

Night M

An observation deck on New York's Empire State Building affords a falcon's-eye view of nocturnal migration

"You've got the biggest one of them all," an ornithologist-friend told me.

He was referring to my study site, the Empire State Building in New York City. During spring and autumn 2004, I counted birds in migration each night from its 86th-floor observation deck, 1,050 feet above sea level. I was never alone: Colleagues and friends were a part of my rapid flight-assessment team, and we were joined by birdwatchers visiting the city from faraway places.

Below us were the lights on Broadway, and above us only sky. In between came the migrating birds like shooting stars, winging their way north in spring and south again in fall. How many would we see? When and how might the birds be affected by the bright city lights? If we could address these and similar

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questions, then we would take a small step forward in our knowledge of nocturnal migration.

On a few occasions when skies were overcast and light winds prevailed, we observed birds circling the building's illuminated tower. Surprisingly, on evenings of heavy migration, they sometimes landed on the building. At least twice on rainy and windy spring nights, migrants took refuge on the railing of the observation

deck. On the calm night of October 18, an Eastern Phoebe landed above me. I watched as the bird used the perch to fly out and catch insects for 10 minutes or so. On other occasions, we observed birds such as Black-throated Blue Warblers, Northern Flickers, and Yellow-bellied Sapsuckers resting on the tower for up to 90 minutes before resuming their migration.

For the year, we counted approximately 3,500 migrants in spring and another 10,500 in fall. Most of the migration in both seasons occurred on nights when winds were greater than 15 mph. On such



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nights, migrants passed the Empire State Building with no difficulty that we could detect. Small birds generally migrated in “loose associations,” not tight flocks. On good flight nights, migrants arrived in waves of up to 25 birds and continued past us for a minute or so, then there would be a pause until the next wave arrived. Occasionally in autumn we saw a flock of robins traveling together, but we came to view the night migration of birds as the movement of individuals.

Our highest single-night total occurred on October 11. From 7:03 to 11:45, we counted 1,578 small migrants — warblers, woodpeckers, and sparrows. During the peak hour of migration, from 10 to 11, we saw 442 birds pass by, or about one migrant every eight seconds.

We noted important differences between spring and fall migration. We found that birds generally migrated higher in spring than in autumn, probably the result of birds riding in warm air currents from the south that override heavier, cooler air. We counted fewer migrants overall too, and most of these came through in a briefer time frame.

In autumn, many more migrants were counted. The first were seen in early August, the last in mid-November. On two occasions we noted Ospreys in migration at night over land, something that no one had ever observed before. And we regularly saw Peregrine Falcons hunting by the light of the Empire State Building.

On one particularly exciting October night, we watched in amazement as a soaring Peregrine dove repeatedly at migrants. The falcon would catch a bird, drop it off on a ledge, zoom out, and then “wait on,” hanging in mid-air above the observation deck for the next group of migrants to appear. In 30 minutes, the falcon made 25 dives and caught seven birds. For the season, we saw 111 Peregrine hunting attempts. Captures were made on 37 occasions, a 33 percent success rate. **A**

A Peregrine Falcon perches on a Brooklyn Bridge cable. Observers on the Empire State Building saw falcons hunt migrating birds by the light of the colorfully illuminated tower.

