From: Mike Cardwell Sent: Sunday, September 14, 2014 4:11 PM To: Cardwell, Mike Subject: Rattlesnake update

Hello all,

There's lots going on with the telemetered rattlesnakes at Effie Yeaw!

As mentioned previously, female #39 had her kids on about 27 August (based on when they started their neonatal shedding on 5-6 September). We have not observed a neonate in the refuge with #39 since 6 September, although this refuge is a labyrinth of passages, creating many places we couldn't observe with either mirrors or the BurrowCam. Finally, on 13 September, we found #39 out of her refuge for the first time since 10 July. Over the past two months, her mean body temperature has been 86F and the lowest we recorded for her was 77F; but yesterday morning she was in a ground squirrel burrow with a body temp of 75F. She will now hunt for rodents until hibernation and I expect her behavior and body temperatures will be very similar to those of the males.

But we also have new kids! On 8 September, we captured a new female at the refuge with pregnant female #41. The new female, #43, was very thin and could be recently post-partum. But she was large enough for a transmitter so one was implanted and she was released at her capture site. Then on 11 September, both females 41 and 43 were in the refuge when we observed several babies at this site for the first time. The photo below, shot on 12 September, shows one or two neonates coiled on the right, with the nose of another barely visible on top of the adult, which is to the left. The adult is the right color for #41, as #43 is much more brown. The kids' eyes were clear, so they're either brand new or a week old and will shed very soon. Are they 41's or 43's kids? Since we can only see a short segment of the side of the adults in this refuge, we cannot get a good look to assess 41's condition. If the babies were new last Thursday, they cannot belong to #43. We'll know how old they are when they start to shed.

Male #38 has returned from his month-long sojourn into the grape and ivy thicket near the top of the hill behind the back yards on Edgehill Lane. As of 13 September, he was back on flat terrain in the preserve, coiled in typical ambush position. During his month on the hillside, his radio signal moved little, if at all, which makes me wonder if he was hanging out with a pregnant female and mated with her once she delivered a litter (as we think happened with #39, as well as with other pairs in recent years in El Dorado County). The timing seems right and it probably deserves more investigation if it occurs again next year.

Finally, male #36 continues to be missing. Hopefully, his transmitter has simply failed prematurely and he will turn up this fall or next spring, either around the buildings or Maidu Village or courting one of the telemetered females. His rattle colors are red/red, so he should be captured and not released if someone comes across him.

Thanks for everyone's encouragement and kind comments regarding the study!

Mike

