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First documented tool use by reptiles claimed

Dec. 11, 2013 Courtesy of Taylor & Francis journals and World Science staff

How do crocodiles catch their flighty friends?

Though we might expect birds to easily evade their captors, crocodiles have been exposed as the masterminds of a new hunting method, scientists report.



A camouflaged mugger crocodile in stick-displaying behavior. (Courtesy Taylor & Francis)

Lying still in the water and balancing sticks and twigs on their snouts or in their mouths, the crocodiles appear more cunning than a fox, the researchers say. At nesting time, birds fly down to collect foliage for their new homes but are met with an altogether different home coming—to the great bird's nest in the sky, as they are eaten.

Though the use of objects as hunting lures is very rare in nature, a study says at least two species of crocodiles and alligators use twigs and sticks to lure birds. One species is the mugger crocodile *Crocodylus palustris*, the other is the American alligator *Alligator mississippiensis*.

The research is published in the current issue of the journal *Ethology, Ecology and Evolution* and is the first report of tool use by any reptiles, the researchers say.

"This is the first known case of a predator not just using objects as lures, but also taking into account the seasonality of prey behavior," wrote the investigators, Vladimir Dinets of the University of Tennessee and colleagues.

"During the nest-building season, many wading birds are desperately searching for small sticks and twigs, often engaging in stealing from their neighbors and violent fights," they noted. The reptiles exploit this.

The study was based on yearlong observations at four sites in Louisiana. Investigators observed each site between one and four hours after sunrise, monthly in August-February and weekly in March-July, covering the nest-building season of March 24-May 5.

"The spectacular complexity of crocodilian behavior has been recognized only recently," the researchers wrote. "Historically viewed as lethargic, stupid and boring," they went on, crocodiles and alligators are now known to show flexible communication, "advanced parental care and highly coordinated group hunting tactics."

The findings suggest that dinosaurs, close relatives of crocodiles and alligators, may also have exhibited complex behavior, they added.

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