

# Sharp-tailed Grouse Restoration

## Colville Tribes Restore Habitat for Sharp-tailed Grouse

Annual Report 2002 - 2003

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Bonneville Power Administration  
P.O. Box 3621  
Portland, OR 97208

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# **Sharp-tailed Grouse Restoration**

**Project No. 2001-030-00**

**Contract No. 6927**

**WILDLIFE MANAGEMENT DIVISION**

**2003 ANNUAL REPORT**

**FISCAL YEAR 2003**

**October 2002 - September 2003**

***Colville Tribes Restore Habitat For Sharp-tailed Grouse  
#21034***



**Prepared for**

**Joe DeHerrera, Project Manager  
Bonneville Power Administration**

**by**

**Richard Whitney, Project Biologist  
Donovan Antoine, Wildlife Area Manager**

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## **INTRODUCTION**

Columbian Sharp-Tailed Grouse (*Tympanuchus phasianellus columbianus*) (CSTG) are an important traditional and cultural species to the Colville Confederated Tribes (CCT), Spokane Tribe of Indians (STOI), and other Tribes in the Region. They were once the most abundant upland bird in the Region. Currently, the largest remaining population in Washington State occurs on the CCT Reservation in Okanogan County. Increasing agricultural practices and other land uses has contributed to the decline of sharp-tail habitat and populations putting this species at risk. The decline of this species is not new (Yokum, 1952, Buss and Dziedzic, 1955, Zeigler, 1979, Meints 1991, and Crawford and Snyder 1994). The Tribes (CCT and STOI) are determined to protect, enhance and restore habitat for this species continued existence. When Grand Coulee and Chief Joseph Hydro-projects were constructed, inundated habitat used by this species was lost forever adding to overall decline. To compensate and prevent further habitat loss, the CCT proposed a project with Bonneville Power Administration (BPA) funding to address this species and their habitat requirements. The projects main focus is to address habitat utilized by the current CSTG population and determine ways to protect, restore, and enhance habitats for the conservation of this species over time. The project went through the NPPC Review Process and was funded through FY03 by BPA. This report addresses part of the current CCT effort to address the conservation of this species on the Colville Reservation.

The following activities took place by month over FY03.

### **OCTOBER**

BPA approves project and a CSTG biologist was contracted for three months to conduct SOW, and a Wildlife Area Manager was assigned to the project to initiate the field study and conduct trapping. The lead biologist presented the Sharp-tailed Grouse Team with an update on the BPA/CCT CSTG Project #21034 and to discuss changes in the SOW and budget for the next FY on October 16, 2002. Training began and a schedule was developed outlining duties to be performed during winter.

### **NOVEMBER**

Fall/winter trapping started this month. Project personnel borrowed a trap set from Washington Department of Fish and Wildlife (WDFW). The most effective methods and trapping sites were determined by contacting grouse professionals and also by trial and

error. CCT personnel designed traps to be constructed later this year. Project personnel gained experience using project telemetry equipment and comparing the efficiency of different receivers.

## **DECEMBER**

Trapping of leks, radio collaring, and banding grouse for monitoring and evaluation continued. Monitoring of marked bird movement patterns and habitat selection began and remain as an important aspect of the study for the duration of the project.

## **JANUARY**

The primary focus for this month is trapping, banding, and radio collaring birds. Trapping was conducted to capture, band, and collar as many CSTG as possible. Monitoring of collared birds allows project personnel to collect data on seasonal use of associated habitats. The trapping effort concentrated on female grouse, because seasonal habitat requirement data are lacking. Collared grouse were located two to four times per week. Locations were marked using global positioning equipment (GPS). By marking these locations, summer vegetation surveys can be planned to assess vegetative community fitness and diversity. A wildlife biologist was contracted from the Spokane Tribe of Indians to work on the project, prior to hiring a CCT biologist. The Regional Sharp-tailed Grouse Technical Work Group met to discuss current issues and activities to be taken in the upcoming quarter.

## **FEBRUARY**

Project trapping and monitoring continued this month. Using trap designs developed in February, materials and supplies were ordered to construct three complete sets of eight traps (24 total traps). These new traps will be used in the spring trapping season. Planning and coordination for the main trapping season (April/May) was conducted.

## **MARCH**

During the month of March, the project personnel prepared for the trapping season. The “lekking” season provides the best opportunity to trap and radio collar grouse. Before the active breeding season, project personnel were able to collar and track five male sharp-tailed grouse. The data and GPS information collected will help build a comprehensive GIS map of seasonal habitat use and help define current home ranges. Combined with vegetative surveys, this data will define plant community availability and determine future planning efforts. These findings will also help guide future mitigation applications and land acquisitions. A CCT Project Biologist was hired to fulfill the project requirements, and the contracted Biologist was terminated.

## **APRIL/MAY**

Prior to the active “lekking” season, each known lek was monitored for grouse attendance. A “new” lek was found approximately ½ mile from an historic lek that has been recently extirpated. Once lekking behavior was observed, active trapping of the leks began. Multiple leks were trapped each day in order to collar and tag as many birds as possible, both male and female. Fifty grouse were trapped. One died from stress during handling, and one was wounded while in the traps. The dead grouse was sent to a



taxidermist to be mounted for education outreach purposes and training. The stomach, crop, and other vital tissues were retained by CCT for future testing. The wounded bird was rushed to the Animal Hospital of Omak for treatment. A wing was amputated, but the grouse later died in a rehabilitation pen. Project personnel designed more bird-friendly grouse traps for future efforts. The remaining 48 grouse were collared, banded, weighed, and released upon capture. Monitoring and tracking activities continued the rest of the month. Of the 48 collared grouse, 12 were female and 36 were male.

## **JUNE**

Project personnel continued monitoring marked grouse and recording GPS locations. This month trapping was suspended to minimize disturbance of nesting females. Collared females were tracked to record nesting habitat and GPS points of nests were recorded. Monitoring of collared female grouse revealed that the breeding/nesting season has a major impact on female grouse with 3 dying before nesting and 1 while on the nest. Nests were not found for 2 collared grouse of which 1 died during this time. The remaining 6 collared female grouse had successful nests. At each nest site, eggs were counted, monitored, and, once hatched, shell samples were collected for possible future viability testing. The females were then followed to get an accurate count of live chicks.

## **JULY**

The month began with a Regional Sharp-tailed Grouse Technical Work Group Meeting held at the Colville Tribal Fish and Wildlife Department building. Representatives from the Spokane Tribe of Indians, Washington Department of Fish and Wildlife, and the Colville Tribal Fish and Wildlife participated in this cooperative recovery effort. The Work Group agreed that the current Sharp-tailed Grouse Restoration Project was of vital importance within the region and that funding should continue. Tracking collared birds and recording GPS points continued throughout the month. Designs and methods for off-site non-lekking traps were considered, and bird friendly materials were selected for construction.

## **AUGUST**

The final FY04 SOW and Budget for BPA funding was completed. Tracking grouse continued to be a priority. Broods were consistently monitored for survivability, habitat use, and to define home ranges. Project personnel prepared for the Prairie Grouse Technical Conference scheduled in September.

## **SEPTEMBER**

September consisted of submitting final copies of the Sharp-Tailed Grouse Restoration Project's SOW and Budget to Bonneville Power. Recording GPS points from tracked birds continued. Project personnel prepared for the presentation of project activities and accomplishments at the Prairie Grouse Technical Conference. Presentation included posters and brochures showing the cooperative effort between the regional sharp-tailed grouse effort and Bonneville funding support. The conference included research professionals, graduate students, university professors, and wildlife managers concerned with the conservation and preservation of sharp-tailed grouse. It was noted that our methods and techniques are consistent with the current scientific methodology and new

methods and equipment were introduced that could benefit our project and the Region. The conference provided valuable knowledge and techniques that can be utilized in our area to enhance the habitat for sharp-tailed grouse and other associated plant and animal species.

*Table 1: Table below summarizes the expenditures of this project for FY03.*

<b>Summary of Expenditures for FY03</b>					
<b>Sharp-tailed Grouse Restoration</b>	<b>Year To Date</b>	<b>Encumbered</b>	<b>Annual Budget</b>	<b>Remaining Budget</b>	<b>Used Budget Percent</b>
Salaries	\$ 44,064.09	\$ -	\$ 33,820.00	\$ (10,244.09)	130.30%
Salaries - non-worker	\$ 3,261.59	\$ -	\$ 8,455.00	\$ 5,193.41	38.60%
FICA	\$ 2,787.51	\$ -	\$ 2,711.00	\$ (76.51)	102.80%
Medicare Insurance	\$ 651.91	\$ -	\$ 634.00	\$ (17.91)	102.80%
Employment Security	\$ 776.88	\$ -	\$ 1,722.00	\$ 945.12	45.10%
Colville Industrial	\$ 457.42	\$ -	\$ 393.00	\$ (64.42)	116.40%
CCT Medical Insurance	\$ 2,703.12	\$ -	\$ 2,212.00	\$ (491.12)	122.20%
CCT Life Insurance	\$ 160.44	\$ -	\$ 229.00	\$ 68.56	70.10%
CCT Dental Insurance	\$ 182.54	\$ -	\$ 241.00	\$ 58.46	75.70%
CCT Vision Insurance	\$ 69.91	\$ -	\$ 103.00	\$ 33.09	67.90%
CCT Retirement	\$ 2,006.04	\$ -	\$ 2,432.00	\$ 425.96	82.50%
Supplies and Material	\$ 3,603.08	\$ -	\$ -	\$ (3,603.08)	0.00%
Sub Contract	\$ 21,899.00	\$ -	\$ 21,899.00	\$ -	100.00%
Travel	\$ 3,226.88	\$ -	\$ 9,485.00	\$ 6,258.12	34.00%
Training	\$ 667.65	\$ -	\$ 1,345.00	\$ 677.35	49.60%
Vehicle Repair and Maintenance	\$ 2,631.93	\$ 616.12	\$ 3,000.00	\$ (248.05)	108.30%
Fuel	\$ 3,029.43	\$ -	\$ 2,635.00	\$ (394.43)	115.00%
Vehicle Insurance	\$ 516.58	\$ -	\$ 1,500.00	\$ 983.42	34.40%
Equipment	\$ 1,327.00	\$ -	\$ 1,327.00	\$ -	100.00%
Indirect Cost	\$ 19,924.11	\$ -	\$ 20,049.00	\$ 124.89	99.40%
Other Expense	\$ 229.97	\$ -	\$ -	\$ (229.97)	0.00%
<b>Totals</b>	<b>\$ 114,177.08</b>	<b>\$ 616.12</b>	<b>\$ 114,192.00</b>	<b>\$ (601.20)</b>	<b>100.50%</b>

**Tasks for FY04:**

- Develop an HIS model for CSTG on Colville Indian Reservation
- Develop a Colville Confederated Tribe's CSTG Management Plan
- Continue monitoring collared grouse
- Augment the current CSTG population on the Colville Reservation
- Implement monitoring of augmented individuals
- Participate in Regional CSTG Recovery Plan with other Tribes and WDFW