

Living Lab Fellowship Program for Sustainability AY 23-24

Project Overview: Preparing for Prescribed Burns at Jasper Ridge Biological Preserve

Living Lab Fellowship Program in Campus Sustainability:

Offered in partnership with the Stanford Office of Sustainability and the Bill Lane Center for the American West, the <u>Living Laboratory Fellowship Program</u> provides Stanford students real-world sustainability leadership and project management opportunities that meaningfully advance Stanford's operational sustainability goals. Successful student applicants will be matched with a pre-identified <u>campus</u> <u>sustainability project</u>, mentored by operational experts in the project field, and paid to work up to 10 hours per week over the course of an academic year on their project.

Project Background:

Stanford has developed a Wildfire Management Plan (2021), which calls for wildfire risk mitigation across Stanford lands, including Jasper Ridge Biological Preserve (JRBP), through vegetation management that reduces fuels. However, vegetation management may necessarily look very different on campus next to high-density buildings than the more open wildlands of JRBP where fuels management must be particularly sensitive to the ecological conditions and mission of the preserve. One way to address this is to rely on treatments in JRBP such as the planned introduction of goats or prescribed burning. Such treatments more closely resemble historical herbivory and fire in the region when compared to treatments that utilize heavy machinery and intense fuels removal, which may have negative environmental impacts like soil disturbance or habitat disruption. However, no formal strategy for vegetation management at JRBP specifically has been developed to date. Doing so will require a comprehensive understanding of the social landscape of stakeholders for JRBP, regulatory requirements, local fire ecology, and socially and ecologically appropriate fuels management practices.

Project Description:

The selected fellow will explore perceptions and barriers related to prescribed burns and other fuels management techniques (e.g., planned herbivory) at Jasper Ridge Biological Preserve and work toward aligning stakeholders (Stanford, community, fire agencies) in understanding the benefits of prescribed burns and herbivory, including considering such techniques in future Stanford wildfire management plans. The fellow will ultimately produce a final report or, as conditions allow, draft burn plan for JRBP that details a plan for vegetation management.

Desired Project Outcomes & Deliverables:

- Build buy-in and trust with key stakeholders
- Design and deliver presentations on vegetation management at JRBP to quarterly faculty meetings and community meetings
- Develop a burn plan (where external conditions allow) OR draft a report/roadmap that provides a
 detailed strategy for finalizing a burn plan, including timeline, key steps, where burns would take
 place, how many acres, ecological impacts, etc.

Collaborating Department(s):

Jasper Ridge Biological Preserve

Living Lab Fellow:

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