



Forestry and Fire Section

FORESTRY AND FIRE

2021 ANNUAL REPORT

2021 Staff

Stefan Reinold-
Senior Specialist

Planning

Nick Stremel-
Resource Specialist
Jessica Hawkins-
Seasonal Technician
Corrina McLeod-
Seasonal Technician
Jacob Finco-
Seasonal Technician

Contracts

Scott Golden-
Resource Specialist

Volunteer Programs

Shane Milne-
Resource Specialist

Operations

Zach Price-
Resource Specialist

Sort Yards

Wayne Harrington-
Resource Specialist
Jon Clark-
Seasonal Technician
Daniel Buelow-
Seasonal Technician

2021 Highlights

- ◆ Assisted with aerial mulching efforts on 2,115 acres of lands impacted by the Cal-Wood fire. Oversaw harvesting and mulching operations that produced 10,670 tons of mulch from on-site resources.
- ◆ Completed post-fire hazard tree mitigation at Heil Valley Ranch including the parking lot, main access road and certain sections of the Wild Turkey, Ponderosa Loop, and Picture Rock trails.
- ◆ Hand felled and processed 172 tons of wood from three small patch cuts at Reynolds Ranch resulting in 632 fence rails, 62 tipi poles, and approximately seven semi-truck loads of biomass fuel.
- ◆ Completed 27 acres of prescribed fire at Hall Ranch.
- ◆ Processed 1,960 tons of biomass at our Community Forestry Sort Yards, with 240 tons utilized in our biomass heating facilities.
- ◆ Provided 100 holiday trees for underserved populations in Boulder County.



Post-fire Recovery Efforts



Lichen Loop Project pre-treatment



Lichen Loop Project post-treatment



Lichen Loop Project post Cal-Wood Fire

Immediate recovery efforts concentrated on felling fire weakened trees at certain locations on Heil Valley Ranch. Forestry operations performed hazard tree mitigation from December 2020 through April 2021, focusing on the northern trails system, main parking lot, and main access road. These efforts expedited the opening of several trails, allowed for the safety of others working on recovery efforts, and provided on-site material for use in aerial mulching operations.



Hazard tree work-Wild Turkey Trail



Grinding operations at Landing 3

Forestry aided in additional recovery efforts by overseeing the harvesting and grinding portions of the aerial mulching contract. Duties included identifying appropriate landings, locating areas to harvest trees for mulch production, daily on-site presence to monitor equipment operators, and providing guidance for similar work being performed at the Cal-Wood Education Center.

Volunteers also took part in post-fire activities by rebuilding multiple sections of worm fence that were consumed during the fire. Forestry operations played a key role in making these work projects happen by delivering over 500 fence rails to two different locations at Heil Valley Ranch. In all, volunteers were able to rebuild over 1,000 feet of fence at locations ranging from the entrance gate to access gate 4.



Volunteers replacing worm fence at Heil

Forestry Operations



Hazard tree felling at Heil Valley Ranch main trailhead



One of many fire weakened trees in the post-fire areas at Heil Valley Ranch

Our operations crew spent the first three months of 2021 at Heil contributing match hours towards the Lichen Loop pre-disaster mitigation grant, as well as general hazard tree felling.

- ◇ Felling, processing, skidding, chipping, and log hauling of hazard trees within the HVR main trailhead, and access road-PDM.
- ◇ Felling and processing of hazard trees along the Wild Turkey, Ponderosa Loop, and Picture Rock trail system.



Hazard tree work-Wild Turkey Trail



Firewood deck at Reynolds Ranch

Work continued at Reynolds with an additional 1.5 acres of patch cuts completed in 2021.

- ◇ 172 tons of wood hand felled and processed, forwarded, and removed (approx. 50 tons/acre).
- ◇ 43 Ox loads hauled, sorted and decked (approx. seven semi-truck loads).
- ◇ 632 fence rails produced and delivered to Parks' projects.

Forestry operations often gets called to lend a helping hand outside of their normal activities. Highlights include:

- ◇ Two-day chainsaw class for the Weeds work-group.
- ◇ Hauling/delivery of 30 tons post-fire logs from Mountain View Subdivision to the HVR aerial mulching project.
- ◇ Tree removals/chipping at Pella, Boulder County Parks & Open Space building, and Boulder County Transportation building for Urban Forestry.



Ox load being hauled from Mountain View

Forest & Fire Planning



Legacy trees that will be retained during the Caribou/Sherwood project



Ponderosa pine with heavy dwarf mistletoe infestation at Caribou/Sherwood

In 2021 our forestry planning group completed a forest inventory of 82 data plots, spanning approximately 1,556 acres. At Walker Ranch, 60 plots were collected over areas of both forest and grassland. The data collected at Walker Ranch is pre-treatment, setting the informational basis for future prescription burns in the area. The data for the remaining 22 plots were collected from the forested area behind the Nederland Community Forestry Sort Yard (CFSY), allowing us to draft a forestry recommendations and prescription report for the 34 acre parcel.



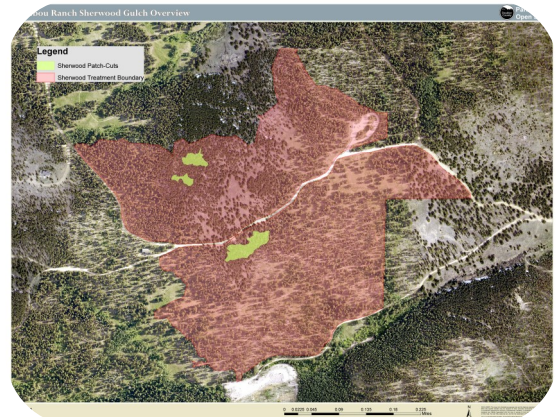
Data photopoint at the Nederland CFSY



Prescribed fire at Hall Ranch

On November 9, with the cooperation of the Boulder County Sheriff's Office, a controlled burn of 27 acres was performed along the Nelson Loop at Hall Ranch. This burn was intended to set the basis for continued prescribed burns in the area as a means to reduce fuel loads and combat encroaching noxious weeds.

One hundred acres of Caribou/Sherwood project were marked, mapped and ready to move forward for harvesting. Special interests such as limber pine, mining hazards, and legacy trees also marked/ mapped.



Caribou/Sherwood project boundary, patch cuts shown in green

Community Forestry Sort Yards

The Community Forestry Sort Yard (CFSY) program is now in its fourteenth year. In 2021 there were 195 operational days. The Nederland CFSY was open from April 28th through Oct. 16th, and the Meeker Park CFSY was open from May 16th through Oct. 10th.

The total load count for 2021 was 8,439 loads, the second highest load count for a season. There were 537 new property locations in 2021 (344 from Meeker Park and 193 from Nederland). In total, there were 1,972 different property locations, with an average of 4.3 loads per property.

In addition to woody biomass material, we have been collecting both pine needles and noxious weeds at our sort yards for the past seven years. Pine needle removal from the home ignition zone is an important part of maintaining defensible space for mountain properties.

Yard	Slash Tons	Wood Tons	Chip Tons	Noxious Weed Tons
Nederland	534	54	104	83
Meeker Park	637	226	249	73
Totals	1171	280	353	156

Noxious weed removal from the properties helps keep weeds in check. These collections have increased yearly and are a popular use of the sort yards.

Outreach is an important part of the CFSY program. Unfortunately, many of our outreach events, such as user appreciation days and wildfire awareness days, were canceled because of COVID-19. We were able to continue providing education and outreach materials at our yards for visitors, including our monthly newsletter, and we also used social media to communicate with the public.



View looking west from the Meeker Park CFSY



Grinding operations at the Nederland CFSY



Pile of wood chips at the Meeker Park CFSY.



Meeker Park's resident elk (shown left), and CFSY collected noxious weeds (shown right).



Public Participation & Engagement

Volunteer Projects

- ◇ Ten volunteer projects.
- ◇ 104 volunteers contributed a total of 312 hours of service.
- ◇ Thinned two acres of lodgepole pine regeneration at Reynolds Ranch.
- ◇ 515 linear feet of worm fence rebuilt at Heil Valley Ranch.

All-Staff Work Day

- ◇ Led crew of 12 staff to rebuild worm fencing consumed during the Cal-Wood Fire.
- ◇ Rebuilt 200 linear feet of worm fence at the entrance gate and party barn.

Holiday Trees & Firewood

- ◇ 20 holiday trees were harvested and handed out to various county offices.
- ◇ 100 holiday trees harvested for low income families in Boulder County.
- ◇ Public holiday tree sale on December 4th and 5th:
 - 100 holiday permits issued, 98 permits paid for, and 95 permits redeemed.
 - 276 people attended the event over a two day period.
- ◇ 65 cords of firewood sold to the public from multiple sales at Hall Ranch.
- ◇ 7 cords of firewood sold to the public from Reynolds Ranch.



Holiday tree permit holders find a great tree and help thin high density lodgepole regeneration



Volunteers help rebuild fences at Heil Valley Ranch





**Resource Management
Forestry and Fire**

For more information or questions:

Stefan Reinold

Phone: 303-678-6202

Email: sreinold@bouldercounty.org

Website: <https://www.bouldercounty.org/open-space/management/forestry/>



UH-1 Huey used for aerial mulching at Heil Valley Ranch



Forestry Staff 2021