

TRUE WILD MAY 2024 NEWSLETTER



Fig 1. P13, the last male we were tracking, died 29 April 2024 (Photo: Audubon Canyon Ranch Trail Camera Project).

FAREWELL TO P13

It has been a really tough year for the mountain lions on the Living with Lions Project. As much as we would like to share a hopeful story, what has transpired feels harsh and raw right now. In the last 3 months we have lost 5 mountain lions we were tracking due to illness (P11, P13, P45, P46 & P47).

P13 was the most recent mortality on 29 April this year. A few weeks before his death Quinton reported that P13, our Sonoma Valley star dominant male whom we had been tracking since December 2018, seemed to be doing fine and contributing valuable data to our understanding of wildlife corridors and landscape connectivity. Quinton wrote: "P13 has crossed HWY 12 six times in the past month (Fig 2). Five of the crossings were at night and one in the early morning when it could have been light - 11pm - 1am (n=2); 1am - 3am (n=2); 3am - 5am (n=1); 5am - 7am (n=1)." These crossing points over a busy highway are fundamental to our understanding of how carefully we need to consider current and future management of the ever growing human pressure on wildlife in the San Francisco North Bay. The loss of P13 will leave a significant void in this region for some time until his territory is filled. It also puts our planned high-resolution highway crossing data collection project on hold until we can collar another suitable candidate.

Some Interesting P13 facts:

- We tracked P13 for almost 2,000 days and collected over 20,000 GPS locations from his collars;
- 92 kill clusters were identified;
- 75 kill clusters were investigated and 51 kills found - 49 deer, 1 coyote, 1 adult male [mountain lion \(killed and fed on\)](#);
- No livestock were recorded in P13's diet;
- P13's home range covered over 11,000 private land parcels;
- Based on the genetic work done, P13 was likely the father of P32, P34, and P40; Strongly related to P3, P5, P17, P27, P28, P29, & P43. P5 could have been P13's father, but the genetic data shows a SECONDARY relationship, so more likely that P5 is the father of P13's mother. No female sampled on the project had been documented as being his mother.

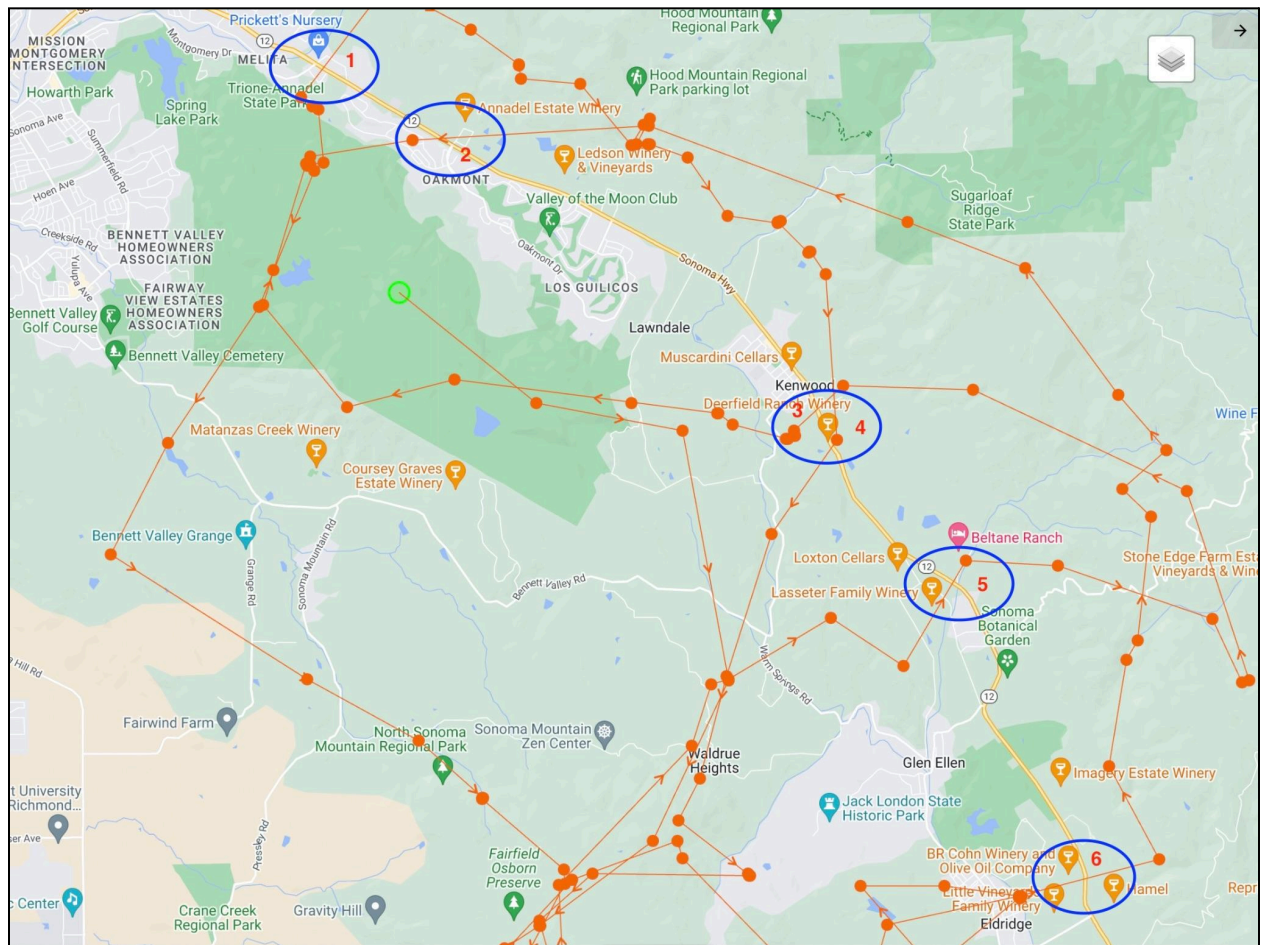


Fig 2. P13 - 30 days data April 2024 - crossed HWY 12 six times.

MOUNTAIN LION MORTALITIES

As for the causes of death of the 5 lions: We are working closely with the California Department of Fish and Wildlife, who, in conjunction with the California Animal Health and Food Safety (CAHFS) laboratory at UC Davis, are doing everything they can to determine if certain bacteria or viruses are consistently associated with these cases. The most significant finding was that all were in poor body condition. There is no indication at this time that these cases are related to toxins. Avian influenza A (H5N1) and SARS-CoV-2 do not seem to play a role in these cases. Updates will be provided as soon as we have more concrete information.

The fact that 5 of our tracked lions have died in such a short space of time makes it very concerning to consider how many other uncollared mountain lions may be dying undetected.

CALL TO ACTION

One way to glean valuable data on current presence of lions on the landscape would be to analyze the trail camera data collected in the region. Our partners at [Audubon Canyon Ranch's Trail Camera Project](#), California State Parks and Sonoma County Regional Parks are contributing significant data with over 150 trail cameras on private and protected land monitoring wildlife movement. We ask the public in Sonoma County to please actively monitor any cameras they have on their properties and provide us with any mountain lion footage every 2 weeks, along with the location of the cameras. These camera data will give us a better sense of lion presence on the landscape as we only have 3 GPS collared lions left to monitor right now. Data can be sent to Kate Remsen at the Audubon Canyon Ranch Trail Camera Project - trailcamera@egret.org



WILDLIFE CORRIDORS

Quinton recently worked with Sonoma Land Trust on an Open Roads TV segment on wildlife corridors and mountain lions in Sonoma.

[LINK TO THE NBC OPEN ROADS SEGMENT ON WILDLIFE CROSSINGS.](#)



ON A POSITIVE NOTE

There has been some positive news - progress has been made with our lion-conflict mitigation work. We built our first Shade Cloth Livestock Experimental Pen in April. Researchers in Africa have found that using shade cloth or similar non-see-through material around an enclosure has helped herders to protect their cattle from lions and leopards. These cats are visual hunters and it seems that they are not inclined to jump into an enclosure if they can't see into it. We think that this should also work with mountain lions, but now we have started some experimental work to verify this.

Dr. Carolyn Whitesell (UC Cooperative Extension), Kate Remsen (Audubon Canyon ranch) and Quinton (True Wild) worked together to put up a 24'x24' pen on Glen Oaks Ranch (Sonoma Land Trust), bordering Bouverie Preserve (Fig 3). The enclosure is 6 feet tall, surrounded by 93% opacity shade cloth that blocks the view of any passing wildlife. Inside, a caller emitting the sounds of a distressed fawn was placed to entice any predator to come by to investigate. These callers have been tested in other applications and are known to be a good attractant for mountain lions. To monitor the presence and behavior of any predator approaching the pen, the team placed video trail cameras outside the pen on each corner. Furthermore, to determine whether a lion will attempt to take the leap, a cell phone trail camera was placed inside the pen to instantly notify us of such an event.

Since mountain lions move through vast areas of their territories and we currently have diminished numbers, it may be a while before we see one on the cameras. Until then, we will wait and see!



Fig 3. Final product - the first Shade Cloth Puma Proof Experimental Pen.