

**MINUTES OF THE
SALT LAKE CITY MOSQUITO ABATEMENT DISTRICT
18 March 2021
BOARD MEETING**

Presiding: Neil Vickers, Ph.D., Board Chair 2021

Time: 12:33 p.m.

Place: 2215 North 2200 West, Salt Lake City, UT 84116

Trustees Present: Neil Vickers, Ph.D., Chair (Attended Remotely)
Van Turner, Vice-Chair (Attended in Person)
Carlton Christensen (Attended Remotely)
La Vone Liddle (Attended Remotely; Joined During Item 2)
Dr. Dagmar Vitek (Attended in Person)

Others Present: Ary Faraji, Ph.D., Executive Director (Attended in Person)
Gregory White, Ph.D., Assistant Director (Attended in Person)
Aleta Fairbanks, CPA, CFO (Attended in Person)
Andrew Dewsnup, IT/GIS Specialist (Attended in Person)
Greg Baumgartner, Utah Local Governments Trust (Attended Remotely for Item 4)
Approximately 30 members of the public (All Attended Remotely)
The following persons provided comments:
Tena Rohr, Salt Lake City Private Citizen
Rebecca Burrage, Retired Nurse Practitioner, Great Salt Lake Audubon Member
Heather Dove, President of the Great Salt Lake Audubon
Heidi Hoven, Ph.D., Assistant Gillmor Sanctuary Manager, National Audubon Society Member
Ella Sorensen, Gillmor Sanctuary Manager and Project Officer for U.S. Federal Government Properties
Romel Mackelprang, Ph.D., Professor Emeritus from Eastern Washington University, Washington
Steve Erickson, Policy Advocate for the Utah Audubon Council
Dr. Brian Moench, M.D., Board President of Utah Physicians for a Healthy Environment
Lionel Trepanier, Utah Tar Sands Resistance
John Giles, Salt Lake City Private Resident
Richard Holman, Community Advocate for the Westside Coalition
Jill Merritt, Climate Justice Advocate

1. Roll Call:

Trustee Vickers called the meeting to order at 12:33 p.m., and Executive Director Faraji confirmed that the meeting was being recorded. Trustee Vickers indicated that he could possibly have a conflict of interest with Item #12, Approval on Training Grants with the Pacific Southwest Center of Excellence, because he is a recipient of one of these grants. He will recuse himself from this discussion and vote, and Trustee Turner, Vice-Chair, will chair the meeting during Item #12.

2. Public Comment:

The District is currently in the process of considering applying for the Innovative Readiness Training (IRT) Civil-Military Partnership with the U.S. Air Force to evaluate aerial pesticide applications while the District conducts its regular mosquito abatement activities. This is a public meeting, and approximately 30 members of the public were in attendance. Members of the media were given permission to record the meeting and utilize clips for news reports. The following individuals made comments about this partnership, and a summary of their remarks are included below:

Tena Rohr – The Great Salt Lake the is the largest salt water lake in the western hemisphere, and 10,000,000 birds use the Lake annually. It has been designated as a globally-important bird area and is included in the Western Hemisphere Shorebird Reserve Network. This important area also includes the surrounding wetlands, which provide critical habitats for millions of birds. She is concerned that the pesticides being used will cause a reduction of the mosquito population, which birds rely on as an important food source for other insects that birds eat. The pesticides will also kill non-target species that are important food sources for foraging birds and will also provide toxic conditions for other wildlife and humans.

Rebecca Burrage – She is concerned about the health impact on the community from spraying neurotoxins. She is a member of a small environmental justice committee with the Holladay United Church of Christ. She fears that the spraying will spread throughout the valley and probably beyond. She is a member of the Great Salt Lake Audubon and is also worried about seeing impacts to the birds from the spraying.

Heather Dove – She is speaking for the Great Salt Lake Audubon members. She was shocked that the environmental assessment didn't address the effect on the acres of shorebird habitat and on the millions of birds that use it. Mosquitoes are the main food source for birds, especially during migration when they need high-quality protein in order to complete the migration cycle. She feels utilizing C-130 aircraft to conduct the spraying is inappropriate, especially during fall migration. Birds will be decimated even when spraying occurs at night. She encouraged using less-toxic substances that will not come at such a great cost to birds and humans. Besides, the spraying is ineffective because the problem is persistent. Mosquitoes come back and the problem is even more so. She took umbrage with the statement that there was no "environmental justice issue present." Persons are in the spray area after dark and people are also near enough to be affected

by the drift. She encouraged rejecting the IRT proposal and allowing private entities to opt out of treatment.

Heidi Hoven – She is against spraying with organophosphates over the highly-productive habitats for shorebirds, water fowl, water birds, and the non-target organisms that many of them eat. She was worried about contamination from spray drift and cited some studies supporting her opinion. Gillmor Sanctuary and all managed wetlands within the spray area are ecologically sensitive, should not be sprayed, and should have a buffer of at least 750 meters. She was vehemently concerned about the plans to spray during the nesting and brood-rearing season with C-130 aircraft. She was also strongly opposed to spraying with naled and permethrin over these sensitive wetlands.

Ella Sorensen – The National Audubon Society manages 3,614 acres within the spray zone that is dedicated to wildlife and focuses on birds. There are two partners within this area. She is the project officer for properties owned by the U.S. Federal Government (they will submit their own comments) and she manages the Gillmor Sanctuary. She spoke about one of the Audubon's concerns, which is bird strikes with aircrafts. The FAA encourages a bird-free zone of five miles around airports. Birds commonly fly between sunset and dark, and C-130 aircraft flying in the heart of an avian zone is not ecologically sensitive nor appropriate. There will be death as well as disturbance and harm to shorebirds in the peak migrating period. The large aircrafts also produce light and a high degree of noise that are both detrimental to birds. She strongly opposes the use of the C-130 aircraft within the avian fly zone of sensitive wetlands of a National Audubon Society Sanctuary, for it is not ecologically sensitive, appropriate, or necessary.

Romel Mackelprang – He is a beekeeper and moved many of his hives to Utah from Washington State. His beehives have suffered significantly since moving them to Utah, and he believes this has been, in great measure, due to pesticides. He has discussed the Air Force project with his daughters, Rachel Mackelprang, Ph.D. (a microbiologist whose research includes bees) and Rebecca Mackelprang, Ph.D. (a molecular and plant biologist who is currently working in the area of sustainable crops and food stability). Both of his daughters have expressed serious reservations about this project. From their molecular and microbiology perspectives, it will cause harm to bees and plants. Indiscriminate spraying using large airplanes will expose a large number of bees to these toxins, and he encouraged the District to be engaged in mosquito abatement using much more targeted technologies rather than these massive means of delivery.

Steve Erickson – He has been a long-time volunteer and has been involved with matters dealing with the U.S. military. On 17 March, he filed an official request with the United States Air Force to withdraw their offer to participate in this project on the basis of the environmental impact study and significant concerns that this is federal competition with the delivery of private sector services. This is an inappropriate location for Air Force operations and training for a variety of reasons. There is no need for it to be conducted near the airport and these sensitive habitats because the Air Force has hundreds of thousands of acres specifically set aside for training operations at its disposal. It causes speculation that this training has been designed to allay fears that mosquitoes and other pests will cause problems in the development of the Inland Port and for the operations of the new State Prison. He is in agreement with the concerns about the wind speed and drift

that have been previously expressed, and he feels this project is bad optics, particularly for the U.S. Air Force.

Brian Moench – He believes that the aerial spraying is a serious health issue, going far beyond a handful of cases of West Nile virus in Utah. He declared that low-level pesticide exposure is similar to the consequences from low-level radiation exposure, claiming that pesticide spraying is tantamount to making thousands of Utahns “downwinders” again. The Utah Physicians for a Healthy Environment is preparing a report scientifically challenging the District’s Environmental Assessment and virtually all of the assumptions justifying this spraying project. It is nearly 60 pages with 300 references. Its summary expresses the opinion that pesticide use contributes to local air pollution and poses a threat to fetuses and children. He argued that spraying is not effective in reducing mosquito populations nor reducing the incidence of West Nile virus. He claimed that West Nile virus incident numbers are so low, that preventing this outcome should not be allowed to eclipse the list of health and environmental concerns arising from pesticide use. He asserted that claims of safety from pesticide spraying use faulty logic and outdated science and that there are multiple oversights, omissions, inconsistencies, and errors in the District’s Environmental Assessment. He repeated other previously-expressed ecological concerns and stated that there are better ways to control mosquitoes, as other communities have found.

Lionel Trepanier – He has submitted comments to the Department of Defense in response to the District’s public notice that was published in February. He took exception to the dates specified in the public notice and noted that they did not perfectly align with the two-week period Executive Director mentioned during a discussion with the West Point Community Council. In this case, the time period matters because the public notice fails to provide sufficient specificity of the request and also fails to comply with the required non-competition due diligence because the extent of the program may be longer than noticed. He assumed that the District had submitted an application to the Air Force prior to being approved by the Board of Trustees, and he was certain this aerial application would damage civilian-military relations in Salt Lake County. He has asked the DOD to deny the District’s Readiness Training application.

John Giles – He dislikes being bitten by mosquitoes, but birds need to eat. He is apprehensive about using naled because it kills bees, it has been banned in the European Union, and it will not get rid of the mosquito population. He noted that several beekeepers have sued cities because of bee deaths being attributed to Dibrom (naled). He also mentioned that naled causes slow growth, stunted brains in animals and humans, liver damage, and other negative effects. He recognized the fact that some harmful chemicals are present in mosquito repellents, but he emphasized that users have the discretion of when, where, and how often to apply them. He felt that saving the District thousands of dollars by having the U.S. Air Force conduct the aerial spraying was not sufficient to help mitigate the expensive tax burden that the Inland Port and State Prison have instigated. These facilities will require massive amounts of pesticides to contain the insects because they are being built in a marsh. He thinks that there needs to be more public meetings to further investigate the potential poisoning of our valley.

Richard Holman – The west side of Salt Lake is comprised of six communities that are adjacent to the area where the Air Force will be conducting its aerial spraying. He anticipates this spraying will have a negative socioeconomic impact based on employment and other matters that are cultural. And, the seventy-five percent of the Hispanic population that lives exclusively on the west side will be subject to the impacts of this spraying. They also suffer existing hazards, including the Utah Inland Port, the interstate highway locations, multiple refineries, the 24-7 rail yard, etc. He opposes the spraying of chemicals, and he asked that aerial spraying cease and other means of mosquito control be studied. He is concerned about the pesticide exposure to human life, the U.S. Air Force competing with the private sector, and harming military-civilian relations. He will be encouraging the U.S. Air Force to reject the District's application to conduct aerial spraying. He is familiar with C-130 aircraft; they are heavy aircrafts that put out maximum air, so the drift will be far beyond the area that the District anticipates.

Jill Merritt – She noted that two contexts needed to be remembered in the discussion: 1) the unfavorable relocation of the State Prison to the Northwest Quadrant to facilitate the development of the Inland Port and 2) projects throughout the world taking the habitat of so many creatures and loading the atmosphere with climate-changing megatons of carbon that harm the habitat of human civilization.

No more members of the public indicated that they wished to speak, and Trustee Vickers thanked them for contributing and sharing their thoughts and concerns. He informed the attendees that they could request a copy of today's "chat" and/or submit any further comments by contacting Executive Director Faraji at ary@slcmad.org. Public comments were closed at 1:20 p.m., and the attendees were invited to join us for the remainder of the meeting.

3. Update on Air Force Innovative Readiness Training:

The Board of Trustees has been proactive in extending the comment period to 31 March 2021. Comments that are submitted by 31 March will be compiled into a packet and given to the Trustees for consideration prior to making a final decision at the 22 April 2021 Board Meeting.

4. Discussion and Approval of Utah Local Government Trust's Team Appreciation & Recognition Program (TARP):

Greg Baumgartner, Utah Local Governments Trust, introduced a new safety program that the Trust has found to be very successful in reducing injury claims. This program strengthens a culture of safety awareness and accountability that has proven to be very effective. The Trust will partner with the District in tracking, recognizing, and rewarding those who are accident-free. The companies that have already instituted the TARP program have reduced work-place incidences 25% over the companies that don't have this program in place. The key components are Management Engagement with 1) Team Element (Accountability), 2) Shared Results (Transparency), and 3) Monthly Reward (Awareness). The results are shared once a month at a safety meeting, along with

discussions about safety incidents and identifying how possible accidents can be avoided. The Trust will reward the District's participation with a 5% reimbursement on its liability insurance premium plus a 5% rebate on its workers' compensation premium. As a result, a good portion of the TARP program's cost is covered by ULGT. This is a small investment for a big payoff in keeping employees safe.

Trustees Christensen affirmed that this safety program has been a great partnership for the Utah Transit Authority. Trustee Vickers indicated that the University of Utah has a big safety operation in place to protect people, and he was in agreement with incentivizing the program like this program plans to do. Trustee Liddle made a motion to approve the District's participation in the Utah Local Governments Trust's Team Appreciation & Recognition Program. The motion was seconded by Trustee Turner, and it carried with all in favor.

5. Approval of the 18 February 2021 Minutes of the February Monthly Board Meeting:

The minutes had been distributed to the Trustees for review prior to the meeting, and Trustee Vickers pointed out that a change needed to be made under the "PacVec Annual Meeting, 17-18 February 2021, Online" heading. The student who received the \$25,000 grant for studying the Western tree hole mosquito, *Aedes sierrensis*, was Kirsten Meredith and not Kirsten Wilson. Trustee Christensen moved approval of the 18 February 2021 minutes with the stated correction. Trustee Vitek abstained, and the motion passed after being seconded by Trustee Liddle.

6. Presentation of the February 2021 Financial Statements and Approval of Bills for Payment:

The Board Members had also received the Financial Statements and record of bills for payment beforehand. CFO Fairbanks reviewed the Financial Statements with the Board; all expenditures were presented, with special attention being paid to items over \$1,000. Documentation for every payment accompanied the checks when they were signed, and she pointed out one unusual transaction. Purchasing five bicycles for the catch basin team had been approved with the 2021 budget in December; each bicycle cost \$819.99, and the bikes were purchased by credit card. Because employees have a \$2,000 credit card limit, the purchase of the bikes was spread over three credit cards and appropriately documented. Trustee Christensen moved approval of the February 2021 Financial Statements as presented and February's bills for payment, along with the discussion on the credit cards. The motion was seconded by Trustee Liddle and carried unanimously.

7. Discussion and Approval from Board to Fill Vacancy of Education Specialist:

The Education Specialist position has been vacant since Sean McKelvie resigned in July of 2018. We have been holding off filling this position until everything settled down after moving into the new facility and getting a good handle on our operations. We have

had a science curriculum in place that is catered to 4th, 5th, and 6th graders. In light of everything that has been happening recently, we realize we need to put more expediency in filling this position because reaching out and engaging / teaching the community about mosquito biology, ecology, epidemiology, and mosquito / vector control as a whole has become imperative. We need to locate someone who not only enjoys teaching, but someone who understands abatement operations, has excellent communication skills, and has the scientific expertise allowing him/her to knowledgeably interrelate with the public as our Public Information Officer. This position will also include performing some safety responsibilities and providing increased training with our internal staff. (Richard Holman heartily endorsed hiring someone with communication and educational components. The more experiences and varied backgrounds aligned with the ability to communicate with a wide range of people is desirable. He suggested looking for someone who can also speak Spanish. Dr. Moench was worried because the Department of Agriculture provides the study materials used to educate the staff. He feels the Department of Agriculture has historically been at multiple arms-length from the health consequences resulting from the spraying that they do. He would like to take a look at these educational materials.) Trustee Christensen recommended completing a GRAMA request if people are genuinely interested in receiving any information so that we are equal in how we give out documents.

Trustee Liddle made a motion to approve filling the vacancy of Education Specialist; the motion was seconded by Trustee Turner and passed with all in favor.

8. Discussion and Approval from Board to Phase Out Gas-Powered Vehicles to Electric or Hybrid:

The District generally replaces vehicles on a rotation basis, and Executive Director Faraji asked the Trustees if they would be supportive of systematically phasing out gas-powered vehicles and replacing them with electric or hybrid vehicles. The Board had previously indicated that this would be a positive direction for the District to pursue. Trustee Christensen also indicated that UTA had experienced a grid issue, and he recommended communicating with Rocky Mountain Power to help avoid any energy problems in the future. Costs escalate whenever there is a peak demand, which will occur if all of the vehicles are plugged in at the same time. A motion approving the move to electric or hybrid vehicles was made by Trustee Liddle, seconded by Trustee Vitek, and passed unanimously.

9. Discussion and Approval of Changes to Policies and Procedures in Regards to Political/Religious etc. Debates at Work and Secondary Job Notification:

In an effort to save money, Executive Director contacted Utah Association of Special Districts' Association Secretary, Heather Anderson, to see if the Association has an existing policy concerning political/religious debates in the workplace. She agreed that there is a need for such a policy, and the Association is now undergoing research to identify the best way to handle this issue. It isn't straightforward because there is a freedom of speech issue that needs to be legally considered. UASD will develop a policy for all of their

members, so this policy change will be tabled until UASD completes a legal policy for us and other districts to adopt.

An Employee's Notice of Secondary Employment form was included in the Board Packet for the Trustees to examine. The Policies and Procedures currently dictate that secondary employment may not be of a type that would reasonably give rise to criticism or suspicion of conflicting interests or duties. And it must not have a negative impact on the employee's work performance, such as being too physically or mentally draining. This form will allow employees to readily provide an overview of secondary employment to the Executive Director. Should the Executive Director have secondary employment, he will submit the form to the Board Chair, who will then distribute the form to the other Trustees to make them aware of the situation. The form will then be included in the employee's personnel file.

The Employee's Notice of Secondary Employment form was unanimously approved through a motion made by Trustee Liddle and seconded by Trustee Christensen.

10. Update on Insectary Renovations with Design West Architects:

Assistant Director White reported that the renovations to fix the high-humidity issues in the insectary are ongoing. No water damage existed in the drywall, and work in the first room has nearly been completed. Construction in the second insectary should begin in about one week; renovations are going well and should be completed before the start of the mosquito season.

11. Legislative Updates:

A legislative summary put together by Ryan Lusty, Manager of the Magna MAD, was included in the Board Packet. It lists the results of several bills that were presented this legislative session, and it looks like nothing major will impact us.

12. Updates and Approval on Training Grants with the Pacific Southwest Center of Excellence:

Running the meeting was turned over to Vice-Chair Turner. The Pacific Southwest Center of Excellence in Vector-Borne Diseases provides training grants (funded by the U.S. Centers for Disease Control and Prevention) to improve public health surveillance through increased interactions between academia and vector control districts. As explained previously, being selected as a grant recipient is generally enhanced if a sponsoring agency also agrees to fund some of the research, and the District agrees to provide some matching funds. The District was successful in being awarded two \$25,000 grants from the Pacific Southwest Center of Excellence. One grant supported working on next-generation sequencing of our mosquito populations out on the west side. We are participating in an additional grant from another collaborator on the insecticide resistance status of mosquitoes. This grant is headed by Dr. Tara Thiemann with the University of the Pacific

and is specifically investigating resistance status in *Culex tarsalis* populations. And, we are also involved in a grant that has been awarded to Dr. Neil Vickers and his student, Kirsten Meredith. They have been researching *Aedes sierrensis*, which is the Western tree hole mosquito. The District had previously agreed to provide a small amount of matching funds for all of the above grants and we are in the process of cutting the checks for two of these grants, which requires official approval because they are \$2,000 and over. The first is for the University of Pacific in the amount of \$2,000, and the second is for the University of Utah in the amount of \$2,500.

Trustee Liddle made a motion to approve the grant payments, and Trustee Christensen seconded the motion. Trustee Vickers abstained, and the motion passed with the other Trustees in favor.

13. Report on Attended and Reminder/Approval of Upcoming Training/Meetings:

Running the meeting was turned back to Chair Vickers.

- **Utah State University, 24 February 2021, Online**

Assistant Director White presented on mosquito control during a public health seminar at the Utah State University, and he is actually in the process of applying for an adjunct professor position in their Biology Department. This will be a good opportunity to develop some relationships with USU professors and their students. We also hope to be able to work on some applied research discovering how mosquito control affects the environment.

- **AMCA Annual Conference, 1-5 March 2021, Salt Lake City, Utah**

AMCA had originally budgeted for 600 attendees at the American Mosquito Control Association's 2021 Annual Conference, and they exceeded their expectations with well over 1,100 participants. Because Executive Director Faraji was the national president of AMCA during the conference, the original plans had been to have a lot of Utah-centric events for the attendees. Unfortunately, COVID-19 changed these plans; however, Executive Faraji was able to get an entire edition of *Wing Beats* published in honor of Utah's rich history of dedication to research, surveillance, and control measures. The edition also portrays how our partners within Utah are involved at the national level and work to protect public health and enhance the quality of life. Senator Mitt Romney was kind enough to open the conference by recording a five-minute speech, and he made a lot of promises as far as being able to help be a champion for public health if we need his assistance at the federal level.

Dr. Sammie Dickson presented the Memorial Lecture on Dr. Lewis Nielsen, who was a longtime University of Utah professor and member of this District's Board. Assistant Director White ran a symposium on collaborations between different entities within Utah, including IDbyDNA, the State of Utah Health Department, BYU, Utah State University, and the University of Utah. Executive Director Faraji ran the Mosquito

Lightning session, which was a series of three-minute talks on various mosquito-related topics. Additionally, he delivered his Presidential Address and awarded select recipients with the AMCA's highest honors. Our GIS/IT Specialist, Andrew Dewsnup, also received AMCA's Grassroots Award for exceptional contributions to enhancing mosquito abatement operations through his drone and 3-D printing work.

The AMCA also organized an education event in West Valley City which went very well: Jackling elementary students participated in a virtual mosquito education program with individual segments geared towards the different age groups. Executive Director Faraji included a copy of AMCA's press release in the Board Packet.

Dr. Peter Hotez, who is a vaccine scientist and Dean of the National School of Tropical Medicine -- Baylor College of Medicine, was a featured speaker at the conference. He has spent 10 years of work on coronavirus and related pathogens, and he delivered an interesting presentation on COVID-19 and mutant forms of the virus.

Assistant Director White and the Board Members elaborated on their impressions of the conference. Even though the District's presenters indicated that recording their talks without an audience was difficult, there was a general consensus that Trustee Vickers', Executive Faraji's, and Assistant Director White's presentations were among the most enjoyable and were very informative. The Board Members also complimented Executive Director Faraji on the content and organization of the conference; they commended him for the service he gave as the President of the Association and recognized that it was an extremely tough year with exceptionally unusual challenges. They appreciated the opportunity to listen to several of the presentations and felt they were well worth their time. All of the talks are available online until 31 March 2021.

- **Visitors from Mali, 1-5 March 2021, Salt Lake City, Utah**

The two professors from the University of Bamako ran into travel complications and only made it to Paris before they had to return to Mali because of COVID travel restrictions. When it was evident that they would arrive in Salt Lake City at the end of AMCA's conference, Executive Director Faraji suggested they reschedule this trip for later in the spring when it is warmer. Their visit will be more worthwhile if they can get in the field with us and learn more about our operations.

- **Municipal Mosquito Control, 31 March 2021, Online and**
- **Texas Mosquito Control Association (TMCA), 7 April 2021, Online**

Both Municipal Mosquito and TMCA reached out to the District for presentations on some of the novel mosquito work we have been conducting. Assistant Director White will be giving a presentation to the Municipal Mosquito Control at the end of March, and Executive Director Faraji will speak to the Texas Mosquito Control Association in April. Their presentations will cover some of our work with 3-D printers, drones, and our creative traps.

- **AMCA Washington Days, 10-12 May 2021, Online**

The AMCA Washington Days will take place this year; the scheduled meetings with the legislators will be held virtually. Executive Director Faraji asked the Trustees to let him know if they'd like to participate virtually in the meetings.

14. Executive Director's Report:

The Board Members were given a few updates, which included the following: 1) Executive Director Faraji and Assistant Director White have begun interviewing prospective employees for the 2021 seasonal positions. 2) *Anopheles* mosquitoes began host seeking for blood meals during our short span of warmer weather. This species is able to use a blood meal for nutrition, which these mosquitoes used this year when they went back into hibernation once the temperatures cooled back down. 3) The Ouelessebougou Alliance has an interest in funding a western-approach mosquito program in Mali rather than using bed nets and indoor / outdoor residual spraying. They plan to fund this operation, and they would like the District to provide advice and potential training. Once they have an established concept, they will seek possible funding from various entities. 4) Utah State Public Health Department's Zoonotic Epidemiologist has some additional CDC Epidemiology and Laboratory Capacity funding, and she asked how this funding could best be utilized. Perhaps doing an insecticide resistance workshop for the entire State of Utah through the Utah Mosquito Abatement Association would be a good use of those funds. We would like to set up a state-wide Insecticide Resistance Workshop and Training to really teach the other districts how they can go about conducting their own insecticide resistance testing at their own facilities with their local species of mosquitoes. We would like to host this training sometime in the late spring or early summer, and we may have a chance for obtaining some additional funding if we also partner with an academic researcher. 5) The State of Massachusetts is currently undergoing an independent evaluation process to gauge the efficacy and methods used for mosquito control in that state. Executive Director Faraji was contacted to participate as part of a panel to submit a proposal to the state. However, the application to Massachusetts' Request for Responses was not submitted on time, and it was not considered. 6) Two years ago, there was an infestation of the yellow fever mosquito, *Aedes aegypti*, in Moab, UT. We, and several other local mosquito districts, took an aggressive approach to conducting surveillance and control in order to extinguish these invasive mosquitoes before they could become established. Our collected specimens were submitted for genetic analysis, and our collaborators from Yale University recently contacted us with an update. They were able to definitively let us know they have evidence that the mosquitoes most likely came from a very small number of mosquitoes that originated in Arizona. We are planning to publish an article in a microbiology journal and then follow that up with an additional article in a more medical entomology-related journal. This was largely a success story which showed that an aggressive mosquito control campaign can be effective in preventing the establishment of an invasive mosquito in a new territory. 7) We are thinking about additional partnerships that we can do with local associations to help us answer questions about the pesticide impact on the environment, nesting birds, midges, bees, non-targets, etc. The best way of responding to these questions is through research, and we can accomplish more by utilizing partnerships. One avenue could possibly be through funding a student who is

enrolled in some academic institution to look specifically at the questions that are being posed and to work with an advisor on these issues. Executive Director Faraji spoke with an entomologist in Montana who specializes in some of this work, and his university has an online program for a professional master's program. Or, another possibility could be to partially fund a Ph.D. student or Post Doc to do research. We could find out the primary questions the environmentalists have and do actual research to scientifically learn the answers. A combination of collaborations with different groups, and hopefully locating some funding as well, could enable us to quickly obtain even more answers. There could possibly be a national interest in establishing specific answers to many of the concerns that have been expressed in our meeting today, which could enable us to locate even more outside support. Collaborations could provide different ways to approach and resolve these concerns at a minimal cost to the District, and this approach and subsequent partnerships could serve as a national model for others to follow. 8) The Director's Report also included an article from the national *Science Teacher Magazine* featuring Executive Director Faraji and his entomological work.

15. Probable Agenda Items for 22 April 2021 Board Meeting:

- Executive Director's Report
- Insectary / Facility Updates
- Tax Increase Update
- IRT Update

16. Adjournment:

Trustees Liddle and Christensen made and seconded a motion to adjourn the meeting at 2:55 p.m. The 22 April 2021 Regular Monthly Board Meeting will be held at 12:30 p.m., and this meeting will be held electronically.



Ary Faraji, Executive Director

23 APR 21
Date



Van Turner, Vice-Chair

4-23-21
Date