Man: A Course of Study
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BABOONS

This book is based primarily on the field studies of African savanna baboons by Irven DeVore, Professor of Anthropology, Harvard University.
A baboon is a tree-climbing monkey
Baboons can stand on two feet, yet they walk on all fours. They have long, pointed teeth as sharp as a tiger's, but they eat mainly grass. They are fierce fighters that hardly ever fight.

They find their way through the plains of Africa easily, tree by tree, rock by rock. They travel swiftly on the ground and in the trees. Swimming across rivers gives them no trouble at all. Yet each baboon dies close to where it was born.

They spend many of their twenty years learning.

Yet baboons cannot talk. They cannot talk about what happened yesterday, or make plans for tomorrow. A baboon cannot add $2 + 2$, or laugh at a joke. Also, a baboon has no name.
These monkeys live on the ground during the day, when they are free to roam around in search of food.
But at night they leave the ground to sleep in the safety of tall trees or steep cliffs.
MOVING ACROSS THE SAVANNA

They often go out on the open grasslands seeking food,
or they may find their food among the scattered trees of the grasslands,
but they always return to drink and sleep in the woodlands around the waterholes and rivers.
Of all monkeys, baboons adapt most easily to different environments. One reason is that they can eat so many kinds of foods. The usual baboon food is grass, insects, roots, fruits and flowers. But if baboons live in a forest, they eat pine cones. If they live by the sea, they add shellfish to their diet.

Baboons are herbivores, but once in a while an adult baboon kills and eats a small animal, like a hare or a young gazelle.
Baboons' bodies have several special features that help them as they move from one environment to another. Adaptations that help them live easily in trees are just as useful in their life on the ground.

Three-dimensional eyesight, which allows them to judge distances between branches, is also of great help in spotting predators on the ground.
Fingers that can wrap around a branch in the trees are also able to dig up roots beneath the soil.

And baboons even have special sitting structures that permit them to sit on the ground or to sleep sitting up in the trees all night in comfort.
Male baboons have certain body structures that are especially helpful in surviving the dangers of life on the open grasslands, sometimes far from the safety of the trees.

When males are about nine years old, they are fully grown. At this age they weigh about 75 pounds and are almost twice as large as adult females. They have a great ruff of fur around the neck which stands up when a male is threatening, making him look even more frightening. Adult males have especially powerful muscles. Their muscles and their four long canine teeth are a great help if predators approach and the males must defend themselves, the female baboons and the young baboons.

When a big male baboon barks and shows his canines, few animals stay around to find out what happens next.
Baboons not only have special body structures, they also have special ways of behaving that help them survive.
Living in Baboon Troops

Among the most important behavior patterns of baboons is living together in *troops*. In a troop there are adult males and females, older and younger juveniles, infants and newborn babies. The troop may be a small one with twenty members or less; it may be a large one with sixty or more. Some may even have over 100 members, but most troops have about 40 members.

These troop members spend the whole of their lives together. They get to know each other very well. The baboons in a troop stay close beside one another day and night, when they eat or play, while they rest or sleep.

Baboons generally leave their sleeping spots in the morning for a trip to a waterhole or to open territory for feeding. When they do, all baboons in the troop move together. No baboons stay behind to take a quick nap; the sick or the injured must keep up with the others as well as they can.

Baboons wander all day on the plains of the African savanna, eating, resting and playing, but they return to the safety of their sleeping trees before nightfall. Being near to one another is so important to members of a troop that many baboons crowd together into a few trees.
Most baboons live their whole lives without ever being alone.
Care of the Young

Another important behavior of adult baboons is caring for baboon infants. A female baboon has only six or seven offspring in her lifetime. They are born helpless and must be looked after and protected at all times. Even so, perhaps only two of these six or seven offspring survive to have offspring of their own.

The baboon mother stays with her infant every moment of the day and night for the first few weeks, and for a year and a half, at least, she follows with great attention everything her offspring does.

The grown males in the group are also intensely interested in young baboons. Male and female baboons do not have permanent mates; they do not even keep the same mates over many days. This means that the males do not know if a certain infant is their offspring or not, but they are very protective toward all the young.
HOW BABOONS GROW UP

MONTHS

0  2  4  6  8  10  12

Younger Infant  Color Change  Older Infant
The baby baboon is born with a bright pink face, fur black as ink, and ears that seem too big. All other baboons find the young infant very attractive. Certainly its mother does. The other females, the males in the troop and the older infants all want to touch and to hold the new member of the troop. But the mother keeps the infant completely to herself at first.
When the infant is ten days old or so, the mother finally allows other baboons to touch it. A little later, she allows them to hold her infant. But she is there to rescue the infant if the older baboons play too roughly around it.
Nursing and Grooming

Infant baboons hardly ever leave their mothers during the first few weeks. Their mothers’ milk is all the food they need. At first the younger infants spend a great part of the day nursing.

The mother baboon often grooms her infant when they are resting. She does this by picking through its fur to take away bugs and twigs. She parts the infant’s fur with her fingers. Often she nibbles at these bugs and twigs with her teeth. Grooming is the way baboons stay clean.

The young baboon learns how to stay clean by grooming. Just as important, young baboons feel how pleasant it is for baboons to be together. A nervous baboon relaxes when it is groomed. While the mother grooms her infant, she frequently smacks her lips at it. Lip-smacking is another way baboons have of helping each other to be relaxed and peaceful.
Clinging

Usually only one baby is born at a time, for twins are even rarer in the baboon world than they are in ours. The baby grows inside the mother for six months before birth, and its arrival is a great event in a baboon troop. The ties between the mother and infant are particularly close during the first few months. Mother and infant sleep together at night in the trees. On the open grasslands, the infant clings to its mother as she sits, rests or walks.
A newborn infant is able to hold on to its mother within a few hours of birth. The mother baboon needs all four legs for walking, and she cannot carry her infant the way a human mother can. So clinging the infant must, and clinging the infant does. It clutches its toes as easily as humans clench the fingers of their hands, and the infant holds on with all fours. Grasping hands and feet allow the infants to stay with their mothers even when the mother races at top speed across the plains. Grasping hands and feet allow the infants to be completely dependent on the mother for a long period of time.
Observing and Exploring the World

Baboon infants need a long period of dependency because they must learn much in order to survive. They must learn what to eat, what to be afraid of, how to use the sounds they can make. Most of their ways of behaving are learned from other members of the troop. These behavior patterns are easily learned by any baboon brought up in a natural setting. No baboons ever teach their young, as humans do, but the young learn quickly just the same.

The infant begins to explore the world when it is just a few weeks old. It stumbles around picking up things and putting them down again. The infant watches its mother, then pulls at blades of grass as she does. Sometimes the infant puts the grass in its mouth, testing it but not eating it.

What the young infant is most curious about is other infant baboons. When the infant is a few weeks old, it begins to walk gingerly toward other infants close by. Soon they begin to wrestle playfully, rolling each other over, pulling each other's ears and tails.
But every few moments the young infant returns to the safety of its mother’s arms.
Growing Stronger

As young infants get stronger, they become more adventurous. An infant will try to ride its mother's back when they move across the grasslands. At first the infant sprawls across her back. By the fourth or fifth month, the infant is able to sit up and ride like a jockey on a horse. The mother holds her tail up to make a splendid backrest for the infant.

Many of the things the infant begins to do, it does because its body has developed and is now ready to do them. As the infant's body develops, new behaviors become possible.

But at times, even the developing infant slips back. When the mother baboon runs, the infant lies face down and clutches her fur as it used to.
Play Groups

The four-month-old infant begins to leave its mother for longer periods to exercise and play with others of its age, climbing, jumping, somersaulting. Most infants in a troop are born at the same time of year, during October, November, and December, when the rainy season is starting and the food supply is most plentiful. At least in a large troop, baboon infants have many age-mates to grow up with. These young infants of the same age are constantly together and form play groups that continue throughout the early years of a baboon’s life. In these play groups, much of a baboon’s learning through experience takes place. Young baboons learn to know each other well, and they learn the ways of getting along together.
Playing with Adults

The young infant plays not only with other infants: it plays with the adults also. Fearlessly, the black infants jump on the heads of the big adult males. Infants have been known to pull the tail of a male and sometimes even ride along on his chest or back. Nothing the young infant does at this age seems to bother the adult males, and the young baboon takes full advantage of it.
A big change is coming for the infant. It is beginning to change color. As it does, its whole world changes too.
The older infant begins to eat solid foods. Sometimes an infant picks at the tops of tall grasses as it rides its mother’s back or wanders by her side in search of favorite roots. The infant nurses less and less.

By the sixth month, the young baboon has lost the colors of babyhood. Its coat of fur is now light brown, and the infant’s face has lost its pinkness. These new colors mean that the infant is growing up.
Now that the infant is heavier, its mother begins to find the older infant difficult to carry. The time has come for the infant to travel on its own. When the older infant tries to climb up on her back, sometimes she lets it, sometimes she refuses.

The infant gradually becomes more independent of its mother. Groups of older infants now stay near the adult males during the day, even if their mothers wander off. But at six months, the older infant still comes close to its mother in the late afternoon, riding her back as the troop moves to the sleeping trees, and still sleeping in her arms at night.
By the time young baboons are a year old, they are nearly independent of their mothers. They no longer rely on their mothers’ milk. They find their own food just as other troop members do. And in times of danger, young juveniles flee to safety on their own. They look to the adult males rather than to their mothers for protection.

The experiences of early life in the baboon world are shared mainly with age-mates, rather than with brothers and sisters as the human world. Baboon mothers give birth about every two years. By the time a mother gives birth to a new baby, the older offspring is two years old and totally independent. Two-year-old juveniles then spend energetic, active days in play groups of their own age.

Juveniles start their acrobatic games early in the morning, continue them during the day when older baboons are resting, and keep on late into the evening when the others have settled down for the night.

Play for young juveniles seems to be great fun. They whiz around in a game that looks like tag. Juveniles scramble over bushes and over each other. They are becoming fast and strong at this age. They quickly climb trees, jump up and down on branches and just as quickly race to the ground. They spend the whole of the day in play.
The older juveniles go on spending most of the day in play, but in many ways they are beginning to behave more like the adult baboons around them. And the differences between male and female juveniles become very clear.

**The Males**

The older juvenile males go on playing restlessly as before only even more roughly. They chase, jump and pull violently. Climbing up and down and over and around, they get to know their environment very well. With each other, they play so roughly that we call it play-fighting. The females and young juveniles avoid the older male juveniles at these times, and still the adult males must frequently protect infants and young juveniles from their rough play.

But this play-fighting is useful behavior. The older juveniles discover during this play-fighting which are the toughest and the most stubborn young baboons. Some day these will be the most dominant members of the troop.

The older juvenile male is also more daring and active toward everything around him than other baboons. He is the only baboon that will tease a sleepy lion while the adults are trying to slip quietly past. He will run ahead of the others to be the first to arrive at a ripe fig tree. He is the first to taste new foods and try new pathways.

To the adults, the behavior of this young male is a bother. They do not want the infants in the troop harmed, and they do not want their rest disturbed.
But in the long run, this behavior by the juvenile males is necessary for the group. Only in this way can the group be sure of having adult males that are tough, practiced and willing fighters. Only in this way will the group have as leaders males that know the environment well, that know the ways of predators and new pathways for escaping when the troop is in danger.
The Females

The behavior of older juvenile females is quite different. By the third or fourth year they are no longer willing to take part in the play-fighting of the males. In all ways they are less active, less adventurous.

They spend more time with the adults, resting in the shade and grooming. And of all the troop members, the older female juveniles are the most interested in the young infants. They go up to mothers and wait patiently for a chance to hold a baby, to groom or to carry the young black infants.

It is almost as if they were practicing to be mothers.