J. Goodall Chimpanzees of the Gombe Stream Reserve Primate Behavior, ed. I. DeVore Holt Rinehart & Winston NY, 1965. p.440

The chimpanzee is primarily a vegetarian (see Goodall -in-press). - Seventy-three different types of vegetable foods have been collected, consisting of 37 fruits, 21 leaves or leaf buds, 6 blossoms, 4 seeds, 3 stems, and 2 barks. (This list comprises a total number of 63 different species of plants and trees; a complete list will be published at a later date.)

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-- In- the Gombe Stream Reserve chimpanzees were seen feeding on two types of gall, on two species of ant, and on termites.

J. Goodall

Chimpanzees of the Gombe Stream Reserve Primate Behavior, ed. I. deVore Holt Rinehart & Winston NY, 1965. p.443/4

Chimpanzees were seen feeding on meat on nine three times the prey was identified as occasions; a monkey (twice the red colobus, <u>Colobus badius</u> graueri) and once as a young bushpig (<u>Potamochoerus</u> On four occasions the prey was not koiropotamus sp.) identified. Bones (once the toe bones of a monkey) were twice found in chimpanzee feces. On another occasion, the skin of the tail and part of the rump --of-a-monkey was found on a termite hill where two male chimpanzees had been feeding; the skin was still damp and it was presumed that they had left it there. Hunting and killing was seen once only, when the prey was a red colobus. When the chimpanzees were eating the young bushpig referred to above, two adult pigs remained in the vicinity for an hour,

chasing a juvenile chimpanzee that climbed to the ground. On one of the occasions when the flesh being eaten was not identified, a female bushbuck remained near the chimpanzees all night and was twice chased by an adult male; it is possible that the chimpanzees were eating its young.

J. Goodall Chimpanzees of the Gombe Stream Reserve
Primate Behavior, ed. I. DeVore
Holt Rinehart & Winston N.Y. 1965. p.445

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On the only occasion when hunting and killing were observed, the prey, a red colobus monkey, was sitting in a tree when an adolescent male chimpanzee climbed a neighboring tree, and remained very still as the monkey looked toward it. A second adolescent male chimpanzee then climbed the tree in which the colobus was sitting, ran quickly along the branch, leapt at the colobus, and caught it with its hands, presumably breaking its neck, as it did not struggle or call out. .The other adolescent then leapt into the tree, and five other chimpanzees, including a mature male and a late infant-two, climbed up. The mature male pulled until he had half the carcass. Subsequently I observed that the mother of the infant had acquired a large ... piece of meat and afterward the other chimpanzees, with the exception of the infant, also managed to get small pieces or scraps. On the other occasions when

I saw meat-eating, the prey was initially in the possession of a mature male. Each time the other chimpanzees in the group sat close to him, holding out their hands with the begging gesture.

J. Goodall Chimpanzees of the Gombe Stream Reserve Primate Behavior, ed. I. DeVore Holt Rinehart & Winston N.Y. 1965. p.455

Chimpanzees normally show a good deal of tolerance in their behavior toward each other. This is especially A typical true of males, less so with females. instance of tolerance of a dominant to a subordinate animal occurred when an adolescent male was feeding from the only ripe cluster of fruits in a palm tree. A mature male climbed up but did not try to force the he merely moved up beside the younger other away; and the two fed side by side. Under similar circumstances a subordinate chimpanzee may move up to a dominant one, but before attempting to feed it normally reaches out to touch the other on the lips, thigh, or genital area.

Tolerance between males is particularly noticeable during the mating season, as for example on the occasion described above when seven males were observed copulating with one female with no signs of



aggression between them; one of these males was an adolescent. Tolerance of mature and adolescent chimpanzees toward infants is discussed on page 460.

J. Goodall Chimpanzees of the Gombe Stream Reserve
Primate Behavior, ed. I. DeVore
Holt Rinehart & Winston N.Y. 1965. p.466

Instances of attack were seldom observed, and mature males were seen fighting on only one occasion, when William took a bite of fresh meat on which Huxley, an old male, was feeding. Huxley, with a scream, seized William and bit him on the shoulder, and J.B., a large and powerfully built mature male, chased him from the tree. After a few moments both males rejoined Huxley, who then reached out and hit William four or five times on the scrotum, while J.B. bit his shoulder. J.B. then hit and pulled at William's scrotum: the latter screamed loudly but did not try to escape or retaliate. No signs of injury were visible after the encounter.

Other instances of attack behavior are described elsewhere (see below).

On one occasion a mature male climbed a tree ten feet above me (I was lying down) and worked himself into a rage,

screaming, hitting the trunk, and shaking the branches.
After some five minutes he climbed down, moved behind me,
paused, and then with a short yell hit my head, presumably
with his hand. When I sat up he moved slowly away, still
showing signs of excitement.

J. Goodall. Chimpanzees of the Gombe Stream Reserve Primate Behavior, ed. I. DeVore Holt Rinehart & Winston N.Y. 1965. p.472

It is important to remember that the behavior described in this chapter applies specifically to a chimpanzee population in a rather atypical habitat. One noticeable difference between the Gombe Stream chimpanzees and those of the closed forest habitats described by Nissen, Kortlandt and Regnolds is that the density of the population per square mile appears to be much greater in the latter type of habitat.

- 2. A. Kortlandt, 1962, "Chimpanzees in the Wild" Scient.
 Am. 206(5): 128-138
- 3. Vernon Regnolds & F. Regnolds "Chimpanzees of the Budongo Forest" l.c. p.368-424



Two of the most interesting behavior patterns that were observed during this field study were, first, that these chimpanzees hunt and kill fairly large animals for food and, second, that tool-using is a relatively common practice.

Meat-eating has bot, to my knowledge, been recorded from other parts of the chimpanzee's range in Africa, although if it is assumed that human infants are in fact taken for food, the report that five babies were carried off in West Africa suggests that carnivorous behavior may be widespread.

Although meat-eating cannot at present be regarded as common to the chimpanzee species as a whole, the ability to utilize natural objects as tools is undoubtedly a species characteristic of the chimpanzee throughout its range.

Merfield describes a group of chimpanzees poking sticks into an underground bees' nest to obtain honey, and Beatty observed a chimpanzee using a stone to break open the kernel

of a palm nut. Both these observations were made in West Africa. The Gombe Stream chimpanzees, however, in their ability to modify a twig or stick to make it suitable for a definite purpose, provide the first examples of free-ranging nonhuman primates actually making very crude tools.

1. (1954)

2. Beatty, H., 1951, "A Note on the Behaviour of the Chimpanzee", J. Mammal., 32(1): 118

