

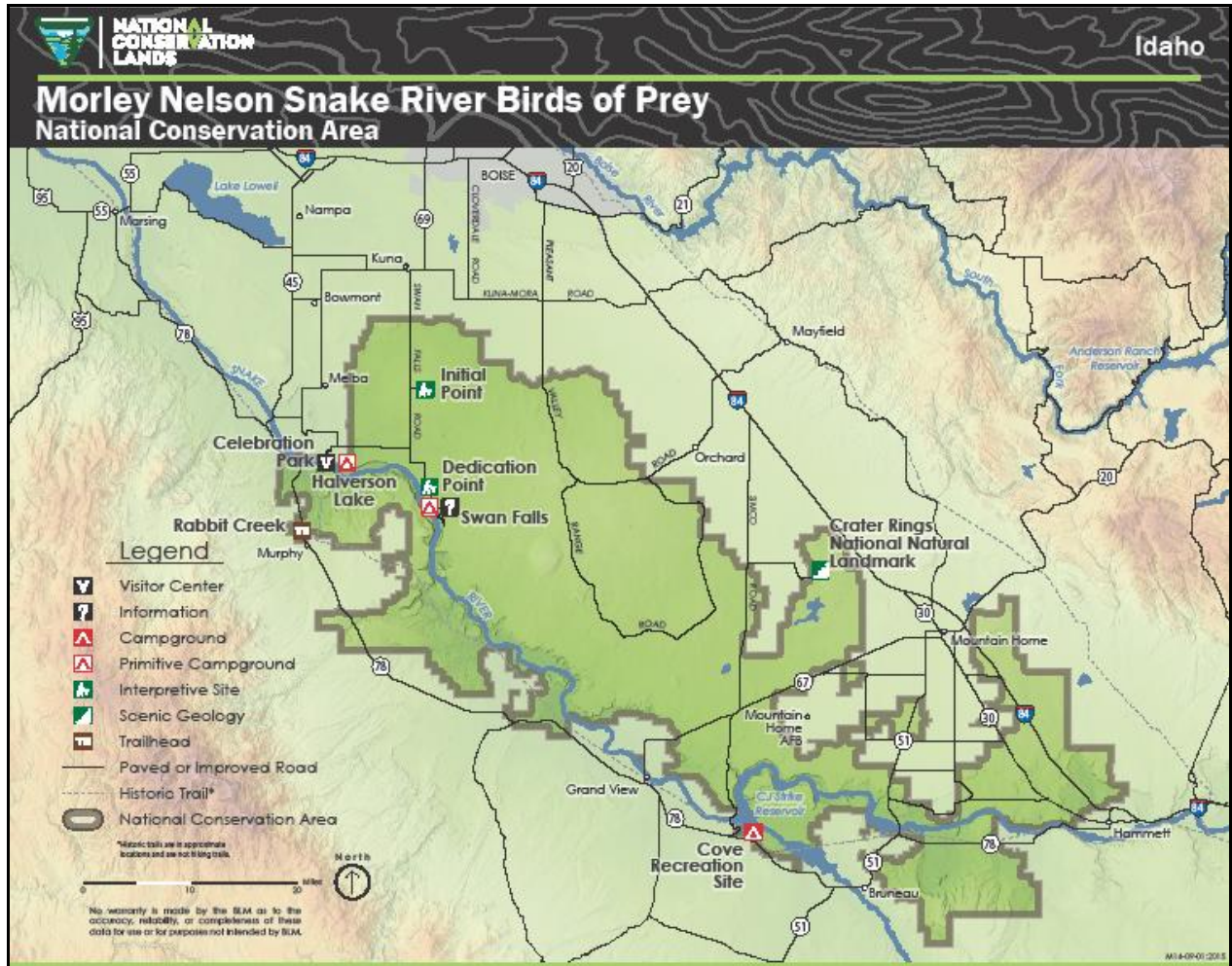
NATIONAL CONSERVATION LANDS

Idaho
2023: Annual Manager's Report

Morley Nelson Snake River Birds of Prey National Conservation Area



Map



Accomplishments

The Morley Nelson Snake River Birds of Prey National Conservation Area (NCA) continued its relationship with the Idaho Army National Guard (IDARNG) in Fiscal Year (FY) 2023 by permitting multiple rights of way and other actions in support of the Orchard Training Center (OTC), the world's premier tank combat training facility. The OTC has been used by the United States military and its allies since 1953 under a memorandum of understanding between the Idaho Army National Guard and the Bureau of Land Management (BLM). When the NCA was established in 1993, this unique relationship was specifically identified in the enacting legislation, and the military's use is allowed as long as it remains compatible with the purposes the NCA was established for. As a result, the Department of Defense and the Idaho Army National Guard (IDARNG) have become highly valued partners in scientific study and habitat preservation. Domestic livestock grazing was also a specifically mentioned heritage use of the enabling legislation, and active rangeland management techniques allow for continued cattle grazing on the NCA. Other multiple use activities recurring within the Area are special recreation permits, motorized and non-motorized recreation and rights of way.

The NCA continued to be an important living laboratory for partner agencies and universities. During FY23, research efforts included habitat restoration techniques, drought resiliency, rare plant survey techniques, remote-sensing applications, recreational use, raptor mortality, raptor prey species inventories and golden eagle telemetry studies. Results from these studies provide the NCA with the best available science to inform decision making.



A seed harvester collecting native plant seeds

Challenges

The NCA is adjacent to the City of Boise and the greater Treasure Valley, which is one of the fastest growing metropolitan areas in the Western US. This growth has placed greater recreational demands on Idaho's public lands, including BLM-managed lands. In particular, the growth in recreational shooting has caused increased incidences of irresponsible shooting practices, including dumping, shooting of trash, and wildlife poaching. The NCA continues to work with a coalition of stakeholders to address the illegal shooting of protected migratory birds and raptors in the NCA and other areas of Southwest Idaho. The NCA is also experiencing more extended camping as people struggle to find housing in the Treasure Valley.

During July 2023, two wildfires occurred on BLM lands within the NCA that impacted intact shrub steppe habitat. The South Coy fire burned along Swan Falls Road and immediately adjacent to the Dedication Point Interpretive site, and consumed approximately 300 acres of winterfat shrubs, which provide desirable habitat for raptor prey species. The South Tom fire burned within the IDARNG Orchard Training Center and damaged approximately 1,130 acres of Wyoming big sagebrush and rabbitbrush shrub habitat; the fire also burned through habitat for Slickspot peppergrass, a federally listed Threatened species. Emergency Rehabilitation Plans were completed for both fires, and treatments to rehabilitate habitat began in FY24.



South Coy Fire burned area

Visitors

An estimated 164,500 people visited the NCA in 2023 to enjoy the many recreational opportunities such as camping, boating, fishing, hunting, shooting, hiking, biking, and horseback riding. A significant number of people regularly visited the Cove Recreation Site and Dedication Point Overlook, both of which are included in a driving tour along the Western Heritage Byway. The Cove Recreation Site is a managed fee campground within the NCA. It received 6,425 visitors in FY23, a very slight decrease from the prior fiscal year. The primary activities associated with this site are camping, fishing, boating, relaxation, and wildlife viewing. A camp host is on site providing information and light maintenance. The Boise District completed Great American Outdoors Act projects at this site in FY23, improving and upgrading visitor road access and area landscaping.

The Dedication Point overlook provides a great spot to view the area's famous birds of prey. From the canyon rim overlook, birdwatchers observe seasonal raptors, canyon and rock wrens, Say's phoebe, cliff swallows, white-throated swifts, common ravens, and rock doves. Sage, Lark, and Brewer's sparrows and western meadowlarks can also be seen in the shrubs along the trail that leads to the overlook. Collaboration with Boise District engineering, weeds, and force account staff successfully ensured that all recreation sites and facilities were maintained in good operational condition.



Cove Recreation Site

Partnerships

The NCA continues to work closely with its friends group, the Birds of Prey NCA Partnership (BOPP). The NCA and BOPP were awarded a [grant from the National Environmental Education Foundation \(NEEF\)](#) and the BLM to conduct a [Greening STEM](#) project with students and faculty at One Stone, a local high school. Representatives from BOPP and the NCA visited One Stone School in January and March 2023 to hold a school assembly to introduce 75 students to their organization and to give an overview of the NCA. In the remainder of the school year, 11 students took a deep dive into learning about STEM careers, raptor monitoring, and public land management in the NCA by participating in field study days, including a BLM-led ferruginous hawk banding field trip. During this time, researchers from IDARNG and Boise State University partnered with the project to introduce students to their field research. By the end of the school year, one high school graduate from the program applied for and received a job as a Natural Resource Technician with IDARNG due to her work on this Greening STEM partnership project.



NCA Staff and BOPP presentation at One Stone High School

Science

The NCA wildlife and ecology programs support scientific research to further understand the NCA ecosystems and address ongoing and emerging conservation threats. Current priority wildlife studies are focused on golden eagle nesting habitat suitability and nestling survival, ferruginous hawk breeding productivity monitoring, raptor prey species abundance and distribution, and investigating reproductive productivity declines of burrowing owls.

In October of 2022, the fourth Morley Nelson Snake River Birds of Prey NCA Symposium was held at Boise State University. This two-day science symposium was organized by the Boise State University Raptor Research Center, IDARNG, the Birds of Prey Partnership, and the BLM. The symposium is open to the public and provides an opportunity to highlight and share the scientific work that is being conducted in the NCA or work that is relevant to the management goals of the unit. The NCA staff gave a presentation about the unit's science plan, and facilitated a working group scoping session to identify priority research needs for the unit.

Two new wildlife conservation research projects funded through financial assistance agreements were initiated in FY23. The National Conservation Lands Management Support Studies Program funded one agreement awarded to the Boise State University Raptor Research Center. The project will investigate possible explanations for the recent decline in burrowing owl breeding productivity in the NCA. Another agreement was funded through the BLM Idaho National Conservation Lands budget, and the project will be conducted by Boise State University. The objective of the project is to further understand distribution and abundance of key raptor prey species, including the black-tailed jackrabbit and cottontail rabbit.



NCA biologist banding and taking measurements of ferruginous hawk nestling

Climate Impacts

The NCA is situated in one of the warmest and driest regions of Idaho, characterized by high variability in climate. The anticipated impacts of climate change for the NCA include milder winters, shifts in the timing and amount of precipitation, prolonged droughts, and increased wildfire. These impacts have profound implications for plant community dynamics, prey availability, wildfire risk, and restoration success.

Prolonged drought conditions and conversion of shrub and grassland habitats to invasive annual communities, dominated by tumble mustard and Russian thistle, adversely impact small mammal communities, specifically jackrabbits and Piute ground squirrels, that serve as prey for the NCA's raptor population.

Research has identified several climate-related threats to the golden eagle population in the NCA. Changes in prey availability, especially the decrease in the jackrabbit population due to the loss of shrub habitat, has resulted in a dietary shift to rock pigeons and waterfowl. Rock pigeons can carry trichomonosis, which is usually fatal in nestling golden eagles. Due to shorter and milder winters, the prevalence of ectoparasites (bedbugs) is increasing in the NCA. High ectoparasite loads can result in parasite-induced anemia, chronic stress, and premature fledging, any of which can be fatal to nestlings.

The NCA is currently collaborating with the Boise State University Raptor Research Center and IDARNG to further understand the impacts of climate change by investigating juvenile golden eagle survivorship through a multi-year telemetry study.



Golden eagle nestling with a newly deployed telemetry unit

A primary challenge for restoration efforts in the NCA is the high interannual variability in the timing of precipitation and the greater incidence of warmer and dryer winters. Prolonged drought conditions the year following seedings and plantings reduce germination and limit establishment and first year survival of seedlings. In addition, milder winters and loss of persistent snow is especially problematic for sagebrush seedlings, as winter snow insulates seedlings from freeze-thaw cycles and the absence of which has been linked to first-year mortality. The NCA staff have observed the detrimental effects of low precipitation and prolonged drought on restoration treatment success.



BLM and BOPP student field trip

Climate Resiliency

The NCA partners with researchers to develop and field-test strategies to overcome climatic and resource-related barriers to seeded and planted species establishment and survival. These include the use of novel seed coat technologies and soil amendments, including biochar and mycorrhizae. These strategies provide hope for restoration by providing a more favorable, climate-adapted growth environment for developing seedlings.

In FY23 the results from a research project conducted in the NCA and funded through the National Conservation Lands Management Studies Support Program were published in the journal *Plants* titled “*Herbivory Amplifies Adverse Effects of Drought on Seedling Recruitment of a Keystone Species of Western North American Rangelands.*” This study provides important insights concerning habitat restoration implementation and on climate resiliency challenges facing native shrub steppe habitats in the NCA and other BLM lands in southwest Idaho.



View of the Snake River Canyon in March

Social and Environmental Justice

The NCA resumed in-person education programs in FY23, reaching more than 7,200 individuals. Events included the NCA's Desert Discovery Days field trips for local fourth graders, classroom visits, summer camps, and cleanup events. The NCA provides school grants to cover busing to educational events such as Desert Discovery Days.

The NCA provided educational programs to nearly 1,000 students from schools receiving targeted assistance in low-income areas. Additionally, the BLM provided bus funding for educational field trips to bring students from economically disadvantaged school communities to the NCA.

The NCA's educational raptors are incredibly effective and frequently requested, ambassadors. Sage, a red-tailed hawk, and Nel, a prairie falcon, are in excellent health and are well known throughout the area public schools.



Sage, the red-tailed hawk

Events

The NCA staff participated in the 6th annual Raptor Fest event in June. Raptor Fest is an annual family-friendly event hosted by the NCA's friends' group, BOPP. Raptor Fest celebrates raptors and other wildlife, cultural resources, and the people and organizations that work in the NCA and Treasure Valley of Southwest Idaho. As part of this event, the NCA staff hosts a booth where the public can learn about the NCA, engage with staff, and meet our education raptor ambassadors. Approximately 1,200 members of the public attended Raptor Fest.

The NCA hosted Desert Discovery Days field trips for local fourth graders. Desert Discovery Days is the NCA's premier educational event, occurring over two weeks in May. Approximately 600 third and fourth grade students learn about the mission of BLM by visiting a variety of stations with activities and lessons on the biology and ecology of the NCA.



Golden eagle at Raptor Fest

Words from the staff

The annual Manager's Report provides the perfect opportunity to highlight the quality work of our employees and community partners.

One volunteer in particular stood out in 2023: Monte Tish received a Lifetime Achievement Award in the Bureau's annual Making a Difference volunteer award program. Monte is a passionate and dedicated advocate of the NCA's unique resources and wildlife. Monte was a personal friend of Morley Nelson and worked with him to get permanent protection for the NCA in 1993.

Monte has given countless public and school presentations on raptors and habitat conservation, engaging audiences with his rehabilitation raptors. Monte rehabilitated and trained a variety of educational raptors for BLM beginning in the 1990s. These raptors have had an incredible impact on the NCA's education and outreach program. Monte continues Morley's, and the NCA's, proud tradition of providing the public with opportunities to have personal experiences with raptors to increase their knowledge and curiosity about these amazing creatures and their habitat.



Secretary of the Interior Deb Haaland with Monte Tish, NCA community education volunteer



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[Morley Nelson Snake River Birds of Prey](#)

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