



Cañada de los Osos Ecological Reserve

The Cañada de los Osos Ecological Reserve is starting its 20th year - purchased by the California Department of Fish and Game (now Fish and Wildlife) in 2000. The Reserve has seen many changes through these years, both wildlife habitat improvements and youth outdoor education programs. Throughout, the California Deer Association has played a key role in providing funding for habitat projects, and for the hunting and fishing programs.

In 2011 an agreement was signed by the Department of Fish and Wildlife (CDFW), CDA, and the Friends of Cañada de los Osos to move forward together in actively managing the Reserve. The

Friends of Cañada de los Osos is a nonprofit organization made up of local volunteers, many are also CDA members. CDA still plays a very active role in supporting the hunting, fishing, and hunter education programs on the Reserve, with day-to-day management by the Friends of CDLO and oversight by CDFW.

The youth hunting program on Cañada de los Osos is one of the best in the state. Every year for the last 16 years, hunting opportunities have been provided to junior hunters for deer, wild pigs, and upland game. With the help of experienced volunteer guides, we've had a 100% success rate for the deer hunts, with





a total of about 80 bucks taken. This year was no exception; five happy young hunters went home with a nice buck. With each hunt, the junior hunters are taught about game management, hunting ethics, and how to successfully harvest and take care of their game. They also leave with a greater appreciation for wildlife and wildlife habitat needs.

Our success has only been possible because of a group of dedicated volunteers, accompanied by funding from CDA and other conservation organizations to improve habitat on the Reserve for deer and other wildlife.

This approximately 5,800-acre property has a mix of annual grasslands, oak and montane woodland, chaparral, riparian and wetland habitats, with numerous springs and ponds. Raptors - including golden eagles, nest throughout the region and wintering bald eagles are occasionally seen. Several bat species use the area throughout the year as well. Other wildlife species found on

the property include mountain lions, black-tailed deer, wild pigs, wild turkeys, California quail, and Neotropical migrant songbirds.

Our thanks again to CDA for helping to get this program started, and for the continued support throughout the years.

For more information on applying for the junior hunts visit the department's website at:

www.wildlife.ca.gov/Regions/3/Hunts/CDLO



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2019 Grants

Conserving California's Wildlife Since 1996

Over this past year, CDA has acquired 5 new grants for habitat restoration on 15 project sites set to kick off this next spring. These grants total over \$830,000 of State and Federal funds to be leveraged for nearly \$1.5 million of "on the ground" project work during 2019 to 2020. The ability to use these grants to implement a larger, landscape scale project was only possible with the private and public partnerships CDA has made over the past year and a half. These projects, when combined with previously completed habitat work, will not only have a dynamic impact on the deer herds in the area, but showcase the effects of implementing a larger, landscape-scale project within a region.

Modoc-Warner Mountains Wildlife Recovery Project

The Modoc-Warner Mountains Mule Deer Recovery Project is a collaborative effort between CDA, USFS, NRCS, BLM, private landowners, and local organizations to restore critical ecosystems back to healthy function. These ecosystems, such as aspen communities, meadows, sage-steppe, and riparian corridors historically have provided necessary high-quality forage, nesting, bedding, and clean water to deer and other wildlife - but have been depleted in many areas and no longer provide these necessities. The interstate deer herd as well as local deer herds in the Warner Mountains have been in a state of decline and noted as

the deer herd most critically in need of restoration efforts. This area is part of the CDFW Deer Assessment Unit (DAU) 2, which has been identified by the California Department of Fish and Wildlife (CDFW) in a report to the commission as an area of critical concern with regard to drastically declining deer numbers.

This project is a multi-year, multi-phase project by CDA and includes several partners and a variety of funding sources. The project area encompasses nearly 1,000 square miles of the Warner Mountains in Modoc County and northern portions of Lassen County, from Alturas to Eagleville, Hwy 395 to the Nevada border. Our primary goals are: to restore historic meadow boundaries and the beneficial vegetation communities found within these ecosystems, re-establish quality forage components beneficial to wildlife and subjugate species, address hydrology issues and erosion by reconnecting waterflows within meadow systems, watersheds, and springs, and address invasive species and encroaching vegetation to restore native seed banks to re-establish forage and vegetative communities.

Phase 1 funding of this project includes a grant from CDFW under the Big Game Management Account (BGMA). This grant totals \$229,000 for 6 project sites, leveraging \$250,000 in partner contributions.





Phase 1 funding of this project also includes a grant from the National Fish and Wildlife Foundation (NFWF) in the amount of \$100,000 under the Sierra Nevada Meadows program. This funding will be used in conjunction with BGMA funding to restore meadow hydrology and improve the habitat in surrounding areas.

Rock Creek Meadow Restoration Project

A smaller project than the Modoc-Warner Mountains project - the Rock Creek Meadow Restoration Project - carries on the same goals immediately adjacent to the Warner Mountains in Modoc County. Located just north of Alturas, this project area has been used as a test site for monitoring the effects of juniper removal to re-establish native seed banks and vegetative communities.

During the initial phase of this project, a test cut was completed in an upland habitat area. This cut was conducted to estimate what the understory response would be on a larger, more encompassing cut. The results of the test cut were very favorable, resulting in a 62% increase in forb and grass diversity and an increase of over 50% in total ground cover within the first grow season. Historic fire suppression has led to an increase of woody vegetation encroachment, primarily Western Juniper, across meadows and sage-steppe habitat within the Great Basin. That, and the lack of successional fires has enabled juniper encroachment across the landscape which has led to greatly reduced quality forage components for all wildlife. This project ad-

resses the encroachment of juniper and promotes the re-establishment of herbaceous and bitterbrush communities that are more desirable to deer and other wildlife.

Phase 2 funding of this project includes a grant from CDFW under the BGMA. This grant totals \$31,000, leveraging \$26,000 in partner contributions. Phase 2 funding of this project also includes a grant from the US Fish and Wildlife Service (USFWS) in the amount of \$25,000. This funding will be used in conjunction with BGMA and partner funding to complete the larger cut of nearly 200 acres.

Buffalo-Skedaddle Spring and Riparian Restoration Project

Located in Lassen County, just south of the Warner-Mountains Mule Deer Recover Project, the Buffalo-Skedaddle project moves into the riparian areas of the high desert. The project area - also part of CDFW DAU 2 - suffers from habitat loss from overuse of critical riparian areas by feral horses. The loss of quality forage components has been noted as a contributing factor to the decline of deer within DAU 2. Addressing the four main requirements for deer, antelope, elk, birds, and other wildlife - forage, water, cover, and space is not only necessary to thrive but a requirement for a species to survive in this region. This is the primary objective of this project.

Riparian areas are the ecologically critical zones around streams, seeps, springs, and surface water. Even though these areas make up less than 2% of the western landscape, they support and promote a diversity of resources and intrinsic values for plant, animal, and wildlife communities. When these ecosystems function properly, they act like a sponge. By trapping sediments and slowing runoff, this allowing water tables to rise and hydrological systems to function properly. Healthy, protected riparian areas create critical transition zones that support many developing terrestrial and aquatic wildlife species.

Healthy, protected riparian areas provide three of the four requirements for survival, making these areas highly sought after and a critical part of the survival of many wildlife species. This high demand, primarily from the increasing population of the feral horses and burros, has led to the damage of vegetation communities as well as stream and seep structures. Unlike livestock, there is no grazing management for feral horses and their long-term presence as well as high population numbers are the cause of excessive impact on an already depleted riparian resource.

Phase 1 of this project not only includes restoration of these critical areas, but installation of wildlife friendly exclusionary fencing to protect them from further damage and allow wildlife access. Phase 1 funding of this project includes a grant from CDFW under the BGMA. This grant totals \$450,000, leveraging almost \$300,000 in partner contributions.



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Connecting Kids with Nature & Youth in the Outdoors



As a child, did you go camping and sit around a campfire? Did you suddenly hear the sounds of the night? Were there noises from the creatures of the forest or monsters lurking in the dark? Do you remember the first time you saw a deer grazing in the wild? Where did it come from? Why was it there?

The Central Modoc River Center and the California Deer Association (CDA) are working together to provide answers to these questions arising in the minds of children and to satisfy their natural curiosity about the environment. These two agencies support “Youth in the Outdoors” and “Connecting Kids with Nature,” initiatives as part of their Outdoor Education Program (OEP).

Our goal is to educate every public and private elementary school student in Modoc County about their natural surroundings and the unlimited outdoor recreational opportunities available here. Children work with outdoor professionals, to learn how to enjoy the outdoors, become good land stewards and conservationists, and gain knowledge about their natural surroundings.

Understanding our natural world ultimately cultivates a deeper appreciation of nature. This program provides a chance for students to complete hands-on, place-based learning projects in the outdoors as they progress in grade levels pre-school and K-12. One of the main objectives of these programs is to engage and educate students on a wide variety of topics and agencies, such as: forest health/watershed stewardship and conservation; wildlife identification and inventory, wildlife habitat restoration and enhancement, geology, botany, biology, archeology, range, fire ecology, hydrology, soils, re-vegetation of native plants, plant inventory, water quality monitoring, Modoc’s Native American, pioneer and western culture and history, and outdoor recreation. Plus any other projects that the group, under supervision of refuge and forest service staff, determines would enhance the area.

Working with the two parent organizations, and by using the US Fish and Wildlife Outdoor Reaction Model - or R3 Recruit, Retention, Retainment - this program provides activities that generate awareness, interest and opportunities to learn more about the environment. It also provides support to build skills and become



Curtis “Scooter” Harris, with kids during CDA/MORTAL-USFS forest health education days



active participants for outdoor recreation. Imagine a child's interest if after seeing a deer in the wild, the student is presented with a class on how to grow deer.

Deer eat, but eat what? Can we figure out what plants the deer like? In the past, youngsters have discovered the answers through careful observation - planting thousands of seeds in one afternoon. Through continued classes in the following years, the students can return to the area and see if their seed planting has made a difference to the deer. Not only students, but teachers, volunteers and parents experience and enjoy the change they helped to create. Who knows? Perhaps a youngster's curiosity may lead to a career in the future.

Showcasing some of the student's projects at the Modoc's Annual Sportsman's Expo gives students a sense of accomplishment and ownership within their community. The California Deer Association and the Central Modoc River Center have provided

support for the Outdoor Education Program consisting of a collaboration with the Modoc National Wildlife Refuge, Modoc National Forest, Bureau of Land Management, National Park Service, Natural Resources Conservation Services and Modoc County Public Health. These agencies and their staff have been devoted have been devoted partners to the Central Modoc River Center and its education efforts. Other conservation agencies include, California Waterfowl Association, Audubon Society and Ducks Unlimited.

Field trips include educational activities designed by Central Modoc River Center Environmental Education staff to fulfill state educational standards. Our long term vision is that this project could be replicated and repeated with other schools that also have wonderful watershed and healthy forest opportunities in their own backyards.

Learning to enjoy nature and the outdoors can be a gratifying experience. Spending quality time in the outdoors with family and friends is a memorable experience and inspires students and adults to foster healthy lifestyles. Hearing the noises in the night and knowing that they aren't monsters - but are merely other residents of the forest - is a knowledge that can be passed on to future generations while sitting around a campfire.

The CDA has been one of our biggest supporters not only to the Outdoor Education Program but also with the Annual Modoc Sportsman's Expo. Providing outreach to thousands of participants and attendees with information about our program.



Dale MacDougall
Wildlife Project Director



Dale MacDougall teaching kids and sharing the love of the outdoors.

Modoc Unites

To Find Solutions for Resource Management

Photos & Written by: Heather Hadwick

Recent wildfire events throughout Modoc County inspired a Resources Tour through the Stone and Cove Fires in Eastern Modoc County last week. The Modoc County Sheriff's Office and Office of Emergency Services organized the event, inviting agencies and organizations that play a key role in natural resource management in the area. Agencies from all over the North state gathered to educate each other on their future plans, practices and limitations. "It was really a day to teach each other and get information first hand to share with the public," said Modoc County Sheriff Elect, Tex Dowdy. "We are trying to get all the players to the table, so that we can all work together to improve our public lands. In the end, we all have the same goal and that is to serve our county the best we can."

1,665,746 acres have burned in California in 2018. This combination of Cal Fire and US Forest Service land burned from 7,421 individual fires this year. Modoc County accounted for just under 42,000 of these acres of devastation. As fire behavior intensifies, California seems to be the center. The last two fire seasons have given eight of the top twenty most destructive wildfires in CA. These fire seasons are among the deadliest and vicious we have seen, crushing previous records. The destruction of these fires remains.

"We have so many examples of devastation and the aftermath of these fires. I would like to see a more concentrated effort and more of our precious dollars spent on prevention. Fire is inevitable, but a properly managed forest has a much better chance to survive and actually thrive once again in the aftermath of a catastrophic fire." —said Modoc County Sheriff Mike Poindexter. "We can change things by working together to remove restrictive barriers so that those with the job of managing can actually be proactive rather than reactive."

The economic impact of wildfires in the state is astronomical and only growing. In 2018 alone, California spent \$2.973 Billion on fires. This included \$1.364 Billion in fire suppression costs.

Kenneth Heald, Fuels Specialist from the Modoc National Forest Service spoke about the impact of reducing fuels in the forest. The tour began north of Cottonwood Flats Campground - the road shows the distinct line of pre-treated healthy forest burn versus untreated. The blackened trees and charred remains of the right side held nothing living. On the left side, the grass had already started to grow back, trees although marked by fire had branches full of healthy green needles. "To the left, you can see that wildlife has returned to forage, the trees are recovering nicely and even just two months after the fire, grass is growing. On the other side though, this area could take 60-80 years to recover. It won't just bounce back. If we are able to get in there and treat our forests, remove biomass and give the heat somewhere to escape to, you'll get this healthy burn," commented Heald.

Modoc County houses one of the oldest deer herds in the state. California Deer Association's Dale McDougall said "We have migrating corridors that are vital to the sustainability of the deer and elk here. The interstate deer herd historically ran 100,000 plus deer; that same herd is running 10% of those numbers today. We can add credibility to our cause by collectively telling the story. Resource management is not just up to one agency or one organization; we all need to be in this together."

The tour continued to the Bushey Ranch in Canby, CA, where participants were able to see distinct lines in the fire. This private land owner was prepared for wildfire. The homes and outbuildings were all saved because of his defensible space. The group discussed the importance of defensible space and how to find a way to create accountability for the land owners that don't have habitable structures on their property but still pose a fire risk. "On the big fire seasons, people are a lot more receptive about our inspections. It's on their mind and in the news. It's those years that we don't have fires, landowners don't make fire safety a priority and then it gets put on the back burner," added Steve Walker, Battalion Chief from Cal Fire.



Example of fire behavior in treated forest on the left and untreated on the right.

"Unfortunately, we can only inspect structures, even if it is a major fire hazard. We need to make sure that our county ordinances are being monitored and know who enforces them. Keeping up with the violations takes a lot of resources and most of our county agencies are already stretched thin." By following a conserva-



Photograph of Stone Fire High Intensity Burn Zone- Paul Bailey, Representative from the Rocky Mountain Elk Foundation commented on the devastation "We need to ask ourselves if we want to pay for it before or after. The Stone Fire cost \$17 Million dollars. But in the end, we just lost 80 years of forest growth, what is the cost of that?"

tion plan, the Natural Resource Conservation Service (NRCS) can provide technical and financial assistance to implement practices such as erosion control, range seeding and pre-commercial thinning through Environmental Quality Incentives Program (EQIP) or Emergency Watershed Protection Program (EWP). "We can also work on invasive juniper removal, cross fencing and wildlife/livestock water projects. Invasive juniper removal can be very beneficial to our landowners if a wildfire was to come through their property. It also helps conserve water and restore habitat for our local wildlife including; sage grouse, mule deer and elk," stated Bryon Hadwick, District Conservationist NRSC. The last stop on the tour was a site at the 2017 Cove Fire between Adin and Canby, CA. Pit River Resource Conservation District has taken on the Cove Restoration Project, they will remove 10.5 miles of road side hazard trees, biomass removal and restore 1400 acres of merchantable timber and then replant those 1400 acres. Post fire restoration projects are getting litigated. Some groups feel that logging this area is taking away from wildlife habitat and would like the project stopped. Chris Christofferson, District Ranger from the Modoc National Forest spoke about recovery efforts at the Cove Fire. He stated, "The problem arises when we aren't able to take restoration efforts after a fire. If dead trees are not removed, they will fall on the ground. This will result in a tremendous amount of fuel loading and subsequent fire risk. It's not just the regrowth though; think of our water systems, the soil erosion and the downstream users."

The Modoc Fire Safe Council provided lunch while guest Speaker Bruce Ross addressed the crowd. Bruce, the District Director for Assemblyman Brian Dahle's Office gave an update on the new bill that passed in August regarding Wildfire and Mitigation. He stated, "Assemblyman Dahle has always been passionate about his concerns regarding wildfire in the state. The fire season this year just intensified that. The passing of this bill means that there will be \$200 Million each year for the next five years for

fuel reduction, prescribed burns and forest health in general. Meetings just like this need to happen all over the state. The cooperation between communities and organizations is exactly what we want to see with this grant program. There is money built in for the capacity building as well."

The group discussed the missing piece of the locations of the biomass markets, grazing opportunities and needs, range readiness, direct and indirect fire suppression. They examined what the next steps might be for recovery and what proactive land resource management will look like in Modoc County.

Although wildfires are inevitable, the destruction of property and lands is not. Organizer, Heather Hadwick, Deputy Director of Modoc County OES said, "We want to emphasize the importance of resilient forests and local community capacity in preparation and response to wildfires. The fire events in CA have highlighted the consequences of not making resource management a priority in our state. We want to be the county that does." Modoc has the largest expanse of grazing permit ground in California with over 1.7 million acres of National Forest. This is not only part of its local economy, but its heritage. Wildlife and livestock live side by side in this rural county, each equally important to residents and visitors alike. Modoc County encompasses its slogan "Where the West still lives" in every right. The small town feel is in every community, the vast open range and the countless outdoor recreational opportunities are what bring people to Modoc.



Sheriff Mike Poindexter added, "Unfortunately, the vast majority of our public forest that burns may not be in a condition to draw visitors to Modoc County to boost our economy, enjoy our beauty and bucolic lifestyles. Every fire is taking this away from our grandchildren and even their children. The cost of fire is more than just dollars. Working together to change that is a good thing for all."



Chester Robertson- Modoc County CAO, Chris Christofferson-USFS Modoc District Ranger and Modoc County Sheriff Elect- Tex Dowdy discuss the Cove Fire Recovery work near Adin, CA. Christofferson added, "I'm thankful for meetings like this to educate each other. We need to figure out how best we can spend what little money we have to prioritize areas for restoration to do the most good."

"In the end, we need to have a united front for the public. We need to have information - and accurate information about our partners, stakeholders and what we are able to do. The collective impact of all of our area agencies and organizations working together is very powerful. Our natural resources deserve our best. We need to create movement and accept nothing less than excellent when it comes to our quality of life. We are blessed to live in Modoc County; where there are so many different uses for our land. Whether we are hiking, hunting, farming, grazing cows, or just going for a drive, we want to make sure that our lands are at their full potential." said Modoc County Sheriff Elect, Tex Dowdy.

At the Cove Fire Recovery Logging site, Mike Poindexter commented "We have many examples of devastation and aftermath of these fires in our own backyard. Restoration needs to be a priority. The Fletcher Fire of 2007 and the Barry Point Fire of 2012 are prime examples of how our federal foresters struggle with bureaucracy and red tape in trying to repair and restore while our private industry foresters can quickly engage in salvaging, cleaning up and replanting. We need to ensure that the Cove and Stone fire sites don't end up this way. The contrast between the two areas is easily seen today."



Participants learned from Speakers from the USFS, NRCS, Cal Fire, California Deer Association, Modoc County Sheriff's Department and Assemblyman, Brian Dahle's office at a Resources Tour hosted by Modoc County Sheriff's Office and Modoc County OES last week.

