

WHO/WHERE WE ARE

Lakewood, CO: Pam Sponholtz, Project Leader; JoAnn Wise, Budget Admin

Buckley Air Force Base, Aurora, CO: Krystal Phillips, Wildlife Biologist, Dustin Casady, Fish and Wildlife Biologist

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

US Air Force Academy, Colorado Springs, CO: Brian Mihlbachler, Biological Scientist; Diane Strohm, Biological Scientist; James Donahey, Forester; Melissa Whittingslow, Wildlife Biologist

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

Warren Air Force Base, Cheyenne, WY: Alex Schubert, Fish and Wildlife Biologist

McConnell Air Force Base, Wichita, KS: Laura Mendenhall, Fish and Wildlife Biologist

Pueblo Chemical Depot, Pueblo, CO: Clark Jones, Wildlife Biologist

Colorado Fish and Wildlife Conservation Office



APRIL 2016

Habitat Conservation & Management

Habitat Restoration. Clark Jones reviewed the Colorado Natural Heritage's scope of work for the creation of a habitat restoration plan along Chico Creek at Pueblo Chemical Depot. This project will create discrete management units, each with their own restoration and management goals, along Chico Creek at PCD. Chico Creek has been designated as a *Potential Conservation Area* containing several globally vulnerable plant and animal communities. The goal of this project is to provide clear management and restoration goals along a six-mile stretch of Chico Creek at PCD for successful habitat improvement.

Noxious Weed Treatment. Brian Mihlbachler and Melissa Whittingslow met with the Academy's noxious weed spraying contractor and botanists from the Colorado Natural Heritage Program to discuss weed spraying techniques and the protection of rare plants. More spot spraying, versus broadcast spraying, is planned as the size of many weed populations has declined. Special Weed Management Areas, delineated in the revised weed management plan, will also help refine the weed control actions in biologically significant plant and animal communities.

Bark Beetle Management. Dustin Casady sprayed 350 transplanted ponderosa pine trees on the Academy with an insecticide to prevent attack by bark beetles. A contractor with a high-powered sprayer also treated approximately 70 trees. These included a dozen high-profile blue spruce near the Academy Civil Engineer complex to prevent infestation by the spruce Ips engraver beetle, which recently killed several nearby large landscape spruce.

Invertebrate Survey. Buckley Air Force Base (BAFB) is located in the Colorado Front Range, which is a region known to support a diverse terrestrial and aquatic Arthropo-



Brian Mihlbachler, Clark Jones, and Pam Sponholtz gearing up to inspect the USAFA Falcon Trail.

da fauna. Last year, Krystal partnered and coordinated with the Colorado Natural Heritage Program to accomplish a 2015 baseline survey of Arthropoda (Hexapoda) on BAFB and to profile and identify the potential management issues for species at risk identified during the survey. In April, Krystal reviewed and commented on the draft survey report. The 2015 baseline Hexapoda survey on BAFB detailed a total of 3,454 collected specimens representing at least 15 orders, 153 families and 459 species. The conservation assessment revealed no federally endangered or threatened insect species; however two of the insects found at BAFB are at risk species - monarch butterfly (*Danaus plexippus* Linnaeus 1758) and the Paiute Dancer (*Argia alberta* Kennedy 1918), a damselfly.

Trail Maintenance. Brian Mihlbachler, Clark Jones and Pam Sponholtz inspected the Falcon Trail on the Academy for erosion and how past trail realignment held up during the past runoff event. Of

course the best way to do that was to actually ride the trail with mountain bikes. The inspection went very well!

Native Cutthroat Trout. Chris Kennedy completed the draft report on Cascade Creek and Mirror Lake project within Rocky Mountain National Park. 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, location 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.

Arbor Day and Earth Day



Children raise their hands to answer James Donahey's open ended questions about the forest.

Environmental Outreach. Public outreach is an essential part of any natural resources program and has a federal priority with in the Air Force and US Fish and Wildlife Service. All USAF installations have established an ongoing natural resources public relations program by sponsoring public events associated with commemorative days such as Earth Day and

National Arbor Day. On 21 April 2016, Buckley Air Force Base (BAFB) celebrated Arbor Day with a proclamation reading by 460th Space Wing Mission Support Group Commander, Colonel Rose Jordan, and commemorative youth tree planting. In addition, BAFB received their 11th year Tree City USA award by the Colorado State Forester.

Dustin Casady and Krystal Phillips also put on an Earth Day celebration at Buckley AFB.

Arbor Day Celebration. Smokey Bear joined James Donahey and Diane Strohm at the 23rd annual celebration of our Tree City USA® designation. Festivities were held both inside and outside Douglass Valley Elementary where 60 kindergartners enjoyed story time, awards, tree

and shrub drawing, and tree planting. The most important lesson of the day, lock your dumpsters to save our bears and keep our forests clear of garbage. The kids gleefully picked up garbage on their walk back to the classroom.



Buckley AFB commemorative tree planting.

Partnerships & Accountability

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Eagle Scout Project. Laura Mendenhall trained a Boy Scout troop to set hoop nets and identify, weigh, and measure fish for a largemouth bass tagging project. Mendenhall is working with an Eagle Scout candidate to complete the capture and tagging of 25 largemouth bass from a McConnell AFB fishing pond for a pond health project. Together, the team captured and tagged 4 bass. The project will allow for comparison between bass growth rates in the pond to expected growth rates as found in fisheries literature. The project will further aid in the monitoring of pond health with the ongoing goal of maintaining a healthy and productive fishery for McConnell AFB anglers. The Eagle Scout candidate demonstrated leadership and organizational skills and the boys came away having learned fishing techniques, fish identification, and fish habitat characteristics.



SCA AmeriCorps Natural Resource Internship. The national agreement between the USFWS and Student Conservation Association serves to support America's conservation corps by providing college and high school-aged members with hands-on conservation service opportunities. By merging several COFWCO habitat conservation and management military projects on Air Force installations, Krystal was successfully able to support and offer one (1) natural resource

internship to accomplish avian surveys/monitoring, invasive plant species management; and trail maintenance.

Erosion Control. Brian Muhlbacher is working with the Colorado Department of Transportation to assess the effectiveness and appropriateness of erosion control fabrics used on the I-25 highway widening project. Of particular concern is plastic-netted fabrics which could trap wildlife, including Preble's meadow jumping mouse (ESA listed species), where these materials were used in riparian areas.

South Platte Fish Workgroup: Pam Sponholtz and Chris Kennedy attended the South Platte workgroup meeting. Topics discussed included an update on renovation projects in Herman Gulch for greenback cutthroat trout as well as projects that are in the planning stages for summer 2016.

Species Conservation & Management

Bird Surveys. Dustin Casady conducted burrowing owl and songbird surveys on Buckley Air Force Base in March. Two burrowing owl nesting sites have been located and are being monitored. Burrowing owls are listed as threatened in the state of Colorado and are protected federally under the Migratory Bird Treaty Act. Since, burrowing owls are listed as threatened in the state of Colorado it is required that there be no disturbance within 150 feet of an active nest. Signs have been put in place and a base wide email was sent out warning people to stay out of the area.

Prairie dog/burrowing owl survey report: Max Canestorp completed a report on the 2015 prairie dog and burrowing owl surveys conducted on Schriever AFB. There were approximately 77 acres of active prairie dog colonies on Schriever AFB in 2015 (an additional 171

acres were subject to lethal control during the year), along with three active burrowing owl nest sites.

Canada Goose Depredation. Dustin Casady assisted Alex Schubert at F.E. Warren AFB with Canada goose depredation. Over 75 eggs have been added thus far and some geese have been taken lethally. One of the geese taken had a U.S. Fish and Wildlife Service band on it. The



Canada Goose band.

band was reported and it was determined that the goose was banded in Kimball County, Nebraska in 2012.

Macroinvertebrate Ecology. Laura Mendenhall attended a week-long macroinvertebrates training at the National Conservation Center. Mendenhall left with a comprehensive understanding of how to use macroinvertebrates to effectively gauge stream health and the ability to identify a suite of macroinvertebrates to family level. Mendenhall has started curating a collection of representative macroinvertebrate specimens for McConnell AFB and will implement the techniques learned to monitor creek health in some target areas throughout the base.

Bird/Wildlife Aircraft Strike Hazard (BASH)

Buckley AFB. A monthly stakeholders meeting was held on 14 April 2016. Krystal supported the BASH program as an active participant during the meeting and supported junior Service staff, Dustin Casady, by reviewing his slide presentation of the summary of findings discovered during the annual Raptor Report.

USAFA. Brian and Melissa met with the 306th FTG, 12th FTW, and USDA-APHIS staff to discuss Bird-Aircraft Strike Hazard (BASH) and other wildlife issues on the Academy's airfield. Natural Resources recently obtained an MBTA depredation permit for species (Common Raven, Canada Geese,

Mallards, and Double-Crested Cormorants, that occasionally cause flight training delays and safety concerns. They also provided input and advice on airfield mowing, rodent control, coyote management, and revegetation.

McConnell AFB. Laura Mendenhall facilitated the transfer and storage of 3 coyote carcasses following depredation by the McConnell AFB BASH program. The coyote carcasses will be frozen until funding becomes available to taxidermy one carcass and pelt the other two carcasses for use in environmental education and a natural history display in the Outdoor Recreation

lobby. Mendenhall will oversee the content of this display to ensure it is an accurate representation of the coyote's role in the mixed-grass prairie ecosystem and the consequences of removing the species from the environment. Mendenhall is also coordinating with the Outdoor Recreation Director to apply for a Migratory Bird Educational Purposes permit to taxidermy one depredated Mallard for display.

Peterson AFB. Max Canestorp participated in a Bird/animal Aircraft Strike Hazard (BASH) meeting on Peterson AFB.

Leadership in Science & Technology

Aquatic Weeds Management. Brian Mihlbachler met with the Academy's pest management contractor to discuss the management of algae and aquatic weeds in the base's fishing lakes. Cutrine and Reward will be used for treatments in 2016.



Rocky Mountain National Park Fisheries and Aquatic Data. Chris Kennedy continued working on RMNP fisheries and aquatic data CD. The CD contains almost all available fisheries and aquatic data; including fish survey data, disease testing, creel survey data, water temperature, fisheries/aquatic research, etc. A meeting also took place during the month to show the Resource Management, GIS and Research Divisions of RMNP what data is on the CD and how it might be used by RMNP and current/future researchers.

Using Remote Antennas to Track Fish: Pam Sponholtz, Baca National Wildlife Refuge Staff Corinna Hanson, Paul Jones (Colorado Parks and Wildlife) and Jason Kline with SWCA Environmental Consultants installed five remote antennas in Crestone Creek on Baca National Wildlife Refuge. The purpose of these antennas is to detect movement by Rio Grande chub and sucker and determine where entrainment is occurring into irrigation ditches. The antenna's detect small tags that are inserted into the abdominal cavity of the fish.

Mosquito Management. Alex coordinated with the Safety group on F.E. Warren regarding their intention to trap mosquitos in various locations on base and provided input on potential trapping locations. The results of the mosquito trapping effort may be useful in discovering which areas of base have higher mosquito populations and whether or not those mosquitos may be vectors for certain viruses. The trapping data may also help in discovering a favorable location to move the bat house in the future.

Climate Change Monitoring. Max Canestorp participated in meetings to develop a climate change monitoring program on multiple DoD installations.

"...[mosquito] trapping data may also help in discovering a favorable location to move the bat house in the future."

Firearms Training

Firearms Training. Colorado Fish and Wildlife Conservation staff participated in firearms training at the U.S. Air Force Academy. Participants qualified with a rifle at 100 yards and also a shotgun at 25 yards. Annual firearm training

is required for personnel that use or are involved with the use of firearms and it is important for staff safety. Examples of use or involvement with the use of firearms on military bases include: wildlife depredation and facilitation

of hunting programs. Alex Schubert, Dustin Casady, Clark Jones, Max Canestorp, Melissa Whittingslow, and Brian Mihlbachler participated in the training this year.

From left to right: Brian Mihlbachler watches Clark Jones fire a rifle; Melissa Whittingslow demonstrates the prone position for firing a rifle; Brian Mihlbachler demonstrates the kneeling position for firing a rifle.

