California Invasive Species Advisory Committee (CISAC) October 16th, 2024 Meeting Minutes

CISAC Members:

Erik Blosser Humberto Izquierdo Katie Sutherland-Ashley
Tim Crothers Brent Johnson Martha Volkoff
Gina Darin Ricky Lara Helene Wright

Tom Getts Shannon Lynch Ted Grosholz Lori Nezura

David Haviland Bea Nobua-Behrmann

Stacy Hishinuma Tom Smith

CISAC Members Absent:

Steve Schoenig

Guests:

Claire Aicken Chris Scianni Heather Healy Jonathan Babineau Kevin Healy Cherie Shook **Brad Hooker** Jim Boyd Brice Smith Kathryn Bronsky Doug Johnson Kayla Thompson Elisabeth Brusati Jeff Johnson Lynnette Thompson Catalina Cespedes John Kabashima Tyler Tkachuk Julie Clark Jason Leathers Ezekiel Villacampa Rachel Wigginton Kim Corella Robert Mackie **Brian Woodward** Cyndi Dawson Dominique Norton Travis Elder Randall Oliver David Wirta Jim Farrar MacKenzie Patton Karey Windbiel-Rojas

Claudia Garcia David Pegos
Patrick Hoffman Jocelyn Perez
Lindsey Hack Matt Ribarich
John Hackett Ambika Saini

Opening:

The California Invasive Species Advisory Committee (CISAC) meeting was called to order at 10:05 a.m. on October 16, 2024. Shannon Lynch welcomed committee members, guests, and staff.

Public Comments:

Dr. Shannon Lynch briefed the members on a new detection of the Invasive Shot Hole Borer (ISHB) in the Felton area near Henry Cowell Redwoods State Park. The infestation has spread through the Box Elder trees in the riparian area of the San Lorenzo River. Additionally, she is working with Tom Smith, Kim Corella, and other members to research acute oak decline and establish pathogenicity on the bacteria

recovered from infected trees emerging in the state that are attributed to acute oak decline.

Dr. Ricky Lara disclosed information about a new project on the Spotted wing drosophila (*Drosophila Suzuki*) in collaboration with the University of California and the United States Department of Agriculture. USDA will provide the mastering the bio control agent, and Dr. Lara will assist in Northern California with the redistribution of the parasitoid-bio control agent and monitoring establishment in the field. There have also been great results from the growth chambers for the one hundred Yellow Star Thistle Weevils in preparation for release next year. Also, through the CDFA Crop Grant program, Dr. Lara is working with UC cooperators on the "baramoda stink bug" (*Bagrada hilaris*) to release parasitoids to reduce the population of that pest.

Katie Sutherland Ashley shared that the Office of Environmental Health Hazards Assessment is updating the human health information on products used to treat the invasive Spongy Moth and continuing public outreach.

Tim Crothers completed workshops on monitoring pests and maintaining tree inventories with customers. There is a focus on educating customers, specifically in regional areas of concern for invasive pests. In Southern California, his staff has been training with UC Cooperative Extension in Orange County on the Golden Spotted Oak Borer (GSOB). Mike Pallet will be speaking at a presentation in San Diego on the South American Palm Weevil and how to remove the infested palm trees.

Humberto Izquierdo is working with David Pegos to gauge the interest in additional trapping for ISHB and Mediterranean Oak Borer (MOB) monitoring and trapping. The CACASA Fall Conference is currently underway and will discuss the ISHB program eligibility and the leading-edge strategy.

Ted Grosholz announced that he will serve as a technical working group member of the Southern California Caulerpa Action Team (SCCAT). The group will focus on how much effort and activity are required to eradicate Caulerpa from infested areas.

Martha Volkoff shared that the California Department of Fish and Wildlife is updating the State Wildlife Action Plan for its ten-year review cycle. Major revisions are planned for the State Aquatic Invasive Species Management Plan for the department. The annual meeting for the Western Regional Panel on Aquatic Nuisance Species is October 23rd - 25th in Grand Junction, Colorado, with an option to join in on Zoom. The Aquatic Nuisance Species Task Force (ANSTF) will be meeting remotely from November 6th - 7th on the East Coast. Martha was the lead author of the New Zealand Mud Snail National Management Plan, which will be shared at the ANSTF meeting.

Bea N Behrmann detailed that they have been receiving reports of suspected ISHB infestations, one of which was the new infestation in the Felton area reported through the ISHB.org online reporting tool. After receiving GSOB detection training, the survey team observed a new infestation in Orange County, Coto de Caza. Additionally, due to

the growing demand for GSOB training for identification and management, there will be a GSOB Symposium online on November 6th for anyone interested. There has been increasing concern over the dotted Paropsine leaf beetle, as more sightings are being reported. There are collaboration efforts with other advisors from the UC Cooperative Extension to test the possible biocontrol with some parasitoids from Australia.

David Haviland highlighted that the University of California is hiring positions for pest management, including invasive species. He signed up for the International IPM symposium in San Diego in March 2025, where there will be an invasive species tour highlighting a variety of invasive species.

Erik Blosser introduced himself to the board and shared that the *Aedes aegypti* mosquito is the invasive species of focus for the California Department of Public Health. The mosquito is moving to new areas of the state, carrying the risk of local dengue transmissions (nine transmissions detected).

Gina Darin announced that the Department of Water Resources finished construction on the largest tidal habitat restoration site in the Delta, Sassoon Marsh, opening three thousand acres of habitats for listed fish species. Additionally, her department is continuing to monitor Nutria in the Delta to assist the Nutria Eradication program in partnership with CDFW.

Helene Wright provided progress on the seven fruit fly quarantines in California that began in 2023 and 2024. Four of those seven fruit flies were the oriental fruit fly species and have now been eradicated from the state. There is a new Mediterranean fruit fly quarantine in Alameda County, which appears to be fairly contained with no current larvae detections.

John Hackett shared that the Department of Transportation is focused on fuel reduction on the right of way throughout the state, including the removal of invasive species that can impact fire suppression. Other projects include maintenance forces following up on initial treatments, monitoring, and retreating areas as needed. The department is assisting in monitoring Lake County as it deals with its first MOB infestation.

Stacy Hishinuma announced that the USDA annual call for proposals for forest health protection funding is open. There will be an opportunity to apply for special technological development that focuses on biological control and informal funding for general invasive species management.

Dr. Tom Getts from the UC CO-OP Extension described the growing population of common Curpina (*Crupina vulgaris*), which is an "A" rated noxious weed. They are reviewing previous research conducted in Idaho for effective control mechanisms. Dr Getts announced that the California Plan Council online symposium will take place next week.

Dr. Tom Smith from CalFire confirmed the ISHB infestation in Santa Cruz County. He shared news on a newly reported GSOB infestation in Santa Barbara County. Recent detections of MOB have increased in Sacramento County, with additional detections trapped in El Dorado County and Yolo County. Currently, he is attending the California Forest Pest Council Pitch Canker Task Force Committee Meeting in Torrey Pines to discuss the impact of the disease on the trees.

Martha Volkoff from the Department of Fish and Wildlife detailed the progress on the eradication efforts of the Nutria eradication program. The department is working to obtain K-9 scent-detection dogs to help further inform eradication efforts. Their program is interested in the Judas Nutria strategy, tagging Nutria and allowing it to lead to other Nutria. Across the state, the total count of Nutria eradicated thus far is 5452.

Karey Windbiel-Rojas from IPM/UC CO-OP Extension shared that they continue invasive pest education and work with UC Cooperative Extension to get information on invasive species to urban audiences. She introduced Lindsey Hack, who was hired to work on invasive pest education with UC master gardeners and other urban audiences.

David Pegos shared that he will be attending the League of Cities conference for outreach and education. There will be an online National Invasive Species Advisory Committee meeting, where two white papers on Early Detection and Rapid Response and Island Ecosystems will be presented. Additionally, there is a Japanese beetle infestation in Sacramento, and CDFA is working with the UC Cooperative Extension for eradication efforts. The North American Invasive Management Association held its annual meeting in Montana and would like CISAC to sponsor them as the advisory board.

Brian Woodward is working on the ISHB detection in Felton, Santa Cruz, with David Pegos, and others from CISAC.

Chris Scianni shared progress on the bi-annual report summarizing to the legislature, outlining program activities, commercial vessel traffic patterns, inspection violations, etc. The report will highlight twenty-five years of data sets over time, and aim to publish the report sometime next year.

Doug Johnson highlighted the 33rd Annual California Invasive Plant Council Symposium online as an opportunity for land managers to discuss land management. He detailed the information on the online tool, Weedcut, which complies with best practices for controlling weeds and provides decisions to support land managers in making an IPM approach. Additionally, they are working with several other states on plant assessments using the Plant Risk evaluator tool developed by UC Davis, by adding new plants to the inventory as "invasive" or "watch" species. The Cal IPC-sponsored Bill AB2909 adds language to the section of the code to define invasive species, and has the council promote Integrated Pest Management as a standard practice. Lastly, he shared that Prop 4 will have \$20 million for funding for ISCC/CISAC opportunities to set ambitious goals.

Elisabeth Brusetti shared an update that Dr. Christine Whitcraft will be sharing her presentation on the Early Detection and Rapid Response will present to the Delta Independent Science Board.

Dr. John Kabashima shared an update that the South American Palm Weevil reached Camp Pendleton and is expected to make its way to LA, Orange, and other Counties. Additionally, the Ghost Canker fungus is killing five different kinds of species of Pine trees, targeting mature pine trees in about three to four years. Activities coming up involve providing training on ISHB Monitoring and Management in Concord to the Western Chapter of the International Society of Arboriculture.

Rapid Response Application -Amendment

Received several proposals; however, due to broad project objectives and the executive member's recommendation, the language has been revised.

Presentation:

The Polyphagous Shot Hole Borer (PSHB) was introduced in Western Australia in 2021. In California, we have two beetles: PSHB and KSHB. The PSHB carries Fsusarium *euwallaceae*, and Kuroshio Shot Hole Borer carries *Fusarium kuroshium*. Research indicates a nonexclusive relationship between the beetles and the beetle in Australia carrying a different species of Fusarium. The beetle is a different haplotype than the one in Australia and holds a different Fusarium species.

The beetle attempts to attack three hundred twenty-four tree species, the Fusarium colonizes one hundred thirty-seven species, and a subset of those are reproductive hosts. The beetle can reproduce on seventy-seven species, and those include twenty species native to California including avocado. It can potentially affect up to twenty-five to sixty percent of trees planted in the Southern California urban landscape areas and eighteen species are heavily impacted and can die.

The Western Australia Department of Primary Industries and Regional Development leads the response to this outbreak. A \$30 million response plan was approved through the national emergency plant pest response arrangement to eradicate PSHB. The actions will involve monitoring and early detection, an extensive media campaign, surveillance and trapping program across the QA and broader Perth region, and the destruction of infested material, with plant material double-chipped and head composted. They have inspected over 1.9 million trees on over 62,000 properties, and there have been no detections outside of Perth and created a quarantine area broken into two zones.

Presentation:

The spongey moth is an invasive pest up to one inch long and dull in color. It is native to Europe and North Africa. The caterpillars are known to feed on the leaves of more than three hundred species of trees and shrubs, many of which are native to California.

The female Spongy Moths can lay anywhere from one hundred to one thousand eggs in a single mass and will lay eggs on any surface. California's climate and plants in well-irrigated areas are likely to support a spongy moth population to persist and become permanently established. The caterpillars feed on over three hundred tree and shrub species, causing defoliation. Spongy Moth infests 1/3 of its susceptible host types, with twenty states impacted, and carries the risk of spreading in suitable climates.

The United States Department of Agriculture's National Spongy Moth Management Program involves a four-pronged approach. The "Slow the Spread" transition area is spread along the leading edge of the quarantine. This transition area suppresses and regulates activities in the generally infested area. The "Suppression" of the generally infested area is the quarantine zone, and the rest is the eradication, un-infested area.

Several nuisances are caused by the Spongy Moth Outbreaks. The caterpillars can be found at high densities, causing defoliation of the trees. The life stages can deter people from recreational activities and impact the aesthetics. The health concern from the Spongy Month outbreaks is due to the urticating hairs from the caterpillars causing allergic reactions such as wheals and rashes. The current prevention activities involve vehicle inspections, parcel inspections statewide, and high-risk detection trapping.

Eradication is possible due to early detection, precision delimitation, science-based control, the use of a Science Advisory Panel, strong partnerships, and community action. Due to the number of previous detections, treatment will be needed in 2025, three treatments, two weeks apart per year, on trees. A bio-control method being explored is the *Bacillus thuringiensis kurstaki* (BTK), which is a naturally occurring bacterium. BTK appears to be the safest and most effective eradication method for the spongy moth, only impacting caterpillars and will not harm other beneficial insects.

Presentation:

Emerald Ash Borer (EAB) is an invasive pest native to Asia, Its first detection was in Michigan in 2002. It can attack all species of ash trees, leading to their death in two to five years. It has already killed millions of trees in the Eastern US, with damages estimated to be exceeding \$ 10 billion. Present in thirty-six states, but not in California, yet.

Making proactive biocontrol is possible by keeping up with the spread. Work to give California growers and stakeholders a head start in preparing for a priority invasive species. The classical biological control is four parasitoids sourced from Asia as the native range of EAB. They have completed host specificity and have been permitted for field release, coordinated by the USDA.

Sixteen native North American Fraxinus species (five of which are in California) are threatened by this species. The ecological problems include stand replacement, wildlife dependency, wildlife hazards, and riparian stability. Concern about cost removal in urban areas, and the ability to spread quickly through California.

The Biocontrol methods applied are host tree surveys, native parasitoids, and permits. Host tree surveys are used to identify and characterize host tree habitat areas that would be suitable for future release. Initiating potential surveys for known natural enemies of buprestid beetles in California. Initiate paperwork to facilitate future conditional importation for EAB parasitoids in California with support from the USDA.

CISAC Funds

ISCC Funding Projects

| Description | Funding | Status | Amount Contracted |
|--|----------------|-------------|-------------------|
| Invasive Species Summit | \$118,750.00 | Pending | \$0.00 |
| Invasive Species Tours | \$136,562.50 | Executed | \$60,000.00 |
| ISCC/CISAC Operational Fund (travel, outreach booths, printing, business needs, reports, facilitation) | \$29,687.50 | In progress | \$4,978.91 |
| Living list and pathway prioritization | \$136,562.50 | Pending | - |
| Fulltime support for ISCC/CISAC (Two year limited term position) | \$356,250.00 | Executed | - |
| Reserve fund | \$682,812.50 | In progress | |
| Invasive Shot Hole Borer (PSHB, KSHB, MOB) | \$1,502,187.50 | Executed | \$650,000.00 |
| Volutaria San Diego Project | \$250,000.00 | Executed | \$249,999.91 |
| Statewide exotic wood borer survey | \$136,562.50 | In progress | - |
| Statewide aquatic invasive survey | \$475,000.00 | In progress | - |
| Yellow Star Thistle biocontrol incubators | \$59,375.00 | Executed | \$52,356.08 |
| Plant Right | \$296,875.00 | Executed | \$252,606.00 |
| Caulerpa prolifera - Newport | \$819,375.00 | Executed | \$819,349.60 |
| Totals | \$5,000,000.00 | | |

Rachel Wigginton announced she will be sharing updates on the Nutria Eradication Program at the Delta Conservancy's next board meeting on October 23^{rd,} with a focus on the Delta. Serving as a co-leader of the Delta Interagency Species Coordination Team that works to share information and prioritize research of management needs in the Delta and the Sassoon Marsh. Also working with the group to develop a quick-start information guide for restoration practitioners and land managers for adaptive land management. So, when people reach out to a particular subject master's, they have some basic understanding to guide them.

Adjournment

The meeting was adjourned at 3:10 p.m. The next California Invasive Species Advisory Committee meeting is scheduled for January 15, 2025 at 10:00 am.