Spring Raptor Migration Summary 2006

Lindsay Zemba

Four watchsites reported counts for spring 2006 (Tables 1 and 2). There was no count conducted this year at Tuscarora Summit. A total of 7240 raptors representing 17 species was reported. The passage rate for all species for the four sites ranged from 3.26 to 8.65 raptors per hour (average 4.51). Count effort (hours of observation) for the four watchsites totaled 1526 hours, ranging from 233 to 508 hours among the sites. Comparing data among watchsites is difficult because of differences in count effort. Allegheny Front and Tussey Mountain counted for a week in February and throughout all of March, whereas Rose Tree Park counted only the second half of March and Hawk Mountain counted on only two days that month. All of the sites counted throughout April, but only Allegheny Front and Hawk Mountain extended counts into May.

Composition of the flight

Broad-winged Hawks (*Buteo platypterus*) made up 52% of the overall flight (range 22-60%), and their migration peaked in the second half of April. Red-tailed Hawks (*Buteo jamaicensis*) made up 19% of the overall flight (range 7-27%), and their migration peaked in late March - early April. Broad-winged Hawks were the most common species at all sites except Tussey Mountain, where Red-tailed Hawks were the most common species counted (27% of the overall count).

Turkey Vultures were the third most abundant species overall, making up 14% of the total count (range of 2-17%). Turkey Vultures were seen as early as February, with most individuals passing in March (Table 2). Sharp-shinned Hawks (*Accipiter striatus*), whose migration peaked in March and April, made up 9% of the overall flight, followed by Ospreys (*Pandion haliateus*), whose migration peaked in late April and made up 8% of the overall flight. At all sites, Ospreys were first seen in mid to late March, with the earliest sighting on March 11 at Hawk Mountain. For watchsites that also conduct autumn counts (i.e., all except Tussey Mountain), Ospreys and Northern Harriers (*Circus cyaneus*) are relatively more common in spring than they are in autumn, whereas Sharp-shinned Hawks are relatively less common in spring.

Only one Peregrine Falcon (*Falco peregrinus*) was reported on 16 April at Hawk Mountain and eleven of fifteen Merlins (*F. columbarius*) were seen in April. Over 69% of the 126 American Kestrels (*F. sparverius*) were counted in April. Golden Eagles (*Aquila chrysaetos*) were the earliest migrants; 5% of all Golden Eagles counted were detected in February, with Tussey Mountain accounting for all of these observations.

Seasonal Highlights

Allegheny Front (Bedford County) – This was Allegheny Front's highest count effort (508 hours). Several counts were below average, including Red-tailed Hawks (279), Golden Eagles (37), Turkey Vultures (240) and Sharp-shinned Hawks (92), and no Peregrines or Rough-legged Hawks were recorded. On the other hand, it was the second-highest spring Broad-winged Hawk flight (636) ever recorded at Allegheny Front, with 78% of birds passing between April 18-21, along with 30 Sharp-shinned Hawks, 29 Osprey, 4 Northern Harriers, and 3 Bald Eagles among others. Strong easterly winds at the end of April produced 76 Osprey from 28 April – 1 May, contributing to a total of 148 Osprey for the spring count.

Hawk Mountain Sanctuary (Berks and Schuylkill Counties) – The peak period of migration during the official count period (1 April – 15 May) was 15 – 24 April, when 46% of the total flight came through, including 85% of the Broad-wing Hawks, 45% of the Sharp-shinned Hawks, one-third of the Ospreys, and more than one quarter of the Northern Harriers. Several species counts were lower than last year's count. They include Ospreys (83 vs. 134), Sharp-shinned Hawks (88 vs. 126), Red-tailed Hawks (82 vs. 209), and American Kestrels (11 vs. 21). Season records (since 1998) were set for Black Vultures (32) and Golden Eagles (3). The spring total was 32% below the five-year recent average, most likely due to clear skies and light winds during the peak period for northbound flights in April.

Rose Tree Park (Delaware County) – Rose Tree Park started their count on 15 March, and recorded 30 Bald Eagles in March. The first 10 Broad-winged Hawks were counted on 10 April, and from 15 – 28 April Broadwing counts increased and remained consistent. The total Broadwing count was 1519, the second highest spring count in eight years (the high count was 3282 in 2002). Three species, Bald Eagles (85), Osprey (158), and Black Vultures (74), have record high counts for the site. Some counts were below average, including Red-tailed Hawk (88; 8-year average is 105), Red-shouldered Hawk (9; 8-year average is 21), and American Kestrel (51; 8-year average is 110). A rare Swallow-tailed Kite (*Elanoides forficatus*) was recorded on 20 April, and a Sandhill Crane (*Grus canadensis*) was observed on 26 April.

Tussey Mountain (Centre County) – Red-tailed Hawks (626), Broad-winged Hawks (506), Turkey Vultures (381), Golden Eagles (150), and Cooper's Hawks (132) were the most common birds seen at Tussey Mountain this spring. The peak period of migration for Broadwings was 12 – 21 April, with a high of 91 Broad-winged Hawks passing through on 21 April, along with high counts for Sharp-shinned Hawks (14) and Osprey (11) on that day. High counts for Red-tailed Hawks (45) and American Kestrels (7) were on 12 April, while high counts for Black Vultures (11), Turkey Vultures (37), and Cooper's Hawks (13) were in early March. Tussey Mountain also had the highest count of Red-shouldered Hawks (36), 89% of which were counted in March. Peak flights of Golden Eagles occurred in mid-March, with a total of 150 for the season, which is 17 % lower than recent years' average.

Acknowledgments: I thank the compilers who reported their counts for the spring 2006 season, and all of the watchsite participants who helped to document the migration. Keith Bildstein commented on an earlier version of this manuscript. This is Hawk Mountain Sanctuary contribution number 142.

Acopian Center for Conservation Learning
410 Summer Valley Road
Orwigsburg, PA 17961
zemba@hawkmtn.org