Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Biostatistics Support for NPS Fire Ecology Program

Discipline: Natural Resources

Type of Project: Technical Assistance/Education

Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming
Effective Dates: August 15, 2008 - December 30, 2011

Funding Amount: \$22,000

Investigators and Agency Representative:

NPS Contact: Nate Benson, National Interagency Fire Center, National Park Service, 3833 South Development Avenue, Boise, Idaho 83705-5354, Office Phone: 208-387-5219,

Cell Phone: 208-484-0930, Fax: 208-387-5250

Investigator: Dr. Ken Gerow, Statistical Consulting Center, Department of Statistics, University of Wyoming, Laramie WY 82073, (307) 766-6600, gerow@uwyo.edu

Project Abstract: The NPS Fire Ecology Program has 22 park fire ecologists with field crews, 7 regional fire ecologists and 2 national positions. It is a complex program that services over 100 parks. On all levels, fire ecologists need statistical support. The University of Wyoming Statistical Consulting Center (UWSCC) will provide statistical assistance with Dr. Gerow serving as principal investigator. The UWSCC will provide support through the review of study designs, consulting on preliminary sampling and sample size determination, consulting on all phases of project planning, review and recommend appropriate statistical techniques to analyze fire effects data, and provide a statistical review of statistical methods used in manuscripts or in other documents where data is being interpreted or presented. Specific technical assistance to be provided may include the use of nonparametric statistics, multivariate statistical tests, Bayesian Statistics, confidence intervals, time series trend analysis, and geospatial statistics. The UWSCC will also assist with the development of statistics and probability-based tools, and assist with developing workshops and online training sessions as requested and provide instructional support.

Outcomes with Completion Dates: Due by December 31, 2011: report on biostats projects, training sessions, on line assistance.

Keywords: NPS Fire Ecology Program, biostatistics, training sessions, University of Wyoming