Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Sound and Light Ecology Research

Discipline: Natural
Type of Project: Technical Assistance/Education
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Students Involvement: Yes
Effective Dates: 6/31/2016 – 5/31/2019
Funding Amount: $421,974

Investigators and Agency Representative:
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Project Abstract: Noise and stray light are pervasive pollutants in protected natural areas, degrading habitat quality for wildlife and diminishing opportunities for outdoor recreationists to see wildlife in natural settings. This project will support a breadth of public purposes, including the training of young, diversity candidate scientists, support for park based research and assessment, and catalyzing NPS and academic science interaction, collaboration and exchange. Specifically, the project supports a laboratory that enables undergraduates to work with CSU and NPS scientists in the analysis of acoustic and photic monitoring data. These data are used directly in technical advisory reports requested by park units. It will also support postdoctoral associates who will lead field research projects that quantify the effects of noise and light pollution on wildlife and engage undergraduate students in data collection and analysis. Research topics will be selected to maximize knowledge gain pertinent to NPS park management. Finally, it will produce audio and video materials for public outreach and education.

The task activity will address several public interests: expanding the scientific basis for evaluating the effects of noise and stray light exposure on wildlife and opportunities for park visitors to view wildlife, promoting collaborative interactions between academic professionals and natural resource managers to address societal conservation concerns (including exploring potential interest and venues for a workshop on noise impacts on animal behavior), furthering the education and career development of university students and researchers, providing opportunities for project participants to produce peer-reviewed papers and outputs for scientific conferences reporting these research results, stimulating interdisciplinary research and education at CSU, and producing educational materials pertaining to soundscapes and night skies.

Keywords: technical assistance, education, National Park Service, Natural Sounds and Night Skies Division, Colorado State University