

Chimps face death in humanlike ways

New papers provide rare glimpses of chimp rituals



A chimpanzee mother, Vuavua, chases away flies circling the body of her dead infant, Veve, at Bossou, Guinea. Veve died two days previously, of a respiratory disease.

Biro et al. / Current Biology

By Jennifer Viegas

[DiscoveryNews](#)

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From holding deathbed vigils to comforting the dying, chimpanzees face death in humanlike ways that indicate their awareness of death is probably much more developed than previously thought, suggest two new studies.

The papers, both published in the journal *Current Biology*, provide rare, intimate glimpses of chimpanzees dealing with death.

For the first study, scientists observed how three adult chimpanzees reacted when an elderly female, named Pansy, gradually passed away in an indoor enclosure at Blair Drummond Safari Park in Stirling, Scotland. The over 50-year-old Pansy had grown increasingly lethargic before lying down on the floor one day after eating.

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"In the days before Pansy died, the others were notably attentive towards her, and they even altered their routine sleeping arrangements to remain by her, by sleeping on the floor in a room where they don't usually sleep," lead author James Anderson told Discovery News.

Blossom, another elderly female, and Pansy's daughter, Rosie, both stroked and groomed the dying Pansy, and sometimes just sat, subdued, beside the elderly female. Blossom's son Chippy checked to see if Pansy was alive by manipulating her arms and trying to open her mouth.

All of the chimps tossed and turned at night, much more than normal, during the dying female's final few days.

"As she died, all three were closely gathered around her, and they paid especially close attention to her face," said Anderson, who is in the Psychology Department at the University of Stirling. "After some lifting and shaking of her head and shoulders, all three moved away from her, and there was no more such contact at all."

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After Pansy died, however, overhead video cameras captured Chippy jumping onto the platform with Pansy's body. He leapt into the air, brought both hands down and pounded on Pansy's torso. He later sat by the corpse, and gently removed straw from the face.

"It is possible that it was an attempt to arouse Pansy, or a serious test of whether she was able to respond," Anderson said.

For the second study, Dora Biro of the University of Oxford and colleagues witnessed the deaths of five members, including two infants, of a semi-isolated chimpanzee community that researchers have been studying for over three decades in the forests surrounding Bossou, Guinea. The dead succumbed to a flulike illness possibly originating in humans.

After their two infants died, chimpanzee mothers Jire and Vuavua continued to carry and groom their offsprings' lifeless bodies for up to 68 days. By the time the corpses were finally abandoned, the bodies had mummified and developed an "intense smell of decay."

While it remains unclear if the mothers were aware that their infants had died, the researchers suggest biophysical changes that prepare mothers for childcare after birth "may have contributed to a gradual letting-go" of the remains.

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"Intriguing parallels may exist with physiological and psychological changes experienced by human mothers, in whom the absence of cessation of breastfeeding may cause exaggerated desires to hold their infant (after it has died)," the researchers wrote.

"Certainly in humans, the loss of loved ones is an immensely painful experience, and the loss of a child perhaps almost inconceivably so," Biro told Discovery News, adding that "we probably experience feelings of a 'refusal to let go' even if we don't act on it in the same way as these mothers did."

Humans, she said, tend to "hold onto objects that remind us of the dead person instead. We feel simply unable to throw them away, often for long periods after death, and these can be extremely emotive for us."

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In light of all of the findings, Anderson and his colleagues suggest it might be better to not remove ailing elderly or terminally ill chimpanzees from their groups before they die, if the chimps are not contagious. At present, such individuals are often taken away and put to sleep.

"In some cases," Anderson and his team conclude, "it might be more humane to allow elderly apes to die naturally in their familiar social setting than to attempt to separate them for treatment or euthanasia."