

Prairie dogs murder ground squirrels to stave off competition for food

ZME Science, March 24, 2016

<http://www.zmescience.com/ecology/animals-ecology/prairie-dogs-murder-50543/>

Many wars have been fought for to resources such as precious minerals, oil and in the not so distant tribal past — food. Humans aren't the only ones to kill competitors for food. Among their own kind, many animals **resort to infanticide**, killing the babies of rivals so their own offspring have a better chance to endure. There's also inter-species warfare. **Some insects**, for instance, engage in a bit of biological warfare, carrying a fungus that kills their competitors but which they can tolerate. What's surprising is that even fluffy and seemingly benign animals use warfare. Researchers report how the **white-tailed prairie dog** is ruthlessly killing the Wyoming ground squirrel. They do this so they have more access to food, but do not eat the ground squirrels. They just leave the squirrels to rot. This is the first time such a gruesome behaviour has been documented among omnivores.



For more than a decade, John Hoogland of the University of Maryland Center of Environmental Sciences and his students have been following prairie dogs in the scrublands of western Colorado's Arapaho National Wildlife Refuge. In 2007, Hoogland first spotted a prairie dog tossing a rodent. He thought the prairie dog was attacking some pup of their own kind, but soon found the victim was a ground squirrel. Was this some isolated incident or just one in a series of killing sprees?

This first murder prompted the team to investigate closely. They eventually documented 101 ground squirrel murders, plus 62 suspected cases. One prolific individual, aptly nicknamed Killer Supreme, was seen killing nine ground squirrels over four years. Most of these killings happened in May which is when the young squirrels come out of their nests in search for food. Occasionally, the prairie dogs would chew the chests and brains of their victims, but Hoogland says they never ate them — they were just checking the job was done properly. Carcasses are left where they stand, which birds later scavenge.

“In my 43 years of research, this is perhaps the most provocative, puzzling, and far-reaching discovery I’ve ever made,” Hoogland **said**. “The results are just staggering.”

This all works very well for the prairie dogs. After the researchers followed prairie dogs that killed squirrels, as well as those that didn't, they found the killers' offspring had much better survival odds. The findings were reported in ***Proceedings of the Royal Society B***.

Become a "Barefoot Writer"

And live the life of a famous writer without having to write a blockbuster movie script or a chart-topping book.

LEARN MORE ABOUT THIS UNIQUE GROUP OF HIGHLY-PAID WRITERS ...

"The condition of the female, her longevity—the factors that normally influence [success]—none of them apply to this case," says study co-author Charles Brown of the University of Tulsa.

"It seems to me is that there are major, major benefits to killing these ground squirrels.

As climate change intensifies, it's possible that we'll witness similar behaviour between other species for control over food. As for us humans, things don't look too well either. The **World Bank** and the **United Nations** say there won't be enough food to feed the global population when it jumps from the current seven billion people to nine billion by 2050. "The food scarcity problem is serious. I think the next world wars could be fought over resources like food and water," **said** Usha Haley, a professor of business management at West Virginia University, who studies food supplies.