Inside this Issue

2 Farm PPE: Biosecurity Webinar Series

3 Winter Word Wrangle

4 New Approaches Toward an Old Foe
The UC Davis, School of Veterinary Medicine, Washington State University College of Veterinary Medicine, and Colorado State University College of Veterinary Medicine and Biomedical Science will have a series of webinars available to provide current and prospective livestock and poultry owners with information on animal health and biosecurity, and to guide them in the development of a biosecurity plan for their operation.

This webinar series falls within the Farm Animal Risk Mitigation Prepare Prevent Evaluate (FARM PPE) Project, whose overall goal is to develop and improve biosecurity measures among livestock and poultry operations of various scales, including alternative agricultural systems (i.e., small-scale, diversified, and backyard farms), through an outreach program and capacity-building. The aim of this project is also to provide train-the-trainer resources on biosecurity, and to encourage and improve partnerships between extension educators and veterinarians with producers, which are key to improving animal health and sustainability in alternative agriculture systems.

The webinar series is coming to a close, with a total of eight webinars with the final planned for Tuesday from 5:30 to 6 PM PST March 1st, 2022. Five webinars will be held live using Zoom, and the other three are pre-recorded. All recordings will be posted on the FARM PPE website. You can register here or at the qualtrics link below to receive the Zoom links to connect to the live sessions.

In the long-term, this project will add to current state and national efforts and resources to protect animal health, prevent the introduction of foreign animal diseases, and limit the transmission of local pathogens.

By Juliette Di Francesco (Postdoctoral fellow, jdifrancesco@ucdavis.edu) and Alda Pires (Associate Professor of Cooperative Extension, apires@ucdavis.edu)

https://farmppe.netlify.app/

https://ucdavis.co1.qualtrics.com/jfe/form/SV_8D5CMISwGnwIOcC

- At UC Davis, the main principal investigator is Alda Pires, and collaborators include Juliette Di Francesco, Beatriz Martínez-López, Richard V. Pereira, Terry Lehenbauer, Rebecca Ferreira, and Rosie Busch; at CSU and WSU, the principal investigators are Ragan Adams and Craig McConnel, respectively, with additional collaborators from Washington State Department of Agriculture, Amber Itle and Minden Buswell.
- This project also titled “Capacity Building to Improve Biosecurity and Reduce Disease Spread in Small-scale, Diversified, and Backyard Livestock and Poultry Premises” is part of the 2020 National Animal Disease Preparedness and Response Program (NADPRP) Projects, USDA-APHIS award #AP21VSSP0000C034.
Winter Word Wrangle!

Word Bank

biosecurity  livestock  outreach
virulent  poultry  webinar
farmer  winter  mitigation
documentary  recording  newcastle
New Approaches Toward an Old Foe:
Improving Preparation and Response to virulent Newcastle Disease (vND) in Southern California

By Maurice Pitesky, Joseph Gendreau, Myrna Cadena, Alec Michael, Theresa Valdez, Ashley Railey and Jingwen Zhang

Virulent Newcastle Disease or vND is the chicken equivalent of Ebola (aka it kills a lot of birds including domestic poultry). VND is highly contagious and causes high (typically over 70%) morbidity as well as significant drops in egg production in “well-vaccinated” layer hens. While vND is not endemic in the U.S., periodic outbreaks (including 3 outbreaks in Southern California over the last 50 years) have resulted in the death and/or depopulation of millions of birds and hundreds of millions of dollars in economic costs. The introduction and spread of vND during these outbreaks typically follow a pattern from non-commercial chickens to commercial chickens. Therefore, working with non-commercial poultry owners in historically affected areas of Southern California is an essential step toward improving preparedness.

To address these challenges UC Davis was recently awarded a 4 year 1 million dollar grant to leverage social media, disease modeling and extension to improve preparation and response. Specific aspects of the grant include:

**Disease modeling:**
In a similar fashion to COVID, disease modeling can be used to better understand various scenarios including the efficacy of various vaccination strategies.

**App Development:**
A new interactive app is being developed to deliver educational and persuasive multimedia materials and to measure the impact of various outreach efforts in various non-commercial poultry communities.

Continued on page 5
New Approaches Toward an Old Foe continued

Social Media Analysis
A social media monitoring approach is developed to analyze aggregated social media trends to better understand how BYP owners react to respiratory disease in their flock and geospatial concentrations of BYP and GF. These data can be leveraged to improve extension efforts and supplement passive disease detection mechanisms like the California Animal Health and Food Safety (CAHFS) laboratories.

Documentary
In order to better tell the story of vND in Southern California, a documentary will be produced that explains the history of backyard chickens and game fowl ownership and shares the nuances of farmer's experiences of living through the vND "epidemic".

The project is a collaborative effort between the UC Davis School of Veterinary Medicine-Cooperative Extension, UC Davis Department of Communications, USDA-Center for Epidemiology and Animal Health (CEAH) and Oklahoma State University Department of Sociology. The grant concept received letters of support from various stakeholders including the Pacific Egg and Poultry Association (PEPA), California Poultry Federation (CPF) and the California Department of Food and Agriculture (CDFA). If you have any questions or comments please contact Dr. Maurice Pitesky at mepitesky@ucdavis.edu