

United States
Department of
Agriculture

Forest Service

Intermountain
Region

Caribou-
Targhee
National
Forest



Caribou-Targhee National Forest

CARIBOU

Monitoring and Evaluation

Report

2002-2003

Caribou - Targhee National Forest

Caribou Monitoring and Evaluation Report

Abstract

The Caribou and Targhee National Forests were officially combined in the spring of 2000. The Caribou zone published an Analysis of the Management Situation in 1999 that identified several Needs for Change. The AMS determined that many of the Caribou's ecological communities are "functioning but at risk" and the 1985 LRMP management was not adequate to improve these conditions. As a result, the Caribou Plan was revised. On February 19, 2003, Regional Forester Jack Troyer approved the Caribou Revised Forest Plan. Forest managers began implementing the Caribou RFP on May 12, 2003. The monitoring required during the 2003 has not been entirely completed or compiled and will not be reported until 2004.

This report touches on most of the functional areas of the Caribou but highlights areas where we have made extensive strides towards enhancing the human and natural environment. At the end of the field season the Forest expects to have completed fish distribution surveys on all perennials streams. These surveys show which streams are "strongholds" for the sensitive Yellowstone and Bonneville cutthroat trout. The Caribou RFP includes new livestock utilization standards designed to enable the Forest to allow grazing while maintaining or improving stream conditions. For the past two years, the Montpelier District has been working with the research division of the Forest Service to develop effective methods for restoring tall forb communities. The Selenium Area-Wide Advisory Committee continues to work on reducing selenium risk in new mining operations and developing methods to clean up areas currently contaminated.

Forest Supervisor's Message

This has been a very busy year for the Caribou-Targhee National Forest personnel. The Caribou Land and Resource Management Plan revision was completed in February of 2003 and we began implementing the new direction on May 12, 2003. During the summer of 2003, the Interdisciplinary Team (IDT) spent a lot of their time responding to the nine appeals received on the Revised Forest Plan (RFP). For the past several years, most of the Forest resources were channeled into this effort and the Curlew National Grassland Plan Amendment which was completed in February of 2002. I did not put an emphasis on the Caribou monitoring plan since we had determined that the Plan needed revision. Since the RFP has been implemented for less than six months at the time of this Report, this will be an abbreviated document highlighting interesting and important activities on the Caribou zone of the Caribou-Targhee National Forest. Please contact our office for additional information regarding any of our resource areas. The List of Preparers in the back of this report has the contributors and their telephone numbers if you wish to contact any one of them.

I have determined that the standards and guidelines in the 2003 Caribou Revised Forest Plan will move forest resources towards the Desired Future Conditions that the public and Forest Service worked together to develop.

Jerry B. Røese

JERRY B. REESE

Caribou - Targhee National Forest Supervisor

Monitoring and Evaluation Report

■ *This highlights the different resource areas on the Caribou zone of the C-T.*

Ecological Processes and Patterns

PROPERLY FUNCTIONING CONDITION

One of the assumptions in the 1985 Caribou LRMP and 2003 Revised Forest Plan (RFP) is that ecological condition is a function of soil productivity. Because ground cover provides protection for soils, it can be used to assess the ecological status of a given site. The Intermountain Region developed thresholds of ground cover necessary to maintain properly functioning conditions (PFC) in various ecological types (USDA FS 1996). To assess conditions, the Caribou established nine, line-intercept transects on several range allotments to measure ground cover annually. In the past 5 years, Forest personnel also established 27 nested-frequency transects to measure apparent trend and ecological conditions on a five-year cycle.

In general, ground cover on managed sites was adequate to maintain soil productivity and the trend is toward improving ecological conditions. Seven out of the 9 ground cover sample sites were at or above the levels needed for properly functioning condition. Other ground cover measurements taken in aspen, mountain maple, and mountain sage sites during the past 5 years were meeting PFC but some measurements taken in tall forb, juniper and mountain mahogany sites did not meet necessary ground cover requirements to protect the soil resource.

Twenty-five of the 27 nested-frequency sites are stable or trending toward improved ecological conditions with adequate ground cover for soil protection. Of those 25 sites with improving ecological conditions, 15 sites had one or more parameters that were declining, however. Eleven sites had all ecological parameters rated as improving or stable.

FIRE

The Caribou-Targhee fire management group has been implementing the National Fire Plan in many different arenas. The local and national emphasis has been on fuels management, wildland fire planning, and bringing fire-fighting resources up to Most Efficient Levels (MEL). In the wildland fire planning, the Forest has completed its first Wildland Fire Use Guidebook on the Targhee. These Guidebooks are an interdisciplinary effort, addressing the use of prescribed natural fire and wildland fire in each subsection. The Caribou RFP contains direction to complete one Guidebook each year at a subsection scale.

In December of 2002, the BLM and Forest Service proposed a cooperative fuels reduction project in the wildland urban interface around Pocatello Idaho. In cooperation with Tribal, federal, state and local entities that form the Gateway Interagency Fire Front (GIFF), the Portneuf West Bench Fuels Reduction Project was developed. After extensive public involvement and analysis, in September of 2003, the BLM and Forest made a decision to implement the 10-year plan. The Portneuf West Bench Project would allow fuel reduction by various means on 2,740 acres, in 52 treatment units, in a 27,200-acre analysis. This project was a BLM Pilot Project for implementing the President's Healthy Forest Initiative. More information is located at the following website or by contacting Westside District personnel. <http://www.id.blm.gov/offices/pocatello/>

Physical Elements

SOILS

Soil Erosion Monitoring

For over 20 years, Caribou soil scientists have sampled 24 soil erosion collection tanks to determine if and how management activities are affecting the soil resource. According to the monitoring data, all measured erosion plots are below the allowable soil loss levels needed to maintain soil productivity. Soil loss tolerance ranges from 3 to 5 tons per acre on all erosion plots. Actual measured erosion from these monitoring site ranges from 0.03 tons per acre per year at the Black Canyon site near Toponce Creek to 1.05 tons per acre per year at the Red Sink site.

Using the WEPP model from the University of Moscow web site to validate the measured erosion rates on the Caribou National Forest, sites with shrubs and 60% ground cover have predicted erosion rates of 0.03-0.08 ton per acre per year. Sites that have few shrubs and 60 percent ground cover have predicted erosion rates of 0.07-0.14 tons per acre per year. Sites that have greater than 80 percent ground cover show no predicted erosion.

Applying the WEPP modeling to the ground cover information discussed in the Properly Functioning Condition section, we can predict that 9 of the 15 sites would have no measurable erosion. The other six sites would have a predicted erosion rate of 0.03 – 0.08 tons per acre per year. This predicted erosion would be in juniper, mountain mahogany and one third of the mountain sagebrush areas. According to this model, the aspen, mountain brush, tall forb, and two thirds of the mountain sagebrush sites would have no measurable erosion. This indicates that management activities, particularly range management, are not causing excessive losses of soil in any of the vegetative types monitored.

Mass Movement

In 2002, two new landslides occurred on the Caribou National Forest. Soil and water specialists conducted site analysis to determine the cause. The cut-slope mass slump that occurred in Montpelier Canyon was a result of major highway construction and has been controlled and mitigated by the Idaho State Department of Transportation. The landslide that occurred on the Barnes Creek Ridge above Caribou Basin Guard Station was evaluated and determined to be a natural occurrence caused by wet soil conditions in siltstone and mudstone from the Wayan Formation during the spring of the year.



Barnes Creek Ridge Landslide

In 2002, an analysis of projects that have the potential to trigger landslides was conducted to determine if landslide potentials were addressed in the environmental analysis document and a site visit was made. All ground-disturbing projects have received evaluation for mass stability. This will continue to be a monitoring item in the 2003 Caribou RFP.

Roadability

During the past 5 years approximately 13 miles of new road construction has occurred on the Caribou portion of the Forest. Of the 13 miles of road constructed, less than 0.5 miles were constructed on marginally capable land types. On-site evaluations of the Miles Canyon Timber Sale determined these soils to be capable of road construction and no failures have been observed since these roads were constructed. During the past 5 years, new roads on the Soda Springs and Montpelier Ranger Districts were monitored: just over two miles of the Stewart Flat Road reconstruction were surveyed. The entire length appeared to have been constructed on capable soils and no special design measures were required.

Although the landtype analysis indicated that the soils were capable for road construction, the Campbell Canyon project required special mitigation measures to protect Diamond Creek from sediment. In addition to the silt fence required along the fill slope, one wet area needed special drainage design. The remainder of the road appeared to have been constructed on capable soils. Landtype suitability ratings were "fair" (27%) and "good to fair" (73%).

The Swan Flat Timber Sale roads were all constructed on capable landtypes. Landtype suitability ratings for this road were "good" (80%) and "fair" (20%). Crystal Timber Sale roads were also constructed on capable landtypes. Landtype suitability ratings for this road were "fair to good" (100%). No special design features were required for these roads.

LANDS

In 2002, the Caribou acquired a 157-acre inholding in the Gravel Creek area from the Idaho Transportation Department (ITD). The Gravel Creek Ranch was donated to the Forest Service as mitigation for wetland impacts incurred in the reconstruction of Highway 89. As part of the agreement, the Forest Service developed a special management prescription in the Caribou RFP to insure protection of the wetland values. Management Prescription 2.1.6(b) –Gravel Creek Special Emphasis Area, will be managed according to the Memorandum of Understanding (MOU) with the IDT, FS, Federal Highway Administration (FHA), and the Army Corps of Engineers. The primary goal of the special emphasis area is that management protects, conserves, and retains the floodplain and wetland values of the area (Caribou RFP).

MINERALS

The southeast portion of the Caribou-Targhee encompasses most of the Idaho phosphate reserves. Phosphate mining continues to have a large economic impact on Southeast Idaho. In 1996 we discovered that selenium, a mineral essential to humans in trace amounts but toxic in slightly larger amounts, was leaching from overburden mine waste dumps on the Forest. In order to deal with this problem, the IDEQ, BIA, Shoshone-Bannock Tribes, BLM, FS, EPA, US Fish and Wildlife Service, State of Idaho, university researchers, concerned citizens, and mining interests joined together to form the Selenium Area-Wide Advisory Committee. IDEQ with support from the state and federal agencies developed a Risk Assessment. Risk was evaluated at the regional levels to assess the potential to impact human health and the environment from the release of hazardous substances by phosphate mining operations. From this effort, general guidelines and practices are developing to manage phosphate mining and improve reclamation. Modified mine operations employ mitigations and alternative mine practices to reduce or eliminate hazardous substance releases. Those are being implemented in new and ongoing operations. Dry Valley, Central Rasmussen Ridge, Enoch Valley and Smoky Canyon Mines are active mining operations on or near the forest. Adaptive management practices and recommendations are also incorporated into the 2003 Caribou RFP.

In addition to the mitigation measures designed to prevent further contamination from current and future operations, the Forest is actively dealing with already contaminated sites. Authority was delegated to the Forest Service by Executive Order 12580 to conduct consensual response actions using the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Non-time Critical Removal actions are planned at 9 additional Forest Service impacted sites. Site-specific Administrative Orders of Consent (AOC) will guide investigations at each of these sites to provide the information necessary to develop effective removal action alternatives. A Memorandum of Understanding signed in July 2000 between the FS, BLM, U.S. Fish and Wildlife Service, IDEQ, BIA, Shoshone-Bannock Tribes, and EPA guides the schedule and terms under which the Area wide Investigation and site-specific investigations are occurring. FS personnel lead the investigations on all phosphate mine sites largely occupying National Forest System Lands. Sites with evenly mixed ownership will be led by the IDEQ while the Forest Service provides support and decision making for National Forest System lands. The Forest has hired an additional On-Scene Coordinator, soil scientist and hydrologist for this effort.

So far, extensive data has been gathered to understand the performance of the dump design, materials, and the extent that impacts occur. Site-specific pilot studies to test treatment alternatives have been completed. Further work in 2003 will provide a better understanding of contaminant sources and potential removal alternatives. Groundwater impacts have been detected by

monitoring. Contractors involved on behalf of the Potentially Responsible Party (PRP) are investigating treatment alternatives. The Forest is negotiating AOCs to conduct Site Investigations (SI) and subsequent Engineering Evaluation/Cost Analyses (EE/CA) at individual contaminated sites. These are consistent with the National Contingency Plan and designed to quantify site conditions and develop removal alternatives to address identified contaminant releases. In 2003, the AOCs for both Smoky Canyon Mine and Enoch Valley Mine have been completed. AOCs are anticipated later this year for the North Maybe Canyon and Georgetown Canyon Mines. The latter is on private land but it is affecting NFS lands immediately surrounding the site.

Biological Elements

FISHERIES

Fish Distribution and Habitat Surveys

In 2000, the Caribou-Targhee Forest Fish Distribution Survey was used to sample 42 streams on Palisades, Soda Springs, and Montpelier Ranger Districts. In 2001, fish distribution surveys were done on all of the major streams on the Westside District (Malad and Pocatello areas). The surveys in the Bear River Range of the Montpelier District were completed as well.

During the field season of 2002, fish distribution surveys were done for streams in Grays Lake Wildlife Refuge and Soda Springs Ranger District. On the Soda Springs District, Yellowstone cutthroat trout were documented in fifteen streams. Of the 15 streams with YCT in them, all but one were determined to be "stronghold" streams. For the most up-to-date information on the fisheries program, see our website at <http://www.fs.fed.us/r4/caribou/Targhee/fishing/>

Thomas Fork Bonneville Cutthroat Trout Fish Passage

In 2001, the Forest completed a Watershed Analysis for the Thomas Fork of the Bear River. In a watershed analysis, the IDT reviews overall watershed conditions and makes landscape level management recommendations for improving those conditions. The top priority fisheries-related recommendation was to provide consistent passage over the Esche Irrigation Diversion, located on the Flyway River Ranch near the mouth of the stream. In some years, the structure completely blocked the Bonneville cutthroat trout spawning run from accessing its spawning grounds on federal lands.



The Esche Diversion is a barrier to Bonneville cutthroat trout attempting to migrate from the Bear River to the upper Thomas Fork to spawn in tributaries located on Forest and BLM lands.

In 2002, a partnership was developed between the Caribou-Targhee, Idaho Dept. of Fish and Game (IDFG), U.S. Fish and Wildlife Service, Trout Unlimited, and the Flyway River Ranch to construct a fish passage facility over the diversion structure and screen the diversion to protect downstream-migrating fish. IDFG designed the structure during the winter of 2002 and the structure will be constructed in 2003. This project will increase the long-term viability of Bonneville cutthroat trout populations in Thomas Fork tributaries.

Free Fishing Days

For the past several years, the Forest has hosted 3 Free Fishing Day Celebrations throughout Southeast Idaho. The traditional event at Mill Pond in Island Park was joined by new events at Little Lemhi Boy Scout Camp near the South Fork Snake River and a Kelly Park pond in Soda Springs. An average of 25 kids and their parents participated in each of the events each year.

Support for the C-T Fisheries Program has come from Federation of Flyfishers, US Fish & Wildlife Service, Greater Yellowstone Coordinating Committee, Wyoming Dept. of Game & Fish, Idaho Department of Environmental Quality, Idaho State Parks Department, Nature Conservancy, partners in the Henry's Fork Cutthroat Trout Subcommittee, and Idaho Dept. of Fish & Game.

WATER AND RIPARIAN RESOURCES

Stream Channel Stability and Riparian Vegetation Condition

Stream channel stability and riparian vegetation condition were completed through two different methods. The first method is through the Properly Functioning Condition Survey. This method is a joint Forest Service/Bureau of Land Management survey that considers hydrology, soils and riparian vegetation and rates riparian areas and associated stream channels according to their functioning condition. Three ratings are given: Properly Functioning Condition, Functioning-at-Risk, Non-Functioning. Every major stream within the Caribou portion of the Forest was rated on a stream-wide basis with an interdisciplinary team from each Ranger District. In addition, several streams have been specifically surveyed by the Forest Hydrologist and other Forest personnel.

In 1999, all major streams on the Forest were evaluated for PFC at the reconnaissance level. In addition, intense, on-site PFC was completed on four streams. Of all the evaluated streams, 30 percent are considered to be at PFC, 61 percent at Functioning-at-Risk, and 9 percent are Non-Functioning.

In 2001 and 2002, 38 streams that were evaluated for PFC in 1999 were specifically field verified in the north Bear River Range on Montpelier Ranger District and the Salt River front and Grays Lake front on Soda Springs District. Several streams had multiple reaches evaluated separately. Of these reaches, 20 (43%) are considered to be in Properly Functioning Condition, 25 (53%) were considered to be Functioning-at-Risk and only two (4%) were considered to be Non-Functioning. For the most part, the initial 1999 reconnaissance-level evaluation was determined to be reasonably accurate at the stream-scale. Most of the evaluated reaches had improving trends.

In 2001 and 2002, streams in the north Bear River range, Salt River front and Grays Lake area were also evaluated for Channel Stability using the R1/R4 survey method. Forty-six reaches on 32 streams were surveyed. Of these, 2 reaches were rated as having excellent stability, 19 as being Good, 20 Fair and 5 poor.

Best Management Practices (BMPs)

The Idaho Forest Practices Act requires that land management agencies conduct interdisciplinary reviews of timber sales to insure that BMP's have been implemented and are effective in reducing negative effects. The inspections are conducted with a full interdisciplinary/interagency team consisting of Forest soils, watershed and silvicultural specialists, Idaho Department of Fish and Game, Idaho Department of Water Resources, Department of Lands, the timber purchasers and interested individuals. Since 1997, the Forest has conducted audits on 10 timber sales. No specific detrimental effects to or violations of water quality standards were documented. All applied BMP's appeared to be effective in controlling erosion/sediment and protecting water quality. Some shortcomings were noted, such as road maintenance, but actual detrimental effects to surface water from these shortcomings were not observed. In all cases, corrective measures were advocated.

The reviews suggest that, when planned and administered properly, timber harvesting and associated roading have little observable effects to surface water quality. Detrimental effects can, and have been, reduced through the use of Best Management Practices and other mitigating actions. The intent of the Clean Water Act in protecting surface water quality has been satisfied through the Idaho Forest Practices Act and other mitigating measures.

Water Quality

The Clean Water Act requires States to identify streams and stream segments with impaired water quality. These water quality limited streams (WQLS) can be listed for several reasons, such as too much sediment, high temperatures, chemical inputs, etc. Thirty-seven streams within and adjacent to the Forest have been listed through this process initially. Several tributaries to the Blackfoot and Salt River in Wyoming require further evaluation for chemical contaminants under section 303d of the CWA. Limiting parameters for those 37 streams include sediment, nutrients, bacteria and temperature. Once a stream is listed, the State develops total maximum daily loads (TMDLs) for the various stream parameters and an Implementation Plan is written to address how the pollutant will be addressed and reduced. Forest hydrologists have been working with the Idaho Division of Environmental Quality to develop these TMDLs for basins in southeast Idaho. TMDLs have been established for the Blackfoot River, Portneuf River, and Rock Creek Basins. The State is working on TMDLs for the Bear and Salt River Basin. To date, the only completed Implementation Plan is for listed streams in the Portneuf River Basin. Initial monitoring began in 2003, results are unavailable at this time.

Monitoring by the Forest has consisted of water temperatures, total suspended sediment, turbidity and macroinvertebrate analysis in selected streams. Suspended sediment and turbidity were monitored in Bloomington Creek (Montpelier Ranger District) during 1999 and 2000 in association with the Bloomington timber sale. An independent firm analyzed the samples and found that no violations in State water quality standards occurred.

Macroinvertebrate analysis was conducted in Pruess, Dry and Giraffe Creeks to determine the effects of grazing impacts on the streams (1996). DAT, a biodiversity index, and Standing Crop of vegetation were both good to excellent in each of the streams. The Biotic Condition Index (BCI), a relative rating used to evaluate aquatic ecosystems, ranged from poor to good. This indicates that there are still some influences of sediment and organic enrichment, but not to the point where aquatic life would be inhibited. Some sites showed an improvement over previous years, indicating that changes in grazing administration is having a positive effect on riparian area and stream channel conditions.

Monitoring has been conducted by the Forest, by the Idaho Department of Environmental Quality, and by the phosphate mining companies, as part of their mining permits. See the Minerals section of this report.

Water Yields

When the Caribou Forest Plan was implemented over a decade ago, it was thought that management practices could have a substantial effect in the amount and timing of water shed from Forest lands. As such, changes in water yields were calculated for major land-disturbing projects, specifically timber sales. Analysis has determined that no projects have produced measurable changes in total water yields across the Forest, nor have those changes resulted in measurable changes or influences to channel morphology and/or condition. This is consistent with research that has been conducted within the western United States. Research suggests that water yields can be altered on a site-specific basis, but when evaluated on a watershed level, overall changes are negligible and mostly un-measurable by conventional means. BMP reviews (see above) of timber sales found no visual impacts to adjacent and downstream channels due to changes in amounts and timing of water yields.

VEGETATION

Rare Plants and Unique Habitats

The Forest and Idaho Department of Fish and Game's Conservation Data Center (CDC) conducted a cooperative project to collect updated conservation information for known populations of Sensitive and other rare plant species in the Bear River Range and established permanent, long-term monitoring stations for Cache penstemon (*Penstemon compactus*). Botanists also evaluated the possibility of establishing monitoring stations for botanical resources within the Bloomington Lake area and surveyed for new populations of regionally sensitive and other target rare plant species.

Botanists conducted field surveys for two weeks in July 2002 and a detailed report was completed in February 2003. They revisited all previously documented occurrences for green spleenwort (*Asplenium trichomanes-ramosum*), Rydberg's musineon (*Musineon lineare*), and Cache penstemon. The rare plant occurrences at Bloomington Lake appeared to be secure from human-associated threats due to difficult access. Green spleenwort was not relocated due to late lying snow in its habitat. The current trail and location of a user-created diving area is not impacting plants at this time.

No new populations of rare plants were discovered, although few, new, small sites of Rydberg's musineon were found in close proximity to the known occurrence at Bloomington Lake. Forked spleenwort (*Asplenium septentrionale*) and manyhead bladderpod (*Lesquerella multiceps*) were two other rare plant species specifically targeted for field investigation. The bladderpod was found to be widespread and common along the high, rocky ridges surveyed. The spleenwort was not relocated and no new populations were discovered.

Permanently marked photomonitoring stations were established at each of the seven known occurrences for Cache penstemon. No obvious threats to the occurrences were found, although some plants could be killed if a fire were to pass through the area. Some occurrences are accessible by sheep, but no evidence of disturbance was noted. No signs of ATV use in close proximity to occurrences were noted; however at one location a user-created motorcycle trail may approach an occurrence in the future. Overall human-associated threats to Cache penstemon on the Forest appear to be non-existent or not measurable.



Cache Penstemon (*Penstemon compactus*), one of the rare plants found in the Bear River Range.

Noxious Weeds and Invasive Species

The Caribou-Targhee Noxious Weed Program is active and gaining momentum with participation in all the Cooperative Weed Management Areas (CWMAs). The CWMAs include other land management agencies, Tribal agencies, private landowners, and others with an interest in reducing the spread of invasive species. The CWMAs have adopted the philosophy that weed infestations need to be viewed much like a wildfire. When an infestation is found, it takes a lot of resources and people to get it under control or it will turn into a huge threat to many landowners. If noxious weed infestations are not caught and controlled while they are small, they can turn into wastelands that are costly from lost production and too expensive to restore. CWMAs have provided an opportunity to focus people, dollars and equipment in high-risk areas that can still benefit from treatment. The cooperation and sharing of resources makes all members more willing to do their part in weed control. However there is still a long way to go and new weeds are finding their way all the time to new locations.

In 2001, the Caribou-Targhee Forest adopted a Noxious Weed Strategy for the forest to increase Forest emphasis on weed management and to improve the Forest's capability to deal with weed management issues. Weeds are treated according to the following priorities: 1) prevent the introduction of new invaders, 2) eradicate new invaders and prevent spread of existing infestations, and 3) contain and control established infestations. This plan is being implemented through priority setting, promoting education and awareness with the assistance of the CWMAs, promoting awareness and prevention activities through special work days and Challenge Cost-Share (CCS) agreements, and promoting monitoring and project evaluations. Some components of the Strategy are featured below.

The Weed Free Hay Program requires the use of certified weed free feeds on public lands in the state. This has been required for several years and now citations are issued to people who are found without weed free feed on public lands. This program is generally accepted by the public although some counties do not have many local growers of weed free hay and it can be difficult to purchase in some locations.

The Highland CWMA recognized the problem and is purchasing weed free hay from a grower in Preston to stockpile in Montpelier and Soda Springs for sale to anybody going onto public lands.

The Forest sponsors a Challenge Cost Share (CCS) Program for noxious weeds to supply "seed" money for outside matching funds for projects. A pool of money is set aside for project proposals to compete against one another for a portion of the pool. This money is in addition to the funds allocated for noxious weed treatment to each district. The local Resource Advisory Committee (RAC) has also provided money for weed treatment through their grant process.

The Caribou NF has 14 known species of noxious weeds infesting over 85,000 acres of the Forest. The worst infestation is about 2,000 acres of leafy spurge in Black Canyon, on the Westside District. In 1999, the Westside Ranger District started using sheep in the Black Canyon area to graze on the leafy spurge. This has proved to be very effective in reducing the density and aerial extent of the spurge in the Black Canyon area. This partnership continues under a contract to maintain the control on the leafy spurge.

The Montpelier District is covered by the Utah-Idaho and the Highlands CWMA's. The Utah-Idaho CWMA was formed in 1998 and includes 15 entities in the southeast corner of Idaho and northeast corner of Utah. The Highlands CWMA includes parts of the Montpelier Ranger District and the Soda Springs Ranger District and includes portions of northern Utah and western Wyoming. A new threat on this District is the invasion of Perennial pepperweed which is invading down the Bear River from Wyoming. Up to now, this has not been a big problem on the Caribou National Forest.

The Soda Springs District is a member of the Highland CWMA. Annually, they sponsor several workdays. "Bag of Woad" Day is a day where the public is provided with bags to collect Dyer's woad and they are paid by the number of pounds they collect. The workdays are at specific locations within the boundaries of the CWMA where a special problem exists. One workday focused on the Forest is at Bailey Creek where the CWMA provides herbicide and members show up to spray the weeds. Another workday is at Stump Creek where leafy spurge was located with a helicopter and mapped and now is annually treated. The Blackfoot River yellow toadflax project is aimed at reducing toadflax on Idaho Fish and Game property and the adjacent forest grazing allotment.



Participants in the "Bag of Woad" event on the Soda Springs District.

The last two years, the District has received a CCS agreement and RAC funding to help support the Highlands environmental education, the purchase of insects, workdays and the "Bag of Woad" contest. Environmental education is aimed at the local schools and powerpoint presentations are reinforced with handouts, booklets, caps and T-shirts. This year's topic for the 6th grade essay contest was "How Can I Make A Difference in the War on Noxious Weeds?" Each school competing is awarded a \$100 first place, \$50 second place and \$25 third place. The winners then compete for an additional \$200 award within the CWMA.



Soda Springs Rangeland Management Specialist Vic Bradfield presenting awards to winners of the Bancroft "Weed Essay" Contest.

The overall trend is mixed on the Forest, some Districts report that the big weed patches are gradually getting smaller or are static and others observe that they are gradually enlarging. Across the west, new species of weeds are coming into the area. District weed programs are focusing on controlling new infestations of toadflax and leafy spurge. Birds and wildlife appear to be spreading seeds because more starts are showing up in isolated areas.

WILDLIFE

The Caribou-Targhee wildlife program has been very active in seeking partnerships. Challenge-cost-share partnerships have been developed for monitoring, inventory, and habitat improvement projects.

Grey Wolf (T)

As of the summer of 2003, there are still no documented breeding pairs of wolves on the Caribou-Targhee. At the end of 2002 there were 43 pairs of breeding wolf packs in the Rocky Mountains. This made 2002 the third year in which 30 or more breeding pairs were documented within the three-state area. Recovery criteria have been met for removing these wolves from the Endangered Species List.

In 2001, a wolf was preying on livestock adjacent to the Forest in the Soda Springs area. This animal was caught in mid-winter. In 2002, another wolf was sighted and killed in the vicinity of the Caribou NF.

In January 2003, Wildlife Services sighted tracks of two or three wolves in the Dry Valley area, near Soda Springs, Idaho. In March of this year, a rancher on the WY/UT border reported seeing two uncollared black wolves and that several sheep were attacked in a fenced pasture on private property. The area was west of Highway 30 between Cokeville and Sage, WY. Investigation showed that the wolves had attacked and wounded 2 sheep that had to be euthanized. The potential for additional problems in that area where almost certain and there are no relocation sites for depredating wolves, so Wildlife Services killed the two wolves that afternoon. The depredation and control occurred in Wyoming, east of the Caribou NF. Wolves have also been sighted in Utah, south of the Caribou NF.

Wildlife Service's policy on wolves that leave the experimental population areas is they will be handled on a case-by-case basis. They generally will be left alone if they are not doing anything wrong, killed if they attack livestock, and in rare situations where they happen to be in captivity, they may be returned to MT, ID, or WY, whichever is closest. The experimental rules 7(iii)(A-D) recognized lone wolves would disperse outside the experimental areas and gave the Service clear legal authority to actively manage them.

Canada Lynx (T)

The Caribou-Targhee has been participating in a nation-wide study to determine Canada lynx occurrence and densities. On the Caribou zone, one grid was established in 2000, southwest of Afton, Wyoming. In 2001 and 2002 that grid was surveyed along with the grids on the Targhee zone. The C-T has more sampling grids than any other Forest in the nation. We have received the analysis results from 1999, 2000, and 2001 surveys and no Canada lynx hair has been found. The results of the 2002 survey are not available yet. Winter carnivore track surveys were begun during the winter of 2003 on the Soda Springs and Montpelier Ranger Districts.

This information was used to update the Lynx Analysis Unit (LAU) maps. During this mapping and surveying effort, the US Fish and Wildlife Service and Forest Service determined that the Caribou zone of the Forest did not contain suitable habitat to support lynx reproduction. According to the new analysis, the Westside District is non-lynx habitat and the Soda Springs and Montpelier Districts have linkage habitat only. Applicable direction for linkage habitat contained in the Lynx Conservation Assessment and Strategy was incorporated into the 2003 RFP.

Bald Eagle

There are two historic nest territories on or adjacent to the Caribou NF, one in Wyoming and the other in Idaho. Both of these territories are in the Greater Yellowstone Management Zone for the bald eagle. The Caribou RFP contains guidance for management and monitoring of bald eagle territories.

Susan Patla, Wyoming Game and Fish biologist, has been monitoring the eagle nest near Thayne, WY. "It has been on private property the last 2 years--west of the Cheese Factory in a stand of cottonwood trees." In June, one large young eagle was observed in the nest. A new nest was found in 2003, along the Salt River just north of Freedom on private land. The nest, in a cottonwood tree, had two young in it.

Bald eagles continue to winter along open water on or near the Caribou NF.

Northern Goshawk

The northern goshawk is a management indicator species that the Caribou-Targhee has been monitoring for over two decades. The Caribou zone has 30 known nest territories. The percent of known territories that are occupied remains low. Patla (2000) believes this trend is due to a variety of factors, including possible cyclic population, weather patterns, monitoring methods, management, etc. The 2003 Caribou RFP includes new standards for northern goshawk management, based on the

Southwest goshawk guidelines and site-specific information gathered by researchers and biologists on the Caribou-Targhee. In 2003, one known nest successfully fledged two young.

Sage and Sharp-tailed Grouse

In 2002, an aerial survey between Montpelier and Soda Springs did not locate sage grouse. Ground surveys during 2003 verified continued sage grouse lek activity west of Bear Lake.

According to Idaho Fish and Game, in general, USFS lands on the Montpelier and Soda Springs Ranger Districts are "winter habitat" for Columbian sharp-tailed grouse. The good nesting and brood rearing habitat is found on the valley bottoms and rolling foothill, usually on private or BLM lands around agriculture lands. Serviceberry, chokecherry, and snowberry are particularly valuable mountain shrub species while Hawthorne and willow are important riparian species. (Draft Idaho Columbian Sharp-tailed grouse conservation plan 1998; Keysor Grouse Notes, 2002 pers. comm. Daryl Meints, IDFG).

Harlequin Ducks

McCoy Creek, in the Caribou Mountains Ecological Subsection, is at the southern end of harlequin duck range. These ducks are listed as Sensitive by the Intermountain Regional Forester. In 2003, McCoy Creek was surveyed but no ducks were found. The surveys continue to document that habitat in McCoy Creek is marginal for this species.

Forest Use and Occupation

ACCESS

The 2003 Caribou RFP closed 96 percent of the Forest to cross-country motorized travel. A small area on the Soda Springs Ranger District remains open for this type of use. In addition, the RFP set a ceiling for motorized route densities for each management prescription area. In order to meet these densities, Forest personnel estimate that about 40 miles of motorized road or trail will have to be closed. This will be done through a separate travel planning effort beginning in 2003.

The Caribou Travel Plan process will determine which roads and trails will remain open and which will be closed to meet the density standards in the RFP. During the summer of 2003, Forest personnel and other interested parties have been conducting a comprehensive inventory of the current road and trail network. This will become the most accurate depiction of what is actually out on the ground. From this map, forest managers will propose a network that meets the RFP standards for access. This proposal will be presented to the public for comment. The proposal will likely be formulated in the winter of 2004. If you are interested in participating in this process, contact Deb Tiller, Landscape Architect at (208) 557-5760.

RECREATION

Bloomington Canyon, west of Bear Lake, is a very popular recreation area. The Forest completed an environmental assessment to analyze and mitigate the recreation impacts in Bloomington. The Bloomington Canyon Recreation Plan was completed in 2002. Management direction was incorporated into the Caribou RFP, Prescription 2.1.1—Bloomington Lake Special Emphasis Area. This Plan is designed to maintain the unique botanical and geologic resources of the area. Botanical surveys were conducted in 2002, see "Vegetation" section above.

TRIBAL COORDINATION AND CONSULTATION

The Caribou RFP includes goals and objectives to meet Tribal Trust responsibilities and Government-to-Government Consultation requirements. To meet these goals, efforts are underway to develop a process for technical coordination between tribal and forest resource specialists. This involves coordination at many different stages during project planning and implementation. Environmental coordinators for the Tribes and the Forest are meeting to develop a proposed process. In addition, tribal and forest staff members are working together to share information about environmental analysis, rare plants, archaeological artifacts, and other common responsibilities.

HERITAGE RESOURCES

In 2001 and 2002, archeologists surveyed 4,700 acres on the Caribou looking for prehistoric and historic artifacts. A total of eight sites and numerous isolated artifacts were recorded. So far this year (2003), a total of 4,250 acres have been surveyed.

At this point only three sites have been recorded. It is likely that number will change since not all the survey data is available yet. According to the Forest archeologists, two potential sites will be reevaluated to make final determinations on eligibility for inclusion in the Federal Register of Historic Places. The Forest has also completed archaeological testing on a site and detailed documentation on a historic structure.

Production of Commodity Resources

RANGE

As a whole, the rangeland vegetation trend is upward. Upland vegetation is generally under-utilized by livestock, although some sheep allotments continue to experience heavy grazing in localized areas. The actual livestock use on the Caribou zone is less than the amount that is permitted. This is due to a variety of factors and reflects the grazing permittees' willingness to be flexible in order to maintain and improve range conditions. In 2000 the Caribou-Targhee implemented the Monitoring Module set up by the Inland Native Fish Strategy (INFISH). In 2003, rangeland managers have been working with the Forest hydrologist to begin implementing the Caribou Riparian Grazing Implementation Guide. This Guide will be used as the primary source of direction for setting utilization levels during site-specific allotment management planning (Caribou RFP).

Tall Forb Restoration Projects

One of the most "at-risk" vegetation communities in the Intermountain Region is the tall forb community (Regional PFC Assessment). On the Caribou, these areas were grazed very heavily by sheep in the early 1900's. After the heavy grazing, tarweed and mule's ear became established on these sites. These two native plants quickly establish a monoculture which lacks the diversity of the tall forb community. Over the past several decades Forest Service rangeland managers have attempted to restore these sites by spraying herbicides, plowing, seeding and other methods (Caribou RFP FEIS, 2003). These attempts have had very little measurable success.

In 2002, the Forest teamed with researchers from the Intermountain Research Station and began a new restoration project. This study involves planting tall forb seedlings mixed with broadcast seedings. First, tall forb species were transplanted to the site as seedlings. A let down fence was constructed at this time to encompass the plots and surrounding acreage for future plots and a control area. Then, in the fall of 2002 a broadcast seeding (with snow cover) was completed on small plots consisting of a tall forb seed mix in groups based on early, mid or late seral plant species. In the summer of 2003 this was determined a failure as germination did not occur. It was believed that a short warm up period caused the seeds to germinate and then freeze. Within the seedlings plots, however, the plants are vigorous and reproducing. In September 2003 a graduate student from Utah State University began a 3-year study inside the enclosure which focuses on tall forb species germination with mulch blankets and soil microorganisms.



Franklin Basin Tall Forb Restoration Plots, August 2002*Franklin Basin Tall Forb Restoration Plots, July 2003*

TIMBER MANAGEMENT

Management Accomplishments

On the Caribou, the 1985 Plan's Allowable Sale Quantity (ASQ) is to offer 10.5 million board feet (MMBF) of timber per year. In 2002, the Caribou offered 2.7 MMBF in timber sales. The 2003 RFP, has an ASQ of 2.7 MMBF per year. In 2003 the Caribou will offer about 2.5 MMBF. In 2004, the Caribou plans to offer another 2.5 MMBF.

Planning and Infrastructure

FOREST PLANNING

As mentioned previously, the Caribou-Targhee has been working on two major planning efforts for the past several years. Both were completed during 2002 and 2003. In February of 2002, the Regional Forester approved a management plan for the Curlew National Grassland. One appeal was received on the Curlew Plan. After reviewing the planning records, the Washington Office of the Forest Service affirmed the Region's decision and denied the appeal. The Curlew Plan is now in the second year of implementation, see the Curlew Grassland Plan Monitoring and Evaluation Report, 2002-2003.

In February of 2003, Regional Forester Jack Troyer approved the 2003 Caribou Revised Forest Plan. The Forest began implementing the Plan in May of 2003. Nine appeals were received from various groups and individuals. The Washington Office of the Forest Service has dismissed one appeal and the other eight are currently under review.

The Targhee RFP was signed in 1997 and is now undergoing the Five-year review required by the National Forest Management Act. For information on the Targhee zone, see the Targhee Forest Plan Monitoring and Evaluation Report, 1997-2002.

INFRASTRUCTURE

In the past two years, three District offices have been moved on the Caribou. First, the Westside Pocatello office was relocated to temporary quarters on South Arthur. Construction began in the spring of 2003 on the final destination of the Westside District office. The new office is located on the southeast edge of town where the Forest Service and BLM will be co-located. This new office should be more easily accessed by the public and co-location with the BLM is intended to reduce overhead costs while providing "one-stop-shopping" for the public.

In August of 2003, the Soda Springs District moved into its new office. This office is located on 410 East Hooper, next to the Natural Resources Conservation Service (NRCS) office. The Malad office of the Westside District moved in the summer of 2003 as well. This is also a shared building with the BLM.



In the immediate foreground is a 1970's harvest unit on the Caribou with successful regeneration of lodgepole pine and aspen.

Succession of aspen to conifer is evident in surrounding stands.

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