



Fall Migration (September - November). This figure is an interpretation of the routes taken by Monarchs during the Fall migration. The pathways are based on tag recoveries and observations of Migrating Monarchs.

When the late summer and early fall Monarchs emerge from their pupae, or chrysalides, they are biologically and behaviorally different from those emerging in the summer. The shorter days and cooler air of late summer trigger changes. In Minnesota this occurs around the end of August. Even though these butterflies look like summer adults, they won't mate or lay eggs until the following spring. Instead, their small bodies prepare for a strenuous flight. Otherwise solitary animals, they often cluster at night while moving ever southward. If they linger too long, they won't be able to make the journey; because they are cold-blooded, they are unable to fly in cold weather.

Fat, stored in the abdomen, is a critical element of their survival for the winter. This fat not only fuels their flight of one to three thousand miles, but must last until the next spring when they begin the flight back north. As they migrate southwards, Monarchs stop to nectar, and they actually gain weight during the trip! Some researchers think that Monarchs conserve their "fuel" in flight by gliding on air currents as they travel south. This is an area of great interest for researchers; there are many unanswered questions about how these small organisms are able to travel so far.

Another unsolved mystery is how Monarchs find the overwintering sites each year. Somehow they know their way, even though the butterflies returning to Mexico or California each fall are the great-great-grandchildren of the butterflies that left the previous spring. No one knows exactly how their homing system works; it is another of the many unanswered questions in the butterfly world.

