Lockheed Fire Account

Faculty/Students/Alumni/and others, As most of you know by now, a good part of Swanton Pacific Ranch was ground zero for the Lockheed Fire. What began as a summer to remember with 38 students involved in classes or internships now is a summer most of us will never forget. The fire began in the headwaters of upper Scotts Creek around 7:15 pm on Wednesday, August 12th, and when all was said and done, the fire burned over 7800 acres (most of which occurred over a 3-day period). Gianone Hill and Last Chance residents spotted the fire soon after it began. Word spread quickly throughout the valley just as the first CalFire engines were arriving. Around 9 pm the fire was spreading rapidly to the south and southeast, fueled by strong northeast winds, compliments of a significant high-pressure system that had been building for two days. By 10 pm a mandatory evacuation order was in effect for all Swanton Road residents. Our staff and students, and livestock from the east side of the Ranch, headed for the Shipping Corral on the far west side of the Ranch (along Highway 1). There we set up a makeshift camp for a number of days for staff and students. This location also became the local horse evacuation area. Gordon Claassen, Livestock Manager, and a handful of volunteers coordinated livestock evacuations. Gordon was also involved with moving bulls belonging to one of our neighbors when the fire was spreading into Molino Creek.

When it was evident that we were in this for the long haul, we sent most everyone home or to other less-smoky locales. We postponed the beginning of the three-week Sustainable Rangeland class that was to begin on the 17th. In the end, the class did begin on the 17th, but on Campus for the first three days. We operated with a skeleton crew of essential staff for about a week. We were mostly limited to just Steve Auten, Resource Manager, and me in the valley, providing local knowledge of the area and a level of vigilance that proved useful to CalFire. We also had at least one of our staff (Shane Larsen or Sinclair Wilkinson) on hand to provide water at the well hydrant near the north end of the Long Barn. Throughout the entire fire we sourced more than 600,000 gallons of water to CalFire engines and water tenders. There was quite a bit of logistical coordination that was needed for those evacuated, and Susan Burgess, the Administrative Coordinator came through to help this situation out greatly. The mandatory evacuation was finally lifted on Tuesday night (the 18th), and a more-normal routine slowly resumed with staff and interns returning on the 24th.

CalFire employed a number of suppression strategies. With little access to the interior of the burn area, line was cut manually and with heavy equipment out ahead of the fire, and in some cases backfiring and breaks were established along Ranch roads and along Swanton Road (near the Old Seaside Schoolhouse). It is noteworthy that fire only reached Swanton Road where it came down at Schoolhouse ridge. It is also noteworthy that CalFire was successful in saving all permanent residences. To my knowledge three cabins were lost, including the two owned by Al Smith relatives near the former boy

scout camp up Little Creek. There were also a number of outbuildings lost, including one of ours. The Staub House was nearly lost on the second night, and it stands now only because of the fierce firefight that occurred there that night. The fire was fully contained by August 24th following a rather significant backfire operation that went on for days in upper Queseria and Molino Creek watersheds.

Of significance, over 92% of the Little Creek watershed burned, and the question remains about the extent of tree mortality in the higher-intensity burn areas. Steve and I accompanied a three-member CalFire Team less than a week after the fire began on a 7-mile walk up Little Creek, then up to the General Smith area on the divide between Big and Little Creeks, and then down Berry Creek. Certainly, some areas were pretty cooked, but we don't expect (at this time) that the redwood mortality will be that extensive, however, that will not be the case for Douglas-fir in the hotter burn areas. We also have some concern over the extent of alder mortality, but from what we have observed thus far, lower-intensity burn conditions occurred in the lower elevations of lower Little Creek, making it more likely that most have survived. Initially, it seems that the drainages (Berry Creek and upper South Fork) oriented in the windward direction, where the fire was wind driven during the first couple of nights, burned hot right down to the channels. The ridge tops seemed to be hit the hardest, so the Knobcone Pine and Manzanita have a higher incidence of mortality. Other localized areas in the upper North Fork and South Fork had evidence of higher intensity fire conditions, and a higher incidence of mortality will be likely, including Douglas-fir, tanoak, and some redwood. Lots of trees have fallen due to weakened root systems and burnouts, and some continue to fall, and will continue to fall, particularly as these trees and ground wet up and wind conditions increase. For about a week, Steve coordinated some salvage yarding of trees downed or felled across Little Creek Road because of their hazard potential. It is likely that additional salvage logging will occur within the next year.

We are also in the midst of suppression repair activities with CalFire, and damage assessment with insurance adjusters. The damage to structures and infrastructure includes an outbuilding at the Staub, the redwood fence below the Al Smith House, the South Fork water system, and other fences. We had some suppression damage to our roads, but we will come out in most cases with conditions improved when it is all said and done. Five of the nine monitoring stations that are part of the Little Creek Study have been damaged to some extent. The Fire has put a dramatic end to the pre-harvest/post-harvest Little Creek Study, ...however, out of the ashes, if you will, we now have an incredible opportunity to pick up where the Little Creek Study left off, ... now becoming a very valuable pre- and post-fire study. Major changes to stream channels will occur from the hillside sediment delivery that will take place with even a moderate rainfall year. The habitat conditions for salmonids in Big Creek, Little Creek, Mill Creek, and downstream in Scotts will all be affected to varying degrees.

We are all trying to look at the here and now, but also look forward to the new opportunities that are becoming increasingly evident as a result of the fire. This is only the beginning for information that we intend to provide regarding the fire and post-fire efforts and opportunities. We are in the process of preparing additional information for our website (maps, photos, a fire video, and some additional documentation from the Cal Poly perspective). You can see what is already posted at www.spranch.org. You'll find pictures and fire progression maps posted so far by grad student, Drew Perkins and former grad student, Russ White. I am including a link to a Sentinel article that was in the paper last week. http://www.santacruzsentinel.com/ci_13205114

Lastly, there is a lot that can be said about the initial response and commitment of Swanton Pacific Ranch staff, Cal Poly students, graduate students, and family members who were all involved during and after the fire. We were also impressed by the way in which the Swanton community (that includes Cal Poly) pulled together to help each other. Particular acclaim goes out to CalFire and their amazing response that requires a level of coordination and expertise that most will never witness. We personally spoke to at least nine Cal Poly graduates during the fire who working for CalFire (we gave them Swanton hats). I wonder how many more of our graduates were among the 3000 personnel assigned to the fire. My hat is off to everyone involved.

Brian Dietterick

Director, Swanton Pacific Ranch