

Three Rivers Migration Observatory: Fall Migration 1998

Ronald A. Canterbury¹, Jim Meyer², and Dollie M. Stover³

The 4th year of bird-banding at the Three Rivers Migration Observatory (TRMO) was a moderately successful operation. Banding stations were operated for 114 days between July 7 - December 5, 1998. Additional sites used this year were: Athens (Mercer County), Bluefield (Mercer County), Bluestone State Park (Summers County), and Pipestem (Summers County). July and August were cooler and wetter than normal, but September through November were warmer and drier than expected. Most of the frontal systems were weak and only a few frosts occurred by the end of November. The cool and wet weather of August may have produced an early migration and most warblers were gone by October 1.

A total of 4,216 birds of 95 species and 1 hybrid was captured with a capture ratio of 43.81 birds per 100 net hours. An average of eight 12 meter mist nets were used per day during the study. There were 305 birds captured in July (n = 14 days), 549 in August (n = 26 days), 1,321 in September (n = 28 days), 1,317 birds in October (n = 29 days), 648 in November (n = 14 days), and 76 birds during three days in December. The biggest day was September 11 with 163 captures followed by October 26 with 155 captures, and only a total of five days produced captures in excess of 100 (Figure 1). Nine new species and 1 hybrid were added this fall: the Mourning Dove, Yellow-billed and Black-billed cuckoos, Least Flycatcher, Bicknell's Thrush, Lawrence's Warbler, Cerulean Warbler, Fox and White-crowned sparrows, and the Baltimore Oriole (Table 1). Two Black-billed Cuckoos were window casualties at the Lilly Mountain banding station. We released 90 Ruby-throated Hummingbirds from mist nets.

We captured 1,058 birds at Athens (n = 30 days), 98 at Bluefield (n = 4 days), 239 at Bluestone State Park (n = 10 days), 1,211 at Lilly Mountain (n = 41 days), 299 at Pipestem (n = 10 days), and 1,311 at Sandstone Falls (n = 60 days) (Table 2). A Short-eared Owl was heard on Lilly Mountain on August 8. The American Goldfinch was caught in greatest numbers with 824 captures (Table 1). This was followed by the House Finch with 566 captures. These two finches staged a good movement through the Athens and Pipestem area. The Tennessee Warbler staged a relatively good flight through Lilly Mountain with 345 captures. Like recent years, the Yellow-rumped Warbler migrated in good numbers through lowland areas, e.g., Sandstone Falls and Bluestone State Park and birds were still passing through in late October. Resident species such as Tufted Titmouse, Carolina Chickadee, Carolina Wren, Northern Cardinal and Song Sparrow were captured in good numbers, which may represent migrants from the north. Thrushes were in low numbers and no major flight developed in the area. The Veery was not captured during the study.

A good number of Blue-gray Gnatcatchers was captured and their movement appeared better than in 1997 and similar to 1996 (Canterbury and Stover 1998). The capture of Indigo Buntings (n = 131) was similar to that of 1996 (n = 136 captures) and 1997 (n = 96 captures). We also noted a good movement of House and Winter wrens and Scarlet Tanagers (Table 1). Large flocks of Eastern Bluebirds and Cedar Waxwings were noted in the study areas.

Birds banded and recaptured during the year included one Red-bellied Woodpecker, three Downy Woodpeckers, one Blue Jay, 35 Carolina Chickadees, 20 Tufted Titmice, 26 Carolina Wrens, three House Wrens, two Winter Wrens, three Golden-crowned Kinglets, eight Ruby-crowned Kinglets, one Blue-gray Gnatcatcher, four Hermit Thrushes, 30 Gray Catbirds, one Brown Thrasher, 12 White-eyed Vireos, two Red-eyed Vireos, two Blue-winged Warblers, one Golden-winged Warbler, three Tennessee Warblers, six Magnolia Warblers, one Yellow-rumped Warbler, one Black-throated Green Warbler, five American Redstarts, five Ovenbirds, one Kentucky Warbler, 14 Common Yellowthroats, 10 Hooded Warblers, two Yellow-breasted Chats, 40 Northern Cardinals, seven Indigo Buntings, 10 Eastern Towhees, nine Chipping Sparrows, six Field Sparrows, 28 Song Sparrows, one Lincoln's Sparrow, three Swamp Sparrows, 15 White-throated Sparrows, two White-crowned Sparrows, three Dark-eyed Juncos, one Red-winged Blackbird, 62 House Finches, and 31 American Goldfinches. Recaptures of two

Carolina Chickadees banded in 1996, two Carolina Wrens banded in 1997, a Ruby-crowned Kinglet banded in 1996, one Gray Catbird banded in 1997 and three in 1996, two White-eyed Vireos banded in 1996, one Ovenbird banded in 1996, three Northern Cardinals banded in 1996, two Indigo Bunting banded in 1996, and four American Goldfinches banded in 1996 and one from 1997 are noteworthy.

The banders who participated this year were Janet Meyer, Jim Meyer, Ann McRae, Allen Waldron, and station co-directors Dollie Stover and Ronald Canterbury. Allen Waldron assisted with maintaining net lanes at the two main stations of Sandstone Falls and Lilly Mountain. The following people aided in tending nets, keeping records, and in many other ways: Sandy Canterbury, Bill Hank, Margeret Hank, Dave Llewellyn, and Tommy Stover. The National Park service provided some mist nets and partial funding was provided by the Brooks Bird Club and Concord College. Cully McCurdy and Keith Cooper kindly granted permission to band birds at Bluestone State Park.

Table 2. Birds Captured per Site

Sandstone Falls

Downy Woodpecker	5
Yellow-shafted Flicker	2
Eastern wood-Pewee	9
Traill's Flycatcher	1
Acadian Flycatcher	10
Least Flycatcher	2
Eastern Phoebe	3
Blue Jay	2
Eastern Tufted Titmouse	4
Carolina Chickadee	11
Brown Creeper	2
Carolina Wren	29
House Wren	6
Winter Wren	7
Blue-gray Gnatcatcher	27
Golden-crowned Kinglet	12
Ruby-crowned Kinglet	26
Eastern Bluebird	1
Bicknell's Thrush	1
Swainson's Thrush	11
Hermit Thrush	12
Wood Thrush	5
American Robin	5
Gray Catbird	61
Brown Thrasher	2
Cedar Waxwing	24
White-eyed Vireo	11
Blue-headed Vireo	10
Yellow-throated Vireo	5
Philadelphia Vireo	2
Red-eyed Vireo	21
Golden-winged Warbler	1
Lawrence's Warbler	2
Northern Parula	2
Yellow Warbler	6
Yellow-throated Warbler	1
Magnolia Warbler	38
Black-throated Green Warbler	27
Prairie Warbler	2
Palm Warbler	13
Bay-breasted Warbler	3
Yellow-rumped Warbler	88
Black-and-White Warbler	2
American Redstart	72
Worm-eating Warbler	9
Ovenbird	30
Northern Waterthrush	3

Louisiana Waterthrush	4
Kentucky Warbler	7
Mourning Warbler	3
Common Yellowthroat	39
Hooded Warbler	24
Wilson's Warbler	2
Canada Warbler	1
Yellow-breasted Chat	2
Scarlet Tanager	18
Northern Cardinal	55
Rose-breasted Grosbeak	4
Indigo Bunting	87
Eastern Towhee	15
Chipping Sparrow	3
Field Sparrow	28
Fox Sparrow	1
Song Sparrow	136
Lincoln's Sparrow	23
Swamp Sparrow	23
White-throated Sparrow	136
White-crowned Sparrow	10
Dark-eyed Junco	2
Baltimore Oriole	2
House Finch	3
American Goldfinch	55

Lilly Mountain

Sharp-shinned Hawk	1
Mourning Dove	3
Black-billed Cuckoo	2 (found dead)
Yellow-billed Cuckoo	1
Red-bellied Woodpecker	2
Downy Woodpecker	8
Eastern Wood-Pewee	8
Yellow-bellied Flycatcher	3
Least Flycatcher	2
Eastern Phoebe	1
Eastern Tufted Titmouse	13
Black-capped Chickadee	5
Carolina Chickadee	15
White-breasted Nuthatch	3
Brown Creeper	1
Carolina Wren	6
House Wren	12
Winter Wren	10
Golden-crowned Kinglet	11
Ruby-crowned Kinglet	18
Blue-gray Gnatcatcher	3
Gray-cheeked Thrush	1
Swainson's Thrush	13