

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



JUNE 2016

Habitat Conservation & Management

Oak Management Trial. Dustin Casady and SCA intern Taylor helped for three days on an oak management trial at USAFA (thank you Dustin and Taylor!). Earlier in the year, James Donahey prepared an 813 for herbicide application of Gambel oak to reduce sprouting following manual cutting within fuelbreaks. Dustin and Taylor sprayed a foliar application of Ecomazapyr on approximately 1-2 acres near the Falcon Club and within a fuelbreak on the Academy's west boundary. James and Dustin felled the taller oak, and Dustin applied a concentrated herbicide to the stump. The trial will be used to test the effectiveness of this herbicide for treating Gambel oak in our fuel treatments where we are committed to maintaining the effectiveness of the treatment, thereby reducing long-term maintenance needs. After approximately three weeks, the results are mixed, with stump application appearing to be highly effective, and foliar application being moderately effective. The amount of time applied before rain appears to be a critical variable.

Invasive Tree Removal. Krystal Phillips developed a map and submitted the request to remove ten-twelve (10-12) Russian Olive (*Elaeagnus angustifolia*) volunteer saplings from high traffic landscaped areas on Buckley AFB to prevent the spread of the Colorado noxious weed List B species.

Dustin Casady, Alex Schubert, and Taylor Cassidy removed several Russian olive trees from F.E. Warren AFB. Russian olive trees have popped up in many locations on F.E. Warren AFB and if left unchecked would likely spread and take over the riparian areas. Cut stump treatments were made within a few minutes of cutting the trees down to ensure the herbicide would translocate to the root

system which will prevent any suckers from growing.

Stream Stabilization. Brian Mihlbachler is working with the Army Corps of Engineers, Matrix Design Group, and the Center for Environmental Management of Military Lands (CEMML, Colorado State University) to design and implement a stream stabilization and habitat restoration project on Black Forest



Dustin Casady using cut stump treatment to control Russian olive at F.E. Warren AFB.

Creek (Middle Tributary) for fall/winter 2016. Stabilization of the small watershed will protect Preble's Meadow Jumping Mouse habitat, wetlands, and a rare Southern Rocky Mountain Cinquefoil (*Potentilla ambiguens*) population.

Forest Thinning at the Falcon Club. Forest thinning operations have been completed on a ten-acre step slope directly adjacent to the highly prized Falcon Club on the Academy. Diane Strohm

and James Donahey inspected work during thinning operations. Requested by the Falcon Club staff to enhance their view of the Eisenhower Golf Course and the Cadet Area, this project enhanced forest health by removing dead and dying fir and reducing overall stocking levels. It also greatly reduced wildfire hazard in this important location. A "before" and "after" photo will be included in next month's report.

Ips beetle wood treatment. Max Canestorp covered ponderosa pine sections that had been infected with Ips beetles with heavy plastic sheeting to kill the beetles through solar radiation.

Powerline Hazard. Alex Schubert met with Joe Shogrin (High West Energy) regarding a fledgling owl that had been electrocuted at one of the powerline transformers on base. The incident was reported to FWS Law Enforcement and measures have been undertaken (retrofitting of transformers) to prevent incidents such as this from re-occurring. It is the goal of the energy company to get that certain section of the electric line placed underground within one year.

Native Prairie & Riparian Restoration. Alex Schubert met with Jim Pike and Shawna Taylor (Natural Resources Conservation Service) regarding areas on base to potentially be converted to native prairie. Several areas on base were visited and plans were made for a path forward. Jim Pike also stated that he may be able to find landowners in southeast Wyoming that would be willing to take (adopt) beavers from F. E. Warren AFB, as part of riparian restoration projects. This may help resolve the issue of the perception of too many beavers at F. E. Warren AFB.

Partnerships & Accountability



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Bioblitz. Clark Jones assisted with a bioblitz last month at the newly created Browns Canyon National Monument near Buena Vista, CO. This event was designed to document all flora and fauna encountered over a three-day period at the monument. Browns Canyon was designated as a National Monument in 2015 by an executive order issued by President Obama under the Antiquities Act of 1906. Browns Canyon covers 21,586 acres and is jointly managed by the Forest Service and the Bureau of Land Management.

Firewise Community Wildfire Awareness Day. After months of planning, we held our Community Wildfire Awareness Day. The day was an opportunity to receive our Firewise recognition (the first military installation in the nation) from the Colorado State Forest Service and the National Fire Protection Association, and to provide education to our residents and base employees on wildfire preparation and fuel hazard mitigation. The event was hosted at Fire Station 1 with support from USAFA Fire and Housing staff. Diane Strohm, Melissa Whittingslow, Shelly Crook, and our Wildfire Module represented the

USFWS. Visitors were present for the award reception by Col Dunn, and could view booths on wildfire mitigation work on the Academy and how to prepare for evacuation from a wildfire event. A Black Forest Fire film was shown and kids could enjoy bouncy houses shaped like fire trucks. People were encouraged to drive a demonstration route through the housing area to look at a home with completed mitigation and another that was in-progress. While no official visitor tally was taken, approximately 120 hotdogs were consumed during the event.

Hazard Analysis Critical Control Point. Laura Mendenhall, Brian Mihlbachler, and Clark Jones reviewed Hazard Analysis Critical Control Point (HACCP) plans for each of the COFWCO military installations. HACCP plans are important for controlling the spread of invasive species such as zebra mussels, thistle, and Johnson grass, especially where equipment and personnel are shared across installations. The team suggested edits where clarification was needed and encouraged the use of precise language to avoid confusion and promote standardization and replicability.

Fish Survey. Alex Schubert interviewed numerous fishermen as part of a voluntary fish survey. One regular fisherman to the base lakes is locally known as Mamasan and is shown here holding two of the six trout that she caught that day after expending 5 hours of fishing effort. She also is helping with removal efforts of small yellow perch and regularly keeps the limit of 50 per day. These fish become deep-fried delicacies, cooked whole in the traditional Thai manner.



Commander's Policy Revision. Max Canestorp drafted standard oper-

ating procedures for addressing vehicle/wildlife collision issues on Cheyenne Mountain AFS.

BASH. Dustin Casady, USFWS Biologist, and Taylor Cassidy, Student Conservation Association Natural Resource Intern, supported the BASH program through their efforts to document and prepare a Draft Raptor Pole Recommendation Report to be used in prioritizing perch areas within the installation. The outcome of this report will allow leadership to properly fund raptor deterrents in high priority areas near the airfield and flight path thus reducing the risk to human health and safety.

Species Conservation & Management

Shortgrass Prairie Bird Banding. Clark Jones and Dr. Claire Varian Ramos (Colorado State University – Pueblo) banded Cassin's Sparrows and Lark Buntings at Pueblo Chemical Depot last month as part of a monitoring study examining site fidelity and other demographics of these two species. Both Cassin's Sparrows and Lark Buntings have rapidly declining populations, and surprisingly little is known about many aspects of their life history. This is the second year of the banding study for Cassin's Sparrows and the first year banding Lark Buntings. This study has also provided valuable field experience for several students from CSU-Pueblo and many thanks go to Austin Reed, Alyssa Torres, Liz Smith, Makenna Fair, and Karla Roberts for their help with this effort.

Grassland Bird Survey. In the early morning hours, Alex Schubert met with Nick Van Lanen (Bird Conservancy of the Rockies) to survey grassland bird species at F. E. Warren AFB. A randomly chosen area was surveyed using a standardized survey design. Bird species recorded included western meadowlarks, grasshopper sparrows, common ravens, lark buntings, Cassin's sparrows, and common grackles.

Fish Hatchery. Chris Kennedy did a four week detail at the Leadville National Fish Hatchery. Work centered on the Federally threatened greenback cutthroat trout broodstock program. Spawning was conducted on several occasions with fish on hand at the hatchery, with wild milt which was



Austin Reed, CSU-Pueblo, holds a Cassin's Sparrow captured at Pueblo Chemical Depot.

brought in from Bear Creek and in conjunction with a research project. Over 141,000 eggs were fertilized over the course of the detail. In addition over 520,000 Carr Creek cutthroat trout eggs were collected.

Pest Management. Forest Pathologist Kelly Burns of the USFS Lakewood Service Center inspected several fading bristlecone pines near the Carlton House on the Academy. James Donahey helped her collect samples of an unknown canker by pruning branches. Just one month after an earlier visit, five trees in the Carlton House yard were infested with bark beetles, and two others had died. The likely culprit of this drastic change is the sudden reduction in watering that occurred last year when the decision was made to stop irrigating the trees in the lawn. The branches are currently being cultured by a lab by

Colorado State University to determine the pathogen.

Canada Geese. Dustin Casady, Alex Schubert, and Taylor Cassidy performed a "goose round-up" at F. E. Warren AFB in accordance with the base's current Canada goose depredation permit. There are many resident Canada geese in a "flightless" state this time of year at F. E. Warren and this flightless state makes them easier to capture. As part of the activities, the geese were rounded up with a temporary corral system and herded into an empty stock trailer.

Antelope Survey. An antelope survey was conducted by Dustin Casady and Taylor Cassidy on F.E Warren Air Force Base. June is the month antelope give birth to their fawns and there should be a jump in their population numbers. The early June antelope survey only recorded two fawns but that number is expected to be much greater in July when fawns are more active and visible.



Adult pronghorn with fawn at FE Warren AFB.

"stocked [...] 1,450 lbs of rainbow trout, which should make the 4th of July fishermen happy!"



Fish Stocking. On June 14th Melissa Whittingslow and SCA intern, Taylor Cassidy stocked Fairish Recreational Area with 1,000 Lbs. of Rainbow trout. Before stocking the lakes SCA intern, Taylor tested the temperature, PH, and dissolved oxygen levels in all the lakes to ensure the lakes' water

quality was in an acceptable range to support the aquatic wildlife.

On June 27th Melissa Whittingslow stocked the US Air Force Academy Lakes on May 25th with 1,450 Lbs. of Rainbow Trout, which should make the 4th of July fishermen happy!

SCA Intern, Taylor Cassidy helps Melissa Whittingslow stock lakes on USAFA.

Leadership in Science & Technology

Greenback Cutthroat Trout Recovery. Chris Kennedy prepared and gave talk entitled The Recovery History of the Greenback Cutthroat Trout at Trout Unlimited Alpine Anglers chapter meeting in Estes Park, CO. The meeting was also an opportunity to attract volunteers assist with conducting fish surveys for the upcoming field season in RMNP.

Plague study at Pueblo Chemical Depot. The Dr. Tonie Rocke (principal investigator), Katie Richgels (post-doctoral researcher), Julia Poje (graduate student), and Sabrina Eyob (technician) from the USGS National Wildlife Health Center initiated a study of sylvatic plague at Pueblo Chemical Depot in June. This study aims to examine multiple environmental factors, including potential climate change effects, that may influence plague transmission and the effectiveness of plague vaccines for black-tailed prairie dogs. This is multi-year project funded through the Department of Defense Stra-

tegic Environmental Research and Development Program.

Hunting as Management Tool. Alex Schubert continued coordination with the base's legal office and publications office to update drafts of the F. E. Warren AFB limited pronghorn hunting Air Force Instruction. Updated drafts were re-submitted for approval through the AFB chain-of-command. The natural resources office is currently waiting to hear from base command regarding the disposition of the draft instruction.

Trail Maintenance. Brian and Melissa conducted a site walk with contractors bidding on the FY16 scope of work for trail reconstruction and repair. Approximately 1¾ miles of multi-use recreational trail will be rehabilitated this year to control erosion and improve user safety

Forestry and Fuels Management Program article in national publication. The Academy forestry and wildland fuels management programs will be recognized in this autumn's publication of The Military Engineer, focusing on asset management. Diane and

Academy Environmental Asset Management Flight Chief Bob Fant submitted an article describing the importance of protecting and enhancing the forest for its many valued attributes.

Bat Monitoring. Laura Mendenhall escorted a crew from University of Montana to locations throughout McConnell AFB selected for bat monitoring. The crew installed acoustic detectors set to run nightly through the summer. Following data analysis, McConnell AFB will have a list of bat species known to be present on the base during the summer months.

Swift Fox Management. Throughout the month of June Melissa Whittingslow has been working at Bullseye Air Field to address a swift fox den in-between the runways, which is a BASH concerns. Melissa has experimented with strobe lights, Radios, air cannons, and ammonia, to try to encourage the fox and her kits to move off the airfield. Melissa has been utilizing a game camera to document if any of the methods have been effective.

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Swift fox captured on game camera at Bullseye Air Field.