



## They don't just wing it

Inside the Smithsonian's butterfly pavilion

BY KRIS CORONADO

**They're on the** same floor of the National Museum of Natural History as the Hope Diamond and the Dom Pedro aquamarine, but unlike those precious stones and minerals, these living gems flit and flutter in the 1,200-square-foot glass Butterfly Pavilion. For a small fee (\$5-\$6, free Tuesdays, [butterflies.si.edu](http://butterflies.si.edu)), visitors can observe more than 300 butterflies in action.

"We have a lot of people coming through who are here to see them because they're pretty," says Dan Babbitt, the museum's Insect Zoo and Butterfly Pavilion manager. But the

exhibit aims to show guests there's much more to the winged insects than their vibrant hues and brilliant patterns. For starters? They're tough. A common misconception, Babbitt says, is that butterflies are delicate. "But a butterfly can fly with a third of its wings missing," he says.

Similarly, the pavilion's serene setting makes it seem as if the exhibit is easy to maintain. Hardly. "This being completely inside, in a hall, we have to rely a lot on environmental controls," Babbitt says. Here, he gives us a glimpse of how he and his team keep the exhibit flying year-round.



**"Emergence chambers"** house specimens in their pupa state. About 200 to 300 arrive each week because butterflies don't live long — an average of "a week to three weeks," Babbitt says. The chamber for international butterflies is kept in a lab separate from the pavilion.

Once an insect emerges, it hangs upside down so its exoskeleton can harden, which can take at least a few hours. Then the insects are put in **containers** in the pavilion. Most eventually fly out, but these silk moths remain enclosed.

In the pavilion, where temperatures stay between 76 and 81 degrees Fahrenheit, a dozen **misters** spray water when the humidity level dips below 60 percent.



**Lighting** from 15 modified stadium lights, which slowly turn on at 7:30 a.m. and start dimming at 7:30 p.m., encourages plants to produce nectar and benefits butterflies. "For butterflies to be happy, they need a sunny, hot summer day to be active," Babbitt says.



Babbitt estimates the pavilion has more than a dozen tropical plant varieties, such as **Buddha bellies**. Plants are switched out a few times a week to make sure they are in bloom and producing nectar — food for the butterflies.



A rotting fruit "nectar bar" helps feed the pavilion's inhabitants, including this **owl butterfly**, from South and Central America and one of the largest butterflies in the world, with a wingspan of about six inches.



When a butterfly needs to be handled, Babbitt uses a **paintbrush** to minimize the risk of hurting it. Here, he holds a tiger longwing. "We don't let people touch the butterflies in here, so we don't touch the butterflies in here, either," he says.



If **silk moths** were not contained, visitors would rarely get to see them. "They live, like, three days," Babbitt says. "They don't have a functioning mouth. So they get all their nutrients as a caterpillar."

