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Pacific Southwest Research Station, Albany, CA 94710

Shea in China: A First-Hand Report

From April 5 to May 1, Pat Shea, emeritus scientist at PSW and two other FS entomologists visited the People's Republic of China to consult on the red turpentine beetle that is infesting Chinese pine. Here is his first-hand report:

The FS delegation invited to the People's Republic of China to consult on the red turpentine beetle consisted of myself, and two entomologists: Robert Borys, of the Station's Insect Chemical Ecology Research Unit, at Placerville; and Sheri Smith, Forest Health Management Unit, FS Pacific Southwest Region, in Susanville, Calif. The day after we arrived in Beijing on April 5, we departed for the Shanxi Province to visit several sites infested with red turpentine beetle in various forest locations.

The beetle is a native insect of North America, and is distributed throughout the western United States. Its primary host is ponderosa pine, but it can infest several other pine species. The beetle characteristically attacks the lower portions of pines, and the larvae feeds in groups underneath the bark. In North America, it is rarely considered a tree killer, but in recent years, we have found it the primary source of tree mortality—especially after forest fires and extensive droughts.

The beetle may have been brought to China in a shipment of pine logs that had not been debarked. The logs probably entered through the seaport of Shanghai and were then trucked into the Shanxi province to be used for mine timbers. Recently, the beetle has killed stands of Chinese pine, which is extensively planted throughout the province.

Shanxi is a 12-hour ride west of Beijing, the capital of China, and covers 156,000 sq. km. It has a population of 26 million people, and about 80 percent of the land base is mountains or uplands. We visited six different forest regions in 7 days. We observed the beetle in all regions, and noted the differences in biology between the insects in China and those in the United States.

We also discussed various management options that might be tried. Highly innovative, the Chinese are currently attempting to fumigate infested trees, use explosives to blow up infested cut stumps, and then excavate entire root systems to kill the beetle.

To our surprise, we also observed the beetle feeding below ground in the various lateral roots out to 6 feet distance from the main stem. This pattern had never been reported in western literature and was a new behavior to us.

During our travels to Shanxi we were accompanied by a large delegation of provincial entomologists, pathologists, and forestry officials. Everywhere we went, we were escorted by official vehicles with sirens and swirling lights.

We closed our trip to China with a meeting in Beijing. One of topics discussed was a possible cooperative effort between the

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FS Chief Affirms Forest Plan Amendment

FS Chief Dale Bosworth has affirmed the Sierra Forest Plan Amendment that covers 11 National Forests in California. But he has directed the Pacific Southwest Regional Forester, in collaboration with the Station and the Intermountain Region, to reexamine some aspects of the management plan.

The Chief asked regional forestry officials to reexamine the plan for possible ways to further reduce catastrophic fire risks to fish and wildlife habitat, to reevaluate the plan for consistency with the latest scientific findings in the National Fire Plan for reducing fire risks, and to identify opportunities to better synchronize the plan with the goals of the Herger-Feinstein Quincy Library Group Forest Recovery Act, which seeks to reduce fire hazards through selective logging in specific areas.

Blackwell Appointed Regional Forester, R-5

Jack Blackwell will assume duties next month as Regional Forester, FS Pacific Southwest Region, (R-5) at Vallejo. He will succeed Brad Powell, who is transferring to the Northern Region, at Missoula, Mont, as Regional Forester. Bertha Gillam will be Acting Regional Forester of Region 5 in the interim. Jack has been Regional Forester of the Intermountain Region, at Ogden, Utah since 1997. A 1970 University of Minnesota forest management graduate, Jack is a member of the Minnesota Chippewa Tribe.

New to PSW

After a career in academia and private-sector research, Brian Fry earlier this year shifted to the Federal sector, when he joined the Station's Institute of Pacific Islands Forestry, at Honolulu, as a research ecologist in the Forested Wetlands Research Team. Brian will be conducting research on watershed linkages in wetlands, mangrove-related fisheries, and ecosystem biogeochemistry in forest systems.

Native of Oakland, Calif., Brian left there at an early age, and attended schools in Fayetteville, Ark. He holds B.A. (Cornell, 1972), M.S. (University of Texas, Austin, 1977), and Ph.D. degrees (University of Texas, Austin, 1981). He has been a scientist at the Harbor Branch Institution, the University of Indiana, and the Marine Biological Laboratory at Woods Hole, Maine. He has taught at two universities: Florida International (as an associate professor) and Louisiana State (as an associate professor and later professor of coastal ecology). Widely published, Brian is author or co-author of more than 100 publications.

"I left academia to live and work in Hawaii and the wider Pacific for many reasons, among which are the good climate and

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Station's Insect Chemical Ecology Research Unit and Chinese scientists in identifying beetle pheromones and their use as a management tool.

Meetings/Conferences/Seminars

- Matt Busse and Bob Powers Soil Productivity Research Team, Redding, attended the Annual Meeting of the Soil Science Society of America, Oct. 21-25, in Charlotte, N.C. Matt presented a paper on "Tolerance of Microbial Communities to Severe Forest Disturbances." Bob presented a paper on "Is There Life After LTERs? Findings from LTSP and Other Studies," and a poster paper on "N-Fixing Understory Species Depress Soil Carbon Loss in a California Forest Soil."

- Julie Denslow, Team Leader—Invasive Species Research, Hilo, presented a paper on "Weeds in Paradise" at the 48th Annual Symposium on Biological Invasions, Oct. 12-13, St. Louis.

- Kathy Ewel, Team Leader—Forested Wetlands Research, Honolulu, presented a paper on "Environmental Diversity of Mangrove Forests on Pacific Islands," at a workshop on "The Role of Mangroves in Coastal Resources in the Pacific Islands," Nov. 4-8, Penang, Malaysia.

- Brian Fry, Forested Wetlands Research Team, Honolulu, attended the Symposium on Effects of Human Activities on Ecosystems at the Land/Ocean Margin, of the Western Society of Naturalists, Nov. 8-12, Ventura, Calif.

- Nancy Rappaport, Soil Productivity Research Unit, Albany, presented a paper on "Responses of *Conophthorus* spp. to Behavioral Chemicals: A Transcontinental Perspective," at a Texas A&M University Entomology Department Seminar, Oct. 11, College Station, Tex.

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new challenges in balancing ecology and people in this new global society," says Brian. "And I have enjoyed my first 5 months in Honolulu."

Personnelly Speaking

Extra-Effort Awards

- Enoch Bell, Assistant Station Director, for "outstanding leadership and support of PSW's research program."

- Marilyn Burrows, Station Director's Office, for "leadership in converting and finalizing PSW's FS Manual Supplements."

- Carol DeMuth, Assistant Station Director, for "outstanding leadership and support of PSW's research and operations program."

- Casey Delphia, Insect Chemical Ecology Research Unit, for "exemplary effort as Administrative Assistant."

- Chuck Evans, Information Technology Group, for "continued leadership in promoting and implementing the Station's computing needs."

- Rosanne Hunt, Personnel Management Group, for "excellent advice and counsel to the Station's leadership team on employee relations."

- Bernadette Jaquint, Budget/Financial Management Group, for "exemplary effort and patience in helping initiate PSW's research program on Sudden Oak Death."

- Tom Ledig, Institute of Forest Genetics, Davis, for "outstanding contributions in describing the genetic basis of species rarity and the role of genetic diversity in species conservation."

- Chelle Mullins, Budget/Financial Management Group, for "exemplary effort in resolving motor pool charges, utility accounts, and accounting adjustments."

- Sandra Nedley, Budget/Financial Management Group, for "exemplary effort in assisting a unit in travel regulations and travel voucher preparation."

- Jackie Rountree, Budget/Financial Management Group, for "exceptional leadership as Grout Leader."

- Rochelle Selvin, Personnel Management Group, for "assisting a unit in correcting, adjusting, reconciling, revamping, and processing personnel documentation."

- Melissa Smith, Personnel Management Group, for "exemplary effort in helping a unit with executing the Paycheck and Windows 2000 programs."