Sudden Oak Death Update Cooperative Project with USDA Forest Service, State and Private Forestry and California State Polytechnic San Luis Obispo Summer 2003

Cooperators: USDA Forest Service, Lisa Levien and Jeff Mai, and California State Polytechnic University, San Luis Obispo, Dr. Walter Mark.

Objectives:

- Conduct aerial surveys for the early detection of SOD and map hardwood mortality that visually appears to be related to SOD.
- Conduct ground surveys to sample hosts for presence of *P. ramorum* (labs also testing for *P. nemorosa*).
- Prepare field site maps to re-visit sites from 2002 aerial surveys that had "surprise negative" lab results and/or were not visited. (up to 65 sites if funding available).
 Re-visit sites will be conducted by a combination of CDFA, UCD, Agricultural Commissioners, USFS and Cal Poly.

Progress as of 10/8/2003:

- Fixed wing flights initiated May 29, finishing July 9th, 2003 (~15 days, includes additional day subsequently adding onto area surveyed in NW Del Norte 8/27/03)
- Helicopter follow-up over select areas mapped from fixed wing (5 days July & Aug.)
- Counties flown (all contain host types ranging from Moderately Low to Very High risk):
 - Northern California: Del Norte, Humboldt, Siskiyou, Trinity, Glenn, Lake,
 Mendocino
 - Southern California: Santa Clara, San Benito, Monterey, San Luis Obispo,
 Santa Barbara, Ventura, Los Angeles and Kern
 - Sierra Foothills, limited search areas over oak woodlands in: Tulare, Fresno, Madera, Mariposa, Tuolumne, Calaveras, Amador, Eldorado, Placer, Nevada, Yuba, Sierra, Tehema and Butte
 - Follow-up helicopter flights completed over priority areas mapped within Mendocino, Humboldt, Del Norte, San Luis Obispo, Santa Barbara and Monterey
- Miles Flown (excluding helicopter flights): Approximately 10,000
- Number of polygons sketch mapped indicating fading and/or mortality of oaks and other species of interest: 425

Field Work:

 Polygons are prioritized from the aerial surveys and helicopter flights for field visits that focus efforts on sampling for new infestation. To date, priority counties that have had <u>all or a portion of the field checks completed</u> and/or samples submitted (as appropriate):

- Visit all mapped sites within Del Norte (two remain and will probably be completed by end of month), Trinity (one visit remains, another no landowner contact), San Benito (all visited)
- Visit a priority selection within Mendocino (several higher priority with helicopter GPS remain to be checked), Humboldt, Monterey, San Luis Obispo, Santa Barbara, Kern
- Counties that have not had any field checks yet include:
 - o Lake (one site) and Glenn (six sites), these are also priority to check
 - Ventura (two sites) and, time permitting, the Sierra Foothill counties
 Tehema south to Kern
- Field checks relating to previous aerial surveys:
 - Revisits to 2002 Fixed wing survey polygons that appeared highly symptomatic on the first field check but yielded negative lab results or were lesser priority not yet visited, up to 65 sites - one site revisited in Del Norte and another revisit in Humboldt, additional revisits desired throughout survey area time permitting
 - Initial visits to Oct. 2002 Helicopter points all but one completed, one site remains to be checked on Simpson land in northern Humboldt (should be completed this month)

Results:

- One positive (Monterey, polygon 36 near Plaskett)
- 32 negatives
- 55 no sample taken (symptoms not found/other damage noted, access problems usually due to inability to contact landowner, a few access denied - see field comments in attribute table on Oakmapper)
- at least 15 additional samples taken from suspect areas noticed outside aerial survey polygons, three pending with the rest negative

Results will be periodically updated and posted on Oakmapper http://kellylab.berkeley.edu/SODmonitoring/OakMapper.htm