



## Butterfly Pavilion Kit

### Your Butterfly Pavilion includes:

- A pop-up butterfly observation habitat.
- Dropper to feed the butterflies.
- This instruction guide with fun butterfly facts.
- Butterfly certificate to send away for your larvae.

### Getting Started

Before mailing the certificate for your caterpillars and food, make sure you are ready to receive and care for them.

Remember to plan for any school breaks, holidays, or extended weekends that may interrupt the project. Write your name and address on the certificate and mail it to the address listed. The certificate will arrive at our laboratory where tiny green butterfly eggs are hatched into caterpillars in a butterfly nursery and then sent to you via First Class mail. Once you mail the certificate, please allow 1 to 2 weeks for the larvae to arrive. After receiving your larvae, expect the metamorphosis from caterpillar to butterfly to take approximately 3 weeks to complete.

### When Your Caterpillars Arrive

Your larvae will arrive in a cardboard box that says Live Butterflies – Open Immediately. Inside are two containers with three to five small caterpillars each, and adequate food for the caterpillars' development. Now the fun begins!

### Caring For Your Caterpillars

It is very important that you always keep your caterpillar containers upright, indoors and out of direct sunlight! Direct sunlight will cause the interior of the cups to heat up and condensation can form within the containers. This water can often cause the caterpillars to sicken and die. To keep the nutrient clean, keep the lid on the containers at all times. The larvae don't need anything other than the food provided inside the containers to live and grow.

Don't be alarmed if at first you don't see any movement. Look for a little bit of silky webbing, as this is a good sign that they are well. Now watch as they eat and grow to many times their original size!

### A Fascinating Change

At a normal room temperature of 72 to 78 degrees Fahrenheit, the caterpillars should take approximately 7 to 10 days to make the fascinating change into chrysalides. The caterpillars will climb to the top of the cups and hang down "head first." It is crucial that they not be disturbed at this point as this is their most vulnerable stage. Although this seems to be a time of resting in the butterfly's development, it is really a time of rapid change. Within the chrysalis, the old body parts of the caterpillar are undergoing a remarkable transformation to the beautiful parts that will make up the butterfly.

### Transferring Your Chrysalides Into The Butterfly Pavilion Habitat

When your chrysalides have formed, it's time to put them into the observation habitat. The chrysalides should have attached themselves to the paper disk under the lid of each container.

First, find some scotch tape so you can attach the disks to the inside of the habitat. Carefully open the containers and remove the paper disk. Tape each disk inside the habitat a few inches above the habitat's floor. If any of your chrysalides become detached from the disk, gently lay them on a napkin on the floor of the habitat. Chances are good they will still emerge as healthy butterflies.

If you're placing your Butterfly Pavilion on a counter, be sure it's in a place where it won't be knocked over. Hanging your Butterfly Pavilion by its carrying handle is a good way to keep it safe from unexpected bumps and accidents.

While direct sunlight isn't as big a concern as it was when the caterpillars were in the growing containers, keeping your Butterfly Pavilion and chrysalides out of harsh sunlight and out of the breeze from air conditioning vents is a good idea. Think of it this way: if they're in a spot that would make you feel too hot or too cold, they're probably feeling too hot or cold.

### The Birth Of A Butterfly

Approximately seven to ten days after the chrysalides form, your butterflies will begin to emerge as adults. The darker the chrysalis, the closer it is to emergence. Keep your eyes on them now as you may get to witness the birth of a butterfly! As a butterfly emerges, it will rest in a vertical position while pumping its wings to full size. The butterflies do this by forcing blood under pressure into the veins of the wings. One to two hours after emergence, the wings will be full-sized and hardened, and the butterfly will be ready to fly.

Don't be alarmed if you see a red liquid that looks like blood coming from the tail end of the butterfly. This is called meconium. It's the leftover color and unneeded tissues from the butterfly's wing formation.

### Feeding, Observing, & Releasing

Feeding your butterflies is fun. Mix three teaspoons of sugar into a cup of water and stir. Decorate the floor of your Butterfly Pavilion with a bouquet of fresh flowers (such as carnations or mums). Use the included dropper to squirt the sugar water mixture directly onto the flowers.

An alternative is to wad up facial tissue into 2-inch balls and soak them with the sugar water. Set the balls on a paper plate on the floor inside the habitat. Butterflies also like to drink from slices of freshly cut oranges.

Observe the butterflies eating. You will see them unfurl their proboscis, drink the sugar water or orange juice, then roll the proboscis back up. Sprinkle the sugar water mixture on the flowers or tissue balls every day and remember to keep the sugar water refrigerated between feedings. After observing your butterflies for a few days, and, if weather conditions permit, we recommend releasing them into their natural environment. It's safe when temperatures are above 55 degrees Fahrenheit.

Once released, the butterflies can often be seen for several days in the vicinity of their release. Painted ladies live throughout North America so you can safely release them anywhere!

If you have any other questions, or need customer service, call Insect Lore at 800-LIVE BUG, M - F from 8 to 4 Pacific Time.



## Butterfly Pavilion Kit FAQs and Activities

### Frequently Asked Questions

Q: My larvae aren't moving. Are they dead?

A: Probably not. If you see no movement in one week, return the cultures for a replacement. Insect Lore guarantees that 6 of the 10 caterpillars will develop into perfect adult butterfly specimens

Q: Do the larvae have enough air?

A: Yes. Please notice the small air holes around the rims of the containers.

Q: Can I remove the lid and play with the larvae?

A: No. Removing the lids could introduce bacteria.

Q: What are the "little green balls" I see?

A: This is the caterpillar's "frass" or waste.

Q: What do I do after the chrysalides are formed?

A: After all the chrysalides have formed, transfer the chrysalides on the disks into your Butterfly Pavilion.

Q: If a chrysalid falls off the disk, what should I do?

A: Gently remove it from the cup and lay the chrysalid in the bottom of the Pavilion on a napkin or paper towel.

Q: Why are the chrysalides shaking?

A: This is a natural instinct to ward off predators.

Q: What is the red liquid I see the butterflies excrete?

A: It is called meconium. It is the leftover coloring and tissues from the wing formation. It is not blood.

Q: How long does the total butterfly life cycle take?

A: Approximately 3 weeks (7 to 10 days in the larval stage and 7 to 10 days in the pupal stage).

Q: How long will the butterflies live?

A: Their normal life span is 2 to 4 weeks.

Q: What do I do if my butterflies lay eggs that hatch?

A: Young larvae like to eat thistle, hollyhock, fiddleneck & malva. Find some and place the leaves near the larvae.

Q: Can I order butterflies at any time of year?

A: Yes. If you order in Winter, be prepared to keep the butterflies inside for their life cycle.

Q: When should I release my butterflies?

A: Release your butterflies outside only if the temperature is above 55 degrees.

Q: How do I clean my habitat before reusing it?

A: Just rinse the mesh with warm tap water – detergent or soap may be too strong for your next batch of inhabitants Let it hang dry and you're ready to go again

### Activities

#### Activity #1: Find Butterfly Information on The Internet

While you are waiting for your butterfly larvae to arrive, you can search the Internet for information on butterflies (if you don't have a computer at home with Internet access, try your local public library). Call up your favorite search engine (such as [www.yahoo.com](http://www.yahoo.com) or [www.google.com](http://www.google.com)) then type in "butterfly," "Painted lady" or "metamorphosis." Use any other words relating to butterflies that come to mind. When you have found a butterfly site, bookmark it on your computer or print out the pages and keep them for future reference. Who knows, you may get to do a report on butterflies for school someday!

#### Activity #2: Keep A Butterfly Growth Journal

Keep a daily journal of your butterfly's growth. Get a notepad and a pen or pencil. For each journal entry, write the day and date. Document the details you notice about your butterflies: How much larger and longer are they today? Have they developed any new markings? You may also wish to draw pictures of changes you see each day. Once the butterflies have completed their metamorphosis, you'll have fun looking back at how quickly they have grown and changed