SPCB
STRUCTURAL PEST CONTROL BOARD

STRUCTURAL PEST CONTROL BOARD

BOARD MEETING

March 9, 2023

9 a.m. to conclusion of business

Department of Consumer Affairs
Hearing Room
2005 Evergreen St.
Sacramento, CA 95815

SPCB
STRUCTURAL PEST CONTROL BOARD

MEMBERS OF THE BOARD

KYLE FINLEY, PRESIDENT
YESSENIA ANDERSON, VICE PRESIDENT
ANKUR BINDAL
MARK PAXSON
JOHN TENGAN
JANET THRASHER

OUR VISION

The Structural Pest Control Board sets the standard as the national regulatory and environmental leader of pest management for consumer protection.

OUR MISSION

The Structural Pest Control Board's mission is to protect the general welfare of Californians and the environment by promoting outreach, education, and regulation of the structural pest management profession.

OUR VALUES

Accountability
Consumer Protection
Professionalism
Service
Transparency

STRUCTURAL PEST CONTROL BOARD
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Sacramento, CA 95815
(916) 561-8708
Toll-free: (800) 737-8188
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CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

PDE_23-010

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NOTICE OF STRUCTURAL PEST CONTROL BOARD MEETING

March 9, 2023
9:00 a.m. – conclusion of business
Department of Consumer Affairs - Hearing Room
2005 Evergreen Street, Sacramento, CA 95815

AGENDA

Action may be taken on any item on the agenda. The time and order of agenda items are subject to change at the discretion of the Board President and may be taken out of order. In accordance with the Bagley-Keene Open Meeting Act, all meetings of the Board are open to the public.

1. Roll Call / Establishment of Quorum

2. Flag Salute / Pledge of Allegiance

3. Public Comment for Items Not on the Agenda
   The Board may not discuss or take action on any matter raised during this public comment section that is not included on this agenda, except to decide whether to place the matter on the agenda of a future meeting. (Government Code, Sections 11125, 11125.7(a).)

4. Petition for Reinstatement
   Joseph T. W. Walker - FR 43838 – Branch 2

Closed Session

5. Pursuant to Government Code, section 11126, subdivision (c)(3), the Board will meet in closed session for discussion, and to take action on disciplinary matters, including the above petitions.

Reconvene in Open Session

6. Review and Possible Approval of the Minutes of the October 27, 2022, SPCB Meeting

7. Executive Officer's Report
   a. Staffing Update
   b. Update regarding Licensing, Enforcement, Examination and WDO Statistics
   c. Update regarding the Board's Budget and Fund Conditions
   d. Strategic Plan Update
   e. Sunset Review Oversight Hearing
   f. Legislative/Regulations Update
   g. Report on Board Funded Research Projects

8. Board Meeting Calendar

9. Future Agenda Items

10. Adjournment

This meeting will be Webcast, provided there are no unforeseen technical difficulties or limitations. To view the Webcast, please visit https://thedcapage.wordpress.com/webcasts/. Additionally, the meeting may be cancelled or changed without notice. For verification, please check the Board's website at www.pestboard.ca.gov or call 916-561-8700.

Government Code, section 11125.7, provides the opportunity for the public to address each agenda item during discussion or consideration by the Board prior to the Board taking any action on said item. Members of the public will be provided appropriate opportunities to comment on any issue before the Board, but the Board President may, at his or her discretion, apportion available time among those who wish to speak. Individuals may appear before the Board to discuss items not on the agenda; however, the Board can neither discuss nor take official action on these items at the time of the same meeting. (Government Code sections 11125, 11125.7(a).)

The meeting is accessible to the physically disabled. A person who needs disability-related accommodation or modification in order to participate in the meeting may make a request by contacting: Kristina Jackson-Duran at (916) 561-8700, email: pestboard@dca.ca.gov, or send a written request to the Structural Pest Control Board, 2005 Evergreen Street, Suite 1500, Sacramento, CA 95815. Providing your request at least five (5) business days prior to the meeting will help to ensure availability of the requested accommodations. The Board's TDD Line is: (916) 322-1700.

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STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 1

ROLL CALL/ESTABLISHMENT OF QUORUM

Roll is called by the Board president or, in their absence, by the Board vice president or, in their absence, by a Board member designated by the Board president.

Four members constitute a quorum at the SPCB meeting, per Business and Professions Code section 8524.

BOARD MEMBER ROSTER

KYLE FINLEY, PRESIDENT

YESSENIA ANDERSON, VICE PRESIDENT

ANKUR BINDAL

MARK PAXSON

JOHN TENGAN

JANET THRASHER

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AGENDA ITEM 6

REVIEW OF MINUTES

Review and possible approval of the minutes of the October 27, 2022 SPCB Meeting

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Structural Pest Control Board
Meeting Minutes

October 27, 2022

Location:
The meeting was held via WebEx events

Board Members Present:
Kyle Finley, Board President
Yessenia Anderson
Mark Paxson
Janet Thrasher
John Tengan

Board Members Absent:
Derek Devermont, Board Vice President

Board Staff Present:
Sophia Cornejo, Executive Officer
Melissa Sowers-Roberts, Disciplinary Specialist
Melissa Zanetta, Chief of Licensing & Administration
Kathleen Boyle, Chief of Enforcement
Kristina Jackson-Duran, Administrative Analyst

Departmental Staff Present:
Michael Romero, DCA Legal Counsel
Alex Millington, DCA Regulatory Counsel
Sarah Irani, Moderator

Agenda Item 1. Roll Call / Establishment of Quorum

The Structural Pest Control Board (Board) meeting was called to order by President Finley at 9:04 a.m. and Executive Officer (EO) Cornejo called roll.

President Finley, along with Board members Anderson, Paxson, Thrasher, and Tengan were present. Vice President Devermont was absent.

A quorum of the Board was established.

Agenda Item 2. Flag Salute / Pledge of Allegiance

President Finley led everyone in a flag salute and recitation of the Pledge of Allegiance.

Agenda Item 3. Public Comment for Items Not on the Agenda

Peggy Byerly from Department of Pesticide Regulation provided an update on the recent joint training sessions for new staff of the County Agricultural Commissioner's (CAC). The trainings were held in Irvine, CA, between September 27-29, 2022. A total of 83 CAC staff from 26 California counties were present at the training. Ms. Byerly thanked President Finely, EO Cornejo, and industry training partners for their participation and support with the Irvine training session.

No further public comments.

Agenda Item 4. Petition for Reinstatement
Tomas Zuniga Delgado – FR 31111, Branch 1

Administrative Law Judge Marcie Larson and Deputy Attorney General Phillip Arthur appeared with the Board to hear Tomas Zuniga Delgado's petition. Since a court reporter was not available for the meeting, Judge Larson confirmed that no party held objection to WebEx audio/video recording of the proceedings.

Mr. Delgado was informed he would be notified by mail of the Board's decision.

Agenda Item 5. Petition for Modification / Termination of Probation
Ernesto Lopez – FR 51331, Branches 2 and 3

Administrative Law Judge Marcie Larson and Deputy Attorney General Phillip Arthur appeared with the Board to hear Ernesto Lopez's petition. Since a court reporter was not available for the meeting, Judge Larson confirmed that no party held objection to WebEx audio/video recording of the proceedings.

Mr. Lopez was informed he would be notified by mail of the Board's decision.

Agenda Item 6. Closed Session

Pursuant to Government Code section 11126(c)(3) the Board met in closed session to discuss and take action on disciplinary matters, including the above petitions.

The Board entered closed session at 10:32 a.m., and reconvened into open session at 12:45 p.m.

In addition to President Finley who called roll, Board members Anderson, Paxson, Thrasher, and Tengan were present. Vice President Devermont was absent.

A quorum of the Board was established.

Agenda Item 7. Review and Possible Approval of the Minutes of the July 19-20, 2022, SPCB Meeting

Board member **Paxson moved**, and Board member **Tengan seconded** the motion to approve the minutes of the July 19-20, 2022, Structural Pest Control Board meeting.

No Board or public comments.

Motion carried 5-0 by roll call vote.

Agenda Item 8. Executive Officer's Report

EO Cornejo began by thanking the Board for the opportunity and entrusting her with the EO role for the Board. She acknowledged Board staff on their support with her onboarding as well as assistance in preparing the Sunset Report and new Strategic Plan for the Board meeting with limited lead time.

EO Cornejo explained that one of her current focuses is to help the Board achieve their mission in seeking new and innovative ways to support the Board's consumers and licensees. She and Board staff are working closely with the Department of Consumer Affairs' Public Affairs Office to expand outreach and communications efforts.

EO Cornejo announced Ms. Melissa Zanetta as the new Chief of Licensing and Administration. She explained that Ms. Zanetta has served as the lead in Licensing for four of the six years that she has worked for the Board, she has a wealth of knowledge, and is an overall asset to the Board.

(8a) Update regarding Licensing, Enforcement, Examination and Wood Destroying Organism (WDO) statistics

The Board was referred to Agenda Item 8a in the meeting materials for detailed reports.

(8d) Legislative Update

EO Cornejo addressed four bills that passed and will become effective in the coming months. She explained the bill that would most affect Board operations was the Worker's Compensation Insurance requirement (SB 1064); and reported that implementation efforts are underway and going well.

(8b) Update regarding the Board's Budget and Fund Conditions

The Board was referred to Agenda Item 8b in the meeting materials for detailed reports.

(8d) Regulation Update

EO Cornejo addressed the following three regulation packages :

(1) Pesticide/Fumigation Application Notice Requirements (California Code of Regulations (CCR), Title 16, sections 1970.4, 1970.41, 1970.42, 1970.43)
This package includes revisions to forms in regulation and is set for review and approval later in the meeting.

(2) Electronic Submission of WDO Inspection and Completion Activity Report Form (CCR, Title 16, section 1996.3)
This package is on hold, pending the finalization of DCA's Biz Mod project, since the regulation language will rely on processes in the new application.

(3) Examination and Continuing Education Standards (CCR, Title 16, sections 1935.1, 1950, 1950.5, 1953, 1953.1, 1953.2, and 1970)
This package involves revisions necessary to comply with new U.S. EPA standards required by Code of Federal Regulations, Title 40, Part 171 – Certification of Pesticide Applicators. EO Cornejo explained that Board staff is actively coordinating with DCA's Legal Affairs Division, the Department of Pesticide Regulation, as well as the Department of Public Health, to produce language for this regulatory revision, however the current text is not yet ready for approval.

President Finley inquired about the decline in WDO reports (Agenda Item 8a) and its potential relation to the housing market. He asked if Board staff plans to address these concerns given the significance to the Board's revenue. EO Cornejo stated that she plans to meet with staff to generate possible solutions, including audits in that area.

No further Board comments; and no public comments.

Agenda Item 9. Review and Possible Approval of the SPCB 2022 Sunset Report for Submittal to the Legislature

EO Cornejo provided an overview of the sunset oversight process and how it pertains to the Board and its operations, as well as the proposed Sunset Report awaiting approval to submit to the legislature. The Board was referred to the report in the meeting materials for further detail.

Board member Paxson provided minor edits to the report.

President **Finley moved**, and Board member **Anderson seconded** the motion to approve the SPCB 2022 Sunset Report for submittal to the Legislature, and authorize the EO to make any necessary minor grammatical or non-substantive edits.

No Board or public comments.

Motion carried 5-0 by roll call vote.

Agenda Item 10. Review and Possible Approval of the SPCB 2023-2028 Strategic Plan

EO Cornejo presented the Board's 2023-2028 Strategic Plan as well as an overview of the strategic planning process. The Board was referred to Agenda Item 10 in the meeting materials to review the plan in detail. President Finley stated that he will work with EO Cornejo to complete the optional "Message from the President" section.

Board member **Paxson moved**, and Board member **Tengan seconded** the motion to approve the Board's 2023-2028 Strategic Plan with possible additions to reflect a message from the President.

No Board or public comments.

Motion carried 5-0 by roll call vote.

Agenda Item 11. Discussion and Possible Action to Consider Changes to Previously Proposed Text and Reauthorization of a Regular Rulemaking to Amend California Code of Regulations, Title 16, sections 1970.4 – Pesticide Disclosure requirement, 1970.41 – Pesticide Pre-Application Notice, 1970.42 – Pesticide Post-Application Notice Requirements, and 1970.43 – Reporting Death or Serious Injury.

EO Cornejo provided the Board with background on the proposed regulation. She explained that after the Board approved the text at the March 23, 2022, Board meeting, staff identified the need for substantive changes to the text, including to the format of which the Occupant's Fumigation Notice and Pesticide Disclosure Form appears. She stated that the form will be removed as an image in the regulation text, and a new form with the same information will be established and incorporated by reference. EO Cornejo requested the Board consider rescinding the prior approved text and approve the proposed text as amended.

Board member Paxson requested a brief written summary be provided along with these requests in the future. EO Cornejo acknowledged that a cover memo will be provided moving forward.

Board member Thrasher inquired about the industry's participation in the proposed text. EO Cornejo explained that once the text is approved and noticed, the package will enter a 45-day public comment period and that will be the industry's opportunity to provide input.

Board member Thrasher also inquired about background on the regulation package, specifically what initiated the changes to begin with. EO Cornejo deferred to the Board's Regulatory Counsel, Alex Millington, for response. Mr. Millington explained the rationale for changing the format of the form from "as described" in the text to a form incorporated by reference, citing that it helps to make the regulation easier to understand and allows for a simplified process in making future form revisions. He also outlined several instances where terminology in the text was modified to offer clarification, consistency, and alignment with Board practices. The Board's Chief of Enforcement, Kathleen (Kathy) Boyle, provided additional background and explained that this regulatory effort was largely driven by a recommendation from the Board's Structural Act Review Committee. The Committee consisted of industry and regulatory members, as well as representatives from the County Agricultural Commissioner's (CAC) Association who played a large part in this request since they are the primary enforcement agency for the provisions in the affected sections. She concluded by assuring the Board that there certainly was involvement from both the industry and regulatory stakeholders, and the CACs are aware of this rulemaking and are prepared for when it is formally noticed.

President **Finley moved**, and Board member **Thrasher seconded** the motion that the Board rescind prior proposed text and approve the proposed regulatory text and changes to Sections

1970.4, 1970.41, 1970.42, and 1970.43 as provided in the materials and direct staff to submit all approved text to the Director of the Department of Consumer Affairs and the Business, Consumer Services, and Housing Agency for review. If no adverse comments are received, authorize the Executive Officer to take all steps necessary to initiate the rulemaking process, make any technical or non-substantive changes to the package, and set the matter for hearing if requested. If no adverse comments are received during the 45-day comment period and no hearing is requested, authorize the Executive Officer to take all steps necessary to complete the rulemaking and adopt the proposed regulations at Section(s) 1970.4, 1970.41, 1970.42, and 1970.43 as noticed.

No further Board comments; and no public comments.

Motion carried 5-0 by roll call vote.

Agenda Item 12. Discussion and Possible Action to Initiate a Rulemaking to Amend California Code of Regulations, Title 16, sections 1950 – Continuing Education Requirements, 1950.5 – Hour Value System, 1953 – Approval of Activities, and 1970 – Standards and Records Requirements, and to Add California Code of Regulations, Title 16, sections 1935.1 – Examination Core Competencies, 1953.1 – In-Person Continuing Education Activities, and 1953.2 – Interactive Online and Webinar Continuing Education Activities.

At the request of EO Cornejo, the Board tabled this agenda item until the next Board Meeting.

Agenda Item 13. Annual Election of Board President and Vice President

Board member **Paxson moved**, and Board member **Thrasher seconded** to nominate Kyle Finley for Board President. Mr. Finley accepted the nomination.

No Board or public comments.

Motion carried 5-0 by roll call vote.

President **Finley moved**, and Board member **Paxson seconded** to nominate Yessenia Anderson for Board Vice President. Ms. Anderson accepted the nomination.

No Board or public comments.

Motion carried 5-0 by roll call vote.

Agenda Item 14. Future Agenda Items

Board member Paxson requested to discuss how Board staff evaluates convictions as they relate to the profession.

Board member Thrasher requested to discuss the Board's revenue sources and explore options to resolve the disparity in contributions of Branches 1 and 2, compared to Branch 3 (WDO stamps). President Finley suggested the Board may consider establishing sub-committee to review this concern.

Board member Anderson requested that future meetings include an item to discuss the status of the Strategic Plan as it progresses through implementation.

Board member Tengan requested that a future meeting address training course approvals in order to ensure exam integrity.

Agenda Item 15. Adjournment

President Finley adjourned the meeting at 1:50 p.m.

_____ _____

Kyle Finley, President Date

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STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7
EXECUTIVE OFFICER'S REPORT

AGENDA ITEM 7b
update regarding licensing, enforcement, examination and WDO statistics

AGENDA ITEM 7c
update regarding the Board's budget and fund conditions

AGENDA ITEM 7d
strategic plan update

AGENDA ITEM 7f
legislative/regulations update

AGENDA ITEM 7g
report on board-funded research projects

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MEMORANDUM

DATE	March 9, 2023
TO	Members of the Structural Pest Control Board
FROM	Sophia Cornejo, Executive Officer Structural Pest Control Board
SUBJECT	**Agenda Item #7: Executive Officer's Report**

a. Staffing Update

In November 2022, Vanessa O'Donnell, a Customer Services Representative (CSR) in Enforcement, left the Board. Her position was recently backfilled by Derek Enns who started with the Board on January 30, 2023.

In early January, Florencia Francisco, another CSR in Enforcement, left the Board - the recruitment to backfill this position is currently active.

The Board also hired Heather Jackson as the new Regulation & Legislative Program Specialist, who started on January 17, 2023.

b. Update regarding Licensing, Enforcement, Examination and WDO Statistics

The report included in the materials provides comparisons of licensing, enforcement, examination, and WDO statistics of the current fiscal year (FY 2021/23) and the previous fiscal year (FY 2021/22) for Fiscal Month 7 (January). Additionally, you will find the results from the most recent licensing survey conducted between October 27, 2022, and February 21, 2023.

c. Update regarding the Board's Budget and Fund Conditions

The attached fund condition statement (FCS) is based on the 2023-24 Governor's Budget and 2022-23 fiscal month 6 revenue and expenditure projections. It has been updated with 2021-22 prior year actual revenues and expenditures, which resulted in a fund balance reserve of $3.5 million (6.7 months).

Revenues: The Board began 2022-23 with a fund balance of $3.5 million and is projected to collect approximately $6.2 million in revenues with $5.2 million from WDO activity submittals and $935,000 in exam and license fees and license renewal fees. The Board projects revenues of $6.2 million and currently anticipates revenues to remain relatively stable in the future.

Expenditures: The Board's 2022-23 current year appropriation is $7.1 million. The FCS projects ongoing expenditures with a three percent (growth factor) increase per year. The FCS shows the Board fully expending its appropriation ongoing. Should the Board not fully expend its appropriation, any savings remains in the Fund for future use.

d. Strategic Plan Update

Board staff identified projected timelines for the tasks encompassed by the 5 goals outlined in the 2023-2028 Strategic Plan. Please refer to the Strategic Plan Update section of the materials for a detailed report of target completion dates and success measures. Since this is the first update post-implementation, the report is designed to provide detailed information. On an ongoing basis, Board staff plans to provide a higher-level status report as tasks/objectives approach completion.

e. Sunset Review Oversight Hearing

The Board's Sunset Review Oversight hearing is scheduled for March 14, 2023.

f. Legislative/Regulations Update

The 2022/23 Legislative summary included in the materials outlines bills from the current Legislative session that may impact structural pest activities, regulation, and/or operation of the Board.

The following provides an overview of the Board's pending regulatory efforts. Please refer to the attachment 'Rulemaking Update' for more detailed summaries and progress trackers.

1. Pesticide Application Notice *(Amending Title 16 of the California Code of Regulations sections 1970.4, 1970.41, 1970.42, and 1970.43)*
   On February 22, 2023, Board staff submitted regulatory documents, including the Board approved language, the Initial Statement of Reasons, fiscal impact analysis, and the Public Notice to the Department of Consumer Affairs' (DCA) Regulations Unit for review. Board staff continues to work closely with the DCA Regulations Unit in the next phase of the rulemaking process.
   - **No action is being requested at this meeting.**

2. Certification and Training *(Amending Title 16 of the California Code of Regulations sections 1935, 1950, 1950.5, 1952, 1953, 1953.1, 1953.2, and 1970)*
   On January 23, 2023, preliminary language was submitted to DCA Regulations Unit for review. Board staff continues to work in collaboration with the DCA Regulations Unit, the Department of Pesticide Regulation, and the Department of Public Health to draft language aimed to address the new federal standards related to Certification of Pesticide Applicators.
   - **No action is being requested at this meeting.**

g. Report on Board Funded Research Projects

Dr. Niamh Quinn - University of California, Agriculture and Natural Resources
"Investigation of Rodenticide Pathways in an Urban System Through the Use of Isotopically Labelled Bait"

Status: Phase 4 (Pilot field study and analyses of samples) is currently underway almost 500 scats have been collected for testing. See Dr. Quinn's status report and cover letter in the meeting materials.

Total Contract Amount: $ 329,750
Amount Expended to Date: $ 143,163
Contract Expiration Date: December 31, 2023

Neil Tsutsui - University of California, Berkeley
"Diet and Colony Structure of Two Emerging Invasive Pest Ants"

Status: Research completed. Presenting final report and findings on March 9, 2023

Total Amount Expended: $ 145,165

Dr. Andrew Sutherland - University of California, Agriculture and Natural Resources
"Evaluation of bait station system efficacy for reduced-risk subterranean termite management in California"

Status: Research completed. Presenting final report and findings on March 9, 2023

Total Amount Expended: $ 190,425

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STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7b

EXECUTIVE OFFICER'S REPORT

UPDATE REGARDING LICENSING, ENFORCEMENT, EXAMINATION AND WDO STATISTICS

Structural Pest Control Board

Statistical Comparison of current vs. previous FY for FM7 (January)

	CURRENT FY 2022/23			PREVIOUS FY 2021/22	
	FM 7 Total	FY Total (July-Jan)	FM +/(-)	FM 7 Total	FY Total (July-Jan)
EXAMINATIONS					
Field Representatives Scheduled	389	2,816	(120)	509	3,041
Field Representatives Examined	286	2,389	(16)	302	2,139
Field Representatives Passed	140	1,334	2	138	1,172
Field Representatives Failed	146	1,055	(18)	164	967
Field Representatives Pass Rate	**49%**	**56%**	**3%**	**46%**	**55%**
Operators Scheduled	59	389	2	57	367
Operators Examined	56	348	15	41	322
Operators Passed	35	175	13	22	143
Operators Failed	21	173	2	19	179
Operator Pass Rate	**63%**	**50%**	**9%**	**54%**	**44%**
Applicators Scheduled	180	1,829	(87)	267	2,044
Applicators Examined	191	1,480	16	175	1,498
Applicators Passed	120	853	3	117	942
Applicators Failed	71	627	13	58	556
Applicators Pass Rate	**63%**	**58%**	**-4%**	**67%**	**63%**
LICENSING					
Field Representative Licenses Issued	122	1,150	(4)	126	1,066
Operator Licenses Issued	13	117	(3)	16	95
Company Registrations Issued	14	138	(9)	23	155
Branch Office Registrations Issued	3	25	0	3	21
Change of Registered Company Officers	3	19	2	1	19
Change Of Qualifying Manager	10	70	0	10	67
Applicator Licenses Issued	104	864	(29)	133	926
Duplicate Licenses Issued	74	562	11	63	537
Upgrade Present License	21	183	(4)	25	160
Change of Status Processed	87	875	8	79	356
Address Change	134	862	9	125	893
Address Change (Principal Office)	23	142	8	15	166
Address Change (Branch Office)	0	4	0	0	2
Transfer of Employment Processed	182	1,295	31	151	1,735
Change of Name	4	22	4	0	5
Change of Registered Company Name	1	8	0	1	7
License Histories Prepared	2	31	(3)	5	52
Down Grade Present License	67	583	(7)	74	458
Total	**864**	**6,950**	**14**	**850**	**6,720**

Structural Pest Control Board

Statistical Comparison of current vs. previous FY for FM7 (January)

	CURRENT FY 2022/23			PREVIOUS FY 2021/22	
	FM 7 Total	FY Total (July-Jan)	FM +/(-)	FM 7 Total	FY Total (July-Jan)
LICENSES/REGISTRATIONS IN EFFECT					
Field Representative	14,853		*703*	14,150	
Operator	4,426		*62*	4,364	
Company Registration	3,308		*29*	3,279	
Branch Office	479		*6*	473	
Licensed Applicator	7,118		*338*	6,780	
Total	**30,184**		***1,138***	**29,046**	
LICENSES/REGISTRATIONS ON PROBATION					
Companies	17		*1*	16	
Licensees	96		*(19)*	115	
Total	**113**		***(18)***	**131**	
LICENSES RENEWED					
Operator	0	159	*0*	0	309
Field Representative	0	833	*0*	0	1,034
Applicator	0	237	*0*	0	410
Total	**0**	**1,229**	***0***	**0**	**1,753**
LICENSES/REGISTRATIONS CANCELLED					
Operator	1	10	*(4)*	5	185
Field Representative	11	113	*(2)*	13	86
Company Registration	18	132	*(3)*	21	115
Branch Office	6	24	*3*	3	7
Applicator	7	68	*5*	2	14
Total	**43**	**347**	***(1)***	**44**	**407**
LICENSES DENIED					
Licenses			*(1)*	1	7
Total	**0**	**4**	***(1)***	**1**	**7**
INVESTIGATIVE FINES PROCESSED					
Specialist Fines	$2,550	$28,319	*($2,825)*	$5,375	$70,095
Civil Penalties	$0	$12,307	*0*	$0	$182
County Fines	$7,450	$48,425	*1,800*	$5,650	$49,285
Total	**$10,000**	**$89,051**	***(1,025)***	**$11,025**	**$119,562**

Structural Pest Control Board

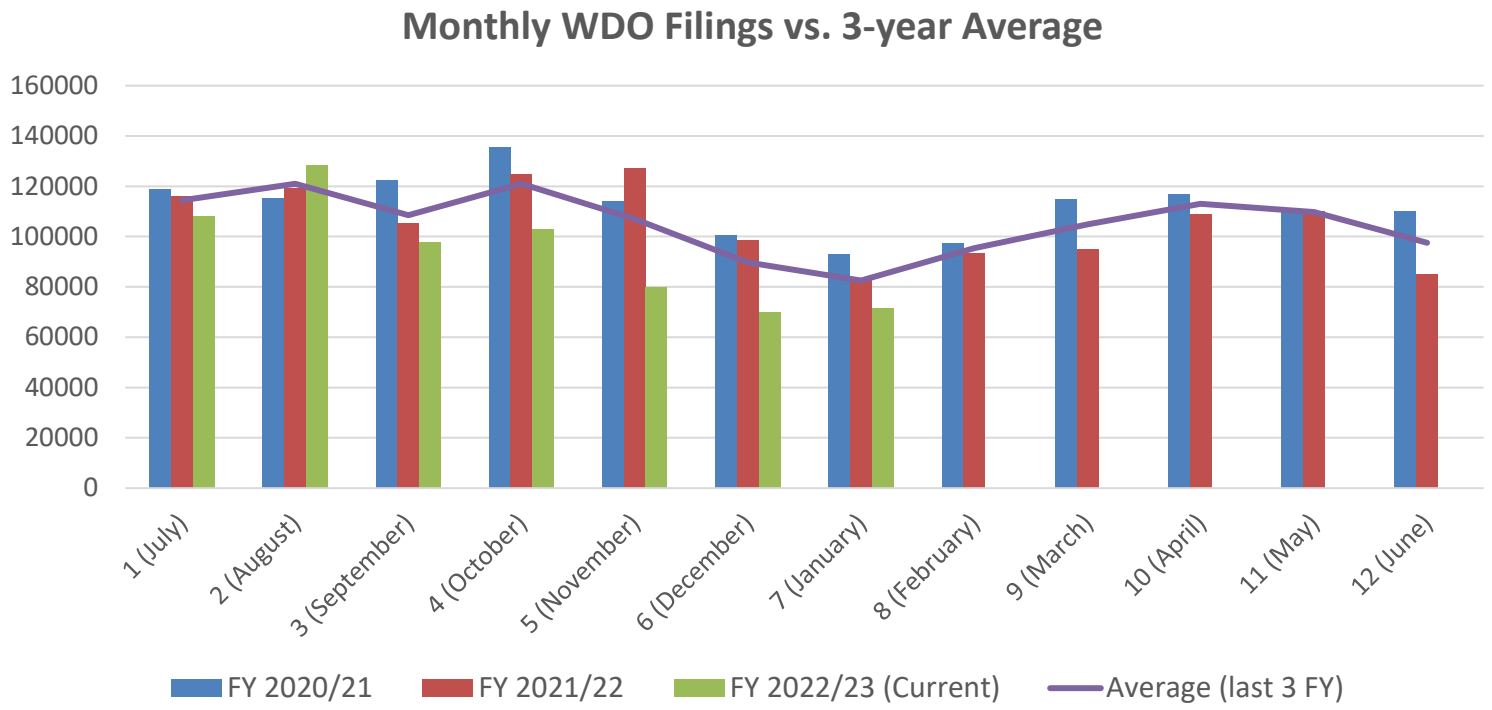
Statistical Comparison of current vs. previous FY for FM7 (January)

	CURRENT FY 2022/23			PREVIOUS FY 2021/22	
	FM 7 Total	FY Total (July-Jan)	FM +/(-)	FM 7 Total	FY Total (July-Jan)
STAMPS SOLD					
Pesticide	7,052	47,174	(1,118)	8,170	48,400
Total	**7,052**	**47,174**	**(1,118)**	**8,170**	**48,400**
SEARCHES MADE					
Public	36	261	(26)	62	364
Complaints	10	32	4	6	48
Total	**46**	**293**	**(22)**	**68**	**412**
BOND / INSURANCE / WORKER'S COMPENSATION (WC)					
Bonds Processed	6	52	1	5	47
Insurance Processed	227	1,571	3	224	1,537
Restoration Bonds Processed	0	0	0	0	0
Suspension Orders	10	120	(35)	45	119
Cancellations Processed	30	239	16	14	189
Change of Bond/Insurance	27	142	11	16	150
WC Updates	122	122	122	0	0
WC Exemptions	116	116	116	0	0
WC Cancellations	0	0	0	0	0
WC Suspensions	0	0	0	0	0
WC Lapse	0	0	0	0	0
WC Company Change	0	0	0	0	0
Total	**538**	**2,362**	**234**	**304**	**2,042**

Structural Pest Control Board

Statistical Comparison of current vs. previous FY for FM7 (January)

	CURRENT FY 2022/23		PREVIOUS FY 2021/22
Wood Destroying Organisms (WDO) Activities Filed			
FM1 (July)	108,300	*(7,700)*	116,000
FM2 (August)	128,400	*9,000*	119,400
FM3 (September)	97,600	*(7,700)*	105,300
FM4 (October)	102,800	*(21,900)*	124,700
FM5 (November)	79,700	*(47,300)*	127,000
FM6 (December)	70,000	*(28,500)*	98,500
FM7 (January)	**71,600**	*(11,400)*	**83,000**
FM8 (February)	*pending*		93,500
FM9 (March)	*pending*		95,000
FM10 (April)	*pending*		109,000
FM11 (May)	*pending*		110,000
FM12 (June)	*pending*		85,200
YTD Total	**658,400**	***(608,200)***	**1,266,600**



Structural Pest Control Board

Licensing Unit Survey Results

Response cards are sent to licensees, registered companies, and applicants receiving the following services: Licensure, Renewal of License, Upgrade/Downgrade License, Change of Qualifying Manager, Bond/Insurance, Company Registration, Transfer of Employment, Change of Address, and Examination.

Total Survey Cards Distributed: 172
Total Responses Received: 10
Survey Period: October 27, 2022 – February 21, 2023

QUESTION	Yes	No	n/a
1. Was staff courteous?	**100%**	0%	0%
2. Did staff understand your question?	**100%**	0%	0%
3. Did staff clearly answer your question?	**100%**	0%	0%
4. Did staff promptly return your telephone call?	**100%**	0%	0%
5. Did staff efficiently and promptly handle your transaction?	**90%**	0%	**10%**
6. How long did it take to complete its action on your file?	**17 days (Average)**		

Survey Type	Response
Company Registration	20 days (3 responses)
Operator License	23 days (1 response)
Applicator License	1 day (1 response)
Total Reponses	**5**

Comments:

- Thank you & Happy New Year, SPCB!
- Helpful.
- Helpful and quick response, courteous and professional.
- Mr. Munoz is always prompt, efficient and professional.
- Thanks Frank Munoz very much for getting my application done.
- Thank you!

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7c

EXECUTIVE OFFICER'S REPORT

UPDATE REGARDING THE BOARD'S BUDGET AND FUND CONDITIONS

0775 - Structural Pest Control Fund Analysis of Fund Condition
(Dollars in Thousands)
2023-24 Governor's Budget W_FM6

Prepared on 2.1.2023

	Actual 2021-22	CY 2022-23	BY 2023-24	BY +1 2024-25
BEGINNING BALANCE	$ 2,814	$ 3,529	$ 3,483	$ 2,435
Prior Year Adjustment	$ 301	$ 0	$ 0	$ 0
Adjusted Beginning Balance	$ 3,115	$ 3,529	$ 3,483	$ 2,435
REVENUES, TRANSFERS AND OTHER ADJUSTMENTS				
Revenues				
4121200 - Delinquent fees	$ 6	$ 7	$ 6	$ 6
4127400 - Renewal fees	$ 271	$ 237	$ 243	$ 243
4129200 - Other regulatory fees	$ 5,180	$ 5,273	$ 5,621	$ 5,621
4129400 - Other regulatory licenses and permits	$ 695	$ 698	$ 666	$ 666
4141200 - Sales of Documents	$ 17	$ 1	$ 0	$ 0
4143500 - Miscellaneous Services to the Public	$ 1	$ 1	$ 1	$ 1
4163000 - Income from surplus money investments	$ 15	$ 17	$ 39	$ 17
4171400 - Escheat of unclaimed checks and warrants	$ 8	$ 9	$ 0	$ 0
4172500 - Miscellaneous revenues	$ 1	$ 1	$ 0	$ 0
Totals, Revenues	$ 6,194	$ 6,244	$ 6,576	$ 6,554
Operating Transfers To General Fund 0001 (AB84)	$ -201	$ 0	$ 0	$ 0
Totals, Transfers and Other Adjustments	$ -201	$ 0	$ 0	$ 0
TOTALS, REVENUES, TRANSFERS AND OTHER ADJUSTMENTS	$ 5,993	$ 6,244	$ 6,576	$ 6,554
TOTAL RESOURCES	$ 9,108	$ 9,773	$ 10,059	$ 8,989
Expenditures:				
1111 Department of Consumer Affairs Regulatory Boards, Bureaus, Divisions (State Operations)	$ 5,138	$ 5,822	$ 7,057	$ 7,269
9999 Statewide Pro Rata	$ 340	$ 367	$ 466	$ 466
9892 Supplemental Pension Payments (State Operations)	$ 101	$ 101	$ 101	$ 101
TOTALS, EXPENDITURES AND EXPENDITURE ADJUSTMENTS	$ 5,579	$ 6,290	$ 7,624	$ 7,836
FUND BALANCE				
Reserve for economic uncertainties	$ 3,529	$ 3,483	$ 2,435	$ 1,153
Months in Reserve	6.7	5.5	3.7	1.7

NOTES:
1. Assumes workload and revenue projections are realized in BY +1 and ongoing.
2. Expenditure growth projected at 3% beginning BY +1.

0168 - Structural Pest Control Reseach Fund Analysis of Fund Condition
(Dollars in Thousands)

Prepared on 2.1.2023

2023-24 Governor's Budget W_FM6 Projections

	Actual 2021-22	CY 2022-23	BY 2023-24	BY +1 2024-25
BEGINNING BALANCE	$ 794	$ 1,117	$ 968	$ 1,138
Prior Year Adjustment	$ 0	$ 0	$ 0	$ 0
Adjusted Beginning Balance	$ 794	$ 1,117	$ 968	$ 1,138
REVENUES, TRANSFERS AND OTHER ADJUSTMENTS				
Revenues				
4129200 - Other regulatory fees	$ 163	$ 166	$ 156	$ 156
4163000 - Income from surplus money investments	$ 4	$ 6	$ 17	$ 19
Totals, Revenues	$ 167	$ 172	$ 173	$ 175
TOTAL RESOURCES	$ 961	$ 1,289	$ 1,141	$ 1,313
Expenditures:				
1111 Department of Consumer Affairs Regulatory Boards, Bureaus, Divisions (State Operations)	$ -156	$ 321	$ 3	$ 3
TOTALS, EXPENDITURES AND EXPENDITURE ADJUSTMENTS	$ -156	$ 321	$ 3	$ 3
FUND BALANCE				
Reserve for economic uncertainties	$ 1,117	$ 968	$ 1,138	$ 1,310

NOTES:
Assumes workload and revenue projections are realized in BY +1 and ongoing.
Expenditure growth projected at 3% beginning BY +1.

0399 - Structural Pest Control Education and Enforcement Fund Analysis of Fund Condition
(Dollars in Thousands)
2023-24 Governor's Budget W_FM6 Projections

Prepared on 2.1.2023

	Actual 2021-22	CY 2022-23	BY 2023-24	BY +1 2024-25
BEGINNING BALANCE	$ 1,207	$ 1,437	$ 1,508	$ 1,639
Prior Year Adjustment	$ 157	$ 0	$ 0	$ 0
Adjusted Beginning Balance	$ 1,364	$ 1,437	$ 1,508	$ 1,639
REVENUES, TRANSFERS AND OTHER ADJUSTMENTS				
Revenues				
4129200 - Other regulatory fees	$ 407	$ 408	$ 437	$ 437
4163000 - Income from surplus money investments	$ 6	$ 7	$ 25	$ 26
4171400 - Escheat of unclaimed checks and warrants	$ 0	$ 0	$ 0	$ 0
Totals, Revenues	$ 413	$ 415	$ 462	$ 463
TOTAL RESOURCES	$ 1,777	$ 1,852	$ 1,970	$ 2,102
Expenditures:				
1111 Department of Consumer Affairs Regulatory Boards, Bureaus, Divisions (State Operations)	$ 314	$ 314	$ 314	$ 323
9892 Supplemental Pension Payments (State Operations)	$ 4	$ 4	$ 4	$ 4
9900 Statewide General Administrative Expenditures (Pro Rata) (State Operations)	$ 22	$ 26	$ 13	$ 13
TOTALS, EXPENDITURES AND EXPENDITURE ADJUSTMENTS	$ 340	$ 344	$ 331	$ 340
FUND BALANCE				
Reserve for economic uncertainties	$ 1,437	$ 1,508	$ 1,639	$ 1,762
Months in Reserve	50.1	54.7	57.8	62.8

NOTES:
Assumes workload and revenue projections are realized in BY +1 and ongoing.
Expenditure growth projected at 3% beginning BY +1.

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7d

EXECUTIVE OFFICER'S REPORT

STRATEGIC PLAN UPDATE

Goal 1: Licensing, Examinations, and Continuing Education

Objective 1.1: Implement the Connect system to improve transparency, customer experience, and efficiency of the examination and licensing processes.

Success Measure: Examination and licensing processes are online.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
1.1.1	Identify projected timelines for completion of licensing implementation.	Q1 2023
1.1.2	Review legislation and regulations to reflect new platform processes.	Q1 2024
1.1.3	Identify SMEs to work internally with OIS.	Q2 2023
1.1.4	Identify internal contacts to cite on website.	Q1 2024
1.1.5	Identify internal processes for help with Connect.	Q1 2024
1.1.6	Ensure that development is addressing board specific needs.	Q4 2023
1.1.7	Identify/map different business processes.	Q1 2024
1.1.8	Create procedures for the new Connect platform.	Q1 2024
1.1.9	Create training plans for internal users.	Q1 2024
1.1.10	Create training plans for external users.	Q1 2024
1.1.11	Participate in continued testing and adjustment as needed.	Q1 2024
1.1.12	Partner with PCOC (Pest Control Operators of California) and other interested parties to notify of changes of new platform. (See 4.7)	Q4 2023
1.1.13	Update board website to include FAQs.	Q4 2023
	End Date	**Q1 2024**

Goal 1: Licensing, Examinations, and Continuing Education

Objective 1.2: Evaluate the process of auditing licensees' continuing education.

Success Measure: Decrease in audit processing time and increase in number of audits completed.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
1.2.1	Review current processes.	Q1 2023
1.2.2	Identify problematic auditing processes (including contact information).	Q1 2023
1.2.3	Explore new or existing auditing processes to determine efficacy.	Q2 2023
1.2.4	Collaborate with Organizational Improvement Office (OIO) on processes.	Q3 2023
1.2.5	Explore automated options in Connect for the submission and confirmation of CE certificates and rosters.	Q4 2023
1.2.6	Recommend new auditing processes, if needed.	Q4 2023
1.2.7	Create/update auditing procedures to reflect new process.	Q4 2023
1.2.8	Provide training for internal staff, providers, and licensees.	Q4 2023
1.2.9	Provide outreach on new EPA standards.	Q4 2023
	End Date	**Q1 2026**

Goal 1: Licensing, Examinations, and Continuing Education

Objective 1.3: Evaluate and restructure the continuing education approval process of providers and course materials to ensure quality continuing education is provided to licensees.

Success Measure: Decrease in violations.

Number	Major Tasks	Completion Date
	Start Date	**Q3 2023**
1.3.1	Review current processes.	Q3 2023
1.3.2	Identify problematic approval processes (including contact information).	Q3 2023
1.3.3	Review course materials standards.	Q3 2023
1.3.4	Evaluate how EPA changes will affect the approval process and standards (check DPR also).	Q4 2023
1.3.5	Explore new or existing approval processes among other boards and other agencies to determine efficacy.	Q4 2023
1.3.6	Collaborate with Organizational Improvement Office (OIO) on processes.	Q4 2023
1.3.7	Recommend new approval processes, if needed.	Q2 2024
1.3.8	Educate the providers on the approval process.	Q2 2024
	End Date	**Q1 2026**

Goal 1: Licensing, Examinations, and Continuing Education

Objective 1.4: Research the feasibility of separating out branch 2 and branch 3 applicator examination and licenses to make applicator licenses more relevant to each trade.

Success Measure: Recommendation made to the Board.

Number	Major Tasks	Completion Date
	Start Date	**Q3 2023**
1.4.1	Collaborate with OPES on potential process of separating the two branches.	Q1 2024
1.4.2	Identify costs and barriers of separating.	Q2 2024
1.4.3	Identify ways to provide assistance for exam takers.	Q3 2024
1.4.4	Make a recommendation to the Board (include other possible options if separating is not feasible, such as taking only field rep exam?).	Q4 2024
	End Date	**Q4 2024**

Goal 2: Enforcement

Objective 2.1: Increase positive proactive education and enforcement to improve the integrity and relationship with the industry.

Success Measure: Have events scheduled ongoing (at least three events per year).

Number	Major Tasks	Completion Date
	Start Date	**Q3 2023**
2.1.1	Work with PCOC to attend their events in different regions of California – send specialist and perhaps staff (districts looking for speakers). One coming March 2023.	Q2 2024
2.1.2	Create meet and greet events in regions, invite companies, take questions – maybe include licensing & enforcement staff (monthly meet and greet?).	Q4 2024
2.1.3	Generate a report of new companies (monthly, quarterly), have a specialist introduce themselves; Look into the idea of inside staff doing this with field offices, give contact info – identify who needs extra support (those would go to a specialist).	Q3 2024
2.1.4	Incorporate meet and greets aligned with board meetings when board meets in person.	Q4 2024
2.1.5	Follow up on new regs via field staff and internal staff (email blasts?).	Q4 2024
2.1.6	Find ways to elicit feedback from companies.	Q4 2025
2.1.7	Comment cards/surveys – also send to companies – for general satisfaction.	Q4 2026
2.1.8	Develop and offer virtual workshop.	Q4 2027
	End Date	**Q4 2027**

Goal 2: Enforcement

Objective 2.2: Increase the working relationships with county agricultural commissioners and the Department of Pesticide Regulations (DPR) to reduce incidents of unlawful pest control services.

Success Measure: Have meetings scheduled ongoing with county ags and/or DPR; internal training created and scheduled.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
2.2.1	Reaching out to DPR - to help drive SCP participation (update enforcement letter?), establish contacts, share ideas.	Q1 2025
2.2.2	CAC (county ag commissioner) has five area groups– attend virtual meetings, introduce collaboration tone and ideas, sharing contacts.	Q1 2025
2.2.3	Create meetings or ways to introduce all parties across SPCB and DPR.	Q2 2025
2.2.4	Meet with county ags to get an idea of what they do, meet to find ways to work together, establish contacts, set tone (SCP - Structural Civil Penalties for more counties?).	Q1 2025
2.2.5	Clarify roles of DPR and county ags and Board (an internal training for CSRs, attend annual structural training at least once).	Q4 2025
2.2.6	Create an internal training for CSRs about roles, ask/encourage/require them to attend annual structural training at least once.	Q4 2025
	End Date	**Q1 2026**

Goal 2: Enforcement

Objective 2.3: Seek authority to suspend and/or (with cause) revoke a license for non-compliance of a citation (unpaid citation or fine) to accelerate compliance and reduce outstanding fines.

Success Measure: Legislative proposal submitted to legislature.

Number	Major Tasks	Completion Date
	Start Date	**Q2 2023**
2.3.1	Develop draft language.	Q2 2023
2.3.2	Work with Leg Council, DCA Leg office and leg committee staff to seek an author for the legislative proposal.	Q4 2023
2.3.3	Determine fiscal impact to the legislative proposal.	Q3 2023
2.3.4	Include in Sunset Review as a new issue (in 2026).	Q1 2024
2.3.5	Seek approval from Board for legislative proposal.	Q3 2023
	End Date	**Q1 2024**

Goal 2: Enforcement

Objective 2.4: Implement the Connect system to improve transparency, customer experience, and efficiency of the enforcement processes.

Success Measure: Enforcement processes are online.

Number	Major Tasks	Completion Date
	Start Date	**Q3 2024**
2.4.1	Ensure that development is addressing board specific needs.	Q3 2026
2.4.2	Identify SMEs to work internally with OIS.	Q3 2024
2.4.3	Create procedures for the new Connect platform.	Q1 2025
2.4.4	Create training plans for external users.	Q1 2025
2.4.5	Create training plans for internal users.	Q1 2025
2.4.6	Partner with DPR and CACs and other interested parties to notify of changes of new platform.	Q3 2026
2.4.7	Participate in continued testing and adjustment as needed.	Q3 2026
2.4.8	Update board website to include new process for complaint submission and FAQs.	Q3 2026
2.4.9	Identify internal contacts to cite on website.	Q3 2026
2.4.10	Identify internal processes for help with Connect.	Q4 2025
2.4.11	Review legislation and regulations to reflect new platform processes (see also 3.5).	Q1 2025
	End Date	**Q3 2026**

Goal 3: Legislation, Regulations, and Policy

Objective 3.1: Incorporate new EPA required standards into regulation to comply with federal standards.

Success Measure: Regulations are finalized, communicated to licensees, and all Branch 1 licensees have been tested.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
3.1.1	Continue to work with DPR staff and DCA Legal Counsel regarding the Board's Certification & Training regulation package to meet EPA standards.	Q3 2023
3.1.2	Continue the rulemaking process to finalize the Board's Certification & Training regulation package to meet EPA standards.	Q4 2023
3.1.3	Coordinate with the Office of Professional Examination Services (OPES) to revise examinations to meet the new C&T requirements.	Q1 2024
3.1.4	SPCB conducts outreach and provides guidance to SPCB licensing population and CE providers.	Q3 2024
3.1.5	SPCB re-tests existing Branch 1 (fumigation) licensees using new examinations reflecting revised competency standards.	Q2 2025
	End Date	**Q4 2026**

Goal 3: Legislation, Regulations, and Policy

Objective 3.2: Provide legislative and regulatory updates in the Board's newsletter to improve communication and awareness to consumers and licensees.

Success Measure: Newsletter is relaunched with leg/reg updates.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
3.2.1	Create new Act Review Committee (see 3.5, 5.6).	Q2 2023
3.2.2	Address suggested changes from previous Act Review Committee (see also 3.5).	Q3 2023
3.2.3	Relaunch Board's newsletter (see 4.5).	Q1 2024
3.2.4	Board staff to work with Act Review Committee on possible Leg/Reg updates that can be included in the newsletter.	Q1 2024
3.2.5	Assign staff member to coordinate the newsletter column.	Q1 2023
	End Date	**Q1 2024**

Goal 3: Legislation, Regulations, and Policy

Objective 3.3: Re-examine the fee structure to ensure a consistent and balanced revenue stream.

Success Measure: Recommendation made to the Board.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
3.3.1	Research feasibility of contracting with outside vendor instead of DCA Budget Office to conduct a fee study.	Q2 2024
3.3.2	Conduct fee study (if outside vendor, obtain contract).	Q4 2024
3.3.3	Develop recommendation to the Board based on results of fee study.	Q1 2025
3.3.4	Recommend to the Board possible changes to the Board's fee structure.	Q1 2025
	End Date	**Q1 2025**

Goal 3: Legislation, Regulations, and Policy

Objective 3.4: Explore alternatives to foster improved communication with other agencies and the legislature to improve timely tracking of sensitive or competing legislation.

Success Measure: Contacts established and monthly EO report sent.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
3.4.1	Collaborate with CSLB to assist with answering questions regarding home inspectors.	Q1 2025
3.4.2	Identify who (DPR, Fish & Wildlife, CSLB, SOS, FTB. etc.) to communicate and collaborate with.	Q1 2024
3.4.3	Ensure that board meeting recordings are highlighted on the Board's social media accounts (see 5.4).	Q2 2024
3.4.4	Ensure board staff is properly identifying and tracking leg proposals and outside rulemaking that effect the board and providing updates.	Q2 2023
3.4.5	Ensure board staff is regularly updating the board's website to reflect updates to legislation and regulations.	Q3 2023
3.4.6	Catch Legislative Supplement publication up to date.	Q2 2023
3.4.7	Ensure monthly EO report reflects updates to legislation and regulation.	Q4 2023
	End Date	**Q1 2025**

Goal 3: Legislation, Regulations, and Policy

Objective 3.5: Review, and revise as necessary, language in the Board's act and regulations to improve clarity.

Success Measure: Act Review Committee re-established, and regulations updated as needed.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
3.5.1	Ask the Board President to establish new Act Review Committee.	Q2 2023
3.5.2	Address suggested changes from previous Act Review Committee.	Q3 2024
3.5.3	Board staff work closely with the Act Review Committee to determine updates needed to the BPC and CCRs.	Q3 2024
3.5.4	Leg/Reg Specialist to work closely with SMEs on minor clean-up regulation package.	Q4 2024
3.5.5	Recommend to the Board, as needed, possible CCR changes for approval to begin the rulemaking process.	Q4 2024
	End Date	**Q1 2026**

Goal 4: Outreach and Communication

Objective 4.1: Continue to communicate and further educate consumers (including such topics as controlled chemicals and general education of the Board's role) to help with health, safety, and consumer protection.

Success Measure: Website and ListServ refreshed, and newsletter relaunched.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
4.1.1	Visit at in-person events (see 4.6).	Q4 2024
4.1.2	Relaunch the Board's newsletter (see 4.5).	Q1 2024
4.1.3	Continue to work closely with DCA Communications (OPA) team on social media campaign.	Q1 2024
4.1.4	Review and refresh the digital brochures on website.	Q1 2024
4.1.5	Review and refresh links on website to studies being done.	Q1 2024
4.1.6	Incorporate external agency contact list with roles on website (including such topics as pesticides).	Q2 2024
4.1.7	Selecting information from outside websites to link to on Board's website.	Q4 2024
4.1.8	Update the consumer information tab on website (see 5.4).	Q3 2024
4.1.9	Work with OIS to break out separate topics via ListServ for consumers.	Q4 2023
4.1.10	Promote ListServ.	Q4 2023
	End Date	**Q4 2024**

Goal 4: Outreach and Communication

Objective 4.2: Set expectations for license applicants to improve success rate and reduce the number of unlicensed practitioners.

Success Measure: Website continuously updated to reflect updated resources for applicants.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2024**
4.2.1	Outline process for updates to materials of all kinds including notifying of suggested materials.	Q3 2024
4.2.2	Review and refresh newly issued company registration packets (PR introduction package).	Q4 2024
4.2.3	Work with OPES to keep exam resources list up to date.	Q1 2026
4.2.4	Ensure that staff update website to reflect changes OPES made to candidate handbook.	Q2 2024
4.2.5	Bulletin or highlight on main webpage about Branch 1 EPA changes.	Q4 2024
4.2.6	Update website on how to start a company with timeframes (licensing performance measures, etc.).	Q2 2024
	End Date	**Q1 2026**

Goal 4: Outreach and Communication

Objective 4.3: Expand communication channels and opportunities for the exam subject matter expert (SME) pool (including incentivizing participation) to raise awareness of SME opportunities.

Success Measure: Increased pool of SMEs.

Number	Major Tasks	Completion Date
	Start Date	**Q2 2023**
4.3.1	Explore options to incentivize participation (higher pay, additional CE hours, etc.).	Q4 2025
4.3.2	Begin social media posts and increase email blasts regarding SME opportunities.	Q4 2025
4.3.3	Research best practices from other Boards/Bureaus.	Q4 2023
4.3.4	Include information in Board's Newsletter regarding SME opportunities.	Q4 2023
4.3.5	Send information regarding SME opportunities directly to individual licensees.	Q4 2023
4.3.6	Collaborate with trade associations (PCOC) on opportunities to raise awareness of SME opportunities including networking.	Q4 2024
4.3.7	Include this as a part of the new company calls that inside staff will be making include SME opportunities to new PR calls.	Q4 2027
4.3.8	Explore options for reducing the number of days for exam development to reduce travel burden and explore virtual options.	Q4 2025
4.3.9	Coordinate with OPES to schedule around the busy season.	Q4 2024
4.3.10	Explore options of having OPES travel to SoCal.	Q4 2025
	End Date	**Q4 2027**

Objective 4.4: Proactively distribute educational materials about enforcement to registered companies and licensees to encourage positive interactions with the Board.

(Objective omitted, will be completed through objective 2.1 – Increase positive proactive education and enforcement to improve the integrity and relationship with the industry.)

Goal 4: Outreach and Communication

Objective 4.5: Design and implement a quarterly newsletter program to increase communication and strengthen the relationship between the Board and the industry.

Success Measure: First newsletter distributed.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
4.5.1	Designate staff to relaunch and implement newsletter.	Q1 2023
4.5.2	Review newsletters from other DCA entities.	Q2 2023
4.5.3	Explore topics to be written (i.e., staff intros, standing items, Q&As, Do's & Don'ts, Consumer focus, disciplinary actions, new/updated rules & regulations, SME recruitment, Board stats, etc.).	Q3 2023
4.5.4	Set schedule for newsletter.	Q3 2023
4.5.5	Work with Office of Publications, Design & Editing.	Q4 2023
4.5.6	Distribute on multiple platforms (hard copies, social media, website, etc.).	Q4 2024
4.5.7	Add newsletter as a topic of interest for email blasts.	Q4 2024
	End Date	**Q1 2024**

Goal 4: Outreach and Communication

Objective 4.6: Increase [Board] participation at in-person events to create positive awareness of the Board and establish relationships.

Success Measure: Outreach calendar established, and first in-person event attended.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
4.6.1	Explore logistics and feasibility of in-person event attendance.	Q1 2024
4.6.2	Collaborate with outside entities to create partnerships (include trainings).	Q1 2024
4.6.3	Create outreach calendar for all in-person meetings.	Q3 2023
4.6.4	Collaborate with DCA entities to create partnerships.	Q1 2024
	End Date	**Q4 2024**

Goal 4: Outreach and Communication

Objective 4.7: Create a strategy to educate licensees and consumers on the new Connect system to ease the transition to an online platform.

Success Measure: Creation of communication plan.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
4.7.1	Review best practices from other Boards/Bureaus.	Q4 2023
4.7.2	Explore options for visual demonstrations of processes (YouTube videos linked from website).	Q4 2023
4.7.3	Partner with PCOC (Pest Control Operators of California), county ag, and other interested parties to notify of changes of new platform.	Q1 2024
4.7.4	Create materials.	Q1 2024
4.7.5	Utilize all outreach methods (social media, newsletter, website, email, etc.) to inform about new online platform.	Q1 2024
	End Date	**Q2 2024**

Goal 4: Outreach and Communication

Objective 4.8: Establish relationships with realtor associations to educate realtors on the role of the Wood Destroying Organism (WDO) reports.

Success Measure: Contacts made, and materials developed.

Number	Major Tasks	Completion Date
	Start Date	**Q4 2023**
4.8.1	Collaborate with Department of Real Estate for better enforcement with both entities and to clarify authority.	Q3 2025
4.8.2	Identify common/important issues and processes to be addressed.	Q1 2025
4.8.3	Provide education to licensees on real estate related matters (NPMA-33 form, WDO report).	Q4 2025
4.8.4	Identify associations for potential partnership.	Q2 2025
4.8.5	Develop and distribute materials for licensees.	Q4 2025
	End Date	**Q4 2025**

Goal 5: Organizational Effectiveness

Objective 5.1: Continue to monitor, and adjust if necessary, staffing levels to achieve the Board's mandated goals and objectives.

Success Measure: Vacancy rate lower; workload analysis and cross-training completed.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
5.1.1	Conduct a Workload Analysis to determine optimal staffing levels for the Board.	Q4 2025
5.1.2	If Workload Analysis identifies an increase in staffing levels is needed, complete a Budget Change Proposal.	Q4 2026
5.1.3	Conduct cross-training.	Q4 2023
5.1.4	Designate a communications/social media staff position.	Q1 2023
	End Date	**Q4 2027**

Goal 5: Organizational Effectiveness

Objective 5.2: Collaborate with DCA's Human Resources division to reclassify the Structural Pest Control Board Specialist positions to increase recruitment and retention.

Success Measure: Positions are re-classified.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
5.2.1	Explore/determine feasibility in re-classing the SPCB Specialists.	Q4 2023
5.2.2	Collaborate with other DCA entities that have similar classification issues/specialized classifications.	Q4 2023
5.2.3	Review the reclass proposal that was submitted to HR by prior management and work with HR to determine why it was denied.	Q4 2023
5.2.4	Explore Minimum Qualification of being licensed by the Board (make it a Desirable Qualification).	Q4 2023
5.2.5	Work with HR on classification options for the SPCB Specialists.	Q4 2024
5.2.6	Submit a new request to HR to reclass the SPCB Specialists.	Q4 2025
5.2.7	Do outreach on exams for vacant positions.	Q4 2027
	End Date	**Q4 2027**

Goal 5: Organizational Effectiveness

Objective 5.3: Create a succession plan to retain institutional knowledge within the Board.

Success Measure: Succession plan has been created; policies and procedures updated.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
5.3.1	Document processes, create/update procedure manuals.	Q4 2027
5.3.2	Identify key positions that are critical to business continuity.	Q4 2025
5.3.3	Evaluate and determine what competencies are needed to be successful in the key positions.	Q4 2026
5.3.4	Document the knowledge that key position individuals possess before they leave the Board.	Q4 2027
5.3.5	Conduct cross-training.	Q4 2027
5.3.6	Consider annual one-on-one staff meeting or encourage IDPs.	Q4 2023
5.3.7	Create a succession plan.	Q4 2027
	End Date	**Q4 2027**

Goal 5: Organizational Effectiveness

Objective 5.4: Update and maintain content on the website to effectively communicate to consumers, licensees, and applicants.

Success Measure: Website is consistently updated.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
5.4.1	Explore other DCA entity websites for ideas.	Q2 2023
5.4.2	Ensure all pages, forms, brochures are up to date and loading without errors - Update the consumer information tab on website.	Q4 2024
5.4.3	Highlight hot topics and key items on website (including new videos and educational material, board meeting recordings & notices).	Q4 2024
5.4.4	Explore a chat feature on the website.	Q1 2024
5.4.5	Establish and roll out social media accounts.	Q1 2023
5.4.6	Implement Connect system via links from website.	Q4 2023
5.4.7	Create and maintain tracking mechanism to make sure updates are being made as needed.	Q1 2023
5.4.8	Ensure accessibility and ADA compliance.	Q2 2023
5.4.9	Add processing time estimates where appropriate.	Q3 2023
	End Date	**Q2 2024**

Goal 5: Organizational Effectiveness

Objective 5.5: Develop and maintain communication between board members and staff to create a collaborative and shared partnership.

Success Measure: Creation of monthly EO report.

Number	Major Tasks	Completion Date
	Start Date	**Q1 2023**
5.5.1	Encourage staff to read Board member admin manual, board member roles and guidelines. (Send to staff to inform them)	Q1 2023
5.5.2	Create a monthly EO Report to all Board Members (licensing, enforcement, admin, staff updates, etc.).	Q3 2023
5.5.3	Encourage and provide opportunities for staff to attend Board and Committee Meetings.	Q4 2023
5.5.4	Increase staff participation at Board and Committee Meetings (rather than EO providing all updates).	Q4 2023
5.5.5	Explore holding a meet and greet with Board members and staff.	Q3 2023
5.5.6	Maintain a board roster for staff, and one for management - encourage staff to review website info about Board members.	Q2 2023
	End Date	**Q4 2023**

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7f

EXECUTIVE OFFICER'S REPORT

LEGISLATIVE/REGULATIONS UPDATE

2022/23 Legislative Summary
Structural Pest Control Board

SB 813 — **Structural Pest Control: Notice to Registrar**

Author(s): Roth (S), Berman (A)
Affected Section(s): CA Bus. & Prof. Code § 8571
Status: 2/17/23 Introduced. Read first time. To Com. on RLS. for assignment. To print.

Summary: This legislative action would require a registered company to notify the registrar in writing within 7 business days, instead of the current 10 days, when the licensed operator ceases to be connected with the company. This bill would also provide that no reimbursement is required by this act for a specified reason.

Vote: majority — Appropriation: no
Fiscal Committee: yes — Local Program: yes

AB 307 — **Structural Fumigation Enforcement Program**

Author(s): Chen (A)
Affected Section(s): CA Bus. & Prof. Code § 8698.6
Status: 2/9/23 Referred to Com on E.S. & T.M.
1/26/23 Introduced Assembly. 1/27/23 From printer. May be heard in committee February 26.

Summary: This legislative action extends the sunset on the Structural Fumigation Enforcement Program (SFEP), from January 1, 2024, to January 1, 2029.

Vote: majority — Appropriation: no
Fiscal Committee: yes — Local Program: no

SENATE BILL No. 813

Introduced by Senator Roth
(Principal coauthor: Assembly Member Berman)

February 17, 2023

An act to amend Section 8571 of the Business and Professions Code, relating to structural pest control.

LEGISLATIVE COUNSEL'S DIGEST

SB 813, as introduced, Roth. Structural pest control: notice to registrar.

Existing law establishes the Structural Pest Control Board and the registrar of the Structural Pest Control Board, within the Department of Consumer Affairs, and requires the board to license and regulate structural pest control operators, as specified. Existing law makes a violation of provisions regulating structural pest control operators a misdemeanor. Existing law requires a registered company to notify the registrar in writing within 10 days when the licensed structural pest control operator who is designated as the qualifying manager for the company ceases to be connected with the company. Existing law suspends the registration of a company that fails to notify the registrar within that 10-day period, and requires the registration to be reinstated upon the filing of an affidavit with the registrar by a representative of the company, as provided.

This bill would instead require a registered company to notify the registrar in writing within 7 business days when the licensed operator ceases to be connected with the company. Because an affidavit is required for the reinstatement of the company's registration, and this bill would expand the application of an existing crime of perjury by modifying the above-described reporting requirement, this bill would create a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 8571 of the Business and Professions Code is amended to read:

8571. If the licensed operator who is designated as the qualifying manager for a registered company ceases for any reason whatsoever to be connected with the company, the company shall notify the registrar in writing within ~~10~~ *seven business* days from such cessation. If the notice is given the registration shall remain in force for a reasonable length of time, to be determined by rules of the board, during which period the company must submit to the registrar in writing the name of another qualified, or to be qualified, qualifying manager to replace the qualifying manager who has ceased to be connected with it, and who shall qualify as such within the time allowed by rules and regulations of the board.

If the company fails to notify the registrar within the ~~10-day~~ *seven business day* period, or fails to replace with a qualifying manager within the period fixed by the regulations of the board, at the end of the period the registration shall be ipso facto suspended. The registration shall be reinstated upon the filing of an affidavit, executed by a representative of the company, and filed with the registrar, to the effect that the qualifying manager who ceased to be connected with the company has been replaced by another operator who is authorized by this chapter to act in such capacity, and that ~~such~~ *the* operator has not had ~~his or her~~ *their* license suspended or revoked or that ~~he or she~~ *the operator* has not been connected with a company which has had its registration suspended or revoked.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or

infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

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ASSEMBLY BILL No. 307

Introduced by Assembly Member Chen

January 26, 2023

An act to amend Section 8698.6 of the Business and Professions Code, relating to structural fumigation.

LEGISLATIVE COUNSEL'S DIGEST

AB 307, as introduced, Chen. Structural fumigation enforcement program.

Existing law, until January 1, 2024, establishes a structural fumigation enforcement program that requires the Director of the Department of Pesticide Regulation to provide oversight for the program. Existing law requires any company performing a structural fumigation in the Counties of Los Angeles, Orange, or Santa Clara to pay the county agricultural commissioner a specified fee for each fumigation conducted at a specific location. Existing law authorizes the commissioners of those counties to perform increased structural fumigation, inspection, and enforcement activities to be funded by the required fee. Existing law requires these funds to be paid to the county and used for the sole purpose of funding enforcement and training activities directly related to the structural fumigation program.

This bill would extend the operation of these provisions to January 1, 2029.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. Section 8698.6 of the Business and Professions Code is amended to read:

8698.6. This chapter shall remain in effect only until January 1, ~~2024,~~ *2029,* and as of that date is repealed.

O

DEPARTMENT OF CONSUMER AFFAIRS
Structural Pest Control Board
2023 RULEMAKING CALENDAR

SCHEDULE A: NO PROPOSED REGULATIONS IMPLEMENTING STATUTES ENACTED DURING THE YEAR 2022

SCHEDULE B: PROPOSED REGULATIONS IMPLEMENTING STATUTES ENACTED PRIOR TO THE YEAR 2022

Subject: Pesticide Application Notice

California Code of Regulations Title and Sections Affected: 16 CCR 1970.4, 1970.41, 1970.42, 1970.43, and 1970.44

Statute(s) Being Implemented: Business and Professions Code Sections 8525, 8538

Responsible Agency Unit: Structural Pest Control Board

Contact Person and Phone Number:
Sophia Cornejo/Heather Jackson, 916-561-8712

Projected Notice Publication Date: June 10, 2023

Projected Public Hearing Date: Upon request

Projected Adoption by Your Agency Date:

Projected To OAL for Review Date: October 12, 2023

Status from 2022 Calendar: Board adopted text on March 23, 2022, and revised same in October 2022. Revised text was presented for vote at the October 2022 Board meeting. The Board expects to submit the regulation in 2023.

NEXT

Subject: Certification and Training

California Code of Regulations Title and Sections Affected: 16 CCR 1935, 1950, 1950.5, 1953, 1953.1, 1953.2, 1970

Statute(s) Being Implemented: Business and Professions Code Sections 8525, 8593

Federal Register EPA 40 CFR Part 171

Responsible Agency Unit: Structural Pest Control Board

Contact Person and Phone Number:
Sophia Cornejo/Heather Jackson, 916-561-8712

Projected Notice Publication Date: July 25, 2023

Projected Public Hearing Date: Upon request

Projected Adoption by Your Agency Date: January 2024

Projected To OAL for Review Date: October 16, 2023 (for effective date January 1, 2024)

Status from 2022 Calendar: Text under development. The Board expects to submit the regulation in 2023.

Rulemaking Update

March 9, 2023

Pesticide Application Notice

California Code of Regulations Title and Sections Affected: 16 CCR 1970.4, 1970.41, 1970.42, and 1970.43
Statute(s) Being Implemented: Business and Professions Code Sections 8525, 8538

Summary: This regulatory proposal clarifies and/or updates instances of unclear and/or outdated terminology, provides post-application pesticide notice guidelines or several possible application scenarios, and requires registered companies to provide, within 24 hours, specified information about pesticide use to any person who requests such information. Additionally, this proposal adds a requirement that any death or serious injury be reported to the County Agricultural Commissioner in the County where the application took place. This requirement is added because the County Agricultural Commissioner's frequently conduct street level enforcement in coordination with the Structural Pest Control Board. Lastly, Form 43M-48, the Occupants Fumigation Notice and Pesticide Disclosure (OFN), has been redesigned to address the problem of the current version being outdated and containing irrelevant information. Additionally, the proposal is to remove the image of the OFN from regulation and incorporate the form by reference. The new OFN is being updated to more closely mirror the language described in Business and Professions Code (BPC) section 8538(a)(1-3).

Initial Phase:

Final Phase:

Orange: Current Status **Blue**: Completed **Gray**: Remaining Steps

Rulemaking Update

March 9, 2023

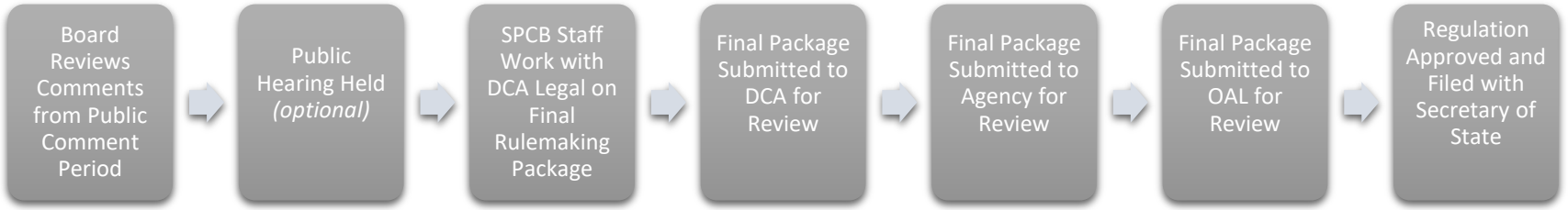
Certification and Training

California Code of Regulations Title and Sections Affected: 16 CCR 1935, 1950, 1950.5, 1952, 1953, 1953.1, 1953.2, and 1970
Statute(s) Being Implemented: Business and Professions Code Sections 8525, 8593, and Federal Register EPA 40 CFR Part 171

Summary: This package revisions necessary to comply with new U.S. EPA standards required by Code of Federal Regulations, Title 40, Part 171 – Certification of Pesticide Applicators. Board staff is actively coordinating with DCA's Legal Affairs Division, the Department of Pesticide Regulation, and the Department of Public Health, to produce language for this regulatory revision. **Preliminary language was submitted to DCA Regulations Unit for review on January 23, 2023.**

Initial Phase:

Final Phase:



Orange: Current Status **Blue**: Completed **Gray**: Remaining Steps

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7g

EXECUTIVE OFFICER'S REPORT

REPORT ON BOARD-FUNDED RESEARCH PROJECTS

Dr. Niamh Quinn
University of California, Agriculture & Natural Resources

Neil Tsutsui
University of California, Berkeley

Dr. Andrew Sutherland
University of California, Agriculture & Natural Resources

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UCCE, Orange County

February 2023

Structural Pest Control Board
2005 Evergreen St,
Sacramento,
CA 95815

Project Update: February 2023
PI: Niamh Quinn
Project: Investigation of Rodenticide Pathways in an Urban System Through the Use of Isotopically Labelled Bait

Dear Structural Pest Control Board,

This project contains a number of phases, most of which have either been completed or are in progress. The isotopically-labelled rodenticide has been developed and tested for quality control purposes. It has been administered to rats by our research partners, Liphatech Inc, at two different feeding regimes, lethal and sublethal.

The methods for detection of rodenticide in hair and feces have been successfully developed. Anticoagulant rodenticides have both been successfully detected in hair and feces samples. Due to the success of these methods, we have acquired additional funding to develop methods for the detection of both Cholecalciferol and Bromethalin. This extra step appears to have great timing considering the fact that both Bromethalin and Cholecalciferol have now been lumped in with the anticoagulants in the current Proposed Interim Decisions from EPA.

Travel to the National Wildlife Research Center in Utah was required by the PI to make meatballs from the isotopically labelled rats as the coyotes would not feed on the whole rats. This was hugely successful and all animals in the sublethal trial were successfully completed.

Unfortunately, there was a catastrophic freezer failure at NWRC where all remaining rats in the lethal trail were destroyed and this part of the experiment was not completed. However, due to the successful detection of the isotopically labelled rodenticide in the feces of these coyotes, we know now that the methods are successful and while the completion of the lethal trial could have provided us with additional info, it is technically not necessary to prove the concept.

Currently, the pilot study to detect the isotopically-labelled bait in the field is underway and we are collecting scat at an unbelievable rate. Due to the success of scat collection, it looks like this project will finally conclude in December 2023.

Even before the conclusion of this project, the successes and implication of the results are immense. With the recent Proposed Interim Decisions from EPA and the current reevaluation of the SGARs at

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UCCE, Orange County

California's DPR, having a tool that can successfully test the success of mitigation measures is so valuable. Ideally, DPR, and EPA will use the techniques we have developed to establish data-driven mitigation measures instead of the stab-in-the-dark measures that we are more accustomed to.

I realize that this project has taken much longer than proposed and I want to than the Board for their patience and confidence in this project. I really believe that the successes in this project are remarkable and I am really excited to move research forward with all we have learned and developed to better pest management in the future.

Sincerely,
Niamh Quinn
Human-Wildlife Interactions Advisor

7601 Irvine Blvd., Irvine, CA 92618 (949) 301-9182

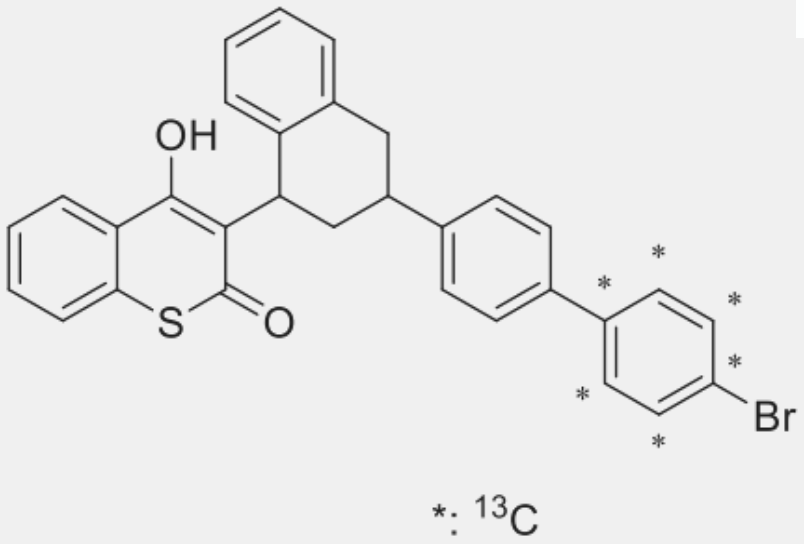
SPCB REPORT

UC ANR

PROJECT STATUS

Investigation of Rodenticide Pathways in an Urban System Through the Use of Isotopically Labelled Bait

02



ABOUT OUR PROJECT

This study will investigate which species are exposed to a rodenticide in a food web with the coyote as the apex predator, after a second-generation rodenticide bait is applied in bait stations to target roof rats. A University of California Research and Extension Center site will serve as a model system in which as many individual animals as possible will be passively monitored for the presence of a stable isotope marker in a specially-formulated bait. The data collected from the field sites will be used to construct exposure pathways, based on the proportion of positively marked individuals of each species and the length of time the marker is detected in them.

03

PHASES

The project involved multiple phases:

- Phase 1- Isotopically labelled bait design
- Phase 2- Labelling of rats
- Phase 3- Administering rats to captive coyotes
- Phase 4- Pilot field study and analyses of samples

THE PROBLEMS

04

A Brief Description About the Problems

Unfortunately, this project has been plagued with multiple delays and issues. Initially, we had significant delays with getting ethical approval from the university which is a requirement. However, once that was acquired, both phases 1 and 2 were swiftly completed. There were some brief issues with flooding and getting some of our samples analyzed at the NWRC Research Facility in Colorado. Phase 3 also faced some issues. Covid 19 delayed the start. The coyotes were extremely uncooperative and did not feed on the rats. This required a lot of trouble shooting and also a trip to the NWRC Research Facility in Utah in order to make the rats into meatballs which were a huge success. However, a freezer failure caused the damage off all the lethally exposed rat samples. Phase 4 is currently underway and almost 500 scats have been collected for testing.

THE GOOD NEWS

05

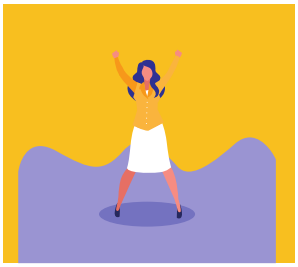
Rats labelled with isotopically labelled DFN

The manufacturing of an isotopically labeled rodenticide had never been done before. We were very successful in the manufacture of this compound and the development of the bait by our research partners Liphatech.

Rats were successful administered the isotopically labelled rodenticide in Milwaukee (48 sublethally and 32 lethally).

Captive coyotes accept isotopically labeled DFN (finally)

It took some work to get the coyotes to finally eat the bait but we were successful in completing the fist half of this work and all coyotes in the sublethal trial completed all the feedings required.



Successful detection of isotopically labeled DFN in captive coyotes

This is the biggest success of this project thus far. We are so excited to report that we have not only developed a bait, we have also developed methods to detect this bait up the food chain. The implications of this success are huge.

MEET THE TEAM

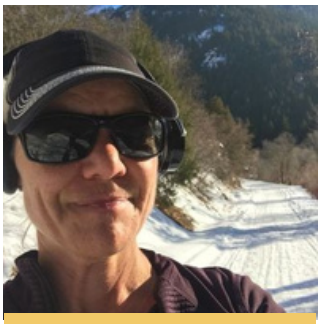
06

Niamh Quinn
UCANR

Katie Swift
Liphatech

Carolyn Day
UCANR

Steve Volker
USDA NWRC



Julie Young
USDA NWRC

Thank you to the Structural Pest Control Board for their patience with this project. Although we have faced many challenges, we are so exicted for the results thus far and we are looking forward to presenting all the results to the board at the conclusion of the project.

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949 301-9182 x1004

www.UCscurri.com

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7g

EXECUTIVE OFFICER'S REPORT

REPORT ON BOARD-FUNDED RESEARCH PROJECTS

Dr. Niamh Quinn
University of California, Agriculture & Natural Resources

Neil Tsutsui
University of California, Berkeley

Dr. Andrew Sutherland
University of California, Agriculture & Natural Resources

Final Report:
Diet and Colony Structure of Two Emerging Invasive Pest Ants

Background

California is a hub of trade, both globally and domestically. As a consequence, non-native organisms are frequently introduced to the state and, on occasion, become widespread and damaging invasive species. As these populations grow unchecked, they can become colonists of both residential and commercial structures. In California, many of our most obvious structural pests have originated in this way. Prominent examples include the German cockroach (*Blatella germanica*), the American cockroach (*Periplaneta americana*), the Oriental cockroach (*Blatta orientalis*), the black rat (e.g. roof rat or house rat: *Rattus rattus*), the brown rat (e.g. sewer rat or Norway rat: *Rattus norvegicus*), and the Argentine ant (*Linepithema humile*). Numerous other introduced species are significant agricultural pests (e.g. some fruit flies, and many moth and beetle larvae) and disease vectors (e.g. several species of mosquitoes).

Controlling the impact and spread of newly introduced species is challenging, particularly because the growth of knowledge about these organisms is generally slow. In the domain of structural pest control, this creates a major barrier to the discovery and advancement of tools and strategies for pest control. Here, we report the results of our research on the basic biology of two relatively unstudied introduced ants that are spreading in California: the brown rover ant (*Brachymyrmex patagonicus*) and the Moorish sneaking ant (*Cardiocondyla mauritanica*).

Colony composition and structure

Composition. Understanding the composition of ant colonies is essential for understanding how they behave, their capacity for ecological dominance, and their rates and patterns of spread. Some ant colonies, called **monogyne**, possess only a single queen. Monogyne colonies typically grow at a moderate rate and can produce new queens that disperse long distances to initiate new colonies far from their natal locations. **Polygyne** colonies, on the other hand, possess multiple queens, which allows the colony to grow at a rapid pace and attain high population densities. Under normal circumstances, polygyne colonies spread only locally, as new queens remain within their natal colony. However, human activities, such as the transport of plants or garbage, can move viable propagules and introduce colony fragments to widely distributed locations.

To understand the colony composition of the introduced rover ants and sneaking ants, we excavated and censused colonies of both species in northern and southern

California (Figure 1). In the brown rover ant (*Brachymyrmex*), we very rarely collected a reproductive (dealate) queen, and when we did, we never found more than one, suggesting that this species has a monogyne reproductive structure (n=24 colonies). In contrast, in colonies of the sneaking ant (*Cardiocondyla*), we commonly found multiple queens (mean queen number=6.7 per colony; n=14 colonies), indicating a polygyne reproductive system. In addition, in both species, we commonly found unmated (winged alate) queens, often in large numbers, indicating a capacity for both dispersal and colony growth.

Figure 1. The composition of colonies of the brown rover ant (left; n = 24 colonies) and the sneaking ant (right; n = 14 colonies).

Colony structure. The spatial size of an ant colony is a fundamental determinant of how it interacts with the surrounding ecosystem. Colonies that occupy larger areas also possess larger numbers of ants. As a result, larger colonies exert a stronger influence on other species in the area – consuming more resources, competing more effectively, and reducing biodiversity. When the surrounding ecosystem is the human-built environment, large colonies are more abundant and noticeable, and are more difficult to control or eradicate. In addition, when insecticidal treatments of large colonies occur at a scale smaller than the colony itself, these treatments may only "punch a hole" in the colony, which is then easily repopulated from the periphery.

The spatial structure of ant colonies exists along a continuum. Spatially restricted colonies that are comprised of only one or few nests are classified as **multicolonial**. At the other extreme, species that form extremely large colonies with no colony boundaries across wide geographic areas are classified as **unicolonial**.

To determine the colony structure of the rover ant and the sneaking ant, we performed behavioral assays that quantified aggression between ants collected from different locations. When ants belong to the same colony, they do not display aggression toward each other, but when ants from different colonies are paired together, they do show aggression.

Surprisingly, across 51 behavioral assays performed for the rover ant, we nearly always saw some level of aggression (mean aggression score = 3.43 ± 0.13, on a scale from 1 – 4), even between colonies that were located only meters apart. This indicates that the rover ant possesses a multicolonial colony structure, which is extremely rare for invasive ant species.

In contrast, we never saw aggression displayed by the sneaking ant (aggression score always = 1) across 50 behavioral assays. Thus, the sneaking ant appears to form widespread supercolonies, similar to that seen in the invasive Argentine ant.

Implications for pest control. These results, in addition to revealing some of the basic biology of these two ant species, also have practical implications for pest control. The rover ant (*Brachymyrmex patagonicus*) appears to be monogyne (single queen colonies) and multicolonial. Efforts to control this species are likely to be successful if the single reproductive queen can be eradicated. However, because the landscape will be occupied by numerous separate colonies, treatments (particularly with insecticidal baits) will need to be widely distributed, as toxicants will only be moved a short distance by workers. Because the rover ant is already widespread and abundant, and a serious pest in many locations, these data are likely to be relevant as pest control professionals customize their approaches to target this species.

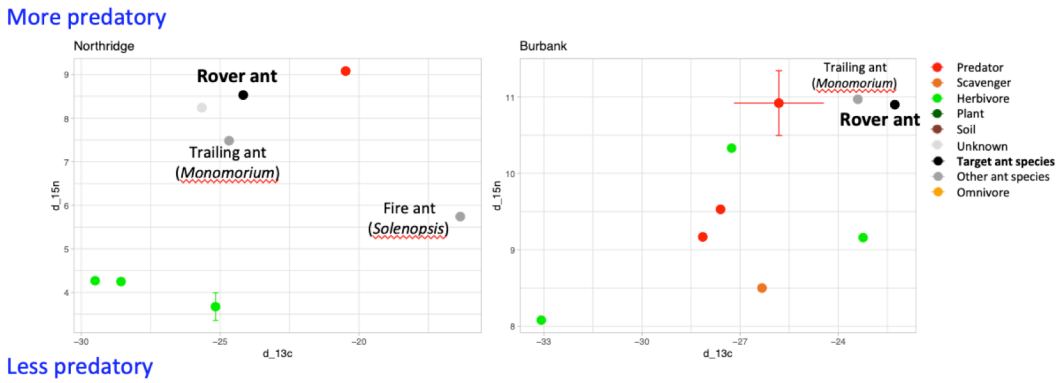
In contrast, the sneaking ant (*Cardiocondyla mauritanica*) has a very different reproductive organization and colony structure. These colonies each have many reproductive queens (polygyne), and thus, will require considerable effort to successfully eradicate. However, because sneaking ants also possess a unicolonial colony structure, workers are likely to distribute insecticides from bait stations across a fairly broad area, thus increasing the efficacy of such approaches. It is also worth noting that this species, true to its common name, was extremely furtive and cryptic in the field, making it difficult to find and collect. The low abundance and relative rarity of this species suggest that it is unlikely to become a significant structural or agricultural pest.

Food preferences in the field and lab

Different ant species vary in their food and nutritional preferences. Homoptera-tending ants often prefer carbohydrate (sugary) food, more predatory ants can prefer more protein-rich (high amino acid) foods, and other species will be more omnivorous. These dietary choices reveal basic information about the biology of the respective species, and are of obvious importance to any bait-based pest control strategy. Here, we examined the trophic ecology of the rover ant and sneaking ant in the field by quantifying stable isotope enrichment, then tested dietary preferences in laboratory choice tests.

Stable isotope analysis. Most of the common elements in nature have forms that differ in mass. These "stable isotopes" are non-radioactive forms of elements that occur naturally in soils and organisms. The ratios of stable isotopes of nitrogen and carbon within the tissues of organisms vary depending on their diet, and are therefore useful for understanding their trophic biology. Specifically, accumulation of the ^{15}N isotope increases with higher trophic position, thus indicating whether the ants are more herbivorous, omnivorous, or carnivorous. In addition, different types of plants use different isotopes of carbon for photosynthesis, so animals that eat these plants have carbon isotope signatures that reveal information about the plants at the base of the food chain.

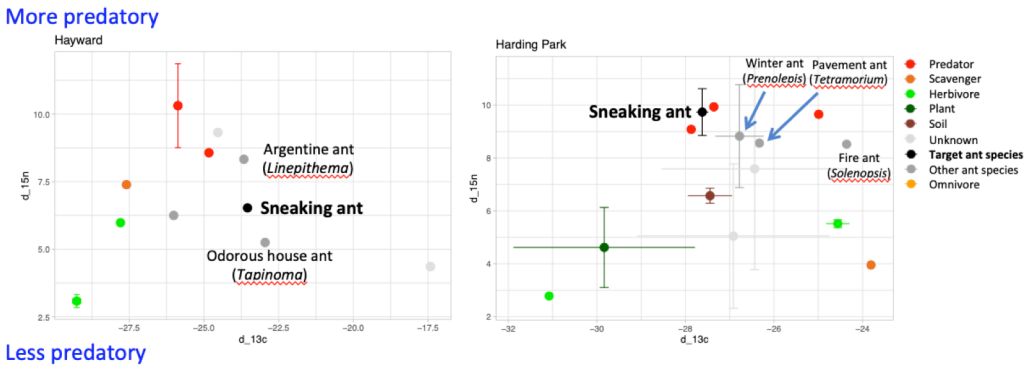
Figure 2. Stable isotope analyses of the brown rover ant. ^{15}N isotope enrichment is shown on the Y-axis. ^{13}C isotope enrichment is shown on the X-axis (but is not informative for the current study).



To estimate the stable isotope ratios, we collected the target ant species as well as other ant species, plants, and known predatory insects to use as references for the target ant species. Samples were analyzed on a CHNOS Elemental Analyzer with an IsoPrime100 mass spectrometer using Pee Dee Belemnite (PDB) as the standard. Our analyses showed that the rover ant had high ^{15}N enrichment (Figure 2), indicating that it occupies a trophic position characteristic of predatory species (or scavenging on dead animals). The sneaking ant showed similarly high ^{15}N enrichment at one site (Harding Park), but was more intermediate at a second site (Hayward)(Figure 3). Compared to other ant species from the same locations, the rover ant and the sneaking ant were equally or more predatory.

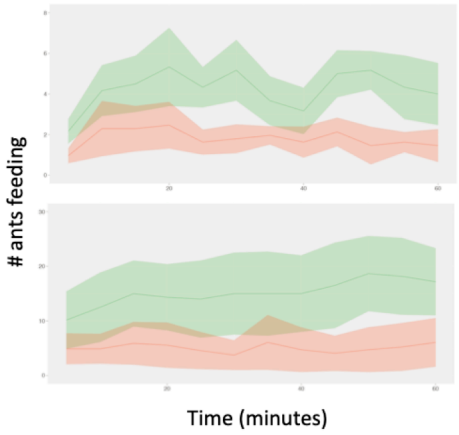
Dietary choice experiments. We next complemented our analyses of diet in the field with laboratory tests of food preference for both species.

Figure 3. Stable isotope analyses of the sneaking ant. ^{15}N isotope enrichment is shown on the Y-axis. ^{13}C isotope enrichment is shown on the X-axis (but is not informative for the current study).



For the rover ant, we collected colonies from the field, and first tested their preference for 10% sucrose versus 5% pure amino acid mixture in a two-way choice test. We recorded the number of ants feeding at the respective foods every five minutes for one hour, and replicated this six times (only one time per day) for each colony. We performed this experiment using three different colonies, but one colony was unresponsive (did not feed), so results are only shown for the two colonies that did exhibit feeding behavior in the lab. In this choice test, the rover ants clearly preferred the sugar solution to the amino acid solution (Figure 4).

Figure 4. Feeding preference of the rover ant in the lab for 10% sucrose (green) versus 5% amino acids (red), every 5 minutes for one hour. Each panel shows the experiment for one ant colony, each replicated six times.



Following this experiment, we performed a dietary experiment with water versus 10% sucrose versus wet cat food as the choices. We introduced wet cat food as a protein source to determine if the avoidance of amino acids in the previous experiment could be overcome by using a more complex protein source (which also includes some lipids and other nutrients). We also introduced a water control in this experiment to control for the potential confounding variable of thirst, since this test now included food presented in both solid and liquid form. Despite the rich and complex protein source represented by the cat food in this experiment, all six rover ant colonies still exhibited a clear and significant preference for the sugar solution in all cases (Figure 5).

Next, we performed a more focused dietary preference study to determine if there

Figure 5. Feeding preference of the rover ant in the lab for water (purple) versus 10% sucrose (green) versus wet cat food (red), every 5 minutes for one hour. Each panel shows the experiment for one ant colony, each replicated six times.

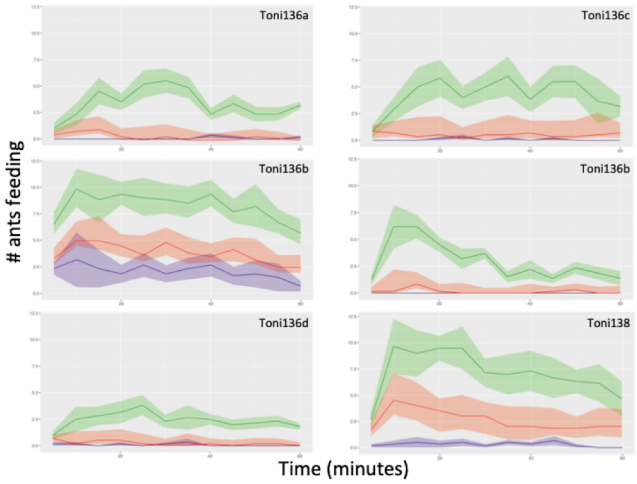


Figure 6. Feeding preference of the rover ant in the lab for sucrose at three different concentrations: 5% (light green), 15% (medium green), and 25% (dark green). Quantified every 5 minutes for one hour. Each panel shows the experiment for one ant colony, each replicated six times.

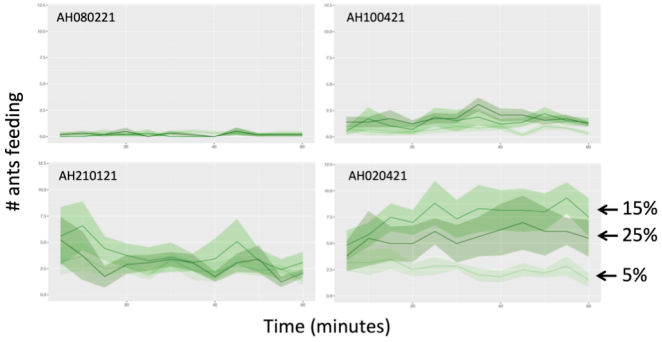
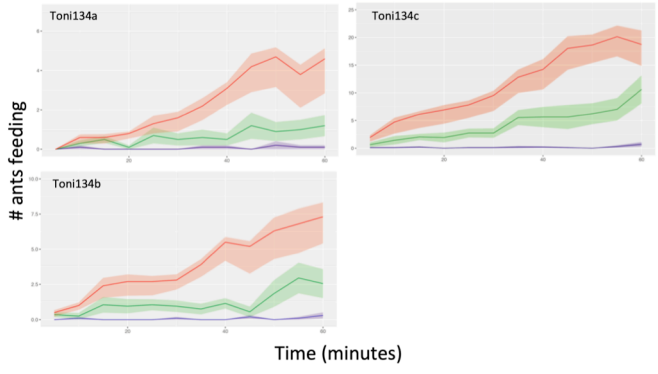


Figure 7. Feeding preference of the sneaking ant for water (purple) versus 10% sucrose (green) versus wet cat food (red), every 5 minutes for one hour. Each panel shows the experiment for one ant colony, each replicated 10 times.



is an optimal sugar concentration preferred by rover ants. In a preference test using three different sucrose concentrations (5%, 15%, 25%), we found no significant difference in feeding activity (Figure 6).

Finally, we also performed dietary choice experiments on the sneaking ants (*Cardiocondyla mauritanica*). We first attempted to test water versus 10% sucrose versus cat food, as above, using six laboratory colonies and replicating the one-hour trials ten times per colony. Half of these colonies were unresponsive in the lab setting, sending out no foragers to the food that was presented. The results of the preference experiments for the three colonies that did respond are shown in Figure 7. In all cases, when the sneaking ants did feed, they showed a significant preference for protein over sugar or the water control.

Because the sneaking ant colonies performed poorly in the choice test, and generally appeared inactive and unresponsive in the lab setting, we chose to not pursue the

dietary choice experiments further with this species. As their common name suggests, the sneaking ant was extremely furtive and shy in the lab setting, and we concluded that it would be difficult to perform highly replicated, robust dietary choice experiments for a range of different comparisons for this species.

Overall conclusions

The brown rover ant (*Brachymyrmex patagonicus*) and the sneaking ant (*Cardiocondyla mauritanica*) are both introduced ants with similar histories, and both appear to be spreading in California. However, our studies of their basic biology reveals that these are two very different species in nearly every other respect.

The rover ant is already a serious structural pest in some parts of the United States (especially Arizona and parts of southern California). We report here that colonies appear to be monogyne (single queen) and multicolonial (spatially restricted colonies), which has implications for treatment and control. Efforts to control this species are likely to be successful if the single reproductive queen within each colony can be eradicated. However, because the landscape will be occupied by numerous separate colonies, treatments (particularly with insecticidal baits) will need to be widely distributed, as insecticides will not be moved by workers any appreciable distance. Although we found that rover ants in the field occupy a relatively predatory trophic position, our laboratory experiments revealed that they have a much stronger preference for sugar baits when given the opportunity. This difference between the lab and the field probably indicates that, although sugar resources are strongly preferred by rover ants, such food is rare in the field.

In contrast to the rover ant, the sneaking ant (*Cardiocondyla mauritanica*) did not appear to be abundant at any of our study sites, and displayed furtive behavior when kept as lab colonies. Although this species has been widely introduced and appears to be spreading in its introduced range, it appears unlikely to make the transition to becoming a damaging invasive species, and is unlikely to be a common target for pest control. Nevertheless, if it becomes necessary to implement treatment and control measures for this species, the use of insecticidal baits should be successful, as the unicolonial colony structure will allow workers to distribute the toxicants across multiple different nesting locations. However, prolonged treatments may be required to eradicate all of the reproductive queens in each colony, to ensure that surviving propagules are not viable. Finally, protein-based baits will likely perform better than sugar-based baits, as this species occupied a relatively predatory trophic position in the field and displayed a significant preference for protein-based food in our limited lab experiments.

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 7g

EXECUTIVE OFFICER'S REPORT

REPORT ON BOARD-FUNDED RESEARCH PROJECTS

Dr. Niamh Quinn
University of California, Agriculture & Natural Resources

Neil Tsutsui
University of California, Berkeley

Dr. Andrew Sutherland
University of California, Agriculture & Natural Resources

Evaluation of bait station system efficacy

for reduced-risk subterranean termite management in CA

Final Report

Project Period: October 10, 2018 – August 31, 2022

Principle Investigator: Dr. Andrew Sutherland [University of California Cooperative Extension (UCCE), University of California Statewide Integrated Pest Management Program (UC IPM)]

Collaborators: Dr. Siavash Taravati (UCCE, UC IPM), UCCE staff members, collaborating pest control operators (PCOs), collaborating property owners, collaborating laboratories, collaborating termite bait system manufacturers.

Executive Summary

This project aimed to evaluate the efficacy of three California-registered termite bait systems against subterranean termites, in collaboration with PCOs and property owners, at 15 single-family homes in the San Francisco Bay Area and the Los Angeles Basin (Objective 1). Though all 15 homes had documented subterranean termite activity immediately adjacent to the structures and, in most cases, documented incidence of one or more identified termite colonies, none became infested during the two-year evaluation period. Furthermore, none of the identified termite colonies collected from bait stations during the project were ever observed again, suggesting that they were eliminated. This project also aimed to increase our knowledge about seasonal and spatial effects on subterranean termite incidence within bait stations in California (Objective 2). At our research station in the San Francisco Bay Area, we observed that bait stations installed during the winter were initially intercepted by foraging termites, on average, 100 days sooner than stations installed during the summer. Spatial factors did not significantly influence bait interception time within our experimental design. There were no significant differences in bait systems / products with regards to bait interception time. We believe these findings will help to increase adoption of bait station services in California and will help PCOs to reduce bait interception times by targeting specific seasons for initial system installations.

Significant tasks, findings, outcomes, and observations associated with this project are reported below. In some cases, hyperlinks have been provided for access to more in-depth information.

Background

Subterranean termites (Blattodea: Rhinotermitidae) are the most important wood-destroying organisms in California. The western subterranean termite, *Reticulitermes hesperus* (a species complex), is a native insect found within many different natural and urban ecosystems throughout the state. Management is often necessary to prevent irreparable damage to homes, businesses, and other wooden structures. The prevailing control strategy used in California involves drenching or injection of liquid insecticide into soil and other substrates surrounding structures, either as whole perimeter applications or as targeted local treatments. In many other parts of the world, termite baits are considered more effective than liquid treatments and are considered as the standard or prevailing control measure. One reason baits may be more effective than liquids is that they can eliminate entire colonies of termites, whereas liquid treatments may only partially eliminate large termite colonies and may only serve as temporary barriers to termite attack of the structure. This is especially true when considering the Formosan subterranean termite, *Coptotermes formosanus*, an invasive species now found in southern California that is known to form colonies of millions of termites foraging over very wide ranges. Another potential advantage of using baits for termite control is that the active ingredients, insect growth regulators (IGRs), are not known to negatively affect nontarget organisms or the environment. In contrast, most of the active ingredients used within liquid termiticides; fipronil, imidacloprid, pyrethroid insecticides; are known to contaminate California's surface water ecosystems and have seen some application types recently regulated or restricted by the State. The pest control industry has been slow to adopt baits in California, as compared to most other parts of the world where subterranean termites are serious pests. Potential reasons for this include licensing barriers (a Field Representative license is required when using bait stations as monitors), consumer protection regulations (baits may not be used to financially "clear" infested structures, as per the Structural Pest Control Act), time required for control, and perceptions of poor control. This project was designed to demonstrate that bait services can be effective in California and, considering newer product labeling, can often be provided by Applicators.

Objective 1. Conduct collaborative field research at participating single-family homes to evaluate bait system efficacy:

Several PCO companies were identified that expressed interest in evaluating bait systems as potential service offerings within their operations. Some of these companies had experience with baits, while some gained their first experiences with bait systems through this project. Companies received research stipends to subsidize their participation ($1000 / home / year). In some cases, these funds were used to incentivize property owner participation via free or reduced-cost services. The UC research team (Sutherland, Taravati, and staff) and participating PCOs performed dozens of structural inspections to locate prospective homes for the study. Fifteen single-family homes were eventually selected, based on several experimental criteria:

- Documented activity of subterranean termites within one meter of the foundation of the residential structure. In some cases, swarms were observed. In other cases, live termites were collected from stumps, landscape edging, monitoring devices, or wood debris.
- No recent (within five years) history of liquid termiticide application.
- No significant structural infestations detected during initial inspection.

List of study home locations, participating PCOs, and participating bait manufacturers:

1. Hayward, Alameda County. Participating pest control operator: Omega Termite and Pest Control. Bait station system evaluated: Advance Termite Bait System / Trelona (BASF). Study period: March 2019 – March 2021
2. Oakland, Alameda County. Omega Termite and Pest Control. ATBS / Trelona. Study period: August 2020 – August 2022.
3. Berkeley, Alameda County. Participating PCO: Western Exterminator. Bait system evaluated: Sentricon Always Active / Recruit HD (Corteva). Study period: March 2020 – March 2022.
4. San Jose, Santa Clara County. Participating PCO: Thrasher Termite & Pest Control. Bait system evaluated: Exterra / Isopthor (Ensystex). Study period: February 2020 – February 2022.
5. San Jose, Santa Clara County. Thrasher Termite & Pest Control. Exterra / Isopthor (Ensystex). Study period: February 2020 – February 2022.
6. San Leandro, Alameda County. Western Exterminator. Sentricon Always Active / Recruit HD. Study period: January 2020 – January 2022.
7. Martinez, Contra Costa County. Western Exterminator. Sentricon Always Active / Recruit HD. Study period: January 2020 – January 2022.
8. Alameda, Alameda County. Omega Termite and Pest Control. ATBS / Trelona. Study period: January 2020 – January 2022.
9. San Jose, Santa Clara County. Thrasher Termite & Pest Control. Exterra / Isopthor (Ensystex). Study period: February 2020 – February 2022.
10. Huntington Beach, Orange County. Western Exterminator. Sentricon Always Active / Recruit HD. Study period: August 2019 – August 2021.
11. Monrovia, Los Angeles County. Participating PCO: Excellence Pest Control. Bait system evaluated: ATBS / Trelona. Study period: August 2019 – August 2021.
12. Pasadena, Los Angeles County. Excellence Pest Control. ATBS / Trelona. September 2019 – September 2021.
13. Pasadena, Los Angeles County. Participating PCO: Homeshield Pest Control. Bait system evaluated: Exterra / Isopthor. Study period: November 2019 – November 2021.
14. Pasadena, Los Angeles County. Participating PCO: Homeshield Pest Control. Bait system evaluated: Exterra / Isopthor. Study period: November 2019 – November 2021.
15. Glendale, Los Angeles County. Western Exterminator. Sentricon Always Active / Recruit HD. Study period: February 2020 – February 2022.

Bait stations, baits, service equipment, and, in some cases, training, were provided by manufacturers to participating PCOs. The UC research team and the PCOs installed bait systems according to product labels, usually with one bait station for every 10 - 20 linear feet of the structural perimeter. Since all 15 sites had confirmed termite activity at the perimeter, all bait stations were installed with active ingredients present from Day 1. The UC research team installed monitoring stations (Ensystex EZE with wooden blocks, see Figure 1) immediately

adjacent to each baits station. The UC team then visited each participating home every three months for two years, checking termite activity within monitoring stations and collecting termites for DNA analysis whenever possible. The PCOs and the UC team visited each participating home every six months to check termite activity within bait stations, replenish baits (as per product label), and to collect termites for DNA analysis. Collected termite specimens were sent to a collaborating lab for DNA analysis. Each collected sample was then assigned a "Colony ID" based on its genetic signature, distinguishing it from all other colonies.

Through this project, our team completed 120 quarterly inspections of monitoring stations and 60 bi-annual inspections of bait stations. Foraging termites were observed and collected during initial inspections, from wood blocks during quarterly inspections, and from bait matrices during bi-annual inspections with PCOs. In some cases, termites were observed and collected from bait stations only six months after installation (Figure 1).

As part of this work, 132 separate samples of *Reticulitermes* foragers were collected, curated, and sent to a collaborating laboratory (see Figure 2). DNA analysis revealed that many research sites included several (3 – 5) unique colonies; one site included 15 unique colonies.

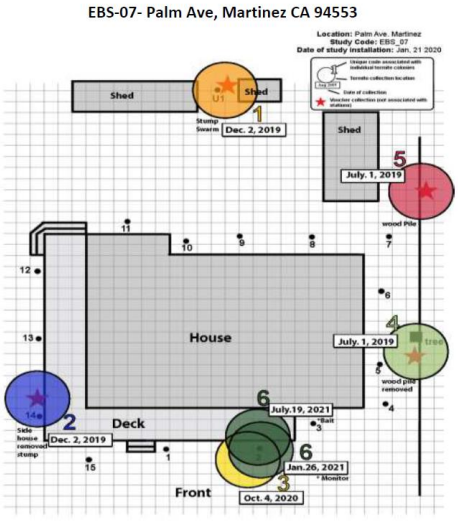
List of unique termite collections and colony identities by site:
https://docs.google.com/spreadsheets/d/16P6PRhrN-rrNE0WJEXb5M3XPi-b_5Qty/edit?usp=sharing&ouid=114980821805913012004&rtpof=true&sd=true

Figure 1. Sentricon Always Active bait tube damaged by termites (left) and associated bait station containing termites (right) approximately six months after installation at Berkeley site.

Figure 2. Vials containing *Reticulitermes hesperus* termites collected from research sites, preserved in 100% ethanol, and curated for later DNA analysis to determine colony identity.

Preliminary data analyses suggest that all three bait systems have been effective at eliminating western subterranean termites at our study sites in California. Bait was consumed at all 15 sites, to varying degrees. No termite colony recovered from bait stations has ever been detected again, according to colony identity as per DNA analysis.

To aid in data visualization, we created maps for each site, indicating exactly when and where termites were observed, collected, and assigned a colony identification number (according to DNA analysis). **Below, we share the map for our Martinez site.** All other maps, with accompanying site-specific final reports, can be accessed within the following online folder: https://drive.google.com/drive/folders/19pXkHyWOnWgqtx7Pke0TUMPuNi3fUP3A?usp=sharing



Colony ID	Date of Collection	Location
1	Dec 2, 2019	Stump in back of property between sheds
2	Dec 2, 2019	Left side of house, old stump next to deck
3	Oct 4, 2020	Monitoring station #2
4	July 1, 2019	Wood pile by poplar tree
5	July 1, 2019	Wood pile by right side fence
6	Jan 26, 2021 July 19, 2021	First collected from Monitoring station #2, then from Bait station #2.

A complete table of raw data can be accessed and viewed here: https://docs.google.com/spreadsheets/d/1m5f5iufXX0sNqrDcfVOlnzpV52W-Lode/edit?usp=sharing&ouid=114980821805913012004&rtpof=true&sd=true

Southern California sites experienced much lower subterranean termite activity during the two-year evaluation period than did northern California sites. No more than one unique termite colony was collected at each of the southern California sites and, in a few cases, no viable collections of foraging termites could be made during the study period. The efficacy trend at these sites was the same, however, with no structural infestation detected during the study.

We have initiated surveys for participating pest control operators and property owners to learn about attitudes and intentions associated with subterranean termite bait services. For PCOs, we are most interested in whether they increased knowledge as part of this project, whether they will continue to provide bait services in the future, and the reasons behind these decisions. For property owners, we are most interested in measuring their satisfaction with the services provided and whether they will continue to hire PCOs for bait services in the future. These surveys can be found at the following links:

https://docs.google.com/forms/d/e/1FAIpQLSfTGhVKGTP4k3AUUjMrY_yrPwxBNjkSyjngIWVXJ0REWwlGqg/viewform

https://docs.google.com/forms/d/e/1FAIpQLSfMfEnvXvdUw3zSC26hiiKhuretc53xqDSwaAUdYCKKSDOpsA/viewform

We have plans to publish one peer-reviewed journal article, one trade magazine article, and one UC IPM newsletter article reporting on findings from this field research. Outreach has already begun, at UC Riverside's Urban Pest Management Conferences, PCOC's *Termite Academy*, the Entomological Society of America, and at local PCOC District meetings.

Objective 2. Conduct observational and manipulative research at UC field station(s) to describe colony attributes, seasonal phenology in CA, and determine time-to-attack for registered bait systems:

Note: some of the text and figures below was taken from our original trade magazine article 'Subterranean termite baiting: system options and seasonal considerations', published within *Pest Control Technology* in April 2022 and freely available at this link: https://www.pctonline.com/article/subterranean-termite-baiting-system-options-and-seasonal-considerations/

One explanation for bait interception time (aka "time-to-attack") problems in California may be explained the state's unique Mediterranean climate (hot summers with little to no rain, cool winters that typically produce the entire annual precipitation amount) and prevailing soil textures (high proportions of clay). Termite foraging at or near the soil surface may be limited or even nonexistent during summer months, especially when areas are not irrigated. Some research supports this idea: *Reticulitermes hesperus*, the western subterranean termite, has been observed to forage near the surface mostly during winter months in its native habitat in southern

California. This suggests that bait stations installed in summer may sit uninvestigated for six months or more. To test this hypothesis, and to observe whether time-to-attack could be reduced by targeting specific seasons for installation, we established five research plots during 2019 at the UC Berkeley Richmond Field Station directly on top of known termite colonies. Naturally occurring subterranean termites (*Reticulitermes* spp.) had been observed, as foraging workers or brood chamber aggregations, and collected at the center of each plot.

Around these five areas of "documented termite activity", we established three concentric rings of bait stations at three distances from the center, installing one station from each of three registered systems along each of the rings at the beginning of each season over one year, for a total of 36 bait stations per plot (Figure 3). We didn't want to kill the termites in these plots because that would significantly confound our data, so we used cellulose bait matrices from manufacturers that did not contain the IGR active ingredients. We also installed a monitoring device (Isopthor EZE station housing containing wooden monitoring blocks) at the center of each plot and along each of the three distance rings. By the end of the year, we had installed 200 stations for this investigation. We then checked each station every two months (about every 60 days) after its installation for two years, opening and inspecting up to 100 stations per month.

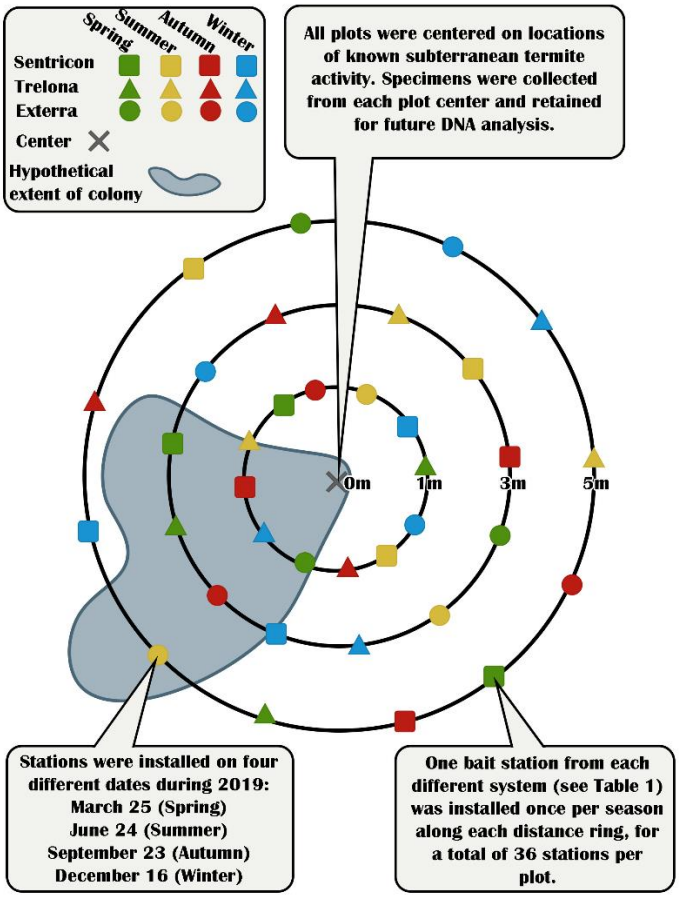


Figure 3. Schematic diagram of experimental design used to evaluate the effects of installation season, distance from observed activity, and bait system on bait interception time.

Of the 180 bait stations and 20 monitoring stations installed, 78 bait stations and 9 monitoring stations had been hit by the end of the two-year project period, representing an overall hit rate of 44%. Three stations were attacked within 60 days after installation, and ten stations were attacked within 120 days. Overall, the average bait interception time was 367 days. This result supports the general claims of California's pest control operators that baiting may take too long for most remedial termite control jobs. There were no significant differences between the three bait systems, with average time-to-attack for all three between 327 and 383 days. We did not detect any significant differences in time-to-attack among the three distance rings. Proximity to adjacent stations and type of adjacent stations were considered as potential factors influencing time-to-attack, but there were no measurable effects detected.

Our study's main question was whether installation season significantly impacts "time-to-attack" due to seasonal differences in termite foraging in California. To answer this, we pooled data from all five sites and all three bait systems and then considered just the first year of observations. The result was clear: time-to-attack for stations installed at the beginning of winter (December 16) was more than 100 days less than for stations installed at the beginning of summer (June 24) (194 days vs. 296 days). This result was statistically significant. Installations at the beginning of spring and beginning of autumn were intermediate (282 and 268, respectively) and statistically inseparable from the other two seasons (Figure 4).

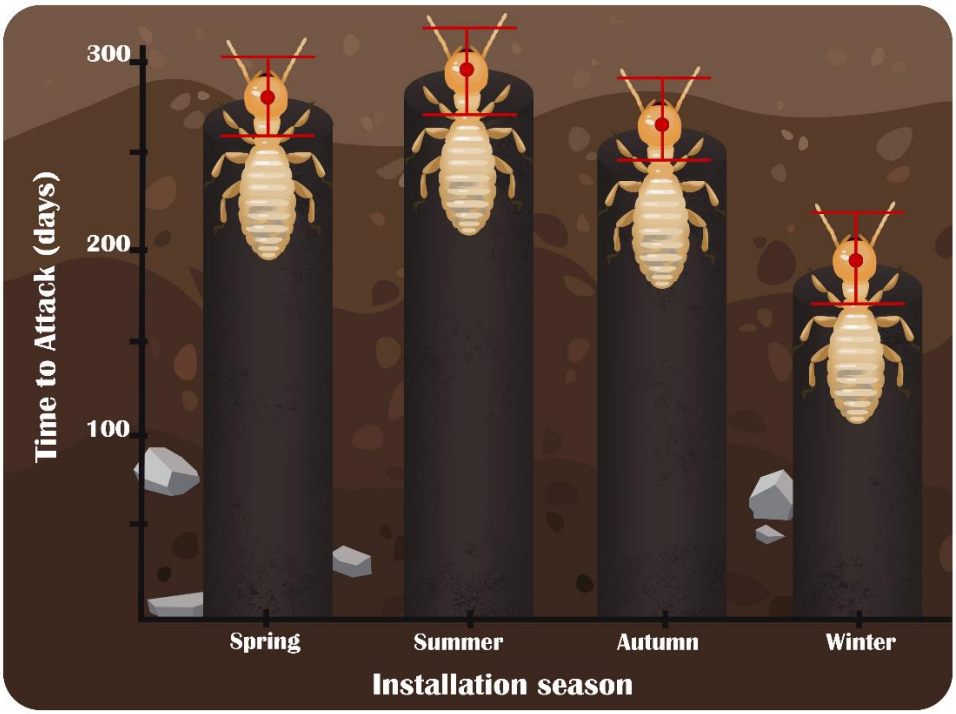


Figure 4. Time required for western subterranean termites to begin consuming baits installed during four different seasons in California's San Francisco Bay Area. Red points on termite heads represent the average time-to-attack (number of days between installation and first observation of bait consumption). Red bars extending above and below each point represent standard error of the mean.

In addition to the trade magazine article referenced and linked above, our team published a peer-reviewed scholarly journal article reporting on these findings. It is freely available within the open access online journal *Insects:*

https://www.mdpi.com/2075-4450/13/5/445/htm

Overall conclusions

Bait stations systems may be very useful pest control tactics for use against subterranean termites in California, especially when dealing with Formosan subterranean termites, very large colonies of native western subterranean termites, multiple colonies, sensitive sites, or sites where liquid treatments have failed. According to the labels of the three products evaluated, systems can be installed with active ingredients present on Day 1, provided a licensed Field Representative has detected and identified the target species at the site. Licensed Applicators may, according to label language and California's Structural Pest Control Act, then service bait stations, replenishing bait that has been consumed or damaged. Two of the systems evaluated allow for annual inspections, while one allows for bi-annual (every six months) inspections. Operators in California may decrease the bait interception time, and therefore the perceived early efficacy, by targeting initial installations for the beginning of the wet season.

SPCB
STRUCTURAL PEST CONTROL BOARD

AGENDA ITEM 8

BOARD MEETING CALENDAR

SPCB
STRUCTURAL PEST CONTROL BOARD

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MEMORANDUM

DATE	March 9, 2023
TO	Members of the Structural Pest Control Board
FROM	Sophia Cornejo, Executive Officer Structural Pest Control Board
SUBJECT	**Agenda Item #8: Board Meeting Calendar**

Below are the proposed Structural Pest Control Board meeting dates and locations for the rest of the 2023 calendar year.

- ~~*Tuesday & Wednesday July 18-19, 2023 (Location: Sacramento)*~~
- **Wednesday & Thursday June 28-29, 2023 (Location: Virtual via WebEx)**
- **Tuesday & Wednesday October 10-11, 2023 (Location: Sacramento)**