Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

| Project Title: Mule Deer Genetic Relatedness Relative to Chronic Wasting Disease |
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| Prevalence and Spread in Rocky Mountain National Park |
| Type of Project: Research |
| Funding Agency: National Park Service |
| Other Partners/Cooperators: Colorado State University, UCLA |
| Effective Dates: May 30, 2004 - June 30, 2006 |
| Funding Amount: \$14,631 |
| Investigators and Agency Representative: |
| NPS KEY OFFICIAL: Terry Terrell, Rocky Mountain National Park, 100 Highway 36, Estes |
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| PRINCIPAL INVESTIGATOR: Bruce A. Wunder, Department of Biology, Colorado State |
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| Project Abstract: |
| This project will be an expansion of the test and cull program currently conducted by |
| ROMO. With additional funding it will be possible to study genetic relatedness that |
| may affect CWD prevalence. More importantly, researchers should be able to provide information on past movements and interaction of deer within ROMO and adjacent areas. |
| Dr. Robert K. Wayne at the University of California at Los Angeles (UCLA) will |
| perform the genetic characterization. Colorado State University, Department of |
| Biology staff, will coordinate with park staff; prepare and ship samples; complete |
| the analysis of data comparing genotypes, frequencies, distribution, and CWD positive |
| individuals; and write and deliver reports. |
| Outcomes with completion dates: |
| 1. Progress reports, in the form of electronic mail and/or oral presentations, as CWD |
| is detected among study animals, relatedness will be analyzed and findings |
| submitted to the ROMO key contact, and appropriate ROMO Resource Management staff. |
| 2. One hard copy and one electronic copy of an annual report describing progress, due |
| March 31, 2005, to be delivered to the ROMO key contact. |
| 3. One hard copy and one electronic copy of the final report, due March 31, 2006, to |
| be delivered to the ROMO key contact, and one electronic copy is to be provided to |
| the Rocky Mountains CESU. |
| 4. Annual and final reports will include analysis of genetic relatedness of the ROMO |
| deer population and among groups therein. |
| 5. An oral presentation will be provided to the ROMO staff describing the research |
| findings and the resulting management implications of this work. |
| 6. At least one publication in a professional journal is anticipated, but not |
| required, from this work. |
| Keywords: chronic wasting disease, mule deer, genetics, Rocky Mountain National Park, |
| Colorado State University For Administrative use only: |
| Date Annual Report Received: |
| Date Final Report Received: |
| Publications, etc. on file: |
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