

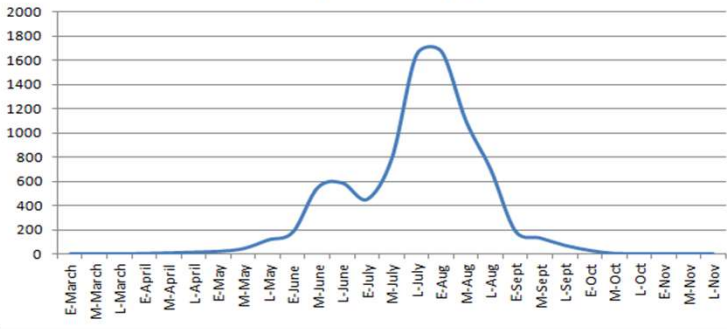
# Butterfly Flight Times in Howard County

by Kevin Heffernan, Linda Hunt, Kathy Litzinger and Bob Solem

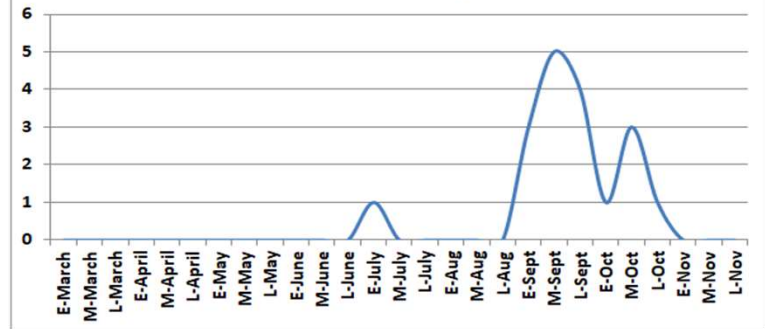
Below are graphs of the flight times of the 80 species of butterflies seen in the first eight years of the Howard County Butterfly Survey. The data from the eight years of sightings were condensed to one year (e.g., all of the sightings of Tiger Swallowtail on July 16 over eight years were summed in the July 16 column and the same was done for each day of the year). Then the data for each month were divided into three (~ 10 day) increments (e.g., Early July, Mid-July and Late July) and plotted. The numbers on the Y-axis show how many individuals of that species were seen in that 10 day increment over the eight years. Where there are only 1-3 data points, a bar graph is used instead of a smoothed line graph.

From these graphs, one can see the number of broods of each species, when they are active, the relative abundance of the species in each brood and, roughly, the early and late dates of each species. The actual early and late dates are shown in a separate document. The graphs can be used to anticipate the first sighting of a given species in the year and can help with identification. For example, if you think you found a Hobomok Skipper in August, a quick check of the flight times would indicate that that is highly unlikely.

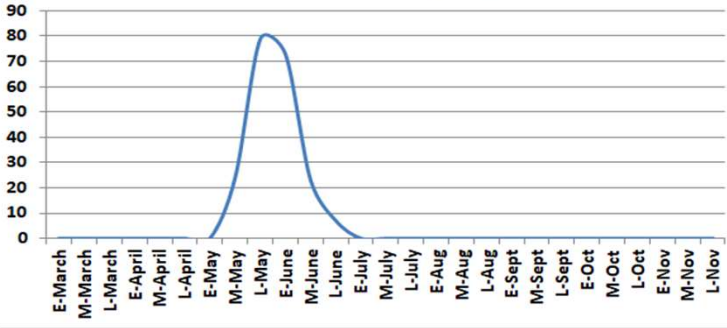
### Silver-spotted Skipper



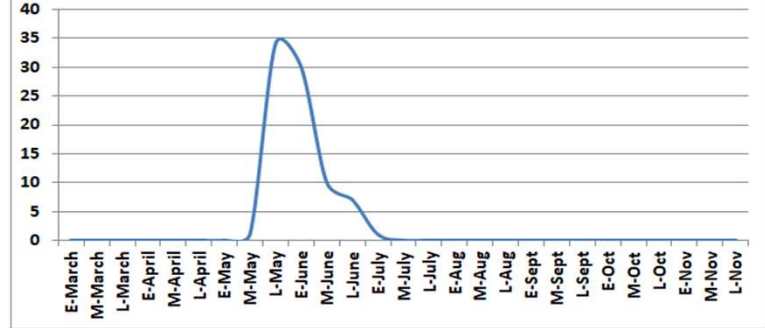
### Long-tailed Skipper



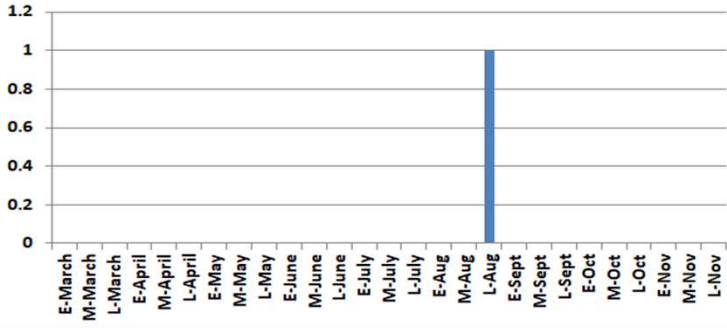
### Southern Cloudywing



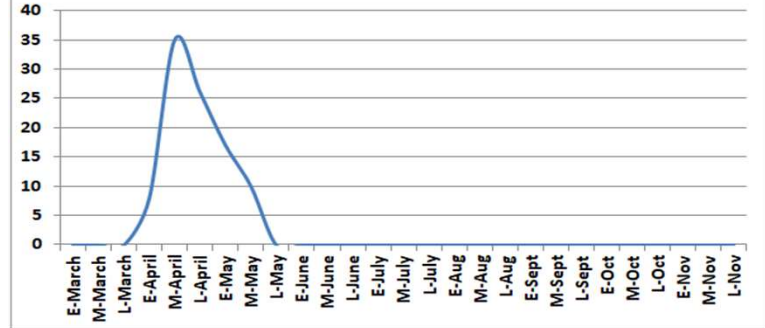
### Northern Cloudywing



### Hayhurst's Scallopwing



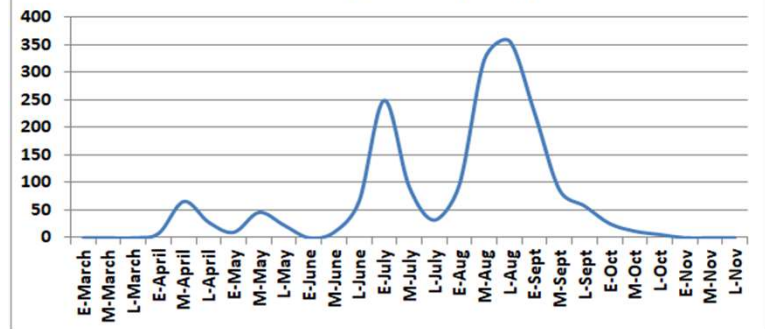
### Juvenal's Duskywing



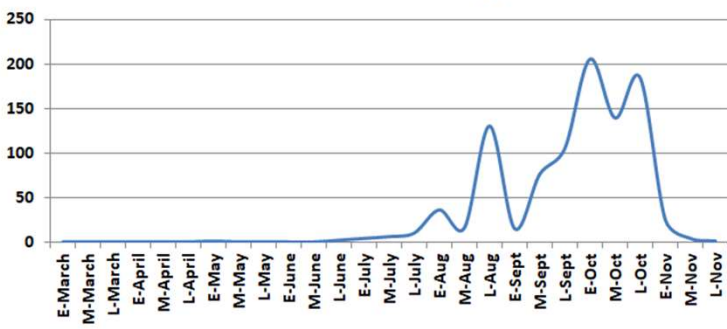
### Horace's Duskywing



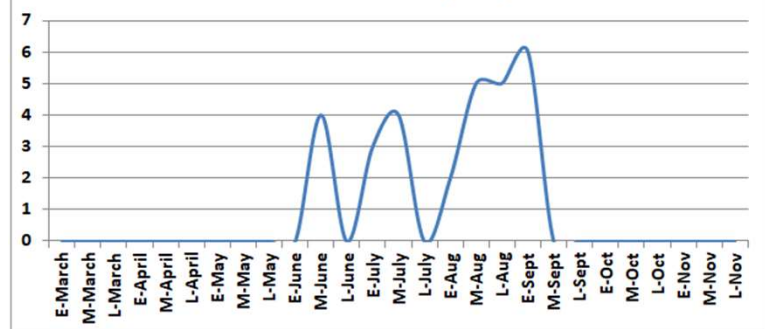
### Wild Indigo Duskywing

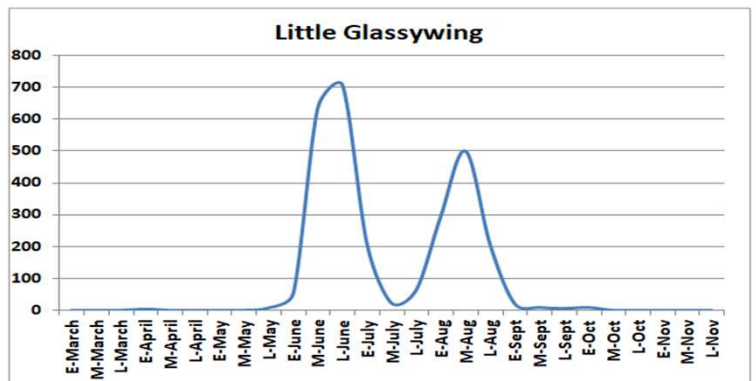
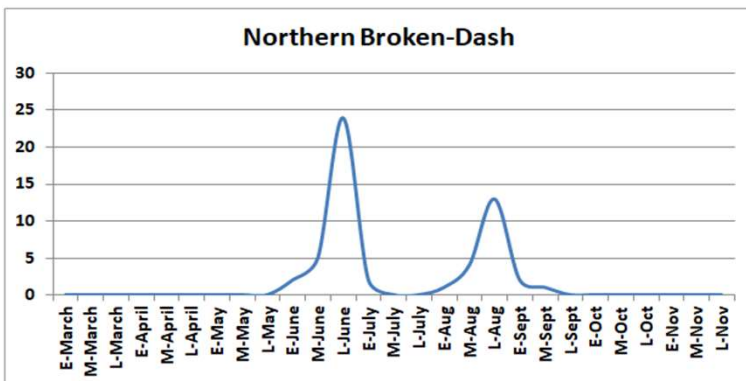
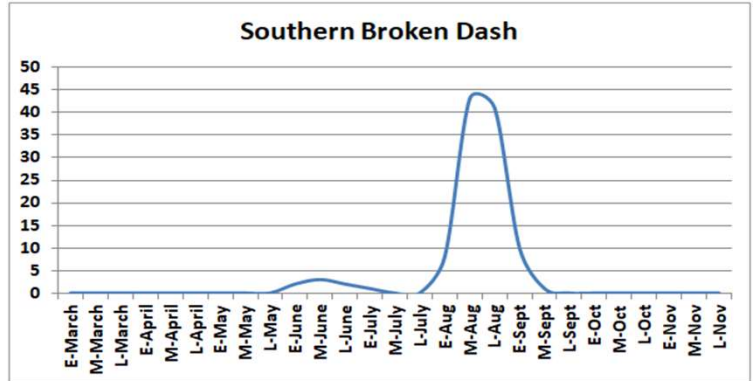
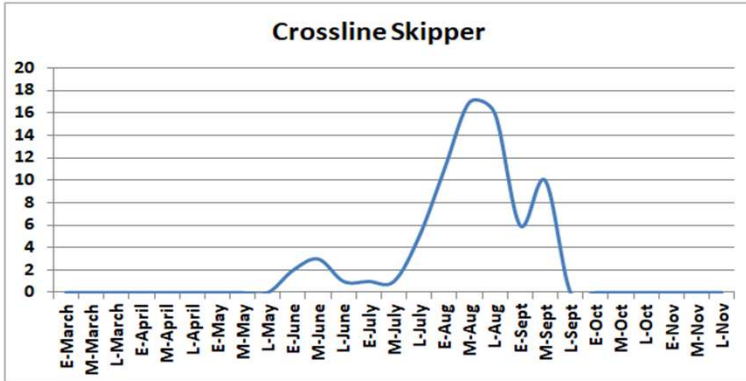
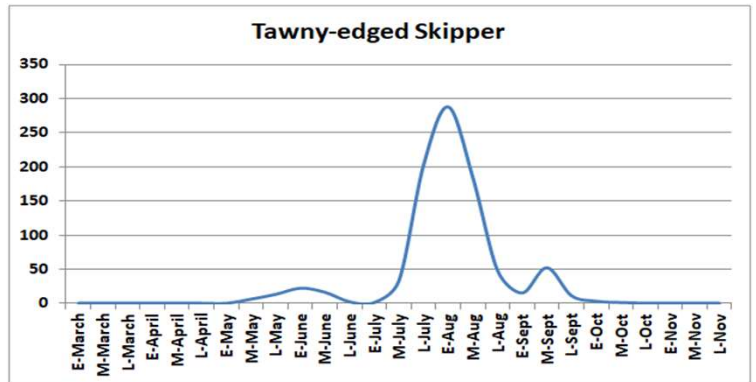
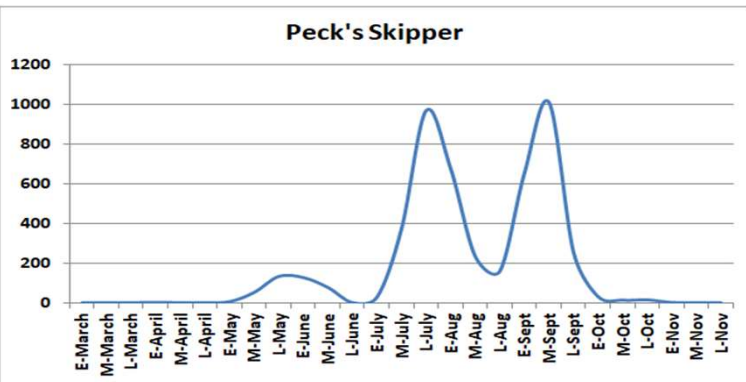
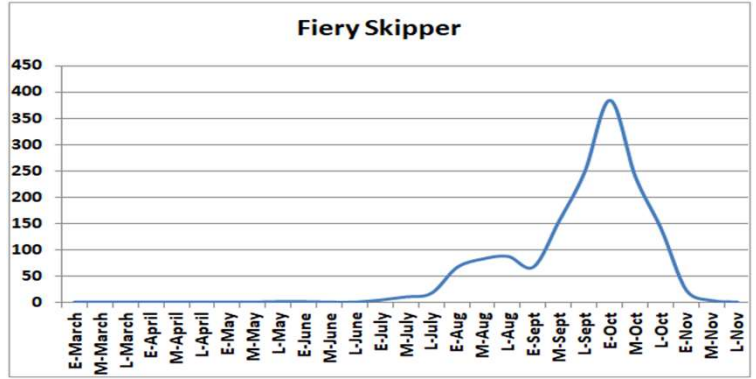
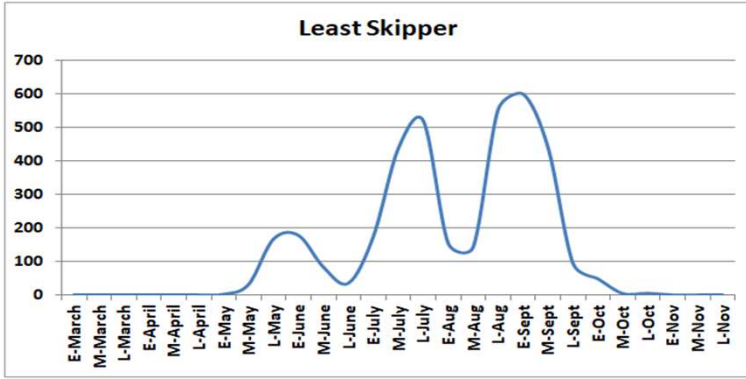
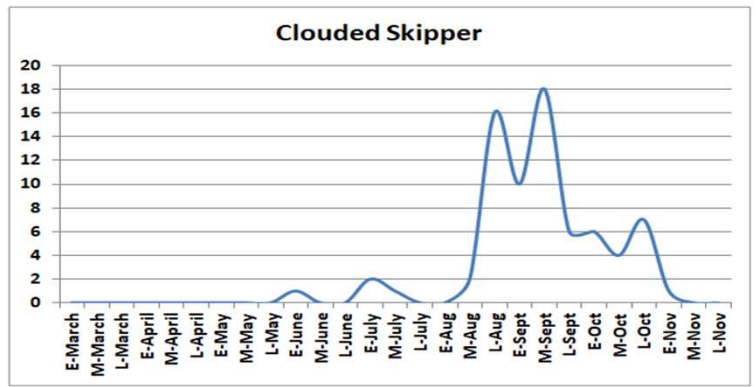
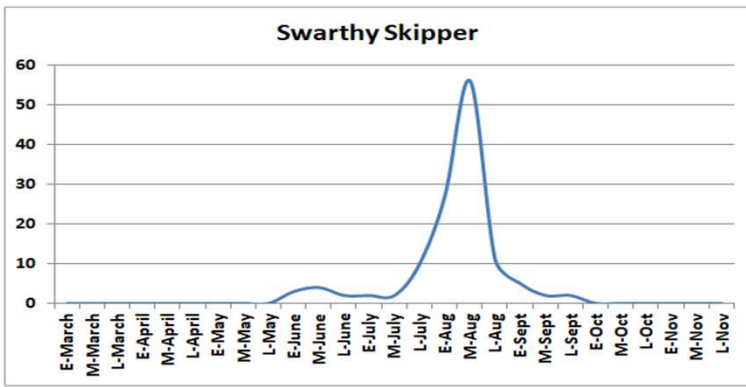


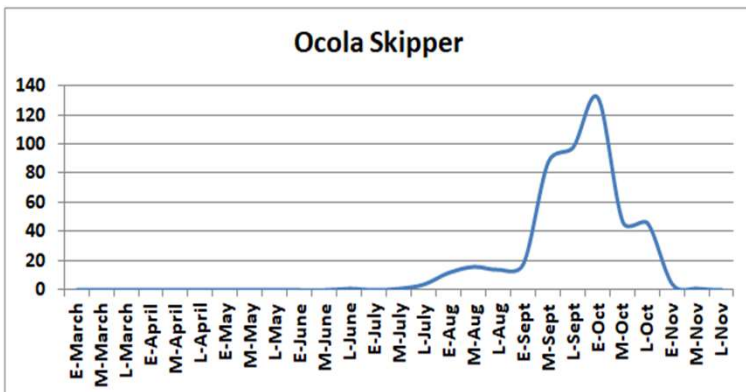
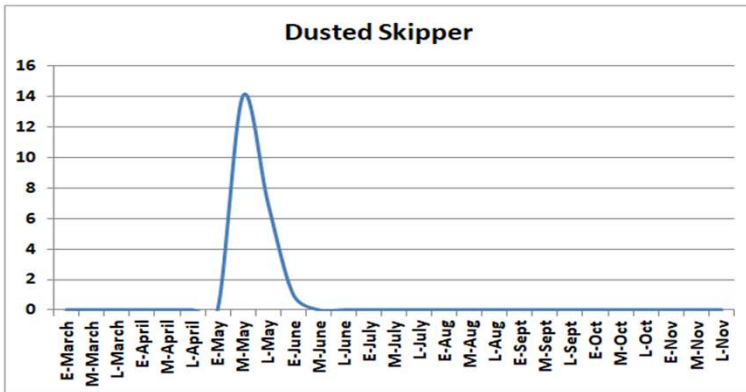
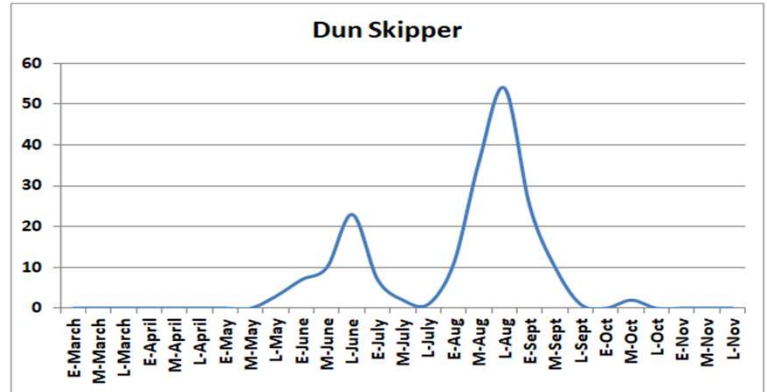
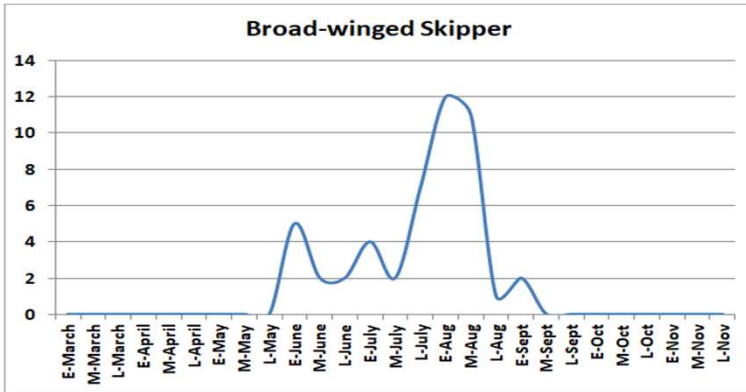
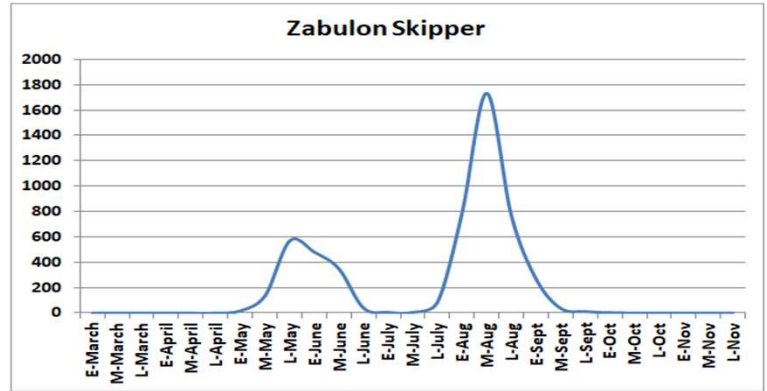
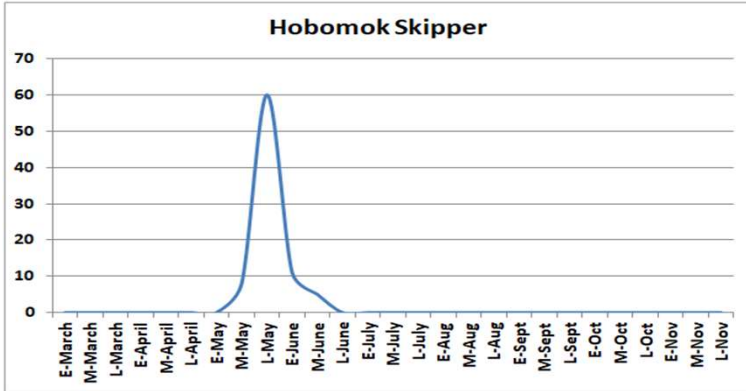
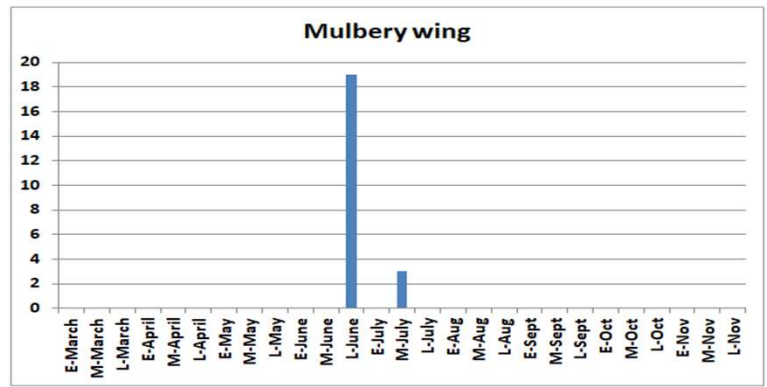
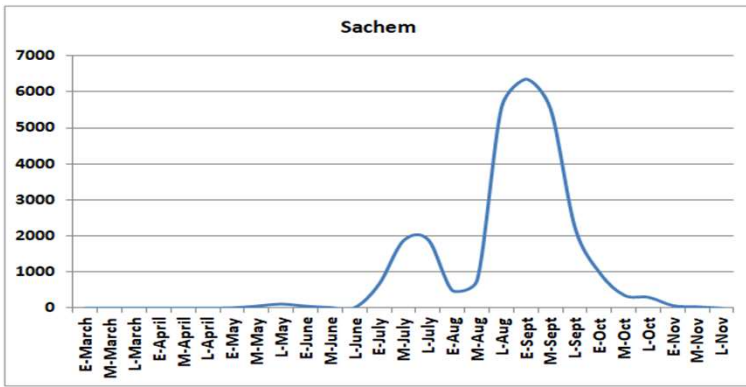
### Common Checkered-Skipper



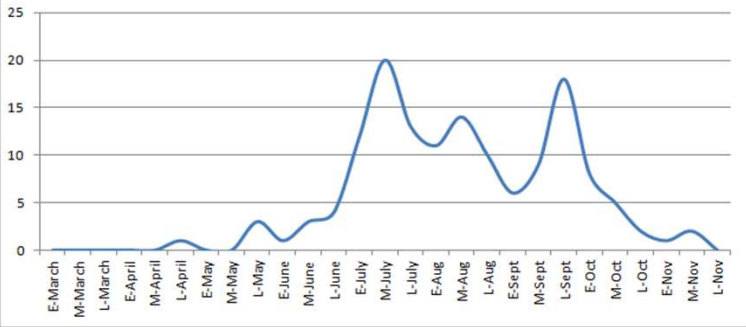
### Common Sootywing



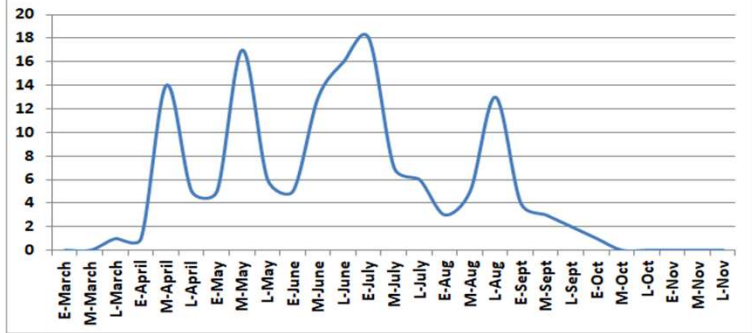




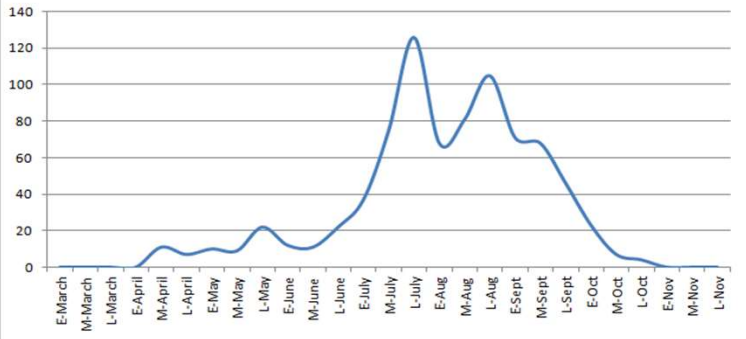
### Pipevine Swallowtail



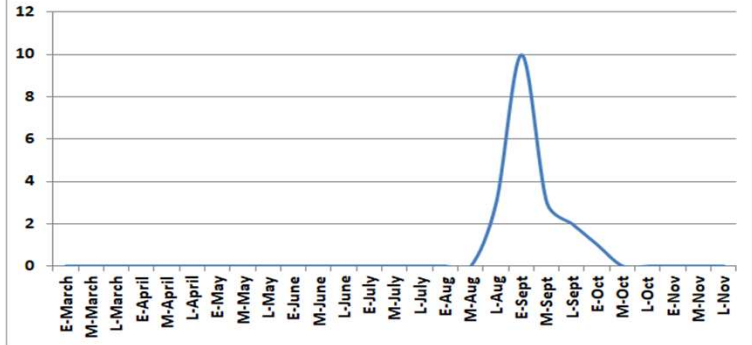
### Zebra Swallowtail



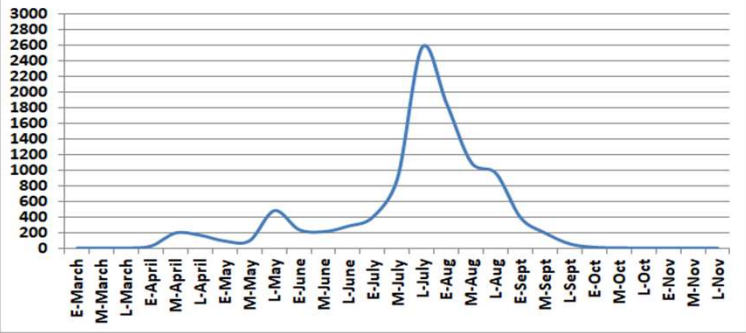
### Black Swallowtail



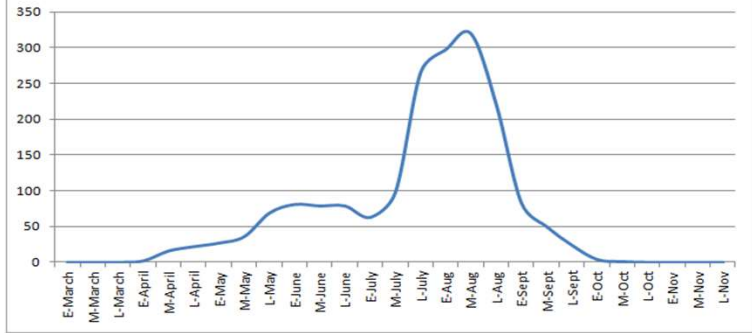
### Giant Swallowtail



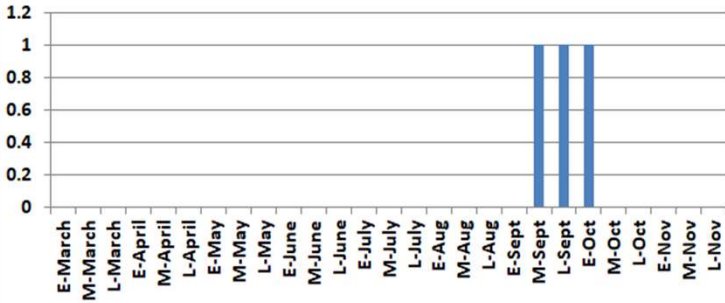
### Eastern Tiger Swallowtail



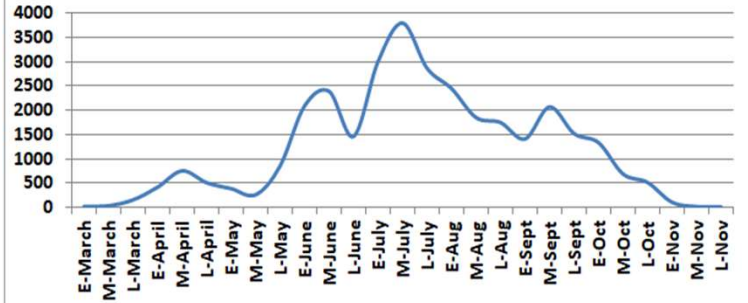
### Spicebush Swallowtail



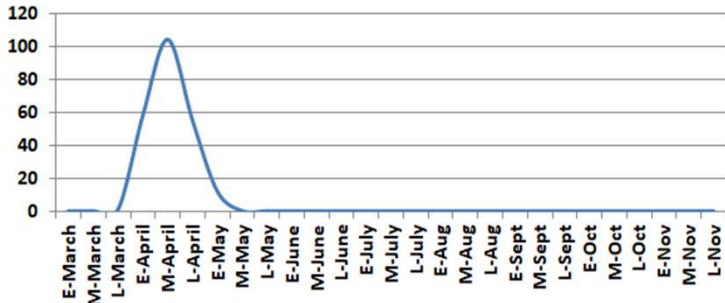
### Checked White



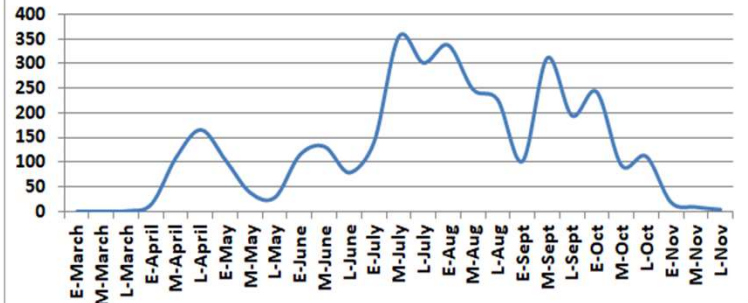
### Cabbage White



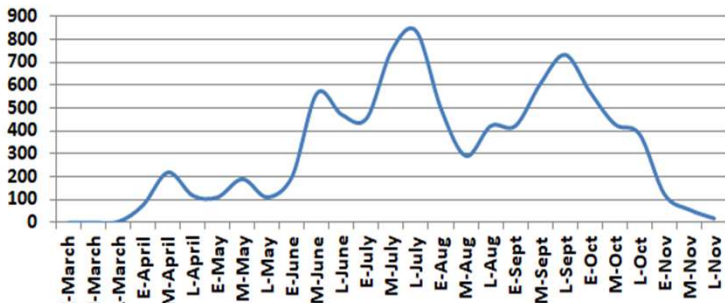
### Falcate Orangetip



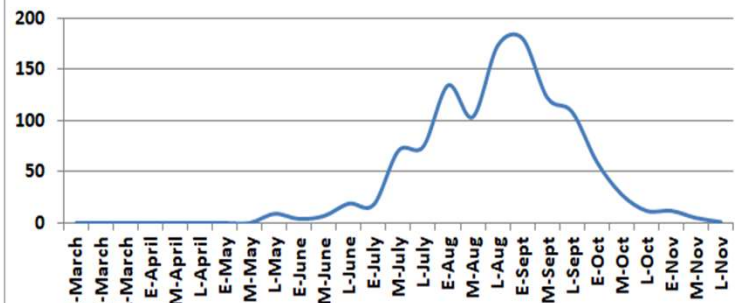
### Clouded Sulphur



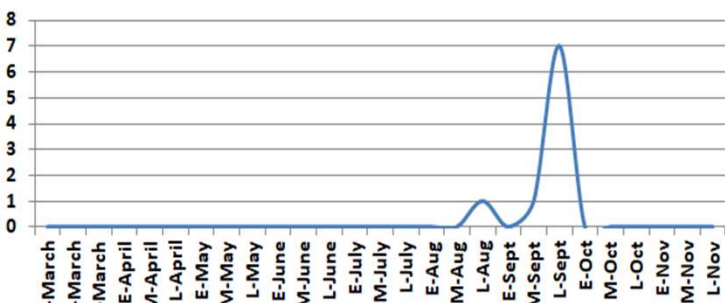
### Orange Sulphur



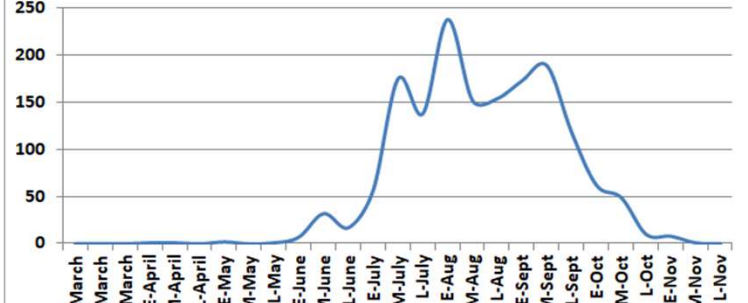
### Cloudless Sulphur



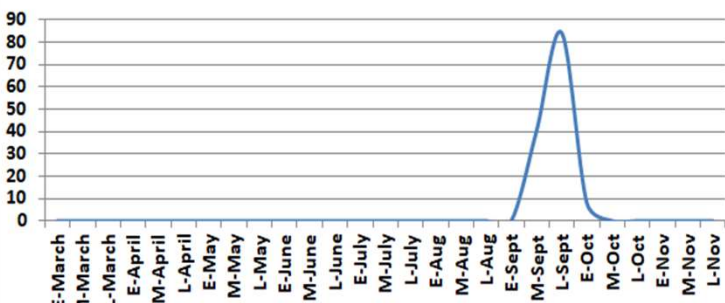
### Little Yellow



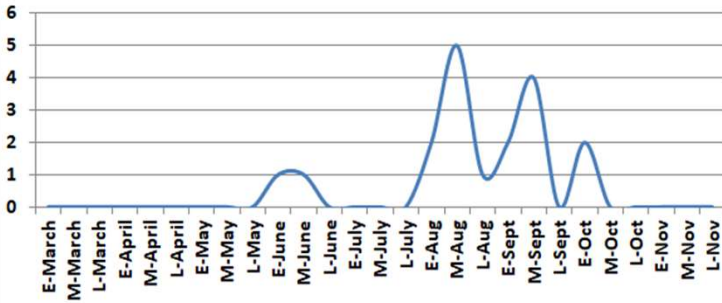
### Sleepy Orange



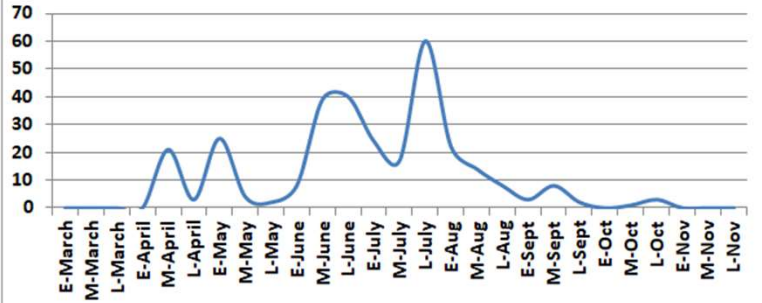
### Dainty Sulphur



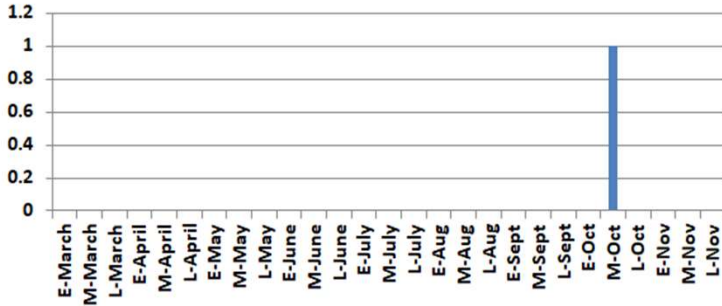
### Harvester



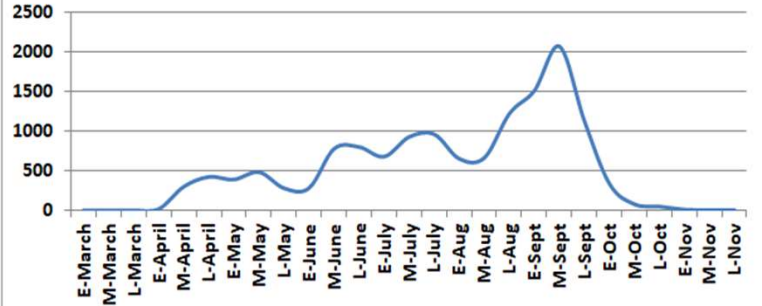
### American Copper



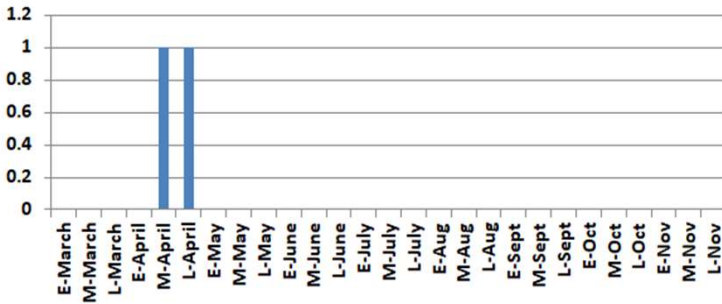
### Bronze Copper



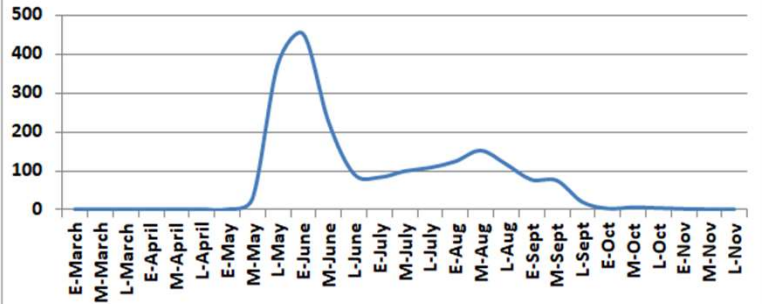
### Eastern Tailed-Blue



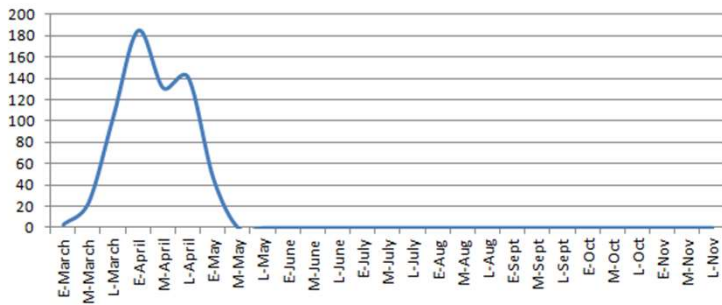
### Spring Azure



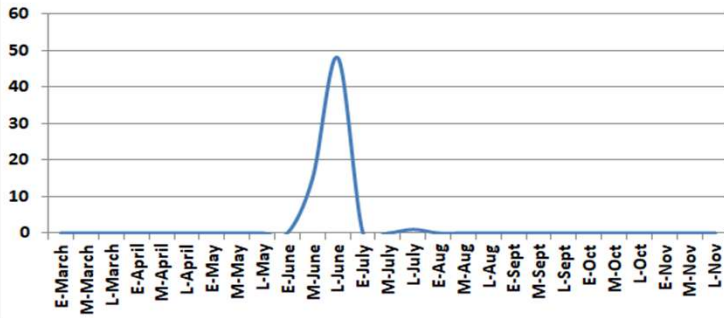
### Summer Azure



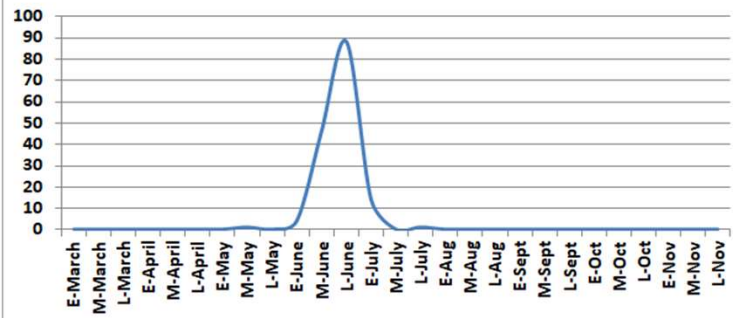
### Azure sp (spring only)



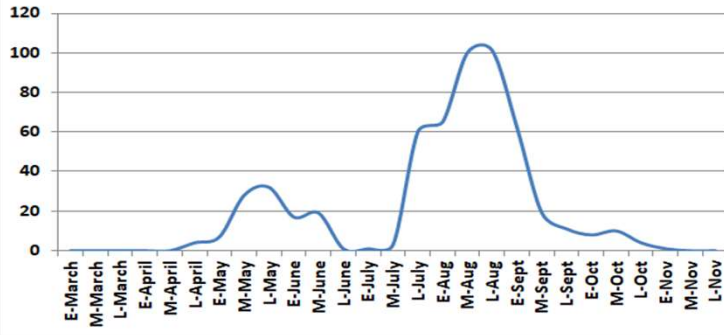
### Coral Hairstreak



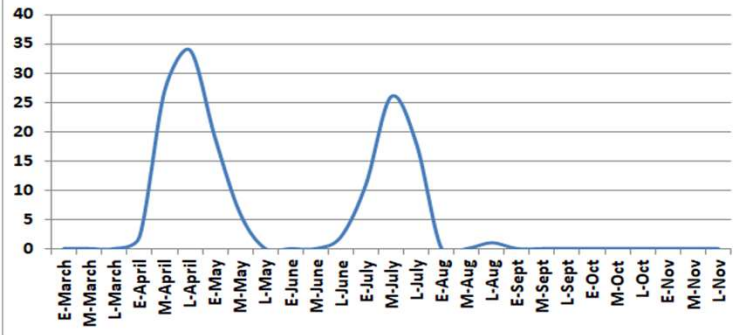
### Banded Hairstreak



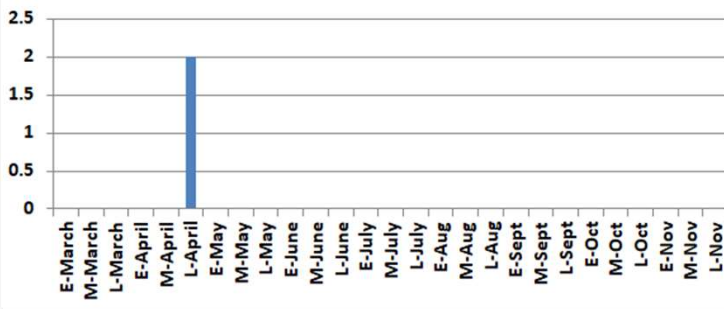
### Red-banded Hairstreak



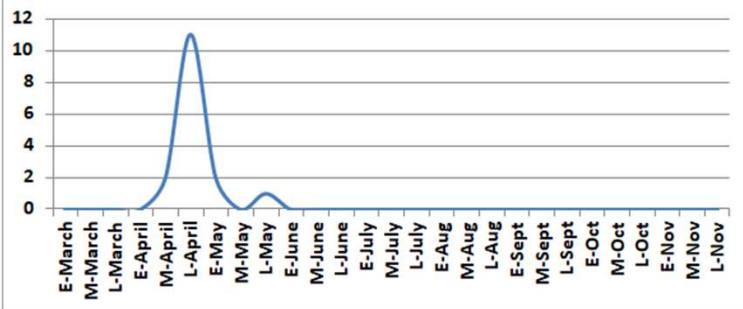
### Juniper Hairstreak



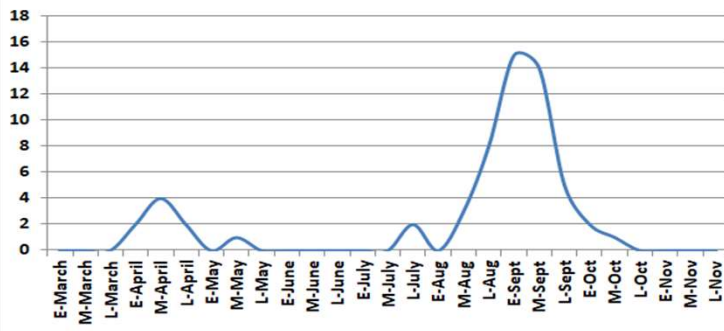
### Henry's Elfin



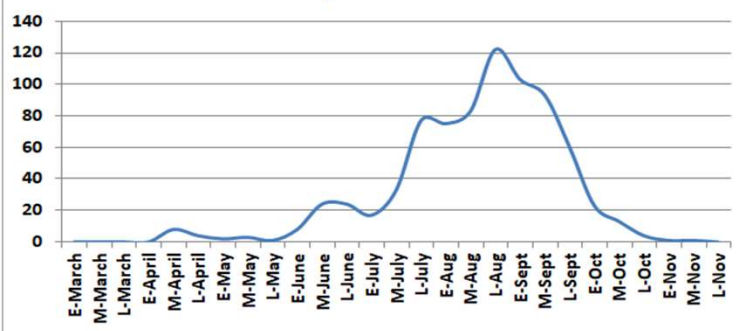
### Eastern Pine Elfin



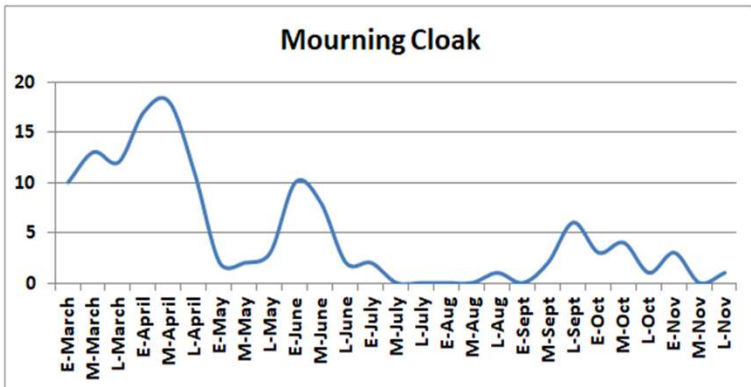
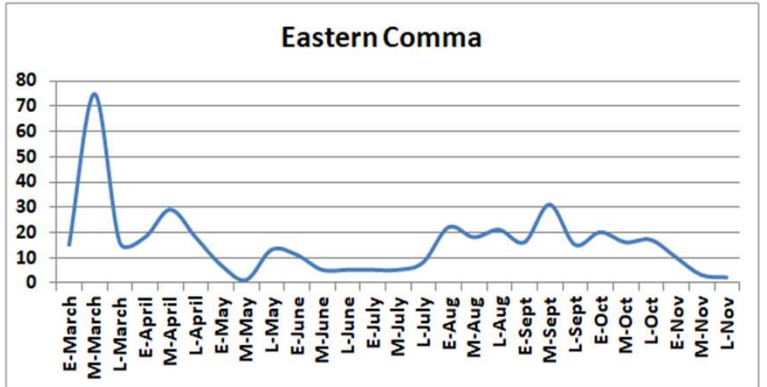
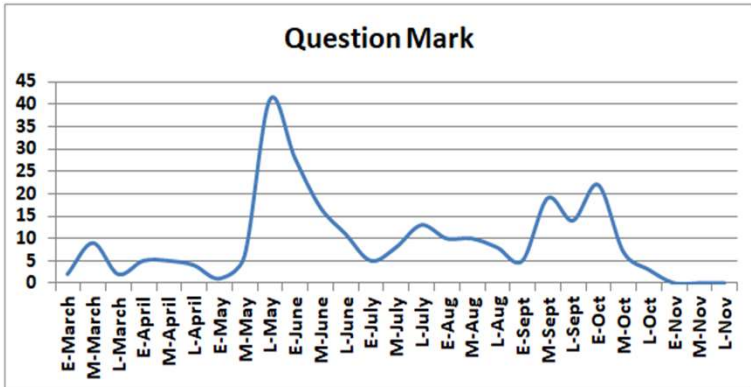
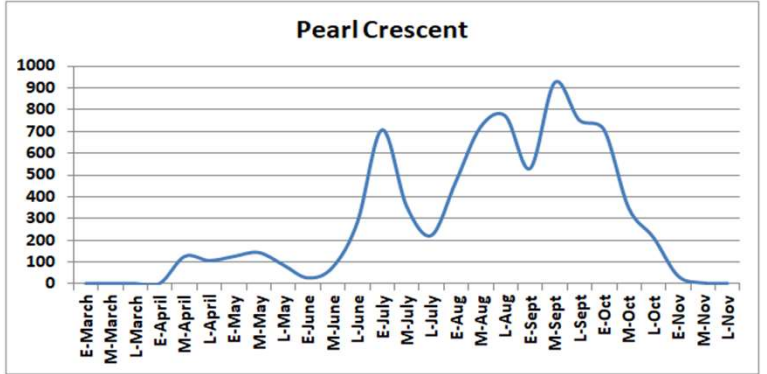
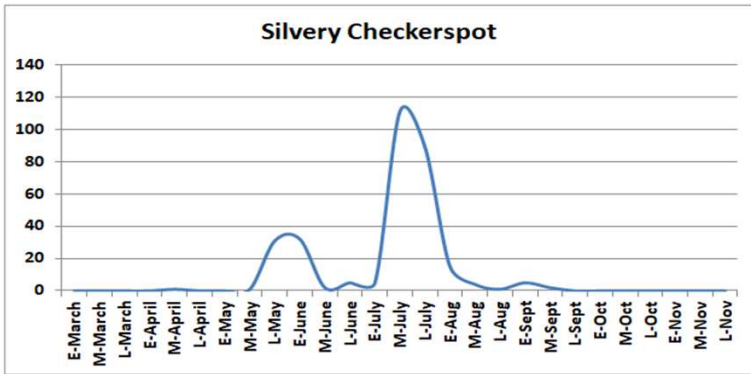
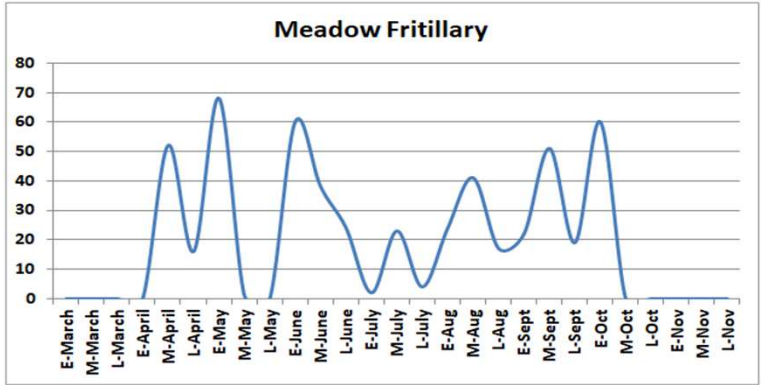
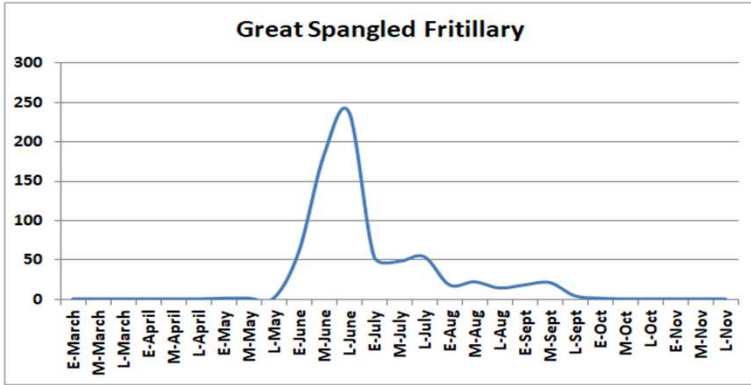
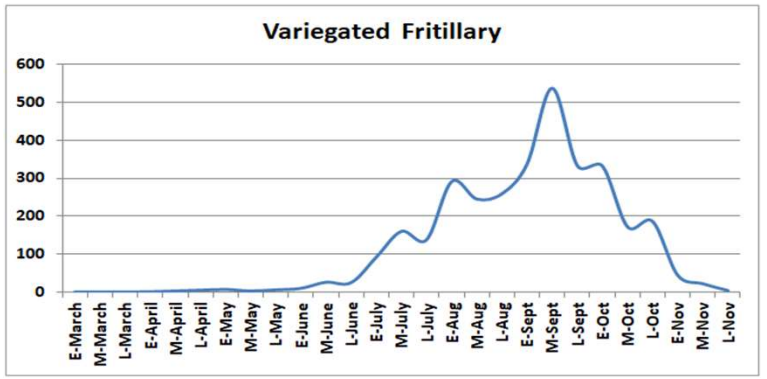
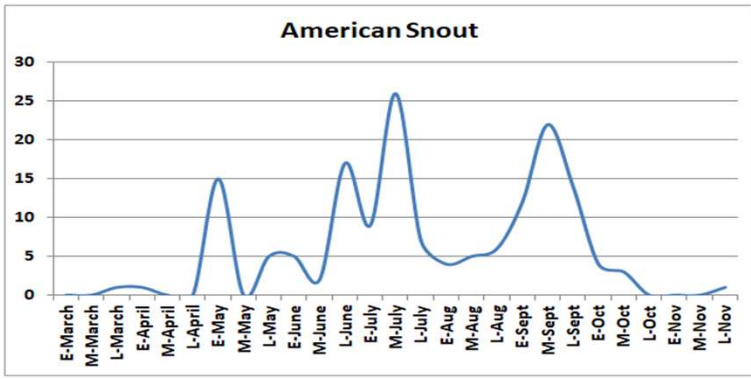
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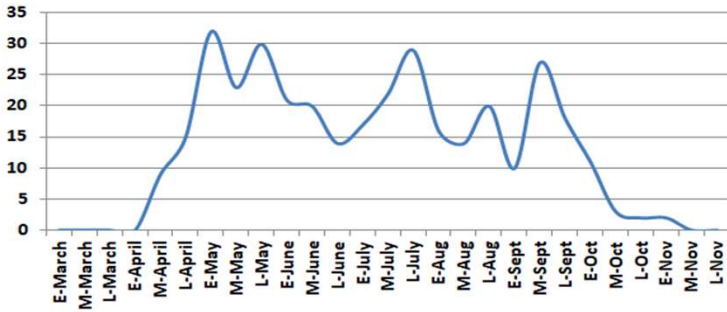
### Gray Hairstreak



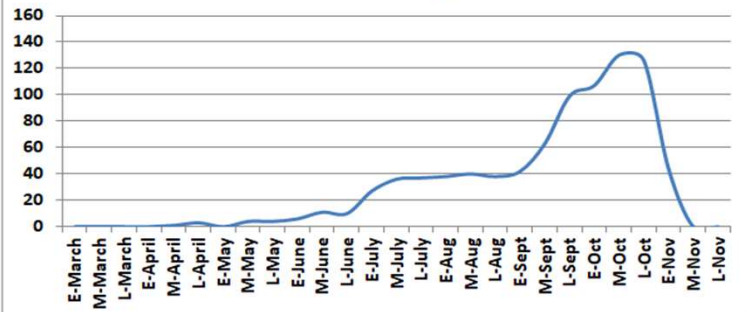




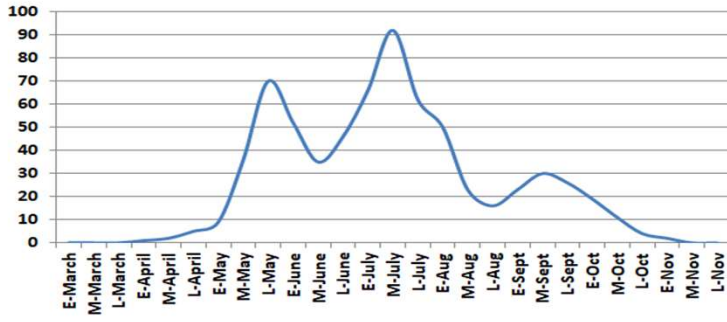
**American Lady**



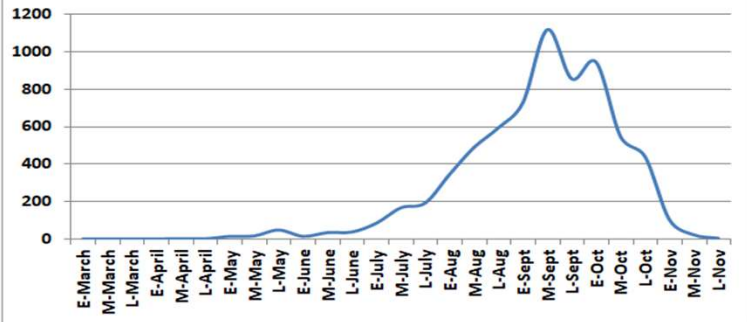
**Painted Lady**



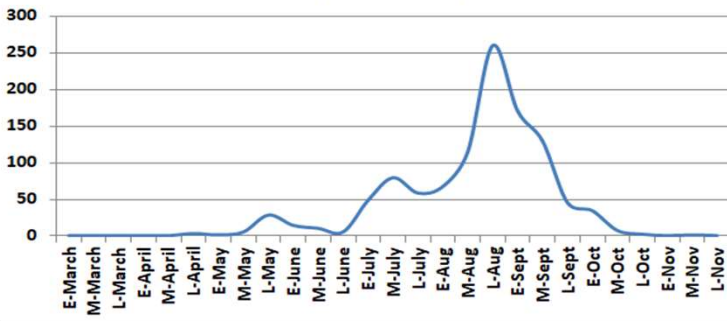
**Red Admiral**



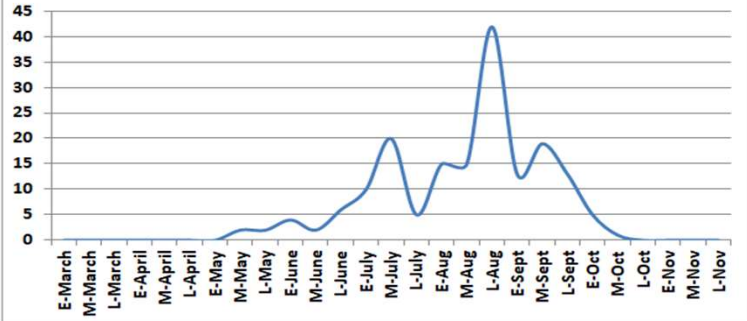
**Common Buckeye**



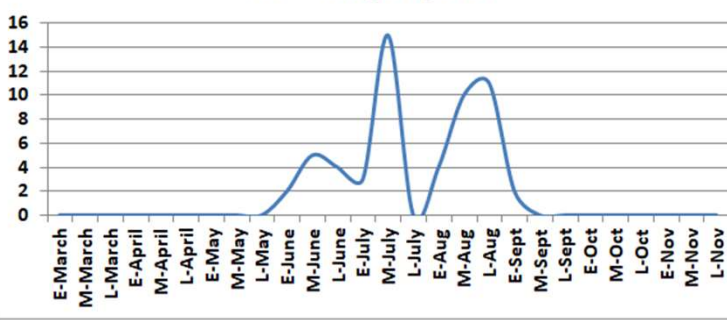
**Red-spotted Purple**



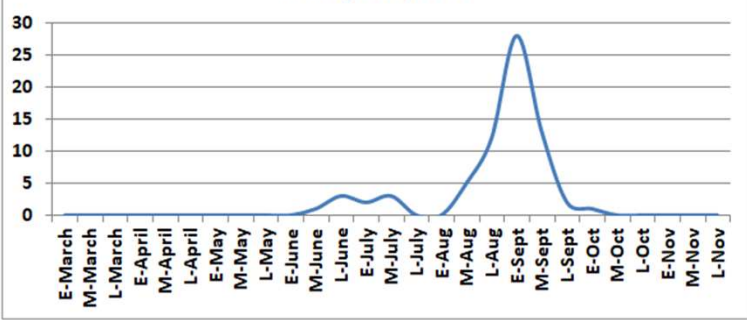
**Viceroy**



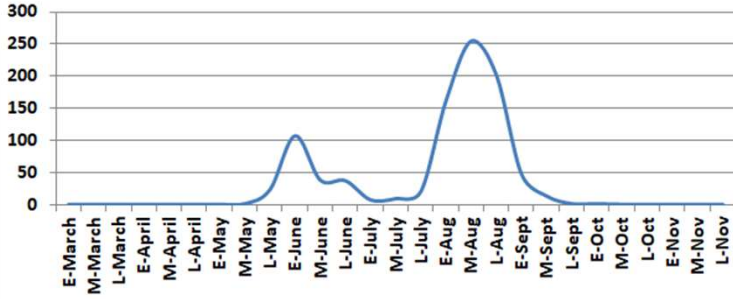
**Hackberry Emperor**



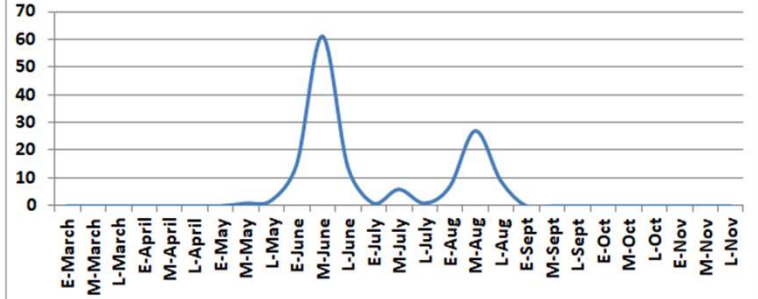
**Tawny Emperor**



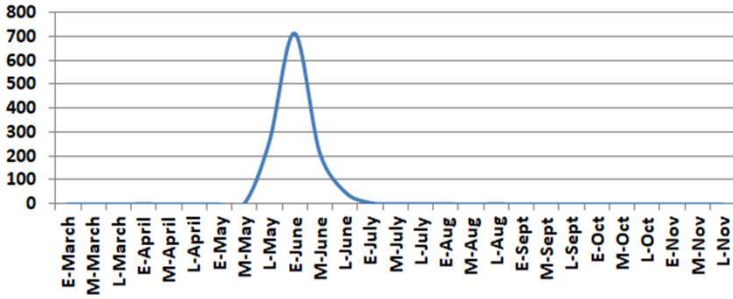
### Northern Pearly-eye



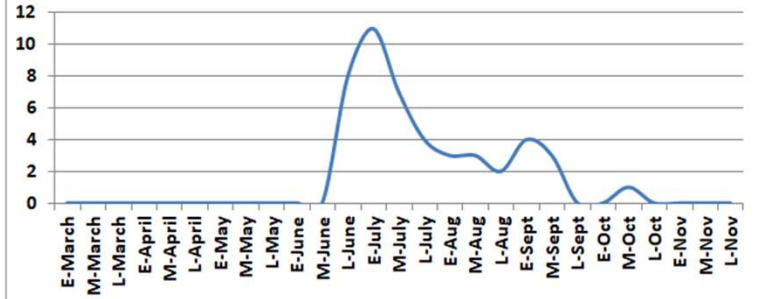
### Appalachian Brown



### Little Wood-Satyr



### Common Wood-Nymph



### Monarch - adult

