A Northern Parula banded on 24 May was observed in the area a number of times later. It was a good addition to the Pennsylvania State Atlas.

Powdermill Avian Research Ctr. 400-0791
Rector, Westmoreland County, PA
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Powdermill Avian Research Center's bird banding program at Powdermill Nature Reserve completed its 45th consecutive spring banding season in 2006. Powdermill is a 2,000-ac field biological station of Carnegie Museum of Natural History and is located in the Laurel Highlands region of southwestern Pennsylvania. The banding station was in operation on 71 out of a possible 93 days during the spring 2006 season (1 Mar through 1 Jun). While still well within one standard deviation, this spring's total of 3,481 was more than 1000 birds higher than last year and well above the long-term average of 2,716. The highest daily total this spring was 170 on 30 Apr., 70 of which were Ruby-crowned Kinglets, setting a new single day spring record for that species. On 20 May, we banded 40 different species, making it the most diverse day of the season. Wood Warblers comprised 35% of the catch that day.

493 American Goldfinch

352 Ruby-crowned Kinglet

213 Slate-colored Junco

173 Magnolia Warbler 156 Cedar Waxwing

142 Song Sparrow

121 Ruby-throated Hummingbird

94 Gray Catbird

90 Chipping Sparrow

89 Black-capped Chickadee

Unlike recent past seasons, weather this spring had an insignificant effect on effort and also seemed to play a neutral role in movements and migration patterns. Many species staged impressive flights, though, and highlights were not few and far between. Among them was our

first spring capture of a Marsh Wren in eight years, only the eleventh spring season capture of a Red-breasted Nuthatch in the 45-year history of the program, and our eighth Cooper's Hawk ever. In addition, three Yellow-breasted Chats were banded, a species that has been a conspicuous "miss" during the last three spring seasons at Powdermill.

While most individual species always fall within 1 SD of the long-term average, an impressive 33 of the total 108 species banded were statistically greater than the mean. Fourteen either tied or exceeded the previous record high (listed here) and only one species, Downy Woodpecker, was banded in well-below-average numbers. The spring 2006 totals are given for each species, along with the previous record high: Rubythroated Hummingbird (121/119), Eastern Wood-Pewee (13/12), Blue-headed Vireo (4/4), Tree Swallow (28/28), Black-capped Chickadee (89/82), Red-breasted Nuthatch (4/4), Winter Wren (9/8), Ruby-crowned Kinglet (352/246), Hermit Thrush (7/6), Wood Thrush (45/38). "Brewster's" Warbler (2/2), Black-throated Green Warbler (11/11), Hooded Warbler (31/ 27).

In addition to those mentioned above, other "good-gets" this season (i.e., species with a long-term spring average of <1) included. Pileated Woodpecker, Great Crested Flycatcher. Warbling Vireo, and Cerulean Warbler. Brown Creeper, Orange-crowned Warbler, Yellow-billed Cuckoo, Yellow-bellied Sapsucker, and Worm-eating Warbler were among the conspicuous "misses" this season (i.e., species with a long-term spring average of >1).

Finally, we held three successful bander development workshops again this spring and appreciate the participation of Jeff Michaels, Jonathon Gottsche, Cailin O'Connor, Beth Girard, Andrea Adams, Erin High, Jason Reppart, Joe Schreiber, Jack Hilsabeck, John Rushin, and Andy Eller. We welcomed and enjoyed a wonderful working visit from Simone Immler, a post-doc researcher from the University of Sheffield, UK, for two weeks this spring as she collected samples from, primarily, North American wood warblers for her study of sperm morphology. We also welcomed 90+members of the Pennsylvania Society for

Ornithology to Powdermill and PARC for their annual meeting over the weekend of 20 May.

A special thanks also to Margaret Hahn, a visiting bander from Michigan, who became an indispensable part of the Powdemill banding team the week she was here "on vacation." For regular help with banding, we also thank volunteers: Pam Ferkett, Lauren Schneider, Molly McDermott, Matt Shumar, Jessica Scopel (Bluebird Box Trail Monitor) and Emma DeLeon. Last, but not least, we are incredibly fortunate to have a highly skilled data entry operator at Carnegie Museum's Section of Birds, Marilyn Niedermeier. Thank you!

Island Beach State Park 395-0740
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Banders: Mary Doscher, Jennifer Hanley, Ted Hicks (first season banding as a new sub-permittee—congratulations!), Glenn Mahler, Robert Pantle, Robert Yunick

Assistants: Rebecca Beer, Martha O'Rourke and Alex Tongas.

	WOX I OI IQUO.			
		<u>% SY</u>	% ASY	% AHY
803	Gray Catbird	79.4	14.1	6.5
453	Com. Yellowthr.	56.1	17.9	26.0
128	Whthr. Sparrow	64.3	7.0	28.7
110	Magnolia Warb.	90.9	4.5	4.5
85	BI & Wh Warbler	65.9	28.2	5.9
83	Ovenbird	71.1	8.4	20.5
71	Myrtle Warbler	70.0	12.9	17.1
68	BI-thr. Blue Warb.	85.3	10.3	4.4
68	No. Waterthrush	39.7	29.4	30.9
60	Blackpoll Warb.	76.7	10.0	13.3

During the spring 2006 banding season, six banders operated banding stations at five locations at Island Beach State Park, between 7 Mar and 13 Jun. One or more of those stations was in operation on 51 days during that 98-day period; there were five banding days in March, 14 in April, 26 in May and six in June. There were three days on which four of the stations were in operation, nine days with three stations, and 12 days with two; on all remaining banding days only a single station was active.

The 2.648 birds banded for the season was well above our average of 2.025. However, this number is an artifact of nearly double the number of net-hour effort compared to the average effort from previous years. The season's 77.9 b/100nh was once again well below our average of 121.4. Looking at the major species groups, flycatchers. vireos and warblers all had capture rates that were about 50% of average. It is purely a speculation, but could this possibly be a reflection of an unusually high mortality rate for Neotropical migrants during the record-breaking severe hurricane season of fall 2005? Thrushes fared a bit better with a capture rate that was 80% of average. Sparrows at 114% were the only group to be captured at better than their long-term average capture rate.

Peak flights occurred as follows:

<u>Date</u>				
(# stations				
Operating)	# Birds	# Species	# B/nh	
May 5 (3)	277	32	128.5	
May 6 (2)	124	18	145.9	
May 13 (4)	291	32	187.1	
May 17 (4)	273	29	142.9	
May 18 (3)	257	28	371.8	
May 24 (1)	93	19	379.6	
May 25 (1)	114	19	330.4	

One new species was banded this spring—an American Kestrel, netted on 2 Apr—was the 123rd species banded since the start of spring banding in 1987. Other notable species were:

- 1 American Woodcock (only the second spring capture)
- 10 Mourning Doves (a new spring high)
- 10 Brown Creepers (a new spring high)
- 9 House Wrens (a new spring high)
- 68 Black-throated Blue Warbler (a new spring high previous was 58)
- 42 Eastern Towhee (a new spring high previous was 27)