Visit pastured

poultry farms across

California

Lessons learned incorporated into

new design +

management system

Advice from farmers, advisers, and other visitors to the Farm

Manage farm based on anecdotal + scientific evidence

# University of California **Agriculture and Natural Resources**



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Design + build mobile coop based on farmers' input + research





# The UC Davis Pastured Poultry Farm School of Veterinary Medicine and Civil Engineering Department, UC Davis, Davis, CA 95616

## Introduction

#### What is pastured poultry?

Raising poultry on pasture is a husbandry practice rapidly gaining popularity across the United States. Born out of alternative agriculture and the "Slow Food" movements, early pastured poultry systems are largely attributed to Virginian farmer Joel Salatin.

In this system, hens are rotated through pasture or orchards for the duration of their production cycle using a mobile chicken coop (or "eggmobile"). The rotation aids in soil fertilization and mitigates many of the welfare issues associated with conventional battery or colony cage facilities.

Few farmers record data such as egg production, mortalities, and predators they encounter. As a result, little research has been conducted on pastured poultry. This research is the focus of the UC Davis Pastured Poultry Farm.

# The Farm

The UC Davis Pastured Poultry Farm is an opportunity for partnership between research and on-farm applications of new poultry technologies. The Farm is designed to act as a research and outreach hub to farmers who use sustainable pastured poultry production systems across the western U.S. Initial seed funding was generously provided by UC ANR. Who?

#### What?

- 4.5 acres of pasture on UC Davis's western campus
- 150 baby chicks

### Aims

### Poultry in motion

Design a mobile coop that can be built by students during the summer.

Build the mobile coop with modular components to limit complications during the first year.

Use the mobile coop as a brooder for the chicks and establish a learning facility.



# **Future Directions**

### Flying the coop

- efficiency.

UC Davis Civil and Environmental Engineering, Animal Sciences, Plant Sciences, the School of Veterinary Medicine and UC Cooperative Extension.

I eggmobile (designed and built by UC Davis Engineering students)

Goals: to study and mitigate issues associated with pastured poultry, such as food safety, environmental degradation, and animal welfare.

 Experimentation with different feedstocks (i.e., black soldier fly larvae), worker-friendly mobile coops, and rotation systems that optimize pasture use and water

The results of these tests will help egg and broiler producers prevent and detect food borne contamination, as well as evaluate technologies that decrease ammonia and harmful airborne particulates in the mobile coops.