

Ravens console each other after fights

May 18 2010, by Lin Edwards



Raven (Corvus corax). Image: Franco Atirador, via Wikipedia.

(PhysOrg.com) -- A new study investigating the behavior of ravens has found strong evidence that after conflicts bystanders appear to console and relieve the distress of victims with whom they have a relationship, and that victims are likely to seek affiliations with bystanders. The results suggest ravens may be sensitive to the emotions of others.

Many species of birds fight aggressively from time to time over resources, to assert <u>dominance</u>, and so on, but such conflicts can waste valuable energy, cause injuries, and damage relationships that are usually mutually beneficial. One way of reducing the cost of conflicts is through reconciliation and through consoling victims, but until relatively recently such behaviors were thought to be unique to humans.



The researchers, Orlaith N. Fraser of the University of Vienna and Thomas Bugnyar of the Konrad Lorenz Research Station in Grünau, Austria, decided to study ravens to see if they exhibited what the scientists call "affiliation behaviors." Previous studies of rooks have shown that pair-bonded birds do show such behaviors, so the researchers chose ravens to see if the same kinds of behaviors occurred in birds that were not paired, because ravens live up to ten years in socially complex <u>flocks</u> before pairing off.

The subject of the study was a social group of 13 hand-reared young ravens, some of which were related. The flock was kept in an aviary and observed over a period of two years. As in wild flocks of ravens the birds showed a variety of forms of aggression, and the scientists watched for signs of affiliation after conflicts, such as preening, contact sitting, and touching each other, and for renewed aggression. They kept records of the timing and severity of the 152 fights observed, and noted which birds were the aggressors, victims and bystanders. They also noted any affiliation or it was offered by a related or unrelated bystander.

A statistical analysis of the observations showed the affiliations were randomly timed and did not appear to be a deliberate attempt to reduce the tension. Victims soliciting affiliations were at greater risk of renewed aggression by their attacker immediately after conflict, but if they solicited affiliations from other members of the flock renewed aggression was less likely to occur.

The researchers also found that victims did not attack other birds, so there was little risk involved in approaching them, and many members of the flock offered affiliation spontaneously, especially if they were related or regularly spent a lot of time together. Surprisingly, unsolicited affiliations did not reduce the likelihood of renewed aggression.



The authors of the paper, published online by *PLoS One*, speculate about whether their observations indicate the <u>birds</u> were showing empathy or consoling the victims. Fraser said there may be some self-interest in the birds' actions because if a bird consoles a victim, it may be consoled in turn when it has been attacked. Fraser also said it is interesting to observe such behaviors in animals other than chimpanzees and said "it seems to be more ingrained in evolutionary history" than previously thought.

More information: Fraser ON, Bugnyar T (2010) Do Ravens Show Consolation? Responses to Distressed Others. PLoS ONE 5(5): e10605. <u>doi:10.1371/journal.pone.0010605</u>

© 2010 PhysOrg.com

Citation: Ravens console each other after fights (2010, May 18) retrieved 3 May 2024 from <u>https://phys.org/news/2010-05-ravens-console.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.