AUTUMN BROADWING FLIGHTS AT WACHUSETT MOUNTAIN

by Leif J. Robinson, Wellesley

For the last three years, Paul Roberts has organized consecutive-day coverage to monitor the autumn raptor migration at Wachusett Mountain, Princeton, Massachusetts. Much data concerning hawk movement there has been gathered, and now some conclusions may be drawn about the site and its most common September migrant, the Broadwing Hawk.

What follows results solely from Roberts' Eastern Massachusetts Hawk Watch reports for fall 1978, 1979, and 1980. Though some other relatively common raptor migrants might also be similarly studied, such as Turkey Vulture, Sharp-shinned Hawk, Red-tailed Hawk, Northern Harrier, Osprey, and American Kestrel, the accumulation of a couple years' more data would greatly improve any analysis.

The Site. I first examined the 16 dates when an average of more than 50 Broadwings per hour were observed. Three quarters of these instances occurred under winds from the west-northwest through the north-northwest. Three major flights, including the largest ever observed, took place with northeasterly winds. The second strongest migration was under an apparently anomalous east-southeasterly flow.

On days between September 4th and 23rd, when 20 to 50 Broadwings per hour were seen, essentially the same wind pattern prevailed. But on days when fewer than 20 birds per hour appeared, a west to southwesterly flow predominated: on 11 of 16 occasions.

Thus, it appears that Wachusett Mountain experiences major Broadwing migration under meteorological conditions similar to other inland New England sites. Exceptional flights under northeasterly winds, however, may be a rather special feature of this central-Massachusetts monadnock.

The Birds. From the three years of data, the passage of Broadwings past the mountain can now be quite accurately predicted.

Evident migration begins: on or before September 2

25% of all Broadwings will have passed: September 8-12

50% of all Broadwings will have passed: September 11-15

75% of all Broadwings will have passed: September 14-18

Migration complete (except for a very few stragglers): September 24

The tightness of the time spans for each passing fraction

indicates the precision of the Broadwing flight schedule. The spread of four days in each case could be easily due to random timing in the approach of propitious weather systems from year to year. For all three years the maximum flow of birds past the site occurred within the interval September 12-16.

Both of the above sections indicate that Wachusett Mountain is a very predictable and rewarding site for Broadwing migration in autumn. Good flying conditions coupled with northwesterly or northeasterly winds within a very few days of September 14th will, in general, yield the bulk of birds for the year.

Be there!

FALL HAWK WATCH

The Eastern Massachusetts Fall Hawk Watch is looking for volunteer observers. This fall, coordinated hawkwatches will be held throughout New England on the weekends of September 12-13, 19-20, October 3-4, and October 24-25. Observers are needed to hawkwatch on sites throughout eastern Massachusetts for all these dates.

Observers are also needed for the consecutive-day watch on Mt. Wachusett from September 5 through October 12. If you want to improve your ability to identify hawks in the field, there is no better opportunity to do so than by participating in the Wachusett hawkwatch as often as possible.

If you would like to sign up for dates and sites, obtain additional information on available sites, or inquire about hawkwatching or hawk identification, please contact:

Paul M. Roberts
254 Arlington Street
Medford, MA 02155 (617) 483-4263 after 8 p.m.

Please note that you do not have to be an identification expert to take responsibility for a site. And we try to have two or more people at each site, so if you would like to hawkwatch with friends or meet and watch with experienced observers, please let us know.

We need your eyes. We need your help, even if you can observe for only a half-day. Please participate.
