

UTV and Powerline Tree Strike

Background

The Oconee National Forest in Georgia conducted the Compartment 111 Prescribed Fire (Rx) in Monticello, Georgia on February 16, 2023. Resources from Chattahoochee-Oconee National Forests, various District personnel, as well as an 8-person Off-Forest Fuels Module (OFUTVM) with a UTV (Utility Terrain Vehicle) were on site to assist with the prescribed fire. That day, the Off-Forest Fuels UTV Module consisted of a three-person crew: the Crew Boss (CRWB), FFT1 and FFT2. The OFUTVM was assigned to a 2020 Polaris Ranger XP 1000, to include a front and back seat configuration.

Firefighters recall that the Firing and Holding operations were normal throughout the day. They inform that the only out of ordinary issue was a Chattahoochee-Oconee UTV (CO-UTV) experiencing mechanical problems at 1400. Therefore, the OFUTVM was requested to complete Firing and Holding operations from Drop Point (DP)-C to DP-D (see map on page 4). The original plan was for CO-UTV to complete the operations. This change in the plan did not seem out of place to any of the resources.

Cat-Faced Tree

At approximately 1500, a Type-6 Engine assigned to the prescribed fire notified the OFUTVM CRWB of a cat-faced tree with fire between DP-B and DP-C.

The OFUTVM CRWB asked the Type-6 Engine to see what they could do with this hazard cat-faced tree. The Engine advised that the hazard had been mitigated.

OFUTVM CRWB then asked if it was still a threat to the road. The Engine advised that it would be a good idea to have a Faller 1 (FAL1) evaluate the tree. However, the Engine personnel felt it would “stand another 100 years.”



The 2020 Polaris Ranger UTV after tree strike.

The OFUTVM CRWB acknowledged their transmission and thanked the Engine for mitigating the hazard.

A short time later, the OFUTVM continued to patrol the assigned area and tied-in with the Burn Boss (RXBB) and Burn Boss Trainee (RXBB(T)). The Job Corps UTV (JC-UTV) was advised to travel back to DP-B to conclude the day's operations and participate in an After Action Review (AAR.)

Hazard Tree Continues to Burn

As OFUTVM was traveling back to DP-B they came across the identified hazard tree that the Engine had mitigated. They noticed that fire was still burning at the base of the tree. The tree appeared to be a large white oak tree with dead limbs and conks. OFUTVM stopped and backed in closer to the tree and used their small onboard pump to spray water on it. While spraying water on the tree, OFUTVM CRWB and FFT1 quickly realized that the tree was beyond saving and needed to be cut down. Due to the size of the tree, OFUTVM CRWB and FFT1 decided they were both required to wrap flagging around the tree to better identify it as a hazard tree.

Hazard Tree Falls

While attempting to flag the hazard tree, a “Crack” and “Pop” was heard. Both OFUTVM CRWB and FFT1 shouted “RUN!” FFT2 was sitting in the driver side rear UTV seat with his seat belt on. The two firefighters shouted at him to “Run!” He was able to quickly unbuckle and exit the vehicle just before the tree trunk struck the UTV’s roof. As the tree came down it also struck the power lines on the opposite side of the road—causing them to arc and break, knocking out the power to the local area.

Once the tree was on the ground, the OFUTVM module quickly made sure that they were all OK and safe. Because the tree was laying on the powerlines and they weren’t sure if the wires were still live or not, they maintained their distance from the UTV.



Initial Notification Made

The OFUTVM CRWB immediately notified the RXBB that: the tree had fallen across the road and taken out the power lines; the UTV had been damaged; and that the road was completely blocked. The RXBB copied the message and asked if anyone was injured. The OFUTVM CRWB radioed that all were safe and no one was injured.

The RXBB and RXBB(T) drove to the scene and started the notification process per the Chattahoochee-Oconee National Forest standard operating procedure (SOP). They attempted to contact the Forest Law Enforcement Officer (LEO). However, their communication went to voicemail. The RXBB contacted the power company, which arrived approximately 30 minutes after being notified. They inspected the lines on the tree and quickly determined it was safe to start cutting and working on the tree.

Removing the Hazard Tree

The OFUTVM CRWB and FFT1 began to buck and cut the tree to enable the Oconee Ranger District Dozer Operator to remove it from the UTV without causing further damage. The UTV was inspected for additional damages or any hazardous leaks. Finding no serious mechanical issues, the UTV was driven back to the staging area and loaded onto the trailer. The CRWB contacted their Chain of Command and advised them of the incident, confirmed that they were safe, and that they would be working with the local unit for reporting. At approximately 1730, all the resources gathered to conclude the day's operations and completed a comprehensive AAR.

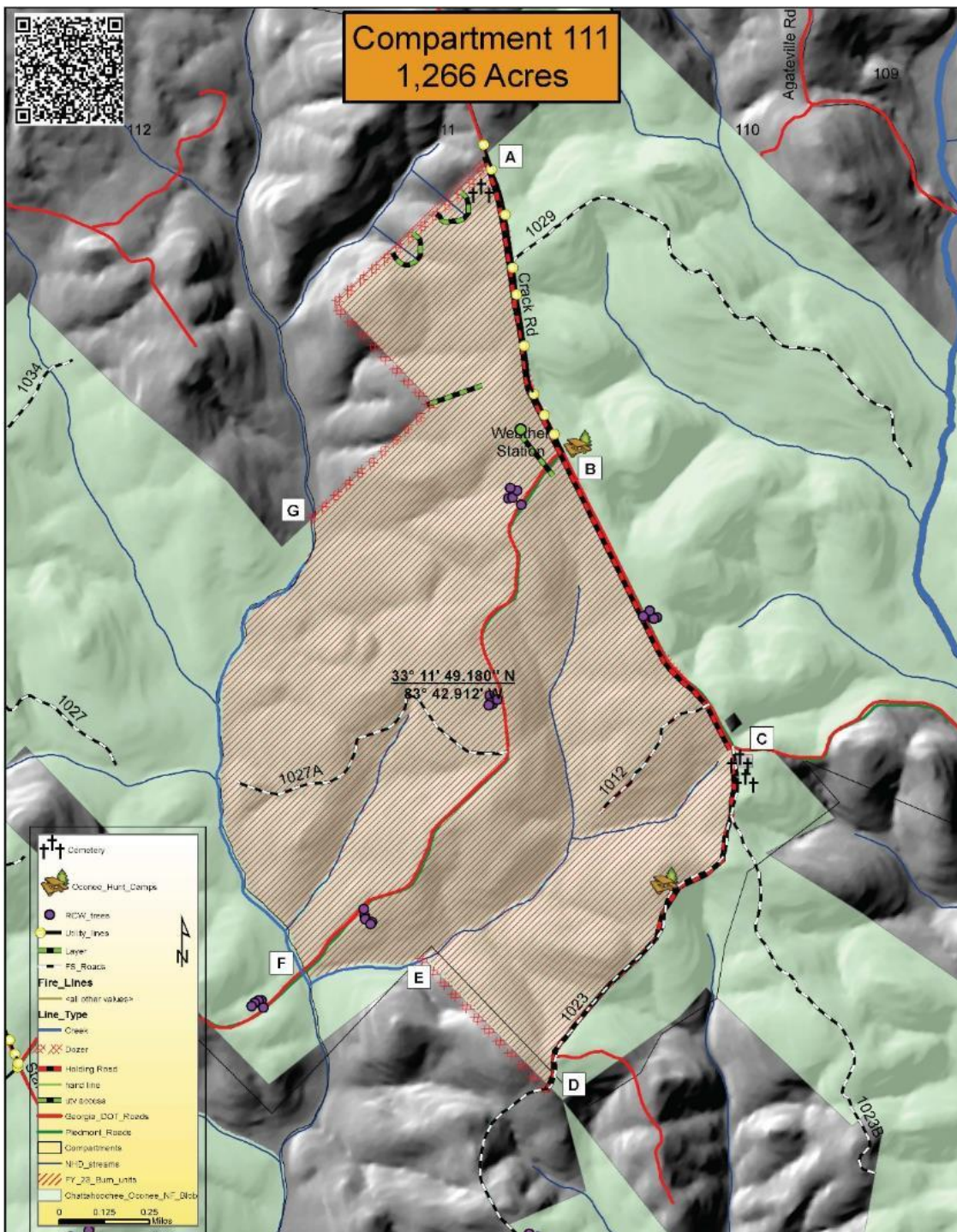


Lessons Learned

1. **Trees that may have not been prepped in the past may need to be examined and prepped.** The long-term reoccurrence of Rx burns in the same unit are beginning to present hazards which need to be identified and addressed. For example, hardwoods in pine plantations which have been stressed from years of Rx fire are now beginning to weaken. This necessitates a unique look at burn unit prep not previously required in past years.
2. **RXBs and RXBs need to identify known hazards, even if they don't seem like a priority at the time.** This Rx unit was familiar to the Burn Boss and Burn Boss Trainee. Much of the focus was on another section of the unit due to forecasted wind conditions and nearby values at risk (houses). This tree was a historically known hazard to local resources. However, it was not prepped or mitigated during this Rx.
3. **If you can't mitigate the hazard immediately, don't burn until it can be mitigated.** This tree had been identified as a hazard previously but was not mitigated due to the proximity of the powerlines. Resources need to discuss what additional mitigations or actions can be taken to maintain safety—before impacted by fire operations. Remember, these are Rx burns not Initial Attack. We have time!
4. **Consider water capacity and availability as part of your contingency resource planning.** During the AAR, the Type-6 Engine Crew advised that due to the difficulty of water re-supply in the area, they could not apply as much water/foam retardant as they would have liked when they addressed the hazard tree. If these issues are a

concern, fire managers need to consider logistics to support additional water availability for mitigating hazard trees that need additional foam and water.

- Fire environment.** Over the past three years, the Oconee Ranger District and the Forest Fire Staff have observed what appears to be climate-induced change to the fuels. While much of northern Georgia has experienced a much wetter weather pattern over the past few years, the Oconee has been south of a dividing line that often means this area receives much less precipitation. Fuels here have become more readily available to ignition after only one to three days of drying and, at times, with much higher relative humidity than what would be considered the norm. Drought conditions were observed in 2019 and as recently as the fall of 2022. These conditions may be impacting trees over the long term—such as the hazard tree in this incident. The Forest is continuing to monitor these conditions with input from employees' observations on the ground.



Map Note

Felton McMichael Road is labeled as "Crack Rd" on the map. This error was briefed to resources on this incident.



This RLS was submitted by:

USFS Southern Region
Chattahoochee-Oconee
National Forests

Do you have a Rapid Lesson to share?

Click this button:

[Share Your Lessons](#)