

Fully funded MSc Assistantship at [Utah State University](#) under supervision of [Tal Avgar](#) and [Larissa Yocom](#)

## WILDLIFE SPACE-USE AND POST-FIRE HABITAT DYNAMICS

Large, severe wildfires can rapidly alter critical wildlife habitat. However, the behavioral response of valuable game species, such as deer and elk, to initial habitat loss from wildfire and its subsequent recovery is rarely monitored. Moreover, the effect of large-game and livestock grazing and browsing intensity on post-fire habitat recovery is also poorly understood. For this collaborative project



Photo by John McColgan, public domain.

between the Utah Division of Wildlife Resources, and [Tal Avgar](#)'s and [Larissa Yocom](#)'s research groups at USU, we are looking for an MSc student to study two complementary research questions: (1) How and why do large herbivores (elk, deer, cattle, and sheep) alter their space-use and foraging patterns in response to wildfire, and how do these responses change as a function of pre- and post-fire habitat dynamics? And (2), do post-fire space-use patterns of large herbivores affect successional trajectories, and how do these effects depend on herbivore species, habitat characteristics, and fire severity?

**Desired start date:** January 2021. The student will be supported by a yearly stipend of \$18,000 for two years. **Minimum qualifications:** BSc in ecology, wildlife biology, conservation biology, mathematical or statistical ecology, or related fields. Applicants must be admissible to the [MS Ecology program at USU](#). **Competitive applicants** will have experience: collecting field vegetation data, conducting statistical analysis of spatial data in R and/or Python, presenting and publishing ecological data, and the capacity to develop and apply quantitative models to address ecological questions. Applicants should email the following materials, **as a single pdf file**, with the subject line "Wildlife-Fire MSc Assistantship" to [larissa.yocom@usu.edu](mailto:larissa.yocom@usu.edu) and [tal.avgar@usu.edu](mailto:tal.avgar@usu.edu) **no later than October 18<sup>th</sup>, 2020:** (a) one page cover letter describing relevant experience, interests, and professional goals, (b) CV, (c) scientific writing sample (an academic paper or report written primarily by the applicant), and (d) contact information for three professional references. **Priority will be given to applicants belonging to under-represented groups**, including (but not limited to) Native/African/Latinx Americans, LGBTQ+, women, and first-generation college students.

[Utah State University](#) is a Research I land-grant institution with a student body of over 28,000, 42 departments, 8 academic colleges, a school of Graduate Studies, and diverse research programs. The main campus is located in [Logan](#), a community of 120,000 people in Northern Utah. Logan is 85 miles north of Salt Lake City in scenic Cache Valley, a semi-rural mountain basin with nearby ski resorts, lakes, rivers, and mountains providing many recreational opportunities. The area has a low cost of living and provides a high quality of life.