

GRAND TETON NATIONAL PARK RESEARCH NEEDS 2020

HYDROLOGY, AIR QUALITY AND GEOLOGY

Broad themes of interest:

- Use of LiDAR and remote sensing to analyze geoscience and ecological processes
- Evaluate effects of climate change on biotic and abiotic processes
- Developing new surficial geologic and geomorphic maps
- Monitoring and mitigating geohazards in backcountry settings
- Investigate hydrologic and geomorphic processes in dynamic river environments

For questions about geologic and hydrologic studies, contact Simeon Caskey at 307-739-3493



ECOLOGY, VEGETATION AND SOILS

- Predicting the spread of cheatgrass in relation to climate change on a local scale in Grand Teton NP
- Soil food web study of Kelly hayfields to determine differences between native and agricultural soils
- Investigate effects of earlier plant flowering on pollinators and/or wildlife

For questions, contact ecologist Laura Jones at 307-739-3678



FISH AND WILDLIFE



Broad themes of interest:

- Investigate climatic influences on aquatic and terrestrial habitats
- Evaluate effects of aquatic and terrestrial invasives on wildlife and their habitats
- Evaluate effects of contaminants, pathogens, and disease on fish and wildlife
- Monitor and research threatened and endangered species, with an emphasis on grizzly bears, wolverines, and yellow-billed cuckoos
- Monitoring and managing the human-wildlife interface

For questions about fish and wildlife, contact Dave Gustine, Branch Chief of Fish and Wildlife, 307-739-3485

HISTORY, HISTORIC PRESERVATION AND ARCHEOLOGY

- Research, identify, and propose a historical research topic related to the history or management of the park or parkway (ex: Civilian Conservation Corps' contributions, trail system development, elk reduction program, etc.)
- Conduct archeological research and survey of previously unsurveyed areas, could include high altitude sites or ice patch archeology, resulting in a technical report written to Wyoming state standards
- Conduct assessments of historic structures or cultural landscapes within the park and develop treatment recommendations



For questions, contact Kate Birmingham, Branch Chief of Cultural Resources, 307-739-3671



MUSEUM COLLECTIONS

- Conduct preliminary research on mountain climbing history in GTNP and conduct oral history interviews within members of the local climbing community
- Complete an initial context study of “imaging Grand Teton National Park” -- a history of painters, filmmakers, and artists

For questions, contact Bridgette Guild, museum curator, 307-739-3494

Many of these projects are ideal for a graduate student with supervision.

All research conducted in NPS units requires a research and collecting permit approved and issued by the park(s) in which studies will be conducted. See <https://irma.nps.gov/rprs/> for more information.