



What Eats Parrots?

What are the major predators on parrots in the wild?

By Donald Brightsmith

Originally published in
Bird Talk Magazine August 2002

Recently I was asked what animals prey on parrots in the wild. I guess the short answer to that is . . . not much. In general parrots are quite wary and do a number of things to make sure that they are not captured by predators. They usually feed in groups high in the tree canopies. The high perches and large groups ensures that there are many eyes to spot predators and then an easy escape as they drop from the tall trees. Parrot nests also seem to be chosen to reduce the risk of predation. Most species in predator rich environments, especially the macaws I work with, prefer to nest in high trees in relatively exposed spots from which the adults can watch for danger and take flight quickly if needed. Those species that nest in the forest understory where they are more vulnerable take great precautions to avoid being captured when they return to their nests. I have watched three such species in the wild as they approach their nests, the Cobalt-winged Parakeet, Tui Parakeet and the Gray-cheeked Parakeet. All three of these birds are normally loud and raucous (those who own them as pets will back me up on this one I am sure). They call constantly when in flight, and usually even continue to chatter while feeding. But when they return to their nests it is a very different matter. They arrive and perch in a tree some 30 to 60 ft or more away from their nests. From this point on they are almost completely silent. They fly quietly to a perch in the canopy directly above the nest, never flying directly to the nest entrance. From their vantage point in the canopy they check the area then slowly descend through the dense tropical vegetation until they arrive at the hole in the termite nest or tree hole that they call home.

One of the most impressive displays of parrots' cautious behavior is at the Tambopata clay lick in se Peru. Here the birds gather in large groups in the trees above the licks. Often the parrots will wait until there are as many as 300 birds in the trees before they start moving towards the clay. But even with hundreds of birds watching, the first birds are still not comfortable descending directly to the clay. Instead they begin to fly in long low circles in front of the lick in what we call the dance. This dance may last as long as 10 to 15 minutes and may include dozens or up to 100 or more parrots and macaws. The birds seem to be checking the entire area for predators and waiting to see who will be the first to take the plunge and land on the clay rich cliff. Once the first bird lands as many as 100 or more can land in the next five minutes. But there are always plenty of birds that remain watching in the trees.

But I digress. What species actually do eat parrots? In the rainforest the answer is whichever ones can catch them. Many mammals would undoubtedly eat adult parrots if they could but I imagine that few ever get the chance. One mammal that may be an effective predator of parrots is the False Vampire Bat (*Vampyrum spectrum*). This is the largest bat in the New World with a wingspan of



nearly 3 ft. It flies by night and locates birds as they sleep. It then carries its prey back to its roost where it feeds. The book *Tropical Nature* by Forsyth and Miyata reports that a roost of this bat in Costa Rica contained the feathers of ". . . parrots and a host of other birds." As for non-flying mammals, I have heard a second hand report of an adult Green-winged Macaw (*Ara chloroptera*) being captured by a Brown Capuchin Monkey as the macaw waited in the trees above a clay lick in Peru. I have also seen this same type of monkey chase a Painted Parakeet (*Pyrrhura picta*) near its nest. Despite this I doubt that many adult parrots fall victim to mammals. This could be very different in areas where parrots go to the ground where wild cats have the chance to stalk them and in nests where adults and young could fall victim to predators that enter the nests.

I imagine that it is much more common for parrots to fall prey to raptorial birds. I have seen an Ornate Hawk-Eagle (a bird with a 4 ft. + wingspan) arrive at the clay lick in the hopes of catching a macaw or large parrot but his plan was foiled as he was spotted and all 500+ birds in the area quickly evacuated leaving the bemused looking Hawk-Eagle perched alone above the recently vacated lick. But my guess is that the scenario does not always play out that way as I found the plucked feathers of a Scarlet Macaw (*Ara macao*) on the trail near the lick later in that same season.

Another two species of large raptors are known to prey on the big macaws these are the Black-and-white Hawk-Eagle (*Spizastur melanoleucus*) and the Harpy Eagle (*Harpia harpija*). Studies of the Black-and-white Hawk-Eagle have shown that they are specialists on large birds and that macaws and Amazon parrots are likely a regular part of their diet. In Peru I watched one of these small eagles dive from a great height on to a densely forested hillside and as he entered the forested hillside a group of 9 Military Macaws quickly vacated the premises flying off in the opposite direction. The Harpy Eagle is not just the largest eagle in South America and one of the most powerful birds in the world, it is also a known macaw killer. In Brazil they have been seen taking adult Hyacinth Macaws. Studies in the Tambopata region have confirmed that these large eagles have killed both Yellow-crowned Amazon and Green-winged Macaw during the nesting season. In the early 1990's one of the hand-raised macaws at Tambopata Research Center was captured shortly after fledging by a Harpy Eagle. In early 2000 I was watching a Scarlet Macaw nest hoping that the nearly 3-month-old chick would fledge as I watched. Instead I saw a visit by an adult Harpy Eagle. The eagle flew in and thoroughly inspected the area, almost as though it was expecting to find a newly fledged young macaw. The macaw parents flew from the tree and flew in large circles screaming intense alarm calls until the eagle took off. As I watched, the eagle flew in the direction of another nest where a chick had fledged earlier that day. At 2 pm that afternoon we found an explosion of feathers where the newly fledged chick had been killed. Was it the Harpy Eagle I had just seen? I will never know, but I wouldn't be surprised.

What other birds eat parrots? That depends on the size of the parrot. The Thick-billed Parrot reintroduction project in the early 1990's was ended in part because a large female Northern Goshawk (*Accipiter gentilis*) found the newly released flock of parrots. She made frequent attacks on the feeder where food was placed daily for the parrots and succeeded in killing 4 of the newly released birds. Other hawks in the genus *Accipiter* are also known parrot predators. I have seen a picture of a Brown Goshawk (*Accipiter fasciatus*) on a wild Gala (*Elophus roseicapillus*) that it had just captured in Australia.



The small parakeets and parrotlets seem to have many enemies. I have seen Roadside Hawks (*Buteo magnirostris*) eating parrotlets and parakeets like the Dusky-billed Parrotlet (*Forpus sclateri*) and Dusky-headed Parakeet (*Aratinga weddellii*) near the clay licks in Peru. Despite this, larger parrots pay no attention to the small (30 inch wingspan) Roadside Hawk and these hawks are usually content to hunt spiders and insects even as parrots descend to take clay nearby.

As a group, the falcons are effective predators of many birds and among the world's best fliers. The Peregrine Falcon is the world's fastest bird and can reach speeds of 200 mph in a dive. This bird is likely a threat to parrots wherever it occurs. In southeastern Peru the Peregrine is only a casual visitor, but other falcons are there to keep the parrots on their toes. On a walk in the forest in Peru I scared a forest falcon (*Micrastur* sp.) off of a Cobalt-winged Parakeet that it had just killed. Since these falcons are specialists at hunting in the dark closed understory of tropical forests, I expect that the parakeet got surprised as it was descending to its nest. I guess even the most careful approach may not be foolproof. Out in more open areas I have witnessed the attacks of another impressive flier, the Orange-breasted Falcon (*Falco direoleucus*). On and off from December 2001 - January 2002 one of these falcons terrorized the clay lick at Tambopata Research Center where I work. I watched as the falcon captured a White-eyed Parakeet (*Aratinga leucophthalmus*) one morning and an Orange-cheeked Parrot (*Pionopsitta barrabandi*) a few weeks later. The falcon was even seen chasing Mealy Parrots (*Amazona farinosa*) which are much heavier than the falcon!! In January the falcon became quite bold and perched for hours in the trees above the lick. Each time the falcon took flight nearly all the macaws and parrots gave alarm calls and flew, even the large macaws that weigh more than twice as much as the falcon. During this period the falcon's arrival spelled an instant end to the clay lick activity and on mornings when the falcon arrived early no birds would eat clay at all. By late January the falcon had moved on, but I suspect that the effects of the falcon's presence lasted, as the birds seemed to be very flighty for the better part of 2 - 3 weeks after the falcon's disappearance.

In summary macaws and parrots are very wary and I suspect that adults rarely fall victim to predators of any kind. The great intelligence and naturally long life expectancy of many of the larger macaws and parrots makes them very cautious and causes them to move in groups and behave in ways to minimize their risk of being captured by predators. The fact that most parrots are highly arboreal and spend most of their time in or flying above the tallest trees, suggests that they rarely fall victim to mammals. Raptorial birds especially the forest eagles, hawk-eagles, Accipiter hawks, and falcons are the most likely species to prey on adult parrots and macaws.

Dr. Don Brightsmith is a Research Associate in the Duke University Department of Biology and runs the Tambopata Macaw Project in southeastern Peru. His research has focused on wild Brotogeris parakeets in Miami and Peru; natural history and conservation of Scarlet, Green-winged and Blue-and-gold Macaws in Peru and macaw reintroduction. He is also the Scientific Director for Rainforest Expeditions, the owner and operator of Posada Amazonas Lodge and the famed Tambopata Research Center. For more information on wild parrots or how to visit Peru feel free to contact him at Parrots@rainforest.com.pe