

ANNUAL REPORT

JACKSON DEMONSTRATION STATE FOREST

Mendocino County, California

2022 Calendar Year



**State of California
Department of Forestry and Fire Protection**

Joe Tyler, Director
George Morris III, Region Chief
Luke Kendall, Mendocino Unit Chief
Vacant, State Forest Manager

Administration

State Forest Staff

Manager:

Vacant (Forester III)

Silviculture/Timber:

Jason Serna (Forester II)
Vacant (Forester I)
Kirk O'Dwyer (Forester I)
Fred Postler (Forestry Asst. II)
Jeremiah Steuterman (Forester I)
Daniel Samaniego (Forestry Asst. II)

Seasonal Forestry Aides:

Richard Hernandez- May-Jan
Iona Mahony-Moyer May-Aug
Charles Sweeney Jun-Sept
Jacob Poss Jun-Aug
Scott Kirby Mar-Nov
Mikayla Blair May-Feb
Esteban Palacios Zarate May-Oct

Research, Demonstration and Education:

Vacant (Forester II)
Tori Norville (Forester I, Jan-Jul)
Fey Egan (Forester I, Jun-Dec)
Vacant (Forester I)
Edwin Diaz (Forestry Asst. II)

Administration, Recreation, Roads and Law Enforcement:

Erik Wahl (Forester II, Apr-Dec)
Erik Wahl (Forester I, Jan-Mar)
Vacant (Forester I, Apr-Dec)
Josh Theofanides (Forestry Asst. II, LE
Forest Patrol, Sept-Dec)

Biologist:

Robert Douglas (Senior Env. Scientist)

Clerical:

Joy Korstjens (Office Technician)
Vacant (Account Clerk, ½ time)

Protection:

Craig Dudley (LE Fire Prevention
Specialist)

Geographic Information Systems:

Peter Rowland (Senior Env. Scientist)

Heavy Fire Equipment Operators, Road Maintenance:

Chris Williams (HFEO)
Kris Rorabaugh (HFEO, retired July)
Matt Lindsey (HFEO, Nov-Dec)

Retired Annuitants:

John Griffen

ADMINISTRATION

Staffing

The State Forest front public office remained closed in 2022 due to a combination of COVID-19 and lack of staff. The position filled by Account Clerk II Debbie Lotten, who retired in December 2021, remained vacant. Office Technician Joy Korstjens filled in for the Account Clerk II with assistance in purchasing from Forestry Assistant II Fred Postler.

In addition to the above-mentioned clerical position vacancy, there were multiple open staff positions throughout the year, beginning with 1) Forester I in the Research & Demonstration program, 2) Forestry Assistant II Law Enforcement, 3) Forester II Recreation and Roads, 4) Forester II in Research & Demonstration, and 5) Forester III Forest Manager. April saw Erik Wahl promoting to Forester II Recreation and Roads, leaving the Forester I in Recreation and Roads vacant. In June, the Forester I Recreation and Roads received 1 applicant, however, request for transfer was denied; 1 of the 2 Forester I Research & Demonstration positions was filled via transfer from LNU (Fey Egan), and Tori Norville left JDSF in July after accepting a position with the UC Extension. HFEO Kris Rorabaugh retired in late July, and in August, an offer was made and accepted for the Forestry Assistant II LE position. The following additional positions were approved as part of the Wildfire and Forest Resilience budget change proposal: Forester I, Forestry Assistant II, and Environmental Scientist (Limited Term) in Research & Demonstration; Associate Government Program Analyst (Limited Term) to assist with forest administration.

Facilities

During the summer, several complaints were received regarding the condition of the Camp 20 Restroom. In particular, a complaint was received by a representative of VisitMendocino.com pointing out the need to improve sanitation, etc. To address these concerns and reduce staff commitments, Fort Bragg Septic agreed to clean the facility each Monday. Erik and two Forestry Aides painted both the interior and exterior during first week of June.

The Fort Bragg building window & painting contract was completed in June. This contract included the replacement of all 44 windows and covering the outside of the building with stain. Since the contract did not specify prepping and painting the building trim a different color, this task was performed by Forestry Aides and seasonal Fire Fighter staff.

In the fall, new hire Forestry Assistant II Joshua Theofanides and Erik began organizing the back garage at the 802 N Main St location, including installation of a bike rack to encourage employees to avoid motor vehicle commutes. Work was begun to clean and prevent rodents from entering the JDSF \$40 building. These tasks were difficult to achieve with limited personnel, but necessary to increase space and efficiency, as well as for health and safety purposes.

Jackson Demonstration State Forest Advisory Group (JAG)

2022 was another very active year for the JAG, with meetings being held in May, August, and November. All meetings were held in accordance with applicable current COVID related health orders, and public comments on agenda items could be submitted via email in advance of the meeting in lieu of personal attendance. The JAG welcomed 3 new members appointed for 3-year terms in 2022: Joanna Nelson (Forest Conservation), Al Lawrence (Licensed Timber Operator), and Reno Franklin (Traditional Ecologic Knowledge). George Hollister (Small Private Forestland Owner) remained the residing Chair of the group, with John Anderson (Industrial Forestland Owner/RPF) as Assistant Chairperson; both of their terms expire in 2023. Member terms expiring at the end of 2022 were Doug Albin (Biologist/CDFG) and Michael Jones (Forest Researcher/UC Cooperative Extension). Recruitment for these positions is expected in January 2023. Amy Wynn (Land Use Consultant/Outdoor Recreation Advocate), Charlie Schneider (Conservationist/Recreation Advocate), and Chris Blencowe (Registered Professional Forester) all have terms expiring in 2024. Edith Hannigan, Executive Officer, acts as the Board of Forestry Liaison to the JAG as of December.

As in the previous year, JAG Members were polled for available dates for the 2022 Jackson Advisory Group meetings, with Saturday options offered as requested by the public. Unfortunately, too few JAG members for a quorum were available on a Saturday to hold a meeting.

The spring JAG meeting was held on May 2nd. More than a dozen members of the public who attended the meeting expressed public comments, including aesthetics after logging completion and encouragement of greater Tribal engagement. The JAG toured the Caspar Watershed Studies; begun in 1961, this longest running watershed experiment is a collaborative effort between CAL FIRE and USDA Forest Service Pacific Southwest Station governed by a 100-year Memorandum of Understanding. The JAG also reviewed potential changes to the Caspar 500 THP. The JAG unanimously voted to submit draft recommendations from the Jackson Advisory Group Tribal Relations Subgroup to the Board of Forestry.

The JAG field tour on August 19th met at the Camp One Day Use Area for introductions and administrative updates from JDSF staff, as well as public comment. Next, the JAG reviewed the Bear Gulch THP and Bear Gulch THP post-harvest, with discussion of the shaded fuel break. The Parlin 17 THP post-harvest portion of the field tour was canceled due to the time constraints of the meeting.

A JAG meeting was held on November 15th, with the group again meeting at Camp One for introductions and general administrative updates from JDSF staff. An overview of the Red Tail THP at Camp One was added to the agenda in response to a public comment request. The field tour portion of the meeting demonstrated Active

Management vs. Passive Management (Road 408 & Road 500 Intersection). The Mitchell Creek Fuel Break was reviewed, with discussion regarding the fact that this location was chosen because it has the THP above it and CEQA is completed. The Caspar Community Center hosted a meeting from 6-8pm the evening after the JAG Meeting to open up the conversation about what fuel breaks are, how they can be used for both the public and first-responders, discuss the specifics of the fuel break, and provide opportunity for the public to give project specific input.

Timber Management and Minor Forests Products

Timber Harvest Plan Preparation

In January, Boundary Creek THP cleared second review and was on schedule to be approved by the end of the year. Meanwhile, THP preparation continued in 5 other plan areas, including East Berry, 16 Gulch, and Old Berry. In August, work began on potential Emergency Notice for Fuel Hazard Reduction and Forest Fire Prevention Exemptions.

Timber Sales/Active Timber Operations

Timber falling resumed on the Red Tail Timber Sale in January, with cable yarding scheduled to resume by the middle of January until the end of the month. In February, all THP related work stopped due to NSO calling.

Timber falling and skidding continued on the Power Line Danger Tree Removal Timber Sale for most of the summer, and hauling was anticipated to resume by the end of September. However, due to financial issues, all work on the Power Line Danger Tree Removal Timber Sale ceased in September.

Approximately 40 slash piles associated with various THPs were burned in early winter. Fuel break work started up again Parlin 17 THP in July, with mastication of the fuels scheduled to last all summer and into the fall. Logging slash in the Parlin 17 THP was burned in October. A broadcast burn was implemented on the tractor ground above Parlin Camp with approximately 10-15 acres a day burned. In addition, about 30 slash piles were burned in various areas.



Operations resumed on the Chamberlain TW Timber Sale in August. Approximately 100 loads of timber were removed from existing log decks. Timber falling, skidding and hauling started back up during the last week of the month. By the end of October all falling, yarding and skidding was completed. Miscellaneous TSA requirements are scheduled to be completed in 2023.

Operational pauses had been withdrawn on 4 active timber sales (Chamberlain TW, Soda Gulch, Red Tail, Caspar 500). In order to resume operations, the following conditions had to be met:

- No removal of trees over 48-inch diameter
- Protection of trees for retention to the extent feasible. 2 trees per acre for Matrix and 4 trees per acre for Older Forest Development Areas were marked for retention.
- In Caspar 500, approximately 75 acres were removed from harvest that were nearest to trails and community use areas. Also, no road construction past the “Gemini Tree” to occur.

Operations resumed on the Red Tail Timber Sale, with falling, yarding and hauling started in early October, and anticipated to continue through the winter.



Red Tail THP post harvest. The tree on the right was painted black due to our commitment to not cut trees over 48” and the orange marked tree is designated as Potential Elder Tree (PET).

Class I Sales (Minor Forest Products Sales)

Minor forest product sales include firewood, mushrooms, and other minor forest products. A record total of 1,066 Class I minor forest product permits were issued in 2022. Healthy rainfall totals in November and December led to brisk mushroom permit sales, with all 1,066 permits issued in calendar year 2022. No firewood sale was conducted in 2022. As in 2020 and 2021, all permit sales were by mail only in 2022 due to COVID and staffing constraints.

Class I Sales

Permit Type	# Permits				Volume Sold				Revenue			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Personal Use Firewood	0	148	75	0	0	296 Cords	150 Cords	0	0	\$2,960	\$1,500	0
Mushroom ¹	820	623	885	1,066	NA	NA	NA	NA	\$16,400	\$12,440	\$17,660	\$21,320
Fern	0	0	0	0	0	0	0	0	0	0	0	0
Shrubbery	0	0	0	0	0	0	0	0	0	0	0	0
Roots/Stumps	0	0	0	0	0	0	0	0	0	0	0	0
Poles	0	0	0	0	0	0	0	0	0	0	0	0
Green Timber	0	0	2	0	0	59.9 ² MBF		0	0	\$38,464 ²		0
Cull Logs	0	0	0	0	0	0	0	0	0	0		0
Totals	820	773	960	1,066					\$16,400	\$53,864	\$19,160	\$21,320

¹ Separate Commercial and Personal use mushroom permits discontinued in 2015; implemented one mushroom permit process for all uses. Individual mushroom permit cost is \$20.00 each, and all are Commercial (i.e., mushrooms gathered can be sold/no longer daily limit of one gallon by volume).

² Green timber sale related to the Caltrans Highway 20 safety project.

Research and Demonstration Program

Caspar Experimental Watershed

Between January and February, Edwin and Daniel worked on replacing a bridge in the Caspar Experimental Watershed. This work was part of ongoing bridge maintenance for the USFS PSW personnel to be able to continuously monitor the gauged watersheds. During the summer, Edwin and the Forestry Aides worked on another bridge replacement in North Fork Caspar Creek. Edwin also continued maintenance on the Forest Learning Center.

Forestry Aides, with direction from Edwin and Daniel, started training for the North Fork Caspar Pre-Commercial Thin (NF PCT) 5-year remeasurement in June. This was the 5th remeasurement of the NF PCT and was a go-to project for the seasonal Forestry Aides throughout the summer and fall.

On August 16th, researchers for Caspar Phase III experiments, Salli Dymond, Liz Keppeler, Joe Wagenbrenner, and Shelby Kassuelke met with CAL FIRE personnel Drew Coe, Dave Sapsis, Joe Restaino, and JDSF staff (Jason, Kirk, and Fey) to discuss data collected and whether the silvicultural treatments for this experiment could be used to assess fuels conditions, potential fire behavior and resistance, adaptive management, and resilience.

CEQA documentation was completed for the Caspar Creek paired watershed experiment to add an additional flume and instrument shelter to Richardson tributary of South Fork Caspar Creek. The flume was placed upstream of an actively erosion course to capture the Richardson sub-watershed sediment movement more accurately above and below the site.

New Projects

Between January 13-14th, researchers Dr. Pascal Berrill, Dr. Michael Jones, and Dr. Rob York toured the Forest with Tori, Jeremiah, Edwin, and retired Forester II Lynn Webb to locate study sites for the GHG Fire Fuels Mitigation (FFM) study. After visiting available options, the group decided to look for sites that are 6-10 years post-harvest rather than 1-3 years post-harvest to avoid potential vandalization of more visible or accessible study plots. This also allowed JDSF staff to conduct environmental review for the entire project under a CalVTP rather than amend current THP or rely on future THP's.

JDSF Forestry Aides flagged the FFM project boundaries and the treatment blocks at the beginning of June. A crew of 3 Cal Poly Humboldt students started working in mid-May on establishing the plots and pre-treatment data collection at each of the 6 sites, and as of July, they completed 4 of the 6 sites and then trained the Forestry Aides to continue the data collection to complete the remaining 2 sites. Tori submitted a proposal to the Board of Forestry for assistance in writing the CalVTP documentation for this project at the end of June. The Board of Forestry could not assist in writing the CalVTP documentation because their funding for assistance ran out, so the CalVTP documentation was slated to be done by Mendocino County Resource Conservation District (MCRCD).

On September 1st, JDSF reached out to Cal Fire's Fire and Resource Assessment Program (FRAP) for expertise on data collection and monitoring prescribed burns. Future collaboration with FRAP for the FFM project was discussed.

Ongoing Projects

Over the winter, Lynn, Tori, Edwin, and Daniel spent a week re-establishing plot corners for the Dry Forest Restoration GHG Grant Project. Edwin administered the contract to have the slash in plot corners lopped and scattered for 2 days.

In January, Dr. Berrill and 4 students were on the Forest for a week, measuring research plots within the Whiskey Springs area for the 10-year mark. Tori and Jeremiah meet with the group to discuss thinning and pre-commercial specifications for the group opening of the study area. Dr. Berrill and his crew returned to JDSF periodically through the rest of the winter and spring to visit other research locations for measurements.

Edwin worked on the Cultivar site during the month of June by mowing the very tall grass around each of the sapling sized trees to reduce competition.

Demonstrations

During the winter, Lynn, Tori, Peter, and Forestry Aide Gissella Quiroga re-visited the Eucalyptus and Turkey-Tail Demonstration after almost 2 years post-treatments to document results. Most of the trees had resprouted with varying degrees of sprout height and vigor.

Tours, Events, and Outreach

On January 29th, Lynn and former Forest Manager Pam Linstedt, along with 4 of their mentees from UC Berkeley's Forester Mentorship Program, toured JDSF. They looked at the Parlin Prescribed Burn Demonstration, Whiskey Springs, and the Caspar Experimental Watershed.

February 11th was the first Caspar 500 THP Community Tour. State Forest Program Manager Kevin Conway, Jason, and Tori were the staff in attendance. There were approximately 40 people in attendance and the conversations ranged from harvesting operations to carbon and climate change. Multiple people from the tour approached Tori after the tour to thank JDSF staff for putting the tour on and having these discussions.

On February 12th, JAG members Michael Jones and Chris Blencowe hosted a community tour of East Berry, with Jeremiah and Tori in attendance. The tour visited Top of Hare THP (harvested 2015-2016) to discuss what East Berry would potentially look like 5-6 years post-harvest. The tour then visited 3 places within East Berry THP to discuss the silviculture and management proposed. About 12 people were in attendance.

Social media outreach continued through January and February with 1-2 posts a week. Social media proved helpful in advertising for the Caspar 500 THP Community Tours. In July, Fey, Jeremiah, and Daniel received social media training by the Unit's Fire Prevention Specialist, Patricia Austin, with the expectation that social media outreach for JDSF would ramp up.

June 21st and 22nd, staff from FRAP and representatives from the Adaptive Management Experiment (AMEX) toured the Forest with Kevin Conway and Fey, Tori, and Jeremiah. AMEX is run by Dr. Sarah Bisbing from the University of Nevada, Reno. The tour was the beginning steps of what will hopefully be the start of an AMEX project in the redwood region, with JDSF being a replicate. Some of the many topics of discussion were the variability of redwood stands and how the variability affects statistical analysis, and what does resistance, resilience and transition look like in the redwood region.

Kyle Farmer, with UCCE, organized a bat tour led by Dr. Chelsea Andreozzi on August 6th titled "Are Coast Redwoods a Refugia for Bats under Global Change?". This tour was well received by the public.

Members of the CAL FIRE Executive Team and the California Natural Resources Agency participated in a site visit on August 7th with the Coyote Valley Band of Pomo Indians, members of the protest groups, and Dr. Steve Sillett of Cal Poly Humboldt to discuss modifications to existing timber sale contracts prior to re-starting operations.

On September 4th, JDSF hosted a booth at the Paul Bunyan Days Forestland Expo in Fort Bragg. Robert brought an array of wildlife skulls and talked about life histories with the public. Edwin donned Captain Cal's costume and gave out stickers, high fives, and hugs. USFS Hydrology Technician Brian Storms spoke with interested members of the public about Caspar Creek experiments. Kyle Farmer and Mike Jones demonstrated the use of Caspar Creek instrumentation used throughout the history of the experiments.

On September 17th, Kyle, Lynn, Jason, USFS Hydrologist Liz Keppeler, and Anna Halligan from Trout Unlimited gave a JDSF tour to Forest Landowners of California. Topics covered were the Caspar Watershed studies, Multiage Stocking Assessment Model demonstration in Hare Creek, and Hare Creek Restoration Project.

Reforestation

Between January 31st and February 11th, Peter, Jeremiah, Edwin, and Daniel administered the planting of approximately ~26,000 redwood seedlings in 3 separate THP areas on JDSF. Planted areas included group openings, even-aged units, and interplanted frill treatment areas.



Planting crew working in Chamberlain Confluence THP area.

These efforts are a part of the long-term goal to increase redwood stocking on the east side of the Forest. The 23 Gulch THP research blocks received ~1,050 seedlings and the southern part Chamberlain Confluence THP received ~20,665 seedlings, both of which are the locations of Dr. Berrill's research sites for 2 different projects. The remainder of the seedlings (~4,440) went to James Creek THP.

Planting was completed by local contractor Vasquez Reforestation. Trees were grown at the Green Diamond Nursery in Korbel from seed collected on JDSF. Planting stock was 1-0 styro plug from the 94-15 zone.

In May, Jeremiah and Vasquez Reforestation completed slash cleanup and aesthetic improvements along road and trail corridors in the South Fork Caspar THP area.

This project was completed over a 3-day period and involved hand piling of slash along trails, manual removal of invasive plants, and felling small diameter trees with logging damage. Hand piles were then burned in the winter of 2022/23.

While working on the South Fork Caspar project, Vasquez Reforestation also completed 11 acres of precommercial thinning in support of the Multi Cohort

Research Project. This research project is nested within the South Whiskey THP. Lead researcher on the project is Dr. Berrill.

Later in May, Vasquez Reforestation completed approximately 13 miles of herbicide treatment to control invasive weeds along seasonal forest roads. This treatment occurred in timber harvest, mastication, and road work areas where disturbed soil creates a flush of invasive French broom and pampas grass.

During November, Vasquez Reforestation returned to JDSF and completed approximately 27 acres of precommercial thinning in the Water Gulch THP group openings. These groups were cut in approximately 2013 and planted in 2015. The crew also completed approximately ½ mi of roadside chipping to improve emergency ingress and egress for an inholding at the end of Road 571.



Crew working in group opening



Crew completing 10ft of chipping off inholding access road.

Recreation Program

Campgrounds

Campgrounds, including Big River, remained closed through the winter months. Big River, Dunlap, Camp One Day Use and Horse Camp opened for the season in time for the Memorial Day weekend. Campgrounds over the Memorial holiday weekend were occupied by a few campers, but overall, weekend visitation was relatively low, likely due to rain and windy weather. Camp One Campgrounds remained closed in anticipation of continued logging and road improvements associated with the Red Tail THP. Campgrounds over the July 4th holiday weekend were moderately occupied by campers. An effort to steal money from the Dunlap iron ranger resulted in a combination of JDSF staff and LE covering campgrounds 3-4 days of the week. In

late September, a press release was issued to notify closure of all campgrounds and seasonal roads on October 10th.

Trails

In January, Mendocino Trail Steward (MTS) member and mountain bike aficionado, Roo Harris, produced a digital untitled map illustrating “Secondary Roads and Trails within the Western Sector of the JDSF”. Per Mr. Harris’s correspondence, the map was intended for distribution after receiving a \$50 donation to the MTS. The map appeared to be a scan of JDSF’s base map with over 260 miles of blue line GPS tracks and user trail name overlays. Mr. Harris also claimed a 2021 copyright. Erik Wahl sent an email to Mr. Harris asking for reconsideration due to the potential for negative impacts through the promotion of recreation along roads and unauthorized trails without cooperation with JDSF (and associated stakeholders). Topics covered in the email included resource protection, safety, conflicts with other land uses, encouragement of illegal trail development, other stakeholder interests, trespass, and display of accurate information.

The Mendocino Coast Cyclists (MCC) offered to assist JDSF in naming 5 public trails. These and other unofficial trails have acquired “user” names, many that are inappropriate for illustration on JDSF maps. Through MCC outreach, a pool of names was gathered with the criteria that names provide a link to visitors that is informative or educational, basing considerations on historic land uses, landmarks, research, or education. The pool of names was selected by the MCC, verified by JDSF, then distributed by the MCC and put up for vote via Survey Monkey. A letter to Mendocino County Native American tribes was also sent to provide opportunity for suggestions and/or comment.

In June, the MCC assisted JDSF in establishing an improved flagged route along the “Old Jeep” trail, located within the recently withdrawn NF Big River THP. CEQA coverage would have included amending the THP to construct a trail post-harvest. In July, the Mendocino Coast Cyclists (MCC) announced the effort to abandon the user-built “Widow Maker” trail. This announcement was through the club’s public forum, explaining the purpose and support for abandoning approximately 0.5 trail miles traversing steep slopes, wet areas, and a recent active landslide above Jughandle Creek.

Another pedestrian bridge, 1 of 4 bridge replacements along the entire trail, was installed on the Manly Gulch Trail within the boundaries of Woodlands State Park (SP) during late summer. Most of the trail is located on JDSF, thus SP’s granting a right-of-entry agreement was a logical step to address a concern for safety as the existing bridge showed signs of decay. SP requested installation perpendicular to the watercourse and naturalization of the old trail. The bridge was constructed based on JDSF’s engineered pedestrian design, utilizing redwood from the Parlin Fork

Conservation Camp. Work was performed by Erik, HFEO Chris Williams, Edwin, and 4 Forestry Aides.



22-Foot Manly Gulch Trail Pedestrian Bridge Replacement

The plan for 2022 was to install an equestrian wooden bridge along the “Sweetpea” trail, with the trail officially placed on JDSF’s base and recreation maps once installation was completed. This is part of a large effort in cooperation with the Mendocino Coast Cyclists to establish a trail along 3.7-miles of Road 630, which was abandoned in 2005. The bridge site is approximately 1.2 miles from the nearest road, where mules or other animals are the best option for moving in materials, and several groups expressed interest in assisting with this effort. In July, Erik met with Don Bone of the Back County Horsemen of California to assess the transport of wooden bridge materials to a site along the proposed “Sweetpea Trail”. Don agreed to skid materials with pack mules or donkeys. This constituted a volunteer effort to improve access for equestrians along the trail utilizing JDSF’s engineered equestrian bridge design. Work began in late September, and although wood materials were planned for transportation with donkeys in cooperation with the California Backcountry Horsemen, scheduling conflicts arose during the remainder of the 2022 dry season. MEU Assistant Chief Brandon Gunn directed Chamberlain Creek Crew #5 to assist in the effort, transporting 60 pieces of wood ranging 6-12 feet in length along approximately 1.5 miles of single track. The crew was able to achieve this task in approximately 6 hours. Bridge abutments and stringers were established, with the remaining work planned for October/November.

Mushroom Gathering

Mushroom permit sales remained brisk due to favorable weather, with 201 permits being issued from January 1-31st. The Fungus Federation of Santa Cruz held a Special Use mushroom foray on January 22nd which may have contributed to permit sales. Permit sales were by mail only during 2022 due to COVID and staffing issues; 1,066 permits were issued in calendar year 2022. Teresa Sholars (1/27, 2/3, 2/10,

2/17) and Glenn Walker (2/5), both of Mendocino College, obtained Special Use Permits to allow their agriculture classes to have field trips on JDSF.

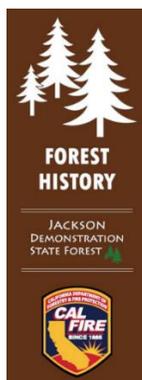
Recreation Task Force

The Recreation Task Force meeting, held on January 18th, was attended by 4 out of the 5 RTF members, 2 members of the JAG and 7 members of the public. The meeting was located at the intersection of County Roads 408 and 409. A handout was provided, summarizing a request to the RTF to provide recommendations on adoption of “user-built” trails located between Russian Gulch SP and County Road 408 and the existing trail network within the LNF Big River THP. The meeting included a field visit to these sites, discussing the proposal for adoption and improvements to the existing public Little-Lake Sherwood Trail that lies within an existing roadbed, addressing erosion control points, establishing a bridge crossing of an unnamed tributary to Russian Gulch, and abandoning a user-built trail adjacent to a perineal stream and wet area. The LNF Big River site visit was attended by 2 public members. All recommendations were supported by JDSF, including adoption of user-built trails and improvements to the exiting trail within the LNF Big River THP to be performed post-harvest. A draft map was presented during the meeting, illustrating road and trails within JDSF and State Parks within the Caspar and Big River drainages to the coast. This map will be displayed on a proposed panel at a popular parking area off Road 409, near the boundary to JDSF and Russian Gulch State Park.

General

In early winter, the Observatory Trail wooden signs were illegally removed at each trailhead. A single sign was recovered after being found lying on the ground near one of the trailheads. Further forest vandalism occurred when the Camp 20 outhouse was tagged with red paint graffiti.

Custom decals for carsonite post signage were sent out and a quote received by Rockartsigns.com. JDSF intends to post signage at all public trails in response to public requests for improved signage. In September, Erik and Josh began installing the fiberglass posts with decals denoting trail names. The example pictured below is 3” x 8”:



Erik interviewed with Mary Benjamin of the Fort Bragg Advocate in early July, followed by the release of the article “Jackson Demonstration Forest – a great recreation choice”: <https://www.advocate-news.com/2022/07/28/jackson-demonstration-forest-a-great-recreation-choice/>.

Unit Chief Luke Kendall and Erik met with a representative from VisitMendocino.com in July to discuss short-and long-term solutions to the Camp 20 concrete restroom facility. Prior attempts to transition responsibilities to Caltrans proved unsuccessful, but Chief Kendall followed-up on possibilities to transfer responsibility to service the Camp 20 restroom facility from JDSF to Caltrans. A letter was received from Caltrans, stating construction and maintenance of facilities are “escalating to a point that constructing more rest areas are not really feasible”, and they suggested (1) contracting janitorial services for maintenance or (2) consider lowering the amount of service provided, including no restroom, and adding signage along Hwy 20 to inform the public distances to the “Next Service Area – xx miles, Please Be Prepared”. The letter was forwarded to the JDSF Recreation Task Force (RTF) and Visit Mendocino.com. The RTF suggested addressing the issue through local legislators, including Assemblyman Jim Wood and Senator Mike McGuire.

August was a busy month for Special Use Events, including the IBIS Migration (MTB) and North American Trail Ride Conference (Equestrian). The Mendocino County Youth for Climate (Advocacy) event was approved after receiving a belated and incomplete application by Chad Swimmer. The event was held August 28th on JDSF, followed by a rally to JDSF Headquarters on the 29th.

A notice of unauthorized use of the forest was sent to Chad Swimmer (Mendocino Trail Stewards) on September 29th for commercial filming without a Special Use Permit or the required permit from the California Film Commission. The Coyote Valley Band of Pomo Indians were issued a Special Use Permit for a Prayer Ceremony on October 17th at the Caspar Scales. The ceremony was held despite the wind and rain on the day of the event.

In early fall, a small crew of fire fighters and JDSF staff worked to improve conditions at the Camp 20 Day Use Area. Maintenance work included painting the restroom facility, sanding/treating the redwood kiosk, pressure washing, removing graffiti, improving signage, cleaning/replacing picnic tables, and placement of 2-ton rip rap along the perimeter of the open grass field.



2-ton riprap replacing old wooden fence – Camp 20

Created slash piles within the SF Caspar THP and along the Parallel Action Trail were burned as part of effort to improve aesthetics within popular recreation areas.

Wildlife and Botanical Resources

Northern Spotted Owl and Marbled Murrelet Surveys

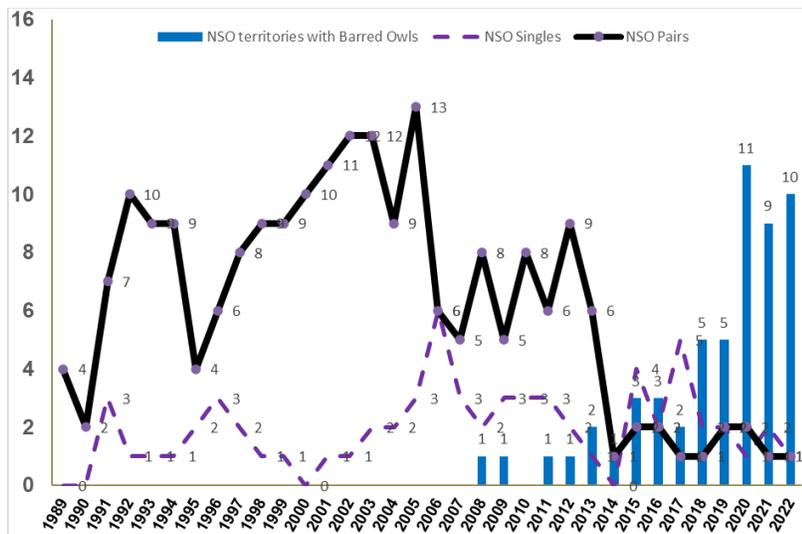
In February, contracts were pending for Northern Spotted Owl/Marbled Murrelet work and botanical surveys with North Coast Field Biologists and the Mendocino County Resource Conservation District, respectively. Thankfully, there is a process in place to allow our contractors to be paid while the contracts are in review and ensure that project and management activities move forward according, because the contracts were not approved until June.

2022 saw the development of electronic data collection forms with Senior Environmental Scientist GIS Specialist Peter Rowland for NSO surveys starting this year, prior to the initiation of the NSO survey season on March 1st. The intention, once the process is complete, is to improve data flow by eliminating the use of paper forms and data entry, and thus, the usual time lag associated with the collection and use of these data. Real-time data use will also assist with survey quality and enable rapid feedback to the contractors regarding survey results.

It was a busy spring and summer on JDSF for Northern Spotted Owl (NSO) and Marbled Murrelet (MAMU) research, with surveys being completed for 2022 in August.

For NSO, a total of 1779 nocturnal surveys (10-minute surveys at a point location) were completed at 329 stations. Species detected during these surveys included: Western Screech-owl (90), Northern Saw-whet Owl (52), Barred Owl (35: 7 pairs, 5 male, 4 female, 10 unknown, and two fledglings), Northern Pygmy-owl (16), NSO (11: 6 male, 4 females, 1 unknown), Barn Owl (5), and Flammulated Owl (1). Daytime visits to historic NSO territories confirmed 1 pair and 1 resident female for a total of two occupied sites on JDSF. Several additional nocturnal NSO detections were followed up during the day without success.

There are currently 23 “active” NSO territories on JDSF, but only two were occupied in 2022 (1 pair and 1 single). Occupancy based on empirical counts has averaged around 10 territories per year from 1991 to 2013, with a peak of 16 in 2005 (13 pairs, 3 singles; see graph below). The first Barred Owl (BADO) detection on JDSF occurred in Railroad Gulch adjacent to Mendocino Woodlands State Park in 1997 but was not associated with any known NSO territories at that time. BADOs started to be detected on JDSF at NSO territories starting in 2008 and then began to rapidly increase in 2015, after which time there was a concomitant decrease in NSO territory occupancy. Over the course of 3 decades of surveys, similar trends in both NSO and BADO detections and reproduction were also observed on neighboring timberlands. As would be expected, NSO reproduction has also declined over this time. The last time a NSO was confirmed to have nested successfully on JDSF was in 2012. Most of the positive reproduction was observed in the 1990s and early 2000s but has since waned as BADOs started to increase and occupy NSO sites.



A total of 59 surveys for MAMU were completed in 9 habitat areas on JDSF during the survey season (April 15-August 5). Most of these surveys were located in Railroad Gulch adjacent to Mendocino Woodlands State Park. No marbled murrelets were detected during surveys in 2022. Requests for post-survey consultation and survey data evaluation were submitted to CDFW during the fall for several habitat areas that have been fully surveyed.

JDSF is working with State Parks and several private landowners (The Redwood Timber Company and Mendocino Redwood Company/Humboldt Redwood Company) pilot testing the use of automated recorded units (ARUs) for detecting MAMU at known occupied locations as a potential method for monitoring landscapes with potential MAMU habitat. The current effort is learning how to operate the units, test the longevity of rechargeable batteries, document field set-up and processing time for sound files. The overall concept in the future is to develop a project that compares results and effort between the use of ARUs and protocol audio-visual surveys (5

visits), and thus, determine if the use of ARUs would be a potential alternative (costs and efficacy) survey methodology for determining MAMU presence at a site with potential habitat.

Of note, during May surveys, the contractor observed a small-to-mid-size carnivore near the conclusion of his MAMU survey in Railroad Gulch. The contractor's description was consistent with Humboldt marten, which is listed as federally threatened (ESA) and state endangered (CESA). Although the observation remains unconfirmed as there was no verifiable record accompanying this observation (a voucher such as a photograph, track print, hair, etc.), the potential for marten is possible given that this region was formerly part of its historical range over a century ago. This potential observation spawned some interest from the Arcata Fish and Wildlife Office, and the Six Rivers National Forest generously loaned JDSF 12 wildlife cameras to install in the area to survey for this elusive carnivore. Note that in 1996, the Humboldt marten was rediscovered in Del Norte County as it was presumed to have been extinct.

In late summer, the digital wildlife cameras were retrieved from the Railroad Gulch area after 2 months of operation. Although no rare carnivores were detected, we did detect American black bear, gray fox, spotted skunk, striped skunk, raccoon, black-tailed deer, opossum, gray squirrel, Douglas squirrel, and deer mouse. Sincere appreciation to USDA Forest Service (Six Rivers National Forest) for loaning JDSF these wildlife cameras

Barred Owl Research

Danny Hofstadter, PhD student in Zach Peery's Lab at the University of Wisconsin, initiated Barred Owl (BADO) removal on JDSF in late November 2021. A total of 49 BADOs removals have been conducted on JDSF since the start of this project. Danny is also coordinating with State Parks, The Redwood Timber Company (formerly Lyme Redwood), and other landowners within Mendocino County to monitor areas with and without BADO removal to examine NSO re-occupancy patterns and the timing and recolonization of BADOs in areas where they were previously removed. Ongoing JDSF NSO surveys have assisted in identifying areas with new BADO territories as well as areas that have been recolonized following removals. Danny is seeing significant BADO recolonization of sites throughout Mendocino County—usually by sub-adults (1- and 2-year-old birds)—where removals have occurred recently. These observations provide insight into the “floater” population of BADOs within the study area and may further highlight differing recolonization patterns of both BADOs and NSOs in areas experiencing a range of forest management regimes. Based on past research results, we expect to see an increase in NSO responses on JDSF, with surveys of BADO detections scheduled for Road 310 near Water Gulch, and near the confluence of Berry Gulch and Little North Fork Big River where fledglings were heard in July.



Barred Owl

Spotted x Barred Owl Hybrid

Spotted Owl

Follow-up surveys of BADO detections during August resulted in the removal of a single male in Water Gulch and a pair in Berry Gulch. A new effort of BADO surveys resumed later in the fall to assess any recolonizations of historical territories, which saw an increase in newly dispersing BADOs, which resulted in 6 BADO removals in November at formerly occupied sites (Waterfall Grove, Gulch 16, Dunlap, Camp 1, and Bob Woods). There is a single male BADO on James Creek that was recently detected but not removed. Most of these birds have been subadults and likely represent recent dispersal events into these sites. More surveys—and removals if necessary—are planned at historic BADO sites prior to the start of the breeding season in February.

Stream Monitoring

Temperature probes were deployed at 33 stream locations throughout JDSF as part of the annual water temperature monitoring effort to determine Maximum Weekly Average Temperatures throughout the summer stress period (June-September). Water temperature is a key parameter determining the suitability of streams to support salmonids and stream-associated amphibians during summer, especially as we continue to experience extended dry periods. Data from the stream temperature probes was downloaded and processed; of these 33 sites across JDSF, 29 stations recorded higher Maximum Weekly Average Temperatures (MWATs) and 4 recorded either no change or lower MWATs compared with 2021. The 29 stations with higher temperatures collectively showed a mean increase in MWAT of 0.65 °C (stdev = 0.40, range = 0.70-1.62 °C), despite having higher stream flows due to late spring rains. Nearly all of the probes on JDSF detected the week-long heat wave following Labor Day in their temperature profiles, including the western-most station in Caspar Creek. Work is progressing slowly on incorporating all previous years of stream temperature data into a database to examine temperature trends spatially and temporally across JDSF, which will facilitate easy access to the data upon request from agencies and researchers.

Botanical Surveys

During the winter, Robert received the final botanical report from the Mendocino County Resource Conservation District (MCRCD) for the Mitchell Creek THP. The

report was reviewed, finalized, and recommended for amending into the THP. Unfortunately, the contract with Klamath Wildlife Resources covering additional botanical surveys for 3 JDSF THPs was canceled due to reports and surveys failing to meet both an expected professional standard of work and concurrence from CDFW that surveys were inconsistent with the botanical survey protocol. Additionally, a contract amendment was submitted to rollover funds and extend the interagency agreement with the MCRCD to 2023, as this agreement constitutes the primary resource for completing required botanical surveys.

Heather Morrison, RPF and CNPS-certified botanist, conducted botanical surveys for future projects in Berry Gulch and Gulch 16, as well as a stand of tanoak and chinquapin slated for prescribed fire area along Road 310 known as Acorn Grove. While no threatened-endangered-sensitive plants were discovered during surveys, 2 “List 4” plants (watch list species of limited distribution)—Chaparral lily and Bolander’s reedgrass—were observed in Gulch 16. In November, Heather submitted a complete botanical report for Gulch 16/Acorn Grove and several areas (Gulch 16) with Chaparral lily (*Lilium rubescens*) were flagged for avoidance, mostly on roadsides. Finalizing botanical reports for Berry Gulch was planned for the winter period, along with producing a scope of work for 2023.

Roads Program

Roadside Mastication

JDSF HFEO’s were busy masticating in the winter with both the excavator and the units skid steerer along Roads 311, 560 and 570. In the summer, JDSF was down to only HFEO Chris Williams, who was busy masticating along Roads 330 and 310, and in the fall, he continued assisting with mastication within the shaded fuel break and then water barred JDSF Road 330.

Contract Road Projects

The Resource Conservation District began writing up a contract for the Road 720 upgrade project in February, with project funding through CAL FIRE’s Forest Health Improvement Program. This funding was intended to include upgrading Road 720, replacement of the Class I Railroad Gulch crossing, and abandonment of Road 700. Due to insufficient funding, only the Road 720 upgrade was approved, including the replacement of 10 watercourse crossings, ditch relief, turnout construction, reshaping, rocking, and chip sealing. Any left-over funding was earmarked for cost share for the Railroad Gulch crossing, as prior attempts to permit the crossing with California Department of Fish and Wildlife (CDFW) failed. Unfortunately, a Fisheries Restoration Grant application to abandon Road 700 was denied by CDFW. The application was submitted by the Mendocino Land Trust (MLT); MLT will retool the proposal and resubmit the application.

A contract to upgrade Road 320 to improve access to the Parlin Conservation Camp started in the spring. There are 9 watercourse crossing replacements with very deep fills and repaving of the road surface as part of the contract.

In June, the 2-year Road 200 North Upgrade contract was breached by Anderson Logging. The contractor claimed that culverts were back ordered and would not be available on time to perform the work. A new contract request will be submitted to complete the work in 2023.

It appears the contractor for the Road 100/130 culvert upgrade project will not be able to perform work prior to the contract expiration date. These are culverts and road improvements within the James Creek THP. Justification was poor, including obligations to finish other projects (outside of JDSF) and short supply of culverts. A contract extension was submitted to allow work completion in 2023.

State Forest HFEO Work

In the winter months, a cutbank landslide occurred within a known unstable area on Road 800, blocking access to private timber lands and CDFW, who perform winter fish spawning surveys. JDSF HFEO's were assigned to remove debris, and the slide on Road 800 was removed after 4 days of end hauling. During February, HFEO's started winter maintenance on equipment.

Spring and summer saw the JDSF HFEO's working on multiple tasks, including gate repairs, prepping the staging area at Parlin Fork Conservation Camp, installing a backup generator at the Forest Learning Center (FLC), removing 2 abandoned vehicles, fixing potholes along the entrance to Chamberlain Creek Fire Center, and moving a Conex box from the FLC to Parlin Fork.

In the fall, Chris placed pieces of 2-ton riprap along flat areas adjacent to County Roads 408 and 409 to discourage vehicle trespass within the Russian Gulch and SF Caspar Creek watersheds. Shooting targets were observed and removed in the same area.

Bridge Replacement Projects

In the fall, 2 bids were received, and a contract awarded in the amount of \$506,379.34 to Wylatti Resource Management, Inc. for the Road 320 Parlin Creek Bridge Replacement Project. This is a 1-year contract to replace a 63-foot span of reinforced concrete bridge superstructures. All work will be completed no later than October 15, 2023. The other bid received by Granite Construction Co. was in the amount of \$538,252.00. This project is funded through Deferred Maintenance funding.

Forester II Roads and Recreation Manager Erik Wahl, with CGS Don Lindsay and Morgan Renner, attended a zoom meeting with a CDFW engineer discussing a hydrologic analysis performed by CGS for the proposed Road 300 NFSF Noyo

Bridge Replacement Project. The analysis showed existing approaches within the flood plain. Next steps include further discussions to determine if existing concrete wingwall abutments with revetment will be sufficient to prevent scouring during flood flows.

Planning Work

A revised NOE was drafted during the summer to perform Road & Trail Maintenance on JDSF. This revision was performed to improve language to support road and trail work outside of known sensitive resources, etc.

In September, Technical Services Civil Engineer Albert Lau visited JDSF staff to review work needed to replace culverts and pavement along the access road to the Parlin Fork Conservation Camp.

General

Trespassers have left trash, and driven around the Road 500 east gate, as well as removing a lock on the west gate. These gates are adjacent to the Caspar 500 THP, and it is suspected this activity occurred during the first weekend of the new year.

Restoration

In February, Erik Wahl met with California Department of Fish and Wildlife (CDFW) and a member of the California Conservation Corp (CCC) discussing a proposed project to input Large Woody Debris (LWD) into the Class I Brandon Gulch in mid-September.

Blencowe Watershed Management began input of LWD on the Hare Creek Mainstem Instream Habitat Enhancement Project in September, which wrapped up the second and final year of the project, placing 185 pieces of large wood in 97 unique locations along nearly 3 miles of the creek. This restoration work was sponsored by Trout Unlimited's North Coast Coho and Steelhead Restoration Program and funded through a grant by the CDFW. Public access to Hare Creek is from Gravel Pit Road off Highway 20 in Fort Bragg.

November saw Erik met with the Mendocino Land Trust, Pacific Watershed Associates (PWA) and CDFW representatives to discuss a Fisheries Restoration Grant proposal to replace a large, rusted culvert crossing at Chamberlain Creek. PWA presented a stream profile illustrating stream banks, unstable areas, and streambed features. The project is considering placement of LWD within the channel, and next steps include assessment of alternatives for replacement, including an oval culvert, arched culvert with concrete footings, or a bridge. The project is expected to be funded for 2023-2024.

Annual Financial Summary

2022 Revenues			2022 Expenses	
	Calendar Year	Fiscal Year (FY22 Estimated)		Fiscal Year (FY22 Estimated)
Class III Timber Sales	\$565,393.96	\$900,000	Personnel	\$3,100,000
Class I Sales	\$21,320.00		Operating	\$1,300,000
Camping Fees	\$22,081.75			
Special Use Permits	\$6,570.00			
Road Use Fees	\$8,039.77			
Total Revenue	\$623,405.48	\$900,000	Total Expenses	\$4,400,000

Taxes

Yield taxes (from Class III sales only): \$41,609.00

Estimated yield taxes returned to Mendocino County (80%): \$33,287.20

In-Lieu property taxes paid to Mendocino County: \$126,282

Estimated total taxes to Mendocino County: \$159,569.80