The many faces of the Swan Lake Fire

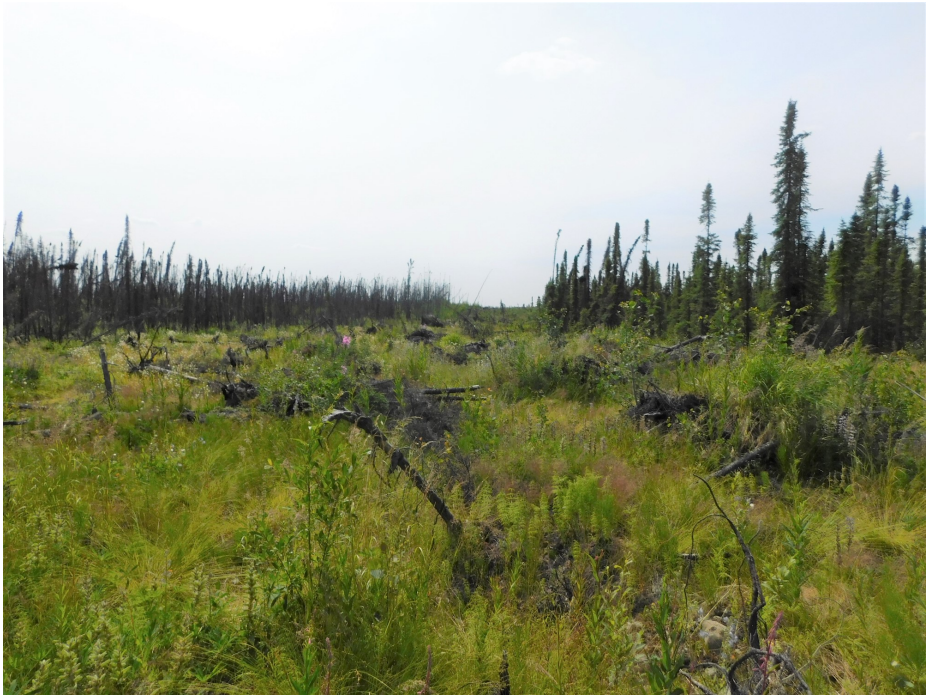
by Todd Eskelin

An excavator pulls vegetation back into a dozer line after the interior line was approved for repair (USFWS Todd Eskelin).

The smoke hung low in the valley as we walked down a dozer line to its end where a clearing had been created. Just weeks before, a dozer crew had attempted to get ahead of an area of the Swan Lake Fire working its way south along Mystery Creek Road. This clearing was a safety zone for themselves and the equipment. Now the dozer line, which serves no tactical purpose for ongoing fire suppression activities, has been approved to be repaired.

As one of many local Resource Advisors (READ) I am part of a team of local experts prescribing and monitoring implementation of a repair plan for wildfire suppression activities. Our goal is to repair impacts to the landscape that are related to fire suppression, while embracing the positive effects of the fire itself on the landscape. This mostly means meeting the objectives of limiting exposed soil so it does not wash away. Covering exposed soil and encouraging native plant growth makes it difficult for invasive plant species to move into the area and get established. Finally, this repair work limits any unplanned access points that may encourage increased illegal ORV/ATV trespass.

On this day I worked with local operators running an excavator and a dozer, and their crew boss “Mo”. We outlined the objectives of what we wanted the “painting” to look like and then this “team of artists” got to work on their “canvas”. In this case their canvas was a wide dirt swath through the forest with a berm of organic material pushed to one side. We noted a couple of spots where erosion could be a future problem and then they jumped in. By leveling berms that were built up by the dozer push and pulling trees and vegetation mats back onto the cut they slowly working backwards from the end. They only had one chance to get it right. It would do more damage walking the equipment back in if they missed something. It was a steady and deliberate process. This team repaired 2 miles of dozer line and several “push out” zones in less than 2 days.



A repaired dozer line from the Card Street fire showing 100% ground cover just 4 years after repair (USFWS Todd Eskelin).

This is just one of the many duties of a READ. We provide information to fire crews on the natural resources and how the firefighters can meet their objectives while still protecting the values of the land owner be it Refuge, Borough, Forest Service, or private. This could be anything from a meeting with a dozer boss and discussing alternate routes to avoid an anadromous stream when possible or directing them to an old seismic line that already exists and provides easier access to the site they need to reach. The next day duties could be informing members of a spike camp on how to set up a camp system that would most effectively reduce potential bear problems. The job is ever changing as there are so many moving parts on a fire that is the size and complexity of Swan Lake.

The vital role that a READ plays during firefighting activities is a testament to how professional wildfire suppression has become. This interface with local knowledge allows us to tap the expertise of firefighting teams from around the country. The longterm outcome will be successfully defending the public and public values from the fire, while still realizing the many beneficial responses to fire on this landscape. This habitat will likely see a conversion to younger seral stages of boreal forest. This means more willow, birch, and aspen supporting a different compliment of birds, small mammals, and especially moose.

The repair crew worked tirelessly in 90 degree heat with smoke, ash, and an occasional flame torching unburned trees. In the end they painted a picture of success with a unique canvas and odd brushes. It may not look like it yet, but over the next 2 years the ground will fill in with fresh growth originating from the vegetation they scattered across the cut. The trees both burned and unburned will deliver nutrients back into the soil and will provide structure needed so rain doesn't wash the soil off the hillsides. It also structurally protects young shoots from being browsed immediately. As I bump on to my next assignment I can only admire the efforts of these crews both on the front end of the fire and those doing equally excellent work on the back end.

Todd Eskelin is a Wildlife Biologist at Kenai National Wildlife Refuge. Find more Refuge Notebook articles (1999–present) at https://www.fws.gov/Refuge/Kenai/community/Refuge_notebook.html or other info at http://www.facebook.com/kenainationalwildliferefuge.