Raising Black Swallowtail Butterflies

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1. Find a caterpillar or egg

- Grow parsley, dill, fennel, or carrots
- Let others know you are looking for caterpillars or eggs
- Look around.



Figure 1- Black swallowtail butterfly egg on dill plant.

Eggs hatch 3-7 days, depending on temperature and time of year.



Figure 2 - Black swallowtail caterpillar - day 6.

2. Put the caterpillar in a cage

- Important considerations
 - Well ventilated
 - Easy to keep clean
 - Keep out of bright sun or hot car
- One option plastic shoe box, nylon tulle from fabric store, and elastic



Figure 3 - Simple caterpillar cage.

3. Provide FRESH food

- 4. Most caterpillars feed on specific plants. When you find a caterpillar, pay close attention to the plant it is on. Put food in water. Use a narrow-mouth bottle or florist pick to keep caterpillars from drowning.
- **5. Keep cage clean -** Empty frass (caterpillar poop or droppings) every day or so.

6. Watch caterpillars grow

Don't panic if they get quiet and stop eating for 1-2 days. They are probably molting. Caterpillars have to shed their old skin and get a new one 4-5 times in order to grow. They often eat the old skin.



Figure 4 - Black swallowtail caterpillar - day 19.

7. Prepare for chrysalis stage

Just before making a chrysalis, caterpillars often empty their gut, which can look like a green glob plus some liquid. Then they usually get quiet and stop eating. After that they may begin to wander, looking for a safe place to make a chrysalis.



Figure 5 - Black swallowtail preparing to make chrysalis.

A slanted stick the size of a pencil or small branch will give them options though they may choose to use the plant they are on, or go to the top of the cage. After choosing a spot and attaching themselves, they may stay in this position for 24 hours or more before changing to a chrysalis.



Figure 6 - Black swallowtail chrysalis.

It is amazing to see the transformation from caterpillar to chrysalis. The change happens quickly and is easy to miss.

8. Wait patiently

The chrysalis stage will last 1-2 weeks, depending on the species, time of year and temperature. The chrysalis of some species changes to a darker color a day or so before the butterfly emerges.

9. Enjoy the adult and set it free

The butterfly often, but not always, emerges in the early morning. This is another impressive sight and it too happens quickly – less than a minute. When the butterfly first emerges, its wings are small and crumpled. They soon become full size but are soft and the butterfly cannot fly. It needs to hang vertically while the wings harden. The butterfly is usually ready to fly after two hours but may be kept longer. I suggest releasing it within 24 hours.



Figure 7 - Newly emerged butterfly.



Figure 8 - Black swallowtail - day 32.



Figure 9 - Male black swallowtail butterfly.

Excellent resources:

- Life Cycle of Butterflies by Judy Burris and Wayne Richards
- Butterfly Field Guide Laminated sheet available at www.ButterflyNature.com