

California Invasive Species Advisory Committee (CISAC) Meeting

Invasive Shot Hole Borer Sub-Committee  
Research and Technology Development

CDFA, Room 220  
April 18, 2019 2pm to 4pm

Meeting Minutes

Meeting Action Items

- **Next Meeting:** Wednesday, May 8<sup>th</sup> from 9am to 11am
- **Working Groups:**

Working Groups	Charge	Participants
<b>Biology</b>	<ul style="list-style-type: none"><li>● Compile list of research questions</li><li>● Develop a list to be prioritized by whole sub-committee</li></ul>	<b>Coordinator:</b> Shelley Bennett <b>Participants:</b> Akif Eskalen Richard Stouthamer Shannon Lynch Add: Adam
<b>Monitoring</b>	<ul style="list-style-type: none"><li>● Compile list of research questions</li><li>● Develop a list to be prioritized by whole sub-committee</li></ul>	<b>Coordinators:</b> Chris Shogren Richard Stouthamer <b>Participant:</b> Kyle Beucke
<b>Control</b>	<ul style="list-style-type: none"><li>● Compile list of research questions</li><li>● Develop a list to be prioritized by whole sub-committee</li></ul>	<b>Coordinators:</b> Akif Eskalen Richard Stouthamer
<b>Epidemiology</b>	<ul style="list-style-type: none"><li>● Compile list of research questions</li><li>● Develop a list to be prioritized by whole sub-committee</li></ul>	<b>Coordinator:</b> Shannon Lynch
<b>Integrated Pest Management (IPM)</b>	<ul style="list-style-type: none"><li>● Compile list of research questions</li><li>● Develop a list to be prioritized by whole sub-committee</li></ul>	<b>Coordinators:</b> Akif Eskalen John Kabashima <b>Participant:</b> Shannon Lynch

### **Other Action Items:**

- **Dr. Hishinuma** will add Richard Stouthamer clarification on Individual Climate Research Question in the Biology subsection.
- **Biology working group** will meet to flush out the questions for the next meeting.
- **Christopher Shogren & Richard Stouthamer** will add Monitoring Working Group research questions to Research Technology Development needs assessment working document.
- **All Working groups** finalize their section of working document by May 1<sup>st</sup> for review by our last meeting so people can rank priorities.
- **Shannon Lynch** will connect working groups through email to clarify what research questions fit under which questions so that there is not duplication.
- **Shannon Lynch** will reach out to Dr. Kabashima and coordinate what we can add to Epidemiology with Amanda Crump and also regarding economic impacts.
- **Shannon Lynch** is on a working group with Jiri Huler at the University of Florida.
- **Shannon Lynch** will contact Darci Oishi from Hawaii Department of Agriculture.
- **All** Finalize all research questions by May 1st then meet on May 8<sup>th</sup> to prioritize research questions.

### **Suggested Requests For Proposals:**

- Amanda Crump could look at behavior of moving wood from south to north.
- Tim Paine could follow infested chip material and look at the survivability in real world situations.

### **Meeting Proceedings**

Shannon Lynch called the meeting to order at 9:05am. Dr. Hishinuma led introductions. Dr. Hishinuma reviewed the agenda and proposed objectives and schedule for the sub-committee meeting. Hishinuma proposed two scenarios, one where people vote between this meeting and the next meeting and another scenario where the voting will occur between May 4<sup>th</sup> and May 14<sup>th</sup>.

- Dr. Stouthamer recommended the 2<sup>nd</sup> scenario.
- David Pegos of CDFA noted the 1st scenario fit the timeline asked by the legislature appropriately.
- There was a suggestion that we push back the next meeting by a week to allow for 3 weeks for people to review the meeting and then have the vote occur at the next meeting in a public process.
- Sheri Smith with the US forest service wanted to make sure the group was aware that not all RFPs could be funded by certain funders due funding restrictions so not the ranking will help inform but not completely decide what will be funded.
- Ms. Smith asked for clarification as to whether federal agencies can submit proposals.
  - Mr. Pegos did not know of any rule precluding federal agencies submitting RFPs and noted that if they have matching funds available that would strengthen their proposal.
- Shannon Lynch asked for clarification as to whether RFPs should include the total cost, not just costs eligible for CDFA AB 2470 funding.
  - Mr. Pegos clarified that proposals could include full project with line items that need to be funded within the first 3 years which are eligible for AB 2470 funding.
- Co-Chair Shannon Lynch wanted to remind everyone of the constrained timeline.

**Action Item:** Finalize all research questions by May 1st then meet on May 8<sup>th</sup> to prioritize research questions.

- It was noted that all committees should look to tapping into additional funding.

Draft Minutes from both the March 18<sup>th</sup> and April 3<sup>rd</sup> meetings were sent out previously to approval of minutes from March 18<sup>th</sup>. Akif Eskalen moved, Shelley seconded the motion. Eskalen moved to approve the April 3<sup>rd</sup> minutes. Shelley seconded. The minutes were approved unanimously.

**Requests For Proposal:** Amanda Crump looking for the behavior of moving wood from south to north.

**Requests For Proposal:** Tim Paine could follow infested chip material and look at the survivability in real world situations.

**Tabled to Outreach and Education:** Mark Porter suggested adding to the BMP protocol for testing blades of chippers to ensure the less than 1 inch chip.

Response back to the Pathways Sub-Committee: Michelle Jones confirmed she has a published study showing 98% kill rate of ISHB.

## **(5) SUB-COMMITTEE BUSINESS/DISCUSSIONS**

At the last Sub-Committee meeting time ran out prior to having all the labs present on their research.

### **Dudley lab research**

Shelley Bennett presented on past and current research being done by Dudley lab. Dudley lab is doing further research to look at the effect of ISHB on restoration projects.

- Dr. Eskalen asked about cuttings that they are seeing attacked.
  - Shelley 3 to 8 centimeters and ISHB are attacking the full range.

### **Jason Stajich**

Shannon Lynch presented on some work done by Jason Stajich, a Fungal Genomist at UC Riverside.

- Dr. Kabashima asked about *Grasium peracramonium*.
  - Shannon Lynch responded that some of that is captured in the research questions.

### **Michele Jones**

Michele Jones from Paine Lab presented on the work that their lab has been doing. Paine lab is looking at pesticides (combinations of pesticides work best), climate modeling, watering effects, and avocado species (Zutano preferred by ISBH). Ms Jones discussed over 10 ongoing projects that Paine lab is currently has going.

- Dr. Hishinuma asked which of the projects are priorities for Paine labs.
- Michele Jones responded research on barricades and host preferences are two.

### **Research and Development Needs Assessment:**

Shannon Lynch presented on the sub-committees working document on research questions. She noted that there was some overlap between the different working groups. The Working Group list links to the full list of research questions being developed.

### **Biology Working Group**

Shelley Bennett read through the current list of Biology Research Questions.

- Tom recommended that the questions be reorganized to make them a more coherent research program.

**Action Item: Dr. Hishinuma** will add Richard Stouthamer's clarification on Individual Climate Research Question in the Biology subsection.

- Shannon Lynch noted that the last questions are still being flushed out.
- Dr. Stouthamer noted that their lab has already looked at the differences between the microbial of the two species of ISHBs.
  - Shannon followed up and asked if this was an area that needed further study.

**Action item: Biology working group** will meet to flush out the questions for the next meeting.

### **Monitoring Working Group**

Chris Shogren and Dr. Stouthamer did meet to discuss potential research questions; however, neither had the questions available so had to discuss from memory.

- Trap size
- Optimum trap height
- Different lures
- Combination Lure

**Action Item: Christopher Shogren & Richard Stouthamer** add monitoring research questions to Research Technology Development needs assessment working document.

### **Control Working Group**

Richard Stouthamer reviewed the Control Working Group's research questions.

- David Pegos asked why research was focused on Taiwan
- Dr. Stouthamer noted that in Vietnam they did not discover any natural enemies and Taiwan also has operational advantages.
- Mr. Pegos asked how studies were currently being funded.
  - Funded through farm bill, CDFW, and SANDAG. Some funding to end soon.
- There was discussion of tabling restoration to the biology working group.

**Action Item: Shannon Lynch** will connect working groups through email to clarify what research questions fit under which questions so that there is not duplication.

### **Epidemiology Working Group**

**Action Item: Shannon Lynch** will reach out to Dr. Kabashima and coordinate what we can add to Epidemiology with Amanda Crump and also regarding economic impacts.

### **Integrated Pest Management (IPM) Working Group**

Dr. Kabashima suggested the working group take the methods we have and then integrate them into the 3 scenarios: native forests, urban forests and woodlands. Over the next 6 months compile current knowledge on best management practices. Then a 2 year project to evaluate the effectiveness of IPM programs.

**Action Item: All Working groups** finalize their section of working document by May 1<sup>st</sup> for review by our last meeting so people can rank priorities.

### **Public Comment**

- Mark Porter asked that recordings of the sub-committees be posted.
- Dr. Kabashima spoke with Dr. McPherson. He suggested a few people who may be able to do economic studies.

- David Pegos suggestion to reach out to Michigan Anthony Cognato regarding their expertise on beetles. Also look to partner with Hawaii and Florida and our great relationship with them to potentially get some farm bill funds.

- **Action Item: Mrs. Lynch** is on a working group with Jiri Huler at the University of Florida.
- **Action Item: Mrs. Lynch** will reach out to Darci Oishi of the Hawaii Department of

Agriculture.

- Sheri Smith asked about adding a 4<sup>th</sup> category to the IPM list of agricultural crops.
- Sheri Smith reported from a conference call that she was just on that there is a federal preference that proposals be vetted by this group prior to being vetted by federal agencies.

### **Adjourn**

Dr. Hishinuma reviewed the next steps and action items. Mrs. Lynch adjourned the meeting at 11:16am. The next meeting will be Wednesday, May 8<sup>th</sup> from 9am to 11am.

### **Meeting Participants**

<b>First</b>	<b>Last</b>	<b>Affiliation</b>
Dr. Stacy (co-chair)	Hishinuma	UC Davis
Shannon (co-chair)	Lynch	UC Santa Cruz
Dorothy	Abeyta	Davey Tree Company
Abby	Barraza	UC ANR
Shelley	Bennett	UC Santa Barbara
Charlie	Branan	UC Santa Barbara
Corin	Choppin	CCP CSU Sacramento (notetaker)
Andrew	Cline	CDFA
Kim	Corella	CAL FIRE
Tom	Dudley	UC Santa Barbara
Akif	Eskalen	Eskalen Labs
Steve	Gaimari	CDFA
Curtis	Ewing	Cal Fire
Katie	Harrell	Forest Service
Gretchen	Heimlich	Disneyland
Michele	Jones	UC Riverside
John	Kabashima	UC ANR Emeritus
Adam	Lambert	UC Santa Barbara
Jessika	Mitchell	Davey
David	Pegos	CDFA (Convener and facilitator)
Mark	Porter	Arborist
Madeleine	Rauhe	Disney
Michael	Scholl	CDFA
Chris	Shogren	Disney
Tom	Smith	CAL FIRE
Sheri	Smith	US Forest Service
Jason	Stajich	UC Riverside
Richard	Stouthamer	UC Riverside