PROJECT DESCRIPTION
2020 FALL/WINTER

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<th>NPS UNIT: DENALI NATIONAL PARK AND PRESERVE</th>
<th>PD #: 2020417</th>
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<tbody>
<tr>
<td>Position Title: Natural Resource Management Assistant (1)</td>
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<td>Position Type: GIP Intern</td>
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<td>Primary natural resource discipline: Multidisciplinary</td>
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<tr>
<td>Project keywords: visitor use, planning, wildlife behavior, data collection, carrying capacity, road ecology</td>
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<td>Location: Denali Park, Alaska</td>
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COVID-19 NOTICE
This project description was developed prior to the onset of the COVID-19 outbreak. Therefore, 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 GIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.

PROJECT DESCRIPTION AND WORK PRODUCTS

Position Description: This position is part of Denali National Park and Preserve’s Road Ecology workgroup in support of park visitor use management and long-term planning. The incumbent will contribute to key aspects of data collection related to the park’s expanding shoulder season visitation (mid-March to the end of May) and recreational opportunities. The park seeks to understand changing visitation patterns during this time of year, and this position will provide critically important data about how this use is affecting park wildlife. The incumbent will monitor how increasing visitor use affects wildlife and visitor experience. This project will contribute to other work and planning documents to help determine future management of the shoulder season to ensure public safety is maintained, visitor service needs are meet, and park goals of stewardship are achieved. The incumbent GIP would receive mentorship in physical geography, data management, and park planning.

The incumbent will have two primary tasks:

1. **Data Collection:** Working with the park Physical Scientist, the intern will use hand-held GPS (iPad) to record biological data such as animal sightings and animal behavior observations along the park road either by vehicle or bicycle. Additional visitor use observations will be recorded at open rest areas using GPS and vehicle-motion-triggered cameras. Some overnight travel into the park may be required (housing provided).

2. **Data Analysis and Report Writing:** The GIP will compile data into a relational File Geodatabase and summarize camera data using existing software. Quality control and analysis will take place in ArcGIS and Excel environments. Data will be used as part of an adaptive management plan to provide off-season park access and protect wildlife during this sensitive time of year. A final report will be written summarizing and synthesizing findings from data collection efforts. Data and the final report will be used as part of an adaptive management plan to provide shoulder season park access, meet visitor needs, and protect wildlife and other park resources.

This position will collect and analyze critically important information regarding spring visitation and its impact on wildlife and other resources in Denali National Park. Visitation in spring months (March - May) has increased and diversified rapidly in recent years, introducing new pressures on park infrastructure, wildlife, and other resources. The NPS is currently conducting a winter and shoulder season planning effort in order to better understand these
pressures and anticipate how to continue to provide excellent visitor experiences and resource protection in the face of rapid change. Information provided by this position will directly support this planning effort and help the NPS make decisions about visitor opportunities and resource protection strategies during this increasingly popular time of year.

This position is offered through the National Park Service’s Geoscientists-in-the-Parks (GIP) Internship Program in partnership with Stewards Individual Placement Program (Stewards) and The Geological Society of America (GSA).

**Work Products:** Final work products will be furnished to both the Physical Scientist and the Outdoor Recreation Planner.

1. Working (or final) draft of road use report
2. Final database (i.e. quality controlled) of visitor use and animal observation statistics
3. Presentation of findings to park staff in informal or formal setting (e.g. working lunch science talk or presentation planning interdisciplinary team or park management team)

**QUALIFICATIONS**

Excellent interpersonal skills, the ability to work independently, and a genuine interest in natural resource management are a must. Candidates should possess curiosity, critical thinking skills, and a desire to explore data and make connections across disciplines and between datasets. Candidates with coursework showing proficient use or theory of: (1) scientific and sampling methods, (2) intermediate-advanced Excel skills, (3) quantitative analysis skills, and (4) GPS and relational databases and who have demonstrated a high degree of attention to detail will receive first consideration. Ideal candidates will also have excellent communication skills (oral and written). It is preferable, though not mandatory, that the candidate possess EMT, WFR, or other medical certification.

Candidates with the following interests will be the most successful in this position: GIS, relationships between management decisions and visitor satisfaction, wildlife-human interactions, balancing park use and park preservation, relational data, data trends and patterns. Successful candidates will have the physical ability to stand for long periods, walk across uneven terrain, and ride a bicycle up to approximately 20 miles on steep gravel roads.

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 veteran up to age 35. Prior to starting this position, a government security background clearance will be required.

**VEHICLE AND DRIVER LICENSE REQUIREMENTS**

**Applicant must have a valid driver license and a good driving record.** Driving a park vehicle to conduct surveys and patrols is integral to the project - there is no other practicable way to access field sites.

**A personal vehicle is not required for this position.** Unless ADA/ABA access is required, commuting to work using a vehicle is not necessary. Offices are located a short distance (6 minutes walking) from the housing area. A personal vehicle can be useful for traveling to town (small community of Healy 11 miles away from the park, Fairbanks 100 miles away) and for exploring other areas in the state, but is not mandatory for the position. Carpooling and ridesharing to town and other areas is common among park staff.

If the GIP is required to drive a park vehicle for their position, Stewards will perform a driving records search, and the GIP’s ability to drive a park vehicle during work hours will be contingent upon the results. GIPs will have to have had their license for 3 years or be over the age of 21 to be insured as drivers under Stewards insurance policy. Examples of things that will preclude a GIP from driving a park vehicle include: GIP under the age of 21 years old that has been licensed less than three years, DUIs, multiple moving vehicle violations, suspended or revoked license, or three or more accidents (regardless of fault) in the last 3 years. If the driver’s search is favorable, Stewards will provide driver’s liability insurance while the intern is driving a NPS vehicle for their GIP position. If the GIP is denied coverage by Stewards, they will not be permitted to drive during work hours.
**HOUSING**

Park housing is available and will be provided at no cost to the participant. Park housing is provided at no cost to the participant. Housing is provided at C-Camp - a 6-minute walk from the offices. Cabins are 2-bedroom, 2-person (you have your own room), furnished, 20'x20', with a shared kitchen, living, and breakfast bar area. Cookware/utensils, heat, electricity, and Wi-Fi are provided. There is cell phone reception (some carriers better than others). Cabins are dry until water is turned on in June - a shared shower, bathroom, laundry (free), and dish washing (i.e. sink) facility is a short walk away. Filtered drinking water can be hauled in provided 5 gallon containers to have in the cabin. GIPs will need to bring all personal items including toiletries, laundry detergent, pillows, and linens. Typically, cabins do not have a microwave or toaster oven. Parking is available near cabins. If you bring a vehicle it would be helpful (but not necessary) if it is winterized (i.e. engine block heater, oil pan and battery warmers). Housing for overnight travel in the park while on duty will be provided.

**INTERNSHIP DATES**

- **Start Date:** 3/22/2021
- **Number of weeks:** 20 weeks
- **Flexibility of dates:** Yes

**LIVING ALLOWANCE**

20 weeks ($350/week = $7,000)

**RELOCATION ALLOWANCE**

$1000

**AMERICORPS PROGRAM**

AmeriCorps is a program that engages individuals in intensive community service work with the goal of “helping others and meeting critical needs in the community”. The GIP Program is supported through AmeriCorps by providing a Segal Education Award in addition to the GIP’s living stipend and relocation allowance.

Upon successful completion of the GIP position, the GIPs (AmeriCorps members) are eligible for a $1,612 - $6,095 pre-tax education award that can be used for paying back student loans or for continuing their education. The amount of the education award is based on the length of the position.

AmeriCorps limits the number of terms an individual can serve to 4 terms. If an applicant has previously completed 4 GIP or other AmeriCorps positions, they will not be eligible to apply for an additional GIP position.

**NATURAL AND PHYSICAL WORK ENVIRONMENT**

**Natural Environment:** Denali headquarters is at latitude 63.7 N and is 1500' amsl. The sun returns in force starting in March - a splendid month for getting outside. Aurora are active December-April. Temperatures can range from -45F to +45F during this time of year. Between 1-4’ of snow accumulates during winter months. Moose, caribou, lynx, and snowshoe hares are the more common mammals seen during winter and spring months. Wolves might be seen. Typically, bears will become active in late April. Summer: sun is plentiful and glorious. Days are warm (60s-70s); 80F is uncommon but does occur. However, it can snow any day of the year. Typically, June is Denali’s wettest month, but has only been sporadically true the last 6-7 years.

Denali is fairly remote – more so in winter and spring as most seasonal services are closed. Healy (15-20 minutes north) has two restaurants, three gas stations, and a full-size grocery store. There is also a clinic, hardware store, and a library. Fairbanks (2 hours one-way north) has all amenities (e.g. several full-sized grocery stores, bulk groceries, dining options, movie theater, auto shops, and outdoor goods shops). More facilities open in summer: restaurants, bars, lodges, shops, food trucks, and convenience stores closer to park housing. During summer, there are several local lecture and educational series put on by the park, partners, or local environmental groups.

**Physical Work Environment:**

*Office work:* a dedicated, dual-monitor work station (with a window) will be provided to the incumbent. The work area is in an open floor plan room down the hall from the supervisor in a climate-controlled, modern building. There may be other staff in the same room (with their own separate workstations).
Field work: A government vehicle will be provided for all work-related transportation needs (e.g. monitoring patrols) – sites may be 30 miles away. Data collection may require overnight stays in historic cabins inside the park. Some sampling may require biking on the Denali Park Road, a well-maintained, mountainous gravel road. Rest areas and the park road are exposed to the elements and cold. Hazards include icy driving conditions, cold exposure, and biting insects in spring. Incumbent must be prepared to face cold conditions. Most suitable clothing will be provided (i.e. coats, hats, pants). However, expect to provide other essentials (i.e. boots, socks, gloves or mittens, long underwear). If the incumbent does not have the appropriate outdoor clothing to provide for safe operations, the park may be able to provide it.

MENTORING AND LEARNING GOALS

Mentoring: Primary supervision and mentoring will come from the Physical Scientist. However, frequent consultation and collaboration will occur with the Outdoor Recreation Planner. Informal orientation, training, SOPs, and project oversight will be handled by one or both supervisors/mentors depending on topic. Mentoring takes place throughout the project’s phases: setting up the sampling scheme through to data management, analysis, and report writing. However, data collection itself is quite independent of supervision/mentoring. The supervisors/mentors empower their interns to learn through experience, trusting that SOPs are followed to ensure data security and fidelity and that the intern is unafraid to ask questions when appropriate. Interns will be directly mentored in topics related to: adaptive management, resource management, data management techniques, data quality assurance and control, following and developing standard operating procedures, the scientific method and design, balancing park use with park restraint, preservation, and stewardship. GIP interns may participate on interdisciplinary teams (IDTs), assist wildlife biologists, implement other fieldwork or visitor surveys, or assist with search and rescue as opportunities arise to broaden their experience at the park, increase their knowledge base, and increase their comfort level in professional settings.

Learning Goals:

Professional development/Mentoring/New skills: scientific methods/sampling; data entry, management, and quality control; ArcGIS; relational databases; analysis software; insights to management-level decision-making and adaptive management; iOS as GPS; iPad protocol development (as needed); describing/recognizing animal behavior; temporal/spatial trends; the power of Excel formulas; winter driving; public speaking; oral presentations; report writing; bear awareness and bear spray training in spring; CPR/first aid; EMS refresher if appropriate; operational leadership; acronyology.

Personal development: engaging with a diverse set of visitors; connecting management concepts at different scales; living and working in Alaska winter and spring is truly an exceptional and transformative experience; spring and summer recreational opportunities including backcountry and nordic skiing, snowshoeing, camping, aurora viewing, star gazing, hiking, paddlesports, and backpacking.

SUPERVISORS/MENTORS

Primary:
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