

Staff Ride

Resources



Wildland Fire Leadership Development Program

Rock Creek Fire – Facilitators Field Guide

Note to Facilitators: This is a suggested format. Do not feel limited by the identified stands for discussion items. It is provided as a Word document so that users may adapt and revise it to fit their specific audience and time demands.

Staff Ride Difficulty Rating

Physical

Moderate – All walking segments are on rolling terrain with good footing. Elevation for the area is approximately 5,000 feet.

Logistics

Easy – Adjacent to a major paved highway. Site is less than one-hour drive from Winnemucca, Nevada. High clearance two wheel drive vehicles can be driven to three of the four stands. Road to Stand 2 crosses over private property, check for permission.

Hazards

Low – Normal wildland hazards (possible snakes, bees, etc.)

Stand 1 - Memorial Monument Rest Area

Maps

Travel Map

Orthophoto with final fire perimeter GPS locations for Stands

Travel Directions

GPS Coordinates 41.32.548 x 117.47.174

From Winnemucca, Nevada take Highway 95 north toward Orovada.

Just after Mile Post 41 turn right into Rest Area.

The Memorial Monument is located in the center of the Rest Area.

****This location can provide a place to park extra vehicles****

Terrain Orientation

Rock Creek Fire Memorial Monument

Sawtooth Mountain

Rock Creek

Antelope Creek and Antelope Creek Road

Drainage immediately south of Rock Creek

Point of Origin

Events to Describe

Weather and fuels conditions in 1939 (Refer to Appendix A)

Overview of the Civilian Conservation Corps program

Initial attack actions by local civilians

Discussion Guide

- The Civilian Conservation Corp (CCC) crews of the 1930s were formed under Franklin D. Roosevelt's New Deal in the hopes of relieving unemployment by providing conservation work across the nation. The CCC was run by the War Department and fire suppression command, control, and organization was modeled after the military.
- Each camp had a camp commander, an assistant commander, a lieutenant, a doctor and an education advisor. All were Army personnel. Fire crews were trained and supervised by specific government agencies.
- Each camp was assigned a fleet of trucks, tractors and basic fire tools.
- Crews were generally consisted of 20-25 people. The crews attended a two-week basic training session that included a short section on firefighting.

- The crewmembers salaries were \$30 a month. They were allowed to keep \$5 for personal expenses while the other \$25 was sent back home to support families. CCC clothing was World War I Army surplus.
- The Department of Grazing mentioned in several documents was the forerunner of the Bureau of Land Management.

Rock Creek Fire Background

- The fire was started by lightning and first reported by local storeowner, Kirk Studebaker. In the initial dispatch information given to the CCC camp was the recommendation that the crew stop by Studebaker's store in Orovada for local road directions into the fire. Mr. Studebaker and five other local residents drove up very near the fire and were the initial attack forces on the fire. Note the map references to Studebaker's car.

Stand 2 - CCC Crew Parking Area

Maps

Orthophoto with final fire perimeter and GPS locations for Stands

Travel Directions

GPS Coordinates 41.33.399 x 117.45.234

From Memorial Monument Rest Area (Stand 1) drive north on Highway 95 to Orovada (1/2 mile).

As you travel through town make the immediate right just past the Nevada Division of Transportation Maintenance yard.

Follow this road 1/4 mile and turn right onto the dirt road.

Follow the dirt road 1.5 miles to CCC crew parking area.

Terrain Orientation

Gabica Ranch

Rock Creek

Area the CCC crew's truck was parked

Saddle on the south side of Rock Creek

McConnell Trail

Frank J. Vitale fatality site

Events to Describe

Communication of the dispatch to Paradise Valley Camp

Extended attack response by CCC Crews

Discussion Topics

Conduct Tactical Decision Game #1

- The CCC crew did not receive a message to stop at the store in Orovada to get directions to the fire. Without knowing about the access route up Antelope Creek suggested by Mr Studebaker, the crew proceeded through Orovada, past Gabica ranch to the end of the road near Rock Creek. This route required more time to get to the fire.
- Foreman Timmons had only fought 11 fires prior to this assignment. However, he had been on a fire in Rock Creek the year before.
- Foreman Timmons decided to split the crew and attack the fire from two sides. He would take one crew up the north ridge while Squad Boss Tippin's crew would traverse to the bottom of the fire. Why?

- Radios were not in use on the fireline in 1939. Only direct verbal communications, message runners, hand signals, and whistles were used.
- Route of travel by Squad Boss Tippin's crew was up McConnel Trail heading to the bottom of the fire from the west. Their approach was from the downhill side with the wind at their backs.

Handout TDGS #2 prior to leaving Stand 2

- Tell students to have their solutions when they arrive at Stand 3.

Stand 3 - The Pep Talk

Maps

Topo Map with fire progression and Stand locations

Travel Directions

GPS Coordinates 41.33.016 x 117.44.100

From Rock Creek CCC crew Parking Area (Stand 2) drive back to the Memorial Monument Rest Area ½ mile south of Orovada on Highway 95.

At the north end of the Rest Area you will see a cattle guard, drive east through the cattle guard (This road is known as Antelope Creek Road).

Follow Antelope Creek Road 2.7 miles to a second cattle guard.

Immediately after this cattle guard turn left and travel north up the hill for 0.3 miles.

****2WD vehicles with high clearance OK on Antelope Creek Road*****

Terrain Orientation

Rock Creek

Antelope Creek and tributaries

Point of Origin

Site of three fatalities at drainage convergence

Events to Describe

The hike in by Tippin's crew

Tippin's briefing known as the "Pep Talk"

Actions of civilians on the fire

Thunderstorm development

Discussion Topics

Conduct Tactical Decision Game #2

- Who was at the Pep Talk - Some of the squad members were still making their way up the hill when Tippin started his briefing.
- Location of Foreman Timmon's crew - outside the realm of communication and still working their way up the north ridge toward the top of the fire.
- Change in weather and fire behavior - thunderstorm building overhead with fire making moderate runs uphill. Then the winds increase and shift out of the east pushing the fire rapidly downhill.

- What would enable a thunderstorm to maintain the downdrafts to push the fire downhill for such a long duration?
- Escape route down the down the drainage:
- Why go down the drainage?
- What other escape and safety options existed?
- Command and control concerns during a hasty retreat from the fire:
- Insubordination?
- Indecisiveness?
- Panic?
- Escape of Studebaker, Gabica, and four others out of Antelope Creek.

Handout TDGS #3 prior to leaving Stand 3

- Tell students to have their solutions when they arrive at Stand 4.

Stand #4 - Fatality Site

Maps

Topo Map with fire progression and Stand locations

Investigation Report Map with firefighter retreat routes

Travel Directions

GPS Coordinates 41.33.081 x 117.44.685

From Stand 3 hike down the drainage along Tippen's escape route to the fatality site at the drainage convergence and then return to the vehicles parked near Stand 3.

Optional: After the discussion at the convergence fatality site hike up to the saddle immediately to the north for the closeout session at the saddle. After the closeout session, hike down Rock Creek to Stand 2 where the vehicles will be parked.

****This will require a vehicle shuttle from Stand 3 to Stand 2****

****Good footwear and water are required for this portion of staff ride****

Terrain Orientation

Saddle between Rock Creek and Fatality Site

McConnell Trail

Location of the crew truck parking area (Stand 2)

Point of Origin

Pep Talk area

Events to Describe

Kennedy's broken ankle and call for help

Conditions and situation in the gully and convergence area

Retreat of the crew

Discussion Topics

Conduct TDGS #3

Deceptive terrain and long escape routes slowed the rate of movement of the firefighters and affected their escape time.

Deciding factors for survival:

- Tippin and James help Kennedy for a while, abandon him and help Barker according to Richard Power's witness statement.
- Vitale travels a long distance in a different direction from others.

- Powers and five others make it out.

Organizational changes:

- Establishment of first Forest Service Regional Readiness Standards
- Establishment of first mandatory fire training program for crews
- Identified the need for a qualification and experience tracking system
- Identified the need to insure a high physical fitness level for firefighters
- Recognition that sagebrush fires could be dangerous

Earnest Tippin and Walter James were both posthumously awarded a National Certificate of Valor:

- What makes a wildland firefighter a hero?
- How well do we recognize our heroes in the wildland fire service?

Conduct TDGS #4

After conducting TDGS #3, allow time for students to explore the area and then conduct TDGS#4 at Stand 4 or in the saddle to the north on the way back to the vehicles if the optional shuttle is completed.

APPENDIX A

Fire History and Ecology of the Rock Creek Area in 1939

The west side of the Santa Rosa Mountain Range has undergone an extensive vegetative change since the time of the Rock Creek Fire in 1939. Fire played a much different role in the northern Nevada sagebrush-grass ecosystem then, with lightning being the primary ignition source. Human caused fires were present, with many being set in the fall by sheepherders to maintain new forb growth and perennial grass stands in the canyons and basins of Humboldt County.

The CCCs, with its camps and spike camps, were charged with fire suppression on the U.S. Forest Service reserves and Division of Grazing (the predecessor to the Bureau of Land Management) districts. The Toiyabe National Forest had jurisdiction for the Santa Rosa Ranger District at the time. Early records state the area was grazed by cattle and sheep extensively during the first third of the Twentieth Century. There were more sheep than people in Humboldt County.

Early records from diaries and newspaper accounts describe an abundance of sagebrush that was “big.” It is thought that prior to the 1860s that most of northern Nevada’s vegetative communities were in climax condition. Mining, grazing, and other human activities began to change that. The “big” sagebrush was used extensively for as fuel for towns, mines, and mills in the 1870s and 1,880’s. There is little evidence from early explorers and pioneers that large fires were common in the northern Nevada landscape due to their accounts of “vast tracts” of unbroken sagebrush. It is thought that fire was not the key factor in shaping of the sage-grass ecosystem prior to large-scale intervention by man. The first newspaper mention of a wildfire in sagebrush comes from the July 31, 1885 issue of the Winnemucca “Silver State.”

As the larger sagebrush was removed from the landscape, grasses, forbs, and other shrubs began to replace the old age sage stands, increasing the “flammability” of the ecosystem. By the late 1890s rangeland fires were becoming commonplace as the vegetation was altered. The livestock industry was well-established and had replaced mining as the primary industry in the area. Most operators grazed on open range year-round, and did no supplement feed with hay in this area. It was necessary to keep big sagebrush stands intact in order for cattle to survive the winters. During the severe winter of 1889-1890, many of the ranchers saw the need to plant alfalfa and the importance of the sagebrush community diminished. As uncontrolled grazing began to be regulated in the 1930s and cheatgrass was introduced on the rangelands, the stage began to be set for the July 1939 incident.

Humboldt County and the Orovada area had experienced several active fire seasons prior to 1939. The 1928 season saw severe fires in the Pine Forest Range (which burned 2,200 head of sheep) and the Kings River Valley. 1934 and 1938 saw fires that were of a magnitude not seen before. The August 8, 1938 Rock Creek Fire is referred to in the 1939 coroner’s inquest as the fire scar that the CCC crews were attempting to tie into during the 1939 Rock Creek Fire.

Fuels on the south side of Rock Creek below the 1939 point of origin were described as being similar to the early sagebrush sites, with the brush being six to seven feet tall and in continuous stands. Perennial grasses were present as an understory. It is reported by the residents of the area at the time that the cheatgrass was just making a presence in the Orovada country, but

nowhere near the abundance that is seen today. It would be difficult to say that the annual grasses played a significant role in the rapid rate of spread seen on the 1939 Rock Creek Fire. It can be reasoned that fuel loadings in the fire area approached three tons per acre of big sage, perennial grass species, forbs, and cheatgrass. There are two remnant islands of sagebrush-grass within the 1939 Rock Creek Fire perimeter which have not burned in subsequent years that give us an accurate picture of what the CCC crews were dealing with. Locals at the time state that the area had not burned for many years previous, so it can be assumed that there were considerable litter and dead components in the fuel composition. This combined with the reported very strong, erratic winds were a critical factor in the events on the afternoon of July 12, 1939.