Happy New Year! There is a lot to reflect on as we head into 2022. I am grateful to have met and worked with many of you during my first year as your Livestock and Natural Resources Advisor - for those of you I haven’t met, I look forward to connecting with you at a workshop or event soon.

I’m also grateful for the moisture we’ve received in the 2022 water year thus far - unfortunately, the forecast shows warmer and drier conditions heading into late winter and early spring. As we continue to hope for favorable precipitation throughout the year, we have also been working on drought research specific to California ranchers - you can find more information about our Drought Decision Support Tool and On-ranch adaptation to California’s historic drought paper on the UCCE Siskiyou Livestock and Natural Resources webpage (or stop by the office for a hard copy). The goal of this work is to help navigate the uncertainty of historically dry conditions across the state, both in terms of day-to-day production decisions and also, hopefully, to guide relevant policy.

As always, please feel free to call the office with your feedback, ideas or questions. Thank you all for a great first year - I look forward to many more!

Grace Woodmansee,
Livestock and Natural Resources Advisor

Extension and outreach efforts in 2021 included a stockmanship workshop hosted by Curt Pate (part of the SCCA Annual Tour) and contributing to a UC Davis study examining the effectiveness of dewormers.
Northern California Wolf Update

David Lile, UCCE Lassen County, Dan Macon, UCCE Nevada-Placer-Sutter-Yuba Counties, Tina Saitone, UC Davis, Tracy Schohr, UCCE Plumas-Sierra-Butte Counties, Laura Snell, UCCE Modoc County, Grace Woodmansee, UCCE Siskiyou County

Background

Recent history of wolves in California: Since wolf OR-7 arrived from Oregon in December 2011, there have been 4 wolf packs established. Three of these are still active:

1. **Shasta Pack**: Siskiyou County, pack established in spring 2015 and last detected in November 2015. One yearling from the pack remained until May 2016, then dispersed into Nevada.
2. **Lassen Pack**: Lassen and Plumas Counties, 2017-present. First-generation breeding pair produced 5 litters of pups and second-generation breeding pair produced at least 1 litter, the current whereabouts of most unknown.
4. **Beckwourth Pack**: Plumas and Sierra Counties, confirmed in 2021. Currently, 3 yearling wolves identified, but limited information about individuals. No official reports of pups.

Since 2011, 7 GPS-collared wolves (i.e., not belonging to a specific pack) have officially dispersed into California from Oregon. The majority of wolves are not collared; therefore, for every known collared individual, there are likely additional unknown wolves. For a detailed description and background of wolves in California, visit the California Department of Fish and Wildlife (CDFW) Gray Wolf webpage¹.

Reported and investigated wolf depredations in CA (November 2021 update): The following data is a summary compiled from depredations reported by CDFW¹:

- Since 2017, there have been 28 confirmed kills and 10 confirmed injuries of cattle due to wolf depredations.
- Confirmed depredations include 6 mature cows, 12 large calves or yearlings (450 – 700 lbs.), and 20 small calves (< 250 lbs.).
- All confirmed depredations against large calves, yearlings, or mature cows have involved multiple wolves, most often members of the Lassen Pack. All known kills by individual lone wolves—such as OR 54, OR 103, and others—have been small calves.
- 84% (32/38) of the confirmed depredations have occurred between mid-July through mid-November. In addition, CDFW has declared 6 depredations as “probable” and 9 as “possible” due to wolves.

Given the strong seasonality of reported attacks and confirmed depredations, livestock protection tools and wolf avoidance strategies are most critical mid-summer through November. Ranches operating outside pack areas are most likely to lose young calves, while those with livestock within pack areas may be more prone to losing larger calves or cows to multiple wolves hunting together.

California’s wolf policy: Wolves are listed under the California Endangered Species Act (CESA), which provides for complete protection². While wolves can be “hazed”³ when near livestock, they cannot be physically harmed. While other states with wolves have incorporated lethal control of “problem” wolves, as well as state managed hunting seasons (in some cases), there are currently no lethal management options for wolves in California. The
California wolf plan outlines CDFW’s process for gray wolf conservation and management. Although the plan provides for lethal control once a population threshold is reached, the CESA listing prohibits any lethal take.

**Compensation as a mitigation tool:**

- **Direct Compensation:** Several western states have developed compensation programs to offset the impact of livestock killed by wolves (and other predators, in some cases). Depending on the program, direct compensation has been provided for both confirmed and probable wolf depredations.
  - Example programs: Washington and Montana

- **Pay-for-Presence:** Typically, pay-for-presence programs are designed to compensate livestock producers for indirect losses associated with wolves in exchange for giving up the ability to use lethal control except in extreme circumstances. Since lethal control is not currently an option in California, this program will focus more on acknowledging the indirect losses associated with stress due to proximity to known wolf activity (including lower weight gains and lower conception rates, and higher labor costs).
  - Example program: Mexican Gray Wolf in New Mexico

- **Resolutions:** Resolutions reflect the stance of an organization on a particular issue and are helpful for directing future policy-related work.
  - Lassen County Board of Supervisors Resolution, November 17, 2020.
  - California Farm Bureau Federation: California Farm Bureau supports the development, in coordination with producers, of a wolf management plan that balances the needs of public safety, private property and the environment. We support the use of various means to protect livestock and crops from loss and damage. We continue to coordinate with state and federal agencies, producers, property owners, and environmental groups on this important issue, and encourage active information-sharing and transparency.

**What’s happening now?**

**CDFW funding for compensation and deterrence:** California’s 2021-22 state budget included $3 million to develop a pilot program for compensating ranchers for depredations and indirect impacts associated with wolves. These funds must be spent by June 30, 2026. The state budget also includes an additional $7 million to help reduce wildlife conflict, which could fund on-ranch, non-lethal predator protection tools (for wolves as well as other predators). Funds will be administered by CDFW.

- **Interim Program:** CDFW is creating an interim program that will retroactively compensate producers for confirmed direct losses that have occurred since September 23, 2021 (when funding was authorized). This will be replaced with the program developed by the Rural County Representatives of California (RCRC) Work Group, described below.

- **RCRC Work Group and producer input:** The RCRC is facilitating a Work Group that will develop mechanisms for a more comprehensive pilot compensation program. This Work Group includes representatives from producer organizations (CCA, CWGA, CFBF), individual ranchers, local elected officials, USDA Wildlife Services, UCCE, CDFW, Defenders of Wildlife, and the Center for Biological Diversity. A Drafting Subcommittee is developing a draft compensation program that can include compensation for direct depredation, wolf-presence related impacts, and funding for compensation/reimbursement for non-lethal depredation tools.
• **Local and regional meetings:** We recognize the importance for producers to have additional opportunities for input as these programs are defined. In addition to having direct input into the Work Group process, ranchers have provided priorities and direction via locally organized discussions facilitated by UCCE and county producer organizations. Additionally, UC Davis and producer organizations hosted a joint-regional meeting for producers from currently wolf affected areas to discuss key components of a compensation program.

**Current UCCE research and demonstration projects:** There are several research projects underway to study wolf management techniques specifically for California ranchers. More information about each project can be found in Additional Resources below.

- **Predator Interactions with Livestock Guardian Dogs (LGD) / LGD Behavior:** Using game cameras and GPS collars on LGDs and livestock, we are assessing impacts and effectiveness of LGDs for short and long-term livestock protection.

- **Bonding LGDs to Cattle:** We are documenting techniques for bonding LGD pups with cattle in a real-world production setting (right).

- **LGD Bonding Survey:** Bonding LGDs to livestock is critical to the long term success and cost-effectiveness of this predator protection tool. Therefore, we are tracking the bonding process on multiple operations via an online survey.

- **Demonstration of GPS Collars on Range Cattle:** We are monitoring grazing distribution on extensive landscapes to develop data-driven management techniques specifically for rangeland livestock operations (below, left).

- **Carcass Composting:** Bone piles and dead animals are a significant attractant for wolves and other predators. We are demonstrating the effectiveness of livestock mortality composting as an economical and useful tool to decrease livestock and predator interactions especially where other disposal options are not available (below, middle).

- **Indirect Economic Impacts of Wolf Presence:** Using cattle GPS collars, game cameras (to document wolf presence), and hair cortisol testing (to measure stress levels), this project will consider differences in productivity (body condition scores, conception rates, calf/yearling sales weights), grazing behavior, and stress levels across herds in and outside wolf activity areas in order to estimate the indirect economic costs of wolf presence.
Next Steps

1. Discussions about the specifics of the pilot compensation program are in process and producer input is valuable. **Contact your producer organization representatives for specific questions and/or input.**

2. **Review and input:** The RCRC Drafting Subcommittee will develop a draft compensation program to be reviewed by the full RCRC Work Group. Once the Work Group is in agreement, the compensation program will be forwarded to CDFW for them to consider for formal adoption.

3. **New and continuing research:** UCCE and partnering producer organizations will continue to collaborate with ranchers, industry groups, agencies, policy makers, and other vested stakeholders to implement and disseminate research specific to the management of gray wolves in California.

   In addition, UCCE continues to lead producer and agency **workshops and field days** demonstrating the application of a variety of nonlethal livestock protection tools, including LGDs, electric fencing, turbo fladry, alarm and scare devices, carcass removal, and kill site preservation (p. 3, right).

Additional Resources

Visit the UC Rangelands **Livestock-Predator Interactions Information Hub** for information about non-lethal tools. Key, California-specific publications are linked below (or visit hub for access):

- **Livestock Protection Tools**
- **Turbo Fladry**
- **Electric Fence**
- **Livestock Carcass Management**
- **Livestock Guardian Dogs (LGDs)**
- **Selecting an LGD puppy**
- **Trail Cameras**
- **3 steps to take when finding a livestock predator kill**
  - Contact your local advisor for county-specific information

Sources


For additional information and a copy of this factsheet, please visit the **UCCE Siskiyou Livestock and Natural Resources webpage**: [https://ucanr.edu/sites/Siskiyou_County_Coop_Extension/files/362099.pdf](https://ucanr.edu/sites/Siskiyou_County_Coop_Extension/files/362099.pdf)

**Have questions or ideas?**

Contact UCCE Siskiyou Livestock and Natural Resources Advisor Grace Woodmansee, gwoodmansee@ucanr.edu | (530)842-2711
3 Steps to Take When Finding a Livestock Predator Kill

Grace Woodmansee, Livestock and Natural Resources Advisor, Siskiyou County & Tracy Schohr, Livestock and Natural Resources Advisor Plumas, Sierra and Butte Counties

Predation is a growing concern across rural counties with mountain lions, bears, coyotes, and now wolves on the landscape. When you encounter a livestock kill at your home ranch, on leased pasture or out on a wide open allotment, it is important to take critical steps to preserve the site so a formal investigation can take place.

**If you find a dead animal that you suspect was killed by a predator (or even if the cause of death is not readily apparent) follow the three steps outlined below:**

1. **Preserve evidence**
   When initially inspecting the site of a suspected/possible depredation, be sure to:
   - **Minimize your own impacts**
     - The fewer steps you make the better!
     - Be careful to not step on tracks. If you discover tracks, cover them with a can, pot, bucket, etc. to protect them.
   - **Protect the carcass + scene**
     - The carcass should be protected by covering with a tarp to restrict further feeding on the carcass by the predator, scavengers, etc.
     - Protect the scene by restricting people, dogs, and livestock from disturbing evidence.
   - **Document the carcass + scene**
     - Take a picture of the carcass and surrounding area.
     - Mark location with camera picture, flagging, or GPS - this can help investigators find the site.

2. **Call the appropriate investigator**
   CDFW staff must be contacted to investigate potential livestock depredations as they have the authority to issue depredation permits for cases involving bears, bobcats and mountain lions. CDFW staff have also been identified as the lead investigators for suspected wolf depredations.

   Siskiyou Department of Agriculture Wildlife Specialists (trappers) are often able to investigate suspected depredations immediately, which is important due to the time-sensitive nature of depredation investigations—they will work closely with CDFW staff to identify depredations. For cases involving coyotes, Siskiyou County Wildlife Specialists take the lead—contact them directly for assistance.

   Investigators will examine the site and surrounding area for predator signs, including tracks, hair, and scat, and will examine the carcass for injuries, bite marks, and tissue damage patterns. The investigation can be conducted either in-person or virtually (i.e., via text/email) depending on circumstances. Therefore, it is important to preserve the site with the steps listed above.

Here, we have outlined who to call in Siskiyou county based on the predators they are authorized to investigate:
For suspected depredation by bear, bobcat or mountain lion:

Siskiyou Unit Biologist, California Department of Fish and Wildlife
- Axel Hunnicutt: 530-598-6820
*Note: Axel must be notified of the first suspected mountain lion depredation in order to: 1) confirm the depredation, and; 2) if confirmed, issue a take permit after the second depredation. See “Additional Information” section for details.

Siskiyou County Department of Agriculture Wildlife Specialists
- Cody Von Saltza, South Shasta Valley, Butte Valley and McCloud: 530-340-0489
- Dennis Moyles, Northern Shasta Valley and Klamath River: 530-598-0676

For suspected depredation by coyote, contact Siskiyou Department of Agriculture Wildlife Specialists Cody Von Saltza or Dennis Moyles (contact information above).

For suspected depredation by wolf:

Wolf Specialist, California Department of Fish and Wildlife
- Kent Laudon: 530-215-0751
*Note: For suspected wolf depredations, a “Livestock Loss Determination” report will be completed.

Siskiyou County Wolf Liaison
- Patrick Griffin: 530-598-6950

If you can’t get in touch with the above contacts, try the following:

Local CDFW Wildlife Management Supervisor
- Christine Found-Jackson, NE CA Wildlife Management Supervisor, 530-340-5977

Wildlife Services State Office: 916-979-2675
- Derek Milsaps, North District Supervisor, Wildlife Services: 530-708-0369
- Bill Watkins, Non-lethal Specialist, Wildlife Services: 530-616-5593

Game Warden Dispatch: 916-358-1312
- Steven McDonald, Lieutenant, western and central Siskiyou: 530-598-1709
- Jake Nicholas, Lieutenant, eastern Siskiyou: 530-339-0786

CA Department of Fish and Wildlife Northern Regional Office (Redding): 530-225-2300

3. Officially report incident to the California Department of Fish and Wildlife:
This will provide a formal record of the incident. Such reports may result in the issuance of a depredation permit (i.e., permit to take animals creating property damage) for designated species requiring a depredation permit by California Codes and Regulations (this does NOT include wolves).

For additional information and a copy of the full factsheet, please visit the UCCE Siskiyou Livestock and Natural Resources webpage: https://ucanr.edu/sites/Siskiyou_County_Coop_Extension/files/362098.pdf
3 Farm Service Agency (FSA) Program Update

In November, Northeastern CA UCCE and FSA representatives collaborated to host a webinar outlining FSA programs and important upcoming deadlines for livestock producers.

A recording of the webinar is available to livestock producers on the UCCE Siskiyou Livestock and Natural Resources webpage, or by clicking here: https://cesiskiyou.ucanr.edu/Livestock_and_Range_Management/FSA_Programs/

The webinar provided an overview on the following topics:

- **Drought Relief Programs**: Details on both NEW and existing programs that provide support for water hauling, feed transportation and decreased forage production due to drought.

- **Fire Relief Programs**: Lost forage, hay burned in storage, fencing on private lands and livestock mortality.

- **Livestock Indemnity Program**: Weather livestock losses and predator-livestock mortality.

For more information on programs, eligibility and signups please contact **Siskiyou County FSA: (530)842-6123**

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**Announcements:**

**2022 Pie Meeting- Save the date!**

2022 Annual Animal Health “Pie” Meeting!  
Thursday, February 24th, 6:30pm  
Montague Elementary School

Red Books are for sale at the UCCE Siskiyou County office for $7 each.

Please make your check to UC Regents and get your Red Books before they are gone!
Current Resident or