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Field Notes and the Long Study at Gombe

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In the fall of 1960, a 26-year-old named Jane Goodall had a notebook and some old binoculars. She watched a chimpanzee push a stem of grass into a termite mound at Gombe, in what is now Tanzania. Her first day there had been July 14, 1960. An observation like this starts as a few lines in a notebook. How does it turn into a record that other scientists can check, and then into a study that is still running more than 65 years later? The answer lies in the way the notes were kept, and in researchers who still follow chimpanzees every day of the year.

Why send an untrained observer into a forest? The scientist Louis Leakey believed that wild chimpanzees could help him guess how Stone Age ancestors may have behaved. In the 1950s she had saved up to go to Kenya, where she met him. Until then, chimpanzee research had mostly been done on captive animals. Frans de Waal later wrote in Nature that in those early days "work in the natural habitat was frowned upon as unscientific", because only laboratory methods gave the controls needed for conclusive science. Goodall arrived with little training and no fixed plan for her method. As a Duke University announcement put it, she did have a keen eye for observation and endless patience.

The first sighting is simple to state. An older male chimpanzee pushed a stem of grass into a hole in a mound, withdrew it and picked something off it with his mouth. When he left, Goodall repeated the motion herself and found termites clinging to her own stem. The proof of the technique was on the grass, where anyone could see it. A notebook entry dated November 4, 1960 adds a closer look at the same kind of fishing: the straw "was held in the left hand, poked onto the ground, and then removed coated with termites." The two lines quoted record which hand, what motion and what the stem looked like afterward.

A few days later, she saw chimps pick a leafy twig and strip off its leaves before fishing. She called this "object modification, the crude beginning of tool making." That idea, more than the fishing alone, carried the claim, because people had long been defined as the tool-making animal. Goodall telegrammed the news to Louis Leakey. He replied that the definition of man, or of a tool, would have to change, or chimpanzees would have to be accepted as human. The reply matters because it shows how a single observation can push a whole field to restate its own terms.

Was it the first report of wild animals using tools? The Jane Goodall Institute calls her 1960 sighting the first recorded instance of non-human tool use in the wild. A 2011 Scientific American blog notes that a few researchers had already spotted wild chimpanzees breaking nuts with rocks, but that spontaneous, flexible tool use had been considered unique to

humans. Both statements can hold together. What changed in 1960 was a documented, repeated pattern of making and using tools, written down in enough detail that other people could test it. In six months, Goodall recorded tool use in 25 chimpanzees of all ages and both sexes.

Her Nature paper reported the pattern in her own words, calling the sticks and leaves natural objects. In three years at Gombe, she wrote, she had seen chimpanzees use sticks, stalks, stems and twigs, mainly in connection with eating insects, and leaves as "drinking tools" and for wiping parts of the body. A science writer adds that, when dipping for ants, the chimps broke sticks to lengths between 1.5 and 2.5 feet. Her list sorts the behavior by what was used, for what purpose and on which part of the body. Later studies found that wild chimpanzees also soaked up water with leaves and cracked nuts with stones. Details like these separate a lucky sighting from a finding, because someone else can go and look for the same thing.

Goodall also broke a convention of the era. Scientists studying animals in this way usually identified each one with a number. She gave the chimpanzees names, among them David Greybeard, Goliath and Frodo. Names were more than a style. They let an observer follow one animal over years and tie each entry to a single life. Some people tried to discredit her observations, as she later said, because she was young and untrained. The result, she said, was a National Geographic Society grant to continue her study. The Institute says she came to see them as individuals with personalities, complex minds and long-term bonds, and that many wildlife behavior studies now follow suit.

Notes had to scale. A science writer says Goodall realized that such meticulous notes called for a more efficient system. Early entries were narrative and carried times and lengths. One printed by Duke University records that a young chimp named Flint suckled for 2 minutes, paused for half a minute and then suckled again. Longhand then gave way to audio transcriptions, typed each night on carbon paper copies, and narrative became grids of abbreviated data called check-sheets. There is a trade-off. A story keeps detail but is hard to compare. A grid loses some detail but can be counted, which makes it far easier to add up across many years. Students and Tanzanian field staff joined the collecting, and the archive holds notes in both English and Swahili.

Today the method is called the focal follow, and the Institute says it uses Goodall's own approach. Researchers follow a selected chimpanzee and record the composition of the group, the foods eaten and the interactions between the focal animal and others. The Jane Goodall Institute says this is done every day of the year and has run since the 1960s. It adds that mapping software now tracks chimpanzee sightings and behaviors. By its own count, in its 2024 annual report, the result is more than 165,000 hours of data from more than 320 chimpanzees. More than 200 researchers and field assistants have collected it. The same study has produced more than 300 peer-reviewed publications.

Why does such a long record matter? In 2011, a Duke University biologist said that only by watching a long-lived species for entire lifetimes can we see the larger patterns made by social bonds and family relationships. The biologist, Susan Alberts, had studied baboons in Kenya for nearly 30 years. Another scientist at Duke added that rare events and subtle patterns can be seen only by taking the long view. That year Duke set up a center to digitize the Gombe archive. Anne Pusey, who began working with Goodall in Africa in 1970, ran it. The archive then filled more than 20 file cabinets with notes, check-sheets, hand-drawn maps, video tape and photographs. The Institute owned the archive.

What has the record found? By 2001, genetic analysis of fecal samples let scientists trace kinship without interfering with the animals. A mother-infant study that Goodall launched examines how upbringing affects adult success. The Institute reports that young chimps raised by more supportive mothers tend to do better as adults. In 2004, a Nature paper reported a four-year field study of how young chimpanzees learn termite fishing. It found distinct sex-based differences in how the skill develops. The Institute's summary adds that recent studies found males with strong social bonds sire more offspring. The abstract describes termite fishing as a cultural behavior, since tools may be used differently in different communities.

Some claims in this story are the keepers' own. The Institute calls the Gombe work the longest-running wild chimpanzee study in the world, and that claim comes from the organization that runs the study. Goodall preferred to be called an ethologist and conservationist rather than a primatologist. She earned her doctorate in ethology at Cambridge in the mid-1960s, as the eighth person admitted without an undergraduate degree. She founded the Institute in 1977, first to support her Gombe research. She died on October 1, 2025, at age 91. The first notebook entry took only a few lines. The record it began is, by the Institute's count, more than 65 years long. It is still written the same way: someone follows a chimpanzee, watches closely and writes down what happens.

Questions

1. According to the book, what did names let an observer do that numbers did not?

A. Make the animals easier to photograph
B. Follow one animal across years and tie entries to a single life
C. Avoid writing anything down

2. In "Goodall also broke a convention of the era," what is a convention?

A. A rare mistake
B. A strict law
C. A usual way of doing things

3. What do researchers do in a focal follow?

A. Follow a selected chimpanzee and record the group, foods and interactions

B. Count termites in a mound

C. Photograph the lake

4. What is a check-sheet?

A. A map of Lake Tanganyika

B. A grid of abbreviated data

C. A kind of termite

5. Who makes the claim that the Gombe study is the longest-running?

A. A national museum

B. A group of Cambridge students

C. The Institute that runs the study

Words to know

convention: usual practice

meticulous: very careful

captive: kept by people

kinship: family relationship

abbreviated: shortened

Answer key: Field Notes and the Long Study at Gombe

1. B. Follow one animal across years and tie entries to a single life
2. C. A usual way of doing things
3. A. Follow a selected chimpanzee and record the group, foods and interactions
4. B. A grid of abbreviated data
5. C. The Institute that runs the study