



UC DAVIS

VETERINARY MEDICINE

Poultry Ponderings



Edition 13 · Winter 2018

A quarterly newsletter detailing poultry related work at the UC system



New California "Waterfowl Tracker" Web App Designed to Help Poultry Producers Assess Risk

The Central Valley of California is one of the most important wintering areas for waterfowl in North America and also contains the majority of California's commercial layer, broiler, and turkey flocks. A new web app called the [California Waterfowl Tracker](#) developed by UC Davis, University of Delaware, USGS and UC-ANR and hosted on the

UCCE poultry website is intended to help poultry producers, backyard poultry enthusiasts, regulators, and risk managers to better assess the locations of waterfowl relative to poultry farm(s) in the Central Valley of California..

(continued on next page)

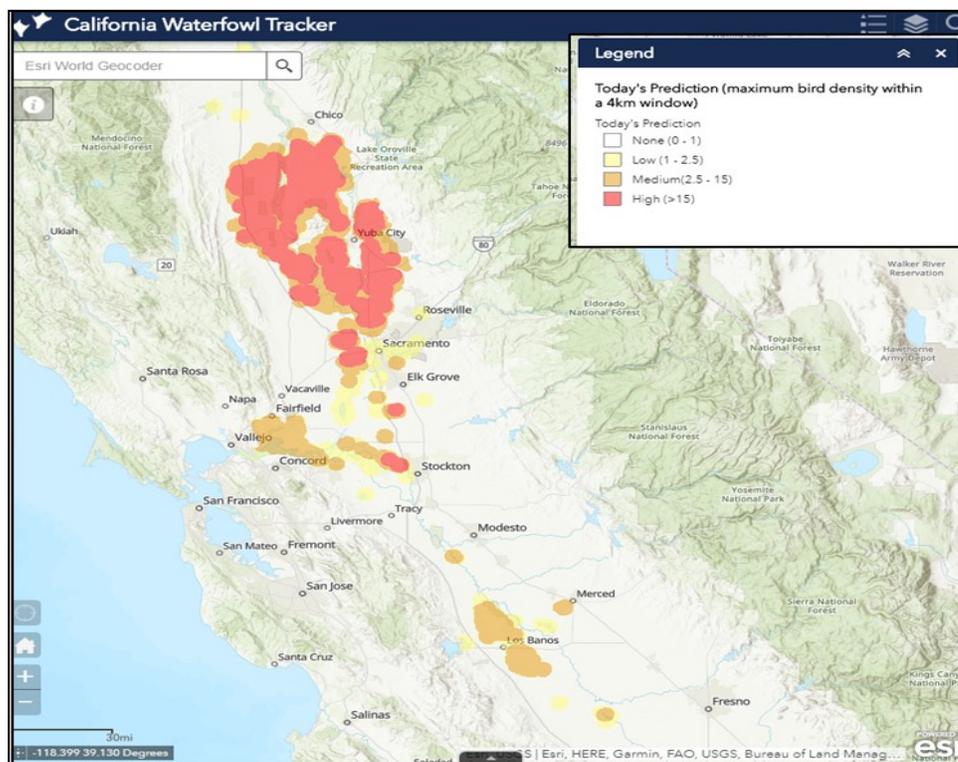
Inside this issue:

- CA Waterfowl Tracker (cont.) **2**
- UCD's Pastured Poultry Farm's Community Donations **2**
- UCD Faculty Honors **3**
- Dr. Cluck's Trivia **4**
- Beginning Farmer and Rancher Development **4-5**
- 4-H Backyard Poultry Workshop **6**

Questions or Comments?

Contact Maurice Pitesky at mepitesky@ucdavis.edu or 530-752-3215

Editor: Anny Huang



Example of the daily updated waterfowl density map. Geographic areas are identified as supporting low, medium, or high densities of waterfowl. Next, a 4-km buffer is placed around those areas in order to capture feeding habitat (i.e., 4 km is the estimated mean distance that waterfowl fly between roosting and feeding). Farms or backyard poultry that are within the red areas would reflect geographical areas with the highest potential for waterfowl habitat. The maps change daily based on several factors including precipitation, temperature, soil wetness, and flooded rice and wetland cover.



New California “Waterfowl Tracker” Web App Designed to Help Poultry Producers Assess Risk (*cont.*)

(continued from front page)

While not all waterfowl carry Avian Influenza (AI), they are the primary reservoir. Therefore, understanding timing and location of waterfowl habitat and ultimately where waterfowl feed and roost (rest), will allow poultry farm managers and other stakeholders to consider spatiotemporal (e.g. space and time) concentrations of waterfowl in decision-making.

Using a machine learning approach developed by Jeff Buler at the University of Delaware, the web app produces

an automatically updated daily waterfowl density map for the central valley of California that is updated daily with both satellite and weather information station information. Additional waterfowl habitat and next generation radar analysis of waterfowl are integrated into the web app. The web app is interactive thereby allowing users to search one or more addresses to understand their farms interaction with waterfowl.

While the current version of the website is designed for California, the

long-term goal is to develop and expand this system for the continental U.S. to promote health and safety of poultry flocks nationally.

This website is a product of the collaboration among Dr. Maurice Pitesky's lab at the UC Davis School of Veterinary Medicine-Cooperative Extension, Jeff Buler's Aeroecology Program at the University of Delaware, and the USGS.

— Maurice Pitesky

UC Davis Pastured Poultry Farm: Working with the Community and the Campus

In addition to being a training, outreach and research hub for commercial free-range and pastured poultry producers the [UC Davis Pastured Poultry Farm](#) is focused on working with the community and the University.

The farm donated 250 dozen eggs to the Yolo Country Food Bank during the holiday season and plans to continue donating about 400 eggs every month. In addition, the farm recently donated 20 dozen eggs to the Woodland Masonic Lodge as part of their annual pancake breakfast fundraiser. All proceeds from the Woodland event were given directly to the Woodland Volunteer Food Closet, which has provided emergency food resources to Woodland residents since 1968.



At the campus level, the farm sells a portion of their eggs to the UC Davis campus dining services to support their efforts to provide healthy local food options.

In addition, at the campus level, the farm has been a training facility for over 40 undergraduate students with the majority of the students being either pre-vet students or engineering students. Students gain practical experience in poultry production, medicine and design and building.

A list of innovations designed at the farm can be found [online](#) at our website. Research done at the farm can also be found [on our website](#).

If you would like to support the UC Davis Pastured Poultry Farm please visit our [crowdfunding page](#) or contact Dr. Maurice Pitesky at mepitesky@ucdavis.edu.

— Maurice Pitesky



UC Davis Faculty Honored by the American Association of Avian Pathologists

At the 2017 American Association of Avian Pathologists (AAAP) annual meeting, UC Davis' poultry expertise and achievements were recognized:



Dr. Rodrigo Gallardo received the 2017 Bayer-Snoeyenbos New Investigator Award

Dr. Gallardo (DVM, PhD), assistant professor and head of the poultry medicine program at the school was awarded the 2017 Bayer-Snoeyenbos New Investigator Award in recognition of meritorious research contributions to the field of poultry medicine. Gallardo has been on the faculty at UC Davis for five years, during which time he has made significant contributions through research to advance poultry health. He has built a solid poultry medicine program offering research, teaching and outreach activities. Gallardo's position is jointly supported by the poultry industry in California and by the school.



Dr. H. Shivaprasad was inducted into the AAAP Hall of Honor

Dr. Shivaprasad (DVM, PhD, DACPV) is professor of avian pathology at the Tulare Branch of the California Animal Health and Food Safety Laboratory (CAHFS), a joint program between the school and the California Department of Food and Agriculture. Shivaprasad was inducted into the AAAP Hall of Honor at the recent 2017 annual conference. This is the highest honor for a poultry pathologist awarded to Shivaprasad in recognition of his significant contributions to the advancements of poultry health, avian diagnostics and his service to the AAAP. He joins a special group of highly distinguished colleagues.



Dr. Manuela Crispo received the 2017 Reed Rumsey Student Award

Dr. Crispo (DVM), an avian medicine resident at the CAHFS Turlock Branch Laboratory, was awarded the Reed Rumsey Student Award for her efforts to advance avian medicine. She was recognized for her research in avian Reoviruses and her future career goals in avian parasitology. Crispo earned her DVM from the University of Torino, Italy in 2013 before coming to California and working with Dr. Shivaprasad in avian pathology and diagnostics.

Correction to the Spring 2017 edition of Poultry Ponderings:

The article titled "Serological Surveillance of Wild and Pen-Reared Pheasants in the Central Valley" used antibody based results to make inferences about disease prevalence and potential of disease spread. The article was subsequently edited to reflect the antibody based results as opposed to any isolation of disease causing agents.



UC Davis Awarded 3-year USDA Beginning Farmer and Rancher Development Program (BFRDP) to Help Training Commercial Free-Range and Pastured Poultry Producers in California and Oregon

The UC Davis School of Veterinary Medicine-Cooperative Extension, the National Center for Appropriate Technology (NCAT) and the Center for Land Based Learning (CLBL) were awarded a 3-year USDA-Beginning Farmer and Rancher Development Program (BFRDP) grant to train beginning farmers who are currently or are interested in commercial free-range and pastured poultry production.

Due to the current lack of training resources in addition to how common these type of farming practices are becoming it is important to facilitate



training and extension opportunities for these type of non-conventional commercial poultry producers. Therefore, the long-term goal of this project is to leverage the UC Davis Pastured Poultry Farm (<http://ucanr.edu/sites/poultry/>) to act as a training hub to facilitate the growing number of beginning free-range and pastured poultry farmers in California and Oregon.

The focus of the training efforts will include beginning free-range and pastured poultry producers. However, training will also include beginning farmers who are attending the California Farm Academy as part of their beginning farmer training program.

Further recruitment of military veterans with an interest in poultry farming will be done via collaborations with the UC Davis Veterans

Affairs Office (UC-VAO) and the Farmer Veteran Coalition (FVC) in Davis, California. To learn more about training opportunities please visit our [online BFRDP Registration](#).



Course material will include husbandry, welfare and land management practices, housing, equipment and predator management, food safety, environmental management and business management and marketing.

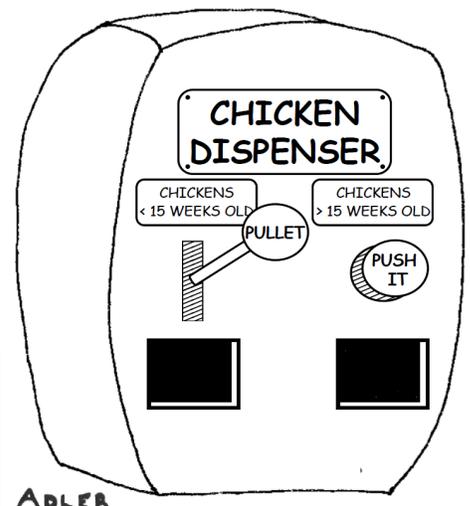
—Maurice Pitesky

Dr. Cluck's Trivia



A truck driver is carrying a cargo of birds. All of a sudden all the birds fly inside the truck in unison without touching any of the four walls. Is the cargo of the truck the same, lighter or heavier?

Email mepitesky@ucdavis.edu with your answer!



Cartoon drawn by Dr. Evan Adler

Last quarter's trivia: *What is the heaviest bird species that is still capable of flight?*

Answer: The Kori Bustard and the Great Bustard can weigh up to 40lbs and still are capable of flight. Your average (flightless) Thanksgiving turkey is only about 15lbs! Congratulations to Dr. Mark Bland, Dr. Gregg Cutler, and Don Brown for getting the correct answer!



Beginning Farmer and Rancher Development Program

Interested in improving your commercial pastured or free-range poultry operation?

Our 1- and 2-day programs offer beginning commercial free-range and pastured poultry farmers (both layers and broilers) the opportunity to learn from experts about how to better raise their flocks!

Topics include health, husbandry, food safety, coop design, land management, marketing, and more! Each workshop includes hands-on demonstrations and plenty of opportunities for Q&A plus networking!

Course dates & locations:

- ◇ 2/22/18 in San Diego, CA (\$20*)
- ◇ 3/14/18 in Davis, CA (\$20*)
- ◇ 3/26 - 3/27/18 in OR (\$40*)
- ◇ 5/16/18 in Santa Rosa, CA (\$20*)
- ◇ 8/18/18 in Davis, CA (\$20*)

*Course fee includes educational material and lunch. Financial aid is available. Contact mepitesky@ucdavis.edu for more details.



Visit our website at ucanr.edu/sites/poultry to register!



Backyard Poultry Workshop

Invite 4-H Volunteer Leaders to Attend!



California Poultry Federation

(209) 576-6355

www.cpif.org



Sponsored by the California Poultry Federation

Official State Agency of the National Poultry Improvement Plan

and University of California School of Veterinary Medicine

Saturday, January 27, 2018

UC Cooperative Extension San Joaquin County

2101 E. Earhart Ave., Suite 200, Stockton, CA 95206-3949

8:00 am to 2:30 pm (lunch included)

Space is limited. [Online Registration](#) is required!

This Backyard Poultry Workshop is geared towards 4-H Volunteer Leaders who work with youth in raising poultry. Poultry experts will share valuable information and tips on raising and maintaining healthy poultry flocks. This full day workshop offers training for you, and educational activities to use in your group meetings. Questions for the presenters are encouraged!

Topics include:

- Poultry Behavior
- Backyard Biosecurity
- Disease Transmission, Risk Assessment
- Poultry Pests and Management Techniques
- Using the California Animal Health and Food Safety Lab (CAHFS)

Speakers include: Dr. Rodrigo Gallardo, UC Davis; Dr. Maurice Pitesky, UC Davis Extension; Dr. Richard Blatchford, UC Davis Extension; Amy Murillo, Ph.D., UC Riverside

Questions? Call or email Monica Della Maggiore: (209) 576-6355 or monica@cpif.org

California Poultry Federation 4640 Spyres Way, Suite 4 Modesto CA, 95356 (209) 576-6355 www.cpif.org

To register, visit ucanr.edu/sites/poultry/events/ and click on "4-H Leaders' Backyard Poultry Workshop"