#### MINUTES VERTEBRATE PEST CONTROL RESEARCH ADVISORY COMMITTEE MEETING Sponsored by: Madera County Department of Agriculture The Pines Resort and Conference Center 34432 Road 432 Bass Lake, California 93604 April 14, 2010

Members Present Dan Spangler, Chairperson Ellen Des Jardins-Hirth Dale Huss Mark Novak Dennis Bray Edward Meyer Paul Stapp Robert Timm Victoria Hornbaker

Visitors Duane Schnabel Scott McCalley Bruce Kimball Fred Rinder Jay Seslowe Katherine Horak Kamaljit Bagri Rick Marovich Members Absent Art Foster

Jennifer Gordon Gary Witmer Ron Eng Florence Maly Donald Mayeda Stephanie Shwiff Kelle Schroeder Peter Newman

#### INTRODUCTIONS

Welcome from Mr. Jay Seslowe, Madera County Assistant Commissioner/ Sealer Madera County.

Chairman Mr. Dan Spangler called the meeting to order at 8:00 a.m. followed by introductions of Committee members and guests.

#### BAGLEY-KEENE OPEN MEETING ACT AND VERTEBRATE PEST CONTROL RESEARCH ADVISORY COMMITTEE COMPLIANCE

Mr. Dan Spangler and the Committee acknowledged the Bagley-Keene Open Meeting Act and the Vertebrate Pest Control Research Advisory Committee (VPCRAC) compliance.

#### APPROVAL OF MINUTES

Motion: Dale Huss moved that the Committee approve the minutes of the October 7, 2009 meeting with corrections. The motion was seconded by Edward Meyer and passed unanimously.

## FINANCIAL REPORT UPDATE

Ms. Victoria Hornbaker provided the Committee with information on the program budget, revenue, expenditures, and projections. Last year's program budget for 2009/10 was authorized at \$954,225 and the program has spent approximately \$430,838 to date, including encumbrances. The administrative budget for FY 09/10 was set at \$244,000 and the total administrative expenditures through March were \$136,436. Research expenditures including encumbrances for FY 09/10 are approximately \$512,717. Yearly federal registration fees were paid for the CDFA rodenticides in the amount of \$15,749 and the fees were recouped from the bait selling counties.

Ms. Hornbaker requested that the Committee increase the administrative budget for FY 2010/11 to \$252,000 to cover salary and benefit increases, she also asked the Committee to authorize the program budget at \$954,225.

Mr. Duane Schnabel, Program Supervisor, mentioned that if the Committee feels the budget needs to be increased, they must make a motion at this time to ensure that it is reflected in the 2010/2011 fiscal year budget. He also stated that all out-of-state travel is currently restricted and in-state travel is limited. An exception to this rule is made if the travel is required under an existing contract. Mr. Dennis Bray wondered if the restrictions for travel would affect the program if they needed to visit Washington D.C. to deal with any USEPA product re-registration issues. Ms. Hornbaker stated that travel authority is already set aside for such issues.

Mr. Dan Spangler then asked the Committee to approve the increase in administrative budget, the program budget for the next year and to approve the financial reports as of March 2010.

- Motion: Dennis Bray moved that the Committee approve an \$8,000 increase in the administrative budget from \$244,000 to \$252,000 for the 2010/2011 fiscal year. The motion was seconded by Ellen Des Jardins-Hirth and passed unanimously.
- Motion: Dale Huss moved that the Committee approve a \$954,225 program budget for the 2010/2011 fiscal year. The motion was seconded by Ellen Des Jardins-Hirth and passed unanimously.
- Motion: Robert Timm moved that the Committee accept the Financial Reports as presented. The motion was seconded by Dale Huss and passed unanimously.

#### COMMITTEE MEMBER RECOGNITION

Mr. Dan Spangler welcomed Dr. Paul Stapp to the Committee. Dr. Stapp introduced himself and gave a short explanation of his work at the California State University, Fullerton, including his experience with vertebrate pest control.

# COMMITTEE MEMBERSHIP: CONSIDERATION AND RECOMMENDATION FOR NEW MEMBER

Ms. Hornbaker mentioned the vacancy for the position left by the retired Committee member Mr. Edward Tully. Ms. Hornbaker suggested that someone from the California Cattlemen's Association might be a good replacement. She also suggested advertising the vacancy on the CDFA website. Mr. Duane Schnabel mentioned that he would talk to a contact involved with the Cattlemen's Association regarding suitable candidates.

## INVASIVE SPECIES COUNCIL OF CALIFORNIA, MICHAEL T. CHAPEL, USDA FOREST SERVICE

Mr. Michael T. Chapel of the USDA Forest Service came to speak about the Invasive Species Council of California. The purpose of the Council is to coordinate a comprehensive effort to exclude invasive species from entering California and to eliminate, reduce or mitigate the impacts of invasive species already established in the state. The Council addresses non-native organisms which cause economic or environmental harm, excluding humans, domestic livestock or non-harmful exotic organisms. The Governor issued an executive order to create the advisory committee to assist the Council in its efforts to protect California from invasive species.

The advisory committee will develop and maintain a fluid list of all invasive species that have a reasonable likelihood of entering or have entered California for which exclusion, detection, eradication, control or management action might be appropriate. This master list is going to be presented to the invasive species council and will be used to make decisions on control efforts. A website was created to keep track and score the listed invasive species. These scores will include the impact of the invasive species and the ability and cost of control measures. Ms. Hornbaker has assisted the advisory committee by updating the vertebrate list and verifying accuracy of the scoring system. Dr. Paul Stapp asked for clarification on how the advisory committee determined if a species is invasive. Ms. Hornbaker explained that the organism would need to be a non-native with the potential to negatively impact the State. The list will continue to change based on new information on species and the potential damage that they can cause. Some invasive species are currently established but causing very little damage in the State, they will be listed however, and their score will be lower to reflect the negligible impact. Ms. Hornbaker also stated that the rankings will emphasize the importance of the invasive vertebrates currently on the CDFA rodenticide bait labels and will justify the continued use of the baits. In addition to the list of invasive species, the advisory committee will develop an Invasive Species Action Plan, which will be implemented at the State level.

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY'S RISK MITIGATION DECISION FOR TEN RODENTICIDES

USEPA had directed CDFA to add the following grazing restriction to the rodenticide bait labels, "Do not graze livestock or plant food or feed crops in spot-treated areas for at least 365 days following the last bait application". The Committee determined at the October 2009 meeting that this language would negatively impact the use in rangelands. Ms. Hornbaker researched the restriction and determined that CDFA owns a data set that supports the following grazing restriction, "Do not graze livestock or plant food or feed crops in spot-treated areas while bait is present." She contacted the EPA and

explained CDFA's concerns regarding an overly restrictive grazing policy. The EPA representative agreed and stated that the 365 day grazing restriction was an old requirement used prior to the development of the new data on rangelands. The EPA agreed to the CDFA supported statement and determined that it would mitigate any residual exposure hazard.

The three CDFA chlorophacinone labels were submitted to the Department of Pesticide Regulation (DPR), where they were accepted and forwarded to the USEPA for final approval. The two CDFA diphacinone labels have been submitted to USEPA and are still pending reregistration. All revised labels must be submitted to the USEPA prior to December 2010. Ms. Hornbaker reminded the Committee that all first generation field use rodenticides will become federally restricted use products.

Dr. Robert Timm explained several proposed restrictions on the aluminum phosphide labels for use on rodents in residential areas and discussed the impact that these changes may have on field use of aluminum phosphide Mr. Schnabel explained that misuse of residential products can have a negative impact on the use of field use rodenticides. Ms. Hornbaker offered to draft a letter on the importance of these rodenticides to California agriculture.

UPDATE ON MEETING WITH THE CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION, REGARDING THE IMPACT OF THE RESTRICTED USE DESIGNATION ON FIELD USE RODENTICIDES FOR SMALL "RANCHETTES"

Ms. Hornbaker provided an update on CDFA's attempt to work collaboratively with the DPR to develop a private applicator exam for rodenticide users. The hope is that either a separate category for rodenticides or an updated private applicator exam containing questions pertinent field use rodenticides will be developed. The exam should address requirements set forth by USEPA for a private applicator exam and touch on the specific hazards associated with rodenticides, including appropriate use rates and specific restrictions in endangered species habitat. The main reason for putting together such an exam is to allow small farms "ranchettes" to gain a private applicator certification and continue to use the field-use rodenticides. It is hoped that the kiosk or similar web-based learning software will be implemented and used to easily impart the necessary knowledge and administer the new/revised private applicator exam. We are waiting for correspondence from DPR as to their willingness to work with us on this proposal.

End users can use the existing stock of product with the old label until they run out, but once the counties begin packaging with the new labels, all persons purchasing or using the products must be certified/licensed.

## CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION'S REEVALUATION OF SECOND GENERATION ANTICOAGULANT BAITS

Ms. Hornbaker provided a brief update on the California Department of Pesticide Regulation's reevaluation of second generation anticoagulant baits. Ms. Hornbaker talked to Ms. Denise Alder, and she stated that nothing new has been done at the State level at this point. There has been no action from DPR and is predicting DPR will most likely go along with EPA's direction.

Mr. Spangler asked for clarification on the difference between first generation and second generation anticoagulants. Mr. Schnabel explained that first generation anticoagulants were the first ones developed for use and they require multiple feedings for the target animal to receive a lethal dose. Second generation anticoagulants were developed in response to resistance issues with warfarin (first generation anticoagulant); they are more potent and only require a single feeding to impart a lethal dose. One major difference is that second generation anticoagulants bioaccumulate in the target animal's tissues and can be problematic for predators and scavengers. In addition second generation anticoagulants are more persistent in the environment.

## 24<sup>TH</sup> VERTEBRATE PEST CONFERENCE

Ms. Hornbaker provided an update on the Vertebrate Pest Conference (VPC). The VPC was held at the Holiday Inn Sacramento – Capitol Plaza on the February 22 – 25, 2010. There were over 250 attendees, including approximately 26 foreign attendees from 7 different countries. The program contained breakout sessions on avian pests, rodents, predators, monitoring methods, invasive species impacts and chemicals. In addition, there was a special symposium on field use rodenticides. Ms. Hornbaker stated that the program was a great success and it was particularly interesting seeing the new technologies being developed and implemented around the world.

## CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE REGISTRATION ISSUES

Ms. Hornbaker stated that the zinc phosphide label, from USDA, for vole control in artichokes was accepted and has been used in the artichoke fields. Mr. Dale Huss explained that the efficacy data collected during the initial study came out differently than what is being seen in field. In fact the growers are seeing a much better acceptance with the chlorophacinone treated bracts. More trials are needed to determine if it's a seasonal issue with the bait. Currently, the artichoke growers are experiencing significant losses due to voles. Due to these losses CDFA and the growers petitioned DPR to maintain the use the chlorophacinone treated artichoke bracts until May of 2011.

The CDFA diphacinone rodenticide products are still pending re-registration at USEPA. Ms. Hornbaker contacted USEPA and was assured that a decision would be reached by June 2010.

San Bernardino County notified Ms. Hornbaker that they will no longer be mixing or selling rodenticides. End users in the San Bernardino area will need to purchase bait from Kings or San Diego counties. There are now only 6 bait mixing counties and 18 or 19 counties selling bait. Ms. Hornbaker spoke with CDFA's legal representative to determine the legality of having a private third party company mix the bait. At this time they recommend not going with a third party to sell CDFA baits, because there is no protocol for collecting the assessment from a private company. Mr. Schnabel explained that in the past CDFA has encountered problems with product quality from third party producers. Mr. Bray stated that there has to be a way to take the stress off the counties and maybe have a private producer formulate the bait under the commissioner's umbrella.

## LEGISLATIVE / REGULATORY UPDATE

Ms. Hornbaker briefed the Committee on the status of Senate Bill 481 (Cox). This bill amends the California State Fish and Game Code to address management of wildlife hazards at public use airports. The bill gives Federal authority to the USDA Wildlife Services and provides the USDA more leeway on dealing with wildlife issues at airports and takes away State authority. Currently, the bill was signed by the governor and chaptered.

Ms. Hornbaker briefed the Committee on the status of Senate Bill 709 (Hollingsworth). This is a spot bill that would make technical, nonsubstantive changes to the existing violation of taking or possessing birds, mammals, fish, amphibians, and reptiles. Nothing has happened at this time, and the bill will have no impact to the Committee or CDFA.

#### QUALITY ASSURANCE/ QUALITY CONTROL PROGRAM

Ms. Hornbaker collected samples from the county bait manufacturing facilities and took them to the CDFA chemistry lab for testing. The chlorophacinone baits samples were all within the certified limits on the confidential statement of formula. The diphacinone baits were consistently below the lower certified limit. Subsequently, it was decided that the technical diphacinone should be sampled to ensure that it was accurately represented at 2.0 percent active ingredient. Samples of the technical product were collected from Alameda and Yolo counties mixing facilities and in both cases the technical was analyzed at 2.0 percent active ingredient. A second round of diphacinone samples will be taken from each county and submitted to the CDFA chemistry lab for analysis.

#### USEPA STIPULATED INJUNCTION INVOLVING PESTICIDES AND ELEVEN SPECIES LISTED AS THREATENED OR ENDANGERED

Mr. Rich Marovich updated the Committee on the Bay Area Stipulated Injunction and Proposed Order. The injunction was a result of a lawsuit brought by the Center for Biological Diversity against the United States Environmental Protection Agency (USEPA). The lawsuit states that the USEPA failed to consult with the U.S. Fish and Wildlife Service (FWS) on the Endangered Species Act (ESA) for the 74 pesticides listed in the lawsuit. To meet the ESA requirements USEPA and FWS would need to evaluate each of the listed pesticides and their impacts to the 11 listed (threatened or endangered) species in the San Francisco Bay Area. Eight Counties are affected by this injunction, including Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, and Sonoma. The injunction imposes interim "no-use" buffer zones around known and historic habitat for the listed species and the pesticides that would be dangerous to them. Several rodenticide active ingredients are included in the injunction for species such as the San Joaquin kit fox and the tiger salamander. The Department of Pesticide Regulation (DPR) has developed a database for endangered species and the requirements for using pesticides near their habitats. The database is called PRESCRIBE and includes maps and buffer zones. DPR developed 42 county/species maps in response to the injunction which include particular species habitat sections in each county and the aerial and ground "no-use" buffers for that species. DPR recommended that the USEPA replace proposed interim buffer zones with use limitations specified in the WEB-based database. The final injunction and order are still pending, as EPA filed its response on March 4, 2010 and is awaiting the judge's decision. A consultation schedule will likely be set and can take up to 6 years to complete. Mr. Marovich stated that public vector control and invasive weed control programs are currently exempt.

#### **RESEARCH UPDATES**

#### National Wildlife Research Center

Dr. Gary Witmer provided an update to the Committee on the research project entitled. "The Effects of Vitamin K-rich Plant Foods on the Efficacy of two Anticoagulant Rodenticides for Voles." Voles are a large group of rodent species that are circumboreal; they are small and secretive mammals. They are active all year long and will feed day and night. When vole population densities are high, they can cause tremendous damage to a variety of crops. Rodenticides are an essential tool used in the control of vole populations. Recently, anticoagulants rodenticides have been observed to be less effective in some areas of California, this could be attributed to genetic resistance. availability of vitamin K-rich foods, palatability issues, or individual species variability. This study examined the question: Do vitamin K-rich plant foods reduce the efficacy of anticoagulants in voles? A two-choice feeding trial (the two choices were normal lab mouse food or anticoagulant bait) was set for a 10 day period, in which vitamin K-rich plant foods were offered before, during and after the 10 day study period. Results for this trial were 100 percent mortality with the chlorophacinone and 60 percent mortality with diphacinone test groups. The control population had no mortalities. The guestions for this study were the palatability or if there was another issue involved. To rule out palatability, a no-choice feeding trial was initiated in which vitamin K-rich plant foods were offered before, during and after the 10 day study period. The mortality with chlorophacinone test group was 60 percent and the mortality rate with diphacinone test group was 80 percent. It is possible that if the trial lasted longer than 10 days a higher percentage mortality would have been achieved. Based on the outcome of the two feeding trials, it is unlikely that vitamin K-rich plant food inhibits the effectiveness of the baits used.

Dr. Katherine Horak provided an update to the Committee on the research projects entitled, "Development of a Pharmacokinetic Computer Model to Assure the Continued/ Expanded Use of Anticoagulant Rodenticides" and "Pharmacokinetic Studies with Kestrels and Owls for Validating the CDFA/USDA Rodenticide PBPK Model." The major issue associated with the continued use of anticoagulant rodenticides is the non-target secondary hazards. This research project proposed that the CDFA and USDA take the lead in rodenticide risk assessment development and incorporate physiologically based pharmacokinetic (PBPK) modeling into the risk assessment process. The research investigated techniques (oral gavage, gelatin capsule, etc.) to dose kestrels and screech owls and used the data to populate the model. Clotting assays were developed for use in birds using a semi-automated BBL Fibrometer. Preliminary results of the clotting assays have provided highly precise clotting times. To determine the acute toxicity of diphacinone to kestrels, the first study consisted of dosing kestrels by oral gavage with a mixture of oil and diphacinone, or with the toxicant in a capsule form and holding them in small cages for two hours. The kestrel would then be released to a flight pen and observed for signs of toxicity three times per day for seven days. Problems were encountered with this protocol as the kestrels were regurgitating the diphacinone. So the study protocol was revised to move from the use of flight pens and holding cages to small pens. Small doses in small capsules minimized regurgitation. Diphacinone residues were recorded for each dose level to determine the time required for the body to clear the residue. Kestrels cleared a 50 milligram dose in approximately 48 hours and a higher 75 milligram dose in 96 hours. The residues cleared by 4 days for all doses. Quails appeared to clear low doses within 48 hours; however the model needs to be refined. Birds of prey were observed consuming brain tissue from rodents. This was not anticipated in the study so brain tissue needs to be analyzed for diphacinone residue in rats and kestrels, so it can be included in the whole body model.

Dr. Katherine Horak provided an update to the Committee on the research project entitled, "Using Liver Microsomes to Assess Resistance of Chlorophacinone and Diphacinone in Meadow Voles." The study focuses on if it is possible to assess the extent of anticoagulant metabolism within and between populations of animals through use of liver microsomes. Previous experiments have shown differences in anticoagulant metabolism between rodenticide resistant populations and non-resistant populations. Voles from Davis, California were tested as the non-resistant population and the voles from Castroville. California comprised the resistant population. In the non-resistant voles increased levels of anticoagulant metabolism were not observed in the tests. In the resistant voles, raised levels of anticoagulant metabolism were present and the rodenticide was not detectable. Metabolic inhibitors were chosen to help slow the metabolism in the resistant voles, which would allow the anticoagulants to be more effective. The first P450 enzyme inhibitors chosen to be tested were Ketaconazole, which produced a 10 percent success rate and Fluvoxamine, which produced a 29 percent success rate. These enzyme inhibitors would be hard to get approved on a label so alternatives were chosen. Some alternatives chosen were grapefruit juice at a 12 percent success rate and pomegranate juice at a 29 percent success rate on inhibiting the metabolic rates in the voles. Castroville voles have dramatically increased metabolism of diphacinone and chlorophacinone compared to Davis voles. Female voles had higher metabolism than male voles at both locations. Pomegranate juice is a better inhibitor of chlorophacinone and diphacinone metabolism than grapefruit juice. Inhibition by both pomegranate juice and grapefruit juices is concentration dependent.

Dr. Katherine Horak provided an update to the Committee on the research project entitled, "Using Liver Microsomes to Screen Anticoagulant/Inhibitor Formulations for Meadow Vole Control." This study will analyze inhibitor formulations in-vivo. Currently Pomegranate juice was chosen as the inhibitor because it is less acidic and a powder form of the bait has been formulated. The next steps in this study include acquiring a permit to trap live animals in the state of California and transport them into Colorado and to submitting animal care paperwork to bring the wild trapped live animals onto National Wildlife Research Center (NWRC) campus.

Dr. Katherine Horak provided an update to the Committee on the research project entitled, "Using Liver Microsomes to Screen Anticoagulant/Antibiotic formulations for ground squirrels and pocket gophers." The pocket gophers were difficult to find so dogs were used to locate them. Not enough have yet been found to allow experiments. On the ground squirrels the in-vitro liver microsome incubations showed that the males had a significant reaction to the pomegranate juice and grapefruit juice formulas. The reactions in the females were about even with controls. Additional studies will begin on May 15, 2010, pursuant to trapping squirrels and gophers. The studies will include additional microsome incubations for diphacinone and chlorophacinone using pomegranate juice and grapefruit juice as the inhibitors.

#### University of California

Mr. Peter Newman provided an update to the Committee on the research project entitled, "Developing a Vertebrate Pest Control Digital Library." Approximately 15,000 slides have been put on a data base which will be used for education or research in the future. Access to this library would be private and the people with access would need to have a password or access code.

Mr. Peter Newman provided an update to the Committee on the research project entitled, "Development and Evaluation of the VPCRAC Website for Vertebrate Pest Research Information." It is possible that improvements could be made to the website that would facilitate bait sales and gain income through advertisements. Links to the Kings County website to show bait prices could help counties stay informed on bait information. Updates on research projects, board meetings, and any updates on labels could be posted. Ms. Hornbaker asked if the grant should be changed from a research contract to a maintenance contract. Mr. Bray asked how much future funding would cost and if it would decrease. Mr. Stapp wanted to make sure that the website would continue to be fresh and not lose peoples' interest. A guest in the audience requested that a section could be added for frequently asked questions to help the counties who still sell the baits.

Mr. Peter Newman provided an update to the Committee on the research project entitled, "Amended Scope – Vertebrate pest Control of Certification, Education and Outreach." Funding is not yet available for this project and there is nothing to report at this time.

Mr. Peter Newman provided an update to the Committee on the research project entitled, "Food Safety and Rodent Control in Leafy Green Crops – Amended Per VPCRAC Request." The goal of this study was assess rodent presence and to develop techniques to deter rodents from leafy green crops. Three techniques, snap traps or mouse trap devices, wax blocks and wax tags were used to detect the presence of rodents in the field. These traps were placed along the edge of the field to separate crop from road.

Dr. Roger Baldwin provided an update to the Committee on the research project entitled, "Reregistration of CDFA Baits for Control of Norway and Roof Rats in Agricultural Fields." Funding is not yet available for this project and there is nothing to report at this time.

Dr. Roger Baldwin provided an update to the Committee on the research project entitled, "Vertebrate Pest Research 'NEEDS ASSESSMENT' for California." Funding is not yet available for this project and there is nothing to report at this time.

Dr. Roger Baldwin provided an update to the Committee on the research project entitled, "Development of an Integrated Pest Management Program for Vole Control in Artichokes." Funding is not yet available for this project and there is nothing to report at this time.

Mr. Peter Newman provided an update to the Committee on the research project entitled, "Assessing Some Potential Environmental Impacts from Agricultural Anticoagulant Uses." Bird carcasses were tested from the San Diego area and from the central valley to determine if anticoagulant residues were present. Most of the birds tested in both locations had second generation anticoagulant residues in their liver tissue. This may correspond with the high volumes of second generation anticoagulants used in urban areas and suspected homeowner misuse.

## NEW RESEARCH PROPOSALS

Dr. Stephanie Shwiff, United States Department of Agriculture, National Wildlife Research Center, presented to the Committee a research proposal entitled, "Estimating Job and Revenue Savings from using a Variety of Pest Control Techniques to Protect Crops from Bird and Rodent Damage in California." The proposed budget amount is \$78,210.

Dr. Gary Witmer, United States Department of Agriculture, National Wildlife Research Center, presented to the Committee a research proposal entitled, "A Field Efficacy Trial of a Within-Burrow Zinc Phosphide-Grain Bait for the Control of Ground Squirrels." The proposed budget amount is \$49,700. As this proposal needed some refining and more details the Committee decided to wait till the October meeting to decide on this proposal.

Dr. Gary Witmer, United States Department of Agriculture, National Wildlife Research Center, presented to the Committee a research proposal entitled, "A Field Efficacy Trial of CDFA Rodenticide Baits with House Mice and Deer Mice." The proposed budget amount is \$54,185.

Dr. Bruce A. Kimball, United States Department of Agriculture, National Wildlife Research Center, presented to the Committee a research proposal entitled, "Increasing Acceptance of Zinc Phosphide Baits." The proposed budget amount is \$125,173.

Mr. Peter Newman on the behalf of Dr. Terrell P. Salmon, University of California, Cooperative Extension, San Diego County, presented to the Committee a research proposal entitled, "A Literature Review of Existing 'Selective' Bait Stations for Excluding Non-Target Animals and Metering Bait Dose." The proposed budget amount is \$8,608.

Mr. Peter Newman on the behalf of Dr. Terrell P. Salmon, University of California, Cooperative Extension, San Diego County, presented to the Committee a research proposal entitled, "Efficacy of Diluted Anticoagulants Baits in Bait Stations for Controlling California Ground Squirrels." The proposed budget amount is \$22,983.

Mr. Peter Newman on the behalf of Dr. Terrell P. Salmon, University of California, Cooperative Extension, San Diego County, presented to the Committee a research proposal entitled, "Vertebrate Pest Control-Education and Certification using the Internet and Touch Screen Devices." The proposed budget amount is \$78,999.

Dr. Katherine Horak, United States Department of Agriculture, National Wildlife Research Center, presented to the Committee a research proposal entitled, "In-Vitro Inhibition of Chlorophacinone Metabolism in Resistant Meadow Voles using FIFRA 25b Inert Ingredients." The proposed budget amount is \$42,865.

Dr. Donal Skinner, University of Wyoming was to present to the Committee a research proposal entitled, "Chemical Ovariectomy of the Coyote." The proposed budget amount is \$176,761. Dr. Skinner was not able to attend the meeting to present so the project

was not voted on for funding. The Committee discussed the proposal and there were no motions to move this proposal forward.

#### RESEARCH PROPOSAL DISCUSSION AND DECISION SESSION

- Motion: Dennis Bray moved that the Committee fund the research proposal from Stephanie Shwiff, United States Department of Agriculture, National Wildlife Research Center, USDA, entitled, "Estimating Job and Revenue Savings from using a Variety of Pest Control Techniques to Protect Crops from Bird and Rodent Damage in California," in the amount of \$78,210. The motion was seconded by Robert Timm and passed unanimously.
- Motion: Robert Timm moved that the Committee fund the research proposal from Gary Witmer, United States Department of Agriculture, National Wildlife Research Center, entitled, "A Field Efficacy Trial of CDFA Rodenticide Baits with House Mice and Deer Mice," in the amount of \$54,185 pending the outcome of the awarding of the Specialty Crop Block Grants. The motion was seconded by Dan Spangler and passed unanimously. Victoria Hornbaker abstained from voting.
- Motion: Dale Huss moved that the Committee fund the research proposal from Bruce A. Kimball, United States Department of Agriculture, National Wildlife Research Center, USDA, entitled, "Increased Acceptance of Zinc Phosphide Baits," in the amount \$125,173. The motion was seconded by Edward Meyer. The motion passed with a majority vote of eight Yeas and one Nay vote.
- Motion: Victoria Hornbaker moved that the Committee fund the research proposal from Terrell Salmon, University of California, Cooperative Extension, San Diego County and presented by Peter Newman, entitled, "A Literature Review of Existing 'Selective' Bait Stations for Excluding Non-Target Animals and Metering Bait Dose," in the amount \$8,608. The motion was seconded by Edward Meyer and passed unanimously.
- Motion: Robert Timm moved that the Committee fund the research proposal from Terrell Salmon, University of California, Cooperative Extension, San Diego County and presented by Peter Newman, entitled, "Efficacy of Diluted Anticoagulants Baits in Bait Stations for Controlling California Ground Squirrels," in the amount \$22,983. The motion was seconded by Victoria Hornbaker. The motion was defeated with a majority vote of six Nays and three Yea votes.
- Motion: Paul Stapp moved that the Committee fund the research proposal from Terrell Salmon, University of California, Cooperative Extension, San Diego County and presented by Peter Newman, entitled, "Vertebrate Pest Control-Education and Certification using the

Internet and Touch Screen Devices," in the amount \$78,999. The motion was seconded by Robert Timm and passed unanimously.

Motion: Robert Timm moved that the Committee fund the research proposal from Katherine Horak, United States Department of Agriculture, National Wildlife Research Center, entitled, "In-Vitro Inhibition of Chlorophacinone Metabolism in Resistant Meadow Voles using FIFRA 25b Inert Ingredients," in the amount \$42,865. The motion was seconded by Ellen Des Jardins-Hirth and passed unanimously.

#### NEXT MEETING

The meeting adjourned 5:30 p.m. The next Committee meeting will be held in Salinas, California. The specific date for the meeting is October 13, 2010 from 8:30a.m. until 5:00 p.m.

SUBMITTED,

Victoria Hornbaker Secretary

Date