

# Colorado Fish and Wildlife Conservation Office



Lakewood: Pam Sponholtz, Project Leader

US Air Force Academy, Colorado Springs: Brian Mihlbachler, Biological Scientist, Diane Strohm, Biological Scientist, Greg Speights, Biological Technician, Steve Wallace, Forestry Technician

Buckley Air Force Base, Aurora: Krystal Phillips, Wildlife Biologist

Peterson, Schriever, Cheyenne Mtn Air Force Bases, Colorado Springs: Max Canestorp, Wildlife Biologist

Rocky Mountain National Park, Estes Park: Chris Kennedy, Fish Biologist

Warren Air Force Base, Cheyenne, WY: Timothy Grosch, Fish and Wildlife Biologist

## February 2014 Accomplishment Report

### Leadership in Science and Technology

*Aerial reconnaissance monitoring for bark beetle infestation:* Diane Strohm presented a lecture to a cadet class on bark beetle biology and management on the Air Force Academy. The senior level course is charged with developing remotely-piloted aerial technology to help locate bark beetle activity. Focus is on the Ips pine engraver beetle, which develops numerous broods annually and has caused substantial tree mortality on the AFA. Diane worked with cadets to develop economic analyses of the project, and met with cadets and the AFA's National Environmental Policy Act (NEPA) coordinator to discuss environmental planning considerations. Steve Wallace continues to coordinate with cadets to inspect beetle-infested trees to serve as samples for sensor calibration.

*Youth Outdoor Skills Webinar:* Tim Grosch participated in a Youth Outdoor Skills Webinar conducted through the National Conservation Training Center (NCTC) on FE Warren Air Force Base (WAFB). Two hunting programs were featured describing youth education in outdoor hands-on experiences which include a youth waterfowl hunting program and a youth turkey hunting program. The idea is to educate youth in firearm safety, conservation and provide an opportunity to recreate outdoors.

### Habitat Conservation and Management

*Urban forest education planning:* Steve Wallace and Diane Strohm met with a retired Colorado Springs City forester to plan educational workshops on protecting trees from construction impacts, proper pruning techniques, post-planting tree care, landscape planning, etc. Target audiences will be AFA personnel including project planners, quality control inspectors, grounds maintenance staff, etc. Workshops are being planned for late spring and early summer.



Tree decay and stem break from poor pruning practices

*Tracking and monitoring weed spraying activities:* Brian Mihlbachler worked with the noxious weed spraying contractor on the AFA to download the weed database to a field GPS and develop field data forms which will improve the tracking and monitoring of weed spraying activities (i.e., areas sprayed, date, target weed, and herbicide applied).

*Wildfire Fire Management Annual Operating Plan prescribed burn to enhance rare plant species:* Steve Wallace is making necessary revisions to the prescribed burning plan to meet new U.S. Fish & Wildlife Service (USFWS) standards. Steve authored this burn plan last spring and supervised the AFA's first prescribed broadcast burn in a decade. Several subsequent burns will be necessary to effectively knock back the invasive smooth brome grass that is competing with the rare Plains Ironweed (*Vernonia marginata*) forbs. Plains ironweed is a State Species of Concern, with only two known populations in Colorado. Burn timing depends on plant phenology, but should occur in early May. The AFA will be coordinating closely with USFWS Region Six Fire staff in planning and implementing this project.

*Fuelbreak construction along west Academy boundary:* Diane Strohm continues to work closely with a logging contractor to plan a fuels reduction project to clear dense brush and thin pockets of trees along a two-track road near the west AFA border. This road is choked with Gambel oak and other brush, with a significant amount of vegetative dieback which elevates flammability and fuel hazard. This area would not be safe for firefighter access due to heavy fuel loadings. It is a strategic location for a fuelbreak, since a wildfire could quickly spread up the face of the adjacent foothills that form the backdrop of the AFA.



Brush-choked road being cleared for a strategic fuelbreak

*Wildfire Annual Operating Plan:* Diane Strohm completed the 2014 Wildfire Annual Operating Plan between the AFA and the USFWS, formalizing the protocol between the agencies for wildfires and prescribed burning. She and Steve Wallace will be revising the AFA Wildland Fire Management Plan this year, working closely with the Wildland Fire Center based at Eglin Air Force Base (AFB), Florida.

*Riparian habitat on Monument Creek:* Brian Mihlbachler continues to work with Union Pacific to develop a cooperative project to stabilize a railroad bridge crossing, thereby also preventing a headcut from damaging 6500 feet of valuable riparian (and Preble's meadow jumping mouse) habitat on Monument Creek. The AFA is moving forward with developing an engineering design that could be implemented with end-of-year funding or FY15 funds.

*Budget requests for Air Force Academy projects:* Brian Mihlbachler refined the FY15 and FY16 AFA budget requests for noxious weed control, habitat management, Preble's monitoring, recreational trails, equipment, and supplies.

### **Species Conservation and Management**

*Preble's meadow jumping mouse's habitat:* Brian Mihlbachler represented the AFA and the Colorado Ecological Services office at a meeting with the Academy Gateway developer. This proposed private development, outside the Academy's north gate, could increase stormwater runoff to Smith Creek, which is designated critical habitat for the Preble's meadow jumping mouse. The developer was asked to further evaluate the current drainage pattern and existing drainage structures within the Colorado Department of Transportation (CDOT) right-of-way at Northgate to determine if improvements or mitigation will be necessary to prevent downstream impacts.

*Native cutthroat trout:* Chris Kennedy continues to write reports on the Paradise Creek and Boundary Lake Project within Rocky Mountain National Park (RMNP). This project was to assess the area for the potential of converting it to native cutthroat trout. Data collected included: pH readings, water flows, mapping of backwaters, location of macroinvertebrate collections, lake depth readings, extent of fish, locations of fish migration barriers, time of water travel, fish survey locations, and locations of temperature loggers. Data and maps will be used in this report so that a chemical treatment plan can be developed if it is decided to go forward with a reclamation project. Several sections of the report were written, tables were created and several maps were created during the month.

*Fisheries work in Rocky Mountain National Park:* Chris Kennedy began preparing the RMNP Fisheries and Aquatic Management final report. This report is a compilation of almost all of the fisheries work that has taken place within RMNP. A draft was completed in spring 2013 and comments from reviewers will be incorporated to complete the report.

*ArcGIS (Geographical Information System):* Chris Kennedy took an ESRI (Environmental System Research Institute) "Working with Rasters in ArcGIS Desktop" class. Following completion of this class watershed areas for cutthroat trout populations upstream of deployed thermographs within RMNP were calculated.

*Stream restoration project of the Fall River:* Chris Kennedy attended meetings and gave advice to the Town of Estes Park on stream restoration projects on the Fall River. Stream restoration is necessary following massive flooding in the fall of 2013. Improving fish habitat during the restoration and possible fish related funding sources were discussed.

*Thermograph plan meeting:* Chris Kennedy prepared for and attended a RMNP thermograph plan meeting. This is necessary to evaluate the need for thermographs currently deployed and those proposed for deployment as they relate to the goals of Wilderness. Several researchers who are collecting water temperature data or would like to and the National Park Service (NPS) Inventory and Monitoring personnel were present.

*Black-footed ferrets:* Tim Grosch continues coordination with John Hughes, Wildlife Biologist for the National Black-footed Ferret Conservation Center. We are currently awaiting approval from the Wyoming Game and Fish Department to move forward with bringing prairie dogs and ferrets back to the conditioning facility at WAFB. According to the Integrated Natural Resources Management Plan (INRMP), WAFB has agreed to partner with the USFWS in the protection and management of this species. This will be a great opportunity for WAFB to show their support of conservation and rehabilitation on Base.

*Boreal toad:* Pam Sponholtz participated in her first boreal toad recovery team meeting. Topics discussed included status of the toad's habitat, planning for monitoring and presentation of current research.

### **Partnerships and Accountability**

*Slide Show presentation:* Brian Muhlbachler finalized an abstract and slide show for the Western Society of Weed Science entitled "Conserving the Air Force Academy Landscape through Integrated Noxious Weed Management", which was presented in March. Partners from Texas AgriLife and the Colorado Natural Heritage Program also presented talks on the AFA's biological weed control program and weed monitoring program, respectively.

*Canada goose population:* Tim Grosch met with the Bird Aircraft Strike Hazard Plan (BASH) working group to discuss ongoing issues with the residential Canada goose population on WAFB. Concerns are growing in regards to the number of geese that inhabit WAFB on a year round basis. The group discussed flight paths and management actions that could be implemented to reduce, haze, or disperse the geese that have decided to call WAFB home. Habitat requirements are quite good on base attracting them year round causing seasonal migration to become non-existent. Further investigation and research will be done considering all alternatives. The opportunity was given to review and provide comments on the BASH plan as well. The document was reviewed and presented to the working group which provided insight from the resource management perspective.

*Pronghorn and goose depredation actions:* Tim Grosch continued coordination with Wyoming Game and Fish Department to discuss pronghorn and goose depredation actions. Further discussion will occur in order to make sure management objectives are being addressed.

*Update on projects, operations and plans:* Civil Engineering held an all staff meeting to discuss current/ongoing projects that are occurring within their respective field of expertise. Natural Resources were allowed to relay ongoing activities in regards to WAFB pronghorn and Canada goose depredation operations as well as an update on the INRMP revision.

*Integrated Natural Resources Management Plans:* Andy McKinley and Tim Grosch continue the updates on the WAFB INRMP. This will be an ongoing process in which we hope to have a working draft by the end of March 2014. It is our hope to have buy-in from Air Force

Leadership and the Wyoming Game and Fish Department sometime late this summer. Currently we are reviewing the existing INRMP and tweaking it to fit the present conditions on WAFB. We will also attempt to meet once a week to go over progress.

### **Public Use and Recreation**

*Fam Camp tree inventory:* Steve Wallace continues to gather tree inventory data in an area of the AFA's Peregrine Pines Family Campground where trees incurred damage due to recent utility line improvements. Injured trees at high risk for Ips beetle infestation will be sprayed to protect against beetle attack, with any trees deemed to pose a potential hazard due to extensive root damage removed.

*Arbor Day 2014 Proclamation:* Diane Strohm prepared the AFA's 2014 Arbor Day Proclamation, formalizing its commitment to planting and preserving trees. Diane is starting to make plans for planting nearly 1,000 seedlings and celebrating Arbor Day at Douglass Valley Elementary School this April.

*Informational trail kiosks:* Brian Mihlbachler received approval from the AFA's base architectural planner to build and install numerous informational trail kiosks using a design similar to typical U.S. Forest Service signage. Volunteers affiliated with the National Wild Turkey Federation will construct the kiosks, using materials supplied by the base.

**Edited by: Emily R. Fausch**