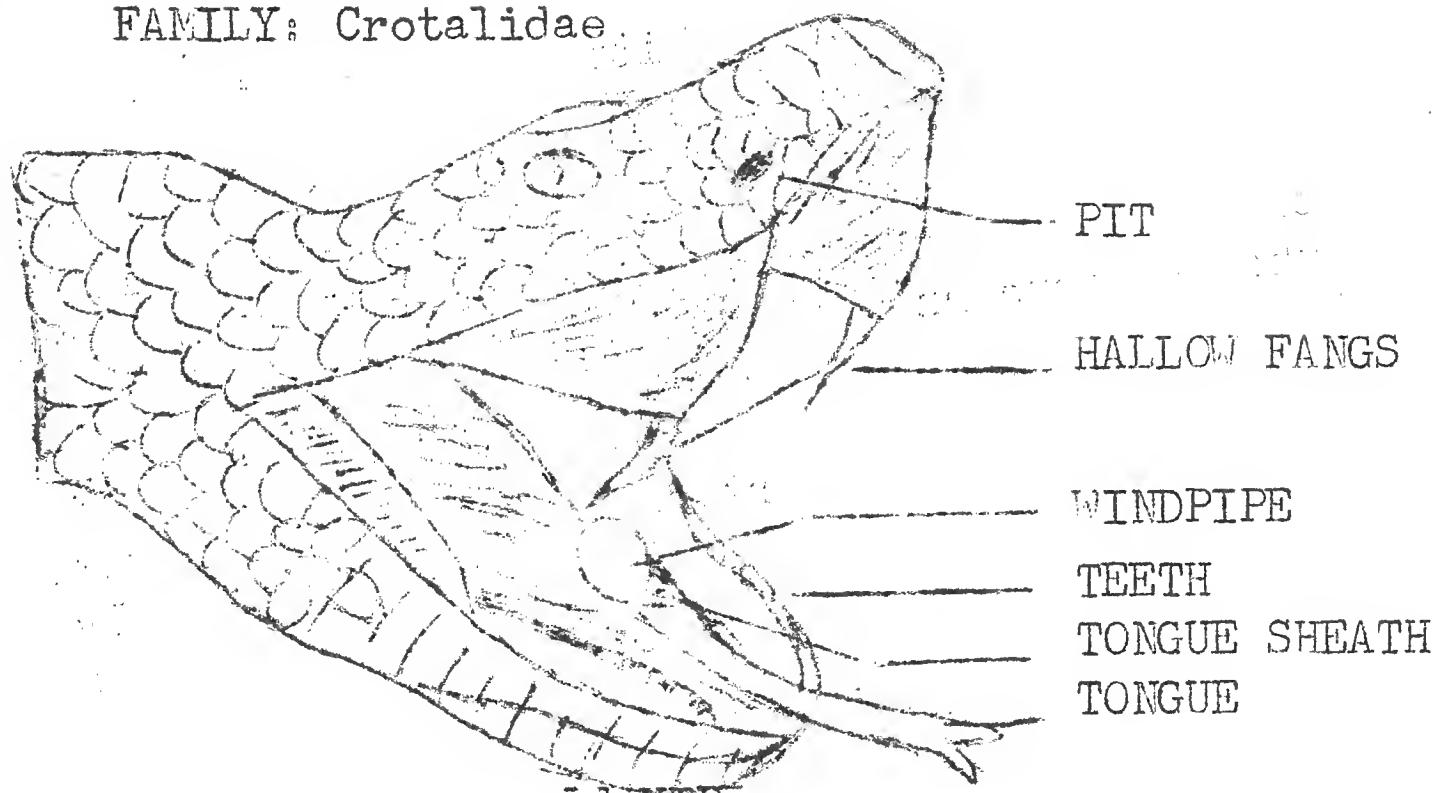
hornbill has a red to yellow growth that arises from its forehead similar to a rhinoceros.

Habits: Lives in tops of trees, female lays eggs in hallow trees & remains there until hatched.

Food: Berries, fruits, & insects chiefly, but also likes reptiles and small mammals.

Range: Tropical Africa and Asia.

PIT VIPERS
FAMILY: Crotalidae



THE MOUTH OF A PIT VIPER

General Characteristics: Poison formed by special glands and carried to victim's body via hollow fangs much like a hypodermic needle; all vipers dangerous to man but small varieties rarely kill anyone with their bite; head much broader than neck; eyes with cat-like pupils; thick bodies and rather short tails; facial pit very sensitive to heat which helps it to secure warm blooded prey.

Habitat: Bushmaster (*Lachesis muta*) & Fer-de-lance (*Bothrops atrox*) live in many part of tropical America but not the United States. Rattlesnakes (genera *Crotalus* & *Sistrurus*), Water

Moccasin (*A. piscivorus*), Copperhead (*Agkistrodon mokasen*) live in the Americas.

Breeding: Bushmaster, only, lays eggs; Others bear young alive.

Food: Water Moccasin eats frogs, fish and other small backboned animals; Rattlesnakes eat birds and small mammals. A few also eat amphibians and reptiles; Copperheads eat rodents, small mammals, sometimes insects and cold blooded vertebrates such as frogs.

Length: Water Moccasin-3½ to 5 feet; Rattlesnakes-2 to 7 feet; Copperheads-2½ to 4 feet; Bushmaster-up to 11 feet; Fer-de-lance-8 feet.

FOREIGN NEWS reported by Marvin L. Jones

The German Museum Association has agreed not to make further purchases of Orang Utan skins and skeletons except from approved and legal sources, thus adding yet another organization to those that are banning purchase of smuggled oranges and orang skeletons.

The Canadian Government has announced that no hunting will be permitted this year of the 'white coats' or very young seals in Canada. This is a final victory for Dr. Grzimek and for others who have worked to halt this killing. It will be noted that due to economic reasons the killing of seals altogether cannot be halted, and we agree with Prime Minister Trudeau of Canada that as long as humane methods are used beyond this initial 'white coat' stage it is not to be argued further.

IF YOU THINK YOU HAVE PROBLEMS, ATTEND THE TOPEKA CONFERENCE AND LISTEN TO OURS.

OTHER NEWS FROM MARVIN JONES

Following is two excerpts taken from a report prepared by Marvin L. Jones, and taken from the yearbook of the World Wildlife Fund!!!

First is an explanation of the organization and their purposes..

The WORLD WILDLIFE FUND (WWF) is an international charitable organization for saving the world's wildlife and wild places. It was established in 1961 under Swiss law and shares joint headquarters with the International Union for Conservation of Nature and Natural Resources (IUCN) in Morges, Switzerland. Its aim is to support the conservation of nature in all its forms (landscape, soil, water, flora and fauna) by raising funds and allocating them to projects, by publicity, and the education of the general public and young people in particular. For all these activities it takes scientific and technical advice from the IUCN. WWF fund-raising and publicity

activities are mainly carried out by National Appeals in a number of countries, and its international governing body is made up of prominent personalities in many fields.

The INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES (IUCN) was founded in 1948 and has its headquarters in Morges, Switzerland; it is an independent international body whose membership comprises states, irrespective of their political and social systems, government departments and private institutions as well as international organizations. It represents those who are concerned at man's modification of the natural environment through the repidity of urban and industrial development and the excessive exploitation of the earth's natural resources, upon which rest the foundations of his survival. IUCN's main purpose is to promote or support action which will ensure the perpetuation of wild nature and natural resources on a world-wide basis, not only for their intrinsic cultural or scientific values but also for the long-term economic and social welfare of mankind.

PROJECT #348 International Polar Bear Program in Svalbard (Spitzbergen)-Norwegian Expedition 1968 \$25,230

To understand fully the population dynamics and the biology of the Polar Bear (*Ursus maritimus*), adequate information is needed of population density in various parts of the Arctic; of the migration of the Polar Bear; of its denning biology; its physiology, etc. The question as to whether there exist several breeding groups or stocks, or whether we have but one single population of polar bears throughout the Arctic is of utmost importance. A Norwegian long-term program for the study of the ecology and the physiology of the polar bear was launched in 1964. Field work in Svalbard (Spitzbergen) began in 1966, with monthly serial surveys over the eastern pack ice from March to October. The survey program was repeated in 1967. In the summer of 1966, an attempt was made to trap bears from a ship in the Svalbard pack. Bears were shot with a syringe gun and immobilized with the morphine-like drug Etorphine (M-99). Four bears were trapped in four days effective work. Live trapping and marking of bears was repeated in 1967 with a much bigger effort. In two months 51 bears were successfully trapped and tagged. Drugs used were Etorphine and Sernylan. In August 1968, one month's work was carried out, and in addition to the Norwegian scientific staff, Dr. Charles Jonkel, from the Canadian Wildlife Service participated for a fortnight; and Dr. Albert W. Erickson, from the University of Minnesota, for one week. The expedition was filmed by Mr. Eugen Schumacher for the IUCN and WWF. Only 12 days were possible for adequate work and sailing. The bears were shot with Cap-Chur syringe gun and Sernylan except in one case when Etorphine was used. Sernylan was used in a concentration of 200 mg/cc. Hence a relatively small bulk was required, and a tranquillizer-different promazine drugs were tried-could be added in the same syringe. Most adult bears were shot with a standard dose of 600 mg. Sernylan, and received additional drugs by hand syringe or by a syringe mounted on a long bamboo pole. This summer guns were equipped with scope instead of open sights. With the scopes, we were able to see how the syringe hit, whether it bounced off, etc. During the expedition, a total of 32 bears were trapped and handled. One bear (#337) was a recovery from 1967, trapped only a few miles from where it was tagged in 1967. Bears were tagged with a monel metal tag and nylon rototag in each ear, all four tags with the same number. The tags had the inscription "Reward 20\$ Norsk Polarinst. Oslo, Norway." The digits that were on the tags, with an N prefix, were tattooed in both right and left upper lips. A 250 cc blood sample was drawn from each bear. Work on this project is continuing, as more knowledge is needed.

Thor Larsen

PROJECT # 450 Serengeti Research Institute, Tanzania-Study of wildlife diseases \$749

The present study was carried out in the Serengeti National Park in January 1968. Its aims are to investigate the importance and role of diseases in the control of animal numbers in the ecosystem of the Serengeti, and to establish whether wildlife is, in fact,

a reservoir of disease harmful to domestic stock as has often been alleged on a hitherto inadequately supported scientific basis. In order to obtain an idea of the pattern of disease, it was found necessary to evolve a method based upon the selection of individual animals that appeared to be sick. During 1968, altogether 316 post-mortem examinations were carried out. Material for further histological examination was made from 155 healthy animals (60 wildebeest, 40 zebras, 40 Thomson's gazelles, 2 Grant's Gazelles, 7 impalas, 6 warthogs) and from 72 sick animals.

From all animals, sick and healthy, blood was collected for serological examination. These serological results will be of prime importance in shedding light upon the role of diseases (i.e. Rinderpest, Foot and Mouth, Brucellosis, etc.) in controlling the animal population. As a result of the micro-pathological examination, it may be stated that ecto-and endo-parasites (i.e. ticks, mites, lungworm, stomachnematode) are major factors in causing diseases. For example, from 41 sick Thomson's gazelles tested, 22 showed infections with Sarcoptic Mange and 11 showed severe lung lesions due to lungworm infection. The examination of the blood smears which are taken from all animals revealed a rather high number of infected animals with blood parasites (Theileria and Trypanosomes).

Dr. Bernd Schiemann

TOPEKA, KANSAS CONFERENCE WILL OFFER A CHANCE TO VACTION AS WELL AS MEET FELLOW KEEPERS...
HOPE YOU WILL PLAN TO BE THERE.

DEAR FRIENDS;

The AAZK is planning its first National Conference to be held in Topeka, Kansas on May 5-6, 1970, and once again we are seeking support to make our meeting a huge success.

We plan to publish another post-conference brochure containing several of the important talks that will be presented at Topeka.

The advertising we sell for this brochure helps to defray our conference expenses and affords us the opportunity to share the conference with those unable to attend.

This year's brochure will be printed into a booklet 8½" x 11".

Advertising sells as follows:

Full page--\$50.00

BOOSTER ADS-NAME ONLY--\$5.00 ea.

Half page--\$35.00

Quarter page--\$15.00

COVER OUTSIDE REAR--\$65 (3/4 page)

All advertiseing limited to print only

DEADLINE DATE FOR SUBMITTING ADVERTISEMENT IS MAY 1, 1970.

We would appreciate consideration of this offer.

Brochure circulation 1000

Zoos 90

TALK PRESENTED AT SECOND AAZK ANNIVERSARY DINNER by Perry Alexander

My short talk tonight will deal with the importance of additional and continuing education and training of zookeepers at all levels, I will attempt to break this down into part.

1. The need or why? for continuing training and education?
2. Where can this training occur?
3. How can it be supported and financed?
4. The future of the zookeeper in this program.
5. The place of management in such a program!
6. Summation: The benefits of a well-executed training and educational program to AAZK and the zookeeping profession

1. The need or why for continuing training or education of the zoo keeper.

Other than finances one of the greatest problems of the zoo today is the requirement of suitable qualified personnel. If one analyzes the large turnover of personnel in many zoos today, we find the lack of training and sense of belonging are a major contributing factor. A properly trained person becomes a secure person who shows much more efficiency. A well informed person can usually anticipate problems with his charges and responsibilities and head off serious or undesirable situations.

These are not easy problems to solve but then the most desirable things are rarely easily achieved.

The diminishing supply and radical increases in cost of animals has placed a great responsibility on the individual keeper in the preservation, conservation, and reproduction of most zoo specimens. You as a keeper have a unique opportunity. Through daily intimate contact with and observation of your animals, you can provide a service and fulfill a responsibility that no one else can. One of the old policies was that of placing the new man with common expendable specimens and hope for the best and that he would learn by word of mouth or catch as catch can.

Today, this is considered a poor policy and one that usually results in poor performances. The next zoo may place the new man in what to him may be very mediocre position for a period of time in hopes that he may learn something by observing (Often very demoralizing for a person when the only thing they feel they do are the dirty jobs).

The modern zoo will place the new man with an older more experienced keeper of proven quality for the necessary time so that he may be properly trained and conditioned for the demands of this profession.

The most desirable but rarely achieved is the zoo wherein the new hand is placed in a formal training period covering complete zoology plus on the job supervised practical training.

Each of these methods of training are subject to merit and demerit based on local conditions.

2. Where can training occur?

The first place of training will be on the job with the support of any number of additional sources, for example, the zoo library in the Director's office can usually be utilized by interested keepers. Your public library will have a suitable section to start on for most any species. The research librarian will be most willing to assist you in your needs.

Because we all work full-time, we are limited in full-time additional academic education, but not stopped. If the keeper is sincere and interested in furthering himself and his profession, he will consider "night school" at a local junior college or even high school if he lacks early schooling for any number of reasons. One semester or basic and advanced biology will improve the capabilities of any zookeeper.

The age of the keeper or the years that he has been in the profession should not stop him from considering this action as the rewards are immeasurable over the inconvenience.

The next thing would be correspondence courses which have merit but for our specialized field there is almost nothing of great value to be had.

The one real bright spot that we have is the excellent publication by the American Association of Zoological Parks and Aquariums under the title of zookeeper training-- "A Suggested Guide for Instructors".

With the cooperation of management it is often possible to make arrangements with the

zoo veterinarian and/or curators or even a local biology or zoology instructor to conduct a class on a weekly basis using this manual as a guide. This may or may not be possible on job time but any effort is well worth the results.

Much more information related to this instruction course and manual will be made available in the AAZK Newsletter shortly. At this time I would mention that through the AAZPA, the manual is available to all zookeepers at the nominal cost of \$2.00 per copy and well worth every penny.

3. How can training be supported and financed?

One could go on for hours on this subject if he desired but I would prefer to stay with generalities as local conditions and resources will vary so much. From the point of management, I must say that support for education exists very strongly, and one has only to look to the ever increasing requirements for qualifying for a new or higher position in our profession of zookeeper.

As for financing education, I can only say that if it improves the individual in himself and his performance, few prices are too high. Money will not be the great sacrifice as you might think. For example, our junior colleges (in California) offer night classes without English, math and history requirements for admission, at a cost of less than \$6.00 and books in biology only cost about \$8.00.

To a few these words will fall on deaf ears as they are unwilling to sacrifice the least expensive thing that they have. Namely a couple of hours of their time each week. Some might hesitate due to age or any number of other considerations to attempt schooling or training, but I can only say from personal experience and a profound belief in education that age need not be a deterrent.

4. The future of the zookeeper:

Of a national population in excess of 180 million, the zookeeper today is in a position of being able to achieve prominence and recognition achieved by few professions. For less than 3,000 people can claim the profession of zookeeping in the U.S. The stigma and image of 50 years ago is still with us and going out slowly. In Europe, the zookeeper is held in highest esteem along with or exceeding the medical profession. It can and will be so here.

Each and everyone of us on all levels have reasons to be proud of our profession. We each have our faults but we have a tremendous responsibility of securing the existence of zoos and wildlife for future generations.

Just as our parents and grandparents enjoyed zoos, we would hope our great grandchildren might enjoy them. The present decimation of wildlife would indicate that only the better trained and educated zookeeper can insure the existence of native forms of wildlife anywhere in the world.

We could give the names of many people that preceded us and a great number still with us and adding to our knowledge daily in the profession of zookeeping, consider the background of these esteemed individuals:

Lee Crandall, Bronx Zoo, wrote the zookeepers bible.

Bell Benchly, San Diego Zoo, proved gorillas could live in captivity.

Both were trained and educated! One academically and one by personal dedication.

There is no limit on where one can go if they try.

5. The position of management.

It's still their ballgame and they are exposed to catching hell from every direction. Instead of making derogatory statements, maybe, we would be better served if we supported them.

After all they are exposed to many problems we rarely face.

Personalities are involved at times through misunderstanding but the primary goals of zookeeping must be foremost.

Summation.

All I can say at this point is wildlife can use all the help it can get from a better

understanding and informed public. It is the purpose of the AAZK to increase the principles of recreation, education, and conservation in any way possible.

As you would build a church or house you would first need a good strong foundation or supporting object. I would suggest that the builder consider the foundation and how important it is to the general structure. The individual zookeeper is the basic foundation of the zoo of today.

A SPECIAL AWARD WILL BE PRESENTED TO THE KEEPER WHO TRAVELS THE MOST MILES TO ATTEND OUR CONFERENCE.

NEWS FROM ATLANTA ZOO reported by Elizabeth Dobbs

Following is a list of recent promotions within the zoo:

J.S.DOBBS, the former Curator of Reptiles, is now the Director of the Zoo.

VERNON N. KISLING, the former Assistant Curator of Mammals, is now the Curator of Mammals.

RONALD JACKSON, a former mammal keeper, is now the Assistant Curator of Mammals.

R. HOWARD HUNT, former Assistant Curator of Reptiles, is now the Curator of Reptiles.

AAZK HEADQUARTERS will present a special program on Thursday, February 5, 1970. Dr. Joel D. Wallach, Assistant Director, Chicago Zoological Park, Brookfield, Ill. will be guest speaker. Dr. Wallach's talk will deal with husbandry and nutrition problems.

All AAZK members, wives and guests are invited.

PLACE: Elmer C. Otto Center, San Diego Zoo

TIME: 7 P.M. sharp

DATE: Thursday, February 5, 1970

FRESHWATER DOLPHINS (*Inia geoffrensis*) by Harold V. Ottesen, Jr.

Also known as Boutos, Boutu, Bufeos, and Boto Vermelho (South American names).

This animal inhabits the Amazonian and Orinocoan River systems of South American. It is restricted to freshwater. Head and body lengths are two to three meters (six to seven feet) and the tail fluke is about 500 mm (20"), weighs about 125 kg. (275 lbs.).

The coloration of this species is probably related to age: young individuals usually have greyish or black upper parts which shade into lighter grey under parts, whereas, older, larger individuals become pale, pinkish, and even flesh-colored. However, these color changes can be reversible: captive inia kept in clear, shallow water becomes darker during the six month period. It has been noted that the darkest coloration in wild, adult Amazon dolphins is in the vicinity of the blowhole, an area that is frequently exposed to sunlight because the animals must surface to breathe. Perhaps, the skin responds to such frequent exposure in clear waters and in surfacing by concentrating pigments, thus preventing sunburn.

A long, slender, slightly down curved beak is characteristic. The teeth number about 33 to 34 on each side of the jaw making a total of 132 to 136 teeth, the back 8 or 9 have a distinct keel. With the jaws closed the teeth fit in pockets of both upper and lower jaws. Very sharp!

The rounded head bears the blowhole on its summit, and seems to be offset to the right side. The blowhole itself is U shaped and placed in back of what I believe to be the echo location area. The snout is covered with short, stiff bristles.

The action of breathing varies: sometimes only the blowhole and the head are exposed; but frequently, especially when excited, the dorsal fin and the ridge of the neck are also exposed. When swimming rapidly and apparently when feeding, inia rolls to breathe. Amazon dolphins breathe about every half minute, on the average.

Inia seems to be less active than the Delphinids but will occasionally leap out of the water to heights of four feet. Speeds obtained are from two miles per hour to short bursts of ten miles per hour. They usually travel singly or in pairs, but loose groups of up to

six individuals are fairly common.

Although it appears to scan its surroundings above water at times, the senses of hearing and touch are more acute than that of vision; I believe, they are almost blind for in very clear water, I have seen them pass fish up and then locate them by other means. Inia apparently utilizes echo location to locate underwater obstacles and prey, and it also probes for food on the bottom.

They primarily feed on fish, including those that are found on river bottoms. The prey is usually less than 305 mm (12") in length. Remains of fish, gastropods, lamelli-branches, feathers of shore birds and plant roots have been found in their stomachs. These are believed to come from the stomach's of fish eaten by the porpoise, although I've seen them eat horse heart.

The single young is assumed to accompany the mother until it is as large as the parent. Gestation: probably about eight months. The dorsal fin is long and ridge-like. They have 41 to 45 vertebra and can move the head more than other small cetaceans.

Inia occupies the Amazon folklore in some ways such as taking on the shape of an attractive young lady and perambulates the river banks. Meeting with an impressionable young man, she entices him nearer to the river banks until he is close enough to touch her. Then she disappears with him beneath the waters.

The natives also believe that the Boto will attack a man in the water. They dread the creature greatly and will not spear it. The other river dolphin (Sotalia) will endeavor to protect people.

We received our three dolphins, two females, one male, May 4, 1968. They were donated by MacDonald's Restaurants. They were picked up at O'Hare Field in Chicago by Ken Schoenrock, George Dolinac, and myself in a heated metro van. Tom Reed of Hialeah, Florida, flew with them all the way and accompanied us to Milwaukee.

The porpoise were in plastic lined wooden crates 6½' x 3' x 18" deep, with just enough water to float them. Water temperature around 75 degrees, air temperature 50 degrees. We reached the zoo around seven A.M. and it took about half an hour to move the porpoise into their pool. All three animals were gating out of our hands within 5 minutes after putting them in the pool.

The size of the pool is 45' x 15' x 12' deep, with three shift cages each one being 15' x 6' x 6'. All shift cages can be independent of the main pool. The filtration system is composed of a sand and gravel swimming pool filter that delivers 600 gallons of water per minute. We can also use a diatomaceous earth filter in conjunction with the regular filter if need be. Water temperature holds around 78 degrees to 82 degrees.

They ate twelve pounds of fresh water smelt the first day. On the second day, we noticed some round spots of a brown color, blister-like in appearance. It comes and goes in a twenty-four hour period. We treated these blisters with 250 mg. of tetracycline hydrochloride. The vitamins are as follows: 0.6 cc wheat germ oil, 0.6 cc ironized yeast, 0.6 cc noviplex daily and one tablet of vitamin B12 approximately once a week. The feeding is as follows: 1/8 pound smelt in the morning with vitamins. Two pounds at noon and two pounds at 4:30 P.M. Every once in a while this is increased by two pounds. This is for each animal.

We are trying to train our porpoise to play basketball and go through a hoop. The male seems to be doing the best. They will not leap out of the water to go through the hoop, but do go through if the hoop is just in the water. The male is much more aggressive than the female and will take fish from her by biting on the neck and also by talking to her.

We lost one of the females to arsenic poisoning. This female, while we had her, seemed to be the easiest one to work with, very friendly and seemed to catch on the fastest. We go in the pool every day with them and they have shown no inclination to bite or any other aggressiveness toward us. The couple of times I was lucky enough to hear them vocally out of water, they sounded like tursiops.

References:

Walker, Ernest P. 1968 MAMMALS OF THE WORLD John Hopkins Press, Baltimore.

Water analysis:

Locale	Tank
P.H. 5.9	P.H. 7.5
Hardness less than 10 PPM	Hardness 15 PPM
Total alkalinity 17.5 PPM	?
Chloride 0.5 PPM	?
Iron 1.0 PPM	?
	Copper None
	Oxygen 6 PPM

Questions I would like answered are as follows:

Has anybody noticed the teeth of their porpoise as our male has white teeth while both of the females have brown-colored teeth?

Any suggestions on training?

Anything on breeding or gestation of Inia?

If anybody can answer these questions or wants to correspond, please write:

Harold V. Ottesen, Jr.
1352 So. 102 Street
West Allis, Wisc. 53214

IF YOU WANT TO VISIT A GREAT ZOO, JOIN US AT THE TOPEKA ZOO IN MAY...SEE FIRST PAGE FOR DETAILS...

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# URGED TO SEND THE RATE OF $7.50 TO AAZK HQ. AS SOON AS #
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# INTERNATIONAL ZOO NEWS, PUBLISHED IN HOLLAND, CARRIES #
# NEWS OF ALL ZOO AND REGULARLY SELLS FOR $15.00 PER YEAR. #
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BIRTHS AT TURTLE BACK ZOO FROM JANUARY 1 TO DECEMBER 5, 1969 presented by Peter Yoost

All births are recorded as of one day of age. This practice will of course raise our yearly death percentage but on the other hand, it will give us a better perspective of the overall picture.

MAMMALS:

1/22	/1 Muntjac	Died
3/19	1/1 Cameroon Goats	Sold
3/20	1/1 Cameroon Goats	Sold
3/28	2/ Cameroon Goats	Sold
4/14	9 European Ferrets	Died
4/14	1/ Karracul Lamb	Sold
4/23	/2 Cameroon Goats	Sold
4/29	/1 Dromedary Camel	Added to Collection

5/11	1/ Sitatunga	For Sale
5/22	/1 Sika Deer	Added to Collection
5/23	/1 Yak	Sold
5/25	/1 Sika Deer	Added to Collection
5/29	1/ Sika Deer	For Sale
5/30	1/ Yak	Sold
6/10	/1 Damara Zebra	Added to Collection
6/12	1/1 White-tailed Deer	1/ Died /1 Added to Collection
6/13	/1 Elk	Added to Collection
6/14	/1 Scotch Highland Cow	Added to Collection
6/16	1/ Elk	Died
6/18	4 European Ferrets	Sold
6/19	1/ White Fallow Deer	Sold
6/22	/1 White Fallow Deer	Sold
6/25	/1 Guanaco	Sold
7/1	1/ Pygmy Donkey	For Sale
7/15	/1 Guanaco	Sold
8/6	1/ Squirrel Monkey	Added to Collection
9/18	3 Gorbils	
9/29	/1 Muntjac	Died
10/10	/1 Llama	Sold
10/11	/1 Llama	Sold
10/29	1/ Llama	Sold
12/5	1/ Sitatunga	For Sale

BIRTHS

3/14	1 Diamond Dove	Missing
4/23	1 Silver Pheasant	Sold
4/26	1 Golden Pheasant	Sold
4/27	1 Ringneck Pheasant	Sold
4/27	1 Silver Pheasant	Sold
5/1	2 Ringneck Turtle Doves	Added to Collection
5/1	1 Golden Pheasant	Sold
5/2	1 Ringneck Pheasant	Died
5/4	1 Golden Pheasant	Died
5/4	1 Silver Pheasant	Died
5/6	1 Ringneck Pheasant	Sold
5/6	1 Golden Pheasant	Died
5/6	1 Ringneck Pheasant	Died
5/11	1 Ringneck Pheasant	Escaped
5/12	1 Canadian Goose	Sold
5/12	1 Eastern Wild Turkey	Sold
5/12	1 Ringneck Pheasant	Died
5/14	1 Golden Pheasant	Died
5/16	1 Golden Pheasant	Escaped
5/16	1 Silky Chicken	Sold
5/17	2 Diamond Doves	Missing
5/17	1 Golden Pheasant	Sold
5/17	1 Ringneck Pheasant	Died
5/19	1 Golden Pheasant	Died
5/21	1 Golden Pheasant	Died
5/21	1 Golden Pheasant	Escaped
6/1	2 Golden Pheasants	Died
6/1	1 Eastern Wild Turkey	Died
6/4	1 Ringneck Pheasant	Died
6/8	2 Ringneck Turtle Doves	Added to Collection

6/8	Eastern Wild Turkey	Died
6/8	1 Silky Chicken	Died
6/23	2 Ringneck Turtle Doves	Added to Collection
6/24	3 Egyptian Geese	Sold
6/25	1 Egyptian Goose	Sold
6/26	2 Ringneck Turtle Doves	Added to Collection
6/28	1 Egyptian Goose	Sold
7/1	4 Indian Peafowl	Sold

REPTILES

7/5 12 Eastern Ribbon Snakes

MAMMALS.....	50
BIRDS.....	49
REPTILES.....	12
TOTAL.....	111

THE VERY FIRST STEP TOWARD SUCCESS IN ANY OCCUPATION IS TO BECOME INTERESTED IN IT.
William Osler

DEAR MEMBER;

On December 12, 1969, I, once again, had the pleasure of pressing the blade of optimism into another AAZK birthday cake.

I use the word optimism because AAZK will not survive without this particular frame of mind. In the two years of our existence our accomplishments have been substantial, but far from the heights we can ultimately achieve. I can readily understand those who are discouraged about services of our organization, and I sympathize with those who feel AAZK offers little in the way of tangible proof of our purpose. But, I also hope a defeatist attitude does not engulf our present membership, because nothing will defeat our purpose faster than a serious lack of incentive.

The future of this organization rides on the initiative and the genuine concern of the zoo keeper.

Neither words, nor ideas can be effective without practical application of their intent. The zoo world isn't going to do anything to help AAZK achieve success. Our progress and our accomplishments are not going to be derived from a helping hand. They will evolve only from hard work, and our own desire to elevate our position to a recognized trade.

If AAZK removes its foot from the open door, you can be assured it will remain closed for a long time to come.

By virtue of our membership, we took the initial step to progress. Now we take the first walk into the purposes we intended to cultivate. But the only way this can be accomplished is by your support and your individual efforts to make AAZK click.

We can't expect to receive something for or from nothing, and we all realize that nothing worthwhile comes easy or cheap. AAZK cannot and will not succeed unless you, as a member, are willing to support its intended goal.

As members of a meaningful profession, we have the right to develop a code of standards, and on equal right to seek individual satisfaction in our careers, but we have to pay the price of achievement, and the price is high.

The zoo keeper has to overcome the age old adage that he should be seen but not heard. We have the task of developing our own syllabus for the universal acceptance, that we are an integral part of a zoological park.

We have to erase the idea that the zoo keeper was born of the WPA. We have to convince the zoo world that animal husbandry is the life line of their existence, but we cannot do this with a false sense of privilege. The right to seek recognition has to be accomplished by self initiative and a willingness to pay what it costs to operate the AAZK independent of any outside influence.

It would be very easy for us to become affiliated with another organization, for the

benefit of financial assistance, and within a short period of time, lose our identity, and our freedom of choice.

I would much rather see the AAZK struggle through periods of uncertainty than to panic, and give up our fight. Our membership dues are small, if we stop and consider the return of profit, from what we are capable of producing, but we must plant the seeds of our intentions before we can expect to reap a harvest. We can destroy the crop at the roots if we fail to fertilize it with a willingness of support, and a belief in our goals.

1970 should be the year of construction for AAZK.

Our foundation is settling into place, now it's time for us to erect the framework of an enduring structure, but we must do it together on our own.

Let's look forward with optimism and work for what we believe in.

Sincerely,

Richard G. Sweeney

Executive Secretary AAZK

HOLIDAY INN IN TOPEKA OFFERS THE HOSPITALITY AT THE TOPEKA CONFERENCE, MAY 5-6, 1970.

JAPANESE ZOO NEWS by Ken Kawata

First Maned Wolf in Japan

On October 25, 1969, Ueno Zoo, Tokyo, purchased a pair of adult maned wolves from Sao Paulo. This is the first arrival of its species in Japan.

The First Pigmy Hippo in Japan Dies

Chiiko, the female pigmy hippopotamus at Ueno Zoo, died of nephritis on November 24, 1969. She was born in Basel on June 12, 1949, and got around Hannover, Gelsenkirchen, and again to Basel, arrived at Tokyo on July 14, 1960 as the first pigmy hippo in Japan. At Ueno, she had two offspring and an abortion.

New Directors in Tokyo

Mr. Eiichi Imaizumi, Ueno Zoo Director, retired on December 10. He will work on WWF project in Japan at the Tokyo Zoological Society. The new Ueno Director is Mr. Asano. Mitsuyoshi Asano is the former Tama Director. The new director for Tama is Mr. Ishiuchi. Dr. Shiro Nakagawa, who recently studied zoo management at several European zoos for 9 months, was appointed general curator of Ueno.

Manatees in Japan

In July 1969, a pair of Amazon manatee Trichechus inunguis arrived in Japan from Loticia, Columbia. On August 30, they joined the two male T. manatus (arrived Nov. 1968) in the great tank at Yomiuri Land Aquarium. They are fed about 10 kg. of cabbage and meadow grass each a day. So far there are 5 manatees in Japan (Atagawa Banana and Alligator Garden has a male T. inunguis, which arrived April 1969.)

Reptile House at Osaka

Tennoji Zoo, Osaka City, will open its new reptile house in the middle of January. It will house about 40 species of reptiles.

African Garden at Sendai

Yagiyama Zoo, Sendai City (the largest city in the northern part of mainland Japan) opened the African garden on October 15, 1969. Among the animals are a pair of white rhinos (Arrived August 29. The second pair ever imported in Japan, the first white rhinos arrived at Ueno, Tokyo in August 1966) and two African elephants (which means Yagiyama is one of the three Japanese zoos which have African elephants).

Galapagos Penguin Dies

The only Galapagos penguin in Japan, a male, which had been kept at Ueno Zoo in Tokyo for 4 years and 1 month, died on August 21, 1969.

Female Komodo in Tokyo Dies

A pair of Komodo dragons arrived at the Ueno Zoo Aquarium on April 27, 1966. They had been doing well, but the female died of bleeding in the ovary on August 16, 1969.

She was 191.5 cm and weighed 37.5 kg (180 cm and 18.8 kg on arrival) and many mature eggs were found.

PITTSBURGH ZOO NEWS by George Badanich

Our 3 Siberian tigers are doing fine and seem to have settled down to the enjoyment of all the visitors. They are very friendly with most of the keepers. They are young, not quite a year old.

We've acquired a gibbon which is very sociable and likes to be shown attention by his keeper, Tom Tryzeck, and the keeper's helper, Rich Nogel.

Our underground zoo has undergone renovation, and I must say Ben Blackson has done a wonderful job of it.

Gus McClung has and is doing a bang up job as our new kitchen caretaker and dietician.

We welcome Howard Hawkins back to the Pachyderm Department. He spent a year or so handling the poverty program here at the Pittsburgh Zoo.

Carl Jones has been added to the Pachyderm Dept. and has been keeping the Hoofed Section of the Department in shape. This includes the zebras, oryx, elk, eland, blesbok, and muntjac.

David Robinson and his helper, Bennett McCann are continuing to do a fine job in the Cat Department.

NEW FEATHERS FOR THE SAN DIEGO ZOO

Following is a list of birds born since the first of January to the fourteenth of January and being cared for by the capable hand of Mr. Pat Kilroy, Sr. Keeper.

Yellow back Lorys	2 ea.	Blue Mountain Lorikeets	3 ea.
Red collared Lorikeets	1 ea.	Ornate Lorikeets	5 ea.
Perfect Lorikeets	2 ea.	Black Lory	2 ea.
Forsten's Lorikeets	2 ea.	Blue thighed Lory	2 ea.
Black throated Lorikeet	4 ea.	Rothchild's Red Lory	1 ea.
Green wing King Parakeet	1 ea.	African Gray Parrot	1 ea.
Crimson Rosella	2 ea.		

ST. LOUIS ZOO NEWS by Kathy Alexander

RECENT BIRTHS AND HATCHINGS:

1/1 Siberian Tiger
0/1 Sooty Agouti
0/1 Bison
0/2 Lesser Kudu
6/3 Aoudad
0/1 Golada baboon
1/0 Eland
5 Llama
0/0/2 Common Hippo

250 Diamond backed Water Snake
22 Corn Snake
7 Spockled Kingsnake
4 Copperhead
8 Mojave Rattlesnake
5 Pygmy Rattlesnake
5 Massasauga
5 Blue Racer

7 Ostrich
3 Common Rhea
1 Ruddy Duck

2 Cayenne Rail
1 Brush Turkey

RECENT ACQUISITIONS:

0/1 Binturong
0/1 Margay
0/2 Klipspringer
1/2 Spoke's Gazelle

1 Blond-phase Indian Rock Python
1 Sunbeam Snake
1 Elephant Trunk Snake
1 Blair's Kingsnake
1/1 Saddle-back Galapagos Tortoise

1/0 Woolly Monkey
1/0 Grevy's Zebra
1/6 Sika Deer

2 Jumping Vipers (baby)
1/1 Basiliscus Lizard
0/1 Florida Peninsula Cooter
3 American Crocodile

1 Java Green Peafowl
5 African Jacana
6 Flower Pecker

1/2 Southern Green Pheasant
1/0 Scintillating Copper Pheasant
1/1 True Silver Pheasant
1/0 Blue-eared Pheasant
22 Various Finches
1/1 Siamese Fireback Pheasant
1/1 Yellow Golden Pheasant
1/2 Lady Amherst Pheasant

1/1 Crested Curassow
1/1 Razor-billed Curassow
2/2 Lesser Brazilian Teal
1/0 Greater Brazilian Teal
2/2 Marbled Teal
1/0 Hooded Merganser
0/2 Cheer Pheasant
1/0 Bornean Crested Fireback Pheasant

Three of our staff members have been involved in changes. Moody Lentz, formerly General Curator, was made Assistant Director as of October 1. Charles Hoessle was made General Curator and remains Coordinator of the Education Department. Ed Schmitt, former Education Assistant and Assistant Curator, has been put in charge of the Bird Division. Our Children's Zoo outdoor area has been closed for the winter. The present plan is to keep the inside area open all year and the 2½ acre outside area open on fair weather weekends throughout the winter season (October through April) as well as summer.

The contact area at the Children's Zoo presently houses a young bison and a young male eland. They both seem to have taken well to their new home and the contact they get.

On October 11, 1969, the second Keeper-Keeper marriage at the St. Louis Zoo took place. Kathy Arend and Jim Alexander were married. Both are members of AAZK.

One morning in October became unforgettable for many keepers and staff members at the St. Louis Zoo. "Mr. Moke", a 14 year old chimp who retired several years ago from the Chimp Show, managed to open the lock on his shift cage. During his brief reign of the zoo grounds, he tried to engineer the zoo train and chatted with several staff members through their car windows. He briefly ventured to a road bounding the Zoo where he peered into windshields and flexed radio aerials, but decided he preferred the zoo grounds. He was quickly tranquillized by zoo employees and quietly returned to his enclosure in the Ape House. Moke became famous for his utterance of the words "mama" and "no" in his earlier days.

On Christmas Day, a second set of twins were born to our pair of Nile Hippo, "Jeepers" and "Peepers". Both babies are doing well and have been named "Chris" and "Noel". Their sex hasn't been determined as of this writing. The other twins were born in April, 1963. To our knowledge, we have the only hippos in captivity in the United States to produce twins.

October 17, 1969, marked the end of a 48½ year long career in zoo work for a keeper at the St. Louis Zoo. William "Willy" Raaf retired after spending 45 years in the animal division. Most of this time was spent as the small mammal keeper in the Small Mammal Wing of the Reptile House.

Editor note: Our best wishes to Mr. Raaf for a long and happy retirement.

CHANGE IN OFFICERS EFFECTIVE JANUARY 5, 1970

Mr. Ken Kennedy, Stanley Park Zoo, Vancouver, B.C. has been appointed Vice Chairman of the National Board of Trustees to replace Mrs. Judy Fields. Mr. John Wortman, Topeka Zoological Park, Topeka, Kansas has been appointed to the Board, replacing Judy Fields, who recently submitted her resignation. Mr. Carl Pyle, San Diego Zoo will serve as Conference Program Chairman for the Topeka Conference in May.

NEWS FROM TOPEKA ZOOLOGICAL PARK reported by Ken Kawata

At 7:30 P.M.; 17 November 1969; a meeting of the Topeka Chapter of the AAZK was

held in the Education Room of the Large Mammal Building. Gary Clarke, Zoo Director, explained the design of the Cassowary Building, a new project for the Zoo, and told of progress on the Rain Forest Building planning. After that, John Wortman, a regional coordinator of AAZK and our hippo-primate keeper, told of his recent trip to the Chicago zoos and the Milwaukee Zoo and showed his most beautiful color slides. Cake and punch were served. Nine members attended.

The First Zoo-born Gorilla Pair!

Topeka Zoo recently established the first and only pair of non-related captive-born gorillas in the world.

On 29 September 1969, Max, the male baby gorilla, arrived at the Zoo. He was born at the Dallas Zoo on 7 March 1969. Max was purchased for \$5,000 by the Downtown Topeka Rotary Club as a gift to the Zoo and people of Topeka and Kansas.

Tiffany, the female, was born at the Kansas City Zoo on 15 July 1968. The purchase price of \$5,000 was donated by citizens of Topeka—from a small child to a big organization—in less than a week! Tiffany arrived at Topeka on 15 October 1969. We now have the first gorillas in Kansas, and the first non-related captive-born gorilla pair in the world.

Zoo Management Trainee Established

Through the efforts of Mr. Dennis Showalter, Park Superintendent, and the Topeka Zoo staff, the Topeka Park Department recently established the position of Zoo Management Trainee for the Topeka Zoo. "Professionalism and dedication" is one of our Zoo Director Gary Clarke's favorite phrases. The new position will enable those keepers who desire to advance in the Zoo profession the opportunity to learn about and participate in the administration and management of the Zoo.

Recent Happenings at the Topeka Zoo

Accessions:

1/0 White-handed gibbon
1 Cereopsis goose
0.1 Kodiak Bear
0.1 Sitatunga
1.1 Raccoon dogs
1.0 Gemsbok

Removals:

1.1 Grizzly bears
1.1 Debrazza monkey

1.1 Echidnas
1/0 Orangutan
1.1 Lowland gorillas
0.1 Brazilian tapir
1.1 Arctic foxes
1.1 Madagascan tenrec

2.1 Galagos
1.1 Moor Macaque

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