

## **Zoo Edition Archives - Spring 2003**

Excerpts from an interview with Erin Sullivan, WPZ Zookeeper in "Bug" World

**WPZ:** How did you first become interested in the field of entomology?

**ES:** I had a lifelong interest in bugs (so I'm told) and I was in Bug Club at San Francisco Zoo when I was a kid. In college, I majored in biology and we had a selection of required courses to choose from. I chose to take "The Behavioral Ecology of Insects" and it had everything I'd been looking for – biology, physiology, morphology, chemistry, and biochemistry plus arts. All of these are encompassed in insects and other arthropods – they're little packets of science! I started to volunteer at the San Francisco Insect Zoo and it was a perfect match for me. In 1996 I came to WPZ to help design "Bug" World and to take care of the bugs.

**WPZ:** What are the best parts of your job?

**ES:** The best thing about my job is that it is different every day. We have a basic routine, but there is always something new and exciting going on. I also enjoy the problem-solving aspect of my job – whether it's trying to figure out how to breed Phyllium or the best way of showing millipede legs to a child.

**WPZ:** What are the challenges of your job?

**ES:** The problem-solving! We work with a large number of species, each with its own microclimate needs and optimal conditions to survive – we have to take this into account for each exhibit. So we're working with 35 tiny habitats trying to maintain the right conditions for each species. With the Oregon Silverspot Butterfly Project that we're working on, maintaining the right conditions is the most challenging part of the project. The larvae (caterpillars) of this species hibernate through the winter and we have to try to create the right condition in our lab so that the larvae survive through the winter in good health.

**WPZ:** What sorts of skills are beneficial for a person in your position?

**ES:** Creative problem-solving abilities are definitely at the top of the list – also, attention to detail, patience for working with small things and good observation skills. Bug keeping is very multidisciplinary, so everything from math skills to artistic abilities is important. A sense of humor helps too! A great way to start out is just by observing bugs— develop a bug-friendly garden at home or school and spend time watching the butterflies, bees, and other bugs that visit your garden. Put yourself in the bug's place – think about what you would need to survive and how you would fulfill your basic needs if you were that bug.

**WPZ:** What changes do you see taking place in your field of work?

**ES:** Well, it's taken a long time for bugs to get noticed and to be treated like other animals, but the field has come a long way. We are working more on conservation, which is also very interdisciplinary. We're not just saving a species of insect; we're saving habitats and everything that is interconnected within those habitats. Bug keepers are taking more notice of the veterinary aspects of bug keeping – such as diseases – and so we're making advances in arthropod husbandry. These advances in turn benefit conservation because the more we can learn here in "Bug" World the more we can share important information with conservation projects that are raising bugs in lab situations. That is the great thing about being involved with the silverspot conservation project"– we're putting what we've learned over the years in "Bug" World into practice to help augment the wild population of silverspot butterflies.