

## THE ANTBIRDS OF THE AMERICAS



Bicoloured Antbird  
*Gymnophithys leucaspis*  
Photo: "Mdf"

The Antbirds are a large family, *Thamnophilidae*, of passerine birds found across subtropical and tropical Central and South America from Mexico to Argentina. There are over two hundred species, known variously as Antshrikes, Antwrens, Antvireos, Fire-eyes, Bare-eyes and Bushbirds. They are related to the Antthrushes and Antpittas (family *Formicardiidae*), the Tapaculos, Gnateaters and the Ovenbirds.

Most Antbirds are small birds with rounded wings and strong legs. Their plumage is mostly sombre grey, white, brown and rufous, they are sexually dimorphic in pattern and colouration. Some species vocalise warnings to rivals by exposing white feather patches on their backs or shoulders.



Variable Antshrike  
*Thamnophilus caeruleus*  
Photo: Dario Sanches

Most have heavy beaks, which are often hooked at the tip. The majority of species live in forests, although a few are to be found in other habitats. Insects and other arthropods form the most important part of their diet, but small vertebrates are sometimes taken. Many of species feed in the understory and midstory of the forest, although a few feed in the canopy and some on the ground. Many join mixed-species feeding flocks. Approximately eighteen species specialise in following columns of army ants to catch the small invertebrates flushed by the ants. However, others may opportunistically feed in this way .

Most Antbirds are monogamous, mate for life and defend territories. However, there are some exceptions, such as the Ocellated Antbird. They usually lay two eggs in a nest that is either suspended from, or supported on, a branch, stump or mound on the ground. Both sexes share incubation, brooding and feeding the young. After fledging, each parent cares exclusively for one chick.



The Ocellated Antbird  
*Phaenostictus mcleannani*  
has an unusual social system of shared breeding territories. One dominant pair may share a territory with up to six other birds.

Photo: "Mdf"

Thirty-eight species are threatened with extinction due to human activities, but hunting is of little significance. The principal threat is loss of habitat



Hen Variable Antshrike  
nest building  
Photo: Dario Sanches

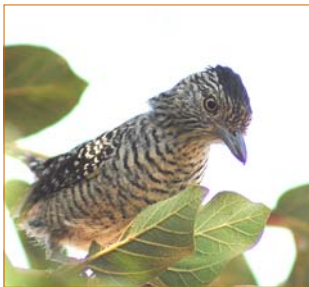
as a result of land clearing, which then causes habitat fragmentation and increased nest predation due to the concentration of both the birds and predators in smaller areas.



The legs and feet of ant-following Antbirds are strong and adapted to gripping vertical stems and branches. For instance, the leg muscles of the Bicoloured Antbird make up 13% of the total body weight.

Photo: Matt Deres

Antbirds rely on their calls for communication, as is typical of birds in dark forests. Most species have at least two calls, the *loudsong* and the *softsong*. Loudsongs have a territorial purpose and are given when birds meet at the edges of their territories, or during the morning patrol of their territory. Neighbouring pairs judge the proximity of rivals by the degradation of the song caused by environmental interference. When defending territory the male will confront the rival male and the female her



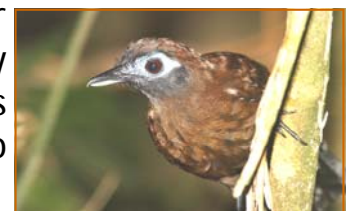
The Barred Antshrike *Thamnophilus doliatus* is distributed from Mexico to Argentina. It has the hooked bill typical of the Antshrikes.

counterpart. Loudsong duets are also probably related to pair bond maintenance. The function of the softsong is more complex, and possibly to do with pair-bonding. A range of other sounds are also made; these include scolding when mobbing potential predators. Some species of Antbirds birds will actively seek out ant-swarms by using the calls of some ant-following species as clues.

Antbirds are for the most part birds of humid lowland rainforests. Less than 10% of species have ranges above 2000m (6500 ft) and almost none have ranges above 3000m (10000 ft). The highest species diversity is found in the Amazon Basin, where up to forty-five species can found in a single



location in sites across Brazil, Columbia, Bolivia and Peru. The number of species drops dramatically towards the outer reaches of the familys' range; for example there are only seven species in Mexico. Some species are predominantly associated with certain microhabitats within a greater ecosystem; for example, the aptly named Bamboo Antshrike is predominantly found in bamboo patches.



Arthropods are the main diet component of all Antbirds. These are mostly insects, including grasshoppers, crickets, cockroaches, praying mantises, stick insects and the larvae of butterflies and moths. Antbirds often take spiders, scorpions and centipedes.

Immaculate Antbirds *Myrmeciza immaculate* regularly attend army ant swarms in order to feed, but they are not obligate ant-followers; they also forage

They swallow smaller prey items quickly, but beat larger items against branches to remove wings and spines. Some of the larger species can kill and consume frogs and lizards as well, but these do not usually form an important part of the family's diet. Other food items are also eaten, including fruit, eggs and slugs.

Swarms of army ants (*Ecitoninae* spp.) play an important role in some species of Antbird, and are the source from which the family's common name is derived. Many species of tropical ant form large raiding swarms, but many are nocturnal or raid underground. The species most commonly attended by birds is the Neo tropical species *Eciton burchellii*, which is active during daytime and surface-raiding. It was once thought the birds were actually eating the ants. However, many studies in diverse parts of *E. burchellii*'s range have shown the ants only act as beaters, flushing insects, other arthropods and small vertebrates for the waiting flocks of "ant-followers".

Antbirds are preyed upon by some raptor species, and their tendency to form mixed-species flocks is thought to be a protection against such predation. Some species, such as the White-bibbed Antbird, *Myrmeciza loricata*, are preyed upon by the Greater Round-eared Bat, *Tonatia bidens*, while the Scaled Antbird, *Drymophila squamata*, is the preferred prey of that species. Incubating adults, chicks and eggs, are vulnerable to predators, particularly snakes but also nocturnal mammals. Nesting success is low for many of the species, particularly in areas of fragmented habitat.