

Woodland Migration Corridors: Critical Stopover Habitat for Neotropical Migrant Forest Birds

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Neotropical Migrants in Trouble

The woodlands of the Campus Natural Areas (CNA) are part of a migration route important to the survival of forest-interior Neotropical migrants. These birds travel twice-yearly between winter homes in the tropics and summer breeding sites in the north. The populations of many of these species (which include thrushes, tanagers, cuckoos, flycatchers, warblers, orioles and other songbirds as well as some predators) are steadily decreasing.

Why is this happening, and what can be done to change this ominous trend? Scientists have focused on habitat deterioration in three critical areas: the winter tropical forests, the summer breeding grounds in the north, and the migration corridors connecting these two. There are problems in each of these, but only those of the migration and breeding periods are applicable to the woodlands of the CNA.

Importance of Woodland Habitat for Migrants

A major problem in migration is the loss of woodland habitat. Birds use a tremendous amount of energy in their astounding voyages and need to replenish their fat supply many times along their route. Today they are dependent on forest "corridors" which have many gaps and are more like archipelagos of disconnected wooded islands than true migration highways. Further, many of these forested "islands" have deteriorated in ways that make them much less able to offer the food and shelter needed by the migrants.

The CNA serves as an important migrant resting area due to its location on the south edge of a large lake. In the spring birds come to the lake edge and travel down Picnic Point in an attempt to avoid flying over a large body of water. In periods of strong north winds and/or rain, birds may be forced to remain in the area for several days. The presence of two and a half miles of wooded shore in the CNA allows birds to move freely to avoid the chilling winds and to find the best feeding areas. In the fall, exhausted from a long night of flying which ends with a dangerous flight over the lake, birds land at Frautschi Point and along the wooded shore. They spend one or more days (depending on weather and their fat reserves) refueling and regaining weight. To these forest birds, the CNA represents a wooded

oasis in a relatively barren urban and agricultural landscape.

Forest Degradation

Simplification makes forest less useful for migrants. Many forests have lost their native plant diversity and their multilevel structure, particularly the layers of understory trees, shrubs, and ground vegetation and the vines that connect these layers. With this decreased plant diversity and simplified forest structure, woodlands have far fewer niches for birds. As a general rule, the more vegetation layers and the greater the native plant diversity, the more niches for wildlife.

The "Edge Effect"

The sprawl of man-dominated landscapes, timber cutting, grazing, and road construction have broken our forests into smaller and smaller units, often separated from each other by some distance. This not only decreases the actual amount of forest available to wildlife, but changes its quality as well. Many birds need interior forest rather than edge, in the breeding season and during migration. They need the seclusion, the food provided, and the relative safety from predators. Most predators are edge-adapted and many hunt most successfully where there are gaps in the forest canopy and few shrubby places to hide. Biologists have found that "interior forest" begins about 300 feet from any road or other non-wooded area. In a very small woodlot, the entire woodlot is edge.

What Can We Do?

What can we do in the CNA and in our neighborhoods to provide optimum habitat for the Neotropical forest birds that migrate through our area?

- 1) Prevent further fragmentation of woodland areas.
- 2) Fill the gaps between woodlots by reforesting damaged areas between them. Where this is impossible, connect the woodlots with hedgerows of native trees and shrubs, especially berry- and seed-producing ones.
- 3) To the extent possible, locate roads and trails on the peripheries of the woodlands instead of through the interior and allow roadside vegetation to grow to at least six inches tall.
- 4) Aim for the maximum plant diversity and the maximum complexity of forest structure.
- 5) Make our properties wildlife-friendly and encourage others in the community to do the same.