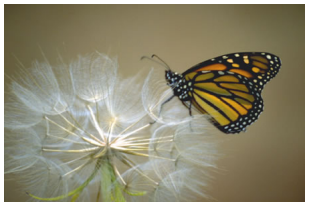
by Arthur Shapiro



Most grownups think there are fewer butterflies now than when they were kids. As a professional ecologist at UC Davis, I heard that from so many people on both coasts, over several decades, that I developed my own theory to explain it. It went something like this: Butterflies constitute a proportionately bigger component of the landscape as perceived by a little kid; as a person gets bigger, butterflies seemingly get smaller, and we just notice them less. I wish that were the case, but, unfortunately for us, for our local ecosystems and for our children, hard data shows that butterflies really are disappearing. In fact, some of the most compelling data come from right here in Sacramento and its vicinity, where several species, which used to be common and easy to spot, have disappeared within the past decade. This means it's that much harder for our kids to observe the miracle of metamorphosis first-hand, like so many of us did. If you want your kids to experience the wonder of butterflies, what can you do?

Rearing butterflies lets kids witness their transformation up-close. For many years I got phone calls from teachers and parents wanting tips on how to find Monarch eggs or caterpillars to bring in and rear to bright-winged adulthood, the Monarch being a sort of "poster child" for butterfly conservation. It's simple to rear them—but first you have to find them. Although there is no compelling evidence of an overall decline in Monarch numbers around Sacramento, finding the early stages has become much more difficult. Many people seem to have given up, since I rarely get those calls any more. The Monarch is simply no longer the easiest butterfly to rear in the home or classroom. Your best bet nowadays is the Pipevine Swallowtail.

Pipevine Swallowtails fly from March to October, but they are most common in spring, when they have two back-to-back generations. Adults straggle out all summer and fall. It's the big, black butterfly with a blue gloss that you might see along the American River anywhere upstream from Sac State into the foothills. If you look carefully, you will see that it has several orange spots rimmed with black and white on the underside of its hind wings. For pictures and information about this local star, you can visit http://www.fcps.edu/islandcreekes/ecology/pipevine_swallowtail.htm.

The Pipevine Swallowtail lays eggs only on California Pipevine, a native plant that can climb into the trees as a woody liana or sprawl over the forest floor. It's very common around Ancil Hoffman Park, Goethe Park, the Upper and Lower Sunrise areas and on up through Hazel Avenue and Folsom, usually growing among oak trees within sight of the river. Our Pipevine plant is a member of a group found throughout the Old and New World Tropics. All the members of this group produce poisonous chemicals called aristolochic acids. Our Pipevine Swallowtail also belongs to a tropical group, all of whose members feed on these plants and store the toxins, which protect them from predators, like birds, which might try to eat them. The Pipevine Swallowtail even transfers the toxins to its eggs– which are "warning-colored" in brick red! The eggs are laid in little bunches on young, tender growing shoots of the plant. When they hatch, the baby caterpillars feed together in groups.

There may be no better way to teach our children respect for the natural world than by giving them opportunities to directly experience the wonders of nature. And butterflies are easily one of nature's most wondrous creatures.

Arthur Shapiro is a professor at UC Davis where he's studied butterflies for more than thirty-five years. His new book, Field Guide to Butterflies of the San Francisco Bay and Sacramento

Valley Regions, illustrated by Tim Manolis, will be in bookstores this June (University of California Press, California Natural History Guides series). It includes a section on butterfly ecology, as well as guidance for activities such as butterfly watching, photography, rearing, gardening and conservation.

The Pipevine Swallowtail is only one of many species that can be seen along the American River. Want to learn more about all kinds of butterflies?

www.effieyeaw.org Art Shapiro's booklet on butterflies of the American River Parkway is usually available at Effie Yeaw Nature Center.

You can learn even more about local butterflies by visiting Shapiro's website (http://butterfly.ucdavis.edu). There you can also download free brochures on how to garden for butterflies in the Valley or the Foothills, or request them by e-mailing the author at amshapiro@ucdavis.edu. He'll be glad to answer questions, though, as a rule, he won't tell you exactly where to go to find a particular species.