

Livestock Mortality Composting in California



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What is Livestock Mortality Composting (LMC)?

LMC is a method of disposing mammalian tissue on-ranch that is self-sustaining and results in a valuable end-product: cured compost. On-farm composting is an effective, environmentally friendly, and economically viable alternative to current unfeasible carcass disposal options. Composting is a critical tool for ranchers in rural areas to reduce livestock-predator interactions, enhance local meat processing opportunities, and efficiently dispose of a mortality.

Figure 1 (left): Compost pile at the UCCE Intermountain Research & Extension Center in Tulelake, CA.

Why is livestock mortality composting necessary?

Disposal of livestock mortalities is a necessary component of ranch management. Regulatory complexity in California, in combination with a lack of carcass disposal infrastructure, has resulted in an extremely burdensome process for ranchers seeking to dispose of a mortality.

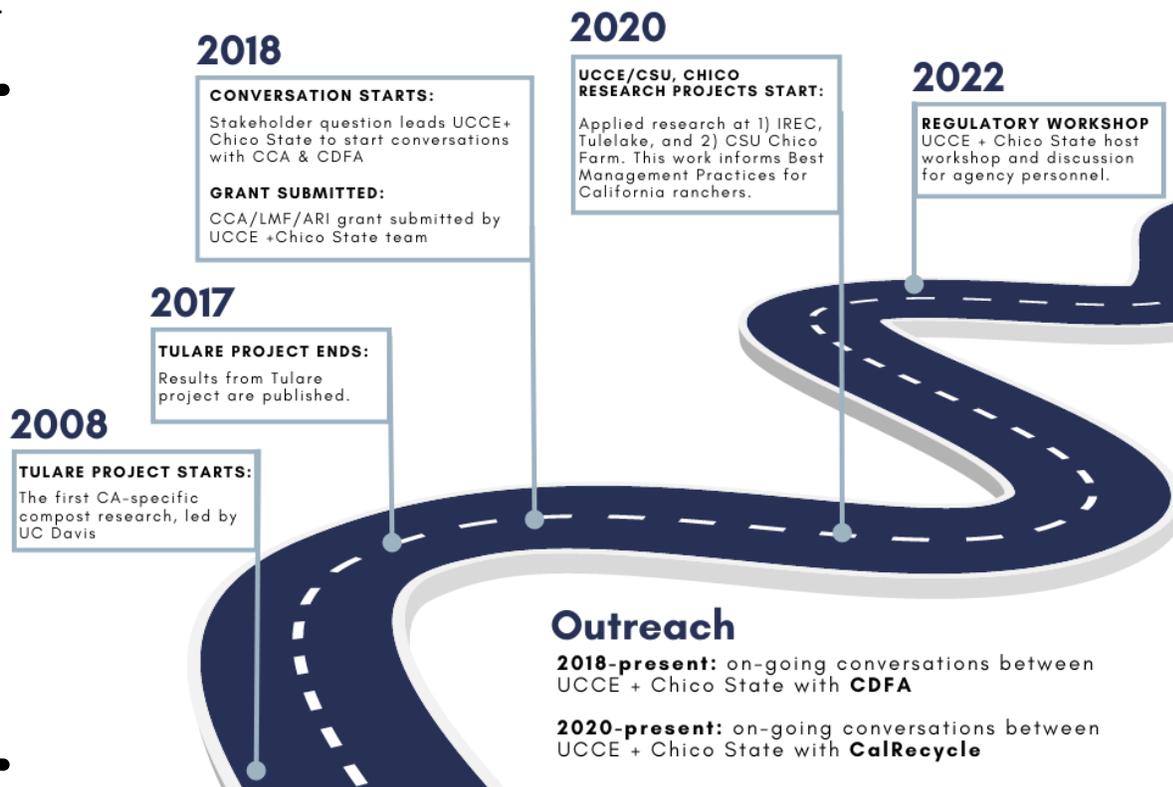
Additional challenges:

- There are few rendering facilities accessible to northern California ranchers (Fig. 1). In addition, for those that transport a carcass from a ranch to a rendering facility, a dead animal hauler license is required and fees must be paid by the ranch for each mortality.
- Each county in California has unique restrictions on where carcasses can be buried (i.e., distance from waterways, groundwater, etc.).
- Bone piles can be a food source for predators, effectively “drawing” predators to the ranch to feed, which can lead to unwanted livestock-predator interactions.



Figure 2 (above): Map of current rendering facilities in N. CA. Producers in far-northern CA lack access.

History of LMC in California



What materials can you compost?

Whole carcasses and offal (e.g., butcher waste) can be composted. **Important restrictions:**

- Animals that have been euthanized using Barbiturates cannot be composted.
- Animals that have died from a reportable disease cannot be composted.



Figure 3: Remining bones from composting 3 cows and 1 yearling.

Next steps:

- Next research project: Bone Management (Fig. 3, above).
- Best Management Practices document
- Continuation of demonstration sites
- **KEY: Targeting policy changes (Fig. 4, below)**
 - Workshops with regulatory agencies

Is LMC safe?

According to over 42 other states, YES! Results from our research indicate that on-farm LMC is safe and effective for California ranchers. To learn more about the IREC research project, check out our paper:



What can you do with cured compost?

Once compost is cured and bones have been sifted, it can be applied on pastures, rangeland, and hay fields at least 200 feet from water sources. Cured compost is a dark, earthy color and has no smell. In addition, cured compost can be used to start a new compost pile. It is recommended that compost be applied to produce/crops not directly consumed by humans.

Who can currently LMC in CA?

In California, LMC is only accepted via executive order from the Secretary of Ag. under emergency situations (e.g., extreme heat) where many animals have died at one time OR by a special research exemption. Currently, there are two legal options for livestock mortality disposal, which are dependent upon county regulation: 1) selective burial at depths deeper than 6 feet, and 2) disposal at a rendering facility/landfill that accepts mammalian carcasses.

Figure 4:
Agencies
involved in LMC
decision-making
in California

