

Photos 810921-2 to 810921-13 of birds in massive flight. Last one shows lightning on clouds.

It is unusual that these birds chase ^{small} this area for roosting with a busy turnpike access road on one side, a county or city road on the other side and a busy parking lot associated with Hallmarks. In spite of the interference these birds departed according to a biological clock.

at home (402 Yorkshire Dr.) called a viceroys butterfly, *Brasilarchia archippus* no. 810921-32, (in afternoon)
Also collected the following butterflies:

810921-33 monarch

810921-34 "

810921-35 "

810921-36 goatweed *Anasa andria*.

810921-37 alfalfa butterfly. *Colias eurytheme*

810921-38 " " *Colias alba*

810921-39 small moth.

At 7:00 P.M. 30 nighthawks between Peterson, Yorkshire and Westchester roads.

Lawrence, Douglas Co., Kansas
Sept. 22, 1981

Checked departure of ceterids (grackles, starlings, cowbirds, redwings, etc.) at Hallmarks (ribbon mfg Co.). See Sept 21 for map of area. Correlated departure with time and light conditions (western meter, candlepower)
6:55 A.M. single grackle left roosting trees and flew 2/10 mi. W to residential area.

6:56 - 3.2 candlepower (reading from sky directly above).

6:57 - 4.8

6:58 first group 15 grackles left to NW.

6:59 no birds in flight.

7:00 ^{6.5 candlepower} 600 grackles left in one group followed by no departures.

7:01 approx 500 grackles flew from one tree to another.

7:02 massive and continuous flight started. Quarter moon directly above. candlepower 9.7

7:09 slight slowing down of departures.

7:10 25.0 candlepower. Massive, explosive departure to NW.

7:11. 32 candlepower. Birds now just a few stragglers.

Birds call in flight. At 7:11 A.M. no noise from roosting area.

Took several photos:

810922-1 birds in flight but speed of camera not fast enough.