

AN APPARENT MIGRATION OF THE MOURNING CLOAK

On September 8, 1955, along the Jones Beach Parkway which parallels the ocean shore on the south side of Long Island, I encountered thousands of the larger dragonflies, particularly *Anax junius*, migrating along the coast toward the mainland. A few Monarch butterflies (*Danaus plexippus* Linné) drifted in the same direction. But what was especially surprising was a definite movement of the Mourning Cloak (*Nymphalis antiopa* Linné). Between the water tower and Captree, a distance of fifteen miles, I saw twenty-five Mourning Cloak butterflies all flying in the same direction as the Monarchs and the dragonflies, toward the western end of the island. One of the insects, moving beside the road and parallel to it near Gilgo Beach, was advancing at a speed of fifteen miles an hour. All the Mourning Cloaks were flying steadily, all were flying in a straight line, all were moving in the same direction.

This is the first instance I have encountered of any mass movement by these butterflies. As it is well known that they spend the winter in hibernation, often appearing during thaws in February and March, this concerted movement along the coast has special interest. Usually hibernation takes place in hollow trees and among woodlands. As there are no large trees or stretches of old woodland in the area, perhaps this was a partial migration, a movement toward more favorable hibernating areas.

On this particular autumn on Long Island the number of Mourning Cloaks seems to have been unusually large. EDMUND MORGAN, Curator of Nassau County's Tackapausha Museum, at Seaford, reports that when watermelon rinds were left in a yard temporarily after a social event at Millville, L. I., about the first of September, they attracted considerable numbers of Mourning Cloaks. As many as thirty or forty of the butterflies clustered on one rind at one time.

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A PAPILIO FLIGHT PATTERN

Back in 1953, May 30 and 31, I collected butterflies about six or seven miles west of Ramsey, Illinois, Fayette County, Hurricane Township, and I made the following observation on the flight habits of some swallowtail butterflies. I saw several *Papilio philenor* L. and *P. troilus* L. exhibiting this curious flight habit on both days. These swallowtails seemed to prefer to fly along the northern edge of some woods known as "The Lost 80", mostly in an east-west direction. Very few went north or south. They flew in the shade and not along the road which ran along the north edge of "The Lost 80", since it was in the hot sun. These woods are one quarter of a mile east and west by one half of a mile north and south. These particular butterflies flew east to the edge of the woods and would turn around and fly back to the west edge, turn around and fly back again. Back and forth they kept up this procedure all day long for both days. Deeper into the woods there were no swallowtails. I did not investigate the south edge. Incidentally, I have collected in this territory previously and since and have observed this curious habit only this one time.

As to the other kinds of swallowtails present here I might add that I saw on the first day eleven *Papilio glaucus* L. and one *P. cressphontes* Cram. These showed no particular flight patterns. But on the second day I saw six *P. glaucus* L., and all were flying either to the north or south. Three flew to the north and one south; the other two came northward through "The Lost 80" woods, turned around at the road, and flew back southward.

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