# Glassy-Winged Sharpshooter Environmental Protection Task Force October 31, 2000

# **Meeting Summary**

**Task Force Attendees:** Les Uhler/UC Davis, Richard Greek/CACASA SLO County, Ron Macedo/California Farm Bureau, John McCaull/Audubon-California, Ron Oshima/CDPR, Brian Finlayson/CDFG, Mike Reid/SWRCB, Linda McElver/Central Coast Canaries, Hank Giclas/Western Growers Association, Jessica Hamburger/Pesticide Action Network, Ann Maurice/Ad Hoc Committee for Clean Water, Dr. Rick Kreutzer/CDHS

**CDFA and Facilitation Support Team:** Gerry Miller/CDFA, Bob Wynn/CDFA, Aurelio Posadas/CDFA, Dr. Peter Kurtz/CDFA, Bob Dowell/CDFA, John Dyer/CDFA, Michael Krug/CDFA, Valerie Brown/CDFA, Matt Etzler/CDFA, Dale Flowers/Facilitation Team, Tanya Matson/Facilitation Team

Other Attendees: James Stratton/OEHHA, Lorianne Fought/Bayer Corporation

**Welcome, Introductions and Review of Agenda and Facilitation Process Matters:** Dale Flowers/Facilitation Team

Dale Flowers welcomed the task force to the second meeting. He indicated that at the last meeting, the group identified their concerns with respect to legal process (such as CEQA compliance) and public health. He stated that since the budgetary language has reference to addressing potential effects on pollinators, there would be some discussion on that subject during this meeting. Dale emphasized the importance of having good communication in light of the short time frame. Another issue identified by the group was the need for a clear understanding of the scope of the task force. He reminded the group that these four meetings would ultimately result in a report to the legislature. Therefore, some insights from the group on how that report should be drafted would be necessary to proceed with report preparation.

# **Questions/Comments:**

### Report

- The report could take on several different forms. For some issues, there is a great deal
  of agreement or consensus. Those issues could make up the body of the report. For
  those issues where there is not consensus, an appended, smaller report could be
  prepared.
- We should focus on recommendations for which there is consensus.
- Some of the risk assessment information which is necessary to make informed recommendations is not available from DPR due to the fact that updates are in progress. We should not rush into a report.
- Is there any flexibility on the time frame from the legislature? The deadline in the budget language is not flexible. The report must be prepared by December 1 for review. It must go to the legislature by January 1. CDFA does not want to fail to meet the deadline set forth.

- We should put forth our best effort based upon the current available information. We can identify that some information is unavailable or does not exist.
- Who asked for this report to be prepared? The legislature, in its budgetary language, asked for the report. This language came out of the Budget Control Committee via Senator Sher, of the Environmental Quality Committee. Senator Sher sits on the subcommittee that handles the CDFA budget. Senator Sher negotiated the language with CDFA that ultimately resulted in the formation of this task force.

# Scope

- Is the scope of this task force to look at urban treatments only? The budget language doesn't specify.
- The scope of this task force only applies to CDFA actions. If a grower wants to apply
  pesticides as part of its own activities, a grower still has that right.
- The scope of this task force should focus solely on CDFA actual treatment activity, not general pesticide usage in agriculture across the state.
- CDFA is impacting pesticide use in agricultural lands across the state through its research activities. The 7-year program includes research on the efficacy of other pesticides and bioengineering. These research activities are not directly solely at pesticides used in urban areas.
- Our scope is strictly to address CDFA actions. This group understands that there are concerns about broader issues, and recommendations on those issues can be included; however, this group still has to narrow its scope to CDFA actions.

Dale Flowers suggested the group agree to begin with focusing on CDFA actions. He indicated that the broader issues do not have to be eliminated, but a starting point should be established.

**CEQA Process Review:** John Dyer, Supervising Staff Counsel/CDFA and Michael Krug, Senior Staff Counsel/CDFA

John Dyer stated that he and Michael Krug were attending the meeting to represent their client, CDFA, with respect to CEQA issues. He explained that he and Michael were in attendance to clarify how CDFA addressed CEQA compliance. He began by indicating that CEQA is oftentimes confused with an environmental impact report (EIR) when, in actuality, CEQA is a much broader process. There are situations where an EIR is required and situations where one is not. The legislature recognizes there are emergency situations where there is a "clear and present danger." In such emergencies, compliance with a full EIR process would be cumbersome and time-consuming. In those cases, a Notice of Exemption (NOE) may be filed. An NOE is not a substantive review of the action to be taken, but primarily serves as a notice to the public that the action will be carried out under the emergency exemption. John noted that the legislature has concluded that GWSS, in conjunction with Pierce's disease in California, represents an emergency situation. As a result, the legislature passed SB 871 that allowed the adoption of regulations for implementation of this program. John explained that there is a statute of limitations associated with the release of the NOE that limits the time frame in which legal actions may be filed. The time frame for taking legal action against the NOE has expired. He indicated that CDFA recognizes at some point the emergency status may no longer be applicable. In that case, compliance with CEQA, including the preparation of an EIR will be necessary. With that in mind, CDFA has already begun making arrangements to contract with a consultant for the preparation of an EIR.

# **Questions/Comments:**

- Who makes the judgment that the emergency status is no longer applicable? CDFA
  decides when the emergency has passed. That decision is open to challenges in court.
  It is our belief that we are in compliance with CEQA. CDFA intends to complete a formal
  CEQA review process before the emergency has terminated or passed.
- Does CDFA have a certified registration program to use as its moves through the CEQA process for implementing this program? No. However, the regulations that were adopted could evolve into such. Development of such a program is an option that CDFA would consider.
- What is the length of time an NOE is open to challenge? 35 days.
- There was a hearing on October 26 evaluating the emergency status of the regulations. That hearing was conducted under the Administrative Procedures Act and took testimony with respect to whether an emergency still existed. However, the time to challenge the NOE on the regulations has already passed. In addition, the legislature gave CDFA two years to address the emergency situation. Not even one full year of the two has passed yet.
- Is there a time during the growing season where it would be discernible whether or not the emergency still exists? The best times to observe Pierce's disease symptoms are in the fall and the spring. We may be able to see visible signs of Pierce's disease next spring, but more likely next fall. We are documenting all known cases of Pierce's disease.
- The NOE includes the Rapid Response Plan on the cover but not in the body of the discussion. In the body of the discussion, it notes that the regulations would not have any environmental impacts. Is CDFA concluding that the Rapid Response Plan would not have any environmental impacts? The inclusion of the Rapid Response Plan on the cover of the Notice of Exemption was an inadvertent error. It is our opinion that the regulations themselves would not have environmental impacts. We are not taking that position with respect to the Rapid Response Plan.
- Will CDFA look at public health issues? CEQA has a significant process for evaluating public health issues. It also provides for a public comment period.
- Are there specific locations where the emergency status is granted or does it apply to the whole state? It applies to any location where there is a need for immediate response. As a practical matter, the entire state is encompassed.
- The Rapid Response Plan, which includes the use of pesticides should not be exempt from CEQA. Will CDFA stop the Rapid Response Plan while going through the CEQA process? It is CDFA's determination that the Rapid Response Plan qualifies as exempt under the CEQA emergency exemption status. Therefore, the measures of the Rapid Response Plan will still be in effect during that process.
- This group should review the County plans that are being implemented. A copy of a County plan has been included in a package distributed to the group.

Prior to beginning the discussion on pollinators, Dale Flowers asked the group if they had any further comments regarding the scope, the recommendations, and/or the CEQA process. The following comments were made:

We have received copies of written comments from folks that may not be a part of
this task force. It would be beneficial to have review of those comments and the
issues outlined. Some may be repetitive of issues that the group has already noted;
however, if there are new issues or ideas, the group should be made aware of those.

• There are concerns that data is not available for review and the time frame in which recommendations and a report must be prepared is very short. Is there any option to delay the report? We cannot delay the report to the legislature. If the group desires, it can be noted in the report that information was not available, and/or there was not enough time to review information.

### Pollinator Areas of Concern: Bob Dowell/CDFA

CDFA has a mechanism in place to ensure that beekeepers are notified of any CDFA-sponsored actions as part of the GWSS Program. Carbaryl is known to have impacts upon honeybees. Beekeepers are required to register their operations with County Agricultural Commissioners. As part of the Program, County Agricultural Commissioners are notified and, in turn, the beekeepers, if spraying will occur in their area. At that point, beekeepers are responsible for taking whatever precautionary measures they deem necessary to protect their bees. In addition to notification of commercial beekeepers, mitigation measures are taken to avoid impacts on wild pollinators. Label requirements suggest measures such as the avoidance of spraying blooming plants and avoidance of spraying during windy conditions.

### Questions/Comments:

- Do beekeepers have any method of recourse if impacts occur to their bees? Not through the CDFA program. Beekeepers are informed in advance so measures can be taken to protect their bees.
- What about wild bees? Impacts may occur to wild bees. It would be very difficult to
  find and remove hives. If there are bees in the treatment area, some non-target
  impacts may occur. Recovery in those cases will depend upon the area covered, the
  life cycle, and biology of the organism. To date, we have not seen any massive
  mortality as result of spraying. We are not currently conducting large area sprays, or
  sprays in short consecutive spans (i.e., once a week spraying).
- Is there any data on how much wild bees or other pollinators contribute to pollination? *No.*
- There are other pollinators that may be affected such as hummingbirds and bumblebees.
- The USDA says there is an impending pollinator crisis due to pesticide use, nonnative invasive pests, and loss of habitat. Lorsban, imidacloprid and carbaryl are also extremely harmful to pollinators.
- Almonds have historically relied on the use of bees from beekeepers outside the state. There have been problems in the past with bees not being available from Texas due to mites destroying colonies.
- We should select pesticides that are not as harmful to pollinators.
- Is there any likelihood that CDFA sponsored treatment would be extended to wildlands? We have not seen GWSS moving extensively into riparian or other wild areas. Currently, there are no plans to treat outside residential and commercial properties. Keep in mind that less than one year's worth of data has been compiled.
- Is there any knowledge as to whether or not GWSS uses native plants? We are not sure. Research is being conducted to determine if native use occurs. To date, we have not seen GWSS moving into wild areas.
- What about nursery use of systemic pesticides? Does the pesticide get into the nectar? Will systemic pesticides affect insects that land on the leaves? We do not

- know whether or not the systemic pesticide would enter the nectar. As far as insects landing on the leaves, it should not have an effect. The insect would have to eat the plant material to have an effect.
- Lorianne Fought of Bayer Corporation explained that for foliar formulations of carbaryl and imidacloprid, an insect can be affected if it lands on the plant and walks across the leaves. For systemic formulations, the material moves up through the xylem of the plant. Their research indicates that pollinators are not adversely affected by systemic formulations. If foliar formulations contact bees during spraying, there will be adverse effects. Drift restrictions outlined on the label are set forth to minimize non-target impacts.
- Imidacloprid is commonly used by the melon industry. This industry also relies heavily upon pollinators.
- The USDA says that there is an impending crisis relating to the reduction in pollinator populations. Other information suggests that agricultural is increasingly relying on outside shipments of pollinators to pollinate crops. Cumulative impacts should be addressed. There is an increase in use of honeybees from outside the state. However, keep in mind that those numbers are also relative to the increase in acreage of crops in California that require pollination.

# Threatened and Endangered Species: Bob Dowell/CDFA

Bob explained that 10 years ago, CDFA, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service agreed upon a consultation process with respect to CDFA actions and threatened and endangered species. The result was a Memorandum of Understanding (MOU). As part of that MOU, CDFA submits detailed information about its emergency programs to CDFG and USFWS for their review. These agencies review their available information such as the California Natural Diversity Database to determine whether or not there may be any occurrences of endangered species in the CDFA program areas. If these agencies have any questions or concerns with respect to endangered species issues, CDFA staff meets with them to resolve the issues. To date, the MOU has been implemented to the satisfaction of CDFG and USFWS. As a result of these consultations, no problems with threatened or endangered species have occurred. CDFG and USFWS have both indicated that they are pleased with the consultation process outlined in the MOU because the agencies are given a chance to comment at the beginning of the program development process.

CDFA also has agreements with other agencies such as the National Marine Fisheries Service, California Department of Parks and Recreation, and the U.S. Forest Service regarding programs that are proposed for implementation in their jurisdictions. A similar approach is taken. Information regarding the actions to be taken on those lands is provided early in the development process, and any questions or concerns are resolved.

These consultation processes have been in effect for nine years and are instrumental in assisting the resources agencies with meeting their legal mandates to protect valuable natural resources, while allowing CDFA to achieve its goal of pest eradication or containment.

# **Questions/Comments:**

- What type of information does CDFG receive? For example, CDFA provides CDFG with maps delineating the spray area. Local CDFG biologists then check the area to ensure there are no species concerns. To date, the only potential species has been the Valley elderberry longhorn beetle which occupy elderberry shrubs.
- Is the consultation process documented in writing? Yes.
- Are lawns being sprayed as part of the program? Primarily, the focus has been on broad-leafed plants and angiosperms where GWSS could feed. However, CDFA will spray whatever is believed to be a host plant of GWSS. That could include fruit trees, gardens and ornamentals. To date, spraying has been limited to urban, commercial and active agricultural areas. Since endangered species are most commonly found in wildlands, spraying has currently been limited to areas where the likelihood of finding endangered species is reduced.
- Endangered species are found in urban and commercial areas. Yes. That's true. To clarify, endangered species are <u>less likely</u> to occur in urban and commercial areas, where the focus of spraying has occurred so far.
- Will the treatment program continue through the wet season? No. The program will probably cease for the wet season fairly soon and not start again until next spring. However, Kern County may have a different schedule.
- Does the MOU cover species that CDFA anticipates may be impacted such as beneficial insects, birds, etc.? The MOU covers threatened and endangered species. In some cases, site-specific consultations are conducted because information may not be available on the CNDDB. For example, if nesting raptors are nearby, no aerial spraying would occur.
- What about endangered species of salmon and steelhead which occupy urban creeks? The label requirements of the pesticide must be followed. If any spraying is carried out near a waterway, monitoring is conducted to ensure there are low effects. NMFS has contacted CDFA and discussed their concerns. CDFA is being responsive to their questions and concerns.
- CDFA should be commended for its interagency coordination to minimize or eliminate impacts to endangered or threatened species.

At this point, Dale Flowers requested the group to identify their concerns. The following concerns were identified:

### Concerns

- Lack of a formal plan for native pollinators/beneficial insects
- Notification process for commercial beekeepers
- Unknown impact on wild pollinators and native plants
- Impact of nursery spraying
- No prohibition on aerial spraying
- No prohibition on riparian zone spraying
- Notice/prohibition of extension of treatment to wildlands
- Monitoring of mitigation for effectiveness
- No prohibition of spraying endangered species
- No analysis of cumulative impacts on food chain (sublethal impacts)
- Effective monitoring by USFWS/CDFG/NMFS input or lack of input into program
- Should be maximal concerns in urban, commercial, agricultural and suburban areas

- Backyard conservation and non-listed species
- Preserving organic urban islands that house beneficial insects that could help control GWSS
- Does MOU Consultation process reflect recent changes to CESA?
- Pesticides entering waterways impacting aquatic organisms at base of food chain
- Pesticide spray could disrupt/destroy CDFA/private biocontrol activities
- Extreme/steady expansion of program could have serious impacts
- Local extinction/take
- Pesticides that induce hormoligosis/reduce natural enemies producing pesticide treadmill
- Potential treatment areas are too large
- Failure to control GWSS may have deleterious effect on native plants/species
- Birds

# Decision-Making Process for Selection of Pesticide and/or Alternative: Bob Dowell/CDFA

Bob Dowell explained that the Scientific Advisory Panel (SAP) makes recommendations regarding potentially effective pesticides as well as biological control efforts. CDFA operations staff reviews the SAP's recommendations and narrows the possibilities. The resulting recommendation is then forwarded to CDFA management for final approval. When CDFA staff reviewed the SAP's recommendations, it considered several different factors such as a pesticide's registration status, label restrictions, any information on prior experience with the material, its availability and familiarity to the public, as well as potential health concerns. In this case, the SAP recommended three pesticides: carbaryl, imidacloprid, and baythroid. CDFA staff reviewed the recommendations with the above criteria in mind. As a result, Baythroid was removed because it was not registered for use on all GWSS host plants, CDFA had no prior experience with the material, and efficacy data was still in progress at the time of the decision. Although imidacloprid was registered for residential use, efficacy tests were still in progress. In addition, it was not registered for use on all GWSS host plants and CDFA had no prior experience with the material. Conversely, efficacy data was available on carbaryl and it was registered for residential use as well as application on almost all GWSS host plants. In addition to the public's familiarity. CDFA had previously used the material on Japanese beetle projects. As a result, CDFA was aware of the problems and issues that could arise with the use of carbaryl. Based upon these facts, CDFA selected carbaryl for use in the GWSS spray programs.

Bob indicated that since the time of the original recommendation, additional efficacy data became available regarding imidacloprid and baythroid. Both were found to be effective. Imidacloprid was determined to have greater residual activity but it is limited to ornamental plants in a residential setting. Baythroid is fast-acting and more effective at low temperatures than carbaryl. Bob stated that CDFA began with the use of carbaryl; however, as more data become available on other materials, CDFA will continue to evaluate those materials for potential use in the program. CDFA is also reviewing some materials that have been approved for use in organic settings.

# **Questions/Comments:**

- Are there any public health representatives on the Scientific Advisory Panel? No. The SAP does not have public health representation. Health concerns are addressed through Dr. Peter Kurtz/CDFA and the Department of Health Services.
- Was the product of least harm chosen? The criteria for choosing a material included its proper registration for use as well as efficacy. If it is registered for use, review of its health effects has already been completed.
- Ron Oshima, DPR, provided a handout to the group that outlines the range of studies that a pesticide must undergo for registration in California. He explained that pesticide studies are relevant to the end use; therefore, some materials may require more focused studies than others.
- After review of the characteristics of each pesticide, CDFA has to select based on the guiding principle of "least possible harm."
- Pesticide Action Network identifies pesticides that, even though registered by the state of California, are still considered very dangerous. There are different degrees of health risks associated with these pesticides. If CDFA is only using registration and efficacy data as its criteria for choosing a pesticide, perhaps this group could recommend that CDFA choose the least harmful pesticide. For health review, data from the appropriate agencies such as DPR, and DHS has to be relied upon. If it becomes known that other pesticides that are less damaging (but still efficacious) are available for use, we will use them.
- Can the counties choose other pesticides for use? Is there an established process for consultation with county health officials? Counties can choose pesticides that they know are applicable to their own areas. However, they will also choose pesticides that are registered for use.
- Richard Greek, SLO County, explained that although San Luis Obispo County does not
  yet have an infestation, county agricultural officials will meet with county health officials
  and local advocacy groups at the end of November to discuss the potential measures
  that may be taken should an infestation occur. In addition, the medical community will
  be warned of potential pesticide use and be provided with material safety data sheets for
  the pesticides used.
- Health data is not entirely accurate because the inert ingredients, which often make up half the overall product, are not tested. Also, there is no testing undertaken that simulates human impacts on those who have asthma or other existing medical conditions.
- There is a list of products approved by the EPA for active/inert ingredients. These
  ingredients can be used and, if used in accordance with the label requirements, they can
  be used safely.
- Carbaryl is extremely toxic to aquatic organisms. The combined active and inert
  ingredients are not always tested for accumulation in plants, soil or water. Toxicity tests
  are based upon LD 50, which means toxicity that will kill 50% of animals. There can also
  be sublethal, cumulative problems that should be researched.
- It is nearly impossible to fill all these data gaps with respect to pesticides. We have to begin somewhere.
- If GWSS infests the industry as a whole, it is likely that CDFA will use every possible mechanism it can to contain or eradicate the problem. Those mechanisms will be overwhelming in comparison to the program currently being implemented. We have to decide whether or not we use some pesticides now, or a lot more at a later date.

In response to concerns raised by the group, Dale asked CDFA staff to answer the question, "How does the program address problems with chemically sensitive people?

Dr. Peter Kurtz, CDFA responded. He explained that it is difficult to approach a population as individuals as opposed to the whole when implementing a program of this nature. The best approach to addressing folks who have individual problems is to notify them in advance and provide them with all available information. This enables them to discuss the situation with their own health care providers.

### **Questions/Comments:**

• If someone refuses to have their property sprayed, does CDFA comply with that request? Some refusals have been sprayed, some have not. CDFA tries to comply with the wishes of the property owners. In some cases, owners refused and then later accepted once it was confirmed that GWSS was located on their property.

Dale requested the group to write down their concerns regarding the decision-making process for selection of pesticides. The following concerns were written down by the individual group members:

# Decision-Making Process Concerns

- I am concerned that this panel is spending an inordinate amount of time secondguessing the recognized protocols and safeguards built into California's (and the United States) registration systems.
- I am concerned that the panel is spending an inordinate amount of time secondquessing decisions made by CDFA and advice from the SAP.
- I am concerned that a "no program," "no chemical" campaign is dragging us off point and away from prudent recommendations regarding program refinements that can minimize adverse public health effects, environmental effects, and enhance public knowledge.
- Equal weight may not have been given to both safety and efficacy in the selection of pesticides (the SAP may have been biased towards efficacy over safety).
- Safety data is generally not as complete as efficacy data.
- Alternatives to pesticides may be limited by the dominant cultural approach to agriculture in California; alternatives to pesticides should, nevertheless, be tested on a limited experimental basis.
- CDFA selection of control measures do not have an adequate process for following the guiding principle of least possible harm to public health and environment.
- There is inadequate requirements for local public input <u>before</u> the GWSS gets to the county to plan for ways to avoid impacts.
- There is no mechanism for allowing counties to let the vector come in and focus on preventing the disease by improving plant health, improving cultivation practices, etc.
- Carbaryl not fully tested
- Carbaryl is not safe for at risk populations people with cancer, asthma, MCS, M.S., AIDS, Porphylen, Gulf War, chronic fatigue, toxic encephalopaths, fibromyaglia, etc. Not safe for children, fetuses, etc.
- Inerts are not safe.
- Chemically-sensitive persons will have to avoid their home and go for 2 months until residues are gone.
- Organic garden food source for people are jeopardized

- Six percent of Californians have MCS.
- Concerned that spraying might not be aggressive enough, causing pests to run
  unchecked with the possibility to spread to other areas of agriculture.
- Positive aspects of pesticides not fully being considered.
- A more transparent selection process would have been helpful
- Incomplete knowledge for all registered materials not just carbaryl
- Process needs to be transparent.
- All information needs to be available.
- Need to clearly identify "least toxic" selection process.
- Consideration documented or mitigation of health risks particularly for at risk populations.
- Minimizing drift and general exposure to any chemical application techniques and equipment.
- Compare efficacy of chemicals to cultural and biological controls.
- That the least harmful pesticide (i.e., low toxicity and persistence) to fish and wildlife be used by CDFA consistent with effective control of GWSS.
- That CDFA keep the safety of fish and wildlife as high criteria used in the selection of pesticides to control GWSS.
- That the decision-making process by CDFA to select pesticides was not transparent to the public.
- That the effectiveness of the current spray strategy has not been adequately justified given the SAP recommendation that GWSS cannot be eradicated.
- Concern about adequacy of pesticide registration process to protect health.
- Sufficient evaluation of alternatives was not performed.
- That the risks of pesticides are inflated and the risks of GWSS are deflated and risks of alternatives are deflated.
- That the short and long-term goals of the GWSS program have not been well-articulated and that the interventions chosen are based upon limited science and unarticulated assumptions.
- Carbaryl spray of residences should be banned for GWSS.
- Carbaryl spray of farmland should be banned.
- Carbaryl not adequately tested by CDFA, DPR inerts not tested.
- Carbaryl not reviewed by EPA per FQPA. Use at this time irresponsible.
- Carbaryl contra-indicated by office of Pesticide Management Policy, Pesticide Impact Assessment Program says "Carbaryl may exacerbate a leafhopper problem."
- Carbaryl highly toxic to aquatic life, pollinators. Inadequate environmental assessment prior to use.
- Not following the "guiding principle" of least harmful to public health and environment
  while effectively eradicating pest per Budget Control Language. Carbaryl not most
  effective see USDA OPMP/PIAP profiles "use of broad-spectrum pesticides can
  negatively affect natural enemies and may exacerbate a leafhopper problem." Carbaryl
  certainly not "least harmful" pesticide. Alternatives have not been considered.
  Especially non-chemical pesticides like manual removal and soap.

• CDFA relates that their attention has been "minimal" regarding endangered/threatened species impacts in "urban, rural and suburban and agricultural areas" whereas salmonid species, including threatened and endangered can be abundant and their habitat and spawning grounds are abundant in those areas. CDFA assumes that endangered species are gone in those areas. Not true. Salmon-spawning creeks are in agricultural and rural residential areas and run, even underground in urban areas. Suburban areas have become refuges for wildlife that are being progressively extirpated in agricultural areas.

A request was made by Ann Maurice, Jessica Hamburger, and Linda McElver to present information related to broad-spectrum pesticide use and health and environmental effects. Dale Flowers indicated that time would be allocated within the next agenda for one-hour presentations each from Ann, Jessica and Linda. Dale then requested the group to provide some concluding comments. The following comments were made:

# **Concluding Comments:**

- The agricultural industry should also be invited to discuss the economic issues that may result from the presence of GWSS. In order to evaluate the measures being taken to control GWSS, we need to have a better understanding of the damages the grape industry could suffer as a result of GWSS.
- This group should have shorter, more structured meetings.
- We should more clearly define our procedure (i.e., how we are transitioning from the meeting discussions to report preparation).

Dale concluded by thanking the group for their participation.