September's Speaker, Jeff Miller

So many of us grew up in environments that despised caterpillars. Girls often shrank from the creepy crawlers and little boys tortured them in one way or another, taking pleasure in any emerging goo. A little more enlightened today, most of us willingly share our gardens with some of these interesting characters; we even rejoice in the spring when we see our rockcress defoliated because we know that through the metamorphosis of the guilty, Sara Orangetip might visit. And like many of us, this month's speaker, Dr. Jeffrey Miller, didn't start out enraptured with the larvae of moths and butterflies, but today he too shares his garden with these splendid insects. When we see his photos Friday night, the beauty and charm of these guys might even encourage us to plant some stinging nettles.

Enjoy below what Jeff has to say about his own metamorphosis:
"I was born in Spokane, but at the age of eight weeks (1950) my family moved to the San Francisco Bay Area--Sunnyvale, Cupertino, and then Los Altos to be exact. I attended Los Altos High School (1964-1968) where I was a half-baked jock and discovered I liked drafting. Then I set off to be a landscape architect, enrolling in the first of three Colleges/Universities I would attend while going through five majors in just under five years as an undergraduate.

"I enjoyed being out-of-doors as a youth, but I was not a nature-loving child prodigy, I preferred playing baseball and had dreams of playing in Candlestick Park. I found the K-12 presentation of biology to be irrelevant (a word I use in hindsight) and boring (a description I still feel is fairly and appropriately applied). In fact, I never took a biology class of any sort in high school. However, as a teenager, my parents forced me into slave labor in the garden, and at least every other weekend during the spring and summer, we would set out on nature drives. I was eventually infected with a severe case of biophilia from these excursions, and coupled with the gardening experience, I chose landscape architecture as my first major.

"As far as any early teacher influences, I must say that in my case, early is defined as post 19-years old. A critical part of the landscape architecture major was a full year of botany. So, here comes a college freshman with no high school biology into a three-class sequence of plant physiology, ecology and taxonomy. I was hooked on the scientific study of nature by the instructor/class on plant taxonomy, the same term I took organic chemistry. I renounced my major in landscape architecture for a major in biochemistry. Eventually, the coincidence of avoiding physical chemistry and taking a five unit insect biology class (taught by an instructor that was filling in for the regular guy who happened to be on sabbatical) as a spring term junior, swayed me into entomology and an extra two terms of senior undergraduate work.

"My first class in entomology was taught by the fill-in instructor, Dr. Robbin Thorpe, a now retired specialist on bumblebees and pollination ecology. I took four courses from Robbin who became my graduate major professor for all of two months. But then, once again, I shifted directions and finished my PhD, the first Doctoral student of Dr. Les Ehler (still working today) in the field of biological control of agricultural pests."

As for landmark experiences:
"Not all of one's life is driven by science, there have been a few personal socio-political-health happenings along the way, such as: late 60's--the drafting of teenagers into the Viet Nam War; rampant use of pesticides (namely DDT and organophosphates) in California (global) agriculture, along with the consequences of toxins in the environment and genetically-based resistance in insect pests. Then, once I was on the job in Oregon [accepted a position as Assistant Professor at Oregon State University] the biggest of the biggies was the gypsy moth in Eugene (and greater Oregon in 1985+). This insect pest problem was full of political issues and drew me out of cropping systems* and into the forests. Subsequently I conducted numerous non-target pesticide assessment field studies in Oregon and in 1994, initiated a biodiversity project at the HJ Andrews Experimental Forest that is still active. I did experience a momentary career set-back, but gained a major philosophical advancement following emergency quadruple bypass in 2002. This traumatic event was immediately followed by the demise of the OSU Entomology Department and my adoption by the Department of Rangeland Ecology and Management. At the present, however, my vote for my all-time best of the best landmark events is the publication of two photo-essay books** by Harvard University Press (2006, 2007) on tropical caterpillars based on visiting Dan Janzen at the University of Pennsylvania and again in Costa Rica."

When I asked Jeff about his hobbies today, he said, "Believe it or not, I still love to garden and I practice my own form of landscape architecture. I make a special effort to include a large handful of native species along with my exotic commercial ornamentals. The foliage from these plants serves as my food for feeding caterpillars--but the caterpillar rearing activity is not a hobby, it is my job!"

His current projects/areas of special interest include "insect biodiversity and plant communities; The Pacific Rim biota and caterpillar foodplants; Writing books."

And memorable travels abound in Jeff's life:
"1977: My very first ride in an airplane (age 26), a flight leaving Sacramento and heading off to Madison, Wisconsin, a job interview, just weeks prior to the commencement ceremony for my PhD.
1998: my first time in the Tropics--two weeks of watching, touching, hearing, collecting insects along the Napo River, Ecuador.
2000: Tanzania and 500,000 wildebeasties on the hoof, plus a hundred or so species of butterflies on the wing.
2003, '04, '05: Costa Rica and dry/rain/cloud forest caterpillars.
2003, '04, '05, '06: Taiwan and forest caterpillars.
2005: Back to Ecuador, but this time to the pacific side of the Andes in the loosely defined southern range of the Choco biotic region."

What will we hear about Friday night?
"Insects in environmental assessment and use as indicators of land management practices in forests and rangelands; natural history of caterpillars; digital imaging; Oregon, Costa Rica, Ecuador, and Taiwan."

Dr. Miller received his BS and PhD degrees (1973 and 1977) in entomology from the University of California at Davis where he was awarded a California Regents' fellowship. He was accepted as a Post-Doc in 1978 and as an instructor in 1979.

*cropping systems: "refers to the mosaic of food and fiber production on local and regional scales and deals with issues such as how crop yield (=$$$) is affected by interactions among such variables as water, soil fertility, pathogens, weeds, insects, etc. . . ."

**Page 7 of Nature Trails has review excerpts and information on both the detailed science and lucid photography in these books.

Editor