## GORILLAS

N Standing quietly at the edge of the gorilla enclosure at the Los Angeles Zoo, screened by trees, I watch Kelly and

Angel, the two infants, wrestling each other on the grass. Chris, their father, reclines in the shadows, watching the

crowd. Cleo, Kelly's mother, saunters non-

chalantly to the edge of the moat nearest me,

seemingly interested in the folks at the edge

of the enclosure. Suddenly her right arm

flashes out, up and over, and a flying object

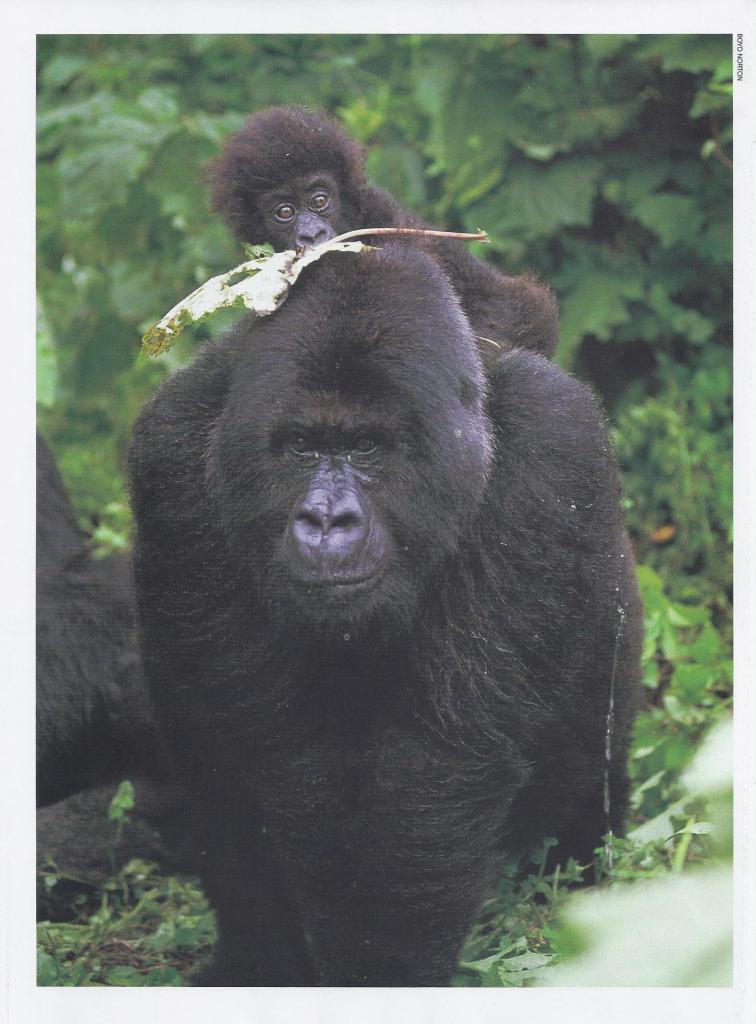
hurtles toward me. I step back as a clump of

grass and dirt falls at my feet. Cleo has not even glanced in my direction. Throwing things can be part of a gorilla's by Sharon Elaine Thompson

aggressive display or a way to simply let off steam. For silverback males, it may be part of a series of actions that

## OUR MISSI





includes the gorilla's crowdpleasing chest thumping. But a gorilla's behavior only incidentally provides entertainment for zoogoers. In the wild, the way a gorilla behaves keeps it alive, healthy and increasing in numbers. In more and more captive situations, an animal's behavior determines how it is managed, and how best to design an enclosure to fit its needs. In fact, the public today can see and enjoy the gorilla's "wild" behaviors mainly because more zoos have learned to keep these primates in family groups in naturalistic enclosures.

here are three subspecies of gorillas. Although in appearance the three types of gorilla are similar, there are enough minor anatomical differences to class them differently. The western lowland gorilla (Gorilla gorilla gorilla) is the one seen in virtually all zoos. In the United States, only the Houston Zoo has an eastern lowland gorilla (G. g. Oklahoma City Zoo. (The only other zoo in the world) subspecies is the Antwerp Zoo in Belgium.) Thanks to the work of George Schaller and Dian Fossey, the mountain gorilla (G. g. beringei) is perhaps the best-known subspecies. While wild mountain gorillas have been the most intensively studied, there are none in captivity.

For gorillas in the wild, foraging is almost a day-long affair. Ambling along in the direction chosen by the dominant silverback male, they snatch leaves, stems, fruits and flowers from the long buffet table of the rainforest. (To process this fibrous diet, the gorilla's intestine is 26 feet longer than ours, giving the animal its familiar potbelly.)

This pattern of nearly constant nibbling poses a major challenge to zoos. The meal provided to gorillas in the morning is high in nutrition, but it doesn't take long for the apes to devour it, leaving them with nothing to do for the rest of the day. Because their natural behavior spurs them to eat continuously, many zoo gorillas regurgitate and re-ingest ("R & R") what they have already eaten, explains Zoo Atlanta Director Terry Maple, who, besides holding a doctorate in comparative psychology, is also the author of several texts on primate behavior. Some experts believe that social isolation early in life, lack of environmental stimulation, or stress may contribute to the habit. No matter what its causes, "R & R" is not a pretty habit, at least to human sensibilities.

Many zoos now feed the apes several times a day and make the edibles more difficult to get. Keepers at Chicago's Lincoln Park Zoo scatter seeds and grains in the hay lining the enclosure. Zoo Atlanta provides vegetables that require



field researchers, the strong bond between gorilla

generations is more clearly understood.

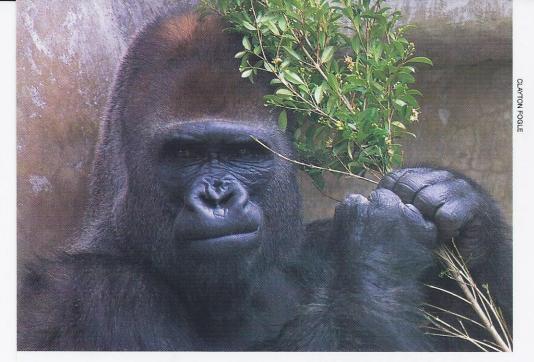
Foraging and eating is a

social affair, both in the wild and in zoos. These

are mountain gorillas in Rwanda.



FALL 1990

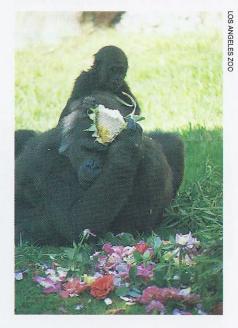


n the wild, gorillas

spend much of their day foraging and dining on leaves, stems and other vegetation. Zoos try to provide the same kinds of foods, dispensed throughout the day, to stimulate natural behavior.

he Los Angeles Zoo
occasionally treats its gorillas to home-grown

sunflowers and roses.



some dexterity to eat, such as unhusked corn or artichokes. The Los Angeles Zoo's volunteermaintained gorilla gardens produce plants and flowers to add variety to the apes' diet. Another bonus is that visitors see gorillas strip their food with their teeth, watch them use their huge, skillful hands to pick up sunflower seeds, and are treated to the incongruity of a 450-pound silverback munching on a rose.

Tackling R & R is tougher. Increasing the amount of food provided often discourages the habit, but so far zoos haven't eliminated it completely. "I have a feeling that what's really needed is just huge amounts of foliage and bark," says Thaya duBois, assistant director of research at the Los Angeles Zoo. "What I'd love to do is dump browse in their enclosure until the gorillas are buried...just like they are in the wild."

Keeping the animals healthy and busy is only a small part of a zoo's responsibility. Says Maple, "Any zoo that doesn't do all it can to stimulate the animals to breed and to parent is missing the point." It's worth noting that over a hundred years passed from the time the first gorilla was taken into captivity, in 1855, until the first captive birth occurred at the Columbus Zoo in 1956.

One of the first things keepers learned is that it takes more than a pair to reproduce — gorillas placed in more natural social settings tend to breed more successfully.

In the wild, both female and male gorillas leave their family group to join other bands or to start their own. Captive animals, however, must "emigrate" through breeding loans between zoos. (One exception was the Los Angeles Zoo's female, Cleo. Apparently dissatisfied with life in her assigned group, she was boosted over the wall by another gorilla into the adjacent enclosure, where she immediately bred with the resident male gorilla.) In 1983, gorilla-keeping zoos in North America formed the gorilla Species Survival Plan (SSP) to facilitate the exchange and management of the animals. As a result, captive numbers have increased — to just over 300 individuals.

Gorillas are powerful, intelligent animals, each with its own distinct personality. While wild gorillas can choose a compatible group when they emigrate, captive animals must be integrated into a group that the SSP and zoo managers choose for them. It is usually a tense time for gorillas, keepers and managers alike. When the Cincinnati Zoo's 6-year-old female, Rapunzel, was moved to the Los Angeles Zoo, she had had no experience with an adult silverback. So when she slapped the male, Tzambo, and he grabbed her, she screamed, bringing another female, Evie, to her rescue. Later, Tzambo dragged Rapunzel halfway across the enclosure before Evie could drive him off. Rapunzel was shaken but unhurt. "He could have killed her if he wanted to," says duBois. But Tzambo made his point — nobody slaps a silverback with impunity.

ccording to Ben Beck, associate director of the National Zoological Park in Washington, D.C., when introducing gorillas to each other, "the best thing is simply to open the door." He doesn't believe that previous visual contact is necessary, and that it may actually lead to more aggression when the animals finally do meet.

But at Zoo Atlanta, the gorilla facility is arranged so that animals can see, touch and smell each other before they are brought together. Terry Maple believes that controlling contact and letting the animals get used to one another prevent injuries later. When Atlanta's male gorilla, Willie B., who had been kept alone for 27 years, was to be introduced to his new mates, keepers gave the two females several months to form a bond before they were introduced to the big silverback.

Indeed, the relationship between females in some gorilla groups is an unusual one, says duBois. She has noticed that if a

## "Urban Gorilla"

A new documentary film examines the lives of gorillas in zoos.

Hollywood abounds with stories about difficult performers, but at least actors and actresses don't try to eat sound microphones. Gorillas, discovered Allison Argo, producer/director of "The Urban Gorilla," a new documentary film, are another story.

For the past three years, Argo and partner Bob Collins have been filming gorillas in captivity in the United States, England, the Netherlands and the Congo. Along with the technical and logistical difficulties of production, they have had to deal with the personalities of the "cast" itself.

In the Congo, a gorilla snatched Argo's sheet of interview questions and ate it. In one zoo, a male gorilla took a dislike to the cameraman but had no objection to working with a woman. In another zoo, a female gorilla was so offended by Argo's presence that the filmmaker had to direct the segment from a monitor outside.

Nine years ago Argo started talking about making a film that would focus on captive gorillas, pointing up the obstacles to their survival. Finally, she says, she got tired of hearing herself talk about it and decided to do it.

Argo's film includes a variety of firsts, including the introduction of Zoo Atlanta's silverback, Willie B., into a natural-habitat exhibit after spending 27 years alone in a sterile, indoor environment. Her crew recorded the hair-raising introduction of the Cincinnati Zoo's female, Rapunzel, into a group at the Los Angeles Zoo. Argo also captured the touching reunion — after nearly a four-year separation — of 23-year-old Pongi and the keeper who raised her.

But at all times, says Argo, they were careful to put the gorillas first, taking pains to minimize any stress filming might have

on the animals. "We tried to act as if we were guests of the gorillas," she says. "I wish every zoogoer felt that way."

Argo hopes that "The Urban Gorilla" will raise the public's awareness of gorillas and that it will inspire individuals and communities to support their zoos' efforts to provide the best possible care for their apes. "I personally feel very protective of the gorillas," she says. "I would go to great lengths myself — as an individual — to protect their species in captivity and in the wild." — S.E.T.

OBERT COLLINS

n the past, zoos often

removed young gorillas for hand-rearing, but that

trend is changing.

Without a doubt, the

human fascination with gorillas will continue to

grow as our knowledge of these powerful — yet

vulnerable — animals increases.

male has to be removed, aggression between the females increases, and that they rarely sit near one another. DuBois believes this is because the females are unrelated and have no strong family bond. She speculates that although the females are attracted to the silverback, they may not really care for each other. But while the male is around, they need each other for protection if he becomes too aggressive.

The purpose of zoos' careful matchmaking and cross-country transfers is, of course, to produce baby gorillas. But, until fairly recently, by misunderstanding the needs of gorilla mothers, zoos often created problems when it came time for the delivery. According to the National Zoo's Ben Beck, it was believed that separating expectant mothers from the group would be less stressful for the animals. Pregnant gorillas were often kept in a small holding area. Then, when the baby was born, the

zoo director and veterinarian usually showed up, anxious that nothing should go wrong. Beck equates the gorilla's experience to that of a pregnant 15-year-old girl taken from her family and locked in a closet with the two people she fears the most.

In such cases, the female often seemed unable to care for her baby, neglecting or even abusing the newborn. "It just became a truism in zoos that if a mother hadn't had experience, she couldn't possibly raise her offspring," says duBois. So zoos began to separate the infants from their mothers for hand-rearing.

ontrary to what was previously thought, says Beck, female gorillas are "genetically hard-wired" for motherhood. While clumsy at first, they get better at parenting as they go along. Successful raising of young in the wild seems to go hand in hand with group contact. Dr. Ron Nadler, of the Yerkes Regional Primate Research Center, in Atlanta, Georgia, has noticed that females without infants in the wild seem to stay at the periphery of a group. But once a baby is born, they move in close to the silverback, and gain in protection and status. The presence of other females also influences the mother to care for her infant. Nadler believes. He once noticed that a captive female who had been neglecting her infant began to pay attention to it when another female was put in with her.

Zoos have come a long way on the road to understanding gorilla behavior, but in many ways the journey has just begun. Increased knowledge can only lead to a deeper respect for these animals, considered by many to be the greatest of the great apes.  $\square$ 

Sharon Elaine Thompson is a free-lance writer based in Glendale, California.

