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Obituary:

Christophe Boesch

Renowned Primatologist with Intimate Knowledge of Chimpanzee Behavior and Advocate for the Protection of Chimpanzees (1951 - 2024)

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Born in 1951 in St. Gallen, Switzerland, Christophe Boesch studied Biology at the University of Geneva. He conducted research under the supervision of Diane Fossey on mountain gorillas in the Virunga National Park, Rwanda, and returned from Africa infected with the virus of great ape research. After hearing rumors of nut-cracking chimpanzees in Côte d'Ivoire, he traveled in 1976 for the first time to Taï National Park (TNP) to find remains of cracked nut shells in the forest. Craving to study this behavior, he convinced Hans Kummer to support his quest of studying chimpanzee behavior for his PhD. Supported with money from the Swiss National Foundation, Christophe and his wife Hedwige returned in 1979 to TNP and began the long-term study on Western chimpanzees (*Pan troglodytes verus*) known today as the Taï Chimpanzee Project (TCP) (Boesch & Wittig 2019; Boesch & Boesch-Achermann 2000).

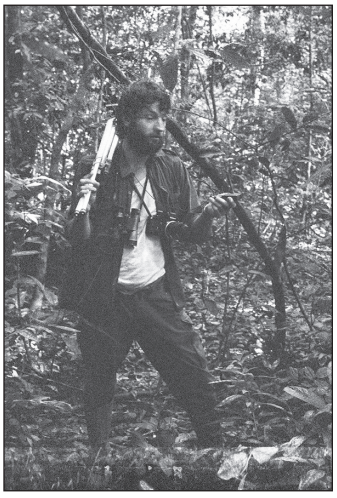
Christophe Boesch in 2013 after the film "Chimpanzee" has been released. (c) Markus Wächter.

The first years were extremely hard. Christophe and Hedwige first saw only black shapes, disappearing into the rainforest. In the beginning it was looking at nut-cracking workshops of the chimpanzees, hearing the chimpanzees hammering and even, with careful approaching, a deserted nut cracking site when arriving. With tremendous determination and patience, Christophe and Hedwige overcame the chimpanzees' fear and habituated them to the presence of human observers. During these first years, Christophe discovered that the Taï chimpanzees used hammers of different materials (stone or wood) depending on the hardness of the nut, that they would transport the hammers over long distances and pick them up on the way to the workshop, and that female chimpanzees in Taï are more efficient nut crackers than males (Boesch & Boesch 1981, 1982, 1984a, 1984b). These findings earned him his Ph.D. from the University of Zürich (Switzerland) in 1984.

Having set up shop in the middle of TNP, Christophe and Hedwige Boesch continued their research on the chimpanzees throughout Christophe's Ph.D. research. They observed the chimpanzees hunting for monkeys using collaborative tactics. Chimpanzee – as hunter – was more efficient when hunting these arboreal monkeys in groups. Each member of the hunting party would enact a different role, and the collaboration would be rewarded by sharing the meat amongst the hunters after the hunt (Boesch & Boesch 1989, 1994a, 1994b).

With the birth of their two children, Lukas (*1983) and Lèonore (*1988), it became clear for them that they would need help living in TNP and following the chimpanzees through the forest. Gregoire Nohon became their first employee, first as the children's nanny but very soon showing a keen interest in the chimpanzees' behavior. After a visit to the Gombe chimpanzees in Tanzania in 1990 (Boesch 1996), Christophe decided to implement an observation protocol for research staff. Gregoire, and a few years later Honroa Kpazahi, became the first staff members at TCP collecting chimpanzee data.

In 1991, after 12 years in North camp of TCP, Christophe became Assistant Professor



Christophe in the forest during the first years of his studies in Tai (undated photo, courtesy of Hediwge Boesch).

in the Zoology Department of Stephen Stearns at the University of Basel, Switzerland. While the family moved to Basel, Christophe went back to observe the chimpanzees as often as his job allowed. The first students arrived at TCP, they and Christophe habituated a second chimpanzee community south of his original North group, and the local field assistants became the backbone for continuous research efforts.

In recognition of his merits for understanding the evolution of human behavior, Christophe Boesch received in 1997 the call to join the Max Planck Institute for Evolutionary Anthropology (MPI EVA) in Leipzig, Germany, as founding director for primatology. This position allowed Christophe finally to unfold his full scientific creativity. He became a driving force for our understanding of animal cultures and brought together chimpanzee researchers to set up a comparison of behavioral diversity across and within chimpanzee field sites (Whiten *et al.* 1999; Boesch 2012; Luncz *et al.* 2012).

Flaring political unrest in Côte d'Ivoire (2001-2011) convinced Christophe to launch additional chimpanzee research sites in other African countries. He habituated chimpanzees in the Loango National Park, Gabon, in 2005. The extraordinary tool use behavior of the Ozouga chimpanzees, using a combination of two tools to access the honey of underground bee nests (Boesch *et al.* 2009; Estienne *et al.* 2017), gave Christophe the idea to establish the Pan African (PanAf) Project – to study chimpanzee cultures across all of Africa. Starting in 2010, the PanAf became a huge success, probing chimpanzee cultures and ecology with the same short term sampling protocol across 46 study sites (Boesch *et al.* 2020). This research showed the cultural variation of chimpanzees across Africa, but also that human impact had eroding effects on their behavioral variability (Kühl *et al.* 2019). Because of Christophe's research on chimpanzee cultures, cultural diversity has become one factor of the IUCN in assessing conservation status of chimpanzees (Carvalho *et al.* 2022).

The huge human pressure on the chimpanzees in TNP made Christophe very aware that all this knowledge about the chimpanzees comes with great responsibility. Over the years, he had experienced how chimpanzees disappeared or were killed by illegal hunting in the fields close to and in TNP. He saw chimpanzees dying from diseases, some naturally present in the forest and others originating in humans (Köndgen *et al.* 2008). His original study group went through a demographic decline from about 80 to about 20 in 30 years (Wittig & Boesch 2019). Thus, early in his career, it became evident to him that he needed to protect the chimpanzees to be able to study their behavior. As a result, he founded the Wild Chimpanzee Foundation (WCF) in 2000, a non-governmental organization to protect wild chimpanzees in West Africa. He was able to show that TCP, as a long-term research project, repels illegal human activity in TNP and that densities of chimpanzees and other wildlife is higher in the research area than in the rest of the National Park (Campbell *et al.* 2011; Kouamé N'Goran et al. 2013). Under the leadership of its president Christophe Boesch, WCF became a driving force behind chimpanzee conservation in Côte d'Ivoire, Liberia and Guinea. He and WCF were instrumental in

During Christophe's retirement symposium (first row left to right): Inza Kone (DG CSRS), Christophe Boesch, Honora Kpazahi (Head of Staff TCP), Tondossama Adama (DG OIPR), Camille Dji (former staff member), Zoro Gone Bi (coordinator TCP) and Gregoire Nohon (Head of Staff WCF).

Photo courtesy of MPI EVA, TCP

Christophe Boesch advocating for the protection of chimpanzees in Abidjan (2013). Photo courtesy of WCF.

creating Grebo-Krahn National Park in Liberia (2017), Moyen-Bafin National Park in Guinea (2023), and Cavally Forest Reserve in Côte d'Ivoire (2024).

After his retirement from the directorship of the MPI EVA in 2019, Christophe invested all his energy in the conservation of chimpanzees. He was a true champion of chimpanzee protection. He won the St. Andrews Prize for the Environment in 2015 and was a Finalist for the Indianapolis Prize in both 2021 and 2023.

On January 14, 2024, fate struck. It did not strike in a forest in Africa, but in his adopted home of Leipzig. Christophe Boesch, "Le père de la primatologie en Côte d'Ivoire," as the president of the African Primatological Society, Inza Kone, called him afterwards, passed away. The void he leaves is immense, but his passion for the chimpanzees will continue in the countless students he has trained and infected with the virus for great ape research and conservation.

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