

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 Mhlbachler, Biological Scientist; Melissa Whittingslow, Wildlife Biologist; Joe Murphy, Forester

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

Gunnison, CO: Cole Brittain, Aquatic Biotechnician

Colorado Fish and Wildlife Conservation Office



FEBRUARY 2017

Leadership in Science & Technology

Colorado Chapter of the Wildlife Society Meeting Several members of the Colorado Fish and Wildlife Conservation Office attended and presented at the Colorado Chapter of the Wildlife Society's 2017 Annual Meeting in Fort Collins, CO. Clark Jones presented a poster on Full-annual-cycle Monitoring of Burrowing Owls in Southeastern Colorado. This poster examined habitat conditions on the wintering grounds for Burrowing Owls that breed on Pueblo Chemical Depot and winter in central Mexico. Alex Schubert prepared and delivered a presentation on Pronghorn Management at F. E. Warren AFB. While preparing for this, Alex summarized the statistics for the pronghorn counts for 2016 for F. E. Warren AFB. The buck/doe ratio on base was 83 bucks for every 100 does in 2016. The fawn/doe ration in July 2016 after the parturition season was 68 fawns for every 100 does. The presentation covered the population status of the base's pronghorn herd, as well as past, current, and future management actions to reduce the base's pronghorn herd size.

Natural Resources Workshop. Dustin Casady attended the Naval Civil Engineer Corps Officers School (CECOS) Natural Resource Compliance Course and the CECOS U.S. Forest Service Climate Change and Natural Resource Management workshop held at Eglin Air Force Base in Florida. The Natural Resource Compliance Course gave instructions on how to apply natural resource laws, regulations, policies, Executive Orders, DOD Instructions, and other guidance, with an emphasis on U.S. Fish and Wildlife Service specific requirements. The course also addressed stewardship, preservation, and process; fish, game, and wildlife management laws; protection of wetlands, waterways, and

other protected ecological areas; forest and land use management laws; Sikes Act and INRMP; and inter-service cooperation. The U.S. Forest Service Climate Change and Natural Resource Management workshop introduced the process of integrating climate change into natural resource management and planning. Overall the course gave valuable insight into the compliance side of managing natural resources on Department of Defense installation.

Ecosystem Restoration Workshop Chris Kennedy participated in Army Corps of Engineers Alternative Formulations Workshop. The workshop was to brainstorm ideas to develop alternatives for an ecosystem restoration project on the South Platte River through Denver.

Stormwater Forum Brian attended a meeting of the DoD Front Range Stormwater Forum. The need to

improve post-construction revegetation and erosion control practices on Air Force contracts was discussed.

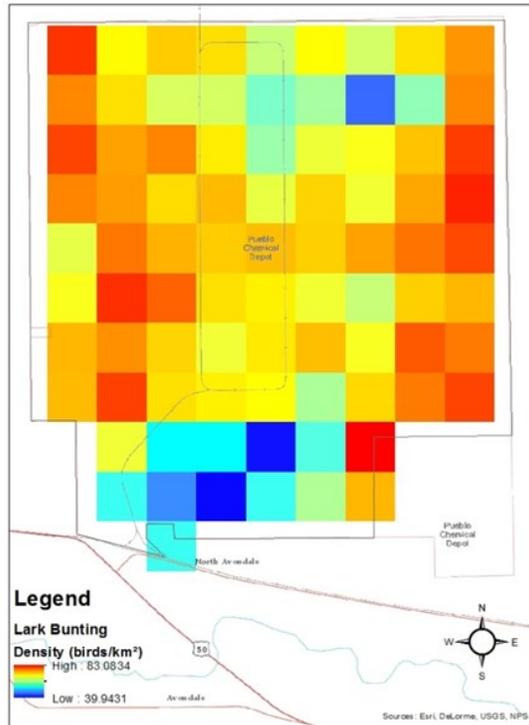
Wichita State University Seminar Laura Mendenhall presented a lunchtime graduate student seminar on how to effectively communicate science using Power Point. Following the seminar, Mendenhall had the opportunity to meet with individual WSU professors to learn about their research and graduate students. The event was an opportunity to invite faculty to see McConnell AFB and also to discuss the potential for collaboration using the Cooperative Ecosystem Studies Unit. Mendenhall also recruited a handful of student volunteers to assist with surveys on the base this summer. Mendenhall concluded the visit with a presentation on California Condor Recovery which generated a number of thought-provoking questions from faculty and students.



Clark Jones and his poster at Colorado Chapter of the Wildlife Society Annual Meeting.

More Science & Technology...

Pueblo Chemical Depot



Integrated Monitoring in Bird Conservation Regions Clark Jones attended the Integrated Monitoring in Bird Conservation Regions held by the Bird Conservancy of the Rockies in Fort Collins last month. This meeting summarized bird monitoring conducted on private and public lands across the western United States, including several military installations across the Front Range of Colorado. The IMBCR conducted over 15,000 point counts in 2016 and produced density maps for priority species on several installations under management of the

USFWS in Colorado and Wyoming. Topics covered in this meeting included increasing partnership funding opportunities, as well as employing Bayesian methods for trend analysis. The IMBCR program is the second largest bird monitoring program in the United States after the Breeding Bird Survey.

Fire Training Melissa Whittingslow and Brian Milhlbachler received their 2017 red cards for the upcoming wildland fire season.

Predicted density of Lark Bunting on Pueblo Chemical Depot derived from the Bird Conservancy in the Rockies' Integrated Monitoring in Bird Conservation Regions.

Partnerships & Accountability

buffers results in swiftly moving water, erosion, and costly maintenance. Flight Safety requested that all of the buffers throughout the cantonment area are mowed once a year before waterfowl nesting season (coincides with the rainy season) so the BASH contractor can more easily harass ducks. Natural Resources requested that only specific "problem buffers" are mowed. Flight Safety agreed to do a ride-around to identify these "problem buffers."

Science Fair! Clark Jones served as a judge for the 15th Annual Southern Colorado Regional Science Fair in February. This event was sponsored by Pueblo Community College and included students from Custer, Fremont, and Pueblo counties for students in 6th through 12th grades. Winners of the science fair go on to compete in the 62nd Annual Colorado Science and Engineering Fair in Fort Collins this April. All student participants adhere to the Intel International Science and Engineering Fair guidelines and compete in a variety of categories including Animal Sciences, Behavioral and Social Sciences, Chemistry and Biochemistry, Earth and Space Sciences, Energy, Engineering,

Environmental Sciences, Mathematics and Computer Sciences, Medicine and Health, Microbial and Molecular Biology, Physics, and Plant Science.

Midwest Regional Support Team (RST) and Installation Support Team (IST). Krystal Phillips organized a site meeting between Project Leader and Peterson IST to discuss project planning on multiple installations and develop the need for independent natural resource program site assessments for select locations. She also participated in one Midwest RST monthly teleconference. Krystal finalized the draft statement of work (SOW) between Buckley Air Force Base (BAFB) and CO FWCO and initiated staffing for initial review, while working to refine the existing BAFB tripartite cooperative agreement set to expire 30 Sept 2017. Working in concert with Peterson IST, she coordinated with various Natural Resource Managers to combine similar sensitive species and biodiversity projects on Colorado Air Force installations into one scope of work finding cost savings and allowing for end of year Service funds to be reallocated to accomplish Air Force unfunded FY17-19 programmed projects.

BASH Audit Buckley Air Force Base is undergoing a Bird Aircraft Strike Hazard (BASH) audit. Dustin Casady and Krystal Phillips met with the BASH auditor to discuss the BASH program on BAFB. The auditor wanted information on projects that are occurring or have occurred on the base in support of the BASH program. The BASH audit is executed to bring to light current and reoccurring issues with the BASH program. Most of the discussions that took place were about the management of habitat that attracts wildlife to areas near the airfield. Overall the meeting went well and many projects that the USFWS is involved in were highlighted.

Riparian Buffers Meeting Laura Mendenhall attended a meeting with Flight Safety to discuss the riparian buffers and potential for increasing BASH risk. Tina Seemayer, McConnell AFB NRM, led the meeting with a presentation on how lack of riparian

"[...] to combine similar sensitive species and biodiversity projects on Colorado Air Force installations into one scope [...]"

More Partnerships...

Outreach & Education Alex Schubert coordinated with Shain Wright (DoD) and Jeff Geyer (Laramie County Conservation District) regarding potential for outreach and education activities for Cheyenne area youth. Activities may include hands-on fish management techniques such as seining in Pearson Lakes as soon as spring arrives. Other ideas included partnering with the University of Wyoming to staff field day activities on base to include the education of adults, as well.

Stormwater Review Brian met with City of Colorado Springs stormwater engineers to review their ongoing project to stabilize and restore habitat east of the Air Force Academy on upper Monument Branch. The City has plans to conduct similar channel stabilization on the Air Force Academy portion of Monument Branch in 2017 and 2018.

Invasive Species Certification In an effort to help control invasive species found

on multiple bases, Taylor Cassidy (SCA intern) has been working towards a Colorado State Pesticide Applicators License. Recently she has passed the General Exam, and will now study for her first category in order to obtain the license. After completing the first category, she will be certified to apply specific herbicides and pesticides as needed.

Species Conservation & Management

Integrated Natural Resource Management Plan (INRMP) In accordance with the approved Buckley AFB NRMP 2017 work plans, Krystal reviewed and commented on the final draft for the annual 2016/2017 raptor report submitted by Dustin Casady, Service biologist assigned to BAFB. Also, she provided key information to Air Force site staff on federal and state requirement for nesting burrowing owls, a known avian visitor of BAFB, to support a contractor's request for information on bidding for a construction project to repair and realign a road on the installation located within historic nesting sites.

Bird Mortality Alex received a report that another owl had been electrocuted at one of the base's power poles in the same spot that one had been electrocuted last summer. As was done previously, Alex called and reported the incident to USFWS law enforcement agents in Wyoming, as well as the USFWS Ecological Services office. Follow-up coordination has led to plans to conduct a conference call with personnel in charge of the power line, other pertinent base personnel, as well as USFWS law enforcement, and ecological services representatives to work to rectify the power pole situation so that incidents such as this are not repeated in the future.

Raptor Surveys Taylor Cassidy completed six Raptor surveys on BAFB



The power pole of interest at FE Warren AFB.

starting in November and ending in February. These surveys are part of an effort to reduce bird airstrikes on base by monitoring the species, behavior, location, and number of raptors seen on and around base. After analyzing the data collected, USFWS staff can determine what management actions to take next to further reduce raptor activity near the runway.

BASH Concern U.S. Fish and Wildlife biologist, Dustin Casady, met with Buckley Air Force Base (BAFB) Wing Safety Management, and U.S. Department of Agriculture to discuss a Risk

Management Assessment concerning proposed work in an unexploded ordinance area on BAFB. The proposed work requests to fill in prairie dog holes previously treated with pesticide in an area identified as Bird Aircraft Strike Hazard (BASH) concern. The risk of encountering an unexploded ordinance was weighed against the identified BASH concern and a decision is being made as to whether the work can proceed.

Black-footed Ferrets Alex coordinated with John Hughes of the National Black-footed Ferret Conservation Center regarding the recently acquired Wyoming Game and Fish Department permit to house ferrets on the base. The current plans are to introduce black-tailed prairie dogs (2 per pen) to the pre-conditioning pens in mid-March to excavate the necessary burrows in the facility. The ferrets will be brought into the facility in mid-July to begin their pre-conditioning phase. Once the ferret's education has reached an acceptable level, they will then be removed from the pens and released into the wild as part of the establishment of non-essential, experimental populations throughout their range.

"The ferrets will be brought into the facility in mid-July to begin their pre-conditioning phase."

Habitat Conservation & Management

Restoration Alex Schubert coordinated with Brian Mealor and Beth Fowers (University of Wyoming) regarding the best sources for seed to revegetate disturbed areas at F. E. Warren AFB. Alex obtained seed from Granite Seed in Thornton, CO. To ensure a native mix appropriate for Wyoming, he did a species-by-species natural history inquiry of all seeds available from Granite Seed, and then proceeded to narrow his list to approximately 42 native prairie plants that could potential be used to re-establish the prairie ecosystem in parts of the base where it once occurred.

Riparian Restoration Working with Colorado State University and Matrix Design Group, Brian Muhlbachler finalized the plans for stabilizing and restoring habitat on Black Forest Creek (Middle Tributary) on the Academy using a natural channel design approach. The project will be bid in March 2017 and will go to construction soon after. Stream stabilization designs are also being developed for upper and lower Black Forest Creek for possible construction in 2018.

National Fish Passage Program Since 2014, funding under the National Fish Passage Program has been awarded to Baca National Wildlife Refuge to address perched culverts and road crossings that preclude upstream movement by native fish.



Newly constructed “fish friendly” culvert at Baca National Wildlife Refuge

In February, Pam Sponholtz, Bill Rice (Region 6 Fish Passage Coordinator), Ron Garcia (Baca Refuge Manager), Cole Brittain (Fisheries Tech) and Estaban Vigil (Colorado Parks and Wildlife) met to discuss how to maintain channel improvements through the expected run off season as well as to review designs for the next set of fish passage improvements scheduled to begin in Fall 2017



Ron Garcia, Baca Refuge Manager, standing on top of a perched culvert scheduled to be replaced in Fall 2017.

Pollinator Garden Preparation Laura Mendenhall began the moist cold stratification process on hundreds of seeds from a variety of native wildflower and grasses. Seeds were wrapped in moist paper towels, put into plastic bags, and placed into a refrigerator. Mendenhall will plant the seeds in mid-March in both transplant pots and in outdoor beds alongside wildflowers established in 2016. Meanwhile, the warm winter has necessitated weekly weeding of each pollinator garden bed. Mendenhall requested extra funds to purchase more mulch to help curb weed growth.

Grounds Maintenance Contract Buckley Air Force Base (BAFB) Entomology shop, the BAFB Ground Maintenance contractor, and Dustin Casady with the U.S. Fish and Wildlife Service met to discuss the grounds maintenance contract. Several topics were discussed and included the mowing and spraying of areas that are infested with invasive species and also the installation and maintenance of a vegetation free ring around the base of trees. The installation and maintenance of a vegetation free ring around the base of trees will allow the trees to uptake nutrients and water that is otherwise taken by the vegetation near the base of the tree.

Stream Restoration Chris Kennedy participated in a conference call with RMNP and US Forest Service regarding initial planning for implementation of mitigation plan for Long Draw Reservoir. The plan calls for the restoration of 37 miles of stream to native greenback cutthroat trout. Disbursement of monies, permits/agreements needed to perform work, genetics of cutthroat trout populations within the project area and barriers were topics discussed.

Welcome, Joe Murphy!

Joe completed his Bachelor of Science in Forestry from the University of Tennessee in 2003. Since then he worked for federal, state, and non-profit organizations in numerous states across the US in the areas of forestry, conservation, wildfire suppression, timber stand improvement, emergency responder, timber cruising, environmental education, prescribed fire, and preserve management. He also served as a Community Based Natural Resource Volunteer for the Peace Corps in Malawi, Africa. He enjoys reading, playing music, canoeing, card and board games, working out, fishing, camping, and of course forestry and fire. Joe started as the new Forester at the Academy in February.