

Following another article by Jane Goodall (by now Baroness Jane Van Lawick-Goodall) in the December 1965 *National Geographic* ("New Discoveries Among Africa's Chimpanzees"), in which she reported seeing chimpanzees make leafy sponges to soak up water from hollows in trees for drinking, the following article appeared in the January 6, 1967 issue of *Time*

ZOOLOGY

Birds that Throw Stones

Time was when only five species of vertebrates were known to use tools. There was man, of course. Chimpanzees used rocks to break open hard-shelled food, sticks to feed on termites and ants, and leaves for wiping their bodies and drinking. A gorilla had been seen pulling fruit to within its grasp by means of a crooked branch. The sea otter used rocks for opening shellfish. And Galapagos woodpecker finches probed insects from holes with short twigs. Come now the Egyptian vulture.

Traveling in Tanzania on a National Geographic Society photographic expedition, Zoologist Jane Goodall and her photographer husband Hugo Van Lawick came upon an abandoned ostrich nest. Two ostrich eggs left in the nest were under attack by a variety of vultures, which were trying vainly to peck through the tough shells. While the Van Lawicks watched and photographed, they reported last week in *Nature* two Egyptian vultures took a novel approach to their problem.

Picking up small stones in their beaks, they raised their heads high, then whipped the stones in the direction of the eggs with forceful movements of their heads and necks. Throwing, you might call it. After several hits -- and many misses -- they successfully broke open the shells and feasted.

To verify that the behavior of the two Egyptian vultures was no fluke, the Van Lawicks set out two ostrich eggs at a site 60 miles away and sat back to see who would cast the first stone. Sure enough, the eggs were promptly attacked by two mature, stone-hurling Egyptian vultures, which aimed wildly, often pausing to threaten each other. After the pair finally had cracked and eaten the eggs, an Egyptian vulture that was lower in the social pecking order approached one of the empty shells and peppered it with 30 rocks, perhaps practicing for the day when he, too, would be lucky enough to have ostrich egg for lunch.