

YELLOWSTONE NATIONAL PARK RESEARCH NEEDS

For more information, contact the Yellowstone Research Permit Office at 307-344-2239 or yell_research@nps.gov. The park does not have funding or housing available for interested researchers. Be prepared to secure your own camping or lodging during fieldwork.

GEOLOGY and HYDROLOGY

- Slope stability, landslides, and debris flows in post-glacial landscapes
- Groundwater recharge at the margins of hydrothermal systems



HISTORY

- Oral histories on major park topics (except for the 1988 fires), Example: What it is like to live in the park interior, and how has that changed over time?
- History of the Army soldier stations and backcountry patrol cabins
- Humans and Wildlife: history of the changing methods, laws, and attitudes surrounding the wildlife of the Greater Yellowstone Ecosystem
- Gardiner, MT and the park: history of the town and its connection with Yellowstone (this could also be expanded to include the other gateway communities: Cooke City, Cody, Jackson, West Yellowstone)
- History of the Civilian Conservation Corps projects and involvement in Yellowstone

VEGETATION

- Life history, expansion rate, and the ability of select exotic winter annual plants to alter native plant communities
- Geothermal plant community types and threats to integrity
- Demography of whitebark pine and lodgepole pine in sympatric mid-elevation zones
- Changes in plant phenology in regards to climate
- Surveys of rare plants
- The role and function of high elevation wetlands
- Characterizing geothermal wetlands in the park
- Studies of native plants and their pollinators
- Visitor impacts to native plant communities



CULTURAL RESOURCES

- NPS Cultural Landscape Inventories for Norris and Madison Trailside Museums, Norris Ranger Museum, and Lamar Buffalo Ranch
- Inventory of historic ancillary and abandoned wagon and vehicle road corridors
- Archaeological inventory of Bechler Meadows and Falls River Basin
- Develop a field guide for regional projectile point typology and nomenclature
- Research traditional ethnobotanical resources and practices in the park

SOCIAL SCIENCE

- How can the park better attract and provide a positive experience for socio-economically underrepresented groups?
- How can the park better understand and deter visitor behaviors that are dangerous, negatively impact other visitors, and/or cause resource damage?
- What patterns describe serious safety incidents, what might be underlying explanatory factors for the increase, and how might the park respond?
- At regional, national, and international scales, what are the key groups of stakeholders who appreciate the park from afar? What about Yellowstone is important to these groups?
- What visitor segments would like to visit Yellowstone NP during either the summer and winter seasons but choose not to visit? What are the reasons for not visiting?



INVERTEBRATES

- Invertebrate response to ecological restoration
- Baseline inventories of invertebrate herbivores
- Herbivore ecology of sage plant communities

