

Goldspotted Oak Borer and Oak Mortality

Quarterly Situation Report

April 1 through June 30, 2012

San Diego GSOB Steering Committee

A Steering Committee meeting was held at CAL FIRE San Diego headquarters in El Cajon on May 29th. Chiefs Chris Zimny and Russ Henly from CF Sacramento headquarters and CF forest pest specialists Kim Camilli and Tom Smith attended the meeting along with Committee regulars. The primary issues discussed included:

- Steering Committee support of initiating a process by CAL FIRE seeking to establish a Zone Of Infestation by the CA Board of Forestry and Fire Protection.
- Discussed a log truck full of oak logs observed heading north on highway 79 toward Riverside County in mid-May and the potential for agency vehicle stops of wood under Penal Code 384.5. Cal Fire, USFS and CA State Parks will consider using their law enforcement personnel to conduct vehicle stops to enforce this section of the Penal Code and to pass out GSOB educational materials and to gather data about any loads that are intercepted.
- The Committee agreed that the GSOB Firewood Best Management Practices needed to be completed soon and made available. Those BMPs have been printed in a foldable card format and were mailed to oak woodland landowners with lots greater than 1 acre in San Diego County.
- The Steering Committee was briefed that the So Cal Committee of the CA Forest Pest Council is pursuing forming GSOB Subcommittee to work at a regional level to complement work done by the Steering Committee in San Diego County.

San Diego County Parks and Recreation District 3 – Roger Covalt

- For this quarter, there has been no real increase in GSOB activity except for Heise which continues to be attacked and had 10 additional trees dropped due to GSOB.
- Dos Pico has had 4 trees dropped in the last quarter, but shows no new signs of infestation. Canopy in all areas still look generally healthy.
- We have had reports of GSOB in oaks on the Five Oak Trail in Volcan Mountain Preserves, but haven't yet been able to confirm it. The Ranger that reports it states she is 80% sure they are GSOB infested.
- We've had one oak fall recently in Santa Ysabel East, but I haven't gotten a report if it is infested.
- Ramona Preserves reports no sign of GSOB.

La Jolla Band of Luiseno Indians - Rob Roy Environmental Director

At La Jolla we have started several things GSOB related:

1. Small initial tree survey in campground and will complete more as time allows
2. Placed bug traps in campground around oak trees
3. Started firewood management program in campground
4. Field training with Tom Coleman to better recognize signs of pest infestation
5. Working with BIA to obtain funding to complete a Forest Management Plan that will include invasive pest issues

Black Oak Restoration: direct seeding, Burnt Rancheria Campground - Maureen Anderson, Descanso Ranger District CNF



In March of 2012, 200 plantings of Black Oak acorns were accomplished on approximately 5 acres in Burnt Rancheria Campground in Mt. Laguna. Planting sites were selected in areas where dead oaks had been removed and there was little or no natural regeneration nearby, due to either loss of a seed source or human impacts on the soil in campsites.

About 500 acorns were collected from trees in the campground in October of 2011. The acorns were float tested for viability and refrigerated until planting time. There were several snowstorms in Mt. Laguna this year; even in March, when planting occurred, there was still snow in shaded areas. Root guards, weed mats and conical tree shelters were utilized for these plantings which were accomplished by student volunteers and USFS personnel.

Ninety days after planting, 192 shelters were checked, with 156 (81%) showing seedlings ranging from new sprouts below 1" and others up to 10" tall. The median height was 3-4". This is the first Black Oak restoration project on record in San Diego County; another 200 plantings in the campground are planned for 2013. The project is part of the Descanso Ranger District Oak Reforestation plan, developed in response to severe GSOB oak mortality.

USFS Forest Health Protection – Tom Coleman

Survey, Detection, Monitoring

- Forest Health Protection provided purple prism traps to numerous tribes in southern California to assist with monitoring efforts. FHP established approximately 40 prism traps in San Diego, Riverside, and San Bernardino Cos. Traps were placed at high-value sites that are dominated by oak canopies. Traps will be checked in September for presence/absence of GSOB.
- The Ramona Reservation was surveyed for GSOB infestation. No GSOB injury or populations were found on the Reservation.

Science Activities and Findings

- Forest Health Protection (FHP) is collaborating with Forest Service (FS) Research, UC-Davis, and APHIS to assess new volatiles to enhance GSOB trap catch. Lab assays with GSOB adults have identified several antennally active chemicals that will be tested on traps in the future. Additional studies from this group are also assessing various trap colors and emerald ash borer pheromones.
- Forest Health Protection continues to survey areas impacted hardest by GSOB to assess the potential risk for other areas in California and changes in the fuel structure.
- Forest Health Protection continues testing systemic and topical insecticide treatments for GSOB with FS Research. Study trees were re-treated in February and May 2012. These treatments represent the second or third year of treatments for some trees. Lab assays were conducted with GSOB adults and insecticide foliage from May to July. The results from these assays should be available later this summer or early fall.
- A manuscript outlining management options for GSOB infested firewood was submitted for publication to the Journal of Economic Entomology. The manuscript was accepted with revision in July 2012. The manuscript was prepared by Michael Jones, UC-Davis who is collaborating with FHP and FS research.

Management and Restoration

- Forest Health Protection is working with the Descanso Ranger District to finalize the environmental analysis for GSOB treatments in 2013. Several campgrounds and one administration site dominated by coast live oak plan to be treated with topical sprays.

Public Outreach, Media Coverage, Technical Assistance

- Forest Health Protection met with members of Rincon, San Pasqual, La Jolla, and Campo Reservations to talk about GSOB management plans. FHP also spoke at the BIA southern California tribal grants meeting to discuss suppression funding opportunities for GSOB with numerous tribes.

California Firewood Task Force – Janice Alexander and Katie Palmieri

Firewood & GSOB

- Summer 2012 firewood outreach campaign: finalized poster designs, worked with printer, received 5000+ posters, redistributed to all firewood outreach partners; ordered, received and re-distributed 4000 decks of firewood playing cards; ordered, received and re-distributed 5000 GSOB temporary tattoos; provided updated outreach materials for posting on website
- Firewood outreach presentation to California Recreation, Parks and Tourism Roundtable, approximately 20 in attendance; followed-up with additional materials as requested
- Outreach at American Association of Woodturners annual symposium in San Jose, 6/10/12
- Submitted firewood movement analysis document with Katie Palmieri
- Spoke with Charmaine Lane of Crossings TV in Sacramento about coordinating outreach messages for Asian language-speaking populations
- Firewood - USDA e-News, California Edition – wrote “Buy It Where You Burn It”, Urges Firewood Task Force” article based on my June Firewood News Release (June 2012)
- Firewood – Reviewed draft firewood posters for 2012 outreach campaign and provided feedback (April 2012)
- Firewood - California Association of RV Parks and Campgrounds – Reviewed and edited firewood article for website (April 2012)
- Firewood Press Release – Kick off Camping Season the Right Way – Keep Firewood Local – wrote, had reviewed and distributed to press; solicited cooperating agencies for press person in attempt to distribute the release as wide as possible; had posted to Firewood Task Force website (May 2012)
- GSOB – Coordination with GSOB group and effort to bring them into the fold of the CFPC resulted in them becoming an official subcommittee of the S. CA Committee of the CFPC (April 2012)
- GSOB – Board of Forestry distributed a Press Release RE adopting policy on GSOB; this is in response to initial work I did with the BOF Resources Committee (April 2012)
- Firewood – Continued communication with California Association of RV Parks and Campgrounds in an effort to bring them into Firewood Task Force fold; was able to get them (Debbie Sipe) to attend/join Firewood Task Force meeting (May 2012)

University of California ARRA Grant Activities –Tom Scott, Brett Goforth, Cara Washington, Kathie Carter, Kevin Turner

1. Dating outbreaks by Dendrochronology – Doctor Brett Goforth

To date, a total of 2,752 wood samples have been collected from 1,591 oak trees among 38 GSOB infestation localities in San Diego County. No new additional samples have been collected since the April 2012 quarterly report. A total of 2,622 scanned images have been made of 1,288 sanded wood samples representing 47% of trees in the collected wood sample inventory. Each image was scanned at 1200 dpi resolution, resulting in a digital image archive of 1.05 TB of data. Five work-study student assistants participated in the tree-ring analysis in the past quarter (Sana Aljilani, Eliza Cho, Marlen Ramirez, Mariana Garrido, Juan Nevarez). The CDendro computer program has been used to count and measure tree-rings shown on 833 samples (65% of scanned samples). The first GSOB attack identified by tree-ring scars among these samples still appears to date back to yr. 2000 from a dead coast live oak tree located in Descanso.

During this quarter, we sought assistance from Bautista Conservation Camp in the Riverside Ranger Unit of the California Department of Forestry and Fire Protection to help us reduce a backlog of wood samples that require sanding prior to tree ring analysis in the lab. Under the supervision of Fire Captain Dale Mattson, inmates from Bautista Crew 5 (the “In-Camp” crew) sanded approximately 100 wood samples in Bautista’s woodshop. Many of these samples were large diameter slabs from stumps which were very time consuming to sand. By gaining assistance on these samples, we were able to focus the efforts of our Sample Preparation Specialist on completing the fine, finish-level sanding creating the polished surface required for microscopic analysis. The camp was provided with abrasive sandpaper and loaned power sanders to accomplish this work.

2. Sequential Aerial-Photoimagery - Cara Washington Graduate Student/Aerial Mapping Leader

Small plot mapping continues with the addition of entire woodland canopy mapping for all small plot locations completed. To date this new feature has 51 sites completed with 25 sites remaining; this new information will allow us to calculate what percentage of woodland canopy for each site has been lost due to tree death.

The collection of data to analyze the contributions of soil, slope and other physical characteristics to GSOB-related oak mortality and morbidity has been completed for all large-scale and small plot locations throughout San Diego County. The collected data variables include: slope, aspect, elevation, precipitation, temperature, soil series, soil infiltration rates, depth to restrictive layer, type of restrictive layer, drainage class, parent material and saturated hydraulic conductivity (Ksat), available water capacity, and cementation hardness of the restrictive layer. This information is in the process of being statistically analyzed for identification of factors that will assist in creating a predictive model of areas or conditions that may encourage GSOB infestation.

3. GSOB Early Warning System (Citizen Scientist) - Kathie Carter Program Coordinator

We have entered into the second phase of the contract with the programmers for the application. I am currently working on putting together the data sheet that all the information that is entered goes into. We also gathered pictures of insect, leaf and trunk damage that will go into the application for reference.

I have also been in contact with several tribal agencies to have an outreach workshop in the field. The tribal agencies are very helpful and will send out a letter to the appropriate tribal coordinators giving the specific information of the upcoming field workshop. This workshop will encompass hands on training, visual observations with physiological data and assess tree health decline. We will also have materials to distribute for the environmental coordinators to take back to their tribes for continued training. Our hope is to place a forestry management plan into effect.

4. Pesticide as a Barrier to GSOB Emergence Study – Kevin Turner and Tom Scott

The study continues into the summer “emergence” period for adult GSOB. No adult GSOB emergence was observed from the barrels being used to hold wood samples for the test until just after the quarter ended (early July). However, several weeks earlier, there was significant emergence of adult GSOB from other wood samples obtained from a different source location; these samples were collected specifically in order to obtain adult samples for use in GSOB ID kits.



Photos clockwise starting from upper left: 1. Barrels with wood samples covered by window screen 2. A prototype trap mounted to a test screen at the UCR Agricultural Operations Shop 3. GSOB adults for GSOB ID kits collected from a recently-killed tree in Julian 4. Applying fluorescent dye to infested wood to determine effectiveness of powdered dye in marking emerging GSOB.

5. Other Coordination Activities - Kevin Turner

- Tom Scott and Kevin Turner surveyed the upper end of Tecolote Canyon Park to check out a report of possible GSOB infestation. No sign of obvious GSOB attack was observed, although some leaf skeletonization was observed on some oaks. However, a few oaks near the ridgeline immediately behind homes were not inspected and should probably be revisited.

- Facilitated a May meeting of state and federal agency and university personnel working collaboratively on developing GSOB Integrated Pest Management (IPM) guidelines and Best Management Practices (BMP).
- Instigated collection of GSOB adult insects and bark samples for producing GSOB ID kits.
- Participant in April 24th Southern California Committee of the CA Forest Pest Council where it was determined to form a GSOB Subcommittee from within this group.

6. GSOB-Supporting Grants – Kevin Turner

- The GSOB ARRA grant ended June 30th 2012, save for the submission of the final report which is due in September 2012. A number of ongoing GSOB projects, activities and their respective personnel that were supported by the ARRA grant have subsequently found at least partial funding through new grants or other sources to continue GSOB-related work. Many thanks to the excellent work done through the ARRA grant by Jan Gonzales (and her staff), Katie Palmieri, Janice Alexander, Cara Washington, Dr. Brett Goforth, Kevin Turner and many UCR student assistants. Our sincere appreciation goes out to both the USFS and CAL FIRE for making this GSOB grant possible and especially to the grant P.I., Dr. Tom Scott of UCCE at UCR.
- Additional work continued this quarter to prepare the full ANR 2012 grant application to secure approximately \$350,000 to fund work on GSOB, specifically Oak Mortality Management Plans, which are intended to help communities and oak woodland managers prepare for and manage oak mortality issues caused by GSOB and other pathogens/conditions.
- In March of this year, we had worked feverishly (with the urging of some GSOB Steering Committee partners) to prepare a grant proposal to submit to the California Landscape Conservation Cooperative RFP. Unfortunately, we received notification in late April that our proposal was not one of the selected projects.

GSOB Meetings/Presentations for the Quarter

6/21/2012	<u>Presentation to Forest Area Safety Taskforce (FAST)</u>	<u>Jan Gonzales</u>
5/19/2012 - 5/21/2012	<u>Idyllwild Earth Day</u>	<u>Kevin Turner</u>
5/18/2012 - 6/15/2012	<u>RAST Fire Summit</u>	<u>Jan Gonzales</u>
5/2/2012	<u>GSOB Workshop - Pechanga</u>	<u>Jan Gonzales</u>
5/1/2012	<u>GSOB Workshop - Altadena</u>	<u>Jan Gonzales</u>
4/28/2012	<u>Idyllwild Fireman's Muster GSOB Booth</u>	<u>Kevin Turner</u>

Goldspotted Oak Borer Education and Outreach Program– Jan Gonzales UCCE San Diego

Outreach Activities

- Organized and hosted two day long GSOB workshops:
 - May 1, 2012 – Altadena, Los Angeles County – in partnership with Los Angeles County Fire Department Forestry Division
 - May 2, 2012 - Temecula, Riverside County – in partnership with the Pechanga Band of Luiseño Indians

Both sessions provided public and private stakeholders a general overview of the GSOB issues and updated information based on the research, management and education and outreach activities during the past year. Presentations were provided by Tom Coleman (USFS/FHS), Kevin Turner (UCR), Tom Scott (UCCE/UCR), Kathie Carter (UCR), Vanessa Lopez (UCR/Hoddle Lab), Matthew Bokach (USFS) and Jan Gonzales (UCCE SD). Workshops summary report attached.

- Provided distribution of GSOB and firewood movement information and awareness materials.
 - Distributed 1,000 GSOB brochures to R. Covalt (SDCo Parks). (5/12)
 - Distributed 100 GSOB brochures to Fallbrook arborist for community handouts. (5/12)
 - Coordinated the distribution of 20,000 Don't Move Firewood disc flyers to the Greater Alpine Fire Safe Council.
 - Distributed 300 GSOB brochures to T. Ellis (SDCo AWM). (5/12)
 - Presented information at the Regional Area Safety Taskforce (2012 Annual Fire Summit. (5/12)
 - Coordinated with San Diego Master Gardeners for GSOB and Don't Move Firewood information outreach at the San Diego County Fair. (5-7/12)
 - Gave presentation to the Forest Area Safety Taskforce (with K. Turner, UCR) to update members on latest research findings, policy development, management strategies and education and outreach activities for GSOB, Early Warning System and Firewood. (6/12)
 - Coordinated with R. Covalt (SDCo Parks), K. Turner (UCR) and J. Alexander (UCCE-Marin) on Don't Move Firewood supplies for southern California. (6/12)
 - Distributed~ 3,000 GSOB Resource Packets to private property owners in San Diego County with parcels in or near GSOB-infested areas. Packets contain a variety of informational resource materials on GSOB and firewood. (6/12)
 - Distributed over 100 GSOB Resource Display kits to organizations throughout the southern half of California, engaged with land management and/or natural resource education. Recipients include County Ag Commissioners offices; water districts, Natural Resource Conservation Service offices, Resource Conservation Districts, UC Cooperative Extension offices, local chapters of Professional Landscape and Arborist organizations, and nature preserves. (6/12)



Left: Tabletop display with new information panels and display board; available for check-out.

Right: GSOB Resource Packet distributed to private landowners in/near infested and at-risk areas.

- Coordinated with collaborators and staff to develop new resources.
 - Developed and printed three flyer handouts for GSOB Resource Packets (dbl-sided, English and Spanish) – Online Resources, Oak Firewood Advisory; and Oak Firewood Advisory for Vendors and Sellers.
 - Designed, developed and printed new 4-pg. GSOB pamphlet.
 - Designed plastic GSOB I.D. cards, coordinated reviews and placed print order for 10,000 pieces. New cards are dbl-sided with a GSOB-sized, 'D'-shaped exit hole punch.
 - Collaborated on the development of GSOB-infested wood BMPs; provided graphic and design work; and placed print order for 6,000 copies.
 - Created new maps of GSOB-infestation for print materials.
 - Arranged the GSOB tri-fold brochure Spanish translation; created a Spanish version of the brochure and placed print order for 3,000 copies.
 - Updated existing tri-fold brochure with new map and placed print order for 3,000 additional copies.
 - Completed resource packets.
 - Finalized GSOB resource display package assembly.
 - Further developed contact information database of private landowners and other stakeholders in GSOB impacted and at-risk areas in Southern California counties.
 - Coordinated and arranged for video narration; created video and posted to You Tube.
 - Developed three public service announcements (PSAs) for print and/or web media and two radio PSA scripts (:15 and :30 second). Coordinated effort to have all PSA's offered in both, English and Spanish languages.

- Conversed with K. Camilli (Cal Fire) regarding plans for developing online, audience specific self-study courses.
- Wrote draft for an e-Newsletter.
- Designed and developed two GSOB tabletop displays, which are now available for loan to public and private cooperators for use at community events.

Firewood Taskforce

- Provided assistance on CFTF related projects in San Diego County.
 - Further investigated billboard options in San Diego for potential outdoor GSOB and Firewood awareness campaign in coordination with a CFTF campaign under development.

Grant Funding Activity:

- University of California RREA funds initially awarded to T. Scott for online outreach activities regarding Oak Woodland Restoration and Recovery in GSOB-infested areas. Short-term funding will support organizing and hosting a webinar series and further development of resources and GSOB.org website.
 - Developed revised plan of work and budget.
 - Assisted with administrative tasks associated with funding reassignment to UCCE San Diego.

Social Media:

- Blog:
 - Wrote article on GSOB workshops for UC Oak Woodland Conservation blog.
 - Communicated with UCCE staff on article for UCCE Ventura County blog.
- You Tube:
 - Uploaded new short video to the GSOB You Tube channel.

Website:

- Managed the GSOB website, Collaborative Tools groups, email list and online reports.
 - Reviewed, added and updated content, added new resources, fixed broken links, etc.
 - Began to deeply scrutinize site content and add descriptions and metadata where needed.
 - Secured permission to make the GSOB webinar recording public and posted it to the website.
 - Re-formatted firewood BMPs publication for website version.
 - Created thumbnail graphics to feature new resources on website.

- Collected new information for bibliography and began investigating options for adding a searchable bibliography database to site.
 - Managed collaborative tools groups – updated members and contact information; investigated system quirks; and updated discussion posts categorizations as needed.
 - Mailing list maintenance - added new contacts, dropped old addresses, etc.
 - Monitored online surveys for Early Warning System inquiries and GSOB symptoms reports.
 - Monitored and collected data for GSOB online news and mentions.
 - Created three Resource Toolkit webpages for Management, Outreach and Spanish resources.
 - Due to University’s year-end activities and heavy system use, statistic data could not be accessed through the end of June. This report reflects data collected through June 20, 2012.
- GSOB website use data, through June 20, 2012.

	Quarter (Jan-Jun 20, 2012)	Cumulative (Sep09-Jun 20, 2012)
Hits	33,202	515,556
Page Views	18,354	183,639

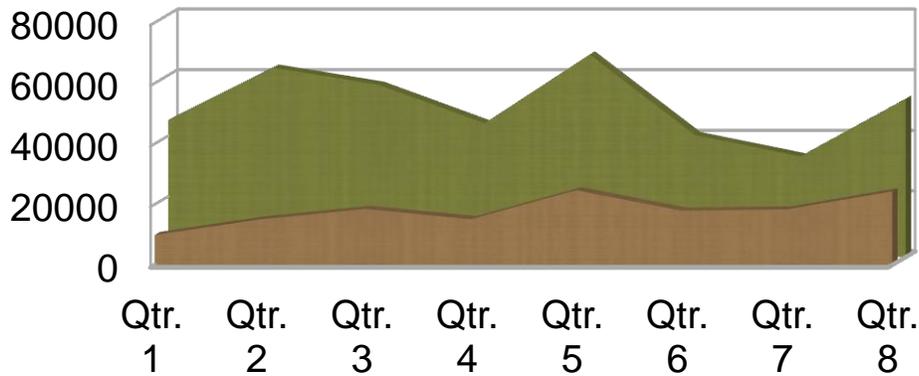
Monthly Activity During ARRA Grant (as of June 20, 2012)

	Page Views	Hits
Qtr. 1	9,906	45,156
Qtr. 2	15,047	62,495
Qtr. 3	18,505	56,836
Qtr. 4	15,098	44,126
Qtr. 5	24,667	66,865
Qtr. 6	17,904	40,242
Qtr. 7	18,354	33,202
Qtr. 8	24,327	52,240
Totals	143,808	401,162

Year 1			Year 2		
Month	Page Views	Hits	Month	Page Views	Hits
Jul-10	2,663	11,318	Jul-11	8,013	21,445
Aug-10	2,951	13,900	Aug-11	5,735	16,135
Sep-10	4,292	19,938	Sep-11	10,919	29,285
Oct-10	4,382	19,563	Oct-11	7,018	17,195
Nov-10	3,825	20,233	Nov-11	5,430	12,181
Dec-10	6,840	22,699	Dec-11	5,456	10,866
Jan-11	6,923	17,606	Jan-12	4,246	9,433
Feb-11	7,261	24,946	Feb-12	6,473	10,578
Mar-11	4,321	14,284	Mar-12	7,635	13,191
Apr-11	5,273	16,494	Apr-12	7,819	18,328
May-11	5,275	14,150	May-12	10,644	21,984
Jun-11	4,550	13,482	Jun-12	5,864	11,928

- Other notable statistics:

- 74% of site visits this quarter were by first time visitors.
- 45% of site visits were via links from other websites.
- Top referral sites were CTFE, County of San Diego Parks and Recreation & La Jolla Tribe.



■ Page Views



Goldspotted Oak Borer Spring 2012 Workshops Combined Summary Report

Overview:

Objective: To share updated information on the Goldspotted Oak Borer, its impacts, risks, ongoing research and management options.

Date: May 1, 2012

Place: Charles S. Farnsworth Park Altadena, CA

Date: May 2, 2012

Place: Pechanga Reservation, Temecula, CA

Target Audience: County Supervisors and Agriculture Commissioners; Public Land Managers and Native Tribes; however, event open to anyone interested.

Combined Attendance: 95

Highlights:

- Likely to use information - 69%
- Webinar changed views about firewood - 60%
- Potential extended reach - **21,100 people**
- Webinar rating: 70% Excellent, 30% Good
- Interested in future GSOB events - 98%

Co-Sponsors:

Date: May 1, 2012, local partner: Los Angeles County Fire Department-Forestry Division

Date: May 2, 2012, local partner: Pechanga Band of Luiseño Indians

Speakers: Matthew Bokach (USFS), Kathie Carter (UCR), Tom Coleman (USFS/FHS), Jan Gonzales (UCCE SD), Vanessa Lopez (UCR/Hoddle Lab), Tom Scott (UCCE/UCR), Kevin Turner (UCR)

Topics Covered: Overview of the goldspotted oak borer; overview of research and management activities; oaks at risk and planning for a potential outbreak; the Early Warning System program, integrated pest management research and practices; biological control research, firewood movement, threats, utilization and the California Firewood Taskforce; firewood policies and education and outreach resources and opportunities.

Continuing Education Units Offered: Southern California Society of American Foresters, Western Chapter of International Society of Arboriculture, California Department of Pesticide Regulation

Attendance and Audience Distribution - Evaluation Surveys

Organization Type	Altadena	Pechanga	Total	%
Private Business	6	14	20	21%
Govt Agency/Land Mgrs	16	20	36	38%
Other Land Mgrs/Preserves/Private landowners	0	3	3	3%
Public Ed/Community Outreach	9	10	19	20%
Tribal Nations	0	17	17	18%
Totals	31	64	95	100%

1. Overall, how would you rate this workshop	Altadena	Pechanga	Total	%
Excellent	6	14	20	21%
Good	16	20	36	38%
Fair	0	3	3	3%
Needs Improvement	9	10	19	20%
Totals	31	47	78	82%

2. Did Workshop cover what you expected - 100% Yes

3. How likely are you to utilize what you have learned at this workshop?	Altadena	Pechanga	Total	%
Very likely	10	22	32	89%
Somewhat likely	2	2	4	11%
Not likely	0	0	0	0%
Not at all	0	0	0	0%
Totals	12	24	36	100%

4. How likely are you to share with others what you have learned at this workshop?	Altadena	Pechanga	Total	%
Very likely	8	24	32	94%
Somewhat likely	2	0	2	6%
Not likely	0	0	0	0%
Not at all	0	0	0	0%
Totals	10	24	34	100%

5. How much has training on GSOB changed your views or future practices for oak woodland mgmt. and/or firewood movement?	Altadena	Pechanga	Total	%
Very much	8	15	23	64%
Somewhat	2	7	9	25%
Not much	2	1	3	8%
Not at all	0	1	1	3%
Totals	12	24	36	100%

May 1 - Altadena

1. Which part of the workshop was most useful for you?

Transfer of pests on firewood
ID GSOB symptoms
General GSOB overview
Lifecycle
Firewood info
Control methods
Early Warning System program
Firewood issues
GSOB ID
Firewood BMPs
General GSOB overview
Firewood issues
Control methods (IPM)
Impacts
Firewood utilization/management
General GSOB overview
GSOB biology
Bio-control research
Firewood movement
Outreach
Outreach resources
Challenges assoc. with spread and control

2. What type of topics would you like to be covered in an upcoming workshop?

More data and control methods for un-infested areas and urban areas

Planting/restoration

Follow-up on biological control

Update on research findings

SOD update

Other oak pests

More on management of infested wood

3. Other suggestions and comments.

Reduce overlapped information between presentations.

Thank you. Very Informative.

Better sound system.

Presenters seemed to overlap each other.

Workshop well planned, run and excellent food!

May 2 - Pechanga, Temecula

1. Which part of the workshop was most useful for you?

GSOB spread data

Early Warning System program

Wood utilization

State of the science

Current research

Management decision process

All

IPM

Biological control

Firewood movement

Treatments

All

Treatments

GSOB location

Transportation on wood

GSOB biology

IPM

Mitigation and Management activities

Management strategies

IPM

IPM

Management practices

Seriousness of GSOB pest

All

Firewood movement and processing

GSOB ID

2. What type of topics would you like to be covered in an upcoming workshop?

Oak tree removal

Restoration

Field training (previous trng. at Heise Co. Park best trng. ever attended)

More on IPM strategies

Update on treatments

Implications for Tribal Government/Tribal Customs

Management/Conservation of wildlands

Stopping the spread by removal at early stages

Mgmt. recommendations assoc. with CEQA

Research updates

How to mitigate

Review of native oak woodlands and GSOB impact to ecology

3.0 Other suggestions and comments:

Have scheduled field trip 1 month following workshop

Have a session at the PTCA of San Diego annual Field Day in August

These workshops are great

Great presenters

Difficult to hear some of the speakers

Less redundancy - coordinated presentations

Vegetarian meal options

Very enjoyable - Thank you!

Continue the research

Use Smokey Bear in T.V. ads to raise awareness

Increase public information

GSOB PSA on T.V.

Submitted by Jan Gonzales., UCCE Coordinator, Farm & Home Advisor

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