

# NOXIOUS WEEDS, ERADICATION AND BIODIVERSITY, AND ROADSIDE MANAGEMENT ANNUAL REPORT

## 2024 SEASON



# NOXIOUS WEEDS STAFF

## Full-Time Staff

Joe Swanson – Noxious Weeds Supervisor

Malcolm Wiley – Roadside Specialist

Jim Sebastian – Biodiversity and Restoration Specialist

Shursteen Sharpe – Eradication Specialist

## Seasonal Staff

Seasonal Roadside Technicians: Doug Adkins, John Steinbauer

Seasonal Biodiversity Technician: Nora Hayden

Seasonal Restoration/Mower Technician: York Mandeville

Seasonal Eradication and Noxious Weeds Technicians: Anthony Beck, Tim Brown, Rae Rademacher, Grace Strattmann, Claire Stufflebeam, Autumn Tudela



# RESTORATION AND BIODIVERSITY ACTIVITY REPORT

## **In-Depth Cheatgrass Restoration Monitoring Efforts (Examples):**

- Biodiversity – 12 monitoring sites (3 to 80 acres in size)
- Geo-reference – 12 site densities of native rare, concern, and short-lived native species.
- Game camera monitoring – comparing deer and elk browsing on cheatgrass infested vs. treated sites
- Arogos skipper moth response to cheatgrass control – Arogos skipper occurrences on sites with long-term cheatgrass control

## **Small Grant Projects:**

- Cheatgrass Fire Susceptibility
- Soil Degradation Study

## **Collaboration Projects:**

- Carbon Sequestration Study – Boise State University
- Antelope Bitterbrush Establishment – Colorado Parks & Wildlife
- Nutrafix Soil Amendment - Edaphix

# RESTORATION AND BIODIVERSITY ACTIVITY REPORT CONTINUED

## Restoration Activities (Examples):

- Monarch Park Open Space – 25 acres
- Rock Creek Farms – 80 acres

## Journal Publications (Contributing):

- **Long-term cheatgrass (*Bromus tectorum* L.) control increases shrub leader growth and mule deer visitation** - in cooperation with Jake Courkamp at Colorado State University. Manuscript submitted and waiting for approval in *Rangelands*.
- **Indaziflam for *Bromus tectorum* (cheatgrass) control increased native species richness for up to eight years in Colorado Front Range shrub-steppe** – in cooperation with Lisa Jones at University of Idaho. Manuscript submitted and waiting for approval in *Restoration Ecology*.



Rare Arogos skipper moth on rare narrowleaf milkweed plant



Cheatgrass treated (left) and untreated (right)



# ERADICATION AND NOXIOUS WEED ACTIVITY REPORT

## Resource Management Collaboration Projects:

- Northern leopard frog (NLF) habitat enhancement Bush Pond
- Prebles meadow jumping mouse habitat enhancement, Pella West
- Mediterranean sage coalition work
- Weed Warriors pilot – working with the community



cattail control for NLF



Prebles habitat restoration

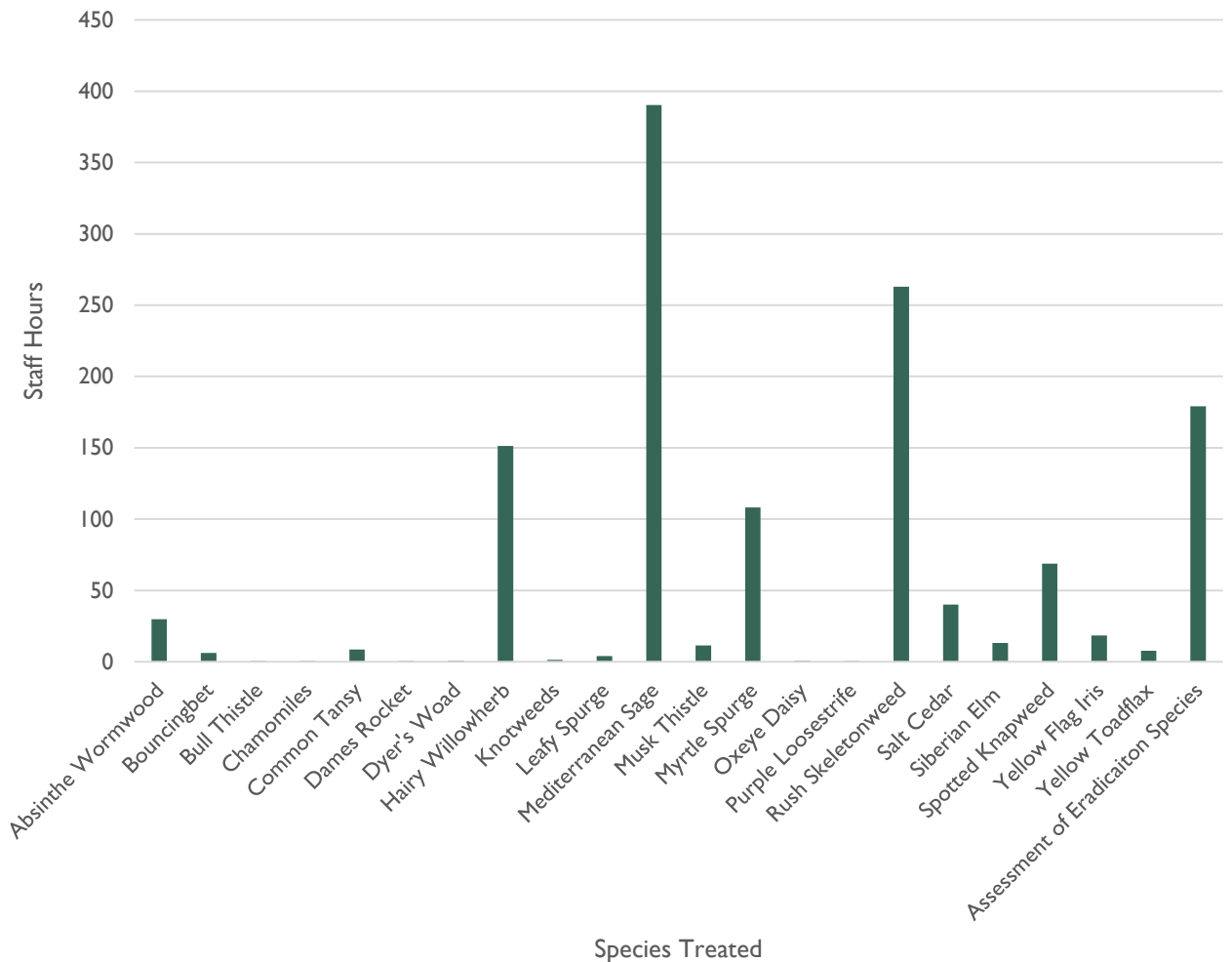


Mediterranean sage control



Weed Warrior volunteer program

## Staff Hours Spent on Eradication Species Treatment



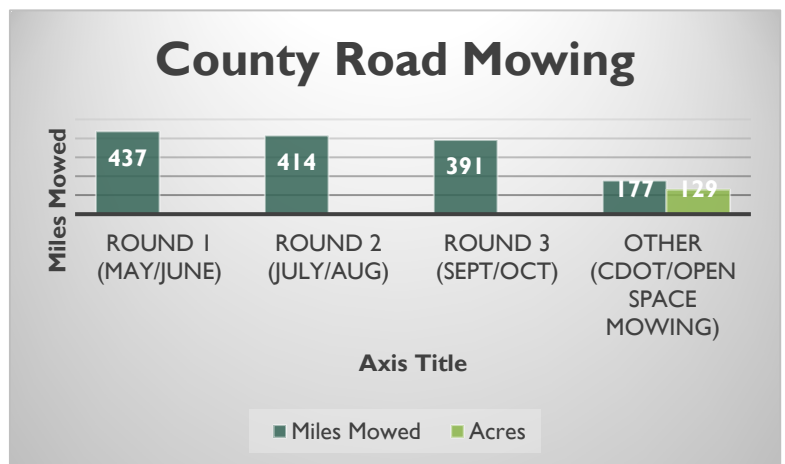
Staff spent a total of 1,125.6 hours treating eradication species and an additional 179 hours assessing known eradication species locations for treatment.

This year, we started a collaborative approach with Jamestown and its residents to address a large absinthe wormwood population. This was a high priority because of the possibility of spread from the upper watershed downstream.

# ROADSIDE MOWING

## 2024 Roadside Activity:

- County road mowing, 2024 (This includes some mowing on Colorado Department of Transportation (CDOT) rights of way and select open spaces.)
- The roadside mowing specialists, in addition to the county road vegetation management team, assists CDOT through an interagency governmental agreement and provides vegetation management on 77 miles of state highways in Boulder County.



County road rights of way mowing



Roadside Mowing team