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Ants care for wounded comrades by licking their wounds clean



"Lie still, this won't hurt a bit" Erik T. Frank

By Jasmin Fox-Skelly

A species of ant has become the first known non-human animal to tend the wounds of its fellows. "Nurse" ants lick the wounds of fallen comrades, and this helps them survive.

Matabele ants (*Megaponera analis*) live dangerous lives. Several times a day, parties of 200-600 soldier ants set out to hunt termites, dragging them from their nests and

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In a new study Frank, now at the University of Lausanne in Switzerland, and his colleagues have filmed what happens inside the nest when the injured are brought in. The footage shows "nurse" ants spend several minutes licking their fallen comrades' wounds.



An experiment in which some ants were denied this licking suggests it is a lifesaver. Without it, 80% of ants who had lost limbs died within a few hours. Of those that received medical care, 90% survived.

"We don't know yet if the ants are just cleaning the wound and removing debris, as we do with our wounds to prevent infection, or if they are also applying antimicrobial substances with their saliva," says Frank.

Either way, the treatment works. "The ants are able to reach running speeds similar to healthy ants, despite missing a leg or two," says Frank.

The team also tracked the ants' raiding parties and found they could tell which injured soldiers were worth saving and which were a lost cause.

"The ants were selective in who they picked up," says Frank. "They didn't want to help heavily injured ants who had lost 5 legs."

Ants that only lost one or two legs pulled in their remaining limbs and kept still, helping

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Altruistic ants?

Although primates are known to tend to their own wounds, this is the first time an animal other than a human has been shown to give medical care to others.

The behaviour probably doesn't arise from feelings of compassion, says Frank, but because the ants' survival depends upon it. Matabele ants live in small colonies with low birth rates, and their taste for termites means each ant risks mortal injury every day.

"Roughly a third of the colony have lost a limb at one point, so if they didn't rescue them then many would be killed on the return journey," says Frank. The treatment may also prevent infection spreading in the colony.

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