

Stealing Nests

By Sue Heath

Brood parasites are some of the bird kingdom's most notorious sneaks. They don't rear their own young but instead pawn the task of child care off onto other species without their knowledge. Instead of making a nest, a brood parasite lays her eggs in the nests of other bird species, avoiding the work of making a nest, incubating, and brooding.

The most studied brood parasite is the European Cuckoo. They never lay eggs in their own nests. The cuckoo removes one of the host's eggs and replaces it with its own (which usually mimics the eggs of the host). If the host does not recognize the intruding egg and abandon the nest, it will incubate and hatch the cuckoo.

Once hatched, the young Cuckoo will shove any other solid object over the edge of the nest using a scoop-like depression on its back. With the loss of their rightful young, the foster parents are left to devote all of their time and care to the cuckoo chick. The cuckoo grows larger than the foster parents, giving them a difficult task of satiating the voracious appetite of an oversized chick.

There are many Cowbirds that exhibit brood parasitism as well. Shiny Cowbirds, Screaming Cowbirds, Bronzed Cowbirds, and Giant Cowbirds all show this parasitic behavior. In fact, the genus name of cowbirds, *Molothrus*, means intruder in Latin. The most common brood parasite in the United States is the Brown-headed Cowbird. This bird is a parasite of more than 200 species!

Brown-headed Cowbirds eggs don't mimic host eggs and the young doesn't push the host eggs and young from the nest. Instead, they usually hatch first, grow faster, are more aggressive, and are much larger than nestlings of host species. This allows Cowbird chicks to out-compete host chicks for food and nest space. Cowbirds are especially bad because they tend to use Neotropical migrant species as hosts. Robins, Catbirds, Blue Jays, and Brown Thrashers will reject the Brown-headed Cowbird's eggs though.

Interesting relationships have developed between hosts and parasites. Some host species have developed defense strategies against parasites and brood parasites have developed unique strategies to counter the host's defense. One example of this is the Common Cuckoo. Many hosts to the Common Cuckoo learned to recognize Cuckoo eggs and would take them out of their nests. The Cuckoos in turn evolved eggs that mimicked those of the host. The mimicry was so good that genetic markers sometimes have to be used to tell the difference between host eggs and Common Cuckoo eggs.

Other brood parasite strategies include unique, but more deadly, adaptations. The aforementioned European Cuckoo has a scoop-like depression on its back used to shove eggs and chicks over the edge of the nest. African Honeyguide chicks are born with sharp hooks on the end of their bills that they use to kill the host chicks. Yikes! These hooks even fall off after they mature. Of course host species have more defense strategies as well. Some will even shift their breeding season so it doesn't correspond to that of the brood parasite. They will also attack the parasite, issue warning calls, and conceal their nests.

Brood parasitism is an amazing and interesting relationship. It's one of the more unusual phenomena of the animal kingdom. It shows how dynamic relationships between animals can be.

Photo By Mike Williams

Caption: Bronzed Cowbirds often lay their eggs in other birds' nest.