Mary Toothman has studied disease dynamics in mountain yellow legged frogs since 2008, first as a staff researcher with Cherie Briggs’ at UCSB and now as a graduate student researcher. Her broad interests lie in disease ecology and conservation ecology, with special interest in how pathogens move through the environment, both between and within host populations. She will graduate in 2018 and will pursue a career in research and management.

The deadly amphibian chytrid fungus, *Batrachochytrium dendrobatidis* (Bd), first appeared in the Sierra Nevada 30-50 years ago. Since then, it has invaded populations of the mountain yellow legged frogs *Rana muscosa* and *Rana sierrae* in a wave from north to south, leaving local extinction in its wake. Scattered populations of *Rana sierrae* survived in the north, however, and now persist with infection despite declines due to the disease. Now these populations are giving us clues to how a susceptible species of amphibians can survive a devastating disease, and our research group is using these clues to inform direct conservation actions and interventions that we hope will allow these endangered species to survive and rebound. I will introduce Bd and its impacts on amphibians around the world, outline research to date on Bd in the Sierra Nevada, and talk about some of the specific questions I am asking in my PhD research.

Please arrive early to park, secure a seat, snack and mingle. Seminars are geared to adult audiences, however young people are encouraged to attend and well-behaved children are welcome. Visitors are not allowed to bring dogs to SNARL, so please leave pets at home. This week’s seminar sponsored by Mammoth Brewing, Mammoth Lakes, CA.