

1. Emergence cage - I have one large cage where I can hang up to 3,000 pupae. This cage is in an air-conditioned room and kept at about 68 to 72 deg F (room temperature) to keep the butterflies calm after emerging and about 40-60% humidity to keep the pupae hydrated. It may be necessary to occasionally mist, depending on your climate. Every day, a couple hundred emerge (100 to 500 at a time). By the end of the day, all the newly emerged butterflies will have hardened wings and will be hanging on the cage sides and top (which are composed of screen). In the evening, I cool the room to about 64-68 deg F to allow me to grab butterflies without them scattering. Then, I put a bright light on the side of the screen that I want the butterflies on (opposite of the opening) so that they will cluster for the night toward the light. This just makes it easier to collect them without them escaping. After they have emerged and settled for the night, I transfer them into a smaller storage cage that will hold up to 250 butterflies (preferably 200, but sometimes I need to add more). This smaller cage is built to fit perfectly in the refrigerator. It is very important to transfer the butterflies to the fridge the same day they emerged, or within 24 hours. However, they need to have sufficient time to emerge and form, which is why I wait until the evening when they naturally come off on their own and start clustering.

2. Refrigerator storage cages - After the butterflies are transferred into this cage out of the emergence cage, they go directly into the refrigerator in the same room. I spray the cages with water mist in order to keep the humidity up inside of the fridge (very important to keep it at least 60% and preferably 80%). I also spray mist the interior walls of the fridge so that they are dripping wet. After spraying, the humidity reaches 90%. By the time it drops back down to 60%, I spray again. I usually have to do this once per day. The cages are numbered and I keep records as to the emergence date of the butterflies in each cage. I will ship the oldest first so that the stock in the fridge are rarely more than 7 days old. The cage is made from PVC pipe and a very soft and light screen which was cut to size and glued to the PVC frame. One side is a mesh sleeve to allow access to the butterflies.

3. Feeding - at around 3 hours PRIOR to sunset, I will look at my shipping schedule to see how many butterflies need to be shipped the next day. I will take out the appropriate amount of cages and give them about 30 minutes to come to room temperature inside the room with the refrigerators. Then, I will take them outside for feeding. At that point, I will completely spray the cages with sugar water. This allows the butterflies to feed right where they're at without flying around and will preserve their wings from excessive wear. I'll do this 2-3 times depending on how quickly it dries. I will also spray mist pure water a couple times after the feeding (or in between) in order to 'wash down' the meal and clean up any sugar residue. Then, after they have fed for about 2 hours, it is now starting to get dark and they are naturally calming down and digesting their food. It is important not to immediately put them back in the fridge after feeding. So, I use the natural effect of the night to help keep them calm yet allow them to digest and process the sugar.

4. Shipping day - the next morning I will move the cages that were just fed back into the fridge and will start packing my orders. I'll take one cage out at a time and will pack those butterflies

until the cage is empty. Then, I'll take the next cage out and will pack those butterflies until I'm done. The unfed butterflies are still fresh and held in dormancy until it is time.

Below are some pictures and descriptions

The set up with refrigerators and emergence cage along the wall:



Glue the chrysalides with hot glue onto strips of 10 per strip. Then, hang into emergence cage.

