**Glassy Winged Sharpshooter Environmental Protection Task Force**
**October 24, 2000**

**Meeting Summary**

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**Task Force Attendees:** Linda McElver/Central Coast Canaries, Ron Oshima/DPR, Mike Reid/SWRCB, Jessica Hamburger/PCL – Pesticide Action Network, Ron Macedo/California Farm Bureau, Dr. Les Ehler/UCD, Ann Maurice/Ad Hoc Committee for Clean Water, Richard Greek/SLO County Dept of Agriculture, Eric Vink/CA Department of Conservation, Hank Giclas/Western Growers Association, Joel Trumbo/CDFG, Dr. Rick Kreutzer/DHS

**CDFA and Facilitation Support Team:** Gerry Miller/CDFA, Bob Wynn/CDFA, Aurelio Posadas/CDFA, Bob Dowell/CDFA, Larry Bezark/CDFA, Dale Flowers/Facilitation Team, Tanya Matson/Facilitation Team

**Other Attendees:** Ann Steele/Central Coast Canaries, Candace Eng/CYA, Lorianne Fought/Bayer Corporation, James Stratton/OEHHA, Frank Carl/Sacramento County Ag Commissioner, Martha Guzmen/United Farm Workers, Kate Campbell/California Farm Bureau

**Welcome:** Secretary Lyons/CDFA

Secretary Lyons thanked the group for attending the first meeting of the Glassy-Winged Sharpshooter Environmental Protection Task Force. He noted that CDFA's mission is to protect and promote agriculture. He stated that while this group may have differing opinions with respect to the issues to be discussed, the presence of an open and respectful atmosphere would be beneficial.

**Welcome, Introductions and Ground Rules**: Dale Flowers/Facilitation Team

Dale Flowers welcomed the group to the first meeting. He reviewed the agenda and discussed his vision of the framework for the four meetings. He noted that there will only be four meetings and a lot would need to be accomplished in that time frame. He stated the following vision for the four meetings:

*Meeting 1* - Receiving information from CDFA staff members and other attendees.
*Meeting 2* - Group begins to think about recommendations
*Meeting 3* - Group crafts recommendations
*Meeting 4* - Group finalizes and considers report preparation

Dale stated that his role is to establish ground rules, keep the group on track, and ensure the task is completed. Dale set two ground rules: (1) keep on track; and (2) maintain civility.

**GWSS Task Force Charge:** Gerry Miller/CDFA

Gerry Miller indicated that the California Department of Food and Agriculture (CDFA) is not a member of the task force. Primarily, CDFA's duties with respect to these meetings will be the dissemination of information for the group to review. Gerry explained that the charge of this task force was specifically outlined in the budgetary language as follows:

*"The department shall consult with a task force comprised at a minimum of the Department of Pesticide Regulation, the State Water Resources Control Board, the Department of Fish and Game, a university-affiliated researcher, a grower, a County Agricultural Commissioner and an environmental or public health non-governmental organization. These entities shall provide input concerning the potential adverse effects on public health and the environment of the application of pesticides, including but not limited to their effects on species and pollinators such as honeybees. These entities shall also suggest measures that, in their opinion, would reduce possible harm to public health and the environment while effectively and expeditiously managing this pest threat. This input shall be provided with sufficient lead-time prior to January 1, 2001, for the effective use of the information. After receiving this consultation, the department shall consider refinements to the program based upon the information provided and the guiding principle of least possible harm to public health and the environment while effectively and expeditiously managing this pest threat. In making its recommendations, the task force shall recognize that time is of the essence. Delay in offering suggestions to the department to deal with this emergency will increase the financial, environmental, and public health impact of the pest and those of any management program."*

Gerry noted the two major points of the language are that (1) the task force provide input on potential adverse effects to the public and environment and, (2) make recommendations to address those issues. Gerry explained that at the end of these four meetings, a report would be prepared and forwarded to the Legislature and CDFA. At that time, CDFA will consider the recommendations based upon the overall program.

**Questions/Comments:**

- Will the task force exist after the report has been finalized? *That could be a recommendation of this group.*
- If the task force meetings result in long-term recommendations, it would be beneficial to keep the task force together.

**Statewide Overview of the GWSS Program:** Bob Wynn/CDFA

*Background/History*

In the fall of 1999, the legislature became involved in the glassy-winged sharpshooter (GWSS) issue. At that time, an ad hoc committee was appointed to review existing research programs and identify research needs. AB 1232 established a grants program to fund the research recommended by the ad hoc committee. That bill also authorized the deployment of a Pierce's disease ad hoc task force to formally recommend funding of specific research projects. In the fall of 1999, CDFA began drafting a Statewide Comprehensive Plan. Early in 2000, the elements of that Plan were implemented. Bob explained that the passing of SB 671 provided $6.9 million in funding which enabled CDFA to establish infrastructure to implement the Plan. SB 671 also enabled CDFA to request County Board of Supervisors to name a local control entity for Pierce's disease. In addition, another $6.9 million in funds are anticipated in the budget for the 2000-2001 fiscal year, resulting in a total of $13.8 million. Bob explained that U.S. Department of Agriculture Secretary Dan Glickman has declared this issue as an emergency and earmarked $22.3 million in federal funds, of which $5.2 will be dedicated exclusively to research.

*Science Advisory Panel*

Bob explained that to assist CDFA with the implementation of this program, three separate advisory task forces have been established. The first is the Pierce's Disease Advisory Task Force to address specific disease-related issues. This task force has already established subcommittees related to specific issues. The second is the Science Advisory Panel, made up of scientific experts, with the purpose of addressing issues such as control, protection and eradication. The Panel advises the Secretary regarding the biotechnical aspects of the program. This task force, the GWSS Environmental Protection Task Force, has been formed to provide recommendations that will assist CDFA with addressing potential public health and environmental issues surrounding the program.

*California Environmental Quality Act*

Due to other commitments, CEQA staff was unable to present specifics of CEQA compliance at this meeting. However, they will be available at the next meeting. Bob indicated that questions would be recorded and addressed at the next meeting.

**Questions/Comments:**

- Will this group be provided with minutes of this meeting? *Yes.*
- We would like to see any information related to CEQA compliance (i.e., was this program addressed under a negative declaration, environmental impact report, etc.?)

**CDFA GWSS/Pierce's Disease Control Program:** Aurelio Posadas/CDFA

Aurelio Posadas provided the task force with the general information and structure of the GWSS/Pierce's Disease Control Program. Aurelio explained that CDFA's role in the Program is to serve as the coordination agency for program activities ranging from training and guidance to local cooperators, to compilation of statewide survey results and public outreach. At the local level, the primary agencies are the County Agricultural Departments. Aurelio explained that at the local level, local agencies have the lead responsibility for the program elements such as public outreach, detection, and containment activities, including regulatory and rapid response activities. Aurelio indicated that to assist CDFA in the successful administration of the program, alliances have been established between CDFA and industry, USDA, University of California, as well as the Pierce's Disease Advisory Task Force and the Science Advisory Panel. Aurelio stated that the latter volunteer task forces have already created subcommittees such as the Bulk Grape Subcommittee to address more specific issues.

**Glassy-Winged Sharpshooter Biology:** Bob Dowell/CDFA

*Pierce's Disease, Native Vectors and GWSS*

Bob provided an overview of the biology of Pierce's disease and native and glassy-winged sharpshooters. Bob explained that Pierce's disease has been in California for approximately 120 years. Major outbreaks of the disease have occurred in California in the 1880's, 1900's and 1920's. In the 1880's the disease destroyed 40,000 acres of grapes in Orange County. Pierce's disease is caused by bacteria called *Xylella fastidiosa*. Pierce's disease can be found in all of the state of California except for the Sierra Foothills. Bob stated that this bacteria is believed to occur in other areas as well. There are also different strains of the bacteria that cause similar diseases in citrus in Brazil, peaches in the southeast, almonds, oleanders and alfalfa in California, as well as maples and elms in the southeastern U.S. Bob noted, however, that distinguishing between the different strains is not possible until the plant manifests symptoms. The disease clogs the xylem of the plant that serves as the plant's water transport mechanism. This causes the plant to die from the top down. Bob indicated that the disease could be found in a number of plants in California, including blackberry vines, Bermuda grass, willow, mugwort, poison oak, curly dock and elderberry. In these host plants, the disease may cause death, localized lesions or no other visible symptoms. Bob noted that the disease does not exist in the Sierra foothills. He surmised that this could be due to the apparent cold limitation of the bacteria. Bob indicated that at this time, according to the best known and available data, there appears to be no cure for the disease.

Bob explained that there are a number of native species that may serve as vectors of the bacteria. These native vectors are xylem-feeding bugs such as leafhoppers and spittlebugs that typically live in grasslands or riparian settings. These native vectors do not breed in vineyards. The bacteria are acquired while feeding on infected plants. The bacteria are then mechanically transmitted to the subsequent plants fed upon. Bob noted that once an adult vector acquires the bacteria, it continues to be a vector for the remainder of its life cycle. If the native vector is in an early life stage, it will lose the bacteria after molting. Bob stated that native vectors typically feed on the new growth at the tips of vines. As a result, diseased tissue may oftentimes be removed after routine pruning. Bob explained that when the spread of the disease occurs through native vectors, it appears to be limited to the vineyard edges. This is due primarily to the fact that the vineyard is outside of the native insect's natural setting. The insect appears to forage the outer edges and then return to its natural habitat.

Bob continued by explaining the history of the GWSS. The GWSS is exotic to California; discovered only in the 1990's. It can now be found in a wide range of habitats including citrus orchards, highway medians, backyards, and vineyards. It was not discovered as a significant pest until 1997 when it was discovered that it was an effective vector of Pierce's disease. In 1999, an emergency erupted in Temecula, Riverside County, when 200 acres of grapes were destroyed. Bob explained that the GWSS is different from its native counterparts in that it lives and breeds in vineyards and citrus orchards. It is also larger than native vectors and tends to feed on older, larger branches. This feeding habit results in the vine being infected below that height which would normally be pruned. GWSS are similar in the acquisition and transmission of the disease. Due to the fact that the GWSS will live and breed in the vineyard, its transmission of Pierce's disease is not limited to the edges of the vineyard. Evidence shows that the disease has been spread from vine to vine as a result of the GWSS. Bob noted that due to the breeding and feeding habits of the glassy winged sharpshooter, there is a potential to spread the disease to vineyards that were not previously susceptible to the disease. Bob stated that as a result of all these facts, the GWSS has the potential to significantly alter, negatively, the epidemiology of Pierce's disease in California vineyards.

**Questions/Comments:**

- Is there a concern that citrus will be damaged? *To the best of our knowledge, Pierce's disease is not affecting citrus in California; however, it currently affects citrus in Brazil.*
- Does the disease not occur in the Sierra foothills because of the cold temperatures? *Periodically, cold temperatures come through areas where the disease currently occurs and kills the bacteria. We are not certain that cold is the reason; however, we speculate that the bacteria are cold-limited.*
- There are other varieties of grapes that are resistant to the disease such as St. George rootstock. Also, the presence of the bacteria is not sufficient to cause the disease.

- Why is it that vineyards are not being destroyed due to native vectors? *Native vectors are temporarily moving out of their native habitat for quick feeding – then return to their normal habitat. GWSS is living, eating, and breeding in the vineyard. This fact changes the dynamics and can result in entire vineyards being destroyed.*
- As an alternative to pesticides, has anyone attempted developing wraps for the base of the vine to eliminate GWSS access? *That approach has not been discussed, but may be something to consider.*
- Where did the bacteria originally come from? *We are unsure where it originated. It has been in California a long time. The bacteria are spread throughout California in native plants such as blackberry, elderberry, etc. GWSS could have picked it up in a number of places. At this time, GWSS is altering the dynamics of how the bacteria move about California.*
- Are infected grape vines being sold by nurseries and transported across the state? *CDFA does have a certification program for nursery plants to ensure they are free of a number of bacteria, not just Xylella fastidiosa.*
- Native vectors feed on new growth, which is often trimmed off, sparing the vine. Does that mean the Xylella moves fairly slowly down the vine? *Yes, but we are unsure at what rate Xylella travels down the vine.*
- Are manifestations of the disease apparent in shoots that are getting trimmed? Is the grower aware that he is sparing his vine from this bacteria? *Removal as a result of trimming is primarily an unintended benefit. We are unsure that a grower could visually identify how far down Xylella has traveled to determine a trimming point. Also, the manifestations could be mistaken for other problems such as water deprivation, sun scorching, etc.*

**Program Elements:** Aurelio Posadas and staff/CDFA

Aurelio indicated that he would be discussing the program elements of public outreach, detection and containment in more detail.

*Public Outreach*

Aurelio explained that a state-level public outreach program has been developed and implemented. Public outreach activities have included establishing an Outreach Advisory Committee that provides input from agricultural-related associations to ensure the feasibility of program elements. CDFA has established a dedicated Program Information Officer that works directly with the advisory committee as well as coordinates other outreach activities such as press releases, news articles and ads. Aurelio stated that a CDFA web site has also been established to provide easily accessible, up to date information for the public. To date, 88 outreach meetings have been held, 46,000 direct mailings have gone out, and 100,000 brochures have been distributed as a result of public outreach activities.

*Detection*

Aurelio explained that the detection program determines where the GWSS is located through statewide surveys. Survey methods include trapping and visual surveys. Trapping is accomplished through placement of approximately two yellow sticky traps per acre in the canopies of plants. Visual surveys are also conducted before shipments are transported as well as when they arrive to ensure no GWSS are present. Through coordination of statewide survey information, guidance can be given to county commissioners. Currently, the GWSS occurs in 11 counties: Santa Barbara, Ventura, Los Angeles, Orange, San Diego, Riverside, San Bernardino, Kern, Tulare, Fresno and Sacramento. Through this program, recent detections have been discovered in Contra Costa and Butte counties.

*Containment*

Containment actions have been undertaken through the implementation of emergency regulations that restrict the movement of infested stock to non-infested areas. A known pathway for the movement of GWSS is nursery plant shipments. To control interstate shipments, inspections are conducted at CDFA border stations. For intrastate shipments, the elements of the GWSS Nursery Plan assist with containment. The Nursery Program includes provisions for nurseries to obtain a Master Permit. The permit requires 100% inspection by the nursery and the local implementing agency. It also outlines treatment methods. If a nursery does not comply with the conditions of the Master Permit, enforcement actions such as notices of violation, suspensions, or revocations may be undertaken. Aurelio indicated that if a destination nursery receives a shipment of plants that contain GWSS, that shipment might be treated, returned, or destroyed. Inspection of bulk grapes is also required to ensure no movement occurs from infested to non-infested areas. To date, 100,000 shipments have been inspected and no GWSS was found. Aurelio explained that once GWSS is identified, rapid response actions are carried out. Rapid response involves swift identification of GWSS, delimitation of the find, and identification of treatment options based upon whether or not the objective is to eradicate or control. A treatment may include pesticide and/or biological controls. If a pesticide control is chosen, a determination of the most appropriate pesticide to use is made. If a pesticide is chosen as a treatment, it must be approved by the U.S. and California Environmental Protection Agencies, as well as approved for use against the pest, host plant and the specific site. In addition, the pesticide must be used according to the label requirements. Aurelio indicated that current treatment material approved for use is carbaryl and imidacloprid. Subsequently, a public meeting is held to educate the public and local officials regarding the GWSS identification and how containment measures will be implemented. Treatment procedures include efforts to protect the public and their homes by covering pools, removing pet containers and toys from the area, as well as notifying neighbors to close their windows. In addition, precautions are taken to reduce unnecessary impacts. Aurelio stated that to assess the results of the treatment options, monitoring of air, soil and water would be performed as needed by the California Department of Pesticide Regulation.

**Questions/Comments:**

- How is the program dealing with bacteria possibly being transported into areas with no occurrence from areas that are infected? *CDFA has a nursery stock certification program in place, established before GWSS was found, that requires inspection of plants for bacteria to ensure bacteria is not being spread.*
- Are nursery shipments inspected before shipping or when they arrive at the destination nursery? *As part of the program, visual inspections are conducted prior to shipment from infested areas to ensure there is no presence of adults, nymphs, or egg masses before shipping. When a shipment arrives, it is held in a staging area for another visual inspection.*
- What is the approved treatment for nurseries? *Trials are underway now to determine an approved treatment method.*
- Some shipments of grapes have been stored in cold containers for 24 hours as a control method. This would be an alternative to pesticide use.
- Is GWSS being transported through citrus shipments? *The Scientific Review Panel believes there is a minimal number, if any, of GWSS on fruit because there is nothing for the insect to feed on; therefore, the probability is extremely low.*
- Who oversees the eradication or control material? *That occurs through a coordinated effort between CDFA and the local county agricultural commissioner.*
- These actions appear to be in violation of the California Environmental Quality Act. How was CEQA complied with? *A Notice of Exemption was filed by CDFA for the emergency regulations.*
- Is the rapid response program included in the Notice of Exemption? *No. CDFA has CEQA staff ensuring compliance with the Act. Those staff members will be available at the next meeting to answer questions.*
- There is concern with the nature of the public meetings. Some believe they are intimidating and do not provide a forum where open discussion can be held.
- The distribution map indicates that some counties have partial infestation. Can the map be modified to include where surveys have been conducted? *Modifications will be made to the distribution map and presented at the next meeting*.
- If the Rapid Response Program is safe, why do children's toys have to be removed? *Children have a smaller body mass, we want to take what precautions we can to minimize any potential risks. Application of pesticides also focuses on host plants to avoid undue exposure.*
- Does pesticide residue remain in the soil?

Dale asked the group to identify their concerns at this point. The following concerns were identified:

## Concerns

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| • There are some varieties that may be resistant | • Transportation of infested root stock to non-infested areas |
| • Trimming as a treatment approach | • Distinction of the disease and the pathogen (bacteria) |
| • CEQA/NEPA compliance issues | • Not all transported vines, etc., are being certified as not carrying the bacteria |
| • Cold storage of some grape shipments | • Emergency plan currently being implemented does not protect public health and may be in violation of CCR 6614 and the Americans with Disabilities Act |
| • Financial impacts (i.e., medical bills of affected public | • CDFA public outreach does not contain information about ecological and health impacts of pesticides – pesticides being used |
| • Nature of public hearings – meaningful involvement | • What measures have been taken to prevent exposure to children/public |
| • Lack of study of alternatives to carbaryl | • What was the process to choose carbaryl, who was involved in? |
| • Lack of transparent decision-making process in choosing use of pesticides as opposed to other alternatives<br>• Why carbaryl? | • Contradictory or misinformation being presented |
| • Which imidacloprid products are being used – for what purpose? | • Why is imidacloprid being used in residences when questions about its effectiveness |
| • Is public being experimented on with use of imidacloprid? | • Investigate legal ramifications |
| • Full investigation of products being used and whether or not they protect entire public's health | • Need all information on what is being done – county-based, etc. |
| • Need to know when complete chemical products will be safe – from EPA | • Medical disability access |
| • Cumulative impacts of pesticide use | • Meet standards of FQPA? |
| • Up front full disclosure – regulatory status – mainstream scientific data, any other anecdotal information that differs from university/government information | • NCAP, NCAMP, data sheets, information from USDA |
| • Dissatisfaction in approach taken to determine chemical toxicity | |

**CEQA:** John Dyer/CDFA

Bob Wynn introduced John Dyer, Department Counsel. John Dyer indicated that although he was not prepared to speak on the specifics of this program with respect to CEQA due to other commitments, he wanted to briefly note that CDFA does have a CEQA attorney on staff and that measures have been taken to ensure CEQA compliance. A Notice of Exemption was prepared and filed for the emergency regulations. John stated that CDFA wants to be responsive to requests regarding CEQA compliance and requested the group write down any questions they may have so that staff would have an opportunity to prepare and respond to those questions at the next meeting.

**Questions/Comments:**

- We would like a copy of the Notice of Exemption prior to next week's meeting so that we have an opportunity to review. Also, we would like to know what emergency activities the exemption covers. For example, does it cover the Rapid Response Plan?
- Is this program in compliance with the Endangered Species Act and the Clean Water Act? *We may not be able to address all those issues at the next meeting. It would require more than one meeting to cover those issues.*
- We would like to know how the county agricultural commissioners are complying with CEQA.

Dale requested the group to handwrite their questions or comments and give them to CDFA staff to review and address at next week's meeting.

**Human Health Concerns:** Dr. Peter Kurtz/CDFA

Dr. Kurtz explained that pesticides are not the main approach taken by the program. The program also includes exclusionary measures to keep the pest from spreading to other locales as well as biocontrol measures. Dr. Kurtz indicated that the pesticides currently being used were chosen by first looking at pesticides approved by the Department of Pesticide Regulation and the USEPA for application on the host plants and pest combined. CDFA is required to use pesticides that have been through the regulatory process of evaluation and approval. After a list of pesticides that met the above criteria was identified, pesticides that would be most effective in the applicable setting were narrowed down. Some were identified as best confined to agricultural settings. The pesticides chosen for application in public areas were chosen because they are familiar to the public and widely-distributed and available in retail stores such as Kmart, Home Depot, etc., for home use.

Dr. Kurtz went on to further explain that children's toys are covered or removed prior to application to reduce exposure. Toxicity is related to the amount of exposure. No chemical is completed safe, but they can be used in a safe manner. For example, gas is not safe; however, it can be used in a safe manner. Dr. Kurtz stated that the public

outreach program provides a forum for open, public discussion as well as an opportunity for one-on-one discussion for individuals who may have specific health problems that they may wish to remain private. The program also works with the Department of Pesticide Regulation and local public health authorities. A decision to apply pesticides is only made after careful consideration of public health concerns. There is also a notification element of the program for those with individual needs. Assistance, guidance and suggestions on how to deal with those needs are provided.

**Questions/Comments:**

- What is the half-life of carbaryl? *That is dependent on several factors such as moisture, heat, temperature, etc. Generally it dissipates within 7 to 10 days. In the human body it is rapidly absorbed and rapidly eliminated.*
- What is the expected time frame for entire removal from soil? *That could be weeks or months*.
- When DPR was notified that GWSS was found in California, we provided CDFA with a list of available pesticides that were applicable to a variety of different hosts, and met federal and California regulations. In addition, we were asked to monitor the spray programs implemented by several different counties. We have drafted protocols on how to monitor use as well as provide information to the public. It is available on DPR's web page. The final numerical amounts for residue in water, air and plants are also available for review. The web address is www.cdpr.ca.gov.
- There is a one-year pilot program in Temecula where 300 acres were aerially treated with lorsban. Preliminary data indicates almost 100% effectiveness against all life stages of GWSS.
- Isn't the Scientific Advisory Panel looking at the Temecula pilot program? *Yes. Again, it's university data, not CDFA's and it is preliminary data at this point.*
- Imidacloprid and carbaryl may only be successful again adults and nymphs. If CDFA is unsure about the success, why are we experimenting on the public? *There are legitimate concerns with respect to the use of pesticides; however, there are no absolute answers. By the time CDFA got the grants and research methods organized, GWSS could be everywhere. In the end, we could just have a list of concerns and questions with no specific answers. The current monitoring plan is an opportunity to get data on the impact of carbaryl in urban areas.*

**Biological Control of GWSS:** Larry Bezark/CDFA

Larry stated that the definition of biological control is the use of pathogen or predators to lower the population of pests. A classical biological control method is the release of natural enemies with the goal that they become permanent in the released habitat. Augmentative biological control involves releases of natural enemies on a regular basis. Biological control can serve to restore the balance of a pest population. Typically, natural enemies of the pest can be collected from the native home of the pest. Classical biological control has been successful in the past with insects such as the ash whitefly and the cottony cushion scale. The goal of biological control of GWSS is to

reduce its populations to an amount less than the current population. It is recognized that biological control of GWSS will not completely eradicate GWSS populations. In 1996 and 1997, surveys were conducted to determine what biological control elements could be used. Egg wasp parasites were found in California, Florida and Louisiana. The GWSS is native to the southeastern United States and northeastern Mexico. In 1999, a trip was made to Mexico where parasites were found but due to permit complications, they were unable to be brought back to the United States. In spring 2000, trips were made to Mexico and Louisiana and potential parasites were brought back. In order to bring egg masses back to the U.S., the biological control quarantine process must be followed. The materials were hand carried to inspectors in Texas, and from there, sent directly to UC Riverside quarantine area. Larry stated that the egg masses were then cultivated and tested. After lab success, the USDA was petitioned for permission for field release. The USDA responded that there was no jurisdiction to provide field release due to the fact that GWSS is not a plant pest. Approval to release was eventually gained in August 2000 to release *Gonatocerus triguttatus,* a species that has never occurred in California, but commonly occurs from south Texas to north Mexico. Releases occurred in Temecula, Bakersfield, Kern, and Fillmore. At this time, it is difficult to acquire enough eggs to keep the colonies alive. Plans to acquire more eggs have been made for Spring 2001.

Overall, the CDFA Biological Control Program is a large program of which GWSS is a part. The program has strong administrative support and coordinates very closely with University of California researchers. The program has several staff persons dedicated to GWSS control. Program elements include rearing of GWSS, rearing of *Gonatocerus*, monitoring for optimum release times, and liaison with counties for identification of priority areas.

**Questions/Comments:**

- What is the target date for the next release? *The target date is for next spring.*
- Will the parasites be adaptable to the climate in the Sonoma, Napa area? *Climatically, Gonatocerus may be better in southern California; however, we will move it into those areas to see if it will adapt.*
- What assurances are there that this parasite will not attack other natives? *The only other species that this parasite may affect is the smoke tree sharpshooter. That species is found in desert settings. There may be slight overlap of habitat, but the likelihood would be negligible.*
- There is concern that these wasps may be competing with other native parasitic wasps. *Native wasps tend to parasitize in the fall; however, there are low populations of natives in the spring. Gonatocerus could be available for spring release to fill that gap.*
- The current native species are obviously not an effective control because the GWSS rate of growth is fairly high. Natural predators may need an opportunity to catch up to the GWSS population through augmentation.
- What about overall predation – all interactions – have any field studies been conducted? *Yes. There is a fair amount of predation from lacewings and*

*ladybugs. We are looking at overall predation. Gonatocerus is a specialist for GWSS egg masses.*

- Are there any organic citrus growers in Temecula? *Yes.* This area has high occurrence of GWSS and Pierce's disease, as well as routine use of lorsban and chlorpyrifos. Maybe broad-spectrum use of pesticides is more effective at killing parasites than GWSS. *There is still a large amount of predation in the fall. However, chemical treatment will kill some of the parasites. These materials are applied once maybe twice per year in very short time frames for specific pests. Applications are narrowly timed to preserve biocontrol pests.*
- The grape industry in Temecula collapsed in 1940's due to Pierce's disease. Is there any baseline data from that experience?
- In Temecula, grape production is up. Also, vineyards are located adjacent to citrus plants, which harbor Pierce's disease. Kern County citrus production is up and it does not have Pierce's disease. Why does the occurrence seem to stop at the county line? GWSS may not be the problem; it may be correlated to poor soils and bad management practices.

Dale asked the group to consider additional information or concerns that they may have after hearing the information presented. The group voiced the following concerns:

## Concerns

- Decision-making process on biological controls may be too narrow
- What ecological niches will these introduced species occupy?
- Missing information about Xylella
- Consideration of Alternatives

**Research:** Bob Dowell/CDFA

Bob provided some detail about the research currently being conducted regarding GWSS and Pierce's Disease. The first step involved the formation of the Pierce's Disease Task Force, composed of industry, University of California, and USDA and CDFA representatives to set priorities. The established priorities resulted in a request for research proposals to meet those priorities. A subcommittee subsequently screened the proposals and recommended that nine be funded. Fund providers for the research include the USDA, Kern County GWSS Program, American Vineyard Foundation, Caltrans, University of California, Citrus Research Board, County of Riverside and City of Temecula. To date, approximately 26 research projects have been funded with an expenditure of over $3.6 million dollars. Some key research areas funded include biological control of GWSS and Pierce's disease, breeding of Pierce's disease resistant grapevines, and developing a genetic map of the grapevine and the Pierce's disease bacteria. Also funded are research projects to understand the GWSS biology, its life cycle and feeding preferences. Bob indicated that funded research projects also include evaluating plant nutrition and pruning for disease control tactics, and development of ways to prevent GWSS from transmitting Xylella. Bob explained that the majority of the key research areas and efforts have been funneled through the

Pierce's Disease Task Force to ensure proper coordination of all activities. For the next round of research, the Pierce's Disease Task Force Subcommittee will review approximately 44 proposals at its November 8 meeting. The USDA has earmarked approximately $4 million for Pierce's disease research. Bob stated that research has resulted in important findings to date, including the identification of a GWSS egg parasite.

At this time, Dale Flowers requested the group concentrate on outlining their general concerns. The following general concerns were stated:

## Concerns

- California Environmental Quality Act compliance
- Decision-making process for selection of pesticides and/or alternatives
- Research doesn't address fundamental gaps (i.e., vineyard practices)
- Lack of public involvement in research priorities (i.e., genetic engineering, cultural approaches to control)
- All public health issues
- Disclosure
- Voids in information
- General/Legal Process
- True magnitude of problem
- Financial concerns of public/disability access issues
- Are products selected for use safe for entire public?
- Prioritization of methods – safe methods used first
- Monitoring

General discussion followed the identification of concerns. The following questions and comments were stated:

## Questions/Comments:

- Is it really worth going in and destroying a few blocks where GWSS is found? GWSS will be here anyway. We could attempt to eliminate it, but it will only be a matter of time before it comes back again. Maybe we should just let it come and in the meantime, develop approaches alternative to pesticide use.
- There is a need to take realistic approaches to slow down GWSS progress and distribution while research develops more benign methods to address the problem. A coordinated effort through CDFA and county agricultural commissioners will prevent vigilante approaches to control. Without coordinated effort, the public could use pesticides without reading the label, with no warning to nearby neighbors or concern for general public health.
- Pierce's disease is the problem, not GWSS.
- At the next meeting, the first item on the agenda should be a clarification of the scope of this task force.

- This group may not be designed to come to consensus on all the issues; however, it is important that views be voiced for all to hear.
- We need to identify alternative methods – find methods that have reduced effects on public health.
- One of the most important charges of this group is to protect public health. Identification of whether or not these products are hazardous to public health would narrow our scope.
- The products currently in use are legally registered pesticides, registered for use by all the people. If it is used in accordance with the label requirements, it is safe for use. These products have been deemed to have minimal risk, but they cannot be used with impunity. The general risk standard for pesticides is "a reasonable certainty of no harm."

Dale Flowers said that it is not necessary for the entire group to come to consensus on the issues; however, the higher degree of consensus, the better the success. Reaching consensus requires effort and he asked that the group be patient as the issues are addressed and recommendations are drafted.

**Communication:** Gerry Miller/CDFA

Gerry indicated that meeting information would be posted on the CDFA web page. Just follow the GWSS links. Gerry said if the group has questions or comments, please feel free to e-mail them to him at gmiller@cdfa.ca.gov.

Dale requested the group hand in their CEQA questions and asked the group if they required any additional information for their next meeting. The following additional information was identified:

**Additional Information**

- Better description of scale of county programs
- CEQA compliance
- Define scope
- Refine categories

Dale thanked the group for their participation and exchange of ideas.