



A quarterly newsletter detailing poultry related work, research, and events in California

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New Lifeline for Backyard Livestock and Poultry

New Grant to Develop Emergency Prep App for Backyard Poultry and Backyard Livestock Owners in California, Oregon, and Hawaii.



Mrs. Theresa Gendreau, Creative Director, UC Davis School of Veterinary Medicine Cooperative Extension Poultry Lab

One of the biggest challenges first responders have during mandatory and voluntary evacuations is resistance from backyard livestock and poultry owners. This is because rapidly moving backyard livestock and poultry during an emergency such as a fire or flood event is a logistical headache and many owners don't have a plan. This is compounded by the reality that during an emergency, internet connectivity is unreliable.

In collaboration with stakeholders in California, Oregon, and Hawaii, the Pitesky lab at the UC Davis School of Veterinary Medicine-Cooperative Extension recently received a USDA Smith-Lever Grant titled "Development of a mobile app in targeted California, Oregon and Hawaii counties for pre and post-disaster planning". The app's development is meant to improve communication, knowledge sharing, and access to relevant emergency disaster resources in multiple high-risk regions in CA, OR, and HI.

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Questions or Comments?

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Poultry? We have an app for that!

Backyard Poultry Central is your hub for the latest information on husbandry practices for new and experienced backyard owners. Get notified of outbreaks as soon as they happen, and receive critical information at your fingertips.

Download the "Backyard Poultry Central" app on the Google Play Store

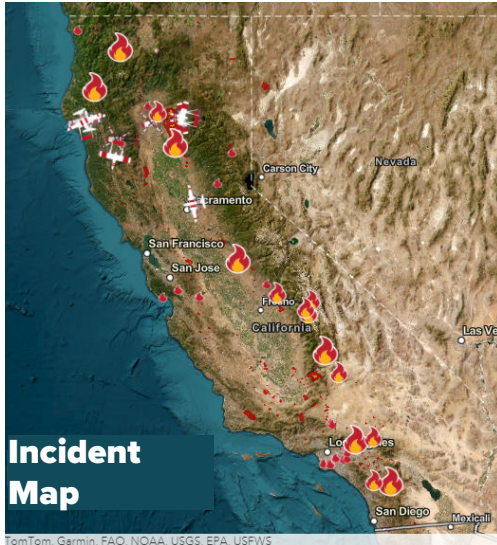


Scan Me!



New Lifeline for Backyard Livestock and Poultry

continued



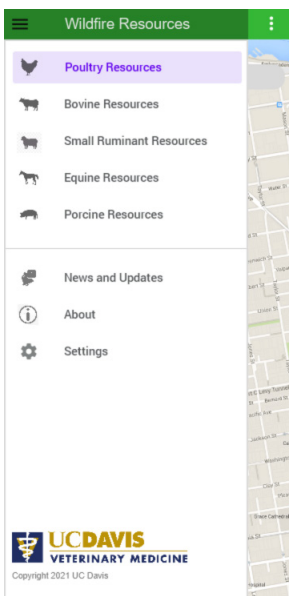
California Wildfire Incident Map, August 2024
Earthstar Geographics, California State Parks, Esri,
TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS

Apps have inherent advantages during natural disasters in that they can function when the internet is not working. The grant-supported app, tentatively titled the Pacific Livestock Evacuation (PALE) App, will be made available for both iOS and Android devices up to about 6 years old. Designed with natural disasters in mind, an accompanying website will also be developed to cast the widest net with respect to extending knowledge

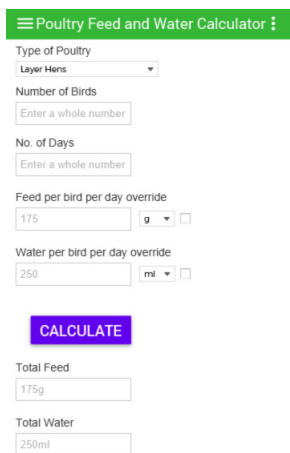
The app will have features including a “go bag” calculator in order to identify feed, water and equipment needs before a disaster. Workshops on emergency disaster evacuation preparedness, drills, and more are also planned in high-risk counties.

For more information on this project, please contact:
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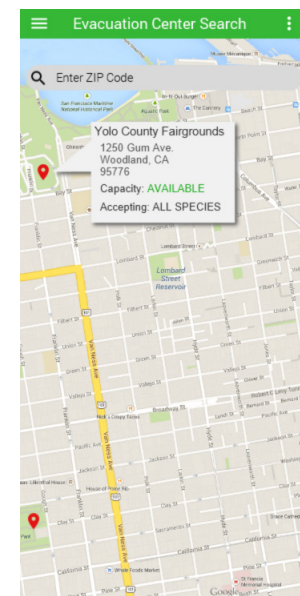
Example “Mock-Ups” of the App



Resources



Feed & Water Calculator



Evacuation Center Search

Community Corner

An interview with Mr. Alec Michael, epidemiology PhD graduate in the CE Poultry Lab.

How did you decide to pursue an epidemiology graduate degree?

I've always enjoyed working with data sets and statistics, starting with baseball statistics as a kid. But I also really enjoyed Microbiology, which is my undergrad degree. Like many folks who do an undergrad in biology, after graduation there was a choice to either start in the industry or continuing in school because what you can do with just a biology degree is sometimes quite limited. I also didn't have the best experience in a lab setting, sometimes working 8-10 hours a day on my feet without easy access to snacks and water. However, I really enjoyed statistics, and still wanted to work with data sets. So I thought, what is sort of the intersection of microbiology and statistics? And found epidemiology.

Did you run into any unexpected challenges in your research?

Yes, because of my research focus on temporal trends in antimicrobial resistance (AMR) in poultry, there is less clinical data available than a typical AMR study that would be available in say, a human study. This information for animals is already hard to find, but then when you're working with poultry specifically, there's barely anything available. But we built a model that may help with this issue. I originally thought this was going to be a 6-month project, but here I am 4 years later. Science has a funny way of being a bit more complex than you expected, but I think that complexity is also what makes it really worth it.

CA Backyard Poultry Census

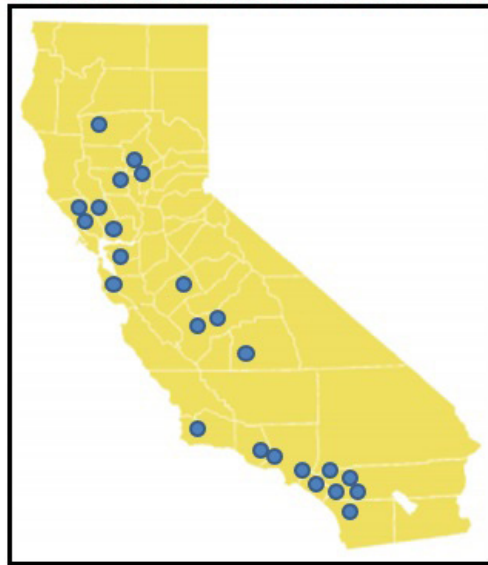
Survey based and anecdotal observations demonstrate that backyard poultry ownership is increasing nationally and in California. At the same time, California's ability to provide resources to backyard poultry owners is limited. In addition, there are no effective ways to communicate with backyard poultry owners in a coordinated fashion. To address these issues, the UC Davis School of Veterinary Medicine and Cooperative Extension have made a short geo-survey (~2minutes) designed for the backyard poultry community. Results will help further clarify the location and number of backyard poultry farms in California. Furthermore, email addresses and other address information will help facilitate communication between poultry experts and backyard poultry enthusiasts. An example



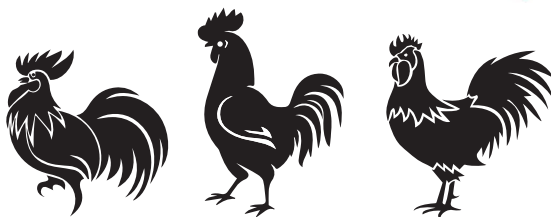
gap is being able to notify backyard poultry owners of an Avian Influenza outbreak. This will be extremely helpful in preventing another large outbreak. For this reason, we sincerely hope you consider participating in this survey, accessible [here](#).

Note: As veterinarians at UC Davis our interest is in working with Backyard poultry and their owners to improve poultry health. The data in this survey is strictly for outreach purposes. We want to work with you. We are a university not a regulatory agency and therefore our focus is on outreach and education and not regulation and enforcement.

The California Backyard Poultry Census:



Make Sure Your Poultry are Represented!



Did you always know what field you wanted to study in?

No, I definitely didn't know what I wanted to do in high school. Not until I took AP Biology, but I think that was largely due to having a really great teacher. I did originally think I would study to be a doctor, but I didn't last more than 30 minutes simply shadowing a surgeon checking on an IV on someone's arm. I was also part of a summer school program for high school students at college campuses, like UC Berkeley, that was cool to get exposure to. After walking past some of the scientific posters in hallways, I was actually able to distinguish studies I was not interested in. Which was kind of reassuring, since the entire study of biology is huge. While studying at UC Davis, I got to take a lot of biology lab classes that further helped me realize what kind of lab work was not for me. For example, I realized that I was not cut out for working in a mouse lab. Then in grad school I took Statistical Modeling, which I really enjoyed taking and enjoyed teaching even more.

Why is Statistical Modeling useful to epidemiologists?

Applying statistics to data sets is already key to answering many questions surrounding epidemiology, but many times we need additional help to actually draw conclusions. Creating models helps fill in gaps in our knowledge and in our data sets that therefore helps us to see more patterns that otherwise are less obvious. I try to remain objective while including points that previous models tend to overlook. This is useful in things like shaping policy and avoiding emergencies that threaten livestock and farmers as a whole.

Feathered Future

Nurturing Tomorrow's Poultry Vets Today

Mrs. Theresa Gendreau, Creative Director, UC Davis School of Veterinary Medicine Cooperative Extension Poultry Lab

Southern California has historically been severely affected by virulent Newcastle Disease (vND), resulting in the depopulation of millions of backyard and commercial poultry. While controlling vND is ultimately about good biosecurity, communication and trust especially between backyard poultry owners and the state and federal first responders is fundamental toward controlling the spread of vND.

In hopes of inspiring the next generation of poultry veterinarians, researchers at UC Davis School of Veterinary Medicine Cooperative-Extension have partnered with curriculum specialists and faculty at two Inland Empire-based school districts of Corona-Norco Unified School District and Colton Joint Unified School District with the support of a USDA NIFA Veterinary Services grant. The program, debuting in September of this year, will feature four unique units for high school students to attend with the goal of fostering the next generation of poultry health first responders who represent the complex demographics of Southern California.

The curriculum will focus on vND disease modeling via a game-based approach and on developing social skills related to dealing with a “poultry pandemic” via a documentary the lab is producing whose setting is in the same demographic region. The goal of the program is not just increasing the volume of, but also broadening the skill-set of the next generation of poultry veterinarians and poultry experts by integrating relevant subject areas (epidemiology, social, biology of wild-birds) that are not a focus in the curriculum of current poultry veterinary training programs.

For more information on this project, please contact:
Dr. Maurice Pitesky mepitesky@ucdavis.edu



Theresa and students from one of the premiere lectures at Bloomington High School



How did you feel as the statistics guy in an extension poultry lab?

On my first day, I was asked to “go grab a chicken” in order to help a citizen science project that was active at the time. After 5 minutes of scrambling, I finally managed to pick one up, but I didn’t know how hard you need to hold on to them, and it just immediately took off. I assumed the birds were easily breakable, after hearing about delicate bird bones all my life after all. But it turns out they need a good squeeze, and finally after 20 minutes or so I secured one long enough to perform a cloacal swab. While I was never asked to go pick up a chicken again, I realized that these skills were still really useful and interesting for me to learn and develop as I continue to work in this field. These experiences, along with the many mentors I had helped me find my niche, and it makes me a better scientist to relate to the individuals for whom my work is supposed to benefit.

Alec has a B.S. in Microbiology and will soon have a PhD in Epidemiology from UC Davis. Congratulations Alec, we are excited to see where your talents will take you next!





PARIS 2024



Dr. Cluck's Paris Puzzle

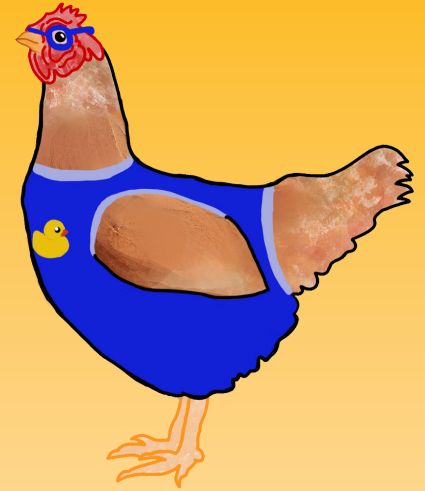
Dr. Cluck enjoyed watching the Olympic Games this summer!

Can you find all 12 words related to the Paris Games?

WORD BANK

- Marathon
- Athletic
- Breaking
- Volleyball
- Swim
- Paralympic
- Meter
- Run
- Rugby
- Bronze
- Silver
- Gold

R A T H L E T I C Z
 S U C M W W G T F B
 M W G J A R O E M R
 F N I B T U L B E O
 U L H M Y N D J T N
 M A R A T H O N E Z
 F J S I L V E R R E
 V O L L E Y B A L L
 U B R E A K I N G H
 P A R A L Y M P I C



Have you seen our series, 'The Sitch'?

Sit down with Dr. Maurice Pitesky as he answers the most common questions for new and experienced backyard poultry owners alike. Get insightful and accurate information on the best practices for raising your own birds.

Visit our channel at:

<https://www.youtube.com/c/ucdpiteskylab>

