

California Department of Food and Agriculture (CDFA)
Minutes
of the Meeting/Video Conferencing
of the Navel Orangeworm Action Committee (NOWAC)
Held on Monday, July 15, 2025
2895 North Larkin Avenue
Fresno, CA 93727

NAVEL ORANGEWORM ACTION COMMITTEE BOARD MEMBERS

Members Present: Tom Coleman, John Diener, Mike Kelley, Ed Kuykendall, Gary Martin, Ted Sheely**

Members Absent: Kristen Camarena, Kevin Collins, Hal Crain, Bob Driver, Dan Errotabere, Jeffery Gibbons, Rob Goff, Joe Mendonca, Galen Miyamoto, Doug Mueller, Rod Stiefvater

OTHER ATTENDEES*

Ex-Officio: Matthew Aubuchon, Joe Coelho, Katie Filippini, Roger Isom, Joseph Munyaneza, Stephen Vasquez

Charles Burks, Keith Colpetzer, Michael Garvey, Devon Gaydos, Christopher McGlothlin, Adalberto Perez de Leon, Cameron Poole, Emily Symmes, Andrea Walton

*As self-reported in the GoToMeeting application or sign-in sheet

**Attended remotely with limited service

CALL TO ORDER AND ROLL CALL

Mike Kelley, acting Chair called the meeting to order at 9:07AM and conducted roll call.

WELCOME AND OPENING REMARKS

Mike Kelley welcomed everyone and reviewed the topics of discussion.

REVIEW AND APPROVAL OF PRIOR MEETING MINUTES

The Committee reviewed the draft minutes prepared by program staff for the May 24, 2025, meeting. A copy of the draft minutes had been distributed to the Board members and posted on the Department's website prior to the meeting.

Board Motion

The Board approved May 24, 2025, NOWAC meeting minutes as presented.

Motion: Gary Martin
Second: John Diener

Details of Board Vote

In Favor: Tom Coleman, John Diener, Mike Kelley, Ed Kuykendall, Gary Martin

Against: none

Abstain: none

Absent: Kristen Camarena, Kevin Collins, Hal Crain, Bob Driver, Dan Errotabere, Jeffery Gibbons, Rob Goff, Joe Mendonca, Galen Miyamoto, Doug Mueller, Ted Sheely, Rod Stiefvater

Additional Public Comments: none

PROGRAM UPDATES - USDA

Matthew Aubuchon, National Policy Manager for the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) provided an update on 2025 Navel Orangeworm Program activities. It was noted that the plane used for aerial releases was grounded at the beginning of the season for repairs and pilot licensing needs; however, ground release was utilized to ensure timely release of sterile moths. It was also noted that the APHIS Phoenix Rearing Facility (PRF) had staffing losses. However, the team was able to triage issues in order to provide consistent delivery of sterile insects.

TECHNICAL ADVISORY COMMITTEE UPDATES AND DISCUSSION

Technical Advisory Committee (TAC) Chair, Stephen Vasquez provided updates on the TAC virtual meeting that was held on July 9, 2025. The updates included the following items:

- **SIT Timing for Pistachios:** Discussion to determine the optimal time to begin sterile insect technique (SIT) release for pistachios based on the current constraint of one magazine of approximately 750,000 sterile navel orangeworm moths received per day. It was recommended that SIT release should be switched from almonds to pistachios after the shake for almonds which is tentatively scheduled for August 15, 2025.
- **SIT Delivery Methods:** The USDA conducted a cost assessment to determine if it was more cost effective to use a USDA plane with a locally based USDA pilot or hire a local private contractor to conduct aerial release in California. They determined that it was \$504 per flight hour for the USDA option vs. \$921 per flight hour for a contractor.
- **Pistachio Damage Assessment:** This season the Navel Orangeworm Program will be conducting damage assessments for all participating pistachio orchards in order to have a baseline comparison of navel orangeworm damage. The TAC discussed the best course of action if the pistachios at the collection site are composed of both hull split and closed hull. It was determined that it is important to maximize the opportunity to collect mature nuts that are as close to harvest as possible to draw accurate conclusions. Based on this, the pistachio damage assessment protocol will target the spilt hulls.

- **Trap Monitoring Methodology:** The TAC considered whether changes can be made to trapping procedures to lower the processing time spent screening traps. The consensus was that more research on the efficacy of the lure options and effects of different trapping configurations was needed before making program changes. It was recommended to keep current trapping protocols in place until more research becomes available.
- **Program Data Presentation:** The TAC discussed how to make the data useful to both the program and the growers. It was determined that this issue will require further discussion before the format for data presentation is finalized.

ASSOCIATED RESEARCH COLLABORATIONS FOR NAVEL ORANGEWORM

Discussion on wide range of research projects that are associated with and could impact the navel orangeworm program. Highlighted research that is being conducted on application and timing of insecticides and sanitation in orchards; the physiology of navel orangeworm genes and the potential to utilize gene silencing for lethal modification; projects developing PCR tools to identify and track target moths; x-ray radiation as a method of sterilization; remote camera traps and use of machine learning for identification; use of external marking (EX: liquid florescence) for identification of sterile insects; research on mark-recapture rates of sterile insects; research on trapping efficacy such as insect response to PPO; testing of inputs for growth and food at PRF; testing improvements to transport of sterile moths from PRF to California; testing of release methods for sterile navel orangeworms which includes hand release, ground release, drone release, aerial release inputs.

OTHER ITEMS

It was noted that there are requests to increase the number of sterile moths that are released from one to a minimum of two canisters. Overall, there is industry interest in determining additional avenues to support the program and enable it to be able to serve a wider portion of growers.

NEXT MEETING/AGENDA

The next Board meetings were set for November 18, 2025. The meeting will be held in person and via GoToMeeting video conferencing.

ADJOURNMENT

The meeting was adjourned at 10:43AM.

Respectfully submitted by:
Katie Filippini, EPM I
Integrated Pest Control Branch
California Department of Food & Agriculture