Avian Brood Parasitism

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In the bird world, parental care takes a lot of energy and creates a high level of risk as vulnerable parents work diligently to provide for and protect their young. Some bird species have evolved to bypass this difficult job altogether by employing a strategy called brood parasitism.

Brood parasitism is a reproductive strategy in which a female lays her eggs in the nest of another bird (usually a bird of a different species), and leaves incubation and chick-rearing entirely up to the host parent, often at the expense of the host's own offspring. In the most successful cases, the host does not recognize that the parasitic eggs in the nest are not hers, even if the eggs look different than her own in size and color/pattern.

The parasitic species benefits from this relationship by increasing its reproductive success without the cost of increased energy spent on parental care. Instead, all of their energy goes into mating and producing more eggs. The cost to the host species is decreased reproductive success.

Some of the most well-known examples of brood parasites are the Brown-headed Cowbird in North America and the Common Cuckoo in Europe. The Brown-headed Cowbird parasitizes over 220 North American species, including the Eastern Phoebe, Song Sparrow, recently de-listed Black-capped Vireo, and endangered Golden-cheeked Warbler. Cowbird eggs require a shorter incubation period than most other songbirds and usually hatch first. Cowbird nestlings are usually larger than their nestmates and grow very quickly because they command the most food from the host parent. This often results in the fledging of only cowbird young because the host's own nestlings are outcompeted.

The Common Cuckoo has an even more aggressive approach. Parasitic nestlings kick their nestmates out of the nest to maximize on the resources received from their host parent.

Many well-meaning bird lovers are tempted to take matters into their own hands when they see a cowbird egg in the nest of a beloved songbird, but the consensus among the bird community is to leave the egg alone. Brown-headed cowbirds are native to the United States and protected under the Migratory Bird Treaty Act.

Egg removal may also trigger a nest abandonment response in some host birds. A study conducted by the University of Washington showed that, in 56% of cases, when Brown-headed Cowbird eggs were removed from parasitized warbler nests, cowbird mothers returned to the nest and destroyed most or all of the eggs.

Rather than remove cowbird eggs, efforts can be put into deterring cowbirds, such as using feeders that are made for smaller birds, such as tube feeders with no catch basin on the bottom. In addition, avoid spreading food on the ground and clean up any spills below feeders. Cowbirds prefer sunflower seeds, cracked corn and millet, so try offering nyjer seeds, suet, nectar, whole

peanuts or safflower seeds instead. Finally, avoid searching for or visiting nests when cowbirds are around. All of these efforts together can help us prevent our favorite songbirds from being parasitized!

Photo by Mike Williams. Caption: Brown-headed Cowbirds are a commonly seen brood parasite in Texas.