

Colorado Fish and Wildlife Conservation Office



Lakewood: Pam Sponholtz, Project Leader , Andy Hopkins, Admin. Support Asst.

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

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

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

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

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

March 2014 Accomplishment Report

Species Conservation and Management

Black bears at the Air Force Academy: Brian Mihlbachler prepared a base-wide email and article for the Academy newspaper concerning the emergence of hibernating black bears and the proper measures to take to reduce bear-human conflicts, especially trash management.



A "cinnamon" black bear cub finds a meal in an improperly secured bear-resistant dumpster on the Air Force Academy.

Preble's meadow jumping mouse's habitat: Tim Grosch is in the process of coordinating Preble's meadow jumping mouse and Colorado butterfly plant surveys with Wyoming Natural Diversity Database personnel on Warren AFB (FEW).

Native cutthroat trout: Chris Kennedy prepared for and attended the Colorado River Cutthroat Trout Upper Colorado River meeting and discussed recent taxonomic findings, updated activities within the area and updated the database with other biologists within the Upper Colorado River Basin.

Greenback cutthroat trout workgroup: Chris Kennedy and Pam Sponholtz attended the South Platte River/Bear Creek cutthroat working group meeting in Denver. The meeting was attended by biologists who work within the South Platte River drainage and other agency representatives. The purpose of the meeting was to improve understanding of agency interests, form a collaborative process for recovery actions and share ideas for recovery actions and strategies.

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

Middle Tributary project: Brian reviewed the final stream stabilization and restoration plan for Colorado Department of Transportation's Middle Tributary project on the Academy. CDOT is funding this work to partially mitigate for Preble's meadow jumping mouse impacts from the widening of Interstate 25.

Fisheries work in Rocky Mountain National Park: Chris Kennedy continued preparing the Rocky Mountain National Park (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.

Paradise Creek in Rocky Mountain National Park: Chris Kennedy finalized the Paradise Creek and Boundary Lake project report. 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 macro-invertebrate collections, lake depth readings, fish extent and survey locations, location of fish migration barriers, time of water travel, 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.

Black-footed ferret conservation: 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 FEW. FEW has agreed to partner with US Fish and Wildlife in the protection and management of this species. This will be a great opportunity for FEW to show their support of conservation and rehabilitation on Base.

Pronghorn surveys: Tim Grosch conducted pronghorn surveys were on FEW. Results show that we are consistent regarding male to female ratios of 1:1 however counts were lower in terms of numbers. 165 bucks and 147 does totaling 312 pronghorn were observed. This count may be off due to rain and wind as well as helicopter operations that took place on the north end of the Base. The animals in that area were skittish and were constantly moving due to helicopter flight paths.

Pronghorn and Goose Depredation: 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.



Habitat Conservation and Management

Prescribed Burn to Enhance Rare Plant Species: Steve Wallace continues planning for an upcoming prescribed fire designed to benefit the rare Plains Ironweed (*Vernonia marginata*). This will be the second broadcast burn designed to inhibit the invasive smooth brome grass that is competing with this rare forb. Plains ironweed is a State Species of Concern, with only two known populations in Colorado. The Academy is coordinating closely with USFWS Region Six Fire staff in planning and implementing this project.

Roadside Tree Removal: Steve Wallace has mapped approximately 125 trees in sight of roadsides that are dead or dying on the Academy. He is administering removal of these trees which have been weakened or killed by extreme drought conditions, road deicer poisoning, and/or bark beetles. This roadside sweep is completed annually before Academy Graduation in May, the largest public event at the installation.



Dying trees weakened by road deicer concentrated in drainage ditch on the Academy

Bark beetle surveys and treatment: Steve Wallace and Diane Strohm performed field surveys on the Academy for bark beetle infestation, since beetles are beginning to emerge from trees that were attacked last autumn. Since the first flight of the year is typically the most damaging, field inventory to locate these trees will continue to be a strong focus over the next several months. Infested trees are cut and de-

barked with limbs chipped or finely lopped and scattered to kill the developing brood.

Dam removal: Under the Fish Passage Program, Bureau of Land Management in cooperation with the COFWCO removed a diversion dam on Tabequache Creek in the San Miguel drainage. Removal of this dam is expected to increase spawning and rearing habitat for flannelmouth and bluehead suckers and roundtail chub.



Before removal



After removal

Preventative Spraying for Bark Beetles: Work has begun on a contract to spray 250 trees to prevent bark beetle attack. Diane Strohm and Steve Wallace identified high-risk trees to be protected, many of which were recently transplanted, stressed due to root damage from construction activities, or within high profile areas recently favored by the Ips beetle. Trees that are under environmental stress are attractive targets for the Ips pine engraver beetle.

Tree Planting: The Academy receives 500-1,000 seedlings each spring, grown in the USFS Bessey Nursery in Nebraska from seed collected on the Academy. Planting generally focuses on areas in need of reforestation due to recent burns, areas cleared due to heavy mistletoe infection, trail reroutes, etc., with specific planting sites tied closely to the elevation from which the seed was collected. The Bessey Nursery is storing sufficient genetically-adapted seed to reforest 6,000 acres across the Academy, which could prove critical in the event of a catastrophic wildfire.

Revegetation at the Air Force Academy: Brian coordinated with Academy environmental staff and the Contracting Office to revise the Academy's Erosion Control, Revegetation, and Tree Care specification. Substantive changes to the site preparation and topsoil requirements were made to promote post-construction revegetation success.

Future Plant Surveys with Native American tribes: Brian Mihlbachler met with researchers from the Denver Botanic Gardens to discuss possible partnership projects addressing rare plant ecology and conservation. Depending on future Native American interest, DBG may be able to assist with surveys for plants that have cultural significance (e.g., OSHA) to various tribes.

Leadership in Science and Technology

Aerial Reconnaissance Monitoring for Bark Beetle Infestation: Steve Wallace met with an Academy Biology professor and several cadets to look for beetle-infested trees in the Jacks Valley area to serve as samples for visual and sensor calibration. Flights could start as early as April to detect recently infested trees, which will be checked, cut and treated to prevent brood emergence.

American Fisheries Meeting: Tim Grosch attended the CO/WY American Fisheries Society meeting held in Laramie, Wyoming. Several presentations by fisheries professionals were attended March 5-6th. This forum also allowed for very important networking opportunities with area biologists. Contacts were made in regards to the fish program at FEW. Wyoming Game and Fish Department personnel offered sound advice as well as manpower and equipment use for the upcoming field season at FEW.

Cultural Resources Management

Culturally Modified Trees Workshop: Max Canestorp of the US Army Pueblo Chemical Depot, helped set up and run a workshop on culturally modified trees (CMTs) during a Colorado Council of Professional Archaeologist's annual meeting and conference held in Glenwood Springs. During the workshop, he gave a presentation on the phenomenon of culturally bent trees; trees that show evidence of having been bent over and tied down by Native Americans many years ago.

Partnerships and Accountability

Air Force Public-Public Public-Private (P4)

Recreational Trails Project: The Air Force Community Partnership Initiative is a framework through which installation and community leaders can develop creative ways to leverage their capabilities and resources to focus on achieving reduced costs by finding

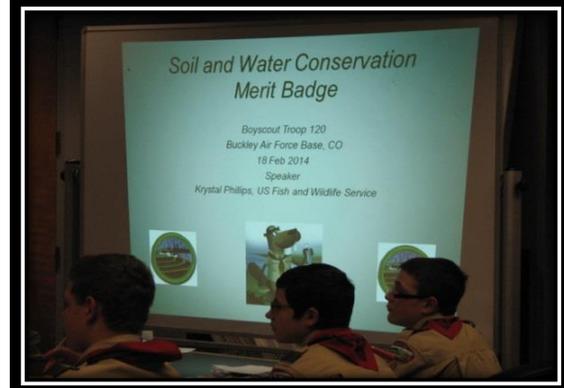
shared value. Krystal Phillips participated in internal and external stakeholder meetings to discuss and delegate efforts to accomplish this initiative within established federal Readiness and Environmental Protection Integration (REPI) project/program timelines.

Firewise Community Workshop at Academy: Partnering with other local communities was an integral facet of a recent workshop hosted by Diane Strohm. Participants from USAFA Fire learned about wildfire hazards around homes, assessing structural fire risk, enhancing defensible space, and prescribing mitigation measures.



Academy homes such as this will be evaluated for wildfire hazards

Environmental Outreach: Public outreach is an essential part of any natural resources program and has a federal priority within the Air Force and US Fish and Wildlife Service. Krystal briefed senior AF leadership and Boy Scout Troup 120 on urban coyote awareness and organized and set up a display outlining BAFB Environmental and Natural Resource information. Krystal also developed and presented the soil and water conservation merit badge requirements to Boy Scout Troup.



Public Outreach with Boy Scout Troup 120

Fish and Wildlife Service Coordination: Krystal Phillips coordinated efforts to assist Great Plains Fish and Wildlife Conservation Office to establish relationships with Air Force Natural Resource Managers at Offutt AFB and Ellsworth AFB. Discussion included the installation Integrated Natural Resource Management Plan (INRMP) reviews and updates, identified natural resource projects on military lands and project expectations.

Pikes Peak Wildfire Prevention Partners (PPWPP): Diane Strohm is serving on a PPWPP committee to plan an upcoming workshop entitled "Wildfire - It Takes a Community". This will be the second annual outreach event hosted by PPWPP, a consortium of wildfire professionals, fuel hazard mitigation contractors, agency representatives and homeowners. Last year's workshop was held in Colorado Springs, and attended by nearly 75 participants. The PPWPP mission is to help reduce the threat of wildfire to life and property in El Paso, Douglas and Teller counties, through education, cooperation and coordination of resources by individuals, agencies, and organizations.

Reclaimed Missile Facilities: Tim Grosch met with Dan Bigbee of EA Engineering, Science and Technology at FEW. Environmental baselines were discussed regarding reclaimed missile facilities. Dan met with several other folks within the Environmental Element but wanted information from the natural resource perspective. It was determined that nearly all natural resource management activities occurred on base so little was known about his interest in the remote sites associated with FEW.

Integrated Natural Resource Management Plan (INRMP): Andy McKinley and Tim Grosch continue the updates on FEW's 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 consensus from Leadership and 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 FEW.

Public Use and Recreation

Tree inventory on the Academy: 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.

Other

Human Resources: To support the natural resource program management efforts on the installation, the USFWS solicited a job announcement for a Biological Science Technician for Buckley Air Force Base. Krystal reviewed resumes; set up interviews; conducted follow-up interview questions; and assisted in interview panel and position selection.

Interviews were conducted for Fish and Wildlife biologist positions at McConnell AFB in Wichita, KS and Malmstrom AFB in Great Falls, MT.

Conferences, Training and Meetings:

- Pam Sponholtz attended the Piscicide Training course in Albuquerque, NM
- Krystal attended the National Military Fish and Wildlife Association training sessions for natural resources on military lands in Denver, CO.
- Chris Kennedy and Pam Sponholtz attended Rocky Mountain National Park/FWS Coordination Meeting in Estes Park. This meeting was attended by representatives from RMNP and FWS and we discussed updates on research projects, the upcoming field season, updates on compliance, updates on funding and updates on reporting. Prepared Investigators Annual Report for RMNP. It is a requirement to report on activities conducted under a RMNP research permit.
- Chris Kennedy attended the FWS Fisheries Academy at the National Conservation Training Center. This introductory course gives participants an overview of the FWS Fisheries Program and its operations. Designed for all fisheries program staff, the course examines the program's legislation and policies, organization and responsibilities of the Washington, regional, and field offices, and how the Fisheries Program and its partners carry out its mission of restoring and protecting aquatic resources following the guidance of the Fisheries Program Vision document and the tenants of Strategic Habitat Conservation.
- Brian Mihlbachler presented a talk at the *Western Society of Weed Science Annual Conference* entitled "Conserving the Air Force Academy Landscape through Integrated Noxious Weed Management." Partners from Texas AgriLife Research and the Colorado Natural Heritage Program also presented papers on the Academy's biological weed control program and weed monitoring program, respectively.

Edited by: Andy Hopkins