

Teams of 2-12 volunteers went out every morning, searching on foot or surveying from cars or bicycles.

Typical daily patrols spanned from 4 a.m. (roughly one hour before sunrise) to 9:30 a.m. Patrols extended later into the day when there was elevated bird collision activity, sometimes until 1 p.m. A small number of additional birds were collected during other hours of the day and night when the public or volunteers in the downtown area reported and retrieved birds.

Results and Discussion

Abundance and Composition Patterns:

Our combined data set consisted of 1432 identified, and 2520 unidentified nocturnal flight calls, 3040 mist-net captures, and 1060 window collisions. Monthly totals are presented for each species, each year, and for each method in Table 1.

Nocturnal flight call recordings produced much higher abundance peaks in both years than did the

other two methods we analyzed (Fig 1). The window-collision data was the flattest method, with mist-netting data showing abundance peaks of intermediate size. There are two principal factors that likely contribute to this variation in peak amplitude.

First, the nocturnal flight call data set has a greater spatiotemporal extent, and therefore samples more birds than do either of the other methods. Even though the microphone is located at a single point in

Table 1: Monthly totals of birds recorded by each method, for each species, in 2006 and 2007

Species that fall into a “black box” (calls are indistinguishable from another species with 95% certainty) in the “calls” data set are marked by “Amb.” Non-migrants, non-passerines, and species whose migration through the Chicago region is almost completed before May are excluded.

SPECIES	2006 CALLS	2007 CALLS	2006 CAPTURES	2007 CAPTURES	2006 COLLISIONS	2007 COLLISIONS
Olive-sided Flycatcher			1	2		
Eastern Wood-Pewee			1	5		1
Yellow-bellied Flycatcher			21	30		2
Acadian Flycatcher						1
Alder Flycatcher		1	19	34		
“Traill’s” Flycatcher			22	24	2	4
Least Flycatcher			3	7	1	3
Great Crested Flycatcher				1	1	
Eastern Kingbird		1		2		
White-eyed Vireo			1			
Yellow-throated Vireo						1
Blue-headed Vireo				1	2	1
Red-eyed Vireo	3		2	10	1	3
Purple Martin	12	5				
Northern Rough-winged Swallow		4				
Tree Swallow	17	1				
Bank Swallow						
Cliff Swallow	2					
Barn Swallow	6	27				
House Wren			4	2	1	5
Sedge Wren						1
Golden-crowned Kinglet	1	2		2		
Ruby-crowned Kinglet			21	170		1
Veery	Amb.	Amb.	33	69	7	7
Gray-cheeked Thrush	61	45	8	30	2	7
Swainson’s thrush	Amb.	Amb.	64	242	5	12
Hermit Thrush	10	2	9	12	3	9
Wood Thrush	Amb.	Amb.	29	28	20	27
Gray Catbird			87	85	10	11
Brown Thrasher			2	1		5
American Pipit	19	18				
Cedar Waxwing	152	41		1	1	4
Blue-winged Warbler	Amb.	Amb.	2	5	1	
Golden-winged warbler	Amb.	Amb.	7	13	1	
hybrid Golden-Blue-Winged	Amb.	Amb.		1		
Tennessee Warbler	Amb.	Amb.	4	25	2	20
Orange-crowned Warbler	Amb.	Amb.	9	14		
Nashville Warbler	Amb.	Amb.	38	30	13	9
Northern Parula	Amb.	Amb.	1			1