

ANNUAL
REPORT
2003

**Wyoming Game and Fish
Department**

WYOMING GAME AND FISH DEPARTMENT

Dave Freudenthal, Governor



Gregg Arthur, Interim Director

"Conserving Wildlife - Serving People"

The Honorable Dave Freudenthal
Governor, State of Wyoming
Capitol Building
Cheyenne, WY 82002

Dear Governor Freudenthal:

In accordance with Section 23-1-503 of Wyoming Statutes, it is my pleasure to present to you the Game and Fish Department's 2003 Annual Report. The report was prepared at the direction of the Game and Fish Commission and covers the period July 1, 2002 through June 30, 2003.

We appreciate your support on the many issues facing wildlife and wildlife habitat in Wyoming. While there are many challenges facing us, I would encourage you to note the many successes our agency has experienced in the past year. These successes are the products of a dedicated agency workforce and an enlightened public.

Sincerely,

A handwritten signature in blue ink that reads "Hale Kreycik".

Hale Kreycik, Vice President
Wyoming Game and Fish Commission

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Wyoming Game and Fish Department

A MESSAGE FROM THE DIRECTOR

In this, the *Wyoming Game and Fish Department 2003 Annual Report*, you will find summaries of division activities, individual program write-ups, participant expenditure information and other budget and financial data. I hope you will find this information valuable. It summarizes the efforts of the dedicated men and women of the Game and Fish Department and their efforts to conserve wildlife and serve people. You will also find a narrative record of the successes and challenges we have faced in these efforts. I hope all of this information adds to the historical record of wildlife conservation efforts in Wyoming in the 21st century, but moreover, I hope it provides you some indication of the importance of wildlife in Wyoming and the selfless determination of the people who work so hard to be advocates for the wildlife resource.

As in the past, this is a considerable amount of material to digest. Nonetheless, I hope you will read it. This report does not adequately reflect the full spectrum of activities agency personnel were involved in during the past 12 months, nor does it reflect the depth of the service given by the men and women of the Wyoming Game and Fish Department. The only true measure of the complexity of this task and the excellence of these people are the results on the ground. Despite declining financial reserves, despite ongoing drought, despite all the other challenges, the wildlife resources of Wyoming continue to be conserved and managed for the people who care about them.

I am very proud to lead a dedicated group of employees, and prouder still to represent a state where wildlife is such an integral part of the landscape and our everyday lives.



Gregg Arthur
Interim Director

DIRECTOR'S SUMMARY

This section is intended to provide a narrative of the accomplishments of the men and women of the Wyoming Game and Fish Department, and to provide a record of the important events that have marked our efforts in wildlife conservation during the past year in Wyoming. Each of these events or issues is discussed in some detail below:

Drought

Last year, this section was dominated with a discussion of the ongoing drought and its impacts on wildlife and wildlife habitat. Concerned about drought conditions and the impacts to habitat, wildlife managers factored a possible third year of severe drought into proposed 2003 big game seasons. Because of concern about forage conditions, the Department increased doe/fawn antelope and deer and elk quotas in some hunt areas to reduce grazing pressure.

This year, I am happy to report that conditions have moderated somewhat in most areas of Wyoming. While southwestern Wyoming has remained an area of great concern, most of the rest of Wyoming experienced a mild winter during 2002-2003, followed by ample spring precipitation. While the impacts of the extended drought will remain for a number of years, particularly the impacts to habitat in many areas of the state, conditions are much more favorable at this time than they were a year ago. Concerns remain, however, about the impacts to both terrestrial habitat and the low soil moisture that leads to the loss of more springs and small creeks that feed our major fisheries. It may take a number of years to mitigate these impacts.

Wolf Management

The U.S. Fish and Wildlife Service (USFWS) reintroduced 31 wolves to Yellowstone National Park, and 35 wolves to central Idaho in 1995 and 1996. The northern Rocky Mountain wolf population is comprised of three recovery areas. The Greater Yellowstone recovery area (GYA) includes all of Wyoming, including Yellowstone National Park (YNP), Grand Teton National Park (GTNP), the National Elk Refuge (NER), and adjacent parts of Idaho and Montana. The USFWS has defined a viable and recovered wolf population in the northern Rocky Mountains as one containing at least 30 breeding pairs of wolves with an equitable and uniform distribution throughout the three states for three consecutive years.

Before the wolf will be considered for delisting from protection of the ESA by the USFWS, states must also have adequate regulatory mechanisms, including state wolf management plans in place. *The Draft Wyoming Gray Wolf Management Plan* was completed in November 2002. The plan was controversial, calling for a dual status classification for wolves in Wyoming. Under this classification, wolves in Yellowstone and Grand Teton National Parks and wilderness areas of the Bridger-Teton and Shoshone national Forests would be classified as trophy game animals, and managed by the Department. Wolves outside this area would be considered predatory animals, and could

be killed at any time. A series of nine public open house meetings was held in November to explain the plan. Over 550 citizens attended the open houses. Attendance varied from over 200 in Cody to 24 in Casper. Written comments were submitted through December 12, 2002. A special report summarizing the plan and the public involvement process was prepared. The plan received final approval by the Commission at its July 2003 meeting.

The 2003 Wyoming State Legislature approved a bill that provided the statutory basis for wolf management in Wyoming, once wolves are removed from the federal list of threatened and endangered species. The complexity of this bill prompted the Game and Fish Department to formally ask the USFWS if Wyoming will need to manage for 15 wolf packs – whether inside or outside Grand Teton and Yellowstone national parks – or if the required 15 packs must include seven packs outside the parks.

In their response, USFWS Regional Director Ralph Morgenweck wrote, “We have repeatedly stated, and continue to believe, that only protecting wolves from unregulated human-caused mortality in this small area (national parks and contiguous wilderness areas) will not provide adequate assurances that the wolf population in the Greater Yellowstone area will not decline to the point where it becomes threatened again”. He continued by noting that maintaining at least seven packs of wolves outside Grand Teton and Yellowstone national parks “would be adequate to ensure the viability of wolf populations in Wyoming in the foreseeable future”.

We currently estimate a wolf population of 295 wolves and 22 breeding pairs in the Greater Yellowstone Area. Of these, 240 wolves and 17 breeding pairs are in Wyoming. The total wolf population estimate in the Northern Rockies for 2003 is 747 wolves and 46 breeding pairs compared to 663 wolves and 43 breeding pairs in 2002.

Sage Grouse Management Plan

Sage grouse have been the subject of six petitions from interest groups or individuals since 1999, requesting the U.S. Fish and Wildlife Service to list them as threatened or endangered and protect them under the Endangered Species Act. In keeping with its concerns over the declining sage grouse population in Wyoming and the importance of being involved in range-wide efforts to address both numbers and habitat for this species, the Department organized the statewide Sage Grouse Working Group in 2000. The groups charge was to develop a statewide strategy for conserving sage grouse that could be considered for review, adoption and implementation by the Department and Commission.

This 18-member group, representing a wide array of interests, met 21 times through mid-2002 to complete a *Draft Wyoming Greater Sage Grouse Conservation Plan*. The plan was presented to the Commission in July 2002. A total of 107 written comments were received on the draft plan following the release of the document and 60-day comment period. The Department conducted its own review of the draft plan, and submitted comments to assist the preparation of a final plan. That plan was approved by the Commission in June, 2003.

Funding – License Fees

Inflation, declining license sales and expanding responsibilities have combined to create a serious problem. Inflation since the last license fee increase has eroded our purchasing power by 20 percent. Deer and antelope license sales – the core of Department funding – have remained at a level 30% less than the 25 – year average for the last five years. Costs have continued to increase from more funds spent on health insurance to disease control and access programs.

The upshot of all this is that in the fiscal year that ended June 30, 2002, the Department's costs exceeded its revenue by \$4.6 million. That meant we had to dip significantly into our cash reserves. About half of that deficit was the result of replacing our Jackson regional office, a project that had been in the planning stages for the last ten years. The rest of that deficit, over \$2 million, was simply the result of increased costs with no corresponding increase in revenue. Over the last ten years, the Department's expendable cash reserves have decreased by approximately \$10 million. We worked with the Joint Travel, Recreation, Wildlife and Cultural Resources Committee of the Wyoming State Legislature to develop five funding bills to increase funding for existing programs for hunters and anglers. These bills proposed to:

- Increase the price of resident and nonresident hunting and fishing licenses and application fees by approximately 20%;
- Increase the price of a lifetime conservation stamp from \$75 to \$150;
- Increase the nonresident special license fee to \$400 for elk and \$200 for deer and antelope, and increase the percentage of nonresident licenses set aside in this special drawing to 40% for deer and antelope;
- Increase the fees license selling agents receive for selling licenses, adding permits and interstate game tag fees, and making these fees an add-on to the price of the license; and
- Grant the Game and Fish Commission the authority to develop and implement a preference points system for nonresident elk, deer and antelope licenses and to charge up to \$50 for each preference point issued to nonresidents for elk, deer, antelope, moose and bighorn sheep.

The Wyoming State Legislature considered these proposals in its 2003 session. Foremost was a bill that increased all hunting and fishing licenses approximately 20 percent, except for youth licenses and most 1-day tags. The legislature also expanded Wyoming's "special license" concept. Now, 40 percent of the nonresident deer and antelope licenses will be available in a special drawing at \$200 more than the regular fee. Forty percent of nonresident elk licenses will be available at \$400 more than the regular fee. A third bill increased the price of the lifetime conservation stamp from \$75 to \$150. The license agent fees bill was vetoed by Governor Freudenthal. It will be revised and considered in the 2004 session, as will the defeated preference points bill.

2003 Legislative Session

In addition to the much-needed funding bills, the 2003 Wyoming State Legislature also considered a number of other wildlife-related bills. After a number of failures in past years, the legislature established a Wyoming free fishing day. The bill allows the Game and Fish Commission to designate one day annually where residents and nonresidents can fish without a license or conservation stamp. Anglers will still be governed by all fishing limits and regulations on the free day, which began in 2003.

More free fishing resulted from this session for resident veterans who are 50 percent or more disabled, who will be able to get a free lifetime fishing license in 2004.

Wildlife violators will be contributing to the access easement program beginning in 2004. County and district court ordered restitution money that formerly went to the state's general fund, is now earmarked to the access easement program under a new law that passed. This should provide a \$50,000 annual boost to the program. Wildlife fines will still go to the school district where the violation occurred.

Disabled hunters will get an assist with "disabled hunter companion permits". A person with this free permit can kill and retrieve an animal that a disabled hunter has wounded.

Beginning in 2004, residents who have lived in Wyoming for at least the last 10 years can buy a lifetime game bird/small game license for \$250. The Department currently offers a lifetime fishing and lifetime combination fishing/game bird/small game.

A bill establishes two classes of pioneer big game licenses. Those Wyomingites born before 1930 and who have 40 years of continuous residency can apply for \$2 antelope and deer licenses and \$5 elk licenses. Those hunters 70 and over with 50 years of continuous residency will qualify for elk, deer and antelope licenses "not less than 60 percent nor more than 65 percent of the price of a regular license".

Another bill prohibits the use of aircraft to aid in the taking of wildlife.

Foundation

The Wildlife Heritage Foundation of Wyoming (WHFW) was formed in 2000, as a 501 (c)(3) nonprofit corporation whose purpose as an independent, charitable organization is to provide financial support, through philanthropy, to critical wildlife conservation efforts in Wyoming. Its mission is "To create an enduring natural legacy for future generations through stewardship of all Wyoming's wildlife". An independent Board of Directors, comprised of business and community leaders, governs it. That board was seated in 2001.

In 2002, the Wildlife Heritage Foundation funded projects totaling \$40,000 and set aside \$100,000 to begin a General Endowment to address Wyoming wildlife concerns in perpetuity. The first project to be funded by the Foundation was an effort to eliminate

some of the migration obstacles facing big game animals in western Wyoming. The foundation has earmarked \$30,000 to help fund the Migration Corridor Fence Modification Project near Pinedale. A second project was approved, which will improve fisheries habitat in Flat Creek, near Jackson.

In 2003, Governor Dave Freudenthal announced a change in policy for the 20 complimentary hunting licenses his office receives from the Game and Fish Commission. Governor Freudenthal will turn over the licenses to the Wildlife Heritage Foundation to administer their distribution. The proceeds from the sales will work for Wyoming's wildlife resources through an efficient and controlled process, one that is accountable to both hunting and conservation communities.

The licenses will be auctioned by the Foundation for North American Wild Sheep, North American Moose Foundation, Rocky Mountain Elk Foundation and Mule Deer Foundation, which will all retain 10 percent of the auction price. The remaining 90 percent will be distributed to administer the program and fund designated wildlife accounts for bighorn sheep, moose, elk, deer and general wildlife.

Grizzly Bear Conservation Strategy

A critical step in achieving state management of the Yellowstone grizzly bear population was reached when officials from the wildlife agencies of Wyoming, Idaho and Montana and federal land management agencies approved and signed the *Conservation Strategy* for the Grizzly Bear in the Greater Yellowstone Area. The *Conservation Strategy* is the umbrella document that will provide advice for grizzly bear management in the three states once removed from federal protection under the Endangered Species Act.

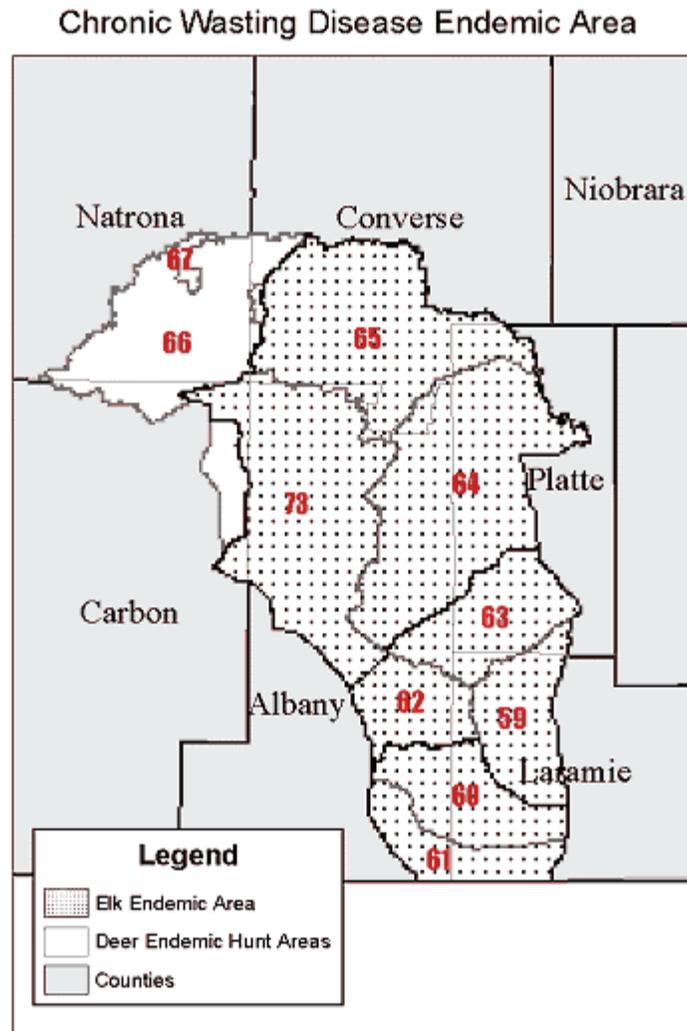
The document references the State grizzly bear management plans, which are appended to it. The strategy also contains a component, which specifically addresses a primary conservation area – currently the recovery zone – that calls for conservative management in the Yellowstone grizzly bear's core habitat. In addition, the *Conservation Strategy* contains grizzly bear demographic, habitat and conflict management prescriptions to aid coordinated management of the population across the several jurisdictions it occupies.

With this step, the groundwork is laid for the U.S. Fish and Wildlife Service to prepare the status change package to remove the grizzly bear from the threatened species list. The *Conservation Strategy* satisfies the Service's need for "adequate regulatory mechanisms" in order for the delisting process to move forward.

Chronic Wasting Disease

Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy of deer and elk and constitutes a threat to the health of mule deer, white-tailed deer, and elk populations in the endemic and adjacent areas and, potentially, throughout the remainder of Wyoming and elsewhere. There currently is no evidence CWD is a human health threat. The CWD endemic area in Wyoming is currently defined as that area where

CWD has historically been found, persists and we get positive tests each year, as shown in the map below:



In September 2002, the Department completed a *CWD Management Plan*. This plan will provide flexible, adaptable direction for management of CWD with minimal impact on Wyoming's wildlife and public. The plan will be reviewed annually and updated as the CWD situation in Wyoming changes and additional information becomes available. The plan contains of three goals: Disease Management, Applied Research, and Public Information. A brief summary of the plans salient points is noted below:

- Based upon the current understanding of CWD in free-ranging deer and elk, eradication currently is not a justified or realistic disease management objective within the identified endemic area.

- The Department will work to prevent the spread of CWD and, if possible, reduce the prevalence of the disease in the endemic area and cooperate and coordinate CWD management with other state and federal agencies.
- The Department will conduct surveillance to determine spatial distribution and prevalence of CWD, and to cooperate and coordinate CWD research with other state and federal agencies.
- The Department will use all available communication tools to provide timely, complete, and accurate information about CWD.
- Although there are concerns or perceptions by some people that CWD could be a livestock or human health threat, there currently is no credible supporting evidence; consequently, this plan addresses CWD as a disease of deer and elk.
- The Department will continue to work cooperatively with the Wyoming Department of Public Health and other human health organizations worldwide to monitor human health risks of CWD and to provide up-to-date information to the public.
- Many very expensive CWD management, research, and public outreach activities are driven by the recent consideration of CWD as a national emergency; therefore, federal funding is appropriate and will be necessary for complete implementation of this plan.

Researchers analyzed 2,550 samples – 1,755 deer and 795 elk -- during Wyoming's 2002, hunting season, with 105 deer and five elk testing positive. Currently, CWD has been found in 23 of Wyoming's 152 deer hunt areas. During six years of surveillance, only eight elk in three hunt areas have tested positive. Surveillance testing revealed that two deer harvested outside the endemic area tested positive for CWD. One deer was harvested in Deer Hunt Area 78, on the western slope of the Snowy Range, south of Saratoga. The other deer was harvested in Deer Hunt Area 82 on the western slope of the Sierra Madres near Baggs.

New Director

Dr. Tom Thorne, Chief of the Department's Services Division, was appointed as the agency Interim Director, in the wake of John Baughman's retirement in May 2002. Dr. Thorne served as Interim Director until March 10, 2003, when he retired.

Dr. Thorne began his Game and Fish career as the department's veterinarian stationed in Laramie. For 29 years he was responsible for supervising wildlife research projects and providing on-site veterinary help with wildlife trapping and relocation projects. In 1988, he was honored as Conservationist of the Year by the Wyoming Wildlife Federation for engineering the first successful black-footed ferret captive breeding program. That year he also received the Outstanding Achievement Award from the Foundation for North American Wild Sheep for his work with Wyoming bighorn sheep. In August 1996, he was promoted to be the Service's Assistant Division Chief and was promoted to Division Chief in October 1999. In May 2002, Governor Jim Geringer named him Interim Director.

In March 2003, Governor Dave Freudenthal appointed Mr. Brent Manning, former director of the Illinois Department of Natural Resources, as the Director of the Wyoming Game and Fish Department.

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INTRODUCTION
AND
DIVISION REPORTS

INTRODUCTION

This report covers the progress and financial status of the Wyoming Game and Fish Department during Fiscal Year 2003. The information documents progress toward objectives in our Strategic Plan for the Comprehensive Management of Wildlife in Wyoming, 1992-1998.

During FY 2003 a total of 5,657,670 hunting and fishing recreation days were provided to the public. Based on the 1989 hunting and fishing expenditure survey conducted by the University of Wyoming, hunters, anglers, and trappers expended approximately \$929,316,449 in pursuit of their sport.

At the end of the period covered by this report (June 30, 2003), the Department was comprised of 337 permanent full-time employees and 133 temporary or seasonal workers.

A summary of Department activities by respective division follows:

FISCAL DIVISION
Ron Arnold, Chief

The Fiscal Division, through the efforts of Fiscal Managers, spent much of the year addressing new issues related to licensing, changes in the state's accounting and payroll systems, training on the state purchasing credit card, rewrite of the Department's internal financial systems and instituting the state wildlife grant program.

REVENUE COLLECTION AND LICENSING

One area of major involvement for the Division involved upgrading the Department's licensing systems. Beginning in mid-FY01, the Department began working with the Department of Administration and Information programmers to design, program, test and implement a point of sale licensing system to allow license issuance information to be captured at the time licenses are sold. Additionally, license inventory would be automated, significantly decreasing the number of manually issued licenses. However, in the testing process in February 2002, it was determined by Game & Fish Fiscal personnel that operational costs of license issuance were going to be 20-30 times the original estimates by programmers. At such time, programming was subject to evaluation by an outside consultant resulting in significant program rewrites and time delays. Subsequently, it was determined that costs could not be reduced to an amount that would be cost effective for the Department. Accordingly, it was determined to form a License Task Force to review all application and licensing processing to determine what options would best meet the Department's needs in a cost effective manner. Information from this group is due to be presented to the Commission in early 2004.

Additional licensing information continues to be available through the internet from license results, demand indices, leftover license information in addition to application and packet information.

In FY03, the Department conducted all of its limited quota draws either on or before the published tentative draw dates. All licenses and refunds for the largest series of draws (resident deer, antelope, elk and nonresident deer and antelope) were in the mail at least one week prior to the beginning of the leftover application period, July 10th. During FY03 over 234,000 limited quota applications were received and processed by the Division for over 50 different types of licenses and permits. This represents an increase of two percent in volume from the previous fiscal year and 7 percent from two years ago.

The number of License selling agents administered by the Division stayed at a relatively constant level in FY03. In FY03, the Department continued to process search and rescue donations and distribute those donations to the Wyoming Emergency Management Agency for their search and rescue programs. In addition, the License Accounting section also accounts for the predator stamp, the proceeds of which are distributed to the Animal Damage Management Board, after Department administrative costs are deducted. The License Accounting Section also oversaw

the implementation of a new boating registration system, allowing for improved reporting and the implementation of boat renewals at field offices by late 2003.

A new streamlined deposits system was tested and implemented in FY 2003, resulting in reduced need for temporary personnel to assist the Division's cashier during the high volume period of February – June each year.

GENERAL ACCOUNTING

In the General Accounting section, work continued in conjunction with the State Auditor's new fixed asset system, which went into effect June 30, 2001. Due to State Auditor security issues, reporting and verification information from the new system was unavailable until late in FY03, resulting in significant delays in updating information on the new system. The passage of federal legislation for the State Wildlife grant program in 2001 has also resulted in significant time requiring the development of a separate AFA on a project by project basis plus annual reporting at this level to allow for the Department to be eligible to receive approximately \$700,000 in federal funds in FY 2003 and \$500,000 in funds in FY 2004. Finally, the Wildlife Diversity initiative, approved in FY 2001, will require closeout reporting in early 2004, as this federal program was not continued.

ACCOUNTS PAYABLE (DISBURSEMENTS)

In the Disbursements section, expanded use of the statewide purchasing credit card initially begun in April 2001 expanded to over 100 users. Several training sessions were held for interested Department employees throughout the year in conjunction with Commission meetings and new employee orientation. Data is accepted electronically directly from the credit card company and transferred to field personnel for review and coding. Additionally, work was begun on the rewrite of the voucher processing system, with the first phase, landowner coupon payments in place by late February 2003. This implementation allowed for the discontinuance of the state mainframe for landowner coupon processing, resulting in a cost savings of approximately \$1000 in annual processing fees. The remainder of the system is expected to be complete and in production by November 2003.

General Accounting and Disbursements will continue to have involvement in assisting in the design and testing of the rewrite of the Department's financial systems related to payroll and cost accounting over the next 12 months.

SERVICES DIVISION
Brent Knotts, Division Chief

HABITAT AND TECHNICAL SERVICES PROGRAMS

CONSERVATION ENGINEERING BRANCH

Many boating access projects were completed as the state continued in drought. The Flaming Gorge-Buckboard Bay Boat Ramp was extended for the second time. A new boating access point was completed at Keyhole State Park and three ramps were expanded at three other access points. A new boating access point was developed at Glendo State Park-Bennett Hill. Boat ramps were extended at Lake DeSmet-Monument Point & Miksell-Potts Access. New precast ADA toilets were installed at Packer & Rock Lakes.

Addressing disease prevention in the hatcheries and fish rearing stations is continuing as a high priority program. A major brood complex was started in May at the Tensleep Hatchery. A new concrete brood pond was constructed at the Tillett Springs Rearing Station. The Clark's Fork Hatchery was re-roofed and new metal roofs were placed on two residences and the office-shop building at the Wigwam Rearing Station.

The Bureau of Land Management's (BLM) fish pier on Newton Lake was repaired under a cooperative agreement and was paid for by the BLM. A fish barrier was designed and installed across LaBarge Creek in Western Wyoming as part of an effort to protect Colorado cutthroat trout habitat. This project received honorable mention as the President's project of the year award by the Wyoming Engineering Society. Work was bid and awarded for the development of the Fear Public Fishing Area (PFA) on the Green River near Big Piney. BLM clearance is still forthcoming.

The Surveying Section completed more work on boundary surveys and the water rights inventory this year because their equipment was enhanced with the purchase of a new survey grade global positioning instrument. This proved to be more efficient with more fieldwork being completed in a much shorter period of time. Boundary surveys were conducted for property rights and/or for fencing projects on five wildlife habitat management areas (WHMA), four public fishing areas (PFA), and two fish hatcheries.

The surveyors also conducted topographic survey work at the Cheyenne Headquarters Office site for parking lot expansion; surveys and resurvey of the new water supply pipeline at the Dubois Fish Hatchery; topographic surveys for Tillett Springs and Tensleep Fish Hatcheries for new concrete brood ponds; a survey of the Sidon Canal and Bittercreek crossing so that a fish passage structure could be designed; and a survey for the Taylor Cabin Pond on the Bud Love WHMA to apply for a reservoir water right permit.

The Survey Section is also responding to a Department directive to inventory all water rights on the Departments wildlife habitat management areas (WHMA). The actual location of the

irrigated fields including the irrigation systems (headgates, ditches, and turn outs) will be surveyed using a survey grade GPS and mapped. This work was completed this year on the Whiskey Basin, Table Mountain, Yellowtail, Inberg-Roy, and Springer WHMA's. The Land Surveyor has about five water rights correspondence issues to address each month.

The Drafting Section completed the bid specifications, price negotiations, contracts, mapping and publications of the Walk-in Area Hunting and Fishing books; ten Hunter Management Area (HMA) brochures; permission forms; agreements forms and static cling window stickers. All publications and the PLPW website were designed and in place by the targeted dates. Drafting also helped the new PLPW coordinators learn the procedures and budget information to help them get familiar with the program.

Drafting worked with consultants on boating improvement projects and developed the signing layout and then designed and ordered the signs. Almost 27,000 signs were designed and ordered for special regulations, parking information, regulatory, directional, boating access, new access areas, and the PLPW Program.

The Drafting Section drafted up the layout, designed, plotted and mounted all the signs, banners, posters and numerous displays for the Hunting and Fishing Heritage Expo. All personnel helped install the signs, set up the Expo and volunteered at various activities.

Numerous other displays and powerpoint presentations were created for meetings, conferences, workshops, and season setting meetings including the display for Wildlife/Livestock Disease Research Partnership, which was displayed at the Capital during the Legislature and then at Washington, D.C. for Congress.

Drafting made posters to determine season setting for public meetings; drafted plans for the proposed Shooting Range; Cheyenne Headquarters Building; Game Warden District maps, drafted maps on lakes for the fish lake sampling manual; and drafted basin maps of the Sheridan Region.

Maps of Department administered lands are being updated with topography, land status, development, signage, and water rights. Maps were made for the new access areas.

The Section drafted the hunt area maps, made maps for the harvest surveys and converted maps into digital format for contractor for the web site. They also provided numerous employees with maps and digital files of their regions for public meetings.

SUPPORT FACILITIES

The Department maintains seven regional offices, plus a satellite office in Pinedale, in addition to the Cheyenne headquarters building, with two regional office managers assigned to each facility for logistical support. The majority of Department employees are located either in regional office or the headquarters facility, excepting hatchery biologists, game wardens, and some terrestrial biologists. By FY97, the Department was approximately seventy-five percent

complete with its upgrade of regional office facilities begun in 1991. Both the Green River and Laramie offices had renovation completed during FY97, with the goal to provide improved service areas for external customers, adequate working space for permanent employees, and a conference room for regional meetings in each facility achieved. A new Jackson Regional Office was opened in July 2002 leaving only the Pinedale Office and Cheyenne Headquarters to be upgraded. An evaluation and design for expansion was completed for the Cheyenne Headquarters building along with a detailed cost estimate. This project is on hold until funding can be made available.

This year, the parking lot at the Cheyenne Headquarters was expanded by 50 new spaces and with an additional egress point. Remodeling of several offices in the Headquarters Building was also accomplished to accommodate organizational changes.

WILDLIFE VETERINARY RESEARCH SERVICES BRANCH

Primary responsibilities of this Branch are to assist the Department by application of veterinary expertise through controlled technical research and field application of findings generated by research and to provide service to other branches, divisions, and agencies. Primary activities are related to disease diagnosis, monitoring, and control; operation of the Sybille Wildlife Research and Conservation and Education Unit in its varied functions; conducting and assisting with technical research related to disease, reproduction, physiology, life history, and chemical immobilization; captive breeding of endangered species endemic to Wyoming; and assistance with wildlife capture procedures and forensic investigations.

Three research projects continued this year. The first project is a long-term brucellosis vaccine efficacy study. The purpose of this study is to determine how long a single, strain 19 vaccination is efficacious in preventing brucellosis-induced abortion in elk. The second study examines how the infectious agent of chronic wasting disease (CWD) is transmitted from one deer to another. A third study was designed to determine the minimal infectious dose of the infectious agent of CWD (prion). The purpose of this study is to determine if there is a prion dose at which elk do not become infected with CWD. This information will help understand the ecology of CWD in the wild.

Chronic wasting disease surveillance was carried out in southeastern and northeastern Wyoming. Samples were collected by Veterinary Services personnel from meat processors and were also submitted by field personnel. There were 2,550 deer and elk heads examined with 110 positive for CWD.

Branch personnel committed a great deal of time to the Greater Yellowstone Interagency Brucellosis Committee (GYIBC). Personnel are active members of subcommittees and are responsible for the production of many scientific reports and analyses. The GYIBC continues to be recognized by many state and federal agencies and private organizations as the best process for resolving the problem of brucellosis in the Greater Yellowstone Area.

The Branch has an integrated brucellosis management program aimed at reducing the prevalence of brucellosis in elk. A total of 570 elk were trapped and tagged at six feedgrounds this past winter. A total of 227 test-eligible female elk were bled for brucellosis evaluation.

Strain 19 calfhood vaccination was again very successful this winter with a majority of the state feedgrounds reporting complete calfhood coverage. Many feedgrounds reported over 100% coverage, which suggests yearling females were boosted at several areas. A total of 2,569 calves were vaccinated at 19 state feedgrounds. Since the inception of the strain 19 program in 1985, over 53,000 elk have been vaccinated at 21 of 22 state feedgrounds.

The strain 19 vaccination program was initiated for the first time during 2003 since 1989-1991 on the National Elk Refuge. Due to a very short period of when elk were being fed and introducing a new activity, vaccination coverage rates on cow and calf elk were low. A total of 638 elk were vaccinated during a 15-day period.

The surveillance and vaccination of feedground elk was supplemented by a \$109,415 grant from the U.S. Department of Agriculture/Animal and Plant Health Inspection Service.

Implementation of habitat improvements projects was greatly impeded this year due to a lack of personnel in the federal land management agencies to complete NEPA documents and to severely dry conditions. Several elk habitat improvement projects were postponed due to the fire ban. These projects are scheduled for the upcoming fall unless another ban is implemented.

A total of 3,310 samples were submitted to the Wyoming Game and Fish Department Disease Laboratory and/or the Wyoming State Veterinary Laboratory representing 219 diagnostic cases. As part of the Branch's charge to monitor disease in wild populations, the following surveys were conducted: 1) 1,350 elk hunter kits were sent out with 175 returned, of the 175 samples returned, 112 were suitable for testing; 2) approximately 119 coyote, ferret, fox, and badger samples were analyzed for plague and distemper; 3) 2,550 elk, mule and white-tailed deer samples were analyzed for chronic wasting disease; and 4) 5 positive rabies samples were received and analyzed from raccoons, skunks and bats. Forty-two blood samples were submitted from harvested bison in the Jackson area during the fall of 2003.

The Branch also continued teaching courses on the chemical capture and safe handling of wildlife for Department biologists and wardens and other agency personnel. The course is necessary in order for non-veterinarians to be trained in the safe use of drugs used to capture wildlife. The course was again very well received and will be repeated next year in order to accommodate those that were unable to attend.

HABITAT AND ACCESS MAINTENANCE BRANCH

The Habitat and Access Maintenance Branch goal is to maintain and enhance terrestrial and aquatic habitat for wildlife and provide access for wildlife related recreational opportunity on Department managed lands.

With the approval of the Department Strategic Habitat Plan by the Commission, the Habitat and Access Maintenance Branch was transferred additional management and maintenance responsibilities on Department managed lands. These additional responsibilities include farming, grazing, and irrigation contract oversight, weed control, trespass control, wetland management, and facility maintenance.

The Habitat and Access Maintenance Branch completed maintenance and monitoring of wildlife habitat management areas and public fishing access areas within the limits of existing manpower and funding. Maintenance and monitoring was completed on all facilities, structures, fences, roads, and wetland complexes. Maintenance and development needs of these areas far exceed existing work plans.

The Branch manages and maintains 43 wildlife habitat management areas and 82 public access areas. This includes 410,000 acres of managed lands for wildlife habitat and public recreational opportunity. These lands, in themselves, contain 121 miles of stream easements and approximately 21,014 surface acres on lakes and reservoirs for public access.

The physical inventory on the above-mentioned areas includes approximately 408 public parking areas, 1,163 miles of road, 83 miles of fence (8' elk fence and stock fence), 148 restroom facilities, 62 boat ramps, 15 car bridges, 15-foot bridges, 6,000 signs, 300 auto gates, and 95 dam/wetland complexes statewide.

Also included in the Department maintenance are 4,605 irrigated acres, which include: drains, canals, pipelines, and spring developments associated with farming, grazing, and wetland systems.

Physical inventory includes maintenance of car barriers (post, cable, and boulders), pipe gates (for vehicle control), culverts, irrigation structures (concrete and wood checks), fish barriers, and in-stream structures for trout, bank stabilization projects and many other terrestrial and aquatic habitat development projects and related maintenance.

Additional acquisitions have been steady and with these acquisitions the responsibilities of all maintenance and associated costs are assigned to this Branch.

In addition to this workload, through the project request system, the Branch receives additional requests for aquatic, terrestrial, and non-game project assistance statewide, and assistance on 11 hatcheries, rearing stations, and regional offices.

GAME AND FISH LABORATORY BRANCH

The responsibility of this Branch is to provide analytical services for various Department personnel, and occasionally, other agencies and the general public. A total of 35,132 tests were conducted on 14,134 samples in response to 752 requests (cases). These services were conducted at the Game and Fish Laboratory and include: fish health inspections and disease

diagnostics for hatcheries and natural waters in Wyoming; forensic analyses for law enforcement personnel; and other analytical services for management and enforcement personnel.

During FY03, 118 fish disease cases were studied and 29,292 diagnostic tests were conducted on 12,854 specimens of fish. Forty-eight special annual/semiannual fish health inspections, which included 11 state fish-culture stations, three state quarantine units, seven private hatcheries, and six (wild) broodstock populations, were made during the year. These cases involved various species of brook, brown, cutthroat, lake and rainbow trout, kokanee salmon and grayling. Low levels of whirling disease parasites were detected in one of these cases. Twenty-one cases involved free-ranging fish populations and included carp, whitefish, brook, rainbow, brown, lake, and cutthroat trout, walleye, gizzard shad, fathead minnow, snails and red-sided shiners. Parasitism, bacteria, malnutrition, physical trauma, "sand flesh", fungus and genetic deformity were identified for these cases. There were 23 cases that involved rainbow, brown, and cutthroat trout, and grayling from various fish hatcheries or culture facilities. Physical trauma, malnutrition, bacterial and fungal diseases, parasites, gas bubble disease, and environmental toxicity, were identified in various species of fish for these cases. The conditions of most lots of fish located at the various facilities returned to normal after corrective measures (disinfectants, antibiotic therapy, diet change, etc.) were taken.

A total of 1,112 fish in 26 cases were examined for whirling disease organisms. Low to moderately high numbers of the spores were detected in rainbow, brook, cutthroat, and brown trout, and mountain whitefish from the North and South Forks of the Shoshone River; in rainbow and brown trout, and mountain whitefish in the Bennet Creek area; in rainbow and cutthroat trout from Clark's Fork River, all in Park County. Spores were observed in rainbow and brown trout from Clear Creek, Johnson County; in brown trout from Spring Creek, Sublette County; in rainbow and brown trout from Middle Fork Powder River, Johnson County; in rainbow and brown trout from South Piney Creek, Sheridan County; and in brown trout from New Fork River, Sublette County. Spores were also present in cutthroat trout and mountain whitefish from Flat Creek; in rainbow, cutthroat and cutbow trout from Gros Ventre River; and in cutbow and cutthroat trout from Snake River, all from Teton County. This work is an integral part of maintaining healthy fish populations in Wyoming and should continue indefinitely.

Four thousand nine hundred thirty-five tests were conducted on 600 different samples in response to 58 wildlife enforcement forensic cases. In seven cases defendants pled guilty when lab results were used as evidence. Tests included identification of species and gender, matching, and minimum numbers of animals present using microscopic, serological and DNA techniques. Samples tested included: partial animal carcasses, tissue, meat, hamburger, sausage, blood, hair, feathers, hide, fur, bones, stains, antlers, bear claws, saws, gloves, teeth, clothes, blankets, knives, skulls, fish, gut piles, and stomach contents.

Teeth from 635 game animals, predators, and furbearers were processed and aged using the cementum annuli techniques. This included 20 requests from field biologists and 547 hunters who were mailed cards informing them of the age of their harvested animal. Ages ranged from young-of-the-year to 26.3 years for the various species. A total of 270 tests were conducted on 45 different biological samples in response to nine requests from department management

personnel. These included identification of hair, scat, and tissue from chronic wasting disease brain samples.

MANAGEMENT INFORMATION SERVICES BRANCH

Fiscal year 2003 continued to be a pivotal year for the Department with respect to Information Technology. We completed several major upgrades to our network infrastructure, as well as continued to rewrite and develop new applications using Internet enabled tools.

The MIS Section restructured the Department Internet Website, complete with a new layout and design. The previous design had been in place since 1995 and was in desperate need of an upgrade. A full-time programmer started work on the new Website and created the beginnings of a content management system.

The GroupWise 6 e-mail system was upgraded to version 6.5 in order to keep up with new features, which include an instant messaging system. This instant messaging system had been in testing for several months and is gradually being implemented throughout the agency.

MIS staff also created shared calendar resources for several branches in the agency so several personnel could begin to use the calendaring and collaboration features in GroupWise. This seems to be working well for those who are utilizing it.

During this past year, MIS staff worked on configuration of a new Windows 2000 Active Directory Domain (WGFD.STATE.WY.US) and the synchronization between Windows Active Directory and our existing Novell Directory Services (NDS). Final implementation allowed the MIS staff to eliminate the last Windows NT 4.0 Server that had been in place for nearly seven years and had become fairly antiquated.

This year has again seen a profound increase in computer virus and Internet worms that have consumed considerable MIS staff time. Network attached computers have not experienced any problems, however many of the remote user machines encountered virus activity. MIS personnel continued to update the Symantec Anti-Virus application on all file servers within the Game & Fish Department and upgraded all the client anti-virus software as well.

The MIS Section upgraded the local area network (LAN) hardware and software in the Cheyenne Headquarters Office and several regional offices. A new Microsoft SQL 2000 Data Server was installed to enhance performance and the ability of agency staff to access and make use of shared data. Branch personnel worked with an installer from Dell Computer Corp to set up and configure a new Storage Area Network (SAN) in the Cheyenne Office. This SAN will provide mega data storage and fast access, as well as being the beginning stage for disaster recovery of critical Department Information Technology systems.

All Novell NetWare servers were upgraded with the latest service packs and two new NetWare 5.1 servers were configured and installed in the Jackson and Green River regional offices. All of

the Windows NT 4.0 servers were upgraded to Windows 2000 and existing 10BaseT network hubs in several regional offices were replaced with programmable Fast Ethernet switches.

Another major project category involved working with Fiscal Division staff and an independent contractor to convert the Department Unidata database management system on the Application Server to State of Wyoming Standard, Microsoft SQL technology. Phase I of the re-write (the BOATS system) went into full production in the Cheyenne Office and will soon be implemented in regional offices as well. The Contractor has been working on the next phase of the UNIDATA upgrades. This phase includes the Voucher Processing System (VPS), the Vehicle Management System (VMS), and the Personnel-Payroll System (PPS). MIS staff continues to work with Fiscal staff on the update of the DEP-WIN UNIDATA database.

The last major category involved application development of programs to enable users to better utilize their time or use new systems that were not previously available. New applications either completed or under development include an on-line test that constituents can take to assess their knowledge of the difference between black and grizzly bears; on-line harvest survey questionnaires (maps and input forms); a system using technology to assist in gathering and reporting data relating to chronic wasting disease (CWD) surveillance throughout the State of Wyoming; Website changes/enhancements and UNIDATA upgrades (both detailed above). Modifications and improvements were also made to the on-line interface for constituents to look up results of big game license drawings, as well as for Department staff to query the license draw and hunter education databases; and an on-line program enabling staff to enter budget codes into the Department Fiscal Credit Card system.

Statewide big game data continues to consume the majority of GIS time and effort, as it is trying to address updates not done since 1999. GIS data on big game now include seasonal ranges, herd unit boundaries, hunt area boundaries, parturition areas, and migration routes. Barriers to migration will be a new layer in the near future. Hunt area boundaries for the 2004 season were completed on all species, and these layers served as base maps for the Drafting Section to create the hunting maps found in application booklets. The mapping of CWD data was a major project reflecting the seriousness of this disease and the value of mapping data traditionally viewed in columns and rows. Various GIS projects, mapping requests, data requests, and other activities related to Departmental coordination of GIS/GPS occupy an increasing amount of time.

A State Wildlife Grant from the USFWS allowed the GIS Section to focus on species in greatest need of conservation. This will be accomplished in part by querying the Wildlife Observation System, getting back a GIS file, and plotting the locations of these species to develop distribution maps.

LANDS ADMINISTRATION BRANCH

The responsibility of the Lands Administration Branch is to provide direction to the Department relative to property right acquisition, management, or disposal of surplus property rights. All current state and federal laws, rules, guidelines and policies are incorporated into Rules and Regulations (Chapter 57) including procedures outlining the appraisal report processes.

Proposed acquisition nominations are ranked utilizing the Habitat and Access Evaluation Process. Staff and Commission members then review each proposal. This is ongoing with periodic reviews to update and clarify the process. The goals and objectives of the Commission are to stress the acquisition of public access to landlocked public lands and to address the property right needs of the Departments Strategic Habitat Plan. Lands Administration personnel continue to be State Certified Appraisers and maintain the required continuing education requirements.

The Game and Fish Commission continues to protect the States property rights by enforcing legal actions against unauthorized use of Commission owned and controlled property. It has and is actively pursuing encroachment along the Wind River, Salt River and Big Horn River easements. Property right monitoring by the Lands Administration Branch continues on all Commission owned areas. Attempts are made to physically inspect all property right areas and Commission owned lands to establish data photo points, which will set a new benchmark against possible future encroachments. Encroachments are being addressed as they are encountered. Computerized data imaging is being utilized as a means to better document baseline information on property rights.

During FY03, access was acquired: for public access roads and parking areas on State lands at several locations statewide; for ponds associated with the Bud Love Wildlife Management Unit to facilitate future maintenance and use of the ponds for wildlife and access; for a road right of way that provides public access to over 5,000 acres of State lands near Buffalo; for public access to Lower North Crow Reservoir from the Cheyenne Board of Public Utilities; and for boating developments on various lakes and reservoirs around the state.

Property exchanges negotiated involve: clarification of Commission easement rights and re-alignment of roads and parking areas along the Green River near Big Piney; a trade with a private landowner adjacent to the Horse Creek Feedground which when finalized will provide administrative access to the feedground and public access to a large part of the adjoining National Forest lands; further investigation of a trade with the U.S. Forest Service to allow for the Commission to participate in the Campus Complex proposed in Jackson.

The Department renewed leases: for the South Park Bridge-Snake River access south of Jackson, for the Pick Bridge-Platte River access north of Saratoga, for the continued use of McNeel feedground and other winter feedgrounds, for the public access lease on 480 acres adjacent to the Springer Management Area, and for the Pitcher/Brokaw vehicular access near Arlington. Over 30,000 acres of state grazing lease lands were renewed.

Permits for temporary use of Commission owned lands were granted to: a private adjacent landowner for a road across the Soda Lake Wildlife Management Area; to WYDOT to facilitate construction needs regarding the bridge replacement along Robertson Road Bridge in Casper; Quantum Geophysical for activities associated with the Red Rim Unit; the University of Wyoming and the local chapter of the 4H Club was issued a permit associated with activities on the Springer Unit.

A permanent right of way across the Whiskey Basin Wildlife Management Area was granted to Dubois Telephone. Permanent easements were modified to re-align the access road into the Foote fishing easements north of Saratoga. The Department entered into a Memorandum of Understanding with the Town of Saratoga to allow placement of pipe in the Saratoga Inlet Ditch. A lease was also executed with Fremont School District to allow them the use of the old Jeffery City Warden Station.

Several surplus buildings located around the state were declared surplus and removed and a small parcel of land was sold to WYDOT to facilitate the new bridge replacement along Robertson Road in Casper.

Personnel in the Lands Administration Branch are active in the Organization for Wildlife Lands Specialists and hosted its annual meeting in Jackson this year.

INFORMATION AND EDUCATION PROGRAMS

The information and Education programs utilize a variety of methods to carry out the Department's public outreach programs. Following is a synopsis of major activities conducted during FY03.

CUSTOMER OUTREACH

The Customer Outreach Branch is responsible for producing weekly Department video news segments, weekly radio programs, video and radio public service announcements and press releases. The branch is also in charge of the Department's Telephone information center, mailroom services, the Alternative Enterprises function and G&F technical telephone services. We are also the center for hunter information and customer comments, questions and complaints.

Application Booklets: Initial distribution of application booklets included more than 110,000 booklets that were mailed to all who applied for a license the previous year. More than 30,000 additional booklets were mailed between January and August. Mailings of booklets are down somewhat due to the fact that applications can now be obtained over the Internet.

Customer Services: The Branch's responsibility also included the scheduling, distribution and staffing of Department information exhibits at wildlife meetings, fairs, banquets and trade shows. The displays were in use for 66 days during the year.

The Branch also coordinated dates for implementation of six hunter information field stations throughout the state and two at Cabela's in Nebraska. Branch personnel assisted with the staffing and distribution of hunter information materials for several of these stations. The eight stations were manned a total of 18 days and were visited by nearly 2,000 hunters. Personnel also responded to thousands of hunting and fishing requests via telephone, letter, e-mail and in person.

The Telephone Information Center (TIC) processed more than 72,000 incoming calls during FY 03. The 900# was dropped as a result of calls being reduced dramatically due to the availability of drawing information on the Internet. TIC personnel also responded to more than 1000 questions received via the web-site.

Press Releases, Television and Radio: Weekly television news packages (52 during the year) were aired on three Wyoming cable and network stations. Television public service announcements were also produced. The 15 PSA's were aired hundreds of times on nine Wyoming and two out-of-state stations. Radio efforts include production of 156 radio programs that were aired during the year on 18 Wyoming stations. In addition, a new message was prepared each week for the Department's 1-800-radio actuality line. This message is also available on MP3 format over the Internet. These messages included pertinent game and fish topics and often featured interview segments from G&F personnel. Branch personnel also produced 280 press releases sent weekly to 1000 recipients via postal service and e-mail. Video personnel also produced videos on drought, Industry Wildlife Stewardship Awards, Expo promotion and Chronic Wasting Disease.

Alternative Enterprises: Various products are sold at G&F visitor centers in Cheyenne and Lander. Products were also sold at a booth during the Expo. However, the largest share of revenue is generated by products sold through the mail. A catalog listing Alternative Enterprises products and Game and Fish publications was included in the mailings to more than 90,000 resident and nonresident license recipients. In addition, resident and nonresident application booklets have a distribution of 260,000 and include a page with Alternative Enterprises products. As with previous years, a number of new products have been added.

Mailroom: Mailroom personnel processed more than 1.2 million pieces of mail during the year. This includes thousand of packages via UPS and express mail services. In addition more than 100,000 licenses and permits were mailed using the G&F inserting machine.

Telephone Services: This function has the responsibility of ordering regular and cell-phones, seeing that new installations are completed and programming new phone lines. Responsibilities also include voice mail installation and training and liaison between the G&F and state information services and phone and communication companies. Also troubleshoots all agency phone problems.

Conservation Stamp Art Contest: The 2003 conservation stamp art competition featured the mountain lion and drew 164 entries from artists throughout the country. Once again the stamp art competition included a traveling top 40 art show from June through September. This year the top 40 was featured in galleries in Sheridan, Riverton, Worland and Gillette.

Miscellaneous: Branch personnel also served on various department and interagency committees. Included in this were committees for the ACI conference, license application booklet and the Expo. Branch personnel also assisted with check stations, spent considerable time on the CWD issue, providing information and assisting with head pickups for testing. Numerous programs and presentations to schools and civic organizations were also given. Branch personnel also assisted with instruction at the Becoming an Outdoors Woman (BOW)

and Outdoor Recreation and Education Opportunities (OREO) and youth conservation camp in Dubois.

INFORMATION

Regional Information and Education

Regional I&E produced over 780 news releases, radio spots, programs and interviews and television interviews and public service announcements. Over 150 youth and adult conservation education programs, workshops, and seminars were completed. Participation in education outreach programs, such as Hunter Education, Aquatic Education, Project WILD, Becoming an Outdoors Woman, Outdoor Recreation Education Opportunities (OREO), Whisky Mountain Youth Conservation Camp, and the annual Hunting and Fishing Heritage Exposition remain priorities. Programs and tours were given to youths and adults at the Department's Story, Sybille, and Lander education centers. Three hunter information stations and one hunter festival provided 400 non-resident and resident hunters with useful hunting related information.

OREO materials and equipment, including canoes, stream trailers, and education trunks, were loaned to over 60 schools, youth, scout, and church groups.

Twenty-eight man-days were spent assisting the Department administration during the 2002-03 legislative session in Cheyenne. In addition, Regional Information and Education personnel were assigned the duties of Funding Issue Coordinator for their respective region.

Assistance to other personnel in the region included sage grouse lek surveys, first-aid training, moose surveys, antelope classifications, electrofishing, hunter check stations, season setting meetings, gill netting, and chronic wasting disease sample collection.

Assistance was also given to issues management, species and disease and examples of these programs include the wolf and sage grouse management plans, the Jackson elk and bison environmental impact statement, whirling disease, aquatic nuisance species, Wyoming's habitat management plan, chronic wasting disease, brucellosis, Yellowstone ecosystem grizzly bear, and Department funding.

Conservation Education

Personnel conducted 17 Project WILD/Aquatic WILD workshops for 397 teachers, two combination WET/WILD/PLT workshops for an additional 67 educators. The OREO/Project WILD Workshop was attended by 27 educators. Personnel presented 250 public programs to 7,500 youth and adults. Over 7,000 individuals were contacted at fairs and sports shows. An additional 18,006 participants attended the 2002 Wyoming Hunting and Fishing Heritage Exposition. There were 40 participants at the CONSEP training session in Torrington. One hundred fifty-eight attendees enjoyed seven Living in Bear Country workshops held around the state. The Department's volunteer program had 479 volunteers providing approximately 7,186

service hours. There were over 900 volunteers that provided over 25,000 total hours of service for hunter education, conservation education and the Expo

Department personnel and approximately 436 volunteer hunter education instructors conducted 241 classes and certified 4,970 students. In total volunteer hunter education instructors donated nearly 8,279 hours to the Department. Outdoor Recreation Education training was given to 21 teachers and the program is now implemented in 110 schools by 175 instructors. Three shooting clinics were given to about 65 people, including two all female shotgun clinics presented to 25 participants. Seventeen participants competed in the Wyoming Youth Hunter Education Challenge held at the 2002 Wyoming Hunting and Fishing Heritage Exposition (Expo), and another 3,500 youth attended shooting activities while at this event. Education personnel and volunteers assisted in about 25 community fishing clinics for about 4,000 Wyoming youth. An additional 5,000 Wyoming youth participated in the fishing skills activities at the Expo. One Becoming An Outdoor Woman workshop was held for 48 women. Seven volunteer hunter education instructor workshops were attended by about 100 instructors. Assistance was given to the 4-H shooting sports program and the 4-H aquatic ed programs. About 240 4-H members participated in the second Outdoor Skills competition at the State 4-H shoot in Douglas sponsored by the Department.

PUBLICATIONS

The publications Branch won ten national awards for excellence this year.

In the Association for Conservation Information North America competition, they placed as follows: "Sagebrush: Blanket of the Big Empty" by Tom Reed placed second in the wildlife article category; "Golden" by Tom Reed ranked second in the fisheries article category; Christopher Saunders, Tom Reed, and Chris Madson swept the Izaak Walton League's outdoor ethics communication award.

The International Region Magazine Association recognized work in the magazine with these awards: "Last Call" by Tom Reed received a bronze in the general feature category; "What We Owe" by Chris Madson received a gold in the essay category, and three installments of "The Land Ethic" by Chris Madson received a bronze in the column category.

The Outdoor Writers Association of America recognized two articles from the magazine: "What We Owe" by Chris Madson placed second in the outdoor essay category and an editorial by Chris Madson placed third in the natural history category.

Wyoming Wildlife Magazine: twelve issues were produced with an average circulation in FY03 of 30,381 subscribers, down slightly from 31,000 in FY02. Gross receipts for the magazine and the *Wyoming Wildlife News* was \$270,075, up from \$246,618.

Wyoming Wildlife News: six issues were produced and had a press run of 40,091 each. The *News* is distributed free of charge at all Wyoming Game and Fish Department license vendors. Since FY97 when we began to sell subscriptions to the *News* with the magazine, paid

subscriptions are 6,791. This is slightly down from 7,084 in FY02. Free circulation averaged 34,000.

Wild Times: four issues of this publication are distributed free to 4th graders in Wyoming schools.

Other publications and activities—The directory for the Wyoming Hunting and Fishing Heritage Expo was produced in the September/October issue of *Wyoming Wildlife News* for distribution through various newspapers statewide as well as at the Expo in Casper. The 2003 Wyoming Wildlife calendar was produced, to be used primarily as a promotional piece for the magazine. A set of 12 flashcards was produced for the Wildlife Heritage Foundation from photography run in the magazine.

WILDLIFE DIVISION

Jay Lawson, Chief

The Wildlife Division conducted an evaluation of all work units during FY03 and subsequently restructured to enhance efficiency and address major issues. With budgets remaining relatively static, reorganization and a shifting of priorities was necessary to focus more attention on species such as sage grouse, grizzly bears and wolves.

A new Sage Grouse Coordinator position was established to implement the Department's Sage Grouse Conservation Plan. In addition, this position will work on other species and issues related to the sagebrush steppe ecosystem.

An additional permanent position to deal with trophy game conflicts was added in Lander. This position is currently focused on grizzly bear/human conflicts, but will also deal with black bear, mountain lion, and eventually, wolf conflicts.

Through additional conversions, eight permanent Wildlife Technicians were added to the division. These employees will have full law enforcement authority, but their duties will be quite diverse, ranging from the collection and analysis of biological data to the handling of injured wildlife. These positions should be a great benefit to regional operations.

The Wyoming Gray Wolf Management Plan was completed by Wildlife and Services personnel and adopted by our Commission in July. The Wyoming plan, along with plans from Idaho and Montana, has been submitted to a group of wolf experts for peer review. This is the next step towards delisting of the Northern Rocky Mountain wolf population.

In FY03, Division permanent law enforcement personnel worked 7,744 man-days and drove 773,592 miles on law enforcement activities.

Wildlife damage compensated under W.S. §23-1-901 continues to absorb considerable personnel time in the Division. In FY03, Division personnel expended 1,871 man-days and drove 220,775 miles on activities to prevent wildlife from causing damage to private property. They expended 542 man-days and drove 31,809 miles investigating, processing, and handling damage claims and landowner coupon redemption. A total of 139 damage claims worth \$271,695 were filed and the Department paid \$225,552. In addition, personnel spent 477 man-days and drove 64,737 miles responding to nuisance wildlife issues that were not considered wildlife damage under W.S. §23-1-901.

Chronic wasting disease surveillance was greatly expanded, with associated increases in workloads for personnel in the Wildlife Division and other divisions.

On a new disease front, West Nile virus was detected in numerous species, with significant mortality occurring in certain sage grouse and raptor populations. Long-term impacts are unknown at this time and monitoring efforts have been initiated.

Drought conditions improved somewhat in eastern portions of the state, but severe to catastrophic conditions persist west of the continental divide. Declines in shrub health, particularly Wyoming big sagebrush, pose serious threats to shrub-dependent species, future hunting opportunities and Department funding.

TERRESTRIAL HABITAT MANAGEMENT

The Terrestrial Habitat Management Section operated for the first full year under the guidelines of the Department's Strategic Habitat Plan. The focus of personnel in the Section turned to implementation of the plan that combined efforts of the Terrestrial and Aquatic Habitat Sections, Habitat and Access Maintenance Branch, and Lands Administration Branch. The vision statement for the plan follows:

The Wyoming Game and Fish Department is the steward of Wyoming's wildlife, dedicated to the conservation of sustainable, functional ecosystems capable of supporting wildlife populations at least as healthy, abundant and diverse as they were at the dawn of the 21st century. We will take a holistic approach to habitat management, integrating various land uses while involving the general public, private landowners and land management agencies. Our lands will be managed to emphasize and maintain the wildlife and public access values for which they were obtained.

The purpose and goal of the plan for the Terrestrial Habitat Management Section follows:

Maintain and enhance terrestrial wildlife habitats on private and public lands by completing projects, providing extension services to landowners and public land managers and administering Wyoming Game and Fish Commission Wildlife Habitat Management Areas. Minimize loss of habitats through habitat protection and assessment, monitoring impacts, participating in coordinated planning efforts, expanding public awareness, and cooperating with private and public land managers.

One of the major planning efforts of Section personnel was to initiate implementation of the Strategic Habitat Plan by developing regional landscape terrestrial habitat priority areas. In consultation with other Department personnel these areas were assembled with a focus on the following land cover/habitat types: sagebrush steppe, riparian, mountain shrub and aspen communities that were further refined by location of crucial big game winter range areas, important big game transitional ranges and important sage grouse lek and nesting areas along with other pertinent wildlife information and habitat management opportunities. Another significant factor affecting the Section was resignation of the permanent habitat biologist for the Green River region that is still in the process of being replaced. Additional information is available in the Section Annual Report for 2002, the Strategic Habitat Plan, Wildlife Division Annual Big Game Herd Unit Reports, Fiscal Year 2003 Annual Strategic Plan Summary Output Report, various grant and agreement documents, and various completion reports.

During this fiscal year our habitat biologists and habitat extension biologists planned or implemented 214 habitat projects, developed and administered 67 trust fund projects and grants, initiated or continued 34 landscape area habitat surveys, participated in a wide variety of coordinated resource management team efforts, technical groups, various working groups and other collaborative efforts, and provided extensive education and information on terrestrial habitat issues and opportunities. In addition to the development of regional habitat priorities cited above, these efforts resulted in the following major project planning and accomplishments: treating and enhancing approximately 5,400 acres of habitat with prescribed fire; inventory and planning for prescribed fire treatments on an additional 17,500 acres; assistance in planting over 7,000 trees and shrubs; in conjunction with federal Farm Bill programs personnel disked and interseeded legumes on approximately 1,000 acres of Conservation Reserve Program lands in SE Wyoming, provided assistance and planning on 18 Continuous Conservation Reserve Program projects, and provided assistance on three Wetland Reserve Program projects and 10 Wildlife Habitat Incentive Program projects; conducted herbicide application to control cheatgrass on 450 acres on the Johnson Creek Wildlife Habitat Management Area (WHMA); constructing 80 acres of wetlands and ponds and developing plans for an additional 39 acres; improving, enhancing, and/or fencing over 650 acres of riparian habitat; protecting over 4 miles of fishable streams; installing 24 guzzlers and developing plans for 12 more guzzlers, installing 7 water tanks; treating 200 acres of big sagebrush with tebuthiuron for sage grouse and mule deer; cleaning 10 stock ponds, fencing three out and providing off-site water tanks; and developing two springs; assisting private landowners and federal land managers with development of 14 whole ranch grazing plans on nearly 131,000 acres of rangelands; assistance in signing private land/public wildlife (PLPW) walk-in-areas and hunter management areas (HMA's); and providing and assistance on the Department's Pronghorn, Sage Grouse, Mule Deer, and Bighorn Sheep Working Groups and initiatives, Governor's Drought Management Task Force, Wyoming Weed Team, Project Advisory Committee for the Rocky Mountain Elk Foundation (RMEF), National Foundation for North American Wild Sheep, and State Technical Committee for the Farm Bill among and myriad of others.

In addition, nearly 80 one-on-one habitat extension contacts resulted in plans, developments, and habitat improvements on private and public lands. Section personnel participated in a number of coordinated resource management (CRM) programs, technical teams, various working groups, and other large planning efforts during the year. Habitat inventories were either in progress, being completed, or being refined on more than 20 million acres of Wyoming's landscape using remote sensing, aerial photo interpretation, ground sampling, and establishing permanent monitoring transects.

Farming and grazing contract assistance and monitoring on Commission lands were completed along with recommendations for future needs and plans. Section personnel were also involved in two major research efforts including big game/livestock/electric fence studies and sage grouse landscape scale habitat use. Federal Aid National Environmental Policy Act (NEPA) worksheets were completed on 4 WHMA prescribed fires and information was being gathered for NEPA worksheet compliance on an underground pipeline and spring development, a potential property disposal and another prescribed burn. Funds for assisting a private landowner on a major grazing allotment buy-out were secured and other allotments were being evaluated for potential win-win scenarios. Personnel are also involved in two BLM Resource Management Plans and two Forest

Plan revisions as well as providing numerous allotment management plan recommendations. Major reports completed this fiscal year included the section's annual report, strategic plan summary output report, Commission Annual Report, finalization of the Sage Grouse Conservation Planning Group report, and federal aid completion report. A quarterly habitat extension newsletter was distributed to more than 300 organizations and individuals. Section personnel prepared more over 20 articles, made a number of major presentations, conducted and hosted a number of workshops including a sagebrush steppe ecology workshop, International Moose Conference and the Western States and Provinces Deer and Elk Workshop, participated in classroom instruction, developed displays and posters, and contacted over 12,000 people.

Some of the major long-term programs continued this year include: habitat extension services in Wheatland, Newcastle, and Greybull; Lander Front Technical Committee projects; Wapiti Ridge CRM projects; Whiskey Mountain Bighorn Sheep Technical Committee and projects; Martin Ranch mule deer demonstration area; Jim Mountain bighorn sheep demonstration area; Bighorn National Forest and Sheridan regional GIS projects; Green Mountain common allotment; Elk Conservation Strategic Plan and Legacy Plans with RMEF; Snowy Range Winter Range Shrub Treatment Group; Jackson/Pinedale area elk brucellosis-feedground-habitat (BFH) analysis; Jackson Interagency Habitat Group, Water for Wildlife: and habitat development, improvement, and maintenance activities on approximately 413,000 acres of Wyoming Game and Fish Commission-administered wildlife habitat management areas. Other significant efforts were expended on the statewide Sage Grouse Conservation Planning Team, Farm Bill programs, Snowy Range Interagency Habitat Improvement Group, and various GIS projects including remote sensing and evaluation of sagebrush and sage grouse habitat in the Sheridan, Casper, and Laramie regions. The Meeteetse/Owl Creek mule deer habitat analysis continues evaluating changes on over 40 permanent transects established in the area over 20 years ago to evaluate habitat trend and relate that to population trends in mule deer and sage grouse. Projects for the RMEF and Foundation for North American Wild Sheep were evaluated and a recommendation for funding submitted to these organizations. Outside funding for various projects was secured from the NRCS, U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), U.S. Forest Service (USFS), Ducks Unlimited, Pheasants Forever, National Wild Turkey Federation, Water for Wildlife, RMEF, Safari International, and The Mule Deer Foundation among others. The Section also worked hand-in-hand with other Department personnel and Commissioners addressing opportunities to restore and/or manage habitat to enhance and sustain wildlife populations into the future.

STAFF LAW ENFORCEMENT

The wildlife law enforcement coordinator returned from active military duty during February of 2003 and has worked to reassume all of his duties that had been assigned to other personnel during his absence. The WLEC has continued to review applications and issue permits for the importation, possession, confinement, transportation, sale, and disposition of live wildlife, scientific permits, and wildlife rehabilitation permits. In addition continues to provide oversight to the other permit applications which are reviewed, and permits issued. The WLEC continues to administer the Division's law enforcement CMS and has provided periodic reports upon

request to Wildlife Division Supervisors. In addition, the WLEC continues to carry out other routine law enforcement duties on a daily basis or as assigned.

The Wildlife Violator Compact continues to be an important tool for tracking violators. The wildlife law enforcement coordinator continues to provide oversight to this program, which now includes eighteen compact states. The WLEC regularly reviews the CMS for recently suspended violators to enter into the database and prepares correspondence to Wyoming residents that have been entered into the system by other states within the compact.

Personnel assigned to the Watercraft Safety program continued to supplement regional law enforcement efforts throughout the state. Reservoir crews found less watercraft operators were using excessive alcohol. A designated driver was operating many watercraft with alcohol on board. Failing to provide sufficient life jackets for all people aboard watercraft remained the number one detected violation. Personnel from reservoir crews continued assisting the regions with law enforcement efforts throughout the fall. Some of these personnel attended training at the Wyoming Law Enforcement Academy in Douglas in order to meet Peace Officers Standards and Training requirements.

The Stop Poaching program continued to generate numerous reports of wildlife violations. The public provides valuable assistance in apprehension of people illegally taking wildlife. Several substantial rewards were paid by the Wyoming Wildlife Protectors Association to individuals that provided information regarding observed wildlife violations and resulted in the wildlife violators receiving citations.

The 2003 session of the Wyoming Legislature resulted in the gray wolf being defined as a trophy game animal within certain boundaries of Wyoming. This legislative session also passed statutes, which will result in specific license fee increases, becoming effective January 1, 2004. In addition this legislative session resulted in a revision of the statute pertaining to the use of aircraft to aid in the taking of any Wyoming wildlife, except predatory animals.

WILDLIFE INVESTIGATIVE UNIT

The Wildlife Investigative Unit has installed and implemented the “CrimeNtel” intelligence system. This system should enhance the department’s law enforcement capabilities. The system is designed and tailored to accommodate all manor of wildlife crime intelligence information and to link the information in a usable format.

The unit has been involved in hundreds of cases of all sizes during this period. Several undercover cases have also been worked. Investigators spent 5,491 hours investigating cases. The unit closed 77 cases and convicted 110 defendants. These defendants paid \$127,940.00 in fines and an additional \$89,157.50 in state and federal restitution. The total of these is \$217,097.50. Federal restitution money collected has dropped due to a decrease in Lacey Act cases.

The unit continues to assist wardens and to rely on wardens for assistance, on many cases. Each investigator also works very closely with the states three U.S. Fish & Wildlife agents. The unit's Resource Information List, and other databases, continues to be a very popular and useful tool for investigators and other Law Enforcement personnel.

BIRD FARMS

Personnel at the bird farms raised and released 29,012 pheasants in FY03. Sheridan bird farm produced 14,283 birds and Downar bird farm released 14,729. The distribution of pheasants in southeast Wyoming continues to be dictated by the severe drought conditions that exist. The dry weather and the opening of CRP lands(PLPW lands) to haying and/or grazing shifted bird releases back to WHMAs. Table Mt. And Rawhide units received more birds and therefore more pressure from hunters. Pheasant releases were expanded to include some PLPW lands in Laramie County. Walk-in areas for the state received 5,305 pheasants in FY03.

January 30, 2003 brought a heavy, wet snow that tore down 1/3 of the pens at the Sheridan bird farm. Personnel at Sheridan bird farm kept repairs one step ahead of bird production thus ensuring no loss in productivity for the facility. Personnel at both bird farms continue to upgrade and maintain the facilities and vehicles need to produce the pheasants that are requested. They are also involved in habitat maintenance, irrigation, extension services, providing tours to the public and work with the PLPW program.

BIOLOGICAL SERVICES

Biological Services participated in a variety of activities during FY03. The big game harvest survey contract was renewed with the previous survey contractor in FY03, and the small and upland game harvest survey was added to the suite of surveys the section does 'in house'. The Section continued to improve processes associated with the harvest surveys. Data transfer and formatting have continued to improve, which has enhanced interchange between the contractor that performs the big game harvest surveys and Biological Services and between the section and field personnel. Data entry of hunting licenses sold over-the-counter licenses was terminated at the Women's Prison, and that function was contracted to the Kelly Services, Inc. office in Cheyenne. This change improved the speed and quality of license data entry and improved interaction between the data entry contractor and the section. The Section's harvest survey coordinator continued to develop and improve upon harvest survey databases and upon the processes associated with the harvest surveys. She developed internet response forms for all FY03 surveys conducted 'in-house' in an effort to improve survey response rates, reduce costs and errors, and improve efficiency. She also developed a first draft of a harvest survey manual, which will be improved upon and have detail added to it in subsequent years.

The tasks associated with revision of the Wildlife Observation System (WOS) that were performed by outside contractors were completed in FY03. The Department's MIS Section has a few remaining minor problems to fix, and that phase of the revision will be completed. Agency personnel are beginning to use the new entry and querying functions, and they are beginning to

use WOS data in GIS applications. Locational descriptor conversion (PLSS, UTM and Lat/Long) software was incorporated during the second phase in FY03 to allow that use. The next phase is to provide for electronic data transfer directly into the system to eliminate manual entry of that electronic data. It is hoped this final stage will be completed in FY04.

Biological Services personnel responded to dozens of requests from the general public, consultants, other states, Wildlife Division, Director's Office, and sportsmen. Biological Services also handled numerous injured wildlife and urban wildlife problems; maintained databases and map files; and assisted field personnel on check stations, sharp-tailed grouse and sage grouse elk surveys, antelope aerial line transect surveys, and disease sampling. The primary focus of disease sampling was on West Nile Virus and Chronic Wasting Disease. The Section provided technical assistance to various entities, including Department and Division administrations, field personnel within the Department, other law enforcement agencies, industry, and other state wildlife agencies. Technical assistance to the administrations included briefing papers on significant issues for the new director and commissioners and analysis papers on several issues.

The Section maintained the black bear and mountain lion hunter hotlines; printed numerous publications, survey cards, and kill record forms; prepared the season setting reference book for the Commission; and coordinated mourning dove coo counts. Section personnel represented the Department and Division at meetings, assisted with review of regulations, reviewed recommendations for big game hunting seasons and management of big game herds, and provided environmental comments on various projects. Biological Services also coordinated with the Laramie Lab on bobcat and big game tooth collections and with the University of Wyoming Cooperative Wildlife Research Unit on several research projects. The Cheyenne staff biologist conducted several policy reviews for the Director's office and the Wildlife Administration during the fiscal year. The Cheyenne staff biologist also trained the staff biologist in Alpine to take over duties associated with the Pacific Waterfowl Flyway Study Committee and continued his involvement in conservation of the tri-state trumpeter swan flock. The Alpine staff biologist initiated activities that will lead to Joint Ventures wetland improvement projects in western Wyoming in FY04 and subsequent years. The Alpine staff biologist also began working on sage grouse habitat management guidelines for Wyoming in FY03, which will be completed in early FY04.

During FY03, Biological Services was involved with several species affected by the Endangered Species Act. They included the sage grouse, grizzly bear, gray wolf, and lynx. Biological Services personnel participated on committees associated with Yellowstone grizzly bear recovery, wolf delisting, and interstate conservation efforts for sage grouse and trumpeter swan. The supervisor of Biological Services served his last year as chairman of the Yellowstone Ecosystem Grizzly Bear Subcommittee and participated in the effort to finalize the "Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem".

Section personnel completed the fourth annual review of big game job completion reports and season setting recommendations, continued to coordinate a revision of the Handbook of Biological Techniques and assisted with FY03 biologist and warden hiring processes.

Section personnel were part of the Interstate Sage Grouse Working Group, Mule Deer and Antelope Working Groups, Wyoming Bird Record Committee, and the Wildlife Division's Hiring and Screening Committee. The Cheyenne staff biologist assisted organizing the Western Association of Fish and Wildlife Agencies' 2003 Deer and Elk Workshop held in Jackson in May and assisted with editing and compiling abstracts from that workshop for publication.

TROPHY GAME – MANAGEMENT & RESEARCH

During FY03, the Management/Research Branch of the Trophy Game Section continued its participation in preparing several chapters for the 2002 Annual Report for the Yellowstone Grizzly Bear Population. Considerable time was devoted to finalizing the WGFDD state management plan for wolves, which was accepted by the WGFDD Commission at its July meeting in Sheridan. The Section also represented the Department in the completion of the Final Conservation Strategy for the Yellowstone Grizzly Bear Population. This document will direct management activities for the grizzly bear following delisting. The section continues to cooperate with the USFWS and the Interagency Grizzly Bear Study Team in data collection and analysis. Several new manuscripts that were co-authored by section personnel will be printed in upcoming editions of *The Journal of Wildlife Management*.

Six grizzly bears were trapped for continuing management and research efforts. Trapping took place along the Dubois front in Horse and Long Creeks on the Shoshone National forest. We also trapped on the Bridger Teton National Forest south of Hwy 28 from Togwotee Pass to Moran. The Section also conducted 68 telemetry flights and 26 observation flights to monitor radio-collared grizzly bears and document unduplicated females with cubs of the year, which is used to assess population status. The Section also conducted two additional aerial surveys to assess grizzly bear use of moth sites. Additional ground surveys have been initiated to document potential moth aggregation sites in the Wind River Mountains. Once the ground documentation has been completed, the Section will begin annual aerial surveys to document any use by grizzly bears of these new aggregation sites.

The section prepared annual harvest reports for black bears and mountain lions, as well as recommendations for female black bear and mountain lion harvest quotas. The Section also maintains the statewide database that documents interaction for aggressive interactions between wildlife and humans. The Section also coordinated with the Wyoming COOP on research on mountain lions in the Snowy Range.

Other activities included presentations at department bear workshops and meetings of various citizens' groups, providing environmental comments on a variety of proposed projects by land management agencies and industry, and participation in several bear-related research projects.

TROPHY GAME – CONFLICT RESOLUTION

The Conflict Resolution Section will assist with completion of the annual report on human-grizzly bear conflicts published by Yellowstone National Park (YNP). This report is included in

the annual report for the Yellowstone grizzly bear population prepared by the Interagency Grizzly Bear Study Team. Section personnel helped develop portions of the State Wolf Plan and grizzly bear and wolf management cost projections for the Department.

The Section continues to coordinate nuisance control activities for grizzly bears with federal agencies, department personnel, landowners, and the public. Most of the conflicts so far this year have involved livestock losses. The numbers of conflicts involving property damage and human food conditioned bears has been relatively low this year after 2 years of record highs. Grizzly bears continue to expand in both numbers and distribution. As a result, nuisance interactions between bears and livestock have occurred over a much wider area in the last ten years. Bears presently occupy habitat over 20 miles outside the boundary of the recovery area. The section continues to aid Regional personnel in black bear conflicts.

Section personnel continued to give away bear-proof trashcans this year. About 400 empty 55-gallon cans with locking lids have been distributed to individuals in northwestern Wyoming. The cans are obtained without cost to the Department from the Wyoming Department of Transportation. Section personnel are currently working with a sanitation company in Dubois in an effort to provide permanent bear-resistant dumpsters to residents. Grants from NGO's have provided almost \$13,000 to the project, which has resulted in placement of over 25 dumpsters in areas of high bear activity and historic conflicts.

Other activities include presentations at Department bear and lion workshops, meetings of various citizens groups, and providing comments on a variety of projects proposed by land management agencies and industry.

TERRESTRIAL NONGAME SECTION

Nongame personnel conducted numerous projects to fulfill the nongame mission to manage and conserve Wyoming's rare and sensitive wildlife species. During FY03, we initiated several new projects with one-time appropriations from Congress under the States Wildlife Grants Program funding (SWG). This funding allowed us to complete surveys of high mountain streams in wilderness areas of northwestern Wyoming for Harlequin Ducks. We located 29 pairs of Harlequins, substantially increasing the number of known pairs of this unique species to over 50 in the state. Results have allowed us to develop and refine monitoring techniques, and to recommend a sampling design to effectively monitor population trends of Harlequin Ducks in the future. SWG and U.S. Fish and Wildlife Service Section 6 funding also allowed us to compare several different techniques for monitoring black-tailed prairie dogs and initiate the most cost effective technique. The inventory uses aerial infrared photography to locate and map prairie dog colonies. This effort is ongoing but nearing completion. During the summer we checked nearly 3,000 locations where remote censusing efforts identified prairie dog colonies to verify the feature and whether the colonies were active or had been subjected to control efforts or a sylvatic plague epizootic. We also initiated a mapping effort of white-tailed prairie dogs in western Wyoming and attempted to locate complexes where black-footed ferret surveys might be warranted. During 2003, several Partners In Flight projects, particularly the Wyoming Bird Conservation Plan were completed.

A telemetry study funded through SWG, using both satellite and VHF technology, was initiated in FY02 and continued through 2003 in cooperation with the Wyoming Wetlands Society to learn more about movements of reintroduced captive-raised Trumpeter Swans. This study is part of an ongoing effort to increase the distribution and number of nesting swans in the state by establishing swans in the upper Green River Basin. To date, we have released over 60 captive-raised swans and are fast approaching our objective of 10 successful nesting pairs. Although we know some individual swans have migrated as far south as Utah, Arizona, and New Mexico, and have also established connections back to the core population residing in the Jackson and Yellowstone areas, additional site-specific information is needed to understand habitat use and movement patterns of released swans for future management needs.

Nongame personnel conduct intensive monitoring annually on nesting Trumpeter Swans, Bald Eagles, and Peregrine Falcons. Data accumulated on these species have been used to develop effective management strategies. For the third consecutive year, the number of Trumpeter Swan nest attempts has been above average and a record number of young have fledged. However, swan mortality, especially due to collision with power lines, continues to be high and of significant management concern. Cooperative research and management programs helped to increase Wyoming's Bald Eagle population from 20 pairs in 1978 to over 100 pairs. Peregrine Falcons were once extinct in Wyoming, but the Department played an instrumental role in reintroducing over 385 peregrines (1980-1995). The statewide peregrine population reached at least 67 nesting pairs in 2003.

The Nongame Section annually monitors nesting success of Common Loons and colonial nesting waterbirds, and oversees monitoring of Long-billed Curlews by Department biologists. Population trends of many species of birds are being monitored on over 70 Breeding Bird Survey (BBS) routes in Wyoming as part of a continent-wide cooperative effort administered by the U.S. Geologic Survey - Biological Resources Division. Population trend data on species not adequately monitored by the BBS are provided via the Monitoring Wyoming's Birds program, first initiated in FY02. Riparian birds are also surveyed four times a year on six riparian transects in Wyoming. Songbird populations, production, and survival are annually monitored at a bird banding station in riparian habitat in Red Canyon near Lander. All of these efforts depend on nongame personnel, skilled volunteers, and systematic cooperation with groups such as Audubon Wyoming, The Nature Conservancy, and the Rocky Mountain Bird Observatory. A considerable amount of time is required to plan and coordinate these surveys, train volunteers, compile data, and provide reports to volunteers and other interested publics and agencies. However, these data may prove invaluable as we continue to evaluate the potential impacts of new threats, such as West Nile virus.

Nongame personnel continually provide landowners and land management agencies with information for evaluations of wetland development, forest and recreational planning, oil and gas development, or flood control projects through the Department's environmental commenting process. The contract biologist in Jackson is under constant pressure to provide information for numerous developments in Teton County and identify potential effects on sensitive species.

Additional inventories and projects are completed annually through cooperative cost-share agreements with other agencies and private organizations. Recently, the Nongame Section

completed the seventh year of a cooperative raptor nesting survey over a large area in eastern Wyoming. The U.S. Forest Service (Thunder Basin National Grassland) and Bureau of Land Management provided funding for aircraft rental, and the Nongame Section provided personnel to conduct surveys, compile data, and write reports.

Although black-footed ferret reintroduction has not been attempted since 1994, monitoring of the Shirley Basin reintroduction area has consumed a large portion of available resources for the Nongame Section. In August 2003, we documented the continuing persistence of a small population of black-footed ferrets that consisted of at least 49 ferrets, including 10 litters with 30 young.

Adequate coordination of management programs and information transfer can increase effectiveness of wildlife programs. During FY03, nongame personnel continued to participate in numerous committees or working groups, including chairing Wyoming Partners In Flight, the Wyoming Bat Working Group, and the Greater Yellowstone Trumpeter Swan Working Group. These groups coordinate or plan management for different nongame species on a statewide, interstate, or international basis (i.e. Partners In Flight, Western Bat Working Group, Trumpeter Swan Working Group, Western Forest Carnivore Committee, and the Western Region Colonial Waterbird Conservation Planning Committee). Nongame personnel also chair and compile records for the Wyoming Bird Records Committee, which reviews bird records for inclusion in the statewide database. Numerous reports, technical publications, and popular articles were completed this year. Completion of the Wyoming Bird Conservation Plan and Best Management Practices for several habitat types was of primary importance for the nongame bird biologist. The section made numerous presentations at summer camps, in school classrooms, at professional and public meetings, at the International Partners in Flight Conference, and for Audubon Wyoming and affiliate state chapters, and operated multiple booths at the annual Wyoming Hunting and Fishing Expo in Casper.

Nongame personnel continue to assist in the planning, development, and fieldwork of various research projects. This year, we assisted the Rocky Mountain Forest and Range experiment Station with research on lynx, the U.S. Fish and Wildlife Service and Wyoming Cooperative Fish and Wildlife Research Unit with Mountain Plover studies, and the University of Wyoming Zoology Department with research on American Dippers as an indicator species of water quality.

WATERFOWL SECTION

Although banding of migratory game birds remains a priority, no Canada geese, ducks, cranes, or doves were banded during FY03. The Waterfowl Section/Department is providing financial support to the Central Flyway pre-season duck banding effort. That crew banded ducks in North Dakota during FY03.

Maintenance and evaluation of over 1,000 goose nesting structures throughout Wyoming is also a priority. In response to reductions in personnel and funding, and considering the number of breeding Canada geese in Wyoming has increased 32% over the past 20 years, the Department is

evaluating its need and ability to bed and maintain the structures and is eliminating less effective structures where possible.

In cooperation with the U.S. Fish and Wildlife Service, the Waterfowl Section participated in annual surveys to estimate waterfowl populations and provide information necessary for setting waterfowl seasons. Included were September crane, mid-winter waterfowl, and Canada goose breeding surveys.

The Waterfowl Section remains strongly involved in Central and Pacific Flyway waterfowl management efforts, development and revision of management plans for the various migratory game bird populations, and in annual season setting. These processes require participation on the Flyway Technical Committees at the December/January, March and July Flyway meetings. The Waterfowl Supervisor completed his term as chair of the Pacific Flyway Study Committee during the first quarter of FY03.

The Waterfowl Section is also directly or indirectly involved in the management of all other migratory game birds in the two Flyways. The Section's involvement in management of whooping cranes and trumpeter swans has increased.

The Bump-Sullivan managed goose hunt was initiated in 1993 to alleviate competition among hunting parties. In FY03, Bump-Sullivan Reservoir was dry and the hunt was suspended. The hunt includes daily drawings for 12 reservoir blinds at Bump-Sullivan Reservoir as well as 4 pass-shooting blinds available first-come-first-served on the Springer Wildlife Habitat Management Area. The public continues to be very supportive of the hunt.

In FY03, Wyoming continued the light goose conservation order in the Central Flyway portion of the state. The conservation order is sanctioned in accordance with the Arctic Tundra Habitat Emergency Conservation Act. In FY03, 204 hunters harvested 1772 light geese.

The Section co-chaired the Central North Platte Action Group of the Intermountain West Joint Venture. The northeast part of Wyoming is included in the Northern Great Plains Joint Venture.

PRIVATE LANDS PUBLIC WILDLIFE ACCESS PROGRAM

Fiscal year 2003 was the first complete year the Program has been in existence. Personnel include three Regional Coordinators in Cody (Dan Smith), Laramie (Bart Morris) and Casper (Brian Olsen), an administrative assistant (Valerie Sailer) in Casper and a State Access Coordinator (Matt Buhler) also in Casper. During FY03, the PLPW Access Program provided access to 560,190 private acres through Hunter Management Areas. Walk-in Hunting provided access on 422,891 land acres, 30.11 stream miles and 80 lake acres for hunting. Walk-in Fishing provided access to 195.4 lake acres and 67.97 stream miles.

A total of 15 Wildlife Habitat Enhancement projects were conducted for a total of \$22,500. Projects included fencing (3), tree & shrub plantings (3), food/nesting/cover plots (7) and water guzzlers (2). Access Yes donations totaled \$607,282 which includes \$11,648 from direct

donations, \$105,393 through limited quota donations, \$26,250 through license selling agents, \$443,172 in conservation stamp sales, and \$20,819 in interest. Approximately 21,000 individuals donated through the limited quota application process in which 45% were residents and 55% nonresidents. Residents donated \$33,100 and nonresidents \$72,300.

FEEDGROUNDS

Feedground counts indicated that 13,347 elk were fed on state feedgrounds in FY03. This is the smallest number fed since 1986-87. The winter of 2001-02 was another year with little snowfall, which resulted in reduced numbers of elk on feedgrounds. Total elk numbers at the 22 state feedgrounds was 2,689 animals below the combined feedground quotas.

Approximately 5,491 tons of hay was fed. This is smallest amount fed since the winter of 1993-94. Since 1976, there has been only three years when less tonnage was fed compared to the 2001-2002 winter. The average cost of hay delivered to the feedgrounds was \$120/ton, which is about \$15 less than the previous year.

A cost analysis shows that the Department spent about \$56/elk for hay and feeder expenses. This is about \$18 less than the previous year.

Wolves continue to expand their range and now have killed elk on 14 of the 22 state operated feedgrounds. The number of elk killed on feedgrounds during 2002-03 was 26, which down from 74 the previous winter. The number of elk killed on feedgrounds is not considered significant with regard to affecting elk population levels. Of more concern is the potential problems created when elk are displaced from feedgrounds by wolves. Elk were chased between the 3 Gros Ventre feedgrounds, off the Jewett feedground several times (they returned each time), from Black Butte to Soda Lake, and from North Piney to Bench Corral. In addition, elk were chased onto private property (livestock operations) in the Gros Ventre and Pinedale areas. The movements of elk to the Soda Lake and Bench Corral feedgrounds proved to be beneficial with regards to lowered feedground costs and increasing the number of free-ranging elk on native winter range. The overriding concern is the unpredictability of these movements and the potential for a large variety of problems.

JACKSON / PINEDALE REGION

To minimize elk depredation to haystacks, cattle feed lines and to prevent co-mingling of elk and cattle, the region ran late elk hunts in many hunt areas in lieu of depredation hunts. Two Hunter Management Areas (HMA's) for late season elk hunting were administered again this year. The Big Piney HMA in the North Piney and Cottonwood Creek drainages (elk areas 92 and 94) were conducted to address increasing elk numbers and damage concerns. Ten private landowners allowed access to over 27,000 acres of deeded land interspersed with 26,000 acres of public land. Of the 100 access permits available, 86 access permits were issued for the season that ran from November 16, 2002, to January 31, 2003. This is twice the number of permits that were issued from the previous year. The season was for antlerless elk, but due to a group of bulls causing

damage on Cottonwood Creek, an emergency regulation was implemented to allow any elk harvest along a section of Cottonwood Creek. Bull harvest was minimal. The second HMA was Chimney Butte in elk area 98. Eight landowners enrolled 3,880 deeded acres that also provided access to several thousand acres of BLM and USFS land. One hundred six access permits were issued for this hunt with the season running from November 18, 2002, to January 31, 2003. As in the past, both HMA elk hunts were well received by the landowners involved, the hunting public and addressed chronic damage problems.

Big game and trophy game damage continue to be a problem in the region. The workload related to grizzly bear damage on sheep and cattle is increasing in the Upper Green River and Gros Ventre drainages. Assistance from conflict resolution personnel has helped decrease the damage workload for region wardens. For FY02, 27 damage claims were submitted. This included 8 claims for elk, 5 claims for moose, 1 claim for antelope, 4 claims for deer, 3 claims for black bears, 11 claims for grizzly bears, and 1 claim for Canada geese. A total of \$52,874 was paid by the Department to settle those claims.

The region's law enforcement program continues to be a priority. For FY03, region law enforcement personnel spent 7,313 hours on law enforcement. This effort documented 604 violations resulting in 214 citations, 344 warnings and 46 no actions. The region's top law enforcement priority was patrolling mule deer winter ranges in the Pinedale/Big Piney areas to detect and deter the illegal taking of mule deer bucks on those winter ranges. Region law enforcement personnel and game wardens from other regions patrolled the mule deer winter ranges seven days a week from November 18, 2002 – January 5, 2003. During that time period, 727 hours and 15,897 miles were coded to mule deer winter range patrol resulting in 115 vehicles being contacted on the mule deer winter ranges. Other region enforcement task forces and priorities were bear baiting compliance (the region registered over 550 black bear baits), antler hunting, the week long Jackson antler/wildlife parts sale and auction, and the Dell Creek/Hoback Basin mule deer patrol.

Hunting seasons for mule deer in 2002 were again liberalized for Sublette and Wyoming Range herd units. Relatively normal fawn production and average over-winter survival of juveniles from 1996 to 2001 enabled these herds to grow toward population objectives. However, recent drought conditions have significantly reduced productivity resulting in below average fawn production and yearling recruitment.

Mule deer management is still a controversial topic among some publics. Beginning in 1998, the opening date for all general license hunt areas in the region was standardized at September 15 in an attempt to spread out opening day hunting pressure. Complaints regarding hunter crowding continue to be voiced for the early season hunts. In addition, early season deer hunters are expressing concern with the numbers of domestic sheep they encounter in the high country and their impacts to the native vegetation. Deer seasons were liberalized slightly in 2002 with season lengths extended in some areas and general license "any" deer hunting available in portions of Sublette County.

Similar to mule deer herds in this region, fawn production and yearling recruitment for the northern portion of the Sublette Antelope herd has declined the past two years. Consequently,

season length and license availability has remained conservative. Due to the extremely large size of this herd unit (11% of the state of Wyoming) and wide variation in antelope density and productivity, the Sublette Antelope herd was broken into three “sub-units” managed cooperatively among the Green River, Jackson/Pinedale, and Lander regions.

The 2002 hunting seasons for moose in Sublette County were liberalized in several areas. Hunter success for the Sublette herd has remained high (90%) and ages of harvested bulls and cows indicates adequate distribution of animals throughout all age classes.

However, the number of licenses for the Jackson herd unit has been reduced over the last 10 years to address a decline in moose wintering in the Buffalo Valley, Pacific Creek, Spread Creek, and along the Snake River in the north end of Grand Teton National Park. Research indicates low pregnancy rates and poor calf survival for moose in these areas. This may be due to a combination of poor nutrition, crowding, and predation.

Since 1998, hunters have not been allowed to harvest a cow moose with a calf at side. As a result, effort by antlerless moose hunters (the number of days hunted per moose harvested) has increased while hunter success has declined slightly. It is apparent that cow moose hunters must hunt harder to find a legal moose since implementing the new regulation. Overall compliance appears good and most hunters accept and support the change when contacted in the field or at check stations.

2002 hunting success for bighorn sheep in Hunt Areas 8 and 23 declined to 56%, down from the five-year average of 75%. However, numerous trophy class rams were harvested. Horn length averaged 32 inches and age of harvested ram averaged 7 years. During the winter and spring months of 2001-2002, a substantial die-off in Hunt Area 7 (Gros Ventre) was documented. The die-off impacted all sex and age classes of sheep and resulted in a dramatic decline in permits for the 2002 season in Jackson’s Hunt Area 7. Only one of thirteen hunters harvested a ram in this hunt area during the 2002 season.

A major decline in the Darby sheep herd (Hunt Area 24) appears to have occurred sometime in 1996 and/or 1997. No legal rams were observed in summer or winter surveys in 1997 or by the 4 licensed hunters during the 1997 hunting season. As a result, the hunting season in Area 24 was closed in 1998 and remains closed today. Relatively low numbers of sheep and few legal rams have been observed since the area closed.

A significant amount of time and effort has been directed at addressing potential disease transmission between domestic and wild sheep in the Jackson/Pinedale Region. Cooperative efforts involving domestic sheep permittees, the Bridger-Teton National Forest, and the Wyoming Chapter of the Foundation for North American Wild Sheep have increased separation between wild and domestic sheep. By reducing spatial overlap, the risk of disease transmission in the Targhee and the Whiskey Mountain bighorn sheep herds has been reduced.

An expanding population of mountain goats, which originated from a transplant of 12 into the Snake River Range of Idaho, has resulted in hunting opportunities in Wyoming. Mountain goats

were first hunted in the Jackson/Pinedale Region in 1999. Since then, 4 licenses have been issued annually with hunter success averaging 100%.

Elk hunting seasons remained very liberal in 2002. Elk continue to be very abundant, with all eight elk herds in the region within 10% of their population objectives following hunting seasons. Management strategies have been designed to reduce total elk numbers while maintaining adequate bull:cow ratios. These strategies include long hunting seasons for any elk, some antlerless elk seasons extending into November or December, issuance of limited quota antlerless elk licenses with longer seasons and issuance of limited quota, reduced price cow or calf licenses. Weather conditions in most of the Jackson/Pinedale Region were mild (warm and dry) during the September and October seasons. In the Jackson herd unit, total harvest declined in part due to weather conditions. Hunter participation for the Jackson herd unit has also declined when compared to the late 1990s. The late elk hunting seasons on the National Elk Refuge, in Grand Teton National Park, and in area 71 in the west half of the Teton Wilderness was an attempt to harvest additional elk migrating out of southern Yellowstone National Park. Unfortunately, the hunting seasons closed before most of the elk from Yellowstone migrated to winter ranges in Jackson Hole, resulting in less antlerless elk harvest than anticipated.

A total of forty-seven bison (25 bulls, 22 cows) were harvested in 2002 on national forest land in the Jackson bison herd. This is the largest harvest of bison since the hunt was reinstated in 1999. The Department appealed an injunction placed on hunting bison as part of a lawsuit filed in Washington D.C. by the Fund For Animals. The Forest Service was found to be exempt from the injunction and removed their closure order on the Bridger-Teton National Forest. The Department moved ahead with a limited bison hunt in late October, 1999. In January 1999, the Wyoming Game and Fish Commission adopted an objective of 400 bison for the Jackson herd unit. The post-hunt population in 2002 was estimated to be 730 animals and the population is expected to surpass 800 bison in 2003. The bison herd is generally restricted to the valley floor in Grand Teton National Park (GTNP) and the National Elk Refuge (NER). As a result, only limited opportunities to harvest a bison were available on national forest land in 2002. As the herd continues to grow there will be more opportunities to harvest bison as they move into areas on private and national forest lands. However, it will not be possible to control numbers of bison as the majority of animals spend the fall season on GTNP and the NER. Conflicts between bison and humans are likely to increase as the population grows.

Hunters were generally satisfied with the 2002 hunting seasons. Although there continues to be public pressure to increase the number of animals in certain areas. During 2002, regional personnel field-checked 206 antelope, 1,124 mule deer, 2,045 elk, 258 moose, 11 bighorn sheep, 47 bison, and 4 mountain goats.

Post-hunt population data was collected from helicopter surveys for moose, elk, mule deer, mountain goat and bighorn sheep. Classification counts of elk on feedgrounds and ground surveys for mule deer augmented aerial surveys. Regional personnel classified 1,544 moose, 25,694 elk, 13,591 mule deer, 55 mountain goats, and 262 bighorn sheep. Preseason classifications of antelope were conducted from the ground. A total of 4,600 antelope were classified during these preseason surveys in 2002. Adequate sample sizes were achieved for most big game herds.

Precipitation during the 2002-2003 winter was lower than average for most of the region. Poor quality vegetation on winter ranges due to low precipitation during the 2002 growing season led to poor condition of nursing does and below average production for mule deer and antelope. Winter mortality surveys conducted in the Sublette and Wyoming Range deer herds indicated winter losses were in line with mild winter conditions. However, habitat conditions on deer and antelope winter ranges continue to deteriorate due to poor growing conditions. Significant winter losses could materialize if "normal" winter weather is encountered during the 2003-2004 winter. As previously mentioned, losses of bighorn sheep in Hunt Area 7 (Gros Ventre) were high in 2001-2002. It is estimated that up to 75% of the sheep wintering in the Crystal Creek drainage were lost during the 2001-02 winter. Drought conditions in 2002-2003 continue to limit winter range productivity and as such, lamb production and survival continues to be poor for the Gros Ventre segment of the Jackson Bighorn sheep herd.

Regional personnel continued to work with personnel from the Habitat Branch on numerous habitat improvement projects. The erratic wildfire season during 2002 prevented implementation of several habitat improvement projects. However, monitoring of past projects, inventory and planning of future projects continued in FY03. Projects include improvements to elk and bighorn sheep habitat, aspen regeneration, and shrub rejuvenation projects on mule deer winter and transitional ranges.

Work on the Brucellosis-Feedground-Habitat (BFH) program continues. Personnel developed habitat projects, range improvements and provided stackyards to ranchers to discourage interaction of elk and cattle. Efforts to reduce commingling between elk and domestic livestock along the Piney Front, Salt River Range, and Pinedale Front have been underway for several years and many hay stacks vulnerable to elk depredation have been fenced. Regional personnel from all divisions have assisted with movement of elk from damage situations to native winter ranges or nearby feedgrounds.

As part of the BFH Program, vaccinating for brucellosis continued on most of the state operated feedgrounds. Elk were trapped at the Greys River, Dell Creek, Franz, Green River Lakes, National Elk Refuge, and South Park feedgrounds to monitor brucellosis sero-prevalence and the efficacy of the vaccination program. All of the mature cow elk trapped at those locations were tested for brucellosis, ear tagged and neck banded. Calves and yearling bulls were ear tagged.

In FY03, the region conducted surveys of sage grouse leks and brood production, and made wing collections from harvested birds. A total of 121 leks were checked and 74 (61%) were active. The average maximum count of male sage grouse was 26 for active leks in 2003. Regional personnel assisted the non-game program with surveys of long-billed curlews, breeding birds, and peregrine falcon, bald eagle, and trumpeter swan restoration and monitoring programs. Regional personnel cooperated with the Trophy Game Section to conduct aerial surveys of grizzly bears. Department personnel worked with personnel from the National Elk Refuge and Grand Teton National Park to collect population data for bison.

Management of black bear and mountain lions continues to be extremely controversial in the region. In response to apparent increases in lion populations, mortality quotas have been

incrementally increasing in the Jackson, Wind River, and Wyoming Range lion hunt areas over the last 10 years. Hunt area boundaries were reconfigured to split area 17 into two smaller areas (area 17 on the Piney Front and area 26 in the Greys and Salt River drainages). A portion of area 17 in the lower Hoback drainage was added to area 2. A total of 36 lions were harvested in 2002 with all four hunt area quotas filled. Most of the public's concerns about too many lions relate to perceived increases in lion predation of mule deer and bighorn sheep and concerns for public safety. Much of the controversy in Jackson Hole is generated from persons who want no lion hunting or want to create a lion refuge area.

Mortality quotas for female black bears increased throughout the region in 2002. The Jackson management unit filled the quota of 20 female bears while Greys River recorded a harvest of 22 females with a quota of 24. Various indicators show bear populations in the region are robust. Since the current management system is very conservative, hunting pressure is focused in areas with high levels of bear activity. Bears removed from the population in depredation control actions, accidents or natural mortality are not included in female mortality quotas.

Biologists in the Jackson/Pinedale region reviewed over 100 environmental assessments, environmental impact statements and other NEPA related documents in FY03. Numerous other contacts were made with private individuals and state, federal, and county agencies in efforts to minimize environmental impacts to wildlife. Oil and gas development in the Upper Green River Basin has dramatically increased workloads for regional personnel, as biologists participate in various efforts to resolve conflicts between wildlife and oil and gas development, promote better habitat management practices, and prescribe mitigation of impacts. Providing input regarding subdivision development and other county land use planning issues has added substantially to environmental workloads in this region along with various highway reconstruction projects.

Regional personnel participated in a number of workshops, public forums, and open houses to share information, collect public input, and provide wildlife education to the public. The Department sponsored some of these meetings, and the Department also cooperated with other public agencies and conservation groups to address big game management, trophy game management, brucellosis control in livestock and wildlife, wolf reintroduction and management, and management of recreation on winter ranges.

CODY REGION

Winter conditions were favorable in many areas of the Bighorn Basin in FY03; precipitation was again below normal during summer 2002. Spring 2003 precipitation returned to more favorable levels, initiating good forage production. However, late May and June 2003 again turned dry and hot, and much of the forage cured out earlier than normal. Forage production was below average in the interior of the Basin, but closer to normal along foothill zones in the Absaroka and Bighorn Mountains.

Pronghorn populations were estimated to be below objective in all herd units (N=5) in the Bighorn Basin. Pre-season fawn:doe and buck:doe ratios in August 2002 were generally below 5-year averages. Persistent drought conditions and resultant habitat conditions appear to be

impacting pronghorn herds more than other big game herds in the region. Doe/fawn antelope licenses were slightly reduced for 2003, due to chronically depressed fawn recruitment. Minimal doe harvest is anticipated in the next 2-3 years, until normal precipitation patterns return and fawn recruitment improves. However, due to poor habitat conditions, maintaining herds below objective is a recommended strategy, so some doe/fawn harvest will occur.

Mule deer populations were estimated to be below objective in all herd units (N=8) in the region. Post-season fawn:doe ratios were slightly improved (compared to 2000 and 2001) in 4 herds (i.e., Paintrock, SW Bighorns, Basin, Owl Creek/Meeteetse), but still below 5-year averages. The other 4 herds (Greybull River, Shoshone River, upper Shoshone, Clarks Fork) had comparatively lower fawn:doe ratios than in 2000 and 2001, and were also below 5-year averages. Post-season buck:doe ratios ranged from 18-30:100 does, somewhat lower than recent 5-year ratios, in large part due to depressed fawn recruitment in recent years. Doe/fawn licenses were decreased slightly for the 2003 hunting season in the Bighorn Basin. Even though deer numbers were generally below objective, some antlerless deer harvest is necessary to address deer concentrations near irrigated lands. Also, maintaining deer herds below population objectives was deemed desirable, due to poor habitat conditions resulting from persistent drought. This will be the anticipated management approach until normal precipitation patterns return and fawn recruitment improves.

White-tailed deer numbers appear to have rebounded following the summer 2001 epizootic hemorrhagic disease (EHD) outbreak. Up to 70% of the white-tailed deer in the Lovell area were estimated to have been lost, with lesser reductions in other portions of the central/eastern Bighorn Basin, and essentially no loss in the western third of the Basin. For all hunt areas in the Bighorn Basin, any white-tailed deer licenses were increased by 40 for the 2003 season, while doe/fawn white-tailed deer only licenses were unchanged. White-tailed deer typically occur along major drainages, and numbers are generally managed in accordance with landowner tolerance and potential depredation.

Four of 6 elk herds in the Bighorn Basin were estimated to be above population objectives, while 2 herds were at or below objective. Liberal hunting seasons, increased cow elk harvest, and reduced calf recruitment have lowered elk numbers in many, but not all, hunt areas. Potential wolf predation on calf elk remains a significant public and agency concern, as wolf numbers and distribution continue to expand. It is anticipated that many elk herds may be near population objectives after the 2003 hunting season. For 2003, Type 6 cow/calf licenses have been sharply reduced, and late (i.e., January) hunting seasons have been trimmed or eliminated.

Based on hunter/outfitter reports and limited department observations, numbers and recruitment of moose appear to be declining in the Absaroka Mountains, while moose numbers and distribution on the west slope of the Bighorn Mountains appear to be increasing slowly. Residual habitat problems from the 1988 fires and persistent drought, combined with suspected predation by bears and wolves, likely contribute to this decline in moose numbers. Despite lowered moose numbers and reduced hunter opportunity, hunter success remains $\geq 75\%$ in all hunt areas.

Bighorn sheep in Hunt Areas 1-5 continue to do well, with over 4,000 sheep estimated to occur in these 5 areas. Over 80% of Wyoming's licenses and harvest typically occur in Hunt Areas 1-5.

Any-ram limitations have been in place for 4-8 years in several hunt areas, and Area 1 was changed to any ram for 2003. Hunters continue to harvest 90% or more “3/4-curl” rams in areas where any ram is legal, and total hunter success in Hunt Areas 1-5 continues to be $\geq 65\%$.

Mountain goats in the Beartooth herd appear to be doing well. Kid production and recruitment are good, and overall herd size remains near 200 wintering animals. Mountain goats continue to be observed in the Sunlight Creek drainage and other areas south of the Clarks Fork River. Improved coordination on goat management has occurred with Yellowstone National Park and Montana Department of Fish, Wildlife, and Parks. WGFD management goals include minimizing expansion of goats into prime bighorn sheep habitat south of the Clark's Fork River. Hunter success was 92% in 2002 and is expected to remain high in 2003.

Bison movements were very limited in FY03, so no hunt was held in the Cody region. On September 1, 2002 one bull bison moved out of Yellowstone National Park to winter along the Northfork of the Shoshone River, on Shoshone National Forest land. From late September until late November, 4 more bull bison left the Park. A total of 5 bulls spent the winter along the Northfork of the Shoshone River. The first bull returned to the Park on May 29, 2003. The last 4 bulls returned to the Park for the summer breeding season by June 3, 2003.

Following relatively good bird hunting from 1998-2000, hunters harvested fewer birds in 2001 and 2002, especially gray and chukar partridge. Persistent drought conditions during spring/early summer 2001 and 2002 was once again detrimental to sage grouse and partridge nesting efforts, as residual and new herbaceous cover was affected. Slightly more favorable precipitation during spring/early summer 2003 resulted in enhanced forage/nesting cover production, and likely improved survival of chicks during summer 2003. Pheasants and blue grouse fared somewhat better, and hunters had average success harvesting these two game birds. Sage grouse bag limits and season length were reduced for the 2002 hunting season to further protect breeding stock during the persistent drought.

Increased data collection for sage grouse continued in FY03. During spring 2003, 126 strutting grounds were surveyed (compared to 81 in spring 2002) and 63 (compared to 54 in spring 2002) were counted multiple times to determine peak attendance. Average number of males observed per lek (N=13.2) was slightly higher than in spring 2002 (N=11.4), but well below the 1999 peak level (N=24.5). Samples of summer grouse broods and wings collected from hunters were again quite small, and again indicated poor chick production/survival. After three years of good production and population increases from 1997 to 1999, estimated sage grouse populations declined in 2000-2002; a slight increase in FY03 was projected. Hunter participation and harvest have steadily declined in the past 5 years, reaching a low of 310 hunters and 430 birds harvested in fall 2002. Historic and recent data have been compiled in a regional sage grouse completion report this year.

Wild turkey populations have been doing well since the initiation of aggressive transplanting efforts in 1996. A total of 580 Rio Grande and 219 Merriam's turkeys have been transplanted from Oklahoma, Lusk, Douglas and Sheridan over the last seven years to several locations along the Shoshone, Bighorn, Greybull and Nowood Rivers and on Pat O'Hara, Shell, Rattlesnake and Gooseberry Creeks. Several broods of turkeys have been observed along the Shoshone, Bighorn

and Greybull Rivers the last two years. Hunters were very successful in both areas 6 and 10 during the spring 2003 turkey season. Suitable turkey habitat also occurs along the Bighorn River near Thermopolis and along the lower end of Owl Creek but landowner support still needs to be obtained before any turkey releases can occur in these remaining two sites.

Regional personnel classified 4,422 antelope in five herd units, 11,095 mule deer in eight herd units, 283 white-tailed deer in one herd unit, 7,277 elk in four herd units, 1,577 bighorn sheep in four herd units and 79 mountain goats in one herd unit.

Regional personnel made 1,470 landowner contacts during FY03 and spent 5159 hours contacting hunters and fishermen and collecting harvest and management information (activity codes 510-512 and 520). Harvest field checks totaled 1,037 elk, 1,453 deer, 118 antelope, 63 bighorn sheep, 11 moose, 11 mountain goats, 17 black bears, and 6 mountain lions. Body condition was evaluated on 42 mule deer from the Southwest Bighorn mule deer herd unit using a fat index score between 0 and 20. Body condition rating averaged 16.5, the highest since 1999.

A total of 3,002 hunters and 3,802 licenses were checked through the Cody check station. Due to budget cuts, the check station was opened 5 days earlier but closed 30 days earlier than in 2001, for a net reduction of 25 days of operation. One full time employee and three part time employees operated the check station from October 13, 2002 to December 7, 2002. The check station ran 20 hours per day instead of 24 compared to FY02, so hunter numbers/hour of operation were not directly comparable to previous years. Nine moose, 23 bighorn sheep, 64 antelope, 977 mule deer, and 420 elk were checked through the check station.

Regional personnel spent 333 hours (activity code 540) reviewing 110 project proposals, down 10 (8%) from FY02, providing comments on potential impacts to wildlife and recommending mitigations measures to minimize or eliminate negative impacts.

Law enforcement efforts throughout the year were routine. The number of violations detected increased but the number of citations decreased and warnings issued remained the same during FY03. Law enforcement officers spent 4754 hours on enforcement activities, resulting in 312 incident reports, 207 citations, and 218 warnings. One law enforcement aid was employed October through January to assist with enforcement on PLPW lands.

The number of damage complaints decreased in FY03 to 241 but the number of claims received remained about the same, 37. The thirty-seven claims resulted in the payment of \$63,414 for damage to crops and livestock, an increase of \$7,800 from FY02. The game wardens and a damage aid spent 2434 hours preventing and evaluating damage to crops and livestock caused by big and trophy game animals. In addition the trophy game section spent numerous hours looking at livestock damage and trapping nuisance bears. Damage to hay made up 41% (\$25,950) of the total damage followed by damage to livestock by trophy game animals 40% (\$25,370), damage to corn 7% (\$4,363) and other damage 12% (\$7,731). This year was the first time in many years that no claims were filed for damage to alfalfa seed. Drought conditions have caused many animals to move into hay fields to get feed and water resulting in a significant increase in damage to hay.

SHERIDAN REGION

Drought conditions continued for the third year in the Sheridan Region during FY03 (July 2002 – June 2003). Most of the region was again under fire restrictions during the summer and into early fall. Lightning ignited rangeland fires occurred within the region throughout the summer of 2002. Several ponds and streams dried up and many reservoirs on the Bighorn Mountains were drawn down to low levels in 2002. The dry spring of 2002 set the stage for reduced forage production in much of the region. But precipitation in the late summer and early fall coupled with cooler temperatures did allow for some late green-up and growth of some plants. Overall the winter of 2002-03 was considered to be mild as temperatures were warmer than normal during December and January with below average precipitation. Seasonal weather returned in February and March. Good amounts of precipitation during the spring of 2003 resulted in more growth of vegetation in 2003 compared to recent years.

Overall, populations of antelope have been slowly building throughout the Sheridan Region due in part to relatively conservative seasons in many hunt areas during recent years. Eight of eleven herds appeared to grow while population decreases were noted in three other herds. In all but two herds, fawn to doe ratios increased compared to the previous year. As populations have grown, more licenses were made available. Harvest in ten of eleven herds increased in 2002 compared to 2001. Following the 2002 hunting season, four of the eleven herds were estimated to be within 10% of the population objective while the other seven herds were more than 10% above the population objective. In many of the herds over objective, several landowners indicated numbers of antelope were at or even below their desired number of antelope. Access for hunting in many of these areas is difficult which has resulted in some licenses going unsold or hunters purchasing licenses and then having difficulty finding a place to successfully fill the license. In only one herd unit (Beckton), did the largest number of landowners surveyed indicate the number of antelope was higher than desired. It has been very difficult to obtain an adequate harvest in this particular herd unit due to hunting access problems.

Mule deer populations were estimated to either be at or below the population objectives for four herds in the Sheridan Region. In three of the four herds, the population size increased in 2002. The majority of landowners surveyed indicated that deer populations were below or at their desired levels. Hunters, particularly those using public lands, seem to always want more deer to choose from. Although seasons in 2002 were similar in structure to 2001, harvest decreased in the four herd units. In most hunt areas throughout the Sheridan Region hunting regulations were designed to allow the take of only antlered deer on public lands while allowing the take of any deer on private lands. The regulation allowed flexibility for landowners that wanted to address damage or reduce the deer population on their lands. In 2002, fawn to doe ratios increased compared to the previous year but were still below the long-term average.

Two elk herds were within 10% of the post-season population objective and two herds were more than 10% above the objective. Liberal elk hunting seasons provided sportsmen much opportunity with hunting beginning September 1 and the finally ending December 22 but overall harvest decreased compared to the previous year. Limited access to hunt elk on private land continued to impact hunter success. General license any elk hunting from October 1 through

November 5 was again allowed in Areas 36 and 37. In Areas 34, 36, and 37 reduced price cow/calf licenses allowed hunters to take a second elk during 2002. A general license any elk season for Area 129 ran from September 1 through November 30. This area included lands within the Sheridan, Casper, and Laramie Regions outside established herd units.

Sharp-tailed grouse and gray partridge populations were again at low levels in 2002. The continued drought conditions during 2001 resulted in little residual cover to provide security and nesting cover for 2002. The blue grouse population produced fairly well on the Bighorn Mountains and hunting was about average. Pheasants raised at the WGFD bird farm were released on walk-in areas with many sportsmen taking advantage of this bird hunting opportunity.

Regional wildlife biologists were again able to conduct aerial surveys of sage grouse leks in the spring of 2003. Funding for this effort was provided by the BLM. Nearly 70% (174 of 251) of leks were checked from either the air or ground by WGFD, USFS, BLM, private consultants, and volunteers. The surveys included discovery of 9 previously undocumented leks and the monitoring of activity on known leks. In five years of intensified survey efforts, 74 undocumented leks have been found. Attendance at leks by sage grouse again decreased indicating a slight decline in the population since 2002. This was the third year of decline since the most recent peak in 2000. Sage grouse wings were collected in wing barrels during the 2002 hunting season for the third consecutive year.

WGFD personnel and interested landowners in the Sheridan Region did winter flock counts and classifications of wild turkeys. This information has been valuable for encouraging landowners to allow turkey hunting. Wild turkey populations in the Sheridan Region were large enough and predominantly were found on private lands that "area license" hunting was again offered for the fall of 2002 and spring of 2003 with the license being valid in Hunt Areas 3, 5, & 7. The area license concept was well received with hunters being able to purchase a license locally rather than apply through the Cheyenne headquarters. An adjustment to the area license concept was proposed in 2003 where the license will be a "general" license that will be valid for any wild turkey general license hunt area.

Personnel classified big game before and after hunting seasons. For herds where the Sheridan Region has Job Completion Report writing responsibility, 18,602 antelope, 150 elk, and 87 moose were classified during the 2002 preseason surveys. Postseason 2002 classifications were conducted on 2890 elk, 1496 white-tailed deer and 10,772 mule deer.

Personnel on patrol and at check stations checked 430 elk, 69 white-tailed deer, 1254 mule deer, 482 antelope, and 11 moose. These figures include animals checked by Sheridan Region personnel and animals that were harvested in Sheridan Region hunt areas but checked by personnel from other regions. Sheridan Regional personnel also provided field checks to surrounding regions for big animals from their areas. Game wardens and regional office personnel inspected mountain lions, black bear, bighorn sheep and checked small game, game birds and fish.

Check stations were utilized to gather harvest data, monitor compliance, and provide information to the public. Smaller check stations staffed by 1 to 3 persons were used in all biologist districts. Two larger check stations were conducted. One was located on Highway 14 west of Dayton from October 17 through 20 and the other on Highway 16 west of Buffalo October 17 and 18.

Damage complaints were dominated by mountain lion depredation of domestic sheep near Kaycee and Buffalo. Eight claims totaling \$8,521.99 were received of which \$4,584.85 was paid. One claim was completely denied because it was received past the mandatory deadline. Damage to stored or growing crops by deer decreased in FY03. Seven claims totaling \$5,843.00 were received and all were paid in full. Most stored crop damage was effectively addressed by fencing. One claim for \$3,240.00 because of antelope damage was paid in full. No claims were received for damage done by wild turkeys. Total damage claims for FY03 decreased significantly to \$17,604.99 with \$13,667.85 approved for payment.

Access for hunting continued to be a regional priority. Residents and non-residents used Hunter assistance services in Buffalo in cooperation with the Chamber of Commerce and in Gillette with the Visitor and Convention Bureau. Walk-in access areas were made available throughout the region for both fishing and hunting during 2002.

Regional personnel continued to disseminate information and interact with the public through programs presented to schools and other groups. Personnel provided information for or wrote news releases and appeared on television news programs or radio shows.

The Sheridan region continued to feel the impacts of energy development in the Powder River Basin in FY03. Human population growth and increased violation detection efforts likely resulted in a substantial increase in detected violations. Regional officers documented 743 violations in FY03 compared to 492 violations documented in FY02. This represented a 51% increase in the number of detected violations from FY02 to FY03.

No one violation category accounted for the increase. The number of detected violations appeared to increase in most violation categories. False oath violations, for example, increased from 41 in FY02 to 46 in FY03. This translated into a relatively modest 12% increase. Most categories experienced similar increases.

Watercraft violations, however, experienced a nearly 30% jump between FY02 and FY03 (134 FY02 versus 174 FY03). Although the actual violation rate may have changed during this comparison-reporting period, the increase is more likely due to a change in patrol strategies instituted in calendar year 2003. In the past, watercraft enforcement officers were assigned to Lake DeSmet during April, May and June. One weekend patrol was conducted at Keyhole during this three-month period. Due to watercraft enforcement concerns at Keyhole reservoir, watercraft patrols were concentrated almost exclusively at Keyhole rather than at DeSmet in calendar 2003. As expected, officers encountered a relatively heavy enforcement load at Keyhole State Park, even early in the boating season. This likely contributed to the substantial increase in the number of watercraft violations.

This example illustrates that regional officers are capable of improving their effectiveness at detecting violations through planning and review of enforcement efforts. In recent years, the region has focused on false oath, out of season/winter range, wanton destruction and watercraft enforcement. The region remains committed to the planning process as a means of detecting a greater number of violations relative to the actual violation rate.

Increased efforts at detecting violations were coupled with other deterrence methods during FY03. Wardens continued extensive public contacts and field patrols to maintain officer visibility. These efforts contributed to the few “winter range” violations detected in the Powder River Breaks. Contrary to the year previous, the problem of illegal take of moose in the Buffalo area subsided in FY03. This may have been the result of extensive education efforts regarding the difference between moose and elk. “The Wardens Den”, a local radio program in Gillette, was instituted, in part; to convey enforcement related messages and enjoyed a strong following. All of these efforts were intended to reinforce more traditional deterrence approaches.

As the region copes with declining funding and a reduction in personnel time, officers are relying on a broad range of deterrence methods to accomplish the task of wildlife law enforcement. Planning, prioritization and a commitment to the team approach are seen as crucial to future success.

GREEN RIVER REGION

Three personnel changes occurred in the Green River Region in FY03. Rick King replaced Herb Haley as the new Mountain View Game Warden. Allen Round retired after 25 years of service. Michelle Bourassa resigned as the region’s Terrestrial Habitat Biologist and that position remains vacant.

Antelope numbers continue to decrease slightly over most of the region. Poor reproduction as a result of poor habitat conditions has resulted in these declines. We decreased permits slightly in the Sublette pronghorn herd as a result of the reduced numbers of pronghorn. Numbers were either reduced or remained stable across the remainder of the region. We flew antelope line transect surveys in Baggs, Carter Lease, Cedar Mountain, and South Rock Springs in 2003. The South Rock Springs objective was approved by the Commission and so was reduced from 8,000 to 6,500.

Deer numbers are stable in most herds. Because of lower recruitment over the past few years the number of older bucks is declining in most areas. For this reason and because of the continued drought conditions, which has negatively affected most deer ranges, we set seasons that allow some does harvest in many hunt areas for 2003. This should decrease densities slightly on winter ranges that are in very poor condition. Conditions were very dry again in 2003 and we are seeing negative consequences to many of the big game habitats within the region. The higher elevation ranges fared better than the lower elevation ranges in the region.

Elk numbers remain high within the region with most herds over objective. The Commission approved a new objective for the Steamboat herd increasing the objective from 500 to 1200. This

has put this herd much closer to its new objective although it is still above the objective with an estimated population of about 1,700. Liberal seasons have been set for most herds in the region. We tried a general, any elk season for the Sierra Madre herd for 2002 but it increased hunter numbers significantly and it did not reduce the bull harvest as we had hoped would occur. For this reason it was eliminated for the 2003 season.

Several different studies are ongoing within the region. The study involving the Steamboat Elk herd was continued by the BLM because the original study suggested that elk in the Steamboat area are sensitive to human disturbance especially as it relates to roads in the area. Because this area is being considered for further oil and gas development the BLM felt it was important to continue to monitor this population. It is looking at elk movements relative to activity in the Jack Morrow Hills. Two pronghorn studies are also ongoing in the region. The first is looking at the movement of GPS collared pronghorn as they move between various seasonal ranges. It has already shown some interesting movement patterns and has helped to pinpoint fences that are acting as barriers to pronghorn. The BLM's own boundary fence between the Kemmerer and Rock Springs district is a major barrier to pronghorn movement. Additional collars were placed on pronghorn in this herd in order to monitor mortality in adults as part of a larger study that also has marked pronghorn in the Medicine Bow herd.

We received a copy of the final report on the Midget-faded rattlesnake study south of Green River. We still have not received final reports for the Big Piney elk study area or the sage-grouse study in the Kemmerer area both of which have been completed. A final report on the evaluation of the Nugget canyon underpass was received and it showed deer readily use the underpass although many deer refused to pass the box. Unfortunately, since we did not have marked deer it is unclear how many of the deer that turned away from the box eventually crossed through on later attempts. It is our belief most deer eventually passed and that the underpass has been successful. As the size of the box was made smaller greater numbers of deer refused to pass through. The larger size is believed to be a minimum size for underpasses.

The Nugget Canyon underpass work has led to a cooperative effort with the WYDOT to build additional fence along the Nugget Canyon and to add additional underpasses to pass deer. This should reduce mortalities even further and help protect this important migratory passage for the Wyoming Range deer herd. Preliminary planning has occurred and construction is planned for future years.

Several Green River personnel are serving on the Mule Deer, Sage Grouse and Pronghorn working groups. Personnel are also involved in several other statewide working groups and committees as well as participating with the Leadership development Program.

There are CRMs within the region and our personnel are involved with these ongoing cooperative efforts. The CRMs include the Willow Creek, Cumberland, and Big Sandy.

Oil and Gas development continues to be a major wildlife concern within the region as the number of wells, pipelines and facilities increase. Preliminary planning for coalbed methane development has begun in the Wamsutter/Baggs area. An oil and gas biologist was hired in FY01 to address the many issues facing wildlife however this person left in the fall of 2001 and

we have been unable to fill the position. One of the biggest factors in trying to fill the position was the temporary nature of the job. We decided to make the position permanent if we could get backing from the BLM and Petroleum Association for their cost share of this position but neither wanted to commit to a 1/3 share of their funding for the 3-year period and so the position was eliminated. This is unfortunate because impacts continue to mount from the extensive development and we do not have the resources to collect the type of monitoring data necessary to understand how the development is affecting wildlife populations.

Green River personnel spent approximately 10,300 hours were on wildlife management activities, with approximately 5,000 wildlife observations recorded, and 18 annual reports written for big game herds, and we evaluated over 80 projects for possible impacts to wildlife.

Green River Region enforcement personnel worked approximately 6,000 hours on wildlife law enforcement and 500 hours on watercraft safety and enforcement. Law enforcement activities were routine in FY03 with 544 cases resulting in 388 warnings, and 270 citations. These work hour figures do not include contract enforcement personnel.

We spent a total of 1,300 hours on damage prevention and handling and handling of nuisance or injured wildlife. We investigated four big game damage claims totaling \$3,562.50, all paid in full (1 elk, 1 antelope, 2 moose), seven trophy game claims totaling \$2,890.48, all paid in full (4 mountain lion, 3 black bear). The total payments for eleven damage claims were \$6,452.98.

LARAMIE REGION

A brief review of weather conditions during the summer of 2002 and browse transect data collected during the fall indicates that forage availability was down during the winter of 2002/2003. Drought conditions and higher than normal temperatures persisted during the summer of 2002. Wyoming has been in a significant dry spell since October 1999. As in the summers of 2000 and 2001, leader growth along established transects was down again in 2002 near Laramie Peak, the Shirley Mountains, the Platte Valley, and on Sheep Mountain. Body condition indices collected on mule deer at check stations during the hunting seasons were again poor to average showing the effects of summer drought. Winter 2002/2003 was mild. Late spring 2003 was particularly cool and moist. Plant growth responded accordingly. In spite of a good spring it will take several years of above average precipitation for soil moisture reserves and plant root systems to recover from the current drought.

In response to continuing drought pronghorn fawn production in August of 2002 was below the long-term (1979 – 2000) average in the Laramie Region. Fawn production has generally shown a steady decline since 1979. In spite of generally decreasing productivity, concerns over habitat conditions have resulted in more hunting opportunity being offered. Hunter access issues complicate management in most of Southeast Wyoming where only about 50% of the doe/fawn (Type 6) licenses typically sell. Access issues in private land herds are straining our ability to manage populations for established objectives.

Mule deer fawn production in December of 2002 was near the long term (1979 – 2000) average in all herds. In recent years all populations have been increasing slowly. Some decline over the winter of 2002/2003 was likely as a result of a drier and hotter than normal summer, lower than normal forage production and lower body condition going into the winter. Management indicators all point to more hunting opportunity being available. Unfortunately, access issues and the resistance of the public limit our ability to significantly liberalize mule deer seasons. In spite of public resistance, we are nearing the point in many herds where continued drought, declining habitat quantity, quality and habitat fragmentation will make more proactive management critical. It is not logical to expect that a declining habitat base will be able to sustain deer densities like we have seen in the past. Unfortunately, this is what much of the public continues to expect. This issue presents a most difficult public education challenge.

In cooperation with Wildlife Veterinary Research Services personnel, brain stem samples were again taken to document the incidence and distribution of chronic wasting disease (CWD) in both mule and white-tailed deer. The 2002 hunting season was the third year that samples were obtained from meat processors by having them fill out and attach a data form to each head. Heads were then collected by Vet Services personnel. Meat processors in Douglas, Casper, Glenrock, Laramie, Rock River and Torrington were paid one dollar a head for those samples that were useable and had data forms completed. In that portion of the CWD zone found within the Laramie Region (Zone = those hunt areas where CWD has been found via targeted or hunter harvest surveillance; Hunt Areas 15, 16, 55, 57, 59, 60, 61, 62, 63, 64, 73, 75, 78) a total of 1,317 useable mule deer samples and 168 useable white-tailed deer samples have been taken via harvest surveillance since 1997. One hundred twenty one mule deer and 16 white-tailed deer have tested positive.

Elk production remains good throughout the region. Season strategies have changed from trying to reduce elk to maintaining them at current levels. Elk in all three herds (Iron Mountain, Snowy Range and Shirley Mountain) have extensive private sanctuaries available to them making harvest management difficult.

Bighorn sheep continue to present significant management challenges in southeast Wyoming. The Douglas Creek herd has stagnated at about 100 sheep. Only one hunter took a legal sheep in this herd in 2002. The Encampment Herd continues to decline or at best maintain itself at low numbers. Proximity to domestic sheep in the Sierra Madre Range significantly decreases the possibility of doing much for this herd. The Laramie Peak herd continues to expand southward. The herd unit/hunt area boundary was recently expanded to reflect herd movements and add occupied habitats to the hunt area. Unfortunately, these sheep have moved to private land areas where hunters have very limited access. Harvested animals continue to come from several small groups of sheep on accessible public lands. All four hunters were successful in 2002.

Laramie Region personnel are working closely with the USFS on the revision of the Medicine Bow Forest Plan. The current plan was implemented in 1985. A draft of the revised plan is due out by the end of the calendar year with the hopes of having a completed document by the end of 2004. The Rawlins Field Office of the BLM is currently reviewing their Resource Management Plan. The current plan was implemented in 1990. Subdivisions and other developments are continuing to devour wildlife habitat. These subdivisions and industrial developments when

taken individually appear to have almost no impact. However, when looked at in total the amount of wildlife habitat and open space lost becomes significant. The insatiable demand for cheap energy in the United States and depressed agricultural economies has resulted in these projects going through with few or no restrictions.

During the year, enforcement officers spent 5604 hours and drove 101,728 miles patrolling southeastern Wyoming in their efforts to protect fish and wildlife. Game wardens spent 1149 hours and drove 13,663 miles investigating reported violations. Big game seasons, yearlong fishing seasons, and game bird seasons in Goshen, Platte and Laramie Counties required substantial law enforcement efforts. A total of 647 citations and 497 warnings were issued in the Laramie region for game and fish violations.

Watercraft use on Platte County reservoirs remained high. Regional personnel and the Glendo reservoir crew continued to emphasize boating safety. Laramie region personnel spent 1567 hours patrolling the waters in southeast Wyoming. The Glendo reservoir crew checked 609 watercraft and contacted 2004 boaters and fishermen. They issued 112 citations and 92 warnings. They also made ten arrests for boating under the influence, an increase from previous years.

The Laramie Region received 20 damage claims in FY03, with approved payments of \$41,661. Regional personnel spent 583 hours and drove 11,000 miles on damage prevention activities. They spent 276 hours and drove 2410 miles on damage claim evaluations and investigations. Most of the claims involved elk damage to standing crops. Laramie regional personnel spent 314 hours and drove 6079 miles responding to injured or nuisance wildlife calls.

LANDER REGION

Weather conditions during FY03 were generally not favorable for wildlife within the region. Severe drought during the spring and summer of 2002 left nearly all seasonal ranges in very poor condition. A lack of winter snow in 2002-2003 and very little rain during the spring and summer provided little forage for antelope, deer, elk and bighorn sheep to accumulate body fat reserves to survive the winter. Winter ranges, which generally are at lower elevations, received even less moisture so leader growth on sagebrush, bitterbrush and other browse species was very minimal. To compound the problem, deer and antelope moved to winter ranges several weeks earlier than normal, putting additional pressure on stressed browse plants. Wyoming big sagebrush across large portions of Fremont County began shedding leaves from the current year's growth by late October. Residual grass cover needed by sage grouse for spring nesting averaged 4-5 inches in some dense shrub stands, but was generally less than 2 inches high in most areas. A wildfire in excess of 12,000 acres burned along the Lander Front in August 2002, which should create excellent winter range, particularly for elk, in future years.

Although the region received below normal amounts of snowfall, overall minimum temperatures were slightly colder than normal. The lack of snow benefited big game animals by reducing winter stress, but did little to improve drought conditions. Body fat indices of deer and antelope indicated that most animals were in only fair condition going into the winter. Yearling bucks

and does with fawns were in the worst body condition. Drought conditions continued during the spring and summer of 2003 and concerns were expressed over the welfare of both the animals and the habitat. Although forage conditions were somewhat improved in 2003, it is still anticipated that fawn and calf survival will remain below normal throughout the region in 2003.

Antelope populations showed little change in FY03. Of the eight herds within the region, one herd is at objective and seven herds are below objective numbers. A line transect survey flown in the Iron Springs Herd Unit showed little change in population numbers from the last survey conducted in 2000. A total of 15,685 antelope were classified in 2002 to determine herd composition ratios. The young/female ratios were substantially below the long-term averages in all herds. Fawn production varied from a low of 27 fawns/100 does to a high of 81 fawns/100 does. Buck/doe ratios varied from 33 to 65 bucks/100 does. Although license numbers were low, hunter success remained high during the hunting season in 2002. A total of 2,526 antelope were harvested throughout the region in 2002.

Mule deer populations also showed little change in FY03. Of the seven herds within the Lander Region, all seven are below established population levels, and have been that way for several years. Prolonged drought, poor forage conditions and reduced water availability during the year were not conducive to good fawn recruitment. Field personnel classified 4,828 deer in 2002, with fawn production ranging from a low of 40 fawns/100 does to a high of 58 fawns/100 does. As with antelope, fawn production was well below the long-term averages for all herds. The buck/doe ratios varied from 10 to 42 bucks/100 does. Most areas within the region had short hunting seasons that only allowed harvest of antlered deer. As a result, both harvest and hunter success was below the long-term averages. A total of 2,129 mule deer were harvested throughout the region in 2002.

Elk populations are either at or above objectives in all herds within the region. Warm, dry conditions during the hunting season for the past four or five years have resulted in reduced harvests, and have allowed the herds to increase. To address this situation, numbers of antlerless licenses, cow/calf licenses and season length have been adjusted to achieve a higher harvest. These strategies have been working and populations are getting closer to objective numbers. A total of 2,101 elk were harvested throughout the region in 2002. Elk seasons will continue to be liberal over most of the region. Field personnel classified 4,377 elk in 2002, with calf production ranging from 24 to 32 calves/100 cows. As with other big game species, calf production is below the long-term averages. Bull/cow ratios ranged from 8 to 26 bulls/100 cows. Declining calf production in the Wiggins Fork and South Wind River Herd Units remains a matter of concern.

Lamb production in the Whiskey Mountain Bighorn Sheep Herd remained low again in 2002. A total of 572 sheep were classified, with ratios of 10 lambs and 25 rams/100 ewes. The lamb/ewe ratio was substantially below the 17 lambs/100 ewes observed in 2001 and also below the long-term average. A contract employee was hired to investigate the fate of lambs in this herd. Preliminary findings from 1998 and subsequent years indicated most lambs exhibited poor health while on the summer range, and that ewes and lambs made extensive movements from high mountain summer range to lower elevation winter range one or more times per month during the summer to utilize natural mineral licks. Testing indicates summer forage is extremely deficient

in some trace minerals, particularly selenium, during some years. Symptoms observed in lambs on summer range are similar to White Muscle Disease in domestic sheep, which suggests a selenium deficiency. In April 1999, 2000, 2001 and 2002, mineral blocks containing 78% salt, 60ppm selenium, 17ppm cobalt, 95ppm iron, 4ppm zinc, 2% magnesium and 160IU/ib Vitamin E were placed on Whiskey and Middle Mountains. After the mineral blocks were distributed, ewes and lambs were better distributed over the summer range and lamb survival improved somewhat. Mineral blocks were placed in all areas of sheep summer range in 2003, including Arrow Mountain, which had been used as a control area in previous years. This study will end in 2003. No trapping operations were conducted on the Whiskey Mountain herd in 2002. Forage production clippings were again conducted along ten transects in 2002. Results indicated that an average of 164 lbs/acre of forage was produced on the winter range this year. This compares favorably with the 178 lbs/acre produced in 2001, but was considerably below the long-term average of approximately 450lbs/acre. Low forage production is a reflection of the severe drought conditions that have been experienced over the past several years.

Most antelope and deer herds are still below their population objective levels, so hunting licenses were kept at a reduced rate and doe/fawn licenses were virtually non-existent. Despite the low numbers of deer and antelope, hunter success was high for antelope and moderate for deer. Elk harvests increased somewhat throughout the region due to more favorable weather conditions. Harvests of moose and bighorn sheep remained consistent with past years.

The Dubois check station had a busy year in 2002. During the 70 days that the station was open, approximately 5,778 hunters and 2,097 head of big game were checked through the station. Results showed that 105 antelope, 13 black bear, 11 bighorn sheep, 551 deer, 1,246 elk and 171 moose were brought through the check station. These results were very similar to the 5,511 hunters and 2,198 head of big game that were checked in 2001. This station will again be open in 2003.

Sage grouse populations remained stable throughout the region in FY03, and lek surveys were slightly above the five-year average. In the spring of 2003, regional personnel inventoried 292 leks, of which 189 (65%) were active with 5,143 males in attendance, for an average of 27 males per active lek. This was a slight increase from 2002, when 4,808 males were counted on 191 active leks with an average of 25 males per active lek. Drought conditions during the summer of 2002 adversely affected chick survival, preventing any population increase. A study of the effects of various livestock grazing practices on sage grouse nesting success and chick survival was initiated in FY00 and continued through this year by the Wyoming Cooperative Fisheries and Wildlife Research Unit from the University of Wyoming. An additional 40 hens were trapped in April, 2003 and fitted with radio transmitters to determine movements and nest locations. This brought to 57 the number of hens with transmitters that were monitored throughout the 2003 nesting season. Habitat conditions appeared to have improved somewhat in the spring and summer of 2003 and it is anticipated that nesting success will show a corresponding increase.

Wildlife managers reviewed and submitted comments on 36 environmental assessments, environmental impact statements and other NEPA documents in FY03. Regional personnel participated as members of several coordinated resource management teams, as well as making

numerous contacts with private individuals, landowners, and state, federal and local agencies to minimize environmental impacts to wildlife. In addition, regional personnel began extensive participation in revision of the BLM's Rawlins Resource Area Management Plan. Coal Bed Methane development in the Lander Region portion of Carbon and Sweetwater Counties is increasing rapidly and will require additional man-hours to mitigate any losses to wildlife.

Assessment and control of damage by wildlife occupied a moderate amount of time for regional personnel. Big game animals and trophy game animals were involved in depredation activities. Grizzly bear and black bear depredation to bee hives and livestock took the majority of personnel time to investigate and prevent. Trophy Game Conflict Resolution personnel were of tremendous assistance in handling many of the situations involving depredation to livestock. Regional personnel spent 885 hours and drove 6,911 miles handling and preventing wildlife damage. There were 8 damage claims submitted by landowners in FY03 and \$10,648.70 in compensation was paid. This compares to \$21,000 in FY96, \$8,000 in FY97, \$14,000 in FY98, \$5,500 in FY99, \$0 in FY00, \$2,435 in FY01 and \$18,915 in FY02.

Commissioned officers were kept busy enforcing Game and Fish statutes and regulations. In FY03, officers initiated 264 cases involving 385 violations. These violations resulted in 143 citations and 190 written warnings. This is a decrease in overall enforcement cases and violations from the last several years and is likely related to significantly reduced license allocations and low water conditions in much of the Region. Coordinated enforcement efforts were put forth to patrol big game winter ranges, work scheduled hunting seasons and to work fishing derbies and other peak fishing periods on Boysen and Seminoe Reservoirs. In July 2002, a reservoir crew consisting of two officers was assigned to work watercraft enforcement on the larger bodies of water in the region. The region will not have a reservoir crew in FY04.

CASPER REGION

Big game hunting seasons were relatively liberal in 2002 with increased doe/fawn tags to address continued habitat decline. Most deer and antelope herds were at or below their population objectives. Considering the condition of key deer and antelope habitats, holding populations below objective is, and will continue to be, necessary to properly manage these herds for future generations. Elk populations continue to do quite well throughout the region. The number of elk licenses issued was similar to 2001. Dry and mild conditions prevailed throughout much of the Region keeping elk spread out and made finding and stalking them difficult.

It was dry in the Casper region in FY03, with the exception of June, 2003. This was the wettest June on record in Casper and was quite beneficial to ranges throughout much of the Region. However, productivity transects revealed only a slight improvement in shrub leader growth. Overall, the winter of 2002-03 was considered mild and other than June, the summer of 2003 was again quite dry. Monsoon rains in July and August, were essentially absent. Habitat conditions on both summer and winter ranges throughout the region are poor to very poor and reflective of old and decadent shrub stands and poor moisture conditions. Some browse transects on winter range in Bates Hole and the South Bighorns again showed only a few millimeters of current annual growth. To enhance and augment wildlife management in the Casper region, we

continue to collect shrub production and use data in Bates Hole, the Rattlesnakes, the South Bighorns, the Laramie Range, the Grasslands, and now in the Black Hills. This data better enables managers to calibrate population size and to evaluate population objectives with reference to habitat condition. These projects and monitoring efforts target mountain mahogany, sagebrush/grass, oak, and aspen communities in pronghorn, mule deer, and white-tailed deer (Black Hills) summer, transition, and winter range. We are purposefully holding many pronghorn and mule deer populations below objective to relieve browse pressure on key ranges. Nonetheless, recovery of key habitats to maintain robust wildlife populations will require more than proper wildlife management. It will be necessary to relieve other grazing pressures and to renew shrub stands with young vigorous plants.

Despite dry conditions and poor habitat for big game throughout the Casper Region the past several years, turkey populations have and continue to do quite well. Similarly, sage grouse population levels, based on spring lek counts, have remained constant or have slightly increased. Blue grouse, based on a few brood counts and hunter harvest, have remained constant at a relatively good level. Other bird species such as chukars and Hungarian partridge are down compared to the high levels observed in the mid 90s.

Monitoring for Chronic Wasting Disease (CWD) continued in the Casper Region and results (1997-2002) from harvested animals are summarized by species:

Herd Unit	Number Tested to date	Number Positive to Date
Black Hills Mule Deer	194	0
Thunder Basin Mule Deer	133	1
Lance Creek Mule Deer	318	2
North Converse Mule Deer	126	11
South Converse Mule Deer	219	38
Bates Hole Mule Deer	124	10
Rattlesnake Mule Deer	94	6
North Natrona Mule Deer	51	5
Black Hills W.T. Deer	313	0
Central W.T. Deer	206	33
Black Hills Elk	7	0
Laramie Peak/Muddy Mtn Elk	270	1
Pine Ridge Elk	2	0
Rattlesnake Elk	17	0
Rawhide Elk	6	0

In 2002, personnel in the Casper region classified 12,922 antelope, 10,452 mule deer, 4,768 white-tailed deer, and 2,138 elk. Compared to 2001, proportions of antelope, mule deer, and white-tailed deer fawns were up by 3:100, 7:100, and 22:100, respectively. The number of elk calves:100 cows was down by 5:100. On average, we observed 72 antelope fawns:100 does, 63 mule deer fawns:100 does, 57 white-tailed deer fawns:100 does, and 36 elk calves:100 cows. Antelope line-transects were flown in the Rattlesnake and North Converse herd units within the Casper region.

Personnel spent 775 hours and drove 11,394 miles investigating and preventing big and trophy game animal damage reported by landowners. Ten damage claims were filed for a total of \$10,471.93. Payment was made in the amount of \$9,125.73. The amount of time expended by regional personnel investigating and preventing damage and the amount paid to claimants increased in FY02.

Enforcement efforts in the region were routine. The region continues to utilize the task force approach to deal with large numbers of fishermen and watercraft users at Glendo Reservoir during on the Memorial Day and July 4 holidays. Citations for boating under the influence declined significantly during the fiscal year. Alcova Reservoir continues to have the highest watercraft accident rate of any reservoir in the state. One boating accident on Alcova resulted in a fatality. Aggravated vehicular homicide charges were filed by the Natrona County District Attorney's Office. Enforcement personnel worked 6,297 hours driving 94,042 miles enforcing wildlife and watercraft laws and regulations resulting in the issuance of 292 citations and 341 warnings.

Due to the perceived increase in injured and nuisance animal calls received by personnel in the Casper area, a log of calls, reports, and responses has been maintained for the last calendar year. During calendar year 2001, personnel in the Casper area handled 537 injured and nuisance animal calls. This does not include calls taken by the Casper Police Department, Metro Animal Control, or the Natrona County Sheriff's Department during those times when department personnel are unavailable or working in locations where timely response was not possible.

FISH DIVISION
Mike Stone, Chief

This was a year of great progress and challenge. Drought and financial concerns were two of the greatest challenges. A good deal of time was spent prioritizing and implementing budget cuts while successfully completing the work schedule despite long-term vacancies to key biologist and culturist positions. These were left open for more than 6 months. Lost to budget cuts this year were the Habitat Grant and Fish Wyoming grant programs.

Sport fisheries were directly and indirectly impacted by drought this year. Low reservoir elevations at Boysen, Pathfinder, Seminoe, Glendo, and Greyrocks reservoirs and loss of functional boat ramps, meant for diminished boat and angling opportunities. Directly impacting fisheries this year and in the future were the acute, low flows experienced over virtually the entire state. On the Sweetwater River, a survey of several major tributaries found them dry and the remaining streams nearly so. Record breaking, low flows were recorded for the North Platte, Green, Big Sandy, Wind, and Laramie rivers this summer. On the Big Horn and Shoshone rivers, drought dictated low, winter flow releases of 100 and 300 cfs, respectively. Even with the resumption of normal flows, these effects will linger, as it will take several years for fisheries to recover. Lastly, the perceived or real effects of drought were responsible in part to a down turn in fishing license sales for the year.

Boating Access funds in FY03 were concentrated on major improvements and redevelopments on several large reservoirs. A major development, the Bennett Hill site on Glendo Reservoir was completed at a cost of \$309,000. It included over 480 feet of double lane concrete boat ramp, a 60-space parking lot, floating dock and double comfort station. We continued to extend the boat ramp at Buckboard Marina on Flaming Gorge Reservoir as drought again lowered lake elevations. At Keyhole Reservoir, ADA boat dock, parking pad and sidewalks were added along with a new boat ramp at the Wind Creek area. Three other boat ramps were widened (total: \$157,400). Lake DeSmet boat ramps were also extended at Monument and Mikesell Potts sites. A boat ramp extension for Bishop Point on Pathfinder Reservoir was designed with completion scheduled in FY04. A host of small improvements were made at Rock and Packers lakes, plus Springer and Bump Sullivan reservoirs. A total of just over \$700,000 was needed to cover design and construction in FY03.

Several major projects were completed this year that will greatly improve the future status of Colorado River cutthroat trout. On LaBarge Creek, the Forest Service and Corps of Engineers finally permitted the fish migration barrier. Construction was completed in late September. This structure will facilitate restoration of the Colorado River cutthroat trout in the upper 56 miles of the stream and its tributaries, while management for rainbow, brown, and brook trout will continue in the lower reaches. Barrier remodeling was also completed on Gilbert Creek and West Branch of the North Fork Little Snake River. Chemical treatments to remove competing fish species were completed on these three streams. A fourth was completed on Savery Creek as part of the High Savery Dam and Reservoir project. The reservoir will serve to provide both late season irrigation flows downstream yet store sufficient water to make it a Colorado River cutthroat trout sport fishery and brood stock.

Several initiatives were started this year including: a 2-year survey of alpine lakes in Grand Teton National Park, a 3-year effort to determine abundance and distribution of fish native to the Green River, a 2-year study to validate the use of sonar as reservoir sampling tool and an intensive creel survey of Flaming Gorge Reservoir. This year an amphibian program coordinator was funded through the federal program called State Wildlife Grants. Under this same funding source, an intensive survey of the boreal toad was completed in the Wyoming Range.

Fishing regulations for 2004 and 2005 were drafted and presented for public input at over 20 meetings around the state in FY03. Proposed fishing regulations on the Salt River were made following an eight-year study of the Salt and a period of public involvement. Statewide changes were also proposed for the regulated use of bait minnows.

A formal method to assess the risk associated with importation of fish was completed this year. By following these risk assessment methods importation of fish should be possible with a much-reduced potential for introducing aquatic nuisance species. These undesirable and often deleterious exotic species have the potential to do great harm to the sport fisheries and aquatic ecosystems of the state. Out-of-state sources of warm and cool water fishes like walleye and catfish are important game fish for Wyoming anglers. Because of the increasing threat from aquatic nuisance species the division implemented (2002) a self-imposed moratorium to give time to develop risk assessment methods. A public awareness campaign, "Stop Aquatic Hitchhikers," was also initiated last year to alert boaters and anglers to methods of reducing possible transportation and spread of aquatic hitchhikers.

Aquatic Habitat Management completed a statewide-habitat prioritization process. This mapping of priorities and development of narratives was done on a watershed basis to fulfill a major obligation for the Strategic Habitat Plan. Habitat biologists also took the lead role on several Bureau of Land Management Resource Management Planning efforts. This year, the Wildlife Heritage Foundation of Wyoming funded a major enhancement of the Snake River tributaries. Another six habitat restoration projects were funded this year, including studies to design a fish passageway over or around the Kendrick Irrigation Diversion on Clear Creek near Sheridan. Inventory and monitoring were conducted in 37 watersheds included several small (6th order) watersheds, as well as several larger (5th order) basins. Finally, effort was expended on 26 individual enhancement/restoration projects. This included project development, implementation and post-construction monitoring.

Water Management section continued to monitor flows using automated gages on 3 Yellowstone Cutthroat trout streams. These will help secure instream flow water rights for 11 instream flow segments needed to secure habitat for Yellowstone cutthroat trout. Instream flow water right applications were submitted for 5 stream segments in the upper Greybull River drainage. These segments, if approved by the state engineer, will serve to protect Yellowstone cutthroat trout habitat primarily on public land administered by the Shoshone National Forest, State, and Bureau of Land Management. Instream flow studies were completed for one stream segment and initiated for 3 additional segments in the Wood River basin. In the Green River basin, public information meetings and hearings were conducted for 6 instream flow water right applications. These were made to provide long-term sustainable habitat conditions for Colorado River

cutthroat trout. A revised draft report was prepared documenting tradeoffs under different winter flow releases from Buffalo Bill Reservoir into the Shoshone River through Cody. Winter flow recommendations for the Shoshone River are necessary to aid in development of a water marketing strategy and annual operating plan for Buffalo Bill Reservoir.

In FY03, department hatcheries and rearing stations produced 368,863 pounds or 7,100,614 fish and eyed eggs during the year. A majority of total numbers, sizes and pounds were within $\pm 10\%$ of those requested. In addition, eggs produced by instate brood stocks were traded to other state agencies, federal agencies, and instate commercial hatcheries for 1,080,190 cold, cool and warmwater fish weighing a total of 3,388 pounds. These trades either provide fish not reared in state hatcheries primarily due to water temperature limitations or through commercial hatchery reciprocations. Wyoming fish culture people stocked fish from instate and out-of-state sources.

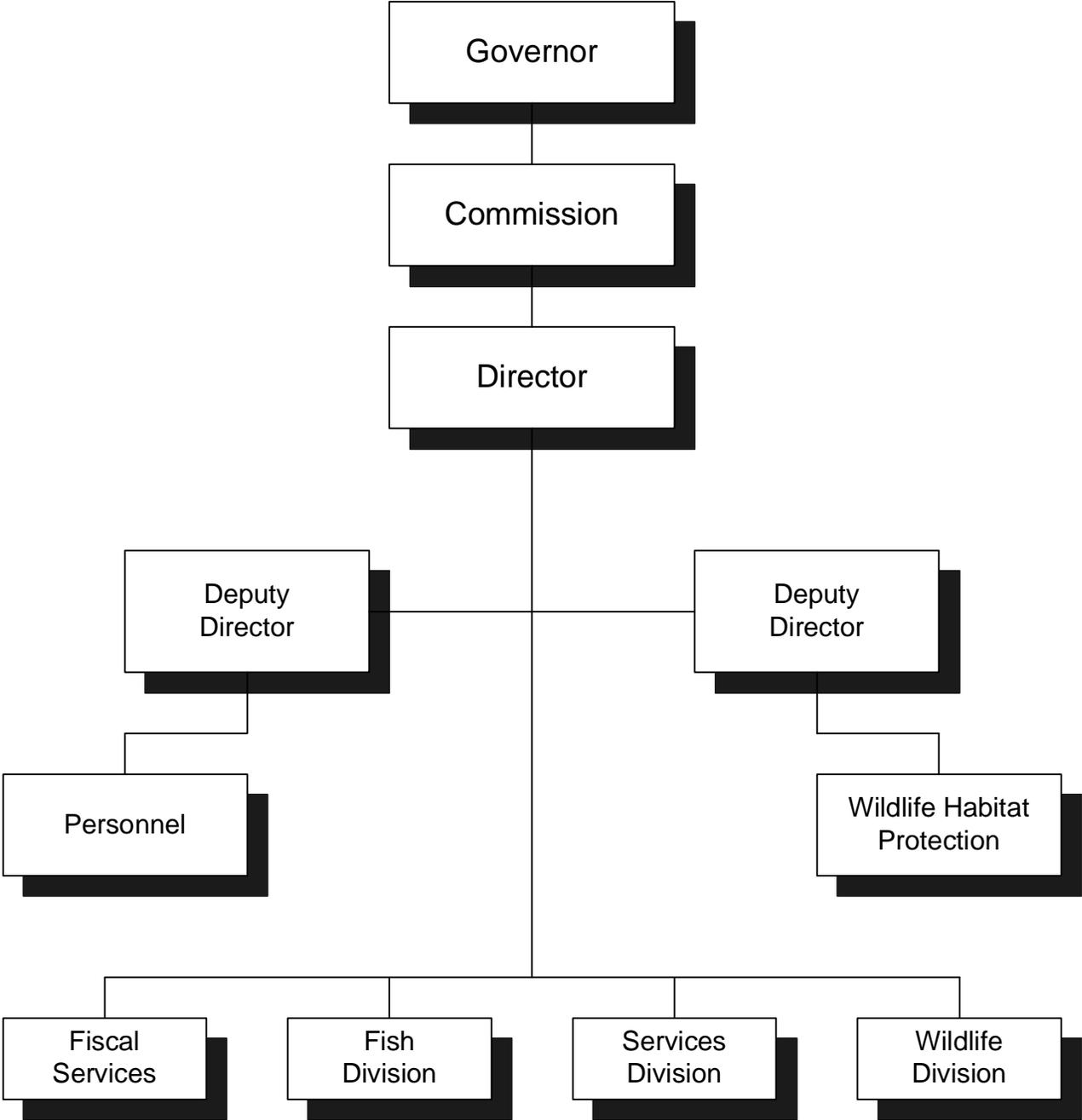
Upgrades to production and brood stock facilities were completed at Dubois and Ten Sleep hatcheries and Tillett Rearing Station. Unfortunately increasing prevalence of whirling disease (WD) in Wyoming waters elevated the need to protect fish culture facilities. For example, WD was identified in one earthen production pond at Wigwam Rearing Station during a scheduled fish health inspection (May 2003) of all dirt rearing units before stocking. The infected lot was destroyed and further dirt pond production was terminated. All other remaining lots of trout tested negative for the parasite and were stocked as scheduled. At the Story Fish Hatchery, DNA from the parasite causing WD was detected in waters above and below the hatchery, but not in it. Prudence dictated all fish stocking from Story Hatchery be redistributed to drainages previously shown to have WD. All other Wyoming state fish hatcheries maintained specific pathogen free status during the year.

Continued drought conditions reduced water supply flows at several facilities and caused stocking schedule adjustments/reductions that impacted fish rearing conditions and fish health. Numerous scheduled stocking requests were canceled due to poor water conditions and alternate stocking sites were required for the surplus fish.

Two highlights are noted in closing this section. First, for the first time in over 40 years continuous flows resumed in Fremont Canyon below Pathfinder Dam. The 75 cfs discharge from Pathfinder, flows through the newly constructed stream channel on the Cardwell public fishing easement. And, Wyoming finally joined the other 49 states in celebrating free fishing day.

DEPARTMENT ORGANIZATION CHART

Wyoming Game & Fish Organization Chart



INDIVIDUAL MANAGEMENT PROGRAMS

BIG GAME

Pronghorn Antelope

Elk

Mule Deer

White-tailed Deer

Moose

Bighorn Sheep

Rocky Mountain Goat

Bison

PRONGHORN

2002:

Population:	439,977	Licenses Sold:	39,720
Population Objective:	461,373	License Revenue:	\$ 3,487,196
Harvest:	30,260	All Other Agency Revenue*:	\$ 1,675,977
Hunters:	33,159	Total Program Revenue:	\$ 5,163,173
Success Rate:	91%	Program Costs:	\$ 2,827,952
Recreation Days:	101,989	Hunter Expenditures:	\$40,509,266
Days/Animal:	3.4	Cost Dept. Per Animal:	\$ 93
		Economic Return per Animal:	\$ 1,339

Wyoming's pronghorn numbers grew strongly through the late 1990s, but growth slowed dramatically in the last few years. In 2002, the state population was estimated to be 429,100 animals compared to the objective of 476,250. The recent stabilization of pronghorn numbers is due primarily to drought conditions resulting in a loss of available forage and depressed fawn production and survival rates. As drought conditions persist in areas of the state, habitat conditions become more critical. The Department will continue to monitor habitat conditions, recommend improvements where necessary and establish hunting seasons accordingly.

The Department increased license quotas in 2002 to limit the number of animals the state's drought-depleted habitats must support. A total of 33,159 hunters generated over \$5,100,000 in revenue to the Department, and they spent more than \$40,000,000 in pursuit of pronghorn.

A total of 33,159 pronghorn were harvested in 2001, an increase of 23 percent over last year's harvest. Hunter effort decreased slightly to 3.4 days per animal harvested in 2002.

Five-year trends in Wyoming's pronghorn antelope program.								
Year	Harvest	Rec. Days	Success	Days/Animal	Lic. Sold	Lic. Rev. (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	28,138	87,228	96%	3.1	34,091	2,910,308	1,936,472	30,703,630
1999	30,694	94,012	93%	3.1	38,467	3,288,444	2,508,466	33,316,675
2000	33,977	108,726	92%	3.2	43,095	3,761,336	2,804,623	41,342,068
2001	26,864	93,652	87%	3.5	36,851	3,273,946	2,904,751	36,515,455
2002	30,260	101,989	91%	3.4	39,720	3,487,196	2,827,952	40,509,266

¹based on Wyoming 1997 Hunting Expenditures, Responsive Management.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

ELK

2002:

Population:	93,506	Licenses Sold:	62,013
Population Objective:	72,656	License Revenue:	\$ 6,310,310
Harvest:	21,462	All Other Agency Revenue*:	\$ 2,314,430
Hunters:	55,784	Total Program Revenue:	\$ 8,624,740
Success Rate:	39%	Program Costs:	\$ 8,550,907
Recreation Days:	423,409	Hunter Expenditures:	\$83,316,849
Days/Animal:	19.7	Cost Dept. Per Animal:	\$ 398
		Economic Return per Animal:	\$ 3,882

Wyoming's elk population was reduced again in 2002. The population in 2002 was estimated to be 93,506 animals compared to the 2001 estimate, which was approximately 96,320. The population objective for Wyoming's elk herds is 80,785.

Harvest decreased from 22,772 in 2001 to 21,462 in 2002. The 2002 harvest is similar to the five-year average. Hunter success declined slightly from 40 percent in 2001 to 39 percent in 2002, and hunter effort (days/animal) increased from 18.7 days in 2001 to 19.7 days in 2002.

Increased harvest efforts will still be needed in coming years to continue decreasing the population toward objective. Access to private and land-locked public lands continues to hamper harvest strategies. The Department will continue to work to improve hunter access.

Five-year trends in Wyoming's elk program.								
Year	Harvest	Rec. Days	Success	Days/Animal	Lic. Sold	Lic. Rev. (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	22,586	386,235	40%	17.1	61,604	5,982,220	8,436,416	69,296,923
1999	21,830	460,618	36%	21.1	62,884	6,382,569	7,275,732	83,130,998
2000	23,727	398,614	44%	16.8	63,596	6,441,010	7,845,909	73,382,902
2001	22,772	426,574	40%	18.7	62,493	6,333,000	9,523,439	81,874,237
2002	21,462	423,409	39%	19.7	62,013	6,310,310	8,550,907	83,316,849

¹based on Wyoming 1997 Hunting Expenditure, Responsive Management.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

MULE DEER

2002:			
Population:	484,700	Licenses Sold:	85,200¹
Population Objective:	563,750	License Revenue:	\$ 8,111,773¹
Harvest:	37,580	All Other Agency Revenue*:	\$ 2,734,841¹
Hunters:	68,785	Total Program Revenue:	\$ 10,846,614¹
Success Rate:	55%	Program Costs:	\$ 4,170,980
Recreation Days:	349,753	Hunter Expenditures:	\$118,398,495
Days/Animal:	9.3	Cost Dept. Per Animal:	\$ 111
		Economic Return per Animal:	\$ 3,151

Wyoming's mule deer numbers declined for the second year in a row in 2002. The estimated population now stands at 484,700, or approximately 86% of the statewide objective. The current downward trend is due to drought conditions. The Department will continue to monitor habitat conditions and recommend improvements where necessary. Field personnel are proposing a further reduction in some herds to lessen the impacts of deer on drought-depleted browse plants until moisture conditions improve.

Harvest decreased again in 2002 from 38,305 in 2001 to 37,580 in 2002. The 2002 statewide harvest success rate is similar to the 2001 success rate (55.7 percent), and hunter effort increased from 8.8 days per animal harvested in 2001 to 9.3 days per animal harvested in 2002.

Hunter access and habitat conditions continued to be a concern in 2001. The Department again worked toward improving these issues in 2001 with walk-in access areas, hunter management areas, and habitat improvement projects.

Five-year trends in Wyoming's mule deer program.								
Year	Harvest	Rec. Days	Success	Days/Animal	Lic. Sold ¹	Lic. Rev. (\$) ¹	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	29,990	296,093	48%	9.8	76,447	6,233,054	3,463,855	90,873,436
1999	39,652	344,972	57%	8.7	79,452	6,645,159	3,695,162	109,367,461
2000	43,544	322,226	63%	7.4	85,960	7,295,589	3,754,746	103,125,884
2001	38,305	338,077	56%	8.8	85,624	8,014,220	4,854,044	111,906,571
2002	37,580	349,753	55%	9.3	85,200	8,111,773	4,170,980	118,398,495

¹includes both mule deer and white-tailed deer.
²based on Wyoming 1997 Hunting Expenditures, Responsive Management.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

WHITE-TAILED DEER

2002:

Population:	Not available	Licenses Sold:	85,200¹
Population Objective:	Not available	License Revenue:	\$ 8,111,773¹
Harvest:	9,216	All Other Agency Revenue*:	\$ 2,734,841¹
Hunters:	21,078	Total Program Revenue:	\$10,846,641¹
Success Rate:	44%	Program Costs:	\$ 436,408
Recreation Days:	74,750	Hunter Expenditures:	\$25,530,820
Days/Animal:	8.9	Cost Dept. Per Animal:	\$ 47
		Economic Return per Animal:	\$ 2,770

It is difficult to collect data on Wyoming's white-tailed deer populations because of the habitats in which they live and their behavior. A majority of white-tailed deer inhabit private lands in eastern Wyoming where access for hunting opportunities has become difficult and is often expensive. This makes them difficult to manage, and management throughout the state is primarily dictated by local perceptions of deer numbers and by landowner tolerances. The white-tailed deer is an undesirable species to some landowners and hunters, while to others it has a status similar to other big game species.

A total of 9,216 white-tailed deer were harvested in 2001, a slight decrease from the 9,638 harvested in 2001. Hunter numbers decreased slightly from 21,925 in 2001 to 21,078 in 2002, while hunter success remained the same.

Five-year trends in Wyoming's white-tailed deer program.								
Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold ¹	Lic. Rev. (\$) ¹	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	7,036	72,442	34%	10.3	76,447	6,233,054	321,982	22,424,187
1999	5,918	73,975	29%	12.5	79,452	6,645,159	300,691	23,216,468
2000	10,833	77,998	48%	7.2	85,801	7,295,589	416,952	25,323,173
2001	9,638	87,624	44%	9.1	85,624	8,014,220	573,571	29,255,500
2002	9,216	74,750	44%	8.9	85,200	8,111,773	436,408	25,530,820

¹includes both mule deer and white-tailed deer.
²based on Wyoming 1997 Hunting Expenditures, Responsive Management.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

MOOSE

2002:

Population:	10,077	Licenses Sold:	1,386
Population Objective:	14,530	License Revenue:	\$ 263,800
Harvest:	1,160	All Other Agency Revenue*:	\$ 160,254
Hunters:	1,350	Total Program Revenue:	\$ 424,054
Success Rate:	86%	Program Costs:	\$ 617,427
Recreation Days:	9,048	Hunter Expenditures:	\$1,863,146
Days/Animal:	7.8	Cost Dept. Per Animal:	\$ 532
		Economic Return per Animal:	\$ 1,606

Wyoming's largest moose populations are in the northwestern part of the state, but moose herds are also doing well in other areas. Moose have recently expanded into the mountain ranges of south central Wyoming, providing additional viewing and hunting opportunities.

Management strategies for moose in Wyoming are quite conservative, and, as a result, success rates are traditionally excellent for those hunters fortunate enough to draw a license. The 2002 hunting season was the fifth year in which a restriction against taking cow moose accompanied by a calf was in effect. This restriction has improved calf survival, hence increasing hunting opportunities.

The 2001 hunting season did not equal results from the 2000 season. Hunter success decreased again in 2002 (86 percent), compared to 2000 (91 percent) and 2001 (89 percent). Hunter effort increased from 6.2 days per animal harvested in 2001 to 7.8 days per animal harvested in 2002.

Five-year trends in Wyoming's moose program.								
Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	1,061	6,095	89%	5.7	1,227	264,075	289,357	1,128,610
1999	1,101	7,906	87%	7.2	1,378	285,641	337,270	1,462,393
2000	1,209	7,815	91%	5.5	1,393	292,250	496,519	1,518,127
2001	1,215	7,592	89%	6.2	1,406	297,850	594,652	1,476,711
2002	1,160	9,048	86%	7.8	1,386	263,800	617,427	1,863,146

¹based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming
 *includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

BIGHORN SHEEP

2002:

Population:	5,513	Licenses Sold:	258
Population Objective:	7,535	License Revenue:	\$ 116,139
Harvest:	183	All Other Agency Revenue*:	\$ 107,603
Hunters:	241	Total Program Revenue:	\$ 223,742
Success Rate:	77%	Program Costs:	\$ 736,527
Recreation Days:	2,558	Hunter Expenditures:	\$ 809,656
Days/Animal:	14.0	Cost Dept. Per Animal:	\$ 4,025
		Economic Return per Animal:	\$ 4,424

Wyoming's bighorn sheep population declined slightly again in 2002. Larger herds maintained or slightly increased population levels while smaller populations continued to struggle in some areas. Bighorn sheep are highly susceptible to severe weather events and disease outbreaks. In addition, poor habitat conditions limit bighorn sheep population increases.

The 2002 bighorn sheep season was slightly poorer than the 2001 season. While hunter success remained at 77 percent, hunter effort increased from 10.4 days to 14.0 days per animal harvested.

The Department will continue to set conservative bighorn sheep hunting seasons. Habitat improvement projects will continue to be evaluated and implemented for the benefit of Wyoming's bighorn sheep.

Five-year trends in Wyoming's bighorn sheep program.								
Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	183	1,981	73%	10.8	255	114,600	1,052,682	635,962
1999	173	2,108	68%	12.2	263	124,361	1,090,871	607,879
2000	185	2,012	72%	10.9	268	121,275	920,962	605,452
2001	206	2,146	77%	10.4	282	122,325	1,000,238	642,835
2002	183	2,558	77%	14.0	258	116,139	736,527	809,656

¹based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

ROCKY MOUNTAIN GOAT

2002:			
Population:	260	Licenses Sold:	16
Population Objective:	250	License Revenue:	\$ 6,904
Harvest:	15	All Other Agency Revenue*:	\$ 12,590
Hunters:	16	Total Program Revenue:	\$ 19,494
Success Rate:	94%	Program Costs:	\$ 85,146
Recreation Days:	47	Hunter Expenditures:	\$ 18,724
Days/Animal:	3.1	Cost Dept. Per Animal:	\$ 5,676
		Economic Return per Animal:	\$ 1,248

Mountain goats inhabit some of Wyoming's most rugged and remote areas in the northwestern part of the state. Throughout the years, successful transplant operations in Montana and Idaho have resulted in mountain goat populations overlapping into Wyoming. The Department manages these populations as the Beartooth and Palisades herd units.

Until 1999, the only hunted population of mountain goats was the Beartooth herd unit near Cody. The Palisades population near Jackson has increased to a point where it was able to sustain limited harvest since 1999. The Department will continue to closely monitor both populations and will continue to set conservative hunting seasons.

Five-year trends in Wyoming's Rocky Mountain goat program.								
Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Rev. (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	12	57	100%	4.8	12	5,175	370,618	18,913
1999	16	38	100%	2.4	16	6,904	102,929	13,959
2000	15	48	100%	3.2	16	6,900	38,221	18,128
2001	17	79	100%	4.6	17	6,975	62,592	31,002
2002	15	47	94%	3.1	16	6,904	85,146	18,724

¹based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

BISON

2002:			
Population:	730	Licenses Sold:	59
Population Objective:	400	License Revenue:	\$22,740
Harvest:	47	All Other Agency Revenue*:	\$25,481
Hunters:	57	Total Program Revenue:	\$48,221
Success Rate:	83%	Program Costs:	\$26,313
Recreation Days:	126	Hunter Expenditures:	Not available
Days/Animal:	2.7	Cost Dept. Per Animal:	\$ 560
		Economic Return per Animal:	Not available

The bison population in the Jackson Herd is estimated to be approximately 730 animals, an increase from the 2001 estimate of 627 animals. A post-harvest objective of 400 bison, based on a running five-year average, has been established for this population. The Department shares management responsibility of the Jackson Herd with the National Elk Refuge, Grand Teton National Park, and the Bridger-Teton National Forest. Bison of the Jackson Herd spend summers in and around Grand Teton National Park, and most spend winters on the National Elk Refuge.

Hunters harvested 47 bison in 2002, up from 19 in 2000 and 41 in 2001. License quotas will be increased as possible to attempt to reduce this population to its objective. Hunter success in 2002 was 83 percent compared to 91 percent in 2001, and hunter effort was 2.7 days per bison harvested, a decrease from the 2001 success rate of 3.8 days per bison harvested. Social and political concerns continue to influence management of the bison herd.

Five-year trends in Wyoming's bison program.					
Year	Harvest	Recreation Days	Licenses Sold	License Revenue (\$)	Program Costs (\$)
1998	4	1	4	9,600	103,036
1999	12	N/A	19	8,051	125,183
2000	19	89	25	9,701	61,853
2001	41	157	44	14,926	79,895
2002	47	126	59	22,740	26,313
*includes allocated application fees, conservation stamp revenue, federal/other grants, and interest earned on Game and Fish cash balances.					

TROPHY GAME

Black Bear
Grizzly Bear
Mountain Lion

BLACK BEAR

2002:

Population:	Not available	Licenses Sold:	2,907
Population Objective:	Not available	License Revenue:	\$ 146,045
Harvest:	323	All Other Agency Revenue*:	\$ 73,382
Hunters:	2,252	Total Program Revenue:	\$ 219,427
Success Rate:	14%	Program Costs:	\$ 809,961
Recreation Days:	21,965	Hunter Expenditures:	\$2,333,475
Days/Animal:	68	Cost Dept. Per Animal:	\$ 2,508
		Economic Return per Animal:	\$ 7,244

Black bears occupy the major mountain ranges of Wyoming, with the exception of the Black Hills. Most black bears are found in the northwestern part of the state, the Bighorn Mountains and the mountains of southcentral Wyoming.

Black bears are hunted in Wyoming during the spring and fall each year. Successful bear hunters are required to report bear harvest to an authorized Department game warden, wildlife biologist, or at a regional office within three days of the harvest. Black bear hunting season regulations should be consulted for baiting regulations, season restrictions, and harvest reporting procedures. Accurate harvest information is vital to management of black bears in Wyoming.

A total of 323 black bears were harvested in 2002, which is higher than previous years and is a product of increased quotas. Quotas have been increased in recent years to address increasing bear/human and bear/livestock conflicts. Bear/human conflicts are most often a result of the bears' attraction or habituation to human related foods. Hunter success was 14 percent. Hunter effort increased from a recent low of 61.3 days per animal harvested in 2001 to 68 in 2002 (5 year average = 74.9).

Five-year trends in Wyoming's black bear program.								
Year	Harvest	Rec. Days	Success	Days/ Animal	Lic. Sold	Lic. Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	197	14,700	11%	75.0	2,052	101,574	457,345	1,393,405
1999	193	18,579	11%	96.0	2,222	104,583	462,146	1,851,510
2000	203	14,917	13%	74.0	2,157	97,710	561,421	1,522,161
2001	261	16,006	20%	61.3	2,422	108,740	718,130	1,672,076
2002	323	21,965	14%	68.0	2,907	146,045	809,961	2,333,475
¹ based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming. *includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.								

GRIZZLY BEAR

OBJECTIVES:

To meet those parameters identified in the revised Grizzly Bear Recovery Plan for the Yellowstone ecosystem.

To maintain at least 7,229 square miles of occupied grizzly bear habitat.

To obtain the informed consent of all potentially affected interests in structuring the population objectives, management strategies, and regulations.

Grizzly bears are presently classified as “threatened” under the Endangered Species Act (ESA). Grizzlies occupy 16,200 square miles in Wyoming, mainly in Yellowstone National Park and the Caribou-Targhee, Bridger-Teton, and Shoshone National Forests. In the past several years, grizzly bears have expanded their distribution into habitats on the periphery of the recovery zone that has not been used by them for several decades. The population has attained the recovery goals stipulated in the grizzly bear recovery plan, and the agencies involved with grizzly bears in the Yellowstone ecosystem are completing the steps necessary for removing ESA protection and returning management of this population to states of Idaho, Montana and Wyoming.

The Department and its counterparts in Idaho and Montana completed state management plans for the Yellowstone grizzly bear population, and in 2002 (FY03) the Yellowstone Ecosystem Grizzly Bear Subcommittee completed the “Conservation Strategy for Grizzly Bears in the Greater Yellowstone Area.” The Department will continue to participate in interagency monitoring of this population and in conflict resolution through the final steps of status change and after the state assumes full management of grizzly bears in Wyoming.

Five-year trends in Wyoming's grizzly bear program.	
Fiscal Year	Management Costs (\$)
FY 1999	942,337
FY 2000	1,033,815
FY 2001	1,600,388
FY 2002	1,434,981
FY 2003	1,378,442

MOUNTAIN LION

2002:

Population:	Not available	Licenses Sold:	1,545
Population Objective:	Not available	License Revenue:	\$ 61,627
Harvest:	201	All Other Agency Revenue*:	\$ 37,098
Hunters:	Not available	Total Program Revenue:	\$ 98,725
Success Rate:	Not available	Program Costs:	\$ 499,805
Recreation Days:	Not available	Hunter Expenditures:	\$13,128,916³
Days/Animal:	5.1	Cost Dept. Per Animal:	\$ 2,487
		Economic Return per Animal:	\$ 65,318

Mountain lions are distributed throughout most of Wyoming and have been managed as a trophy game species in Wyoming since 1974. They prefer rugged foothills and mountainous terrain, which provide cover, denning locations, and suitable prey bases. Mountain lions are opportunistic predators within established and well-defended territories.

Mountain lions are generally secretive and solitary animals, but sightings of the elusive cats have been increasing over the past several years, indicating that mountain lion populations are healthy and expanding in Wyoming. This same trend is being observed in other western states. They are currently managed in Wyoming through annual mortality quotas. When a hunt area harvest quota is reached, that area is closed for the remainder of the season. Annual harvest quotas have been increased in recent years to limit population growth and to address lion/human and lion/livestock incidents in some areas.

A total of 201 mountain lions were harvested during the past season. Mountain lion hunter success rate dropped slightly from 15% in 2001 to 13% this year. Hunter effort increased substantially from 3.8 days per lion harvested in 2001 to 5.1 days per animal harvested in 2002 (5-year average = 3.7).

Five-year trends in Wyoming's mountain lion program.						
Year	Harvest	Success ¹	Licenses Sold	License Revenue (\$)	Mgmt. Costs (\$)	Hunter Expend. (\$) ²
1998	172	17%	1,006	41,319	539,605	6,282,300
1999	201	14%	1,408	68,072	755,152	5,618,352
2000	186	13%	1,436	68,450	540,901	11,626,018 ³
2001	213	15%	1,397	53,005	718,591	11,675,679 ³
2002	201	13%	1,545	61,627	499,805	13,128,916³

¹calculated based on the number of licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

³starting in year 2000, recreation days are no longer estimated in the harvest survey; therefore, hunter expenditures for this year were recalculated to reflect the change.

*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SMALL GAME

Cottontail
Snowshoe Hare
Squirrel

COTTONTAIL

2002:

Population:	Not available	Licenses Sold:	21,060 ¹
Population Objective:	Not available	License Revenue:	\$ 67,850
Harvest:	23,287	All Other Agency Revenue*:	\$ 123,461
Hunters:	5,814	Total Program Revenue:	\$ 191,311
Animals/Hunter:	4.0	Program Costs:	\$ 29,504
Recreation Days:	25,566	Hunter Expenditures:	\$4,608,817
Days/Animal:	1.1	Cost Dept. Per Animal:	\$ 1.27
		Economic Return per Animal:	\$ 198

Cottontails are the most popular small game animals in Wyoming. Cottontails are found in a variety of habitats throughout the state including brushy areas, farmlands, and towns in middle to lower elevations. While populations of cottontails cannot be accurately monitored, hunter success and harvest are directly associated with the dramatically cyclic nature of cottontail populations.

Harvest statistics in 2002 indicate that the cottontail population may be in the declining phase of its cycle. Harvest decreased from 39,874 in 2001 to 23,287 in 2002. Hunter numbers and recreation days also decreased in 2002. Animals/hunter has decreased since 1999 while days/animal has increased for the last 3 years.

The Department will maintain liberal hunting seasons and bag limits since hunting has little effect on cottontail populations.

Five-year trends in Wyoming's cottontail program.								
Fiscal Year	Harvest	Rec. Days	Animal/Hunter	Days/Animal	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	53,253	35,902	5.3	0.67	9,998	85,653	61,896	5,670,625
1999	60,937	37,531	6.1	0.62	9,967	90,960	47,727	6,154,771
2000	44,207	22,609	5.7	0.51	7,772	80,599	53,626	3,842,448
2001	39,874	29,118	4.8	0.70	8,374	53,067	52,241	4,974,709
2002	23,287	25,566	4.0	1.1	5,814	67,850	29,504	4,608,817

¹reflects all small game and small game/game bird combination licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SNOWSHOE HARE

2002:

Population:	Not available	Licenses Sold:	21,060 ¹
Population Objective:	Not available	License Revenue:	\$ 4,493
Harvest:	609	All Other Agency Revenue*:	\$ 8,176
Hunters:	385	Total Program Revenue:	\$ 12,669
Animals/Hunter:	1.6	Program Costs:	\$ 1,954
Recreation Days:	1,505	Hunter Expenditures:	\$ 271,342
Days/Animal:	2.5	Cost Dept. Per Animal:	\$ 3.21
		Economic Return per Animal:	\$ 446

Snowshoe hares are distributed throughout the higher coniferous forests of the western and southern parts of the state and in the Bighorn Mountains. Snowshoe hare hunting is not as popular as other small game hunting, and most snowshoes are likely taken incidentally during big game seasons.

Snowshoe hare populations experience cyclic increases and decreases, and hunter participation and harvest appear to follow population trends. During most years, fluctuations of hare populations are not consistent across the state, as peak snowshoe harvest varies from region to region.

The 2002 snowshoe harvest increased to 609 from the estimated 532 harvested in 2001. Hunter numbers and recreation days both decreased in 2002. Animals/hunter increased while days/animal decreased.

Five-year trends in Wyoming's snowshoe hare program.								
Fiscal Year	Harvest	Rec. Days	Animal/Hunter	Days/Animal	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	636	4,306	0.6	6.8	996	10,273	7,423	680,123
1999	552	1,861	1.0	3.4	558	4,510	2,367	305,198
2000	409	1,617	1.0	4.0	407	3,428	3,835	274,822
2001	532	1,620	1.2	3.0	435	2,952	2,906	276,701
2002	609	1,505	1.6	2.5	385	4,493	1,954	271,342

¹reflects all small game and small game/game bird combination licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SQUIRREL

2002:

Population:	Not available	Licenses Sold:	21,060 ¹
Population Objective:	Not available	License Revenue:	\$ 5,310
Harvest:	1,637	All Other Agency Revenue*:	\$ 9,662
Hunters:	455	Total Program Revenue:	\$ 14,972
Animals/Hunter:	3.6	Program Costs:	\$ 2,309
Recreation Days:	1,313	Hunter Expenditures:	\$236,721
Days/Animal:	0.8	Cost Dept. Per Animal:	\$ 1.41
		Economic Return per Animal:	\$ 145

Squirrel hunter participation and harvest continued to decline sharply in 2001 for Wyoming's two hunted species. Red squirrels can be found throughout the state in mountain coniferous forests. Fox squirrels continue to increase their range and can be found in deciduous forests, along cottonwood-riparian areas, and in agricultural and urban areas.

In 2002, 1,637 squirrels were harvested by 455 hunters. This is nearly a 100% increase over the 2001 harvest of 848 squirrels by 256 hunters.

Squirrel hunting in Wyoming is not as popular as it is in other parts of the country. In Wyoming, most squirrel harvest is incidental to other hunting pursuits. The Department will maintain liberal season structures since hunting has little effect on squirrel populations.

Five-year trends in Wyoming's squirrel program.								
Fiscal Year	Harvest	Rec. Days	Animal/Hunter	Days/Animal	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	2,815	3,550	3.1	1.2	896	7,992	5,775	529,133
1999	2,734	3,514	3.7	1.3	730	8,517	4,468	576,247
2000	1,388	1,314	3.7	1.0	378	5,075	3,117	223,304
2001	848	711	3.3	0.8	256	1,296	1,276	121,426
2002	1,637	1,313	3.6	0.8	455	5,310	2,309	236,721

¹reflects all small game and small game/game bird combination licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

UPLAND GAME

Pheasant

Gray Partridge

Chukar

Sage Grouse

Sharp-Tailed Grouse

Blue Grouse

Ruffed Grouse

Mourning Dove

Turkey

PHEASANT

2002:

Population:	Not available	Licenses Sold:	27,316 ¹
Population Objective:	Not available	License Revenue:	\$ 79,544
Harvest:	31,831	All Other Agency Revenue*:	\$ 144,738
Hunters:	6,816	Total Program Revenue:	\$ 224,282
Bird/Hunter:	4.7	Program Costs:	\$ 895,270
Recreation Days:	28,999	Hunter Expenditures:	\$3,935,817
Days/Bird:	0.9	Cost Dept. Per Bird:	\$ 28
		Economic Return per Bird:	\$ 124

Pheasants are not as abundant in Wyoming as they are in neighboring states, but opportunities to harvest the popular upland game bird in the state are available. Pheasant hunting improved considerably with the implementation and expansion of Wyoming's Walk-In Access Program. Through the efforts of the Department's game wardens and biologists, numerous acres of private lands were again opened for hunting in 2002.

The vast majority of Wyoming's pheasant hunting occurs in Goshen County in the southeastern part of the state. Established pheasant populations throughout the state are supplemented by releases from the Department's Downar and Sheridan Bird Farms.

The 2002 pheasant season showed the effects of consecutive years of drought on wild pheasant reproduction. Harvest, hunter numbers, and recreation days all dropped substantially, but opportunities for pheasant hunting were still plentiful.

Five-year trends in Wyoming's pheasant program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	43,607	41,527	4.1	0.95	10,627	54,273	661,124	5,045,824
1999	55,475	50,951	3.8	0.92	14,468	69,330	698,704	6,492,856
2000	45,946	47,470	3.7	1.03	12,544	82,189	695,497	6,320,663
2001	38,892	38,836	3.8	1.00	10,162	70,778	870,916	5,093,642
2002	31,831	28,999	4.7	0.9	6,816	79,544	895,270	3,935,817

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

GRAY PARTRIDGE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 12,674
Harvest:	1,414	All Other Agency Revenue*:	\$ 23,061
Hunters:	1,086	Total Program Revenue:	\$ 35,735
Bird/Hunter:	1.3	Program Costs:	\$ 19,856
Recreation Days:	3,807	Hunter Expenditures:	\$516,688
Days/Bird:	2.7	Cost Dept. Per Bird:	\$ 14
		Economic Return per Bird:	\$ 365

Populations of gray (Hungarian) partridges, native to eastern Europe and central and southwest Asia, can be found in Sheridan County and the Bighorn Basin of Wyoming. Gray partridges were introduced to Wyoming early in this century to provide additional hunting opportunity for the sportsmen of Wyoming.

Gray partridge populations have suffered from prolonged drought and have dropped considerably since 1999. Between 1999 and 2002, harvest has declined 92 percent, hunter numbers have declined 71 percent, and recreation days have declined 77 percent.

Because gray partridges are very sensitive to drought and severe winters, weather conditions can dictate abundance of partridge and resulting hunter interest. Hunting seems to play a minor role in gray partridge populations. Like other upland game birds, nesting and brood rearing success from the summer preceding the hunting season play a major role in hunter success and participation.

Five-year trends in Wyoming's gray partridge program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	6,384	6,669	3.9	1.05	1,652	15,910	11,640	810,352
1999	17,160	16,640	4.5	0.97	3,808	40,329	4,834	2,120,515
2000	16,154	13,953	4.3	0.86	3,780	5,191	40,376	1,857,850
2001	3,031	6,416	1.6	2.10	1,845	11,693	25,852	853,385
2002	1,414	3,807	1.3	2.7	1,086	12,674	19,856	516,688

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

CHUKAR

2002:

Population:	Not available	Licenses Sold:	27,316 ¹
Population Objective:	Not available	License Revenue:	\$ 15,976
Harvest:	3,244	All Other Agency Revenue*:	\$ 29,071
Hunters:	1,369	Total Program Revenue:	\$ 45,047
Bird/Hunter:	2.4	Program Costs:	\$ 25,030
Recreation Days:	3,921	Hunter Expenditures:	\$ 532,219
Days/Bird:	1.2	Cost Dept. Per Bird:	\$ 7.72
		Economic Return per Bird:	\$ 164

Chukars, native to Europe and Asia, were first released in Wyoming in the 1930s. Small populations of chukars are scattered throughout Wyoming in rocky, steep habitats, but the largest concentrations are found in the Bighorn Basin.

Chukar populations have suffered from prolonged drought and have dropped considerably since 1999. Between 1999 and 2002, harvest has declined 73 percent, hunter numbers have declined 57 percent, and recreation days have declined 68 percent.

Because chukars are very sensitive to drought and severe winters, weather conditions can dictate chukar abundance and resulting hunter interest. Hunting seems to play a minor role in chukar populations. Like other upland game birds, nesting and brood rearing success from the summer preceding the hunting season play a major role in hunter success and participation.

Five-year trends in Wyoming's chukar program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	7,551	7,591	3.9	1.0	1,958	18,110	13,241	922,356
1999	11,806	12,328	3.7	1.0	3,172	29,878	3,587	1,539,383
2000	10,016	10,347	2.92	0.97	3,433	3,849	30,459	1,377,674
2001	3,327	16,535	1.8	5.0	1,838	30,135	66,624	2,186,799
2002	3,244	3,921	2.4	1.2	1,369	15,976	25,030	532,219

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SAGE GROUSE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 34,392
Harvest:	4,835	All Other Agency Revenue*:	\$ 62,580
Hunters:	2,947	Total Program Revenue:	\$ 96,972
Bird/Hunter:	1.6	Program Costs:	\$ 979,917
Recreation Days:	7,164	Hunter Expenditures:	\$ 972,330
Days/Bird:	1.5	Cost Dept. Per Bird:	\$ 203
		Economic Return per Bird:	\$ 201

Depressed sage grouse populations have been a concern for states supporting populations since sharp declines were detected in the early 1990s. Wyoming's sage grouse populations are considered to be below desired objectives, but they continue to sustain the light harvest allowed by conservative season structures. Since 1995, sage grouse seasons have been shortened and have opened later in the year to protect hens with broods. Sage grouse seasons were again conservative in 2002.

After experiencing a small population increase up through 1999, statewide sage grouse populations have declined considerably in subsequent years due in part to prolonged drought. Between 1999 and 2002, harvest has declined 78 percent, hunter numbers have declined 61 percent, and recreation days have declined 67 percent.

The Department will continue to monitor sage grouse populations and to improve habitat conditions throughout the state. The Department worked to develop the Wyoming Greater Sage Grouse Conservation Plan to identify and address sage grouse issues. The Department is also working to create a sage grouse coordinator position devoted to sage grouse conservation.

Five-year trends in Wyoming's sage grouse program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	16,787	15,743	2.8	0.9	5,899	37,552	557,170	1,912,916
1999	21,556	21,759	2.8	1.0	7,625	52,735	815,621	2,772,804
2000	20,685	21,330	2.4	1.0	8,667	82,189	949,900	2,840,159
2001	12,742	14,840	2.3	1.2	5,593	27,046	921,657	1,946,785
2002	4,835	7,164	1.6	1.5	2,947	34,392	979,917	972,330

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SHARP-TAILED GROUSE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 9,581
Harvest:	1,376	All Other Agency Revenue*:	\$ 17,434
Hunters:	821	Total Program Revenue:	\$ 27,015
Bird/Hunter:	1.7	Program Costs:	\$ 39,304
Recreation Days:	3,658	Hunter Expenditures:	\$496,450
Days/Bird:	2.7	Cost Dept. Per Bird:	\$ 29
		Economic Return per Bird:	\$ 361

Sharp-tailed grouse populations and hunter interest have been increasing in Wyoming since the initiation of the Conservation Reserve Program. Thousands of acres of marginal farmlands in the state were converted to native rangelands for the benefit of numerous wildlife species, including sharp-tailed grouse. The Department's implementation of the Walk-In Access Program in 1998 greatly improved sharp-tailed grouse hunting opportunities.

After several years of record harvest, consecutive years of drought in Wyoming have started to impact sharp-tailed grouse populations. Between 2000 and 2002, harvest declined 88 percent, hunter numbers declined 75 percent, and recreation days declined 74 percent.

Most sharp-tailed grouse are harvested in eastern Wyoming where they occupy shrub-grassland habitat and lands enrolled in the Conservation Reserve Program. In 2002, as a result of the drought, various lands enrolled in the Conservation Reserve Program were hayed for emergency livestock feed, further reducing the availability of adequate sharp-tailed grouse habitat.

Five-year trends in Wyoming's sharp-tailed grouse program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	4,807	6,417	3.0	1.3	1,623	15,309	33,452	779,717
1999	9,349	12,463	3.5	1.3	2,644	30,205	43,512	1,588,183
2000	11,676	13,944	3.6	1.2	3,220	5,188	42,802	1,856,702
2001	3,963	6,618	2.1	1.7	1,915	12,061	42,812	880,053
2002	1,376	3,658	1.7	2.7	821	9,581	39,304	496,450

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

BLUE GROUSE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 57,160
Harvest:	13,861	All Other Agency Revenue*:	\$ 104,010
Hunters:	4,898	Total Program Revenue:	\$ 161,170
Bird/Hunter:	2.8	Program Costs:	\$ 11,997
Recreation Days:	21,102	Hunter Expenditures:	\$2,864,042
Days/Bird:	1.5	Cost Dept. Per Bird:	\$ 0.87
		Economic Return per Bird:	\$ 207

Blue grouse occupy most of Wyoming's forested, mountainous areas, except for the Black Hills and the Uinta Mountains. Throughout their range, blue grouse are closely associated with conifer stands. They winter among these conifers and migrate to lower altitudes with more open cover in the spring and summer.

The 2002 blue grouse season provided good hunting opportunities throughout the state, similar to the previous 3 seasons. Although harvest, hunter numbers, and recreation days dropped slightly from 2001, birds/hunter did increase while days/bird decreased. Overall, harvest statistics for 2002 were very comparable to those from the previous 3 seasons, varying only with hunter numbers.

The Department maintains liberal seasons and means of harvest since hunting has little influence on blue grouse populations. Blue grouse numbers fluctuate due to adverse weather events and detrimental land use practices.

Five-year trends in Wyoming's blue grouse program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	9,925	16,460	2.3	1.7	4,317	39,269	5,031	2,000,003
1999	17,325	23,268	2.9	1.3	6,042	56,392	11,555	2,965,151
2000	14,864	20,025	2.8	1.3	5,341	7,450	7,384	2,666,364
2001	14,279	24,240	2.4	1.7	5,885	44,177	18,190	3,173,526
2002	13,861	21,102	2.8	1.5	4,898	57,160	11,997	2,864,042

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

RUFFED GROUSE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 25,383
Harvest:	5,564	All Other Agency Revenue*:	\$ 46,186
Hunters:	2,175	Total Program Revenue:	\$ 71,569
Bird/Hunter:	2.6	Program Costs:	\$ 5,327
Recreation Days:	10,565	Hunter Expenditures:	\$1,433,883
Days/Bird:	1.9	Cost Dept. Per Bird :	\$ 0.96
		Economic Return per Bird:	\$ 258

Ruffed grouse are found in the western and northern forests of Wyoming, including the Black Hills and the Uinta Mountains. They occupy dense, brushy habitats within mixed conifer and deciduous tree stands, usually in and along creek bottoms. The Wyoming Range and the various mountainous regions around Jackson offer some of the best ruffed grouse habitat and provide the best hunting opportunities in Wyoming.

The 2002 ruffed grouse season provided good hunting opportunities throughout the state, similar to the previous 3 seasons. Ruffed grouse harvest decreased from a record high of 7,146 in 2001 to 5,564 in 2002. Hunter numbers decreased slightly from 2,310 in 2001 to 2,175 in 2002, while recreation days increased from 9,686 to 10,565.

Like blue grouse, ruffed grouse populations appear to be affected by weather patterns, land use changes, timber harvest, and grazing practices, with hunting playing a minor role in population changes.

Five-year trends in Wyoming's ruffed grouse program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	3,733	7,267	2.0	1.9	1,710	17,337	3,842	883,013
1999	5,694	10,897	2.2	1.9	2,618	26,410	5,474	1,388,633
2000	6,710	10,261	3.2	1.5	2,092	3,818	3,794	1,366,227
2001	7,146	9,686	3.1	1.4	2,310	17,653	7,269	1,272,077
2002	5,564	10,565	2.6	1.9	2,175	25,383	5,327	1,433,883

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

MOURNING DOVE

2002:

Population:	Not available	Licenses Sold:	27,316 ¹
Population Objective:	Not available	License Revenue:	\$ 30,902
Harvest:	36,431	All Other Agency Revenue*:	\$ 56,231
Hunters:	2,648	Total Program Revenue:	\$ 87,133
Bird/Hunter:	13.8	Program Costs:	\$ 111,845
Recreation Days:	14,470	Hunter Expenditures:	\$1,963,915
Days/Bird:	0.4	Cost Dept. Per Bird:	\$ 3.07
		Economic Return per Bird:	\$ 54

Mourning doves are the most abundant and widespread game birds in North America. More mourning doves are harvested throughout the country than all other game birds combined. They nest throughout the continental United States and in Canada and Mexico. Mourning doves occupy a wide variety of habitats in Wyoming, from farmlands to urban areas.

Mourning dove harvest increased from 29,075 in 2001 to a 12-year high of 36,431 in 2002. Hunter numbers have not changed significantly in the last 5 years, while recreation days increased substantially in 2002, possibly due to prolonged warm weather in September. Harvest in Wyoming can be greatly reduced by early mourning dove migrations due to cold weather in late August and early September.

Mourning dove seasons are set at the national level by the U.S. Fish and Wildlife Service. Seasons are generally liberal since harvest has little impact on dove populations.

Five-year trends in Wyoming's mourning dove program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	28,841	8,067	11.5	0.3	2,509	19,246	89,033	980,183
1999	32,702	8,191	13.5	0.3	2,418	19,852	82,080	1,043,782
2000	34,250	8,499	13.2	0.3	2,594	29,097	105,984	1,131,656
2001	29,075	8,371	10.4	0.3	2,807	15,256	113,928	1,101,400
2002	36,431	14,470	13.8	0.4	2,648	30,902	111,845	1,963,915

¹reflects all game bird and small game/game bird combination licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

TURKEY

2002:

Population:	Not available	Licenses Sold:	7,182
Population Objective:	Not available	License Revenue:	\$ 141,915
Harvest:	2,815	All Other Agency Revenue*:	\$ 145,498
Hunters:	5,688	Total Program Revenue:	\$ 287,413
Hunter Success:	50%	Program Costs:	\$ 272,393
Recreation Days:	16,845	Hunter Expenditures:	\$2,847,492
Days/Bird:	5.6	Cost Dept. Per Bird:	\$ 97
		Economic Return per Bird:	\$ 1,012

Wild turkeys were originally introduced to Wyoming in 1935 when New Mexico traded nine hens and six gobblers to Wyoming in exchange for sage grouse. Turkeys are currently found in the southeastern, northeastern, and north-central portions of the state. The majority of turkeys in Wyoming are found in river-bottomland habitats on private land. However, public land hunting opportunities exist in the Black Hills and around Laramie Peak.

Successive years of mild winters, along with recent habitat improvement projects and transplanting operations, have improved wild turkey populations throughout the state. Turkey harvest may have begun to stabilize in 2002 after a record-high harvest in 2001. Hunter numbers, recreation days, and hunter success rates all decreased in 2002.

Five-year trends in Wyoming's turkey program.								
Fiscal Year	Harvest	Rec. Days	Hunter Success	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ¹
1998	1,521	6,308	59%	4.1	2,590	64,540	291,108	856,668
1999	2,446	10,572	61%	4.3	4,000	109,530	285,125	1,606,944
2000	3,398	15,683	59%	4.6	5,733	132,550	235,259	2,438,824
2001	3,946	18,987	59%	4.8	6,645	141,850	299,900	3,049,184
2002	2,815	16,845	50%	5.6	5,688	141,915	272,393	2,847,492

¹based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
 *includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

WATERFOWL

Duck

Goose

Sandhill Crane

Rail, Snipe, Coot

DUCK

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 72,810
Harvest:	49,529	All Other Agency Revenue*:	\$ 132,486
Hunters:	6,239	Total Program Revenue:	\$ 205,296
Bird/Hunter:	7.9	Program Costs:	\$ 185,602
Recreation Days:	44,850	Hunter Expenditures:	\$6,087,133
Days/Bird:	0.9	Cost Dept. Per Bird:	\$ 3.75
		Economic Return per Bird:	\$ 123

Wyoming supports a variety of duck species throughout the year. Ducks migrate to and through the state along the Central and Pacific Flyways. They occupy most habitats in Wyoming where water is found in good quantity and quality.

Drought conditions have prevailed over the last several years and continued through spring and summer of 2002, leading to comparatively poor breeding conditions and fall recruitment. However, water conditions were markedly improved in the spring of 2003 throughout the core breeding range in the Canadian prairie provinces and northern prairie states. Despite the adverse conditions in 2002, duck population surveys indicate numbers of most duck species were not substantially below long-term averages. Harvest levels and success rates did not change substantially from 2001.

The Department remains concerned with the degradation and loss of wetlands and other duck habitats. The Department will continue to work with private landowners, other government agencies, and conservation organizations to improve habitat conditions for ducks and to increase the amount of habitat available to them.

Five-year trends in Wyoming's duck program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days /Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	66,501	46,457	9.8	0.7	6,785	110,877	294,155	5,647,022
1999	62,932	54,262	7.5	0.9	8,378	131,510	120,064	6,914,886
2000	50,912	39,446	7.4	0.8	5,740	135,048	143,184	5,252,284
2001	49,743	39,725	7.6	0.8	6,584	109,598	183,435	5,226,984
2002	49,529	44,850	7.9	0.9	6,239	72,810	185,602	6,087,133

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

GOOSE

2002:			
Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 66,613
Harvest:	22,337	All Other Agency Revenue*:	\$ 121,210
Hunters:	5,708	Total Program Revenue:	\$ 187,823
Bird/Hunter:	3.9	Program Costs:	\$ 431,698
Recreation Days:	32,110	Hunter Expenditures:	\$4,358,092
Days/Bird:	1.4	Cost Dept. Per Bird:	\$ 19
		Economic Return per Bird:	\$ 195

Goose hunting in Wyoming has been excellent for a number of years, but the recent drought has begun to have an impact. Canada geese traditionally have provided most of the goose hunting in Wyoming, but shifting migration patterns due to drought conditions throughout the west and expanding populations of lesser snow geese have increased hunter opportunities for them.

The 2002 harvest of 22,337 geese constituted the second year of a downward trend. Liberal season lengths and increased bag limits designed to lower goose populations afforded hunters greater harvest opportunities. Liberal seasons will continue, especially the late season Conservation Order, for snow and other light geese as the flyway councils attempt to lower populations to protect sensitive nesting areas.

Five-year trends in Wyoming's goose program.								
Fiscal Year	Harvest	Rec. Days	Bird/Hunter	Days/Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	29,266	46,194	4.3	1.6	6,785	110,207	656,310	5,612,917
1999	22,649	40,512	3.1	1.8	7,196	98,185	422,332	5,162,626
2000	31,956	38,020	5.2	1.2	5,533	130,048	434,626	5,062,459
2001	25,507	36,467	3.7	1.4	6,846	100,610	568,739	4,800,291
2002	22,337	32,110	3.9	1.4	5,708	66,613	431,698	4,358,092

¹reflects all game bird and small game/game bird combination licenses sold.
²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

SANDHILL CRANE

2002:

Population:	Not available	Licenses Sold:	27,316¹
Population Objective:	Not available	License Revenue:	\$ 2,451
Harvest:	132	All Other Agency Revenue*:	\$ 4,459
Hunters:	210	Total Program Revenue:	\$ 6,910
Bird/Hunter:	0.6	Program Costs:	\$44,203
Recreation Days:	437	Hunter Expenditures:	\$59,295
Days/Bird:	3.3	Cost Dept. Per Bird:	\$ 335
		Economic Return per Bird:	\$ 449

Two populations of sandhill cranes are found in Wyoming, the Rocky Mountain greater sandhill cranes and the mid-continent sandhill cranes. Sandhill cranes are managed in cooperation with various western states and the federal government.

During the 2002 season, 210 hunters harvested 132 cranes. Most crane harvest occurs in the western part of Wyoming. Success rates vary slightly from year to year.

Five-year trends in Wyoming's sandhill crane program.								
Fiscal Year	Harvest	Rec. Days	Success	Days/ Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$) ²	Hunter (\$) Expend. ³
1998	93	354	54%	3.8	173	845	67,011	43,000
1999	127	431	67%	2.3	189	1,045	87,897	54,955
2000	159	556	60%	3.5	263	1,904	42,957	73,995
2001	142	563	57%	4.0	248	1,553	42,312	74,671
2002	132	437	63%	3.3	210	2,451	44,203	59,295

¹reflects all game bird and small game/game bird combination licenses sold.
²management costs are for both greater and lesser sandhill crane.
³based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

RAIL, SNIPE, AND COOT

2002:

Population:	Not available	Licenses Sold:	27,316 ¹
Population Objective:	Not available	License Revenue:	\$ 2,077
Harvest:	302	All Other Agency Revenue*:	\$ 3,780
Hunters:	178	Total Program Revenue:	\$ 5,857
Bird/Hunter:	1.7	Program Costs:	**
Recreation Days:	717	Hunter Expenditures:	\$ 97,362
Days/Bird:	2.4	Cost Dept. Per Bird:	Not available
		Economic Return per Bird:	\$ 322

Rail, snipe, and coot are harvested in both the Central and Pacific Flyways in Wyoming. Since these birds are not highly valued as game species or as food sources, the demand is low. Generally, these species are incidentally taken in conjunction with other migratory game birds and upland game birds.

Five-year trends in Wyoming's rail, snipe and coot program.								
Fiscal Year	Harvest	Rec. Days	Birds/ Hunter	Days/ Bird	Number Hunters	License Revenue (\$)	Mgmt. Costs (\$)	Hunter (\$) Expend. ²
1998	1,676	829	5.2	0.5	321	1,978	**	100,715
1999	1,259	1,276	3.2	1.0	388	3,092	**	162,735
2000	710	695	2.5	1.0	281	2,380	**	92,618
2001	754	555	3.5	0.7	215	1,531	**	71,738
2002	302	717	1.7	2.4	178	2,077	**	97,362

¹reflects all game bird and small game/game bird combination licenses sold.

²based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming.

* includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

**because program costs were negligible, they are included with other waterfowl management costs.

FISHERIES

Sport Fisheries
Commercial Fisheries

SPORT FISHERIES

2002:

Rec. Day Objectives:	3,418,000	License Revenue:	\$ 4,574,077
Recreation Days:	4,236,800	All Other Agency Revenue:	\$ 4,315,796
Fish/Day:	2.5	Total Program Revenue:	\$ 8,889,873
Licenses Sold:	368,952	Program Costs:	\$ 14,920,271
Economic Return per Day:	\$131.96	Angler Expenditures:	\$559,088,128

Fishing pressure (recreation days) in 2002 was estimated to have been 4,236,800 days, with anglers fishing chiefly in the fisheries management region where they bought their license. Resident anglers averaged 28 days of fishing in 2002, with 40% of time invested on flowing waters and 60% on standing waters. Nonresident anglers fishing time ranged from 28 days for holders of season licenses to 1.0 day for the NR daily licensee. Nonresidents fished 45% of their time on flowing waters and 55% on standing waters. Overall, the distribution of angling in the state was 45% for flowing waters and 55% for standing waters.

Boating Access funds in FY-03 were concentrated on major improvements and redevelopments on several large reservoirs. The Bennett Hill development on Glendo Reservoir was completed at a cost of \$309,000. It includes over 480 feet of double lane concrete boat ramp, a 60-space parking lot, floating dock, and double comfort station. We continued to extend the boat ramp at Buckboard Marina, Flaming Gorge Reservoir, as drought continues lowering lake elevation. At Keyhole Reservoir, ADA boat dock, parking pad and sidewalks were added along with a new boat ramp at the Wind Creek area. Three other boat ramps were widened (total: \$157,000). Lake DeSmet boat ramps were also extended at the Monument and Mikesell-Potts access sites. A boat ramp extension for Bishop Point on Pathfinder Reservoir was designed with completion scheduled in FY-04. A host of small improvements were made at Rock and Packers lakes and Springer, and Bump Sullivan reservoirs. A total of just over \$700,000 was needed to cover design and construction in FY-03.

Five-year trends in Wyoming's sport fisheries program.						
Fiscal Year	Recreation Days	Fish/Day	Licenses Sold	License Revenue (\$)	Program Costs (\$)	Angler Expend. (\$)
1998	4,553,489	2.5	475,096	4,038,267	11,420,299	267,699,618
1999	4,564,031	2.5	497,064	4,242,445	13,494,171	632,829,438
2000	4,667,115	2.5	507,437	4,531,805	13,757,732	698,527,102
2001	4,457,099	2.5	400,996	5,078,144	15,129,474	609,552,859
2002	4,236,800	2.5	368,952	4,574,077	14,029,271	559,088,128
<p>Recreation days revised to include unlicensed anglers, pioneers, and 6-13 year olds. License revenue does not include sale of nonresident special and nonresident youth elk and fishing license income. Angler expenditure information is based on 1998 survey, "Wyoming 1998 Fishing Trip Expenditures" (Responsive Management National Office). All Other Agency Revenue includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game & Fish cash balances. Total Program Revenue based on fiscal year, all other figures on calendar year basis. NOTE: The decrease of nearly 32,000 in number of fishing licenses sold is explained, chiefly, by continued drought conditions during the year and by increased cost of non-resident daily fishing licenses resulting in fewer purchased. Revenue from fishing licenses was about a half-million less for 2002 than 2001, due mostly, to continuing drought.</p>						

COMMERCIAL FISHERIES

Objectives: The statewide objective for the program is to provide licensing, monitoring, and extension services for minnow seiners, private bait dealers, commercial hatcheries, and private fishing preserves.

2002	
Licenses Sold:	682
License Revenue*:	\$19,255
All Other Agency Revenue*:	\$ 451
Total Program Revenue**:	\$19,676
Program Costs*:	\$17,674

During 2002, 75 fishing preserves, 14 commercial fish hatcheries, 532 seining, and 61 live bait dealer licenses were sold, resulting in \$19,676 in revenue to the Department. Costs of commercial fisheries management in Wyoming totaled \$17,674 for all activities.

Five-year trends in the commercial fisheries program in the state of Wyoming.			
Year	Licenses Sold	License Revenue (\$)	Program Costs (\$)
1998	527	11,765	13,577
1999	579	13,105	10,789
2000	578	23,410	21,093
2001	617	23,965	28,262
2002	682	19,225	17,674
<p>* Beginning 2000, all monetary information is for fiscal year. Other information is tracked on calendar year schedule.</p> <p>**Includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.</p>			

FURBEARERS

Bobcat

Beaver

Other Furbearers

FURBEARERS

2002:		Licenses Sold:	1,289⁴
Bobcat Harvest¹:	1,847	License Revenue:	\$ 46,045
Bobcat Trappers²:	240	Other Agency Revenue*:	\$ 33,755
Bobcats per Trapper³:	3.0	Total Program Revenue:	\$ 79,800
Recreation Days:	Not available	Program Costs:	\$ 223,555
Days/Animal:	Not available	Benefits to the State:	\$2,572,645
		Cost Dept. Per Animal :	Not available
		Economic Return per Animal:	Not available

A variety of furbearing wildlife species occur in Wyoming. Coyote, red fox, bobcat, beaver, muskrat, mink, badger weasel and marten are the most commonly harvested furbearers in the state. Furbearer harvest levels are determined by fur prices and by species abundance. These factors, combined with harvest quotas (where used), ensure that trapping has little impact on furbearer populations.

The future of trapping in Wyoming may be influenced by the ability of the Department to collect accurate furbearer information. The response rate for the annual furbearer harvest survey has been poor for a number of years. The Department has tried each year to impress upon trappers the importance of responding to the survey so the state has information to accurately portray this activity. The harvest survey was revised several times to make it more useful friendly. For a number of years, a cover letter from the Supervisor of Biological Services and a letter from the officers of the Wyoming Trappers Association were included with each survey instrument encouraging trappers to respond. These efforts were not successful, and response continued to be approximately 30%. In 2002, it was decided to discontinue surveying for all furbearers and to concentrate on surveying for the bobcat since it is a species listed in Appendix II of the Convention on International Trade of Endangered Species (CITES). Because of the bobcat's inclusion in Appendix II of CITES, the Department must analyze harvest and population data and report this information to the U.S. Fish and Wildlife Service Office of Scientific Authority in order to allow trapping to continue in the state. For 2003 and subsequent years, the decision has been made to discontinue surveying for bobcats, again because of poor trapper response to the survey. The Department will rely on personnel who tag bobcats with CITES tags to collect information on age and sex of each bobcat, as well as number of traps used and number of days spent trapping for each trapper registering bobcats. This information will be available for the annual CITES report and for Department use such as this annual report. This will only provide information for successful bobcat trappers, but it is more reliable than information collected previously.

Five-year trends in Wyoming's furbearer program.							
Fiscal Year	Bobcat Statistics			Entire Furbearer Program			
	Reported Harvest ¹	Bobcats/Trapper ³	Number Trappers	Licenses Sold ⁴	License Rev. (\$)	Program Costs (\$)	Benefits to the State (\$) ⁵
1998	1,177	5.3	77 ⁶	974	29,710	236,482	498,573
1999	1,452	5.5	251 ²	976	34,909	91,067	443,443
2000	728	2.9	255 ²	1,084	32,539	136,299	2,061,258
2001	1,467	5.9	249 ²	1,128	35,056	169,776	2,197,301
2002	1,847	3.0	240²	1,289	46,045	223,555	2,572,645

¹the number of bobcats tagged in Wyoming.
²the number of trappers who had bobcats tagged.
³the number of bobcats per successful trapper.
⁴the total number of furbearer licenses sold.
⁵based on 1989 Hunting and Fishing Expenditure Estimates for Wyoming, University of Wyoming. Includes estimated trapper expenditures and value of furs taken (based on total furs purchased).
⁶Trappers responding to furbearer harvest survey who stated that they harvested bobcats.
*includes allocated application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances.

RAPTORS

RAPTORS

OBJECTIVES:

To provide a harvest, through capture, of 50 raptors annually.

To maintain a harvest success rate of 50 percent, based on capture permits issued.

Establish 30 breeding pairs of peregrine falcons in Wyoming by 1996.

There are approximately 31 species of raptors known or thought to occur within Wyoming’s borders. Raptors include hawks, owls, eagles, and vultures. Some species are present only seasonally and densities vary with climatic conditions and prey abundance.

In 2002, 29 raptors were captured in Wyoming for use in falconry. The capture success rate was 58 percent. The number of birds captured and the success rate was slightly higher in 2002 than in the previous 3 years. Based on the number of licenses issued, the merlin was in the greatest demand followed by the prairie falcon and red-tailed hawk.

Nonresidents experienced a higher capture success rate than residents. Twenty-four resident licenses were issued and 12 birds were captured, for a capture success rate of 50 percent. Twenty-six nonresident licenses were issued and 17 birds were captured, for a capture success rate of 65 percent.

Five-year trends in Wyoming’s Raptor Program					
Fiscal Year	Capture	Success ¹	Licenses Sold ²	License Revenue (\$)	Program Costs (\$)
1998	31	63%	49	6,590	156,353
1999	27	55%	49	6,410	103,493
2000	23	56%	41	3,655	116,140
2001	21	45%	47	5,615	100,238
2002	29	58%	50	4,495	58,004

¹based on capture licenses sold.
²includes permits to hunt with falcon.

NON-GAME PROGRAMS
AND
NON-LICENSED USES

NONGAME PROGRAMS AND NON-LICENSED USES OF WILDLIFE

Included under this heading are programs for each species such as the trumpeter swan, bald eagle, peregrine falcon, black-footed ferret, black-tailed prairie dog, swift fox, wolverine, and lynx. All of these species are either federally listed as threatened or endangered, or national political pressures are pressing for listing. Hence, all require special management attention and intensive restoration efforts. In addition, extra effort is directed at inventories and monitoring of other certain other species that may require attention to maintain Wyoming's wildlife diversity and abundance. Examples of some of these species include: common loon, harlequin duck, ferruginous hawk, merlin, colonial nesting water birds, long-billed curlew, mountain plover, many species of bats, and a variety of other small mammals. Nongame programs also coordinate a "broad brush" approach for monitoring many species during efforts such as the Breeding Bird Survey or small mammal capture transects. Nongame personnel are also involved in numerous committees and working groups that coordinate and advance planning and management for wildlife diversity.

In 2002, non-consumptive users spent approximately 3,924,000 days enjoying such endeavors as observation, photography, nature study, etc. Non-consumptive wildlife users expended an average of \$63.02 per day, resulting in \$247,289,000 in expenditures throughout the state that year.

The Department's "Wyoming's Wildlife – Worth the Watching®" program has provided economic support for non-game, habitat, and non-consumptive projects. Department interpretive sites include the Cheyenne Visitor Center, Sybille Visitor Center, Sheridan Visitor Center, Story Fish Hatchery, and Lander Visitor Center. Other interpretive efforts include signing at highway rest areas, cooperative Department/U.S. Forest Service signing, exhibits, nature trails on Department lands, and cooperative projects with some city governments. In addition, five wildlife-viewing guides have been developed, and a variety of publications have been produced to inform and educate the public about nongame wildlife. Beginning in 2003, a percentage of the proceeds from the sale of big game licenses the Governor donates to conservation groups for fund raising will be available for nongame programs in the state.

Trends in Wyoming's non-licensed uses of wildlife program.		
Year	Recreation Days	Non-consumptive Users' Expenditures (\$)
*2002	3,924,000	264,931,000
*The number of recreation days and expenditures are reflective of those found in the 2002 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, issued by the U.S. Fish and Wildlife Service.		

HUNTER AND ANGLER EXPENDITURES

Estimates of 2001 Expenditures in Wyoming
by Hunters and Anglers

Restitution Values of Game Animals

**SUMMARY OF 2002 HARVEST, LICENSE SALES AND EXPENDITURES IN WYOMING
BY HUNTERS AND ANGLERS**

LICENSE	HARVEST	HUNTERS	SUCCESS	RECREATION	DAYS/ ANIMALS	LICENSE SALES	LICENSE INCOME	TOTAL HUNTER EXPENDITURES
			RATE	DAYS				
ANTELOPE								
RESIDENT	13,807	15,541	88.8%	51,208	3.7	18,945	382,552	14,295,801
NONRESIDENT	16,453	17,618	93.4%	50,781	3.1	20,775	3,070,265	26,213,465
MULE DEER								
RESIDENT	19,847	39,444	50.3%	214,731	10.8	52,164	1,203,035	74,960,677
NONRESIDENT	17,733	29,341	60.4%	135,022	7.6	33,036	6,847,540	43,437,817
WHITE-TAILED DEER								
RESIDENT	5,955	13,837	43.0%	54,162	9.1	**	**	18,907,471
NONRESIDENT	3,261	7,241	45.0%	20,588	6.3	**	**	6,623,349
ELK								
RESIDENT	16,808	44,997	37.4%	353,022	21.0	50,560	1,673,975	62,434,541
NONRESIDENT	4,654	10,787	43.1%	70,387	15.1	11,453	4,590,925	20,882,308
MOOSE								
RESIDENT	969	1,136	85.3%	7,861	8.1	1,167	87,525	1,324,610
NONRESIDENT	191	214	89.3%	1,210	6.3	219	219,000	538,536
BIGHORN SHEEP								
RESIDENT	127	177	75.7%	1,978	15.6	189	14,175	436,233
NONRESIDENT	56	64	87.5%	580	10.4	69	103,500	373,423
ROCKY MTN GOAT								
RESIDENT	11	12	91.7%	35	3.2	12	900	15,075
NONRESIDENT	4	4	100%	12	3.0	4	6,000	3,649
BLACK BEAR								
RESIDENT	280	2,051	13.7%	20,755	74.1	2,675	80,250	2,041,046
NONRESIDENT	43	201	21.4%	1,210	28.1	232	58,000	292,429
MOUNTAIN LION								
	201	-----	-----	-----	5.1	1,545	61,627	13,128,916
TURKEY								
RESIDENT	2,047	4,241	48.3%	12,716	6.2	5,484	54,840	1,116,083
NONRESIDENT	768	1,447	53.1%	4,129	5.4	1,698	84,900	1,731,409
COTTONTAIL								
	23,287	5,814	400.5%	25,566	1.1	4,014	67,850	4,608,817
SNOWSHOE HARE								
	609	385	158.2%	1,505	2.5	266	4,493	271,342
SQUIRREL								
	1,637	455	359.8%	1,313	0.8	314	5,310	236,721

**SUMMARY OF 2000 HARVEST, LICENSE SALES AND EXPENDITURES IN WYOMING
BY HUNTERS AND ANGLERS**

LICENSE	HARVEST	HUNTERS	SUCCESS	RECREATION	DAYS/	LICENSE	LICENSE	TOTAL HUNTER
			RATE	DAYS	ANIMALS	SALES	INCOME	EXPENDITURES
PHEASANT	31,831	6,816	467.0%	28,999	0.9	4,706	79,544	3,935,817
GRAY PARTRIDGE	1,414	1,086	130.2%	3,807	2.7	750	12,674	516,688
CHUKAR	3,244	1,369	237.0%	3,921	1.2	945	15,976	532,219
SAGE GROUSE	4,835	2,947	164.1%	7,164	1.5	2,035	34,392	972,330
SHARP-TAILED GROUSE	1,376	821	167.6%	3,658	2.7	567	9,581	496,450
BLUE GROUSE	13,861	4,898	283.0%	21,102	1.5	3,382	57,160	2,864,042
RUFFED GROUSE	5,564	2,175	255.8%	10,565	1.9	1,502	25,383	1,433,883
MOURNING DOVE	36,431	2,648	1375.8%	14,470	0.4	1,828	30,902	1,963,915
DUCK	49,529	6,239	793.9%	44,850	0.9	4,308	72,810	6,087,133
GOOSE	22,337	5,708	391.3%	32,110	1.4	3,941	66,613	4,358,092
SANDHILL CRANE	132	210	62.9%	437	3.3	145	2,451	59,295
RAIL	0	0	0.0%	0	0	0	0	0
SNIPE	179	126	142.1%	508	2.8	87	1,470	68,919
COOT	123	52	236.5%	209	1.7	36	607	28,443
RAPTOR	29	50	58.0%	-----	-----	50	4,495	-----

LICENSE	HARVEST	HUNTERS	SUCCESS	RECREATION	DAYS/	LICENSE	LICENSE	TOTAL ANGLER
			RATE	DAYS	ANIMALS	SALES	INCOME	EXPENDITURES
SPORT FISHING	-----	-----	250.0%	4,236,800	-----	368,952	4,574,077	559,088,128
COMMERCIAL	-----	-----	-----	-----	-----	682	19,225	-----

LICENSE	HARVEST	HUNTERS	SUCCESS	RECREATION	DAYS/	LICENSE	LICENSE	TOTAL TRAPPER
			RATE	DAYS	ANIMALS	SALES	INCOME	EXPENDITURES
TRAPPING	1,847	-----	590.0%	-----	-----	1,289	46,045	2,572,645

SUMMARY								
TOTALS	301,480	230,152	-----	5,437,371	-----	600,026	23,670,067	878,851,718

*License Income figures will vary slightly from Statement of Revenue and Expenditures due to timing differences between subsidiary and general ledger reporting.

RESTITUTION VALUES OF GAME ANIMALS TO THE STATE OF WYOMING

The Game and Fish Department has reviewed the state's valuation of wildlife and recommends that the following monies be used in determining the restitution value of illegally killed animals. The factors used in determining the dollar values varies yearly and thus, the values will fluctuate accordingly. Questions concerning the factors used in calculating these values should be directed to the Wyoming Game and Fish Department, Wildlife Division, 5400 Bishop Boulevard, Cheyenne, Wyoming 82006.

<u>SPECIES</u>	<u>2002 DOLLAR VALUE</u>
Elk.....	\$6,000
Pronghorn Antelope.....	3,000
Mule Deer.....	4,000
White-tailed Deer.....	4,000
Moose.....	7,500
Bighorn Sheep.....	15,000
Rocky Mountain Goat.....	12,500
Black Bear.....	5,000
Grizzly Bear.....	25,000
Mountain Lion.....	5,000
Bison.....	6,000
Wolf.....	1,000

Because the factors used in determining the valuation of big game animals is not currently available for small game, waterfowl and furbearer, the best information is based on estimates of the money spent by hunters in harvesting these animals (hunter expenditures divided by harvest):

Cottontail.....	\$ 200
Snowshoe Hare.....	200
Squirrel.....	200
Pheasant.....	300
Gray Partridge.....	300
Sage Grouse.....	300
Sharptail.....	300
Blue Grouse.....	300
Ruffed Grouse.....	300
Chukar.....	300
Sandhill Crane.....	250
Turkey.....	500
Duck.....	150
Goose.....	250
Mourning Dove.....	100
Rail, Snipe, Coot.....	100
Bobcat.....	550
Beaver.....	125
Other Furbearer.....	120
Other Wildlife (not specified).....	10-100
Game Fish.....	100

BUDGETARY AND FINANCIAL SUMMARIES

FY 04 BUDGET SUMMARY

MAINTENANCE & OPERATIONS

Director	\$2,002,835
Fiscal Services	3,622,015
Services	8,921,007
Fish	8,780,831
Wildlife	14,520,159
TOTAL M&O	\$37,846,847
COUPONS	400,000
EARLY RETIREMENT	164,062
DAMAGE	500,000
COST ALLOCATION	410,000
SALECS	252,000
ACCESS EASEMENTS	600,000
PROPERTY RIGHTS	100,000
CAPITAL CONSTRUCTION	0
WILDLIFE TRUST	805,991
STATE WILDLIFE GRANTS	502,725
REIMBURSED CONTRACTS	2,088,000
FY 04 BUDGET	\$43,669,625
AUTHORIZED CARRYOVER	2,962,195
AMOUNT AUTHORIZED FOR FY 04 SPENDING*	\$46,631,820

*previous year authorization was \$47,733,345

**FY 04 DETAIL BUDGET
STRATEGIC PLAN
(EXCLUDING COMPETITIVE REIMB PROJECTS)**

	FY 04	FY 03	% CHNG
<u>OFFICE OF THE DIRECTOR</u>			
ADMINISTRATION	650,351	556,373	17%
COMMISSION	74,711	45,819	63%
COOPERATIVE RESEARCH	337,535	411,000	-18%
STRATEGIC MANAGEMENT	116,784	130,938	-11%
POLICY DEVELOPMENT	363,363	465,547	-22%
STATEWIDE HABITAT PROTECTION	276,781	274,992	1%
LEGAL SERVICES	140,282	141,844	-1%
PERSONNEL	264,835	223,074	19%
 SUB-TOTAL	 2,224,642	 2,249,587	 -1%
<u>FISCAL AND ADMIN SERVICES</u>			
LEGISLATED EXPENSES(coupons, damage, salec, early retirement, cost allocation)	1,726,062	1,760,605	-2%
REVENUE COLLECTION	1,618,534	1,663,849	-3%
REGIONAL OFFICE MANAGEMENT	1,033,963	1,037,661	0%
ASSET MANAGEMENT	438,466	444,613	-1%
ACCOUNTS PAYABLE	187,717	231,369	-19%
ADMINISTRATION	199,127	207,968	-4%
FINANCIAL SYSTEMS	144,208	318,926	-55%
 SUB-TOTAL	 5,348,077	 5,664,991	 -6%
<u>SERVICES</u>			
HABITAT ACCESS & MAINTENANCE	1,909,078	1,858,069	3%
PROPERTY RIGHTS	518,238	523,375	-1%
MANAGEMENT INFO SYSTEMS	1,346,061	1,139,672	18%
VETERINARY SERVICES	677,452	668,399	1%
HEADQUARTERS & SUPP FACILITIES	744,066	880,411	-15%
PUBLICATIONS	635,361	625,913	2%
MAIL SERVICES	536,945	572,898	-6%
CONSERVATION EDUCATION	358,480	442,395	-19%
CUSTOMER OUTREACH	418,075	391,349	7%
ADMINISTRATION	390,423	442,908	-12%
CONSERVATION ENGINEERING	383,115	382,588	0%
REGIONAL I/E	475,974	560,506	-15%
GAME & FISH LABORATORY	467,642	423,109	11%
CUSTOMER SERVICES	175,427	167,186	5%
HUNTER EDUCATION	175,692	217,421	-19%
 SUB-TOTAL	 9,212,029	 9,296,199	 -1%

**FY 04 DETAIL BUDGET
STRATEGIC PLAN
(EXCLUDING COMPETITIVE REIMB PROJECTS)**

	FY 04	FY 03	% CHNG
<u>FISH DIVISION</u>			
HATCHERIES & REARING STATIONS	3,954,425	3,986,387	-1%
REG AQUATIC WILDLIFE MNGT	2,310,224	2,339,262	-1%
AQUATIC HABITAT MNGT	894,952	944,915	-5%
BOATING ACCESS	726,900	738,000	-2%
STATEWIDE WIDLIFE MNGT	399,810	361,474	11%
ADMINISTRATION	322,771	300,741	7%
FISH SPAWNING	189,856	154,164	23%
WATER DEVELOPMENT	213,360	200,916	6%
FISH WYOMING	-	80,000	-100%
FISH DISTRIBUTION	74,122	108,814	-32%
 SUB-TOTAL	 9,086,420	 9,214,673	 -1%
<u>WILDLIFE DIVISION</u>			
REGIONAL GAME WARDENS	4,748,251	4,746,786	0%
REGIONAL TERRESTERIAL BIOLOGISTS	2,425,834	2,362,116	3%
TERRESTERIAL HABITAT	1,202,625	1,509,207	-20%
WILDLIFE FEEDING	1,439,606	1,403,555	3%
REGIONAL WILDLIFE SUPERVISORS	1,069,381	1,069,714	0%
PROPERTY RIGHTS (ACCESS YES AMDIN)	1,092,758	1,120,688	
STATEWIDE WLDLFE ENFORCEMENT	624,391	604,942	3%
BIOLOGICAL SERVICES	762,261	816,959	-7%
TROPHY GAME	509,132	541,271	-6%
ADMINISTRATION	601,420	496,939	21%
BIRD FARMS	342,453	336,190	2%
TERRESTRIAL NONGAME	493,764	447,989	10%
WATERFOWL	125,251	144,842	-14%
PREDATOR MANAGEMENT	100,000	100,000	0%
BOATING SAFETY & INVEST ADMIN	162,530	163,481	-1%
STOP POACHING	10,800	11,220	-4%
 SUB-TOTAL	 15,710,457	 15,875,899	 -1%
 BUDGETS ON A STRATEGIC BASIS	 \$ 41,581,625	 \$ 42,301,349	 -2%

**WYOMING GAME AND FISH COMMISSION FY 04 BUDGET
WILDLIFE TRUST FUND PROJECTS**

HABITAT PROJECTS

Electrical Fence Study (Coop Unit)	\$ 20,000
Winward Technical Assistance Contract	20,925
WHMA/CRW Enhancement BigHorns	3,000
Luce Reservoir	16,500
Pennock Mountain Burn	8,000
Burns & Buxton Prescribed Burn	7,000
Hobble Creek Restoration	5,000
SE Wyoming Walk-in-Access Water Development CRP*	27,500
Roth Grazing/Habitat Technical Supplement*^	12,375
Shrub Habitat Trend Analysis*	78,748
NE Habitat Extension Biologist*	19,142
HABITAT PROJECTS	\$ 218,190

Property Rights Specialist Program	77,267
Habitat Biologist Program	389,958
HABITAT PROGRAMS	\$ 467,225

CONSERVATION EDUCATION (WORTH THE WATCHING) PROJECTS

Wild Times publication*	34,600
Bear Brochure Grant*	5,000
"WORTH-THE-WATCHING" PROJECTS	\$ 39,600

Alternative Funding Program	\$ 80,976
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TOTAL DEPARTMENT TRUST PROGRAMS/PROJECTS	\$ 805,991
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*multi year projects approved in prior year are in bold type

^ projects/programs are partially funded from a one-year appropriation from the USFW State Wildlife Grant program

STATE WILDLIFE GRANT PROJECTS

Native Cutthroat Trout Spawning	\$ 80,976
Salt River Enhancement Project	15,000
Conservation of Prairie Streams	29,388
Herpetological Program	6,838
Green River Watershed Assessment	23,391
Making GIS Useful*	38,868
Enhancing Understanding of Species at Risk through GIS	35,285
Grizzly Bear Management Planning	14,000
Life History Requirements of Sauger in Wind River*	43,280
Effect of Recreational Shooting of Prairie Dogs*	31,500
Mountain Plover Population & Habitat Survey*	10,000
Bonneville Cutthroat Trout Protection*	41,050
Upper Yellowstone River Basin Cutthroat Study	23,750
Trumpeter Swan Summer Habitat Enhancement Study	21,500
Wyoming Bat Conservation Plan	35,246
Shortgrass Prairie Biologist	63,139
Statewide Tasks Identified in Sage Grouse Conservation	24,490
Raptor Stipulations	15,000
Evaluation of Habitat Fragmentation on Sage Grouse	15,000
TOTAL DEPARTMENT FY 04 State Wildlife Projects	\$ 502,725

*multi year projects approved in prior year are in bold type

MAINTENANCE & OPERATIONS BUDGETS (FY 84 - FY 04)
(Does not include Enhancements, Trust Projects, Property Rights, Capital Facilities or Reimbursed Projects)

FY 84	\$18,482,033	FY 89 Continued		FY 95	\$30,672,321	FY 00	\$36,238,774
Game Division	6,828,790	Early Retirement	125,000	Wildlife Division	10,126,225	Wildlife Division	12,970,024
Fish Division	4,048,209	Damage	500,000	Fish Division	6,187,409	Fish Division	8,377,249
R&D Division	2,206,946	FY 90	\$20,533,195	HATS Division	4,195,529	Services Division*	7,765,569
Communications Division	1,284,080	Game Division	8,084,170	I&E Services Division	3,204,102	Fiscal Services Division	3,297,221
Fiscal Division	2,131,904	Fish Division	4,406,561	Fiscal Services Division	2,692,088	Office of Director	1,860,511
Administration Division	1,332,104	HATS Division	2,693,910	Office of Director	1,956,424	Coupons	515,000
Coupons	650,000	I&E Services Division	1,661,592	Coupons	650,000	Early Retirement	325,600
FY 85	\$18,374,317	Adm. & Fiscal Svcs. Div.	1,329,610	Early Retirement	150,000	Damage	500,000
Game Division	6,580,211	Office of Director	708,133	Damage	500,000	Cost Allocation	400,000
Fish Division	3,873,060	Agency Common	474,219	Cost Allocation	300,000	SALECS	227,600
HATS Division	2,112,384	Agency Common	474,219	SALECS	217,000		
Communications Division	1,247,265	Coupons	550,000	Salary Contingency	493,544		
Fiscal Division	2,089,271	Damage	500,000				
Administration Division	1,272,126	Early Retirement	125,000	FY 96	\$31,402,001	FY 01	\$36,571,119
Coupons	700,000	FY 91	\$22,518,236	Wildlife Division	10,288,181	Wildlife Division	12,900,839
Damage	500,000	Game Division	8,711,427	Fish Division	6,803,683	Fish Division	8,617,707
FY 86	\$18,870,228	Fish Division	4,787,533	HATS Division	4,587,011	Services Division*	7,884,777
Game Division	6,983,611	HATS Division	2,876,190	I&E Services Division	3,504,112	Fiscal Services Division	3,355,319
Fish Division	4,184,358	I&E Services Division	1,941,699	Fiscal Services Division	3,018,908	Office of Director	1,917,494
HATS Division	2,724,196	Adm. & Fiscal Svcs. Div.	1,383,147	Office of Director	1,249,286	Coupons	515,000
Communications Division	1,460,214	Office of Director	746,640	Coupons	600,000	Early Retirement	305,000
Fiscal Division	2,174,897	Agency Common	876,600	Early Retirement	333,820	Damage	500,000
Administration Division	1,362,952	Coupons	600,000	Damage	500,000	Cost Allocation	350,000
Coupons	750,000	Damage	500,000	Cost Allocation	300,000	SALECS	224,000
Damage	500,000	Early Retirement	95,000	SALECS	217,000		
FY 87	\$19,913,441	FY 92	\$27,073,153	FY 97	\$30,484,636	FY 02	\$39,727,021
Game Division	7,483,347	Game Division	9,893,600	Wildlife Division	11,479,769	Wildlife Division	14,047,986
Fish Division	4,451,347	Fish Division	5,708,203	Fish Division	6,255,709	Fish Division	9,107,324
HATS Division	2,843,805	HATS Division	4,035,772	Services Division	7,033,623	Services Division*	8,982,248
Communications Division	1,538,464	I&E Services Division	2,723,179	Fiscal Services Division	2,780,604	Fiscal Services Division	3,648,879
Fiscal Division	2,359,229	Fiscal Services Division	2,469,238	Office of Director	984,931	Office of Director	2,081,384
Administration Division	1,236,638	Office of Director	942,412	Coupons	560,000	Coupons	475,000
Coupons	750,000	Coupons	600,000	Early Retirement	378,000	Early Retirement	262,200
Damage	500,000	Damage	500,000	Damage	500,000	Damage	500,000
FY 88	\$21,040,674	Early Retirement	200,749	Cost Allocation	300,000	Cost Allocation	370,000
Game Division	7,381,078	FY 93	\$29,674,362	SALECS	212,000	SALECS	252,000
Fish Division	4,602,523	Game Division	10,561,574	FY 98	\$33,776,380	FY 03	\$40,545,447
HATS Division	2,920,979	Fish Division	6,124,559	Wildlife Division	12,747,313	Wildlife Division	14,843,001
Communications Division	1,553,215	HATS Division	4,114,019	Fish Division	6,755,891	Fish Division	8,856,919
Fiscal Division	1,436,749	I&E Services Division	3,253,794	Services Division	7,332,429	Services Division	9,015,519
Administration Division	702,834	Fiscal Services Division	2,377,512	Fiscal Services Division	3,097,432	Fiscal Services Division	3,904,386
Agency Common	1,193,296	Office of Director	1,632,904	Office of Director	1,822,313	Office of Director	2,165,017
Coupons	750,000	Coupons	860,000	Coupons	602,000	Coupons	450,000
Damage	500,000	Damage	500,000	Early Retirement	369,002	Early Retirement	208,605
FY 89	\$20,465,981	Early Retirement	250,000	Damage	500,000	Damage	500,000
Game Division	7,576,046	FY 94	\$30,946,580	Cost Allocation	330,000	Cost Allocation	350,000
Fish Division	4,146,592	Game Division	10,423,261	SALECS	220,000	SALECS	252,000
HATS Division	2,540,610	Fish Division	6,185,826	FY 99	\$33,582,267	FY 04	\$39,572,909
I&E Services Division	1,583,581	HATS Division	4,539,758	Wildlife Division	12,155,687	Wildlife Division	14,520,159
Adm. & Fiscal Svcs. Div.	1,337,388	I&E Services Division	3,568,632	Fish Division	7,017,794	Fish Division	8,780,831
Office of Director	689,602	Fiscal Services Division	2,996,836	Services Division	7,615,445	Services Division	8,921,007
Agency Common	1,217,162	Fiscal Services Division	2,996,836	Fiscal Services Division	3,025,520	Fiscal Services	3,622,015
Coupons	750,000	Office of Director	1,687,267	Office of Director	1,824,772	Office of Director	2,002,835
Damage	500,000	Coupons	750,000	Coupons	515,000	Coupons	400,000
		Early Retirement	295,000	Early Retirement	358,249	Early Retirement	164,062
				Damage	500,000	Damage	500,000
				Cost Allocation	342,200	Cost Allocation	410,000
				SALECS	227,600	SALECS	252,000

**STATEMENT OF ASSETS, LIABILITIES, AND FUND BALANCES
ARISING FROM CASH TRANSACTIONS
AS OF JUNE 30**

	2003	2002	2001	2000	% CHNG FY 00 TO FY 03
ASSETS:					
PETTY CASH	\$ 14,675	\$ 14,675	\$ 14,675	\$ 14,675	
CASH - OPERATIONS	15,221,185	16,651,727	21,268,183	20,868,132	-27%
CASH- WLDLFE TRUST INTEREST	1,718,782	2,320,767	2,498,820	2,364,244	-27%
CASH- ACCESS FUND	<u>716,722</u>	<u>570,477</u>	<u>312,003</u>	<u>196,196</u>	<u>265%</u>
	17,671,364	19,557,646	24,093,681	23,443,247	-25%
CASH - WLDLFE TRUST CORPUS	17,017,938	15,999,547	15,172,663	14,703,898	16%
CASH- LIFETIME LICENSE FUND	1,890,305	1,288,312	1,020,039	653,363	189%
CASH-ALTERNATIVE ENTERPRISES	50,000	50,110	50,000	50,000	0%
CASH - APPS/LICENSES IN PROCESS	10,614,144	10,509,441	10,274,201	10,054,264	6%
RETURNED CHECKS	<u>5,679</u>	<u>3,935</u>	<u>1,936</u>	<u>1,598</u>	<u>255%</u>
TOTAL ASSETS	<u>47,249,430</u>	<u>47,408,991</u>	<u>50,612,520</u>	<u>48,906,370</u>	<u>-3%</u>
 LIABILITIES:					
VOUCHERS PAYABLE	152,632	163,678	226,538	308,425	-51%
LICENSE AGENT BONDS	100,000	100,000	98,119	100,000	0%
COURT ORDERED RESTITUTION	49,496	115,317	106,242	45,937	8%
UNDISTRIBUTED DRAW/APPS PENDING	10,614,144	10,509,441	10,274,201	10,054,264	6%
RESTRICTED FEDERAL FUNDS	28,266	26,540	26,540	26,540	7%
OTHER DEFERRED REVENUE	<u>210,449</u>	<u>203,121</u>	<u>42,240</u>	<u>44,152</u>	<u>377%</u>
TOTAL LIABILITIES	11,154,987	11,118,097	10,773,880	10,579,318	5%
 FUND BALANCE:					
RESTRICTED					
OUTSTANDING ENCUMBERANCES	2,961,197	3,344,086	2,640,065	2,907,206	2%
WLDLFE TRUST FUND CORPUS	17,017,938	15,999,547	15,172,663	14,703,898	16%
WLD TRUST FUND INTEREST	1,506,505	2,055,084	2,320,100	2,207,254	-32%
ACCESS FUND CORPUS	706,722	554,477	312,003	196,196	260%
LIFETIME LICENSE FUND	1,890,305	1,288,312	1,020,039	653,363	189%
ALTERNATIVE ENTERPRISES	50,000	50,110	50,000	50,000	0%
 UNRESTRICTED					
G&F OPERATING FUND	11,961,776	12,999,278	18,323,770	17,609,135	-32%
TOTAL FUND BALANCE	<u>36,094,443</u>	<u>36,290,894</u>	<u>39,838,640</u>	<u>38,327,052</u>	<u>-6%</u>
TOTAL LIABILITIES AND FUND BALANCE	<u>47,249,430</u>	<u>47,408,991</u>	<u>50,612,520</u>	<u>48,906,370</u>	<u>-3%</u>

**STATEMENT OF REVENUE AND EXPENDITURES ARISING FROM CASH TRANSACTIONS
FOR THE PERIOD ENDED JUNE 30, 2003**

EXPENDABLE FUNDS			%PR CH
<u>REVENUE RECEIVED</u>	<u>FY03</u>	<u>FY02</u>	
Hunting & Fish Lic@	\$ 24,032,899	\$ 24,057,313	0%
Conservation Stamps	664,758	689,995	-4%
Boating Registration	404,235	357,630	13%
Pooled Interest Opr	909,400	1,531,107	-41%
Pooled Interest Trt	597,706	879,641	-32%
Income from Inv&Land	50,526	44,143	14%
100% Reimbursable	1,803,136	1,317,373	37%
Application Fees	1,345,716	1,371,820	-2%
Publication Sales	176,049	186,674	-6%
Access Yes c-stamp/donations	614,513	621,814	-1%
Federal Aid & Grants	7,750,243	7,760,008	0%
Other Items	<u>38,396</u>	<u>105,001</u>	-63%
TOTAL REVENUE EARNED	38,387,577	38,922,519	-1%
 <u>EXPENDITURES MADE</u>			
Maintenance & Ops			
Office of Director	1,905,351	1,858,311	3%
Fiscal Division	2,894,972	3,103,041	-7%
Services Division	8,042,647	8,534,007	-6%
Fish Division	7,500,128	7,704,774	-3%
Wildlife Division	<u>13,490,405</u>	<u>13,317,208</u>	1%
TOTAL M&O EXPENSES	33,833,503	34,517,341	-2%
Access Payments	461,043	374,342	
Trust Projects	1,076,322	955,608	13%
Legislated Expenses	1,408,707	1,438,918	-2%
Carryover M/O /Trust FD	<u>1,549,580</u>	<u>1,753,291</u>	-12%
TOTAL OPERATING EXP	38,329,155	39,039,500	-2%
Reimbursable Contracts	1,294,055	1,511,757	-14%
Mitigation Costs	0	0	
Capital Facilities	0	2,600,766	-100%
Property Rights	750	40,799	-98%
Carryover	<u>738,180</u>	<u>330,019</u>	124%
TOTAL NONOP EXPENDTRS	2,032,985	4,483,341	-55%
TOTAL EXPENDITURES	<u>40,362,140</u>	<u>43,522,841</u>	<u>-7%</u>
DEFICIT OF REV OVER EXP	<u>(\$1,974,563)</u>	<u>(\$4,600,322)</u>	<u>-57%</u>

All Department revenue is recognized above excepting: 1)\$722,650 in lifetime license sales & interest earned on those licenses (W.S. provides that the corpus of the lifetime license fund cannot be spent, but up to 6% of the corpus balance may be transferred annually to the Game and Fish Operating fund;

2)\$352,500 in lifetime conservation stamps and 37 1/2% of the c-stamp (\$664,758) revenue deposited in the wildlife trust fund; W.S. provides the corpus cannot be spent, but interest earned may be used for operations

3)access donations of \$143,297 which are deposited into an access fund & are budgeted and spent in the year following receipt; they can only be used for purchasing nonfee title access easements;

4) and \$37,072 (net profit on a cash basis for revenue of \$164,036 & expenses of \$126,964) from sale of promotional products and publications.

**SCHEDULE OF EXPENDITURES BY STRATEGIC PLAN OBJECTIVES
FOR THE FISCAL YEAR ENDED JUNE 30, 2003**

		EXPENDITURES		WLD TRUST <u>FUND</u>	ACCESS <u>FUND</u>
		<u>TOTAL</u>	<u>G&F FUND</u>		
Aquatic Wildlife Management	8.95%	3,536,422	3,536,422		
Bird Farms	0.84%	333,455	333,455		
Co-op Unit Research	1.04%	411,000	411,000		
Conservation Engineering	0.98%	387,429	387,429		
Department Administration	5.57%	2,201,239	2,201,239		
Education	1.44%	568,874	472,588	96,286	
Feedgrounds	3.61%	1,426,504	1,426,504		
Financial Management	4.85%	1,916,734	1,916,734		
Fish Culture	9.24%	3,651,154	3,651,154		
Habitat/Access Maintenance	10.16%	4,015,963	2,984,976	1,030,987	
Information	2.83%	1,117,407	1,117,407		
Legislative Expenses	3.66%	1,447,243	1,447,243		
Mailroom	1.53%	604,267	604,267		
Management Info Systems	2.64%	1,041,474	1,041,474		
Personnel Management	0.48%	188,968	188,968		
Property Rights	4.49%	1,314,974	853,931		461,043
Regional Information/Ed	1.21%	478,832	478,832		
Specialized Law Enforcement	1.81%	715,170	715,170		
Strategic Management	1.06%	418,982	334,414	84,568	
Support Facilities/Personnel	5.95%	2,351,743	2,351,743		
Terrestrial Wildlife Management	24.44%	9,655,542	9,655,542		
Wildlife Habitat Protection	0.60%	235,636	235,636		
Wildlife Health & Lab Services	2.61%	1,032,560	1,032,560		
TTL DEPT OBJECTIVES	100.00%	39,051,572	37,378,688	1,211,841	461,043
Reimbursable Grants		1,310,568	1,310,568	-	
Mitigation Funds		-	-	-	
Alternative Enterprises		126,694			
TTL AMT EXPND DURING FY 03		<u>40,488,834</u>	<u>38,689,256</u>	<u>1,211,841</u>	<u>461,043</u>

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

BIG GAME LICENSES	1998	1999	2000	2001	2002
Resident Antelope (\$22)	11,878	12,721	13,700	11,583	12,260
Depredation Resident Antelope (\$22)	0	84	0		
Resident Youth Antelope (\$15)	2,157	2,340	2,376	1,942	2,094
Depredation Resident Youth Antelope (\$15)	0	12	0		
Resident Doe/Fawn Antelope (\$17)	3,969	0	0		
Resident Doe/Fawn Antelope (\$20)	0	4,901	5,467	3,162	3,724
Resident Youth Doe/Fawn Antelope (\$15)	547	0	0		
Resident Youth Doe/Fawn Antelope (\$14)	0	750	684	385	434
Pioneer Antelope (\$2)	600	627	649	440	379
Pioneer Doe/Fawn Antelope (\$2)	55	82	91	50	54
Depredation Resident Pioneer Antelope (\$2)	0	4	0		
TOTALS	19,206	21,521	22,967	17,562	18,945
Nonres Special Antelope (\$285)	1,684	1,924	2,236	1,790	1,803
Nonres Antelope (\$185)	9,378	10,185	11,710	11,168	11,710
Nonres Youth Antelope (\$110)	401	550	576	557	587
Nonres Doe/Fawn Antelope (\$50)	3,238	0	0	5,483	6,262
Nonres Doe/Fawn Antelope (\$80)	0	4,014	5,221		
Nonres Youth Doe/Fawn Antelope (\$110)	187	0	0		
Nonres Youth Doe/Fawn Antelope (\$50)	0	273	385		
Nonres Youth Doe/Fawn Antelope (\$30)				291	413
TOTALS	14,888	16,946	20,128	19,289	20,775
TOTAL ANTELOPE LICENSES	34,094	38,467	43,095	36,851	39,720
Resident Bighorn Sheep (\$75)	188	190	197	211	189
Nonresident Bighorn Sheep (\$1500)	67	68	71	71	69
TOTAL BIGHORN SHEEP LICENSES	255	258	268	282	258
Resident Deer (\$22)	39,940	40,903	42,857		
Resident Deer (\$25)				41,682	41,556
Resident Youth Deer (\$15)	6,282	6,339	6,500	6,122	5,933
Resident Doe/Fawn Deer (\$20)	1,823	2,082	2,817	3,382	3,266
Resident Youth Doe/Fawn Deer (\$15)	199	0	0		
Resident Youth Doe/Fawn Deer (\$14)	0	225	262	359	305
Depredation Resident Deer (\$22)	33	0	0		
Depredation Resident Doe/Fawn Deer (\$20)					167
Depredation Resident Youth Deer (\$15)	6	0	0		
Depredation Resident Youth Doe/Fawn Deer (\$14)					28
Pioneer Deer (\$2)	1,329	1,290	1,298	993	861
Pioneer Doe/Fawn Deer (\$2)	27	36	43	59	48
TOTALS	49,639	50,875	53,777	52,597	52,164
Nonres Special Deer (\$285)	4,362	4,426	4,885		
Nonres Special Deer (\$310)				4,372	4,263
Nonresident Deer (\$185)	20,934	22,200	24,696		
Nonresident Deer (\$210)				24,787	25,201
Nonresident Youth Deer (\$110)	628	720	873	910	953
Nonresident Doe/Fawn Deer (\$50)	849	0	0	2,807	2,466
Nonresident Doe/Fawn Deer (\$80)	0	1,137	1,636		
Nonresident Youth Doe/Fawn Deer (\$50)	40	61	93		
Nonresident Youth Doe/Fawn Deer (\$30)				151	147
Nonresident Depredation Deer (\$210)					6
TOTALS	26,813	28,544	32,183	33,027	33,036
TOTAL DEER LICENSES	76,452	79,419	85,960	85,624	85,200

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

BIG GAME LICENSES (CONT'D)	1998	1999	2000	2001	2002
Resident Elk (\$35)	43,508	43,023	42,328	41,548	41,106
Resident Youth Elk (\$25)	5,154	5,055	4,716	4,457	4,255
Depredation Resident Elk (\$35)	94	3	0		
Depredation Resident Youth Elk (\$25)	9	1	0		
Pioneer Elk (\$5)	1,359	1,386	1,379	1,083	927
Resident Cow/Calf Elk (\$35)	1,905	0	0		
Resident Cow/Calf Elk (\$30)	0	2,743	3,773	3,684	3,955
Resident Yth Cow/Calf Elk (\$25)	130	0	0		
Resident Yth Cow/Calf Elk (\$20)	0	220	284	265	268
Pioneer Cow/Calf Elk (\$5)	32	42	68	47	49
TOTALS	52,191	52,473	52,548	51,084	50,560
Nonres Special Elk/Fishing (\$600)	2,835	2,836	2,822	2,821	2,809
Nonres Elk & Fishing (\$400)	6,386	6,969	6,838	6,599	6,388
Nonres Youth Elk/Fishing (\$275)	157	156	149	171	147
Nonres Cow/Calf Elk (\$400)	37	0	0		
Nonres Cow/Calf Elk (\$200)	0	580	1,206		
Nonres Cow/Calf Elk (\$150)				1,738	2,023
Nonres Youth Cow/Calf Elk (\$275)	1	0	0		
Nonres Youth Cow/Calf Elk (\$150)	0	14	33		
Nonres Youth Cow/Calf Elk (\$75)				80	86
TOTALS	9,416	10,555	11,048	11,409	11,453
TOTAL ELK LICENSES	61,607	63,028	63,596	62,493	62,013
Resident Moose (\$75)	1,041	1,110	1,190	1,198	1,167
Nonresident Moose (\$1000)	186	194	203	208	219
TOTAL MOOSE LICENSES	1,227	1,304	1,393	1,406	1,386
Resident Mountain Goat (\$75)	9	12	12	13	12
Nonres Mountain Goat (\$1500)	3	4	4	4	4
TOTAL MOUNTAIN GOAT LICENSES	12	16	16	17	16
COMMERCIAL LICENSES	1998	1999	2000	2001	2002
Comm'l Fish Hatchery (\$125)	16	19	16	18	14
Deal in Live Bait (\$45)	59	56	55	64	61
Fishing Preserve (\$90)	79	91	88	84	75
Resident Fur Dealer (\$35)	22	20	15	15	19
Nonresident Fur Dealer (\$190)	7	5	7	8	7
Game Bird Farm (\$90)	87	93	109	104	103
Seine or Trap Fish License (\$25)	373	413	428	451	
Seine or Trap Fish License (\$15)					532
Resident Taxidermist (\$45)	167	155	155	152	152
Nonresident Taxidermist (\$500)	10	6	5	4	5
TOTAL COMMERCIAL LICENSES:	820	858	878	900	968
FUR BEARING/TRAPPING LICENSES	1998	1999	2000	2001	2002
Res Fur Bearing Trap (\$30)	853	856	965	1,001	1,156
Res Youth Fur Bear Trap (\$6)	106	99	99	101	106
Nonres Fur Bearing Trap (\$170)	15	21	20	26	27
TOTAL FUR BEARING/TRAPPING LICENSES:	974	976	1,084	1,128	1,289

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

GAME BIRD/SMALL GAME LICENSES:	1998	1999	2000	2001	2002
Res Bird/Small Game Annual (\$15)	23,448	24,680	17,385	14,129	12,326
Res Daily Bird/Small Game (\$5)	1,079	1,351	900	879	765
Nonres Bird/Small Game Annual (\$50)	1,674	1,842	2,034	2,191	1,925
Nonres Daily Bird/Small Game (\$10)	5,632	6,971	7,895		
Nonres Daily Bird/Small Game (\$15)				5,089	4,465
Nonres Youth Bird/Small Game Annual (\$40)	54	49	56	68	68
TOTAL COMBINATION LICENSES	31,887	34,893	28,270	22,356	19,549
GAME BIRD LICENSES:	1998	1999	2000	2001	2002
Resident Game Bird (\$10)	0	0	6,203	7,776	7,652
3-Day Special Bird (\$15)	223	164	185	128	115
TOTAL GAME BIRD LICENSES	223	164	6,388	7,904	7,767
SMALL GAME LICENSES:	1998	1999	2000	2001	2002
Resident Small Game (\$10)	0	0	1,735	1,479	1,510
TOTAL SMALL GAME LICENSES	0	0	1,735	1,479	1,510
TURKEY LICENSES:	1998	1999	2000	2001	2002
Resident Spring Turkey (\$10)	1,848	2,608	3,427	3,888	3,728
Resident Fall Turkey (\$10)	1,186	1,476	2,303	1,952	1,756
TOTALS	3,034	4,084	5,730	5,840	5,484
Nonres Spring Turkey (\$50)	461	695	912	1,147	1,187
Nonres Fall Turkey (\$50)	223	303	593	522	511
TOTALS	684	998	1,505	1,669	1,698
TOTAL TURKEY LICENSES	3,718	5,082	7,235	7,509	7,182
GAME FISH LICENSES:	1998	1999	2000	2001	2002
Resident Fishing Annual (\$15)	95,429	94,136	95,456	87,873	81,394
Resident Youth Fishing Annual (\$3)	11,071	10,605	10,415	8,341	7,413
Resident Daily Fish (\$3)	20,885	24,126	26,066	31,952	31,950
TOTALS	127,385	128,867	131,937	128,166	120,757
Nonres Fishing Annual (\$65)	8,197	8,662	9,577	16,203	16,644
Nonres Youth Fish Annual (\$15)	3,122	3,099	1,615	3,941	3,858
Nonres Daily Fishing (\$6)	337,292	348,300	350,496		
Nonres Daily Fishing (\$10)				252,686	227,693
Tourist Youth 10-Day Fish (\$10)	0	0	3,713		
TOTALS	348,611	360,061	365,401	272,830	248,195
TOTAL FISHING LICENSES	475,996	488,928	497,338	400,996	368,952
LIFETIME LICENSES:	1998	1999	2000	2001	2002
Bird/Fish/Small Game (\$400)	19	20	12	39	82
Fishing (\$250)	24	28	27	41	41
Bird/Fish/Small Game & Conservation Stamp (\$475)	246	265	536	623	644
Fishing/Conservation Stamp (\$325)	127	146	263	423	429
Conservation Stamp (\$75)	37	58	849	1,845	1,739
TOTAL LIFETIME LICENSES	453	517	1,687	2,971	2,935

STATEWIDE FIVE-YEAR COMPARISON OF LICENSE SALES

	1998	1999	2000	2001	2002
OTHER LICENSES:					
Resident Archery (\$10)	8,257	8,642	8,962	9,265	9,717
Nonresident Archery (\$20)	1,876	2,165	2,377	2,490	2,580
TOTAL ARCHERY LICENSES	10,133	10,807	11,339	11,755	12,297
Res License to Capture Falcon (\$25)	22	20	25	23	25
Nonres Lic to Capture Falcon (\$170)	31	29	16	24	26
License to Hunt with Falcon (\$10)	77	98	87	96	95
License to Capture Fur Bearing Animal (\$15)	0	0	2	1	2
Duplicate with Coupon (\$3)	933	939	1,086	964	875
Duplicate without Coupon (\$3)	95	103	96	116	133
Duplicate Multi-Purpose Lic. (\$3)	529	525	528	488	426
Duplicate Commercial Lic. (\$3)	1	2	12	1	2
TOTAL OTHER LICENSES	1,688	1,716	1,852	1,713	1,584
PERMITS:	1998	1999	2000	2001	2002
Goose Special Management Permit (\$10)	393	385	348	266	186
Pheasant Special Mgmt Permit (\$10)	4,492	5,954	4,747	4,855	5,839
Conservation Order Special Mgmt Permit (\$10.00)				314	229
TOTAL PERMITS	4,885	6,339	5,095	5,435	6,254
STAMPS AND TAGS:	1998	1999	2000	2001	2002
Conservation Stamps (\$5)	187,519	190,210	195,953		
Conservation Stamps (\$10)				191,929	186,535
Reciprocity Stamps (\$10)	5,628	5,794	5,954	7,563	7,809
Wildlife Damage Management Stamp (\$5)	0	0	362	245	
Wildlife Damage Management Stamp (\$10)					240
Interstate Game Tags (\$3)	13,623	14,492	16,138	14,726	14,763
TOTAL STAMPS AND TAGS	206,770	210,496	218,407	214,463	209,347
TROPHY GAME LICENSES:	1998	1999	2000	2001	2002
Resident Black Bear (\$30)	1,852	1,941	2,007	2,258	2,675
Nonres Black Bear (\$250)	200	184	150	164	232
TOTAL BLACK BEAR LICENSES	2,052	2,125	2,157	2,422	2,907
Resident Mountain Lion (\$20)	0	0	0	1,275	1,424
Resident Mountain Lion (\$30)	948	1,139	1,306		
Resident Additional Mountain Lion (\$15)	0	20	13	12	
Nonres Mountain Lion (\$250)	58	100	116	109	121
Nonres Additional Mountain Lion (\$75)	0	5	1	1	
TOTAL MOUNTAIN LION LICENSES	1,006	1,264	1,436	1,397	1,545
WILD BISON LICENSES:	1998	1999	2000	2001	2002
Resident Wild Bison (\$275)	4	17	23	42	53
Nonresident Wild Bison (\$1688)	0	2	2	2	6
TOTAL BISON LICENSES:	4	19	25	44	59
	1998	1999	2000	2001	2002
GRAND TOTAL LICENSES:	914,256	946,676	979,254	869,145	832,738

HIP PERMITS ISSUED: 10,491

EXPENDITURE ALLOCATIONS BY PROGRAM -- FY 03

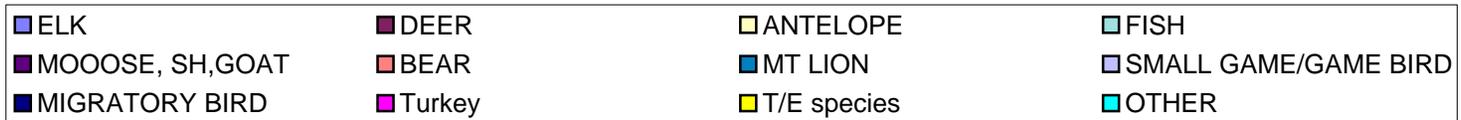
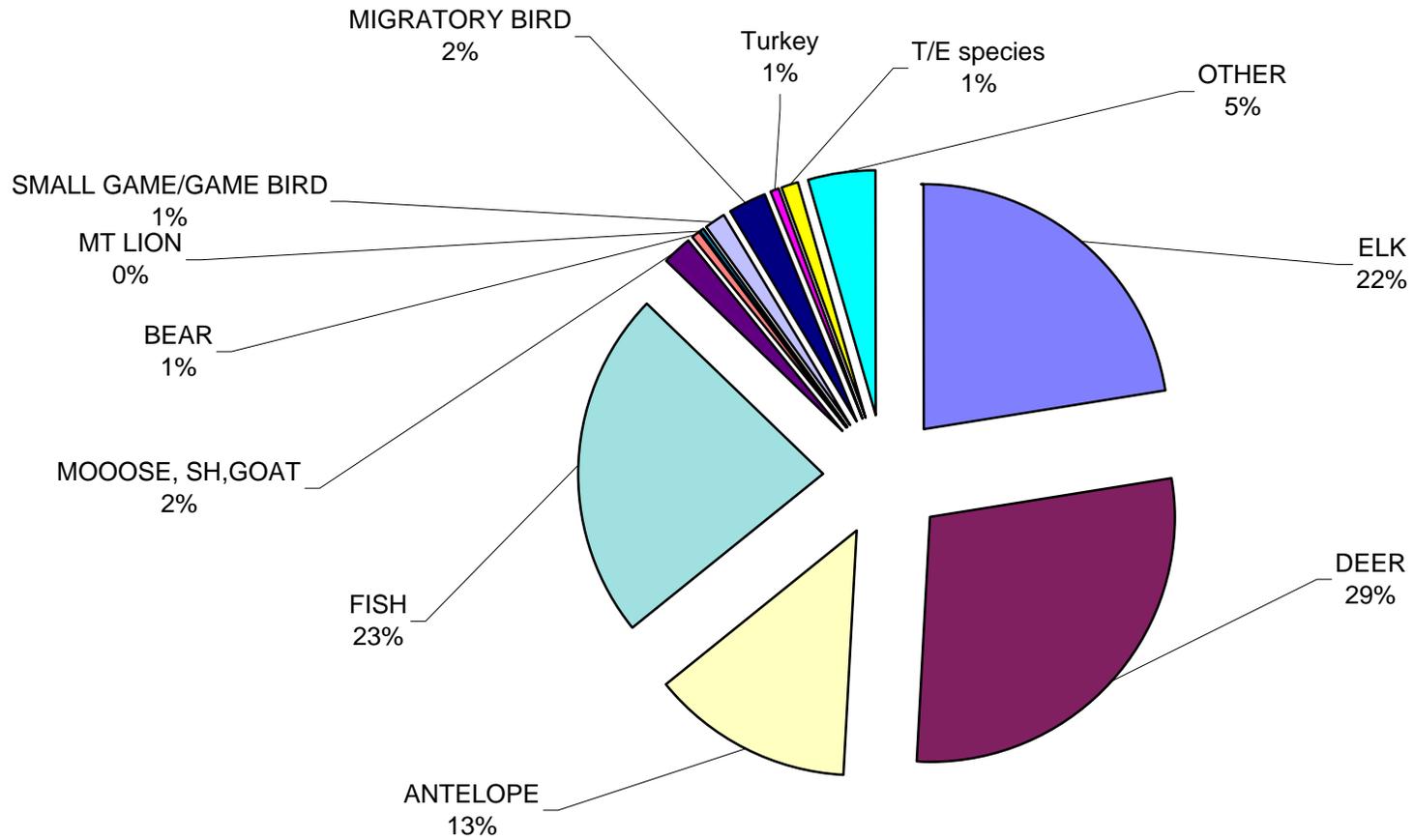
CODE	PROGRAM	COSTS BEFORE ALLOCATION	GEN'L WILDLIFE ALLOCATION*	COSTS AFTER ALLOCATION
AA	GENERAL WILDLIFE	9,585,198		
BC	ANTELOPE	2,151,480	676,472	2,827,952
BD	ELK	6,505,453	2,045,454	8,550,907
BE	ROCKY MOUNTAIN SHEEP	560,343	176,184	736,527
BF	MOOSE	469,733	147,694	617,427
BG	ROCKY MOUNTAIN GOAT	64,778	20,368	85,146
BJ	MOUNTAIN LION	380,247	119,558	499,805
BK	BLACK BEAR	616,211	193,750	809,961
BL	GRIZZLY BEAR	1,048,706	329,736	1,378,442
BM	MULE DEER	3,173,244	997,736	4,170,980
BN	WHITE-TAILED DEER	332,015	104,393	436,408
BP	BISON	20,019	6,294	26,313
BW	WOLF	384,982	121,047	506,029
CA	SMALL GAME	25,690	8,077	33,767
CB	GAME BIRDS	86,654	27,246	113,900
CC	PHEASANTS	681,113	214,157	895,270
CF	TURKEY	207,234	65,159	272,393
CG	PARTRIDGE	34,149	10,737	44,886
CR	BLUE/RUFFED GROUSE	13,180	4,144	17,324
CT	SAGE GROUSE	745,512	234,405	979,917
CV	SHARPTAILED GROUSE	29,902	9,402	39,304
DB	GEESE	328,432	103,266	431,698
DC	DUCK	141,204	44,398	185,602
DD	SWANS	236,642	74,405	311,047
DE	DOVES	85,091	26,754	111,845

EXPENDITURE ALLOCATIONS BY PROGRAM -- FY 03

CODE	PROGRAM	COSTS BEFORE ALLOCATION	GEN'L WILDLIFE ALLOCATION*	COSTS AFTER ALLOCATION
DF	CRANES	33,629	10,574	44,203
FX	SPORT FISH	10,673,343	3,355,928	14,029,271
HB	BOBCAT/LYNX	132,876	41,779	174,655
HC	BEAVER	37,203	11,697	48,900
MB	COMMERCIAL FISHERIES	13,446	4,228	17,674
NA	NONGAME MAMMALS	139,688	43,921	183,609
NB	NONGAME BIRDS	274,124	86,190	360,314
NC	RAPTORS	44,129	13,875	58,004
ND	NONGAME FISH	46,204	14,528	60,732
NE	AMPHIBIANS/REPTILES	131,883	41,467	173,350
NF	PREDATORY BIRDS	379	119	498
NH	PEREGRINE FALCON	41,555	13,066	54,621
NJ	BALD EAGLE	20,763	6,528	27,291
NK	BLACK FOOTED FERRET	23,075	7,255	30,330
NL	CANADIAN LYNX	142	45	187
NM	PREBLES MEADOW MOUSE	337	106	443
NP	PREDATORY MAMMALS	133,630	42,016	175,646
NR	BLACK TAILED PRAR DOG	253,256	79,629	332,885
NS	WHITE TAILED PRAR DOG	712	224	936
NW	WYOMING TOAD	104,489	32,854	137,343
NX	EXOTIC GAME	58,310	18,334	76,644
ZZ	NONWILDLIFE	418,736		418,736
TOTAL PROGRAM COSTS		40,489,121	9,585,199	40,489,122

*Most costs for the Office of Director, Fiscal Services, Services (including remodeling and maintenance of regional office buildings, and Information/Education programs such as Wyoming Wildlife magazine, information services, visitor centers, educational programs, etc.) are included in General Wildlife and allocated on a percentage basis to specific department programs.

Wyoming Game and Fish Revenue by Species FY03



EXPENDITURE ALLOCATIONS BY PROGRAM -- Five-Year History (Includes General Wildlife Allocation)

PROGRAM	1,999	%	2,000	%	2,001	%	2,002	%	2,003	%
Antelope	1,936,472	5.72%	2,508,466	7.03%	2,804,623	7.45%	2,904,751	6.65%	2,827,952	6.98%
Elk	8,436,416	24.90%	7,275,732	20.39%	7,845,909	20.83%	9,523,439	21.81%	8,550,907	21.12%
Rocky Mountain Sheep	1,052,682	3.11%	1,090,871	3.06%	920,962	2.44%	1,000,238	2.29%	736,527	1.82%
Moose	289,357	0.85%	337,270	0.95%	496,519	1.32%	594,652	1.36%	617,427	1.52%
Rocky Mountain Goat	370,618	1.09%	102,929	0.29%	38,221	0.10%	62,592	0.14%	85,146	0.21%
Mountain Lion	539,605	1.59%	755,152	2.12%	540,901	1.44%	718,591	1.65%	499,805	1.23%
Black Bear	457,345	1.35%	462,146	1.30%	561,421	1.49%	718,130	1.64%	809,961	2.00%
Grizzly Bear	942,337	2.78%	1,033,815	2.90%	1,600,388	4.25%	1,434,981	3.29%	1,378,442	3.40%
Mule Deer	3,463,855	10.22%	3,695,162	10.36%	3,754,746	9.97%	4,854,044	11.12%	4,170,980	10.30%
White-tailed Deer	321,982	0.95%	300,691	0.84%	416,952	1.11%	573,571	1.31%	436,408	1.08%
Bison	103,036	0.30%	125,183	0.35%	61,853	0.16%	79,895	0.18%	26,313	0.06%
Wolf	28,575	0.08%	10,719	0.03%	6,749	0.02%	37,171	0.09%	506,029	1.25%
Small Game	75,095	0.22%	54,562	0.15%	60,578	0.16%	56,423	0.13%	33,767	0.08%
Game Birds	215,406	0.64%	175,495	0.49%	246,713	0.65%	299,903	0.69%	113,900	0.28%
Pheasants	608,047	1.79%	698,704	1.96%	695,497	1.85%	870,916	1.99%	895,270	2.21%
Turkey	267,737	0.79%	285,125	0.80%	235,259	0.62%	299,900	0.69%	272,393	0.67%
Partridge	22,875	0.07%	8,421	0.02%	70,835	0.19%	92,476	0.21%	44,886	0.11%
Blue/Ruffed Grouse	8,161	0.02%	17,029	0.05%	11,188	0.03%	25,459	0.06%	17,324	0.04%
Sage Grouse	512,439	1.51%	815,621	2.29%	949,900	2.52%	921,657	2.11%	979,917	2.42%

EXPENDITURE ALLOCATIONS BY PROGRAM -- Five-Year History (Includes General Wildlife Allocation)

PROGRAM	1,999	%	2,000	%	2,001	%	2,002	%	2,003	%
Sharp-Tailed Grouse	30,766	0.09%	43,512	0.12%	42,802	0.11%	42,812	0.10%	39,304	0.10%
Greese	603,620	1.78%	422,332	1.18%	434,626	1.15%	568,739	1.30%	431,698	1.07%
Ducks	270,540	0.80%	120,064	0.34%	143,184	0.38%	183,435	0.42%	185,602	0.46%
Swans	139,873	0.41%	185,419	0.52%	203,267	0.54%	448,125	1.03%	311,047	0.77%
Doves	81,885	0.24%	82,080	0.23%	105,984	0.28%	113,928	0.26%	111,845	0.28%
Cranes	61,631	0.18%	87,897	0.25%	42,957	0.11%	42,312	0.10%	44,203	0.11%
Sport Fish	11,420,299	33.71%	13,494,171	37.82%	13,757,732	36.52%	15,129,474	34.65%	14,029,271	34.65%
Bobcat/Lynx	156,980	0.46%	73,522	0.21%	99,031	0.26%	130,074	0.30%	174,655	0.43%
Beaver	79,502	0.23%	17,545	0.05%	37,268	0.10%	39,702	0.09%	48,900	0.12%
Commercial Fisheries	13,577	0.04%	10,789	0.03%	21,093	0.06%	28,262	0.06%	17,674	0.04%
Nongame Mammals	420,698	1.24%	461,203	1.29%	104,764	0.28%	129,713	0.30%	183,609	0.45%
Nongame Birds	134,769	0.40%	161,604	0.45%	177,748	0.47%	286,589	0.66%	360,314	0.89%
Raptors	156,353	0.46%	103,493	0.29%	116,140	0.31%	100,238	0.23%	58,004	0.14%
Nongame Fish	7,384	0.02%	5,345	0.01%	7,025	0.02%	54,205	0.12%	60,732	0.15%
Amphibians/Reptiles	32,716	0.10%	74,254	0.21%	52,946	0.14%	133,301	0.31%	173,350	0.43%
Predatory Birds	***		***		***		***		498	0.00%
Peregrine Falcon	31,533	0.09%	35,389	0.10%	30,966	0.08%	30,873	0.07%	54,621	0.13%
Bald Eagle	33,087	0.10%	22,148	0.06%	25,840	0.07%	17,705	0.04%	27,291	0.07%
Black-Footed Ferret	49,267	0.15%	13,770	0.04%	62,210	0.17%	45,000	0.10%	30,330	0.07%

EXPENDITURE ALLOCATIONS BY PROGRAM -- Five-Year History (Includes General Wildlife Allocation)

PROGRAM	1,999	%	2,000	%	2,001	%	2,002	%	2,003	%
Canadian Lynx	***		5,086	0.01%	4,769	0.01%	4,599	0.01%	187	0.00%
Prebles Jumping Mouse	***		***		516	0.00%	358	0.00%	443	0.00%
Predatory Mammals	528	0.00%	50,417	0.14%	128,929	0.34%	75,899	0.17%	175,646	0.43%
Black-Tailed Prairie Dog	***		10,889	0.03%	185,197	0.49%	345,575	0.79%	332,885	0.82%
White-Tailed Prairie Dog	***		***		***		***		936	0.00%
Wyoming Toad	94,889	0.28%	57,420	0.16%	96,772	0.26%	150,017	0.34%	137,343	0.34%
Exotic Game	17,184	0.05%	38,822	0.11%	63,113	0.17%	47,066	0.11%	76,644	0.19%
Nonwildlife	390,415	1.15%	346,711	0.97%	405,872	1.08%	443,104	1.01%	418,736	1.03%
TOTAL PROGRAM COSTS	33,879,536	100.00%	35,676,975	100.00%	37,669,965	100.00%	43,659,894	100.00%	40,489,122	100.00%

* because program costs were negligible, they are included in Bobcat and Beaver program costs.

** because program costs were negligible, they are included with other waterfowl management costs.

*** because the program is new, there are no previous reporting figures.

ALL AGENCY EXPENDITURES ON AN ACTIVITY BASIS

#num	ACTIVITY DESCRIPTION	1999		2000		2001		2002		2003	
		AMT	%								
001	Legal research	57,096	0.17	26,509	0.07	6,854	0.02	3,940	0.01	864	0.00
002	Legal briefs	3,595	0.01	23,165	0.06	4,230	0.01	11,921	0.03	8,689	0.02
003	Legal pleadings	1,729	0.01	13,477	0.04	1,044	0.00	1,379	0.00		
004	Legal - court appearances	6,325	0.02	6,860	0.02	1,465	0.00	2,428	0.01	2,198	0.01
005	Legal conferences										
051	Fee Title Acq-Aquatic Habitat	4,013	0.01	3,312	0.01	1,357	0.00	600	0.00		
052	Fee Title Acq- Rip Habitat	2,292	0.01	61,150	0.17	775	0.00	3,127	0.01	1,868	0.00
053	Fee Title Acq- Ter Habitat	34,114	0.10	7,283	0.02	10,240	0.03	62,893	0.14	26,877	0.07
054	Fee Title Acq- Boat Access	1,039	0.00	4,856	0.01	523	0.00	309	0.00	764	0.00
055	Fee Title Acq- Public Access	1,936	0.01	19,595	0.05			934	0.00	114	0.00
056	Fee Title Acq- Dept Facilities	182,154	0.54	10,233	0.03	20,567	0.05	19,225	0.04	6,678	0.02
061	Non-Fee Title- Aquatic Habitat	15,867	0.05	15,741	0.04	11,882	0.03	17,013	0.04	2,912	0.01
062	Non-Fee Title- Rip Habitat	2,209	0.01	1,178	0.00	2,150	0.01	1,386	0.00	4,805	0.01
063	Non-Fee Title- Ter Habitat	49,912	0.15	135,789	0.38	248,146	0.66	81,327	0.19	30,676	0.08
064	Non-Fee Title- Boat Access	5,710	0.02	6,114	0.02	9,623	0.03	11,597	0.03	8,559	0.02
065	Non-Fee Title-Public Access	7,265	0.02	24,482	0.07	64,185	0.17	361,565	0.83	480,403	1.19
066	Non-Fee Title-Dept Facilities	1,705	0.01	1,856	0.01	6,826	0.02	6,434	0.01	4,747	0.01
100	Administration	4,553,557	13.44	4,463,422	12.51	4,963,872	13.18	5,339,859	12.23	5,239,673	12.94
105	Clerical	772,308	2.28	753,270	2.11	781,696	2.08	834,714	1.91	856,844	2.12
110	License Sales & Accounting	1,324,565	3.91	951,973	2.67	1,096,614	2.91	1,391,736	3.19	1,146,692	2.83
114	Product Sales & Alt Funding	75,223	0.22	122,645	0.34	138,717	0.37	139,249	0.32	126,873	0.31
115	Fiscal	347,794	1.03	444,934	1.25	469,652	1.25	559,755	1.28	650,223	1.61
121	Management Planning	603,993	1.78	688,447	1.93	662,256	1.76	601,165	1.38	728,383	1.80
122	Strategic Planning	158,185	0.47	149,874	0.42	211,028	0.56	272,117	0.62	204,729	0.51
125	Procurement & Inventory	266,118	0.79	498,757	1.40	352,321	0.94	516,147	1.18	384,922	0.95
130	Regulations	138,589	0.41	151,477	0.42	158,827	0.42	143,649	0.33	167,173	0.41
132	Season Setting	116,121	0.34	113,273	0.32	142,043	0.38	138,621	0.32	104,817	0.26
135	Grant-in-Aid Administration	51,170	0.15	56,493	0.16	57,391	0.15	59,411	0.14	41,345	0.10
140	Inter-Agency communications	587,930	1.74	540,492	1.51	581,152	1.54	584,761	1.34	647,428	1.60
141	Mngt Info Systems(LE & LIC)	762,073	2.25	723,803	2.03	772,315	2.05	822,328	1.88	621,551	1.54
142	Mngt Info Systems(other)							24,287		94,738	0.23
143	Mngt Info Systems-Hdw/Soft									243,003	0.60
145	Intra-Agency Communications	856,527	2.53	934,510	2.62	689,060	1.83	931,545	2.13	803,828	1.99
149	Commuting Mileage	4,508	0.01	4,560	0.01	3,265	0.01	1,875	0.00	1,307	0.00
150	Hunter Safety	165,417	0.49	186,923	0.52	166,783	0.44	213,296	0.49	181,503	0.45
155	Conservation Education	362,545	1.07	447,193	1.25	299,672	0.80	305,465	0.70	289,623	0.72
156	Aquatic Education	36,123	0.11	67,740	0.19	49,814	0.13	45,656	0.10	76,850	0.19
158	Mass Media Presentations	104,417	0.31	106,243	0.30	86,643	0.23	72,712	0.17	78,696	0.19
160	Public Contacts	1,035,255	3.06	1,075,403	3.01	1,152,254	3.06	1,334,742	3.06	1,258,604	3.11
165	Info Documents & Displays	531,480	1.57	618,732	1.73	635,556	1.69	776,257	1.78	772,528	1.91

#num	ACTIVITY DESCRIPTION	1999		2000		2001		2002		2003	
		AMT	%								
170	Wyo Wildlife Magazine	535,888	1.58	499,329	1.40	495,081	1.31	540,868	1.24	465,362	1.15
175	Extension Service	123,869	0.37	100,892	0.28	89,201	0.24	85,019	0.19	62,182	0.15
180	In-Service Training	819,079	2.42	961,714	2.70	1,035,476	2.75	1,234,485	2.83	1,198,385	2.96
181	Instructional Training									55,202	0.14
201	Habitat Dvmt on Priv Land	22,253	0.07	30,955	0.09	8,756	0.02	8,752	0.02	33,120	0.08
210	Department Facility Dev	459,996	1.36	1,185,944	3.32	1,172,375	3.11	2,951,024	6.76	1,104,204	2.73
231	Wildlife Rearing Facility Dev	96,933	0.29	148,791	0.42	614,509	1.63	408,679	0.94	257,651	0.64
232	Watering Facility Dev	24,176	0.07	156,732	0.44	38,982	0.10	29,555	0.07	48,110	0.12
233	Motor Boat Access Dev	501,557	1.48	801,136	2.25	714,033	1.90	1,590,961	3.64	854,741	2.11
234	Stream Habitat Developmnt	133,475	0.39	134,782	0.38	271,725	0.72	192,107	0.44	411,326	1.02
235	Reservoir/Lake Habitat Dev	96,051	0.28	166,143	0.47	18,648	0.05	27,911	0.06	9,514	0.02
236	Impoundment Development	109,415	0.32	26,642	0.07	50,045	0.13	9,596	0.02	26,786	0.07
236	NEPA Development							2,516		14,973	0.04
240	Riparian Habitat Dev	234,600	0.69	277,097	0.78	150,690	0.40	235,192	0.54	207,667	0.51
250	Terrestrial Habitat Dev	41,797	0.12	52,154	0.15	30,513	0.08	26,171	0.06	15,132	0.04
260	Public Facility Development	52,541	0.16	35,000	0.10	47,751	0.13	131,953	0.30	77,825	0.19
270	Cropland Development	10,007	0.03	599	0.00	934	0.00	1,381	0.00		
280	Transport Facility Dev	133,721	0.39	28,610	0.08	345	0.00	62,095	0.14	11,303	0.03
290	Fence Construction	5,466	0.02	13,809	0.04	29,068	0.08	24,215	0.06	21,551	0.05
299	Other Misc Public Dev							1,501	0.00	356	0.00
300	Routine Enforcement	1,486,821	4.39	1,482,275	4.15	1,440,308	3.82	1,517,018	3.47	1,445,324	3.57
310	Enforcement Investigations	443,699	1.31	434,374	1.22	448,029	1.19	484,168	1.11	511,221	1.26
320	Enforcement Administration	161,184	0.48	161,359	0.45	242,463	0.64	241,255	0.55	281,100	0.69
401	Habitat Mntn on Priv Land	9,023	0.03	2,010	0.01	554	0.00	1,059	0.00	1,106	0.00
410	Facility Maintenance	1,453,410	4.29	1,365,601	3.83	1,556,661	4.13	1,448,259	3.32	1,352,211	3.34
420	Equipment Maintenance	290,258	0.86	297,856	0.83	286,565	0.76	329,737	0.76	347,085	0.86
430	Aquatic Habitat Maintenance	75,503	0.22	115,015	0.32	38,905	0.10	224,985	0.52	98,255	0.24
433	Motor Boat Access Site Main	57,470	0.17	172,905	0.48	142,463	0.38	117,408	0.27	163,378	0.40
440	Riparian Habitat Maintenance	41,248	0.12	108,408	0.30	100,770	0.27	164,823	0.38	105,033	0.26
450	Terrestrial Habitat Main	144,453	0.43	139,978	0.39	130,128	0.35	125,626	0.29	128,613	0.32
451	Noxious Vegetation Control	25,647	0.08	52,365	0.15	42,678	0.11	29,046	0.07	33,814	0.08
452	Livestock Grazing	10,645	0.03	13,589	0.04	74,275	0.20	40,603	0.09	37,580	0.09
453	Permanent Cover/Food Patch	261,872	0.77	254,980	0.71	261,159	0.69	183,525	0.42	127,782	0.32
454	Veg Cover Mngt- Presc Burns	70,682	0.21	113,810	0.32	46,553	0.12	67,771	0.16	23,953	0.06
455	Veg Cov Mngt- Mech Tmnt	4,280	0.01	12,600	0.04	11,244	0.03	14,721	0.03	1,554	0.00
456	Veg Cov Mngt- Chem Tmnt	1,449	0.00	4,130	0.01	1,033	0.00	13,054	0.03	19,559	0.05
457	Watering Facility Maintenance	17,148	0.05	20,294	0.06	4,391	0.01	6,208	0.01	5,327	0.01
458	Cropland Maintenance	19,653	0.06	64,200	0.18	11,074	0.03	35,975	0.08	26,427	0.07
460	Public Access Maintenance	267,999	0.79	299,510	0.84	331,505	0.88	348,048	0.80	392,425	0.97
480	Transport Facility Maintenance	273,154	0.81	302,623	0.85	250,839	0.67	250,587	0.57	239,897	0.59
490	Fence Maintenance	240,619	0.71	267,343	0.75	302,412	0.80	367,675	0.84	408,994	1.01
510	Habitat & Populations Evaluations	1,071,128	3.16	1,024,648	2.87	990,821	2.63	1,192,075	2.73	1,207,610	2.98

#num	ACTIVITY DESCRIPTION	1999		2000		2001		2002		2003	
		AMT	%								
511	Habitat Inventory	298,993	0.88	413,802	1.16	467,712	1.24	584,559	1.34	608,513	1.50
512	Fish & Wildlife Population Studies	1,749,600	5.16	1,593,994	4.47	1,902,494	5.05	1,734,245	3.97	1,730,332	4.27
520	Public Use Inventory	937,465	2.77	969,435	2.72	1,157,654	3.07	1,034,831	2.37	1,105,579	2.73
530	Resource Reconnaissance	122,529	0.36	99,195	0.28	98,798	0.26	130,235	0.30	137,411	0.34
540	Environmental Protection	299,099	0.88	303,518	0.85	361,771	0.96	518,362	1.19	561,939	1.39
551	Disease Investigation	474,587	1.40	478,098	1.34	637,759	1.69	602,930	1.38	482,892	1.19
553	Life History/Ecology Investigations	262,863	0.78	290,240	0.81	311,450	0.83	255,679	0.59	240,663	0.59
576	Investigation of Techniques	40,999	0.12	158,076	0.44	99,520	0.26	103,659	0.24	107,215	0.26
577	Artificial Propagation Investigations	34,484	0.10	36,091	0.10	58,440	0.16	82,243	0.19	62,370	0.15
610	Fish & Wildlife Control	163,662	0.48	259,063	0.73	339,797	0.90	367,809	0.84	342,135	0.85
620	Damage Prevention	382,199	1.13	332,717	0.93	347,612	0.92	437,729	1.00	452,420	1.12
630	Damage Claims	642,591	1.90	644,111	1.81	863,584	2.29	775,776	1.78	757,060	1.87
710	Fish & Wildlife Rearing	1,378,054	4.07	1,366,320	3.83	1,409,234	3.74	1,508,381	3.45	1,534,287	3.79
712	Fish Egg Collection	130,605	0.39	123,096	0.35	151,868	0.40	165,354	0.38	180,618	0.45
715	Wildlife Stocking-Restoration	14,033	0.04	14,359	0.04	12,157	0.03	5,591	0.01	7,798	0.02
716	Wildlife Stocking-Maintenance	213,399	0.63	190,642	0.53	210,351	0.56	200,727	0.46	139,126	0.34
717	Wildlife Stocking-Put&Take	77,773	0.23	76,224	0.21	76,646	0.20	97,800	0.22	115,181	0.28
718	Wildlife Stocking-New Species Est	3,518	0.01	1,944	0.01	4,225	0.01	3,795	0.01	11,546	0.03
720	Wildlife Feeding	1,101,157	3.25	865,475	2.43	843,190	2.24	1,274,800	2.92	1,264,707	3.12
730	Trapping & Transplanting	50,838	0.15	46,363	0.13	27,362	0.07	53,595	0.12	27,903	0.07
810	Paid Leave-Military, Admin	329,499	0.97	322,005	0.90	302,386	0.80	283,373	0.65	335,484	0.83
811	Paid Leave-Annual	980,728	2.89	1,179,452	3.31	1,329,185	3.53	1,505,154	3.45	1,630,032	4.03
812	Paid Leave-Sick	240,880	0.71	250,528	0.70	300,345	0.80	337,525	0.77	386,924	0.96
813	Paid Leave-Comp Time Off	121,097	0.36	106,575	0.30	117,751	0.31	128,671	0.29	156,855	0.39
814	Paid Leave-Holiday	451,431	1.33	470,039	1.32	535,023	1.42	595,472	1.36	596,647	1.47
830	Employee Moving	25,858	0.08	18,759	0.05	7,101	0.02	37,092	0.08	28,419	0.07
900	Boating Enforcement	199,323	0.59	177,482	0.50	254,594	0.68	240,531	0.55	227,092	0.56
905	Boating Accident Invest					5,537	0.01	3,144	0.01	6,703	0.02
910	Boating Certificate & Sales	31,153	0.09	28,875	0.08	31,823	0.08	34,450	0.08	35,387	0.09
915	Boating Administration	37,250	0.11	42,129	0.12	31,030	0.08	73,695	0.17	65,471	0.16
920	Boating Education	10,944	0.03	12,619	0.04	14,402	0.04	7,013	0.02	4,576	0.01
925	Search & Rescue	4,841	0.01	3,522	0.01	4,892	0.01	3,235	0.01	2,102	0.01
930	Local Law Enforcement Assistance	9,055	0.03	10,260	0.03	10,513	0.03	9,406	0.02	8,609	0.02
	TOTAL	33,879,535	100	35,676,974	100	37,669,966	100	43,659,893	100	40,489,121	100

FIVE-YEAR COMPARISON OF LANDOWNER COUPONS AND DAMAGE CLAIMS BY FISCAL YEAR

FY	LANDOWNER COUPONS	% CHANGE	DAMAGE CLAIMS	% CHANGE
1999	363,880	-7.65%	165,615	-37.57%
2000	380,919	4.68%	147,383	-11.01%
2001	423,863	11.27%	348,367	136.37%
2002	392,270	-7.45%	275,983	-20.78%
2003	392,337	0.02%	241,134	-12.63%

REFERENCES

University of Wyoming, Hunting and Fishing Expenditure Estimates for Wyoming, 1989, Department of Geography and Recreation, August 1990.

Wyoming 1997 Hunting Expenditures, Responsive Management.

Western Aquatics, Inc., Fishing in Wyoming: Results of the 1991 Fishing Pressure Survey, May 1992.

Wyoming Game and Fish Department, Annual Report Upland Game and Furbearer Harvest 2002, July 2003.

Wyoming Game and Fish Department, Annual Report Big Game Harvest 2002, August 2003.

Wyoming Game and Fish Department, 2002 Job Completion Reports.

Wyoming Game and Fish Department, 2002 License Sales Data.