



Join Siskiyou County Cattlemen & Cooperative Extension for the

Annual Cattlemen's Tour
in Scott Valley on Saturday, August 24th



9:00 Introduction and Welcome – Coffee and light refreshments

Denny Bar Company
511 Main St., Etna, CA 96027

10:30 Etna Brewery

131 Callahan St., Etna, CA 96027

11:45 Bryan-Morris Ranch

4129 Eastside Rd., Etna, CA 96027

12:00 CCA Updates

12:30 LUNCH at Bryan-Morris Ranch

4129 Eastside Rd., Etna, CA 96027

1:30 Dr. Frank Miltoehner, Professor and Air Quality Extension Specialist, Department of Animal Science, UC Davis

2:00 Local Cattlemen's awards

3:00 Adjourn

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Congratulations to scholarship recipients

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Resources

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John Bennett
Intermountain Ag Services



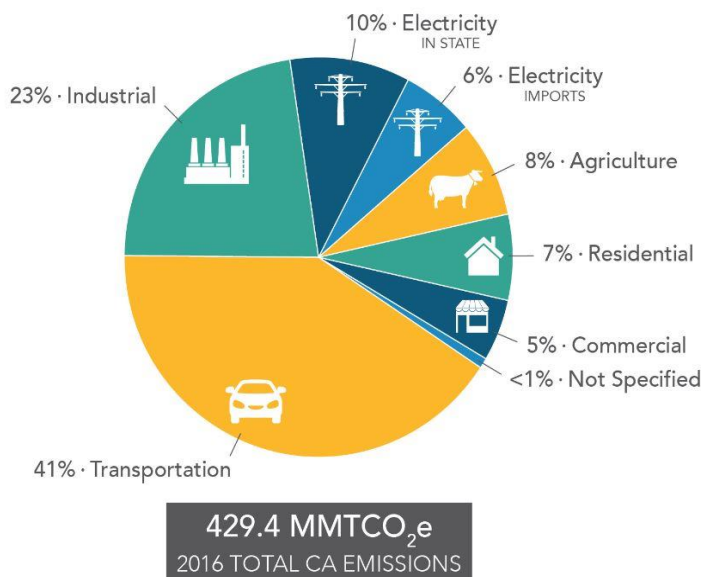
LIVESTOCK'S IMPACT ON GREENHOUSE GASSES AND CALIFORNIA'S RANGELANDS

By Theresa Becchetti and Sheila Barry

“Livestock’s Long Shadow”, a United Nations Report, released by the Food and Agriculture Organization (FAO) in 2006 stated that livestock produced more greenhouse gases than transportation worldwide. The report shocked and outraged many involved in livestock production, including University of California’s Air Quality Specialist, Frank Mitloehner. His research indicated that a much smaller percent of greenhouse gases (GHG) were coming from cattle.

The emissions from cows is often mistakenly called “cow farts,” however methane emissions from cows comes primarily from “belching”. Ruminant animals including cattle, sheep, goats, deer, bison, elk etc. have billions of microbes in their rumens, which operate like a large fermentation vat in their digestive system. While these microbes allow ruminant digestive systems to make protein, energy and even vitamins from low quality feeds, they also produce methane, which is released by belching. Dr. Mitloehner found that the FAO report compared the entire production cycle for livestock, with only tail pipe emissions for transportation, ignoring the emissions associated with the manufacturing of vehicles. The author acknowledged his errors, yet Livestock’s Long Shadow still casts a shadow of misinformation over animal production thirteen years later.

Emissions by Economic Sector



Following are some facts, stemming from Dr. Mitloehner’s research, to help put things in perspective: In California, 8% of the state’s GHG emissions come from agriculture (livestock and crops), residential and commercial activities generate 11%, while 80% of emissions are from transportation, electricity, and industry with 1% unidentified. Out of the state’s agriculture 8%, half is from all of livestock production. Other researchers (White and Hall 2017) have calculated that even if everyone living in the U.S. became vegan (consuming no meat, no dairy, no eggs, no fish), we would reduce our total GHG emissions by only 2.6%. Dr. Mitloehner points out that the greenhouse emissions saved by one person eating a vegan diet for one year is equivalent to cancelling a one-way flight from San Francisco to London. Our meat producers are very efficient in the US and California and have continually made improvements in pounds of production per animal, improved breeding, improved health, etc. The US produces more beef with less GHG emissions than any other country

The impact of livestock production on greenhouse emissions is a simplistic view of a much more complex environmental picture. Livestock production, especially in California, provides a vital role in many ecosystem services. Cattle grazing on rangelands can help sequester carbon on grazed lands, manure is often used in organic farming as the main fertilizer and livestock plays a vital role in upcycling by-products from other ag sectors such as almond hulls, tomato pumice, rice bran, cottonseed and distiller’s grain. (Grasser et al. 1995, Oltjen and Beckett 1996, Sulc et al. 2014) Many of the by-products from producing meat substitutes like the Impossible Burger®, such as soybean hulls, are fed to livestock instead of becoming organic waste.

Cattle grazing - the number one land use in California, reduces fire fuel loads by consuming grass, can minimize greenhouse gas emissions from catastrophic wildfires and supports habitat for many of California’s threatened and endangered species (Bartolome et al. 2014, Germano et al. 2012, Marty 2005, Weiss 1999). The research shows that it is too simplistic to suggest that reducing meat consumption is a climate smart strategy.

- <https://www.arb.ca.gov/cc/inventory/data/data.htm>
- Bartolome, J.W., Allen-Diaz, B.H., Barry, S., Ford, L.D., Hammond, M., Hopkinson, P., Ratcliff, F., Spiegel, S. and White, M.D., 2014. Grazing for biodiversity in Californian Mediterranean grasslands. *Rangelands*, 36(5), pp.36-43.
- Grasser, L.A., Fadel, J.G., Garnett, I. and DePeters, E.J., 1995. Quantity and economic importance of nine selected by-products used in California dairy rations. *Journal of Dairy Science*, 78(4), pp.962-971.
- White, R.R., and M.B. Hall. 2017. Nutritional and greenhouse gas impacts of removing animals from US agriculture. *Proceedings from the National Academy of Sciences of the United States of America*. 114 (48) 10301-10308

FAREWELL

With gratitude, I would like to announce my departure from Siskiyou County as the University of California Cooperative Extension Livestock and Natural Resources Advisor. The warmth and open arms that the agricultural community has given me during my time here has been overwhelmingly heartfelt.

I am forever in debt to this county and the community for the experiences and knowledge gained while serving as a partner in seeking solutions to agricultural challenges. I couldn't have asked for a better environment to start a family and expand my agricultural knowledge.

While I will greatly miss Siskiyou County and everyone who makes it such a special place, I am looking forward to the next chapter. We will be returning home to our family ranch in Sunol, CA. to be close to family where our kids can grow up in the hills that many generations of our family have, learning from Grammy, PopPop, Uncle Clayton and sharing memories with grandparents and cousins.

My last day in the office is July 31st. However, I look forward to seeing you at the Siskiyou Golden Fair and our Cattlemen's Tour August 24th.

Congratulations to our Scholarship Recipients

CATTLEMENS Scholarships

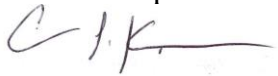
- **Lacey Jackson**, Continuing Education
- **Blakeley Hittson**, USI Scholarship
- **Grace Schumacher**, Tulelake High School
- **Daniel Perez**, Butte Valley High School
- **Olivia Hanna**, Scott Valley Scholarship

CATTLEWOMENS Scholarships

- **Blakely Hittson**, Ag Scholarship
- **Lena Fogle**, Ag Scholarship
- **Daniel Perez-Garcia**, Ag Scholarship
- **Paul Brummet**, Scholarship
- **Rebekah Kimball**, Continuation Scholarship
- **Olivia Hanna**, M. Foster Memorial Scholarship
- **Jaylee Johnson**, M. Foster Memorial Scholarship
- **Felicia Trejo**, M. Foster Memorial Scholarship

Sincerely,

Carissa Koopmann Rivers



Livestock and Natural Resources Advisor
Siskiyou County



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CE



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UNIVERSITY OF CALIFORNIA
Cooperative Extension
Siskiyou County



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University of California
Agriculture and Natural Resources

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Siskiyou Stockman is a newsletter published by the Farm Advisor's office containing research, news, information, and meeting notices related to the areas of livestock production, irrigated pasture, range, and natural resource management.