

THE TIME BIRDS GET UP IN THE MORNING.

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The writer has always been curious to know at what time birds become active in the morning and what species are astir first. The table which accompanies this article shows some observations which were made the last of June and the first of July in various years. This time of year was chosen because it is the time of maximum daylight and also the time when bird-life is at its greatest activity.

Any one who wishes to take observations on the time when birds awaken will have to plan to arise early himself. As will be seen from the data given, one should be on the ground for observation by 3:00 o'clock. A place where a large number of species of birds are likely to roost should be selected. One cannot go from place to place while taking observations; he must choose a place and stay there, and take all the observations which come to him at that place. If the place seems unsuited another place can be chosen for another morning.

To some extent the time of awakening is dependent on the character of the morning. A cold morning with a chilly wind will delay the activity of the birds. A cloudy morning, threatening rain, or one on which it is raining will also delay their movements. Moonlight or the absence of moonlight does not seem to make much difference, providing the sky is clear. So far as observations has been made, the deep woods do not delay the awakening of birds. In the table, the observations taken on July 3, 1913, were taken from a place where the timber was of rather heavy stand and deep ravines hindered the coming of daylight.

Most of the observations recorded in the table were taken on the Purdue University campus. On this campus many Robins and Grackles congregate to roost. With birds the same as with men, it seems that some awake and bestir themselves sooner than others; then to, it seems that with some birds their first notes are but sleepy yawns. For example, the following notes were recorded concerning one particular observation: the first Robin chirped at 3:15, again at 3:17, and at 3:25 it burst into full song, and a minute later the robins all seemed to join in a grand chorus. This chorus continued until 3:50 when they began to fly to the ground and began to feed. The first Grackle was heard at 3:19 then all was quiet until 3:50 when there was a general disturbance among the hundreds in the trees and the chattering began in earnest. It seems as though some one of their number had taken it upon himself to awaken the entire company at 3:50, for apparently the whole flock awoke and began to chatter all at once. This chattering lasted for twenty minutes (4:10) when they began to fly away to feed.

In recognizing the various species one must depend upon his ear, since it is impossible to see the birds at this time in the morning. A study of the table will show that among our earliest birds are the Robin, Grackles, Cat Bird, Bull Bat and Bee Martin. The Bull Bat and Whippoorwill sound their notes throughout the night and ought not to be included in this list.

It is proposed to continue these observations with the hope of getting more data on each species and extend the data to more species.

Table Showing the Observed Time at Which Birds Gave Their First Notes in the Morning.

	June 23, 1913*	June 30, 1913	July 1, 1913	July 3, 1913	July 4, 1915	June 30, 1916
Cardinal.....	3:35	3:43		3:55		
Indigo Bunting.....	3:55	3:30		3:40		
Cat Bird.....	3:55	3:20	3:33			3:28
Blue Jay.....	4:00	3:45	3:53		3:52	
Md. Yellow Throat.....	4:00	3:38				
Green Heron.....	4:00			3:40		
Crow.....	4:08	4:00		3:58		3:52
Mourning Dove.....	4:08	3:44	3:25			3:41
Whippoorwill.....	4:07			3:35		
Song Sparrow.....	4:10	3:35			3:40	
Robin.....	4:13		3:15	3:20	3:43	3:23
Bull Bat.....		3:27	3:16			3:22
Wood Thrush.....		3:43		3:45		
Bob-White.....		3:47				
Brown Thrasher.....		3:55	3:46	3:55		
Crested Flycatcher.....		4:00		4:20	4:10	
Grackles.....		4:08	3:19			3:25
Red-headed Woodpecker.....		4:10				
Chimney Swifts.....		4:15	4:07			4:07
Flicker.....		4:19		4:16		4:22
Bee Martin.....			3:21			3:22
English Sparrow.....			3:45		3:57	3:57
Chipping Sparrow.....			3:52			3:52
Meadow Lark.....			3:55			
Baltimore Oriole.....			4:19			
Tree Sparrow.....				3:35	3:46	
Vesper Sparrow.....					3:34	
Wood Pewee.....				3:47		
Towhee.....				4:12		
Goldfinch.....				4:26		
Titmouse.....				4:28		
Cow Bird.....				4:33		
Yellowbilled Cuckoo.....				4:45		
Bluebird.....					4:00	
Purple Martin.....					4:00	

*Cloudy and rained at 3:35 and continued for 15 minutes.