Washington Department of Transportation Habitat Connectivity Intern

Primary Project Deliverable: Intern will deliver Excel spreadsheets populated with data summarizing wildlife occurrences from motion-triggered cameras and an end-of-project report summarizing data from cameras including tables with species information and basic statistics like means and ranges. The primary emphasis of the end-of-project report will be a species by species summary of highway crossing activities. Other deliverables will include preparation and mailing of posters that inform WSDOT's maintenance staff of Fish and Wildlife Program activities, updates to the Wildlife Carcass Removal database and enhancements to WSDOT's habitat connectivity web pages and Environmental Workbench.

Duties: The Washington Department of Transportation is looking for a Masters in Environmental Studies student for an internship providing support to Kelly McAllister, the agency's Habitat Connectivity Biologist. The primary work involves entering motion-triggered camera image data to Excel spreadsheets. Additionally, intern will help install cameras and periodically load fresh batteries and storage media into cameras that have been installed at several culverts and bridges on the state highway system. Eighteen motion-triggered cameras are currently deployed at six bridge and culvert locations. Thirteen of them are on I-90 near North Bend and we anticipate deploying additional cameras in that area. The intern will also process data from cameras maintained by regional staff, including cameras at Butler Creek, and the US 97 Alt Route wildlife fence. The data entry aspect of this work involves reviewing images, identifying wildlife species and numbers of individuals and entering data that characterize the events caught on camera.

An additional function of the intern is to assist with development of a Passage Assessment System (PAS) database. This is a method for assessing the values of bridges and culverts for their attractiveness to wildlife as routes of safe passage under highways. It is a fully developed method that has had limited application and a digital database for storage of data has not yet been developed. During the 2013-2014 interval, we expect to make substantial progress on implementation of this assessment method.

Other work, such as maintaining the Wildlife Carcass Removal Database, producing and distributing informational posters, and augmenting the habitat connectivity web page, will be completed as time allows. Maintaining the Wildlife Carcass Removal Database involves transfer of data from a web interface, where maintenance staff upload data from their Personal Digital Assistants (PDAs), to a Filemaker Pro database. An intermediary quality control step requires review and correction of records that are caught by an error check routine.

Position Objective:

The primary objectives of this internship are to assist in the advancement of habitat connectivity work within WSDOT, primarily through the collection and dissemination of information, and to use motion-triggered cameras as a data collection tool.

Safety

The intern will be conducting occasional (one to three a month) visits to remote camera sites to install and service the cameras. Cameras are located within WSDOT right of way on busy highways. The intern will receive safety training and equipment and must follow standard WSDOT safety and field visit protocols as outlined in the pre-activity safety plan developed for maintaining the remote cameras.

Essential job knowledge, skills and abilities:

This internship is open to second year students enrolled in the Master in Environmental Studies Program. Other requirements include:

Knowledge of Pacific Northwest wildlife species, their ecology, life history and habitat utilization At least one college level course that includes introductory statistics

Excellent visual acuity, ability to identify Pacific Northwest wildlife from remote camera photographs taken at various light levels.

Ability to use a computer and meticulously process large volumes of information to produce data Familiarity with Microsoft Office programs

Understanding of data analysis and basic statistics

Ability to communicate clearly verbally and in writing in English

Ability to establish and maintain effective work methods and schedules.

A Washington State Driver's license is essential for this internship. Proof of possession of a valid driver's license will be required prior to driving on state business.

This position requires occasional field work. In addition to the job functions listed above, the incumbent must be able to:

Operate a vehicle, often driving several hours at a time.

Occasionally conduct field investigations associated with installation and maintenance of remote cameras at structures within or adjacent to WSDOT right of way.

Ability to work outdoors in all weather conditions (e.g., hot, cold, rain, snow) for up to 5 hours a day, on uneven rough terrain, unstable ground, dense vegetation, and streams and wet areas with exposure to biting insects, common plant toxins, construction equipment, noise, and other hazards. Ability to walk over rough terrain carrying 50 lbs.

Internship hours of compensation and instruction

Under this task order WSDOT has one internship available for the upcoming Summer, Fall, Winter, and Spring quarters. Interns will be expected to devote 25 hours per week to this internship, of which 19 hours will be compensated and 6 hours will be unpaid instruction. Normal hours will be scheduled within the 7:00 am to 5:00 pm period. Scheduled hours and days may change due to workload.

To participate in an internship each student must meet the following:

- Must be registered at TESC for the same quarter the internship takes place
- Must be registered for at least
 - 2 credits for graduate program students per quarter

To apply:

Please submit resume and cover letter by April 30, 2013 to:

Kelly McAllister Wildlife Biologist Washington Department of Transportation <u>mcallke@wsdot.wa.gov</u> (360) 705-7426