



MOSAICS IN SCIENCE

Diversity Internship Program

2021 Project Descriptions

NPS UNIT: YUKON-CHARLEY RIVERS NATIONAL PRESERVE		PD #: 2021517
<p>Project Title: Biology/Science Communication intern supporting science on American peregrine falcons in Yukon-Charley Rivers National Preserve</p> <p>Position Type: Mosaics PLC</p> <p>Primary natural resource discipline: Biological Sciences</p> <p>Project keywords: American peregrine falcons, Yukon-Charley Rivers National Preserve, Central Alaska Network, long-term monitoring, video storytelling</p> <p>Location: Fairbanks, Alaska</p>		
COVID-19 NOTICE		
<p>As the COVID-19 pandemic continues to change and evolve, project timelines and structure remain flexible and it may be necessary to postpone start dates, begin work remotely, or reformulate the project's description. Should any development in the COVID-19 outbreak impair a project's timeline or results, the SIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.</p>		
PROJECT DESCRIPTION AND WORK PRODUCTS		

Position Description: American peregrine falcons on Alaska's Yukon River in Yukon-Charley Rivers National Preserve (YUCH) have been studied for over 40 years. They are included in the preserve's enabling legislation, the Alaska National Interest Lands Conservation Act (1980). Our research has tracked their recovery from devastating effects of the pesticide DDT (dichlorodiphenyltrichloroethane). It caused peregrine falcon eggshells to thin in the 1960s. Many chicks did not survive, and the number of falcons decreased dangerously. In 1970, peregrines were classified as endangered and were protected under the Endangered Species Conservation Act. The United States banned the use of DDT in 1972. The U.S. Fish and Wildlife Service (USFWS) and National Park Service (NPS) intervened to help populations recover. After banning DDT in the U.S., they cooperated and tracked the recovery of peregrines across North America. Today, recent research shows Yukon River peregrines have rebounded and are thriving, demonstrating the importance of long-term monitoring and collaboration. The peregrine's recovery in the U.S. is a shining conservation success story. But, threats such as climate change and global contaminants still face the species. Continued monitoring is needed to track the status of this iconic species. We do this through collaborations. The Central Alaska Monitoring Network (CAKN) manages several long-term monitoring efforts across various parklands, including peregrine surveys in YUCH. The biology/science communication intern would assist on various field work projects and science communication highlighting the recovery of YUCH peregrines. Field work may include: Breeding Bird surveys (YUCH), peregrine falcon surveys (YUCH), small mammal surveys (Denali National Park and Preserve).

Along with field work, the intern will be trained in science communication skills. Since 2013, NPS has partnered with many education partners and rural schools to teach video storytelling and production to youth. Microgrants from partners funded five previous workshops hosted at local and village schools, resulting in 20 youth-produced films on park conservation stories. Many youth are of Alaska Native heritage, have deep connections to the land and live in gateway communities near remote parklands. The disciplines of video production and storytelling are burgeoning career fields that provide career opportunities for youth in remote Alaskan communities. Through these experiences, interns have learned: production and editing, photography, descriptive and creative writing, public speaking, interviewing, presenting and storytelling. We hope to transform the intern into a budding conservation steward and compelling storyteller. These experiences will equip the intern with tools to conduct science, capture experiences, tell tales and inspire others through captivating videos and to learn about NPS careers.

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This position is offered through the National Park Service's Mosaics in Science Internship Program in partnership with Environment for the Americas.

NATURAL & PHYSICAL WORK ENVIRONMENT

Fairbanks is a small city with an abundance of year-round, outdoor recreation activities including: running and hiking trails, running races, cross-country ski trails, a network of public-use cabins, ATV accessible trails and phenomenal camping and hiking opportunities. The parks are rugged, remote and all types of inclement weather may be encountered year-round. The intern will need to be prepared to expect all manner of weather conditions. Grocery stores, gas stations, entertainment and other amenities are within 1-5 miles of the NPS Fairbanks office. About 60 staff work at the NPS Fairbanks Administrative Center. When conducting field work in the parks, the intern should expect to work long hours (up to 12 hours/day) and be prepared for any inclement weather. The intern should be fit enough to carry a 40 lb pack and hike up to 10 miles per day. The intern should expect to camp, backpack and hike in remote areas for 5-21 days at a time. The intern may travel by small, fixed-wing aircraft or motorboat to access field sites. Job hazards include river hazards, hiking in rugged terrain, carrying heavy loads, working in bear country, and remoteness of work sites. The intern will always work with an experienced team in the field. In the office (or if teleworking during COVID-19), the intern will work a regular schedule (established with the supervisor/mentor). Work will be focused on data entry and proofing and science communication and video processing and archiving skills.

QUALIFICATIONS

The intern must have some prior experience conducting fieldwork and camping in remote areas, preferably in Alaska, and at minimum working towards a degree in a discipline in the biological sciences. The intern must be able to carry 40lbs of equipment over uneven terrain in high density grizzly bear country and potential inclement weather. The intern must be able to camp overnight in remote field settings for up to three weeks duration. It is desired that the intern has experience working in grizzly bear country and in the backcountry. The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 30 years old, inclusive, or veterans up to 35 years old. Prior to starting this position, a government security background clearance will be required. The intern must have a good driving record and a driver's license and be able to drive government vehicles. The intern will need some form of transportation to commute in Fairbanks, whether it be by bike, bus or vehicle. The National Park Service in Fairbanks does not have a bunkhouse or housing to house the intern so the intern will need to find housing and commute from home to the work site in town. Transportation to field sites will be provided by NPS.

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VEHICLE AND DRIVER LICENSE REQUIREMENTS

Applicant must have a valid drivers license and a good driving record.

A personal vehicle is RECOMMENDED but not required for this position.

HOUSING

Park housing is NOT available. The intern will be responsible for finding housing in the nearby area. The National Park Service office in Fairbanks, Alaska does not have bunkhouse facilities to house an intern. Fairbanks is a sprawling community and the 2nd largest city in Alaska with a population of 90,000. Grocery stores, restaurants and other amenities are available and within 1-2 miles of the NPS office. Cost of living is high and rentals are expensive (\$500-\$900/month for dry cabins, efficiencies and one bedroom apartments) and are available close by (within 1-5 miles of the NPS office).

INTERNSHIP START/END DATES

Start Date: 5/17/2021

End Date: 7/30/2021

Eleven weeks of the internship will be in the park. A mandatory Career and Leadership Workshop will be held in Washington, D.C. from August 1 – 5, 2020.

PLEASE DIRECT ANY QUESTIONS TO ENVIRONMENT FOR THE AMERICAS

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