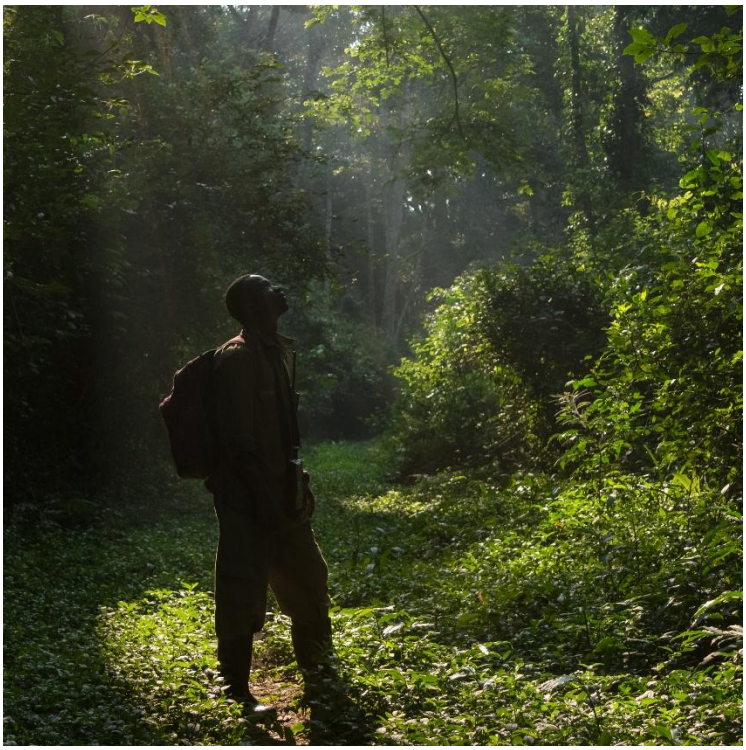
Press Release

Acknowledging the skills of local expertsx

Scientific expertise of local specialists is critical in animal behaviour research, but often under-recognized and under-appreciated. Based on research conducted at the Budongo Conservation Field Station in Uganda, former NCCR Evolving Language member Adrian Soldati, guest researcher at the University of Zurich, explored the phenomenon in a new study published in the scientific journal *Proceedings of the Royal Society B*.

Press release from the NCCR Evolving Language



Bosco Chandia, one of the chimpanzee field assistants at the Budongo Conservation Field Station, looking up to a tree where the chimpanzees he was following that day were feeding. © Adrian Soldati.

In field stations, local field assistants have highly specialized scientific skills and knowledge, on which visiting international researchers rely heavily. At the Budongo Conservation Field

The National Centres of Competence in Research (NCCRs) are a funding scheme of the Swiss National Science Foundation.

Station, in Uganda, local field assistants like Bosco Chandia (in the featured photo) are experts in recognizing and understanding wild chimpanzees' vocalizations and behaviours.

Chimpanzees produce loud, characteristic calls known as “pant hoots” that travel over long distances through dense forest. These calls contain rich acoustic information, including who is calling and what they are doing, and are used by chimpanzees to coordinate movement between distant group members. Researchers routinely rely on these calls to locate, track, and monitor animals. In this new study, the authors show that local specialists are far more accurate at identifying individual chimpanzees, as well as their age, sex, and the behavioural context in which the calls they hear are produced, compared to international researchers.

Experts in analysing calls and behaviours

Local field assistants of the Budongo Conservation Field Station – who have spent many years observing chimpanzees on a daily basis – were asked to listen once to recordings of “pant hoots” and identify multiple key characteristics of the caller without additional information. Their performance was then compared with that of international researchers working at the same field site, field assistants in training, and participants with no experience with chimpanzees.

The results were striking. Local field assistants identified individual chimpanzees from a community of 73 individuals far more accurately than international researchers, achieving an average accuracy of around 50 percent compared with less than 10 percent for international researchers. They also performed better at identifying the caller’s sex, age, and call context.

Importantly, accuracy increased with years of experience, highlighting the value of long-term, on-the-ground engagement with study animals. “*This ability is the result of years of systematic observation and learning,*” says Adrian Soldati, the study’s lead author.

“*There is a growing interest in using artificial intelligence to decode animal signals, but scientists and local field assistants have actually been understanding animal communication for a long time,*” the author comments. Though an algorithm can identify patterns in calls, it wasn’t in the forest, following the animals before and after they called. “*Field assistants can integrate vocal information into a constantly updated understanding of social relationships and interactions.*”

Under-recognized knowledge

Though these skills represent one of the core scientific knowledge areas essential to conduct high-quality, long-term field research, they often remain implicit or under-acknowledged. “*This capacity is remarkable and deserves more recognition as a scientific achievement too,*” says Soldati.

Beyond its empirical findings, the study raises broader questions about how scientific knowledge is produced and credited. Local field assistants play a central role in long-term wildlife research, contributing to data collection, training, and continuity across decades of fieldwork. For Guillaume Dezecache, senior author on this study and researcher director at the French National Institute for Sustainable Development, "*in primatology, the work of so-called local field assistants is not always recognized*".

By making this expertise explicit and measurable, the authors aim to encourage research institutions to more fully recognize local specialists as scientific partners. "*This study will hopefully contribute to their more systematic involvement in the research process, starting from the very design of studies,*" Dezecache adds. Doing so could improve data quality, reduce reliance on short-term field visits, lower the carbon footprint of research, and promote more equitable and sustainable scientific practices.

Reference

Soldati, A. et al. (2026). Local specialists' experience and skills in animal behaviour studies: insights from wild chimpanzee field assistants. Proceedings of the Royal Society B, 292: 20250997. DOI: 10.1098/rspb.2025.0997

More information

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