



Photo: Q.Martins/True Wild/Audubon Canyon Ranch

Living with Mountain Lions

Deer, and their appetite for high value plants, can be a top issue for gardeners. But have you considered mountain lions, and their possible use of the property? Where there are deer.... mountain lions may follow. Here in the North Bay, research has shown deer make up 72% of mountain lion diet. While deer are the primary food item, mountain lions do also eat smaller mammals and, unfortunately, sometimes domestic animals. Thus it is important for property owners with domestic animals to take precautions to help protect their animals. When one is thinking through their overall plan for the yard, they may also want to consider the vital role that vegetation plays in shaping mountain lion movements. Mountain lions are ambush predators and they prefer to utilize thicker habitat. If possible, keep domestic animals in more “open” areas of the property, especially away from drainages.

If you're interested in learning more about how to keep your animals safe, Dr. Carolyn Whitesell, UCCE's Human-Wildlife Interactions Advisor for the Bay Area, is an available resource. She is working with Dr. Quinton Martins (of True Wild and Audubon Canyon Ranch's Living with Lions Project) on mountain lion research and outreach in Sonoma County. Through this collaboration, Dr. Whitesell is assisting with data collection on mountain lion diet and movements and is available for consultations with landowners to help minimize potential conflict with mountain lions.

One critical aspect of Living with Lions' research is to deploy GPS collars onto mountain lions in Sonoma County, which allows the team to collect data on diet, behavior, and reproduction. How does the team get GPS collars onto mountain lions? With a lot of work, sleepless nights, and

patience! They capitalize on mountain lion behavior—mountain lions typically return to a carcass for multiple consecutive nights until it is fully consumed. So, first the team places roadkill deer (“bait”) in suitable locations where they think a mountain lion may walk past. Cameras are placed at the bait so the team knows if a mountain lion shows up. If one does, the team then sets up a cage trap with the bait inside and monitors the cage all night with the hopes that the mountain lion will return. When appropriate, the team can also opportunistically set a cage trap at any livestock kills.

How are the GPS collar data used to study diet? The team looks for locations where mountain lions have spent many consecutive hours in one spot, which suggests they may have made a kill. They then secure permission from the landowner to hike out to that spot and look for any remains that allow them to identify what the mountain lion ate.

The GPS collars also allow the team to identify den sites, where females have given birth. The movement patterns look like a star—where the female continues to return to the same area (her den) for an extended period of time. When the cubs grow old enough to accompany their mother to kill sites, trail cameras are placed at the kills to monitor cub survival.

If you live in Sonoma County, there are a few things you can do to help out this research:

- If you see a fresh roadkill deer, please text the location or nearest cross streets to Carolyn at 650-224-4679.
- If you or someone you know loses livestock or another domestic animal to a mountain lion and you would be willing to have the team attempt to catch the cat to deploy a GPS collar, please contact Carolyn immediately.

If you're interested in learning more about the project or about how best to protect domestic animals from mountain lions, contact Carolyn at cawhitesell@ucanr.edu or check out <https://www.truewild.org/true-wild-blog/coexisting-with-mountain-lions-a-guide-for-pet-and-livestock-owners-of-the-north-bay>

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