

SCIENCE NEWS OF THE WEEK

Chimp Killings: Is it the 'Man' in Them?

The good news for students of evolution is that chimps appear to behave more like humans than was previously thought. Unfortunately, that's also the bad news. "I always thought that chimps were rather nice, more gentle [than humans]," says Jane Goodall, who has been observing and popularizing ape behavior for nearly two decades. "Now we know there is a strong similarity to humans."

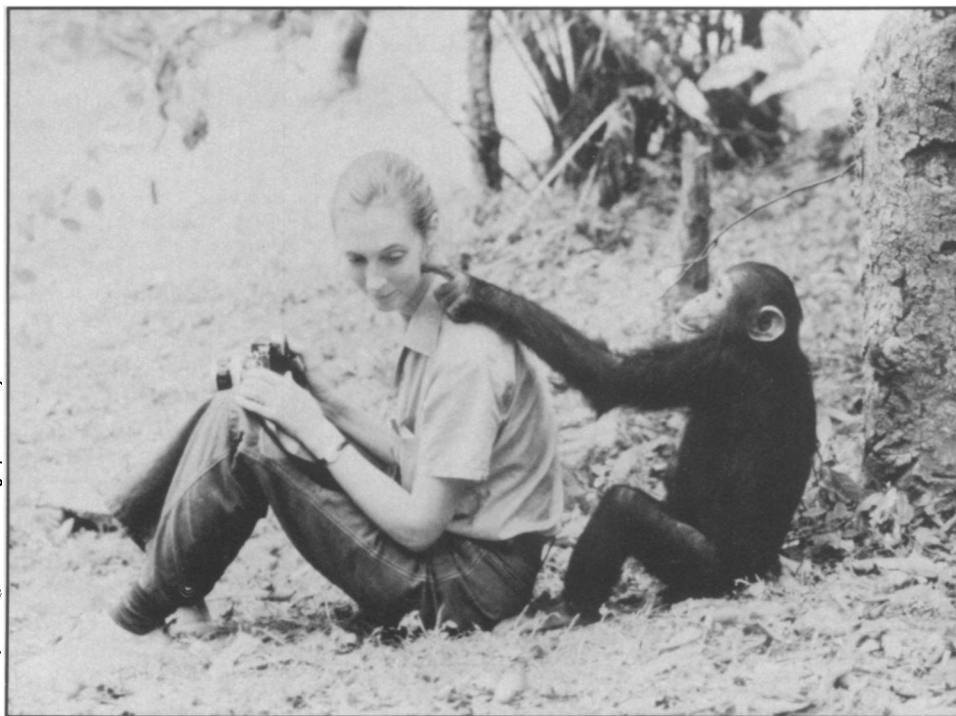
Goodall spoke not of food-gathering, work habits or child-rearing — although she did reveal the first observed in-the-wild birth of twin chimps — but of killing. Calculated, premeditated murder, for no apparent survival-related reason, had never been seen nor even hinted at since Goodall began studying chimpanzees in Tanzania's Gombe Stream Reserve in 1960. But at a news conference in plush National Geographic Society offices, she described gangland-style chimp attacks brutal and savage enough to be considered human-like.

"It seems that we have had the dubious privilege of watching a phenomenon rarely recorded in field studies — the gradual extermination of a social group by a stronger neighboring group," she says. The chimps had been living in one coherent colony until 1970, when the group began to split up "because there were too many males ... too much tension," she says. By 1972, a band of seven males and three females had left the original group and formed their own community to the south; that's when Goodall and her colleagues observed a noticeable cooling of relations between the two colonies.

The first attack came in 1974 — several of the 11 males in the original community attacked a single male from the splinter colony. Ordinarily, when chimps have fought in the past, attacks lasted for only about one minute. "But this lasted for 20 minutes," Goodall recounts. "It was very savage and brutal." The victim died.

Since then, a series of at least five gang attacks have wiped out all seven of the southern colony males. The attackers would strike only when a male was on his own or with a female, but not with another male. "The attacks usually involved young males, who usually used their hands, feet and teeth," Goodall says. But one older male was seen throwing a rock at a prostrate victim of another chimp. One attack did involve an elderly female, who died as a result of the beating. The last surviving male was lost last year. "They broke his leg and beat him up," says Goodall. "Nobody's seen his body, but almost surely he's dead. Nobody's seen him since the attack."

Biochemically and genetically, human and chimpanzee are nearly identical, various studies have determined (SN: 4/15/78,



Most Gombe chimps are friendly, as 6-year-old "Freud" reminds Jane Goodall.

p. 229). And chimps may have moved even closer to humans on the evolutionary scale when it was found that chimps and orangutans possess a sense of self-awareness (SN: 5/28/77, p. 340). But this is the first time Goodall has witnessed such a series of unprovoked, senseless killings. (Japanese scientists elsewhere in Tanzania have observed similar conflict, she says, but no deaths occurred.)

Another first, the birth of twins Gyre and Gimble, took place six months ago. "The most significant thing is that the mother [Melissa] is raising them on her own," says Goodall. Baby chimps depend on mother's milk for their first three years of life, and it's difficult enough for a mother to carry one baby while at the same time traveling around the forest searching for food sources, Goodall says.

"I gave them a week [to live]," she says. "But now they're six months old and a little behind in normal development, but basically healthy." However, life thus far has not been without tribulation and some danger for Gyre and Gimble. One of the babies hurt its foot recently and disrupted the family's life by screaming and requiring frequent nesting stops. These extra problems cut down Melissa's daily feeding time from eight hours to about one hour. "We helped a little by giving her antibiotics in her bananas," Goodall says. This may have not only strengthened the mother but perhaps helped cure the baby's foot, she speculates.

Another, more bizarre, threat to the

twins was a mother-daughter pair of chimps that Goodall estimates had killed and eaten 10 newborns. At one point, the daughter cannibal tried to snatch the twins from Melissa, but failed when the mother made a daring leap from one tree to another. The twins have also been protected by male chimps, including Satan, who is believed to be their father. It is said that when Satan first saw the pair, he stared at them for 10 minutes.

In contrast to her elation over the twins' survival, Goodall is obviously disturbed and puzzled by the group killings she and others observed. "We're not sure why the attacks took place," she says. It is possible that one or both of the groups may have felt threatened by the other's existence, as well as that of a third group that moved into the reserve but had no contact with the others, she says. What was left unsaid is the possibility that the chimps may have killed for no specific reason, but simply out of aggression, territorial or otherwise.

Human presence has been known to stir up aggression in animals, including chimps, but Goodall says direct feeding of chimps by humans is kept to a minimum. The primary aim of her continuing work, Goodall says, is to construct a behavioral profile of the postulated "common ancestor" to man and chimp. "We've got an abundance of fossils that tells us what early man looked like and how he walked," she says. "But the only way we can get at his behavior is by comparative studies with these chimps." □