DRAFT MINUTES

California Department of Food and Agriculture
Integrated Pest Control Branch

VERTEBRATE PEST CONTROL RESEARCH ADVISORY COMMITTEE MEETING

California Department of Food and Agriculture
1220 N St., Sacramento, CA 95814
April 28, 2022

Members Present	**Members Absent**	**CDFA Department Personnel**
Jimmy Hook	Brandon Fawaz	Michelle Dennis
David Kratville, CDFA	Mark Novak	Jennifer Gordon
Dr. Paul Stapp	Ken Zimmerman	Canh Nguyen
Dr. Robert Timm		Raj Randhawa
		Mary Jean Sawyer

Guest Present
Liphatech:
Katie Swift
UC Davis:
Roger Baldwin

INTRODUCTIONS

The meeting was convened at 9:00 a.m. by Chairman Jimmy Hook and introductions were made. The Vertebrate Pest Control Research Advisory Committee (VPCRAC) acknowledged that the meeting was held in compliance with the Bagley-Keene Open Meeting Act.

MINUTES FOR November 16, 2021 MEETING

The minutes from the Fall November 16, 2021, meeting was reviewed. Committee wanted to review the minutes and decided to wait for voting to approve the minutes till the Fall meeting.

Motions: 1. Dr. Paul Stapp moved that the Committee recommend wait on approving the minutes of the November 16, 2021, Meeting. The motion was seconded by Dr. Robert Timm and passed unanimously.

Yes	**No**	**Abstention**
David Kratville Jimmy Hook Dr. Robert TimmDr. Paul Stapp	N/A	N/A

CALIFORNIA DEPARTMENT OF FOOD AND AG (CDFA) UPDATE

CDFA reorganization

David Kratville gave an update of changes in CDFA staff and who would be working with the VPCRAC program now. Introducing Raj Randhawa and Mary Jean Sawyer assisting with samples and working with the counties.

Vertebrate Legislation and Regulations

Mr. Kratville gave an update on AB 1959, Carbon monoxide delivery devices. The Law states," Existing law authorizes the use of carbon monoxide for the control of burrowing rodent pests subject to specified conditions, including that the carbon monoxide delivery device is permanently affixed with a special warning label. Exiting law repeals those provisions on January 1, 2023. The bill would instead repeal those provisions on January 1, 2026."

California Department of Pesticide Regulation Update

Mr. Kratville gave an update on regulation. Katie Swift mentioned new restrictions for applications. Use of respirators and only allowing bait stations. Also, possibly be ready to request new research projects to support current labels.

Leafatech is having a hard time getting Chlorophacionone ingredients. Diphacinone is being used as an alternative.

LA County is interested in being a sole source for bait sales. Since there was no counties at the meeting to get their opinion committee decided to wait on making any decisions at this time.

FINANCIAL REPORTS

Fiscal Year (FY) 21/22 and 22/23 Budgets, Expenditures, and Revenue Review

Mr. Kratville presented the Committee with final expenditures for FY20/21, $403,395.74. Personal costs of $165,439.62 and Operating expenses at $93,528.12 due to cuts from other programs but research funding was under at $144,428 so final were under at $403,395.74 from the approved budget of $446,527.34.

Approved budget for FY21/22 was approved at last meeting for Personal at $236,163.28, Operating expenses at $105,750.00, and Research funding was approved for an increase at last meeting for $372,355.45 to support new approved projects last meeting for a total budget of $714,268.73. So far expenditures for FY21/22 are Personal at $106,554.85, Operating expenses at $66,024.40 and Research so far approved at $372,355.45 for a total of $544,934.70.

Proposed budget for FY22/23 was proposed for Personal at $236,163.28, Operating expenses at $105,750.00, and Research funding for $200,000.00 for a total of $541,913.28. Committee realized that travel was still at the lowered amount of $1,000 but if meetings need to be in person again, they approved for travel to be increased up to $8,000. This would make the final total for FY22/23 Operation Expenses to $112,750.00 and final total to $548,913.28.

Motions: 2. Jimmy Hook moved that the Committee proposed budget for FY22/23 with increase in travel up to $8,000. The motion was seconded by Dr. Paul Stapp and passed unanimously.

Yes	No	Abstention
David Kratville		
Jimmy Hook	N/A	N/A
Dr. Robert TimmDr.		
Paul Stapp		

Motions: 3. Dr. Paul Stapp moved that the Committee accept the financial reports. The motion was seconded by Dr. Robert Timm and passed unanimously.

Yes	No	Abstention
David Kratville		
Jimmy Hook	N/A	N/A
Dr. Robert TimmDr.		
Paul Stapp		

COMMITTEE MEMBERSHIP

Board Member Requirements
Reminder to do 700 form training.

Vacancy
There are three industry vacancies and one general public vacancy on the committee. Mr. Kratville reached out to Fred Rinder as a possible member but has not heard from him. There are no prospective new members at this time but asked to keep an eye out for possible members. Will rerun the vacancy announcement. Possible places to advertise with Farm Bureau, CACASA, and the CDFA website.

Selection of Committee Chair and Vice Chair
Committee felt they didn't need to make any changes to this.

2021-2022 RESEARCH PROPOSAL GUIDELINES

Mr. Kratville gave no new changes to current guidelines for proposals as listed on the grants.ca.gov website which is linked to our CDFA Vertebrate page for templates to submit proposals.

RESEARCH PROPOSALS

No new proposals presented.

RESEARCH UPDATES

A test of management tools for invasive roof rats in citrus orchards.
Dr. Roger Baldwin gave final report for this project.

Efficacy of Goodnature A24 self-resetting traps and diphacinone bait for controlling roof rats (Rattus rattus) in citrus orchards

Invasive roof rats (Rattus rattus) are one of the most damaging vertebrate species to agriculture globally. In citrus orchards, rat damage includes fruit consumption and contamination, girdling of branches, and gnawing irrigation equipment. Managing roof rats in citrus is challenging given the abundance of food and cover provided by the trees year-round. Anticoagulant rodenticide applications, such as diphacinone-laced baits applied via bait stations, are sometimes used to manage roof rats in orchards, but have not been tested in an evergreen crop like citrus. Goodnature A24 self-resetting rat traps are increasingly used to manage roof rats for conservation purposes but have not been tested in agricultural settings.

As such, we tested the efficacy of: 1) 0.005% diphacinone-treated oats applied via elevated bait stations and 2) A24 traps that were elevated to approximately 1 m height to match the bait station heights. This study was conducted across four citrus orchards in the southern San Joaquin Valley, California, to better identify how to implement these tools to manage invasive roof rats in this economically important crop. Although neither trapping nor rodenticide baiting yielded the desired reduction in roof rats across all sites, we identified strategies that hold promise for future testing. For rodenticides, reducing the spacing between bait stations may increase efficacy by increasing encounter rates by rats. For trapping, the use of a platform under the A24 traps appeared to increase its effectiveness by allowing easier access to the trap trigger. Furthermore, reducing spacing between traps, rotating trap locations, or prebaiting sites may also yield better results. Ultimately, a management plan that combines trapping and rodenticide baiting, while periodically rotating trap and bait station locations, may prove more efficacious than our initial study design, and should be investigated further.

An assessment of secondary impacts of anticoagulant rodenticides on predators.
Dr. Roger Baldwin gave final report for this project.

Rodents cause extensive damage to California agriculture and water storage structures, and they pose a serious human health risk in many settings as well. An Integrated Pest Management (IPM) approach that utilizes a variety of tools is generally the most effective option for managing these pests. The use of anticoagulant rodenticides is one tool frequently incorporated into an IPM approach, yet this management strategy is under frequent attack given potential secondary toxicity risks to nontarget predators and scavengers. That said, most of the studies currently available for assessing this potential risk are based on biased data sets (e.g., animals taken to rehabilitation centers, road-killed animals, or carcasses collected from research animals) and consider any occurrence of an anticoagulant as having a detrimental effect on the animal even though this likely overestimate (perhaps substantially) the effect of these rodenticides throughout the landscape. Therefore, we initiated a study to assess residual anticoagulant residues in liver tissues of coyotes collected from rural areas of California to provide a less biased assessment of their exposure in areas less heavily impacted by humans. For this study, we used coyote livers that were obtained from depredation and hunter-killed animals. We collected 172 samples across 24 counties in the state. In general, we observed greater exposure and residual concentrations of anticoagulant rodenticides (ARs) in males than in females. A regional assessment showed that anticoagulant exposure was greatest in the southern desert and Central Valley regions and less in coastal and mountainous regions. Residual concentrations were far higher for second-generation anticoagulant rodenticides (SGARs) in the southern region than for SGARs in any other region or for first-generation

anticoagulant rodenticides (FGARs) in any region. Both exposure rates (FGARs: rural = 26%, urban = 78%; SGARs: rural = 30%, urban = 100%) and residual concentrations (FGARs: rural = 36 ppb, urban = 129 ppb; SGARs: rural = 39 ppb, urban = 789 ppb) of ARs were far greater in urban areas than in rural sites, suggesting that agricultural uses of ARs have much less impact on coyotes and potentially other nontarget predators and scavengers. This study provides a less biased data set on AR secondary exposure risk to nontarget wildlife and should assist current and future AR regulatory reviews.

OTHER ITEMS

Identifying Northern California rodenticide mixing location.

Mr. Kratville stated that they still haven't found a new mixing county. He spoke with Modoc County to see if they were interested but haven't heard anything from them.

Yearly Meeting Calendar Date and Location for next meeting.

Next meeting will be held in Kings County and conducted via webinar/ Zoom. The Committee decided to have the Fall 2022 meeting on Thursday, November 3, 2022.

Public Comment on Matters not on this Agenda

No comments currently.

Vertebrate Pest Conference report

Vertebrate Pest Conference 2022, in Reno, NV – Field trip Monday, sessions Tuesday-Thursday. March 7-10 went well. With some COVID travel restrictions still not lifted some speakers were forced to cancel. Still a good crowd and with less people attending lots of food to go around. Talks are available online on Vertebrate Pest Conference website for $5 each or $100 for all. Those who went to the conference are free they just need to use their log in. Next meeting will be in Monterey, CA, March 11-14, 2024.

Future Action Items

1) More information on the small gas engine restrictions.
2) Revisit priority research topics. Possible projects to maintain bait labels.
3) USEPA Requirements

ADJOURNEMENT

Motions: 4. Dr. Paul Stapp moved that the Committee to adjourn meeting at 10:58am. The motion was seconded by Dr. Robert Timm and passed unanimously.

Yes	No	Abstention
David Kratville		
Jimmy Hook	N/A	N/A
Dr. Robert TimmDr.		
Paul Stapp		

The meeting adjourned at 10:58 am.

David Kratville
Secretary to the Board