

## A TIME STUDY OF TRAP ACTIVITY\*

By L. Barrie Hunt

There is a wealth of information contained in the notebooks of each bander, but unless it is analyzed and made available to others, it remains a mass of useless facts. This study, the first of three proposed, is an attempt to collect a portion of these statistics, and from them draw certain valid conclusions.

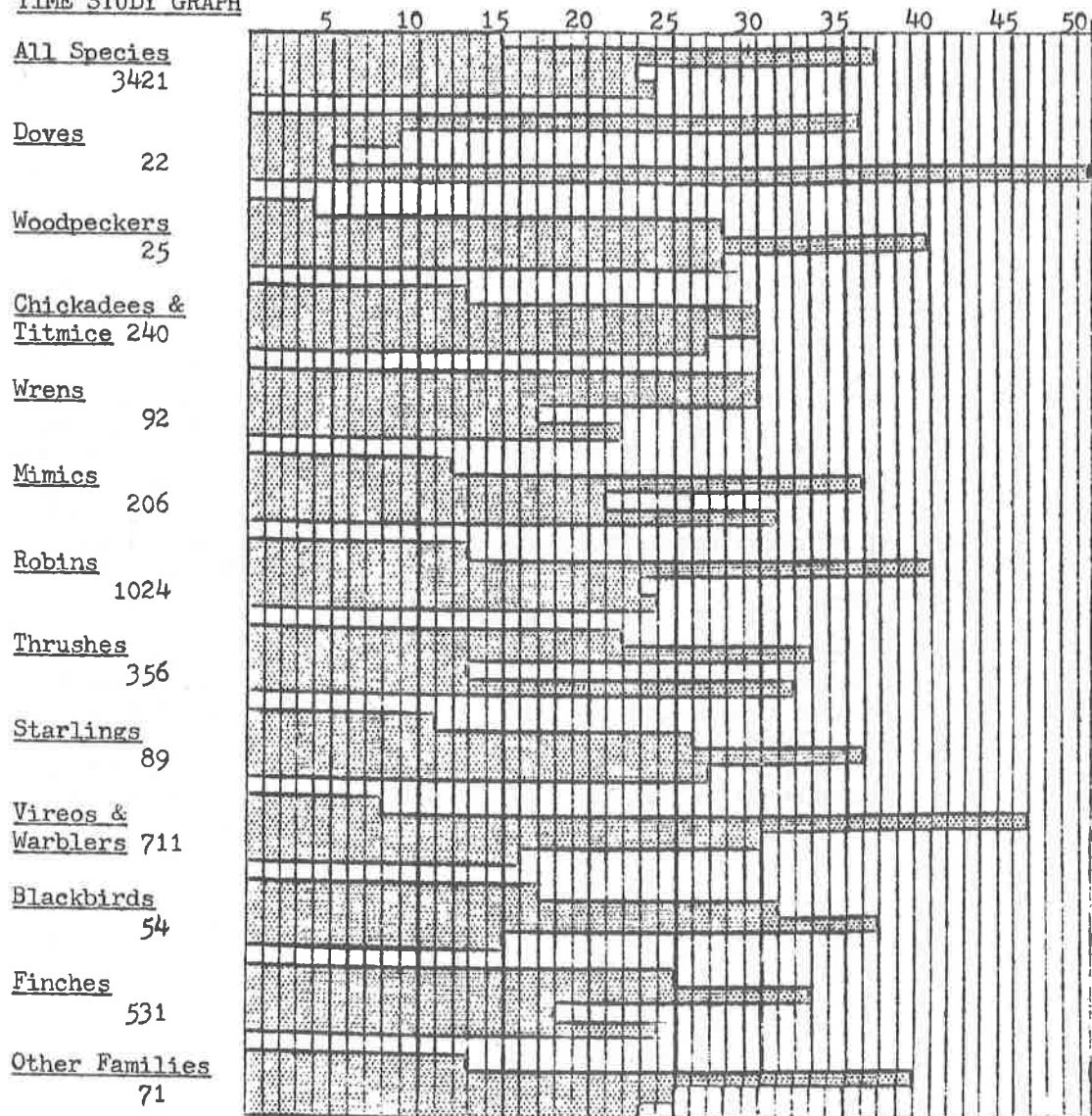
Those who maintain banding or feeding stations have no doubt noticed periods of increased bird activity during the day, and yet it is difficult to correlate these periods unless extensive notes are taken. From August, 1950, till January, 1957, inclusive, 3421 individuals of 77 species were trapped (bandings, repeats, and returns) in Richmond, Wayne County, Indiana, and Oxford, Butler County, Ohio, and the trapping times were recorded. Since this study concerns only birds taken while actively seeking food or water, all birds taken in nests, by hand, or in nets have been excluded. Traps were operated during each month of the year, with the majority of birds taken in water traps during the summer and early fall months. V-top sparrow, sparrow, potted, chardonneret, and drop traps were used.

The traps were normally visited at three hour intervals, and since most of the birds were never seen actually entering the trap, these times have been grouped into four three-hour periods for the sake of convenience and accuracy. These four periods, given in eastern standard (central daylight) time, are: 7:00AM to 10:00AM; 10:00AM to 1:00PM; 1:00PM to 4:00PM; and 4:00PM to 7:00PM and are referred to as early morning, late morning, early afternoon, and late afternoon. No birds were known to have entered before 7:00AM or after 7:00PM.

In the graph illustrating the results of this study, the four time periods for each group are shown in order, each representing the percentage of individuals in the group taken during that period. These percentages are given to the nearest whole percent, and therefore the total may or may not exactly equal 100%. The number immediately following the name of each group represents the number of individuals included in that group. The All Species column has been entered first so that it may be readily compared with each subsequent group. (continued on page 81)

\*Reprinted from Inland Bird Banding News  
Vol. 29, No. 2, April, 1957

TIME STUDY GRAPH



(1st bar in each set is 7-10AM; 2d - 10AM-1PM; 3d - 1-4PM; 4th - 4-7PM.)

**ALL SPECIES** As the graph indicates, the food and water seeking activity of All Species shows an early morning low, followed by a late morning peak and a levelling off throughout the remainder of the day. While this early morning low could be partially the result of not baiting the traps daily by 7:00AM, the late morning high is attributable only to increased bird activity. The possibility that robin activity, which comprises 30% of all trappings, largely influenced the All Species percentages was unfounded, since the All Species percentages, excluding robins, were nearly identical.

**DOVES** In spite of the small available number of trappings to consider, the graph clearly indicates that mourning doves are most active during the early and late periods with only 14% trapped between 10:00AM and 4:00PM.

**WOODPECKERS** 25 individuals of 5 species are only enough to show a possible trend toward early afternoon activity.

**CHICKADEES & TITMICE** The average of 114 carolina chickadee and 126 tufted titmice trappings shows slightly greater mid-day activity, with the titmice most active during late morning (31%), and chickadees during early afternoon (36%).

**WRENS** 3 species of wrens, mostly house, show a definite preference for morning activity. A number of the house wrens trapped were apparently family groups.

**MIMICS** Both catbirds (188) and brown thrashers (18) showed late morning and late afternoon peaks. There is no apparent explanation for this split trend.

**ROBINS** Robins follow the general pattern of peak late morning activity. In late summer large flocks gathered on the lawn near the station during the afternoon, but few showed an interest in the water traps.

**THRUSHES** Here the split trend results from activity differences by members of the group, each of which must be considered individually. While 169 olive-backs and 26 gray-cheeks duplicated the robin pattern, 48% of 95 wood thrushes and 40% of 47 hermit thrushes preferred the late afternoon visits, and 19 veery captures were scattered throughout the day.

**STARLINGS** Unlike the robins, afternoon flocks of starlings readily entered group traps for water.

**VIREO & WARBLERS** The average of 2 species of vireos and 25 species of warblers shows a late morning and early afternoon preference, and a much lower late afternoon activity. However, 41% or 37 canada warblers were trapped after 4:00PM.

**BLACKBIRDS** Numerous grackles and cowbirds accompanied starlings into group water traps during mid-day hours. In addition, several cowbirds accompanied a parent (cardinals and song sparrows) into traps throughout the day.

**FINCHES** Although the family average and most of the 14 member species show late morning preference, 46% of 26 indigo buntings were trapped after 4:00PM, and both towhees and song sparrows were more active during the early morning and late afternoon periods.

**OTHER FAMILIES** 13 species of 8 families followed the All Species trend. Only the total of 6 cedar waxwings, all taken in late afternoon, disrupted this picture.

\*\*\*

#### BANDING GOSHAWKS By Benjamin P. Burt

An expedition to band young goshawks in the nest and to record on tape the calls of adults and young was made recently in a wild area of New York State known as the Tug Hill plateau. It meant an auto trip of 80 miles on paved roads, 20 miles on the dirt roadbed of an old railroad and 3/4 of a mile down a brook. From that point it was 1 1/2 miles on foot.

Prof. Paul Kellogg of the Laboratory of Ornithology at Cornell went along with his recording equipment as well as Fritz Scheider, Dr. Walter Spofford and myself. The sound equipment consisted of a large bowl-shaped reflector mounted on a tripod with a microphone fastened at just the right point in front of it and connected to a portable tape recorder. Sounds striking the four foot reflector bounced into the microphone. Thus it picked up sounds from directly in front of it, while noises coming from the side were not so intense.

Near the nest, the recording equipment was readied. When the adult goshawk first spied us, she swooped over, uttering her wild "cuk, cuk, cuk, cuk." Scheider aimed the reflector and microphone at the moving bird and Kellogg operated the recorder. The young called from the nest and that was taped, too.

In the nest, I found three good sized but downy young goshawks. They were bold and unafraid. Repeatedly they struck at me with their wings and feet. After pulling up a camera and photographing them, each received a leg band. They were then lowered to the ground for the rest to see and to photograph. When I put them back in the tree, they scrambled into the nest eagerly. Their three-foot platform of sticks was all the world they knew. So I went down the rope and left them in their wild and isolated home.

I wonder if I will ever hear from them again?

\*\*\*