Wood Thrush

*Hylocichia mustelina*

Introduction

The Wood Thrush has become a symbol of seriously declining Neotropical migrant birds, its population having decreased significantly over much of its range just since the late 1970s. Its conspicuous song, widespread occurrence in a variety of wooded habitats, and vulnerability to parasitism by the Brown-headed Cowbird make it a frequent subject for ecological research and popular articles.

The flutelike song of the Wood Thrush is one of the most popular and widely recognized bird vocalizations, and is a familiar sound in eastern deciduous woodlands throughout summer, especially at dawn and dusk. Males are versatile singers, sometimes singing two notes at once. By combining different variants of each part of the three-part song, a male also can deliver a broad array of songs, especially during his intense vocal display during the “dawn chorus” on a May morning. Henry David Thoreau wrote that: “the thrush alone declares the immortal wealth and vigor that is in the forest.”

The Wood Thrush inhabits a wide variety of deciduous and mixed forests. Destruction and fragmentation of forests in both breeding and wintering areas are factors in the species’ declining abundance. Individuals in smaller woodland fragments experience more nest predation and more cowbird parasitism (especially in the Midwest) and consequently poorer reproductive success than individuals nesting in larger areas with larger contiguous woodland landscapes.
**Habitat Preferences**
The Wood Thrush is an area sensitive species that is closely linked to large deciduous woodlands. Primary habitat features are a shrub-sub-canopy layer, shade, moist soil, and leaf litter, each of which enhance feeding and nesting.

According to written reports, for areas where Wood Thrush and Veery both occur, the Veery is more often in slightly different sites – those with shorter trees, less canopy, more shrubs, and less leaf litter.

**Feeding Habits**
This species feeds mostly on invertebrates and on fruits from shrubs; and the latter are especially important for energy prior to fall migration.

Wood Thrush forages primarily on the ground in woodland undergrowth, and mostly for soil invertebrates including beetles, caterpillars, ants, crickets, moths, spiders, earthworms, and snails. Berries and small fruits are eaten in all seasons, but mainly in late summer, fall, and late winter, and these are taken up in shrubs and trees.

**Breeding Biology**
Wood Thrushes arrive in Iowa in early May and defend territories that average about three acres in size by singing. They are monogamous, and during courtship the male may chase the female in fast circular flights among the trees. Wood Thrush often react aggressively toward other thrushes that enter their territory.

Most nests are built below 20 feet in height in shrubs and small trees, but some nests may be up to 60 feet high in trees. Nests are built by the female, and are similar to the nests of American Robins.

Usually 3 to 4 eggs are laid and incubation is by the female only, and lasts from 13 to 14 days. Both parents – indistinguishable in appearance – feed the nestlings. The young leave the nest at about 12 days of age.

Most females attempt to rear two broods a summer; and under good conditions about half are successful, but 3 to 4 re-nesting attempts may be required to do so. Second nests usually have fewer eggs.

Brood parasitism by Brown-headed Cowbirds may reduce annual fledgling production in some areas to the extent that it threatens population stability, but the overall demographic effect of parasitism on Wood Thrush remains poorly understood.

**Concerns and Limiting Factors**
The concerns and limitations for Wood Thrushes are similar to those for Veery. Due to the loss of so much woodland resource over time in Iowa, these thrushes are undoubtedly less abundant today than they were a century ago.

Collisions with human-made objects such as TV and radio towers, and perhaps cell phone towers and other structures, during nocturnal migrations, is a serious problem. But elimination of preferred woodland habitats in both breeding and wintering habitats is likely a major reason for declining Wood Thrush populations.

Fragmentation of woodlands into smaller and smaller units, and loss of second-growth in woodlands are major threats to Wood Thrush populations. Fragmentation increases the likelihood of nest parasitism by Brown-headed Cowbird; in fact research in Illinois found that nearly half of Wood Thrush nests were parasitized by cowbirds. Woodland thinning and fragmentation of breeding areas encourage nest parasitism by cowbirds.

Increased browsing of understory by growing populations of White-tailed Deer is likely a problem for nesting Wood Thrush in many areas.

Despite an abundance of research on Wood Thrush, several questions about the
breeding biology and population dynamics of this species remain unanswered.

**Habitat Management Recommendations**

Habitat management recommendations for Wood Thrushes are similar to those for Veery. Further declines in Wood Thrush numbers can be expected in Iowa if habitat losses continue. Woodland management practices that leave large tracts of mature woodland undisturbed is probably necessary if this species is to survive as a breeding bird in Iowa.

With more frequent planning and implementation of bird conservation projects across our state, and as additional focus is placed on IBA Criteria Species, the Wood Thrush will hopefully benefit and be able to sustain its population. Therefore, development and implementation of conservation plans at IBAs and at other woodland habitats that support, or have the potential to support Wood Thrush, is a very worthwhile goal.

For general information see Woodland Management for Birds, and for more specific details see Recommended Woodland Management Practices. Both of these sections are in Part 3.