“Birdbrain” as a compliment? Find out, when THIRTEEN’s Nature explores the cleverness of crows in A Murder of Crows, October 24 on PBS

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Crows do not have the best of reputations. A group of them is even called “a murder of crows,” though they are generally not up to anything murderous at all. They tend to be dismissed as a general nuisance, as schemers and scavengers, or regarded as spooky and even omens of death. Hitchcock famously used them quite successfully to frighten moviegoers. But their image is about to take a real turn. Recent research has shown they are among the most intelligent animals in the world. Crow experts from around the world sing their praises and then proceed to conduct some remarkable research experiments to back it up. These extraordinary birds finally get some long overdue respect in A Murder of Crows, premiering Sunday, October 24 at 8 p.m. (ET) on PBS (check local listings). After broadcast, the program will be available for viewing at Nature Online www.pbs.org/nature. There is more to crows than most of us every imagined.

Currently in its 29th Season, Nature is a production of THIRTEEN in association with WNET.ORG – one of America’s most prolific and respected public media providers.

“The crow is a surprisingly smart and sophisticated bird,” said Fred Kaufman, Series Executive Producer. “The more we learn about them, the more we realize how misunderstood and underappreciated they have been all along.”
Crows are very social creatures, and love to chat with each other in at least two different dialects and as many of 250 distinct calls that form a sophisticated language. They mate for life, mourn their dead, and raise their young for up to five years.

They thrive wherever people live – everywhere in the world, in fact, except Antarctica -- and have used their great intelligence to adapt again and again to a constantly changing world. Some memorize garbage truck routes, and follow the feast from day to day. Others drop nuts in the road and wait for passing cars to crack them open. And some build their nests using items we throw away – like wire clothes hangers.

Among the most intriguing findings about crows is that they are able to recognize individual human faces and pick them out of a crowd. Experts believe crows learn from each other’s experiences and are able pass that knowledge to succeeding generations. To test this theory, University of Washington professor, John Marzluff, and his team wore caveman masks as they caught and banded seven crows, establishing the masked “bad guys” as distinct from their unmasked selves. With chilling accuracy, the crows recognized and scolded the masked researchers whenever they saw them again, even up to two years later, but behaved normally when the masks were removed. What was shocking wasn’t just that the crows could pick the scientists out of a crowd, but that they told each other about them. In fact, impressively, Marzluff was also able to show that the birds are able to pass this information on to offspring who never saw the original “bad guys.” Even the U.S. Department of Defense is invested in Marzluff’s project in hopes that it may have applications in future military projects.

On the opposite side of the globe, researchers from the University of Auckland think the world’s smartest crows live on an island off the coast of New Zealand. New Caledonian crows have been shown to be able to make and use tools. They are one of only three creatures other than humans on the planet that have demonstrated tool-making abilities. Joining the ranks of elephants and chimpanzees are New Caledonian crows, which can skillfully trim a branch into a hook for food. Biologist Alex Taylor is able to show these birds are sharp enough to accomplish meta-tool use; using one tool to get to another tool, and using the second tool to get food. Taylor’s experiment didn’t surprise Marzluff, who said, “[Crows’] brain size relative to their body size is of the same caliber as many primates. So it really is appropriate to think of these animals as feathered apes.”

Brain size may not matter when it comes to the crow’s evolutionary advantage, but complex cognitive powers do. Scientists at the Konrad Lorenz Institute in the Austrian Alps are investigating the crow’s reasoning abilities and social behaviors, specifically what psychologists call “Theory of Mind.” This concept measures a creature’s awareness of other creatures’ thoughts, the ability to project what others might do in response to its actions. While observing a group of crows “caching” or storing food, researcher Thomas Bugnyar found that they exhibit complicated thinking patterns which indicate highly evolved mental states. If they suspect they’ve been seen, crows will move their cache, defend it, or they may even fake cache, keeping food in their pouch and only pretending to bury it. Bugnyar thinks of it as a kind of cognitive arms race.
Tracking the offspring of one of the seven crows in his caveman masks experiment, Marzluff was able to show that the young bird recognized the “bad guy” he had never seen before, scolding it as its parents had. The bird clearly recognized a particular face, and the only way it could have learned about this face as being anything unique was from its parents’ behavior. Social learning of this type has only been proven in a rarified group of the smartest of creatures on earth.

Far from being a general nuisance, these birds are proving they are far more complex, more intelligent and more like us than we could have ever imagined.

*Nature’s A Murder of Crows* was produced by A Murder of Crows, Inc. Produced and Directed by Susan Fleming. Available in HD. *Nature* is a production of THIRTEEN in association with WNET.ORG for PBS. Fred Kaufman is Executive Producer. William Grant is Executive-in-Charge. Major corporate support for Nature is provided by Canon U.S.A., Inc. Additional support is provided by the Lillian Goldman Charitable Trust, by the Corporation for Public Broadcasting, and by the nation’s public television stations.

*Nature* has won nearly 600 honors from the television industry, the international wildlife film communities, and environmental organizations – including 10 Emmys, three Peabodys and the first award given to a television program by the Sierra Club. Most recently, the series won a Peabody Award for *Silence of the Bees* and received an Emmy nomination for *Victoria Falls*.

*Nature Online* ([pbs.org/nature](http://pbs.org/nature)) is the award-winning web companion to the broadcast series and is spearheading *Nature’s* distribution to new media platforms. At *Nature Online*, visitors can stream full episodes of *Nature* programs, watch behind-the-scenes video exclusives with filmmakers and producers (also available at iTunes), view program excerpts (also available on YouTube), and find fun interactive content, teacher lesson plans, and more. Join *Nature* on Facebook ([Facebook.com/PBSNature](http://Facebook.com/PBSNature)) and follow the series on Twitter ([Twitter.com/PBSNature](http://Twitter.com/PBSNature)) to keep up with the latest videos, photos, program alerts and more.

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