

FIRE BULLETIN #16



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Foresters and Firefighters

Richard W. Halsey

I knew the presentation was going to be more challenging than expected after several of my favorite lines were met with silence.

Don't get me wrong, the folks I spoke to were appreciative and I was able to communicate the chaparral message clearly, but the experience demonstrated how important it is to connect with the interests and perceptions of one's audience. I suppose I could have begun with some kind of pyrotechnic device to help improve the group's response, but it would not have helped to achieve my ultimate goal; to demonstrate the relevance of fire ecology in the lives and careers of those in attendance.



The Halsey 2" bore carronade used to encourage audience participation.

The event in question was a presentation I gave several weeks ago to

THIS ISSUE

CDF: Foresters and Firefighters

KPBS Chaparral television show

Mike Evans' loss in Cuyamaca

lone Chaparral

nearly 100 California Department of Forestry and Fire Protection (CDF) personnel concerning the chaparral ecosystem and why its resource value should be viewed on equal par with California's timberlands. What I failed to fully appreciate was the cultural divide that exists between foresters and firefighters and the misunderstandings that sometimes exists between the two. Nearly everyone in the room either worked on an engine or was responsible for some duty related to fire protection. There were only a few resource managers present.

It was a tough sell convincing a group composed mostly of professional wildland firefighters of the

See CDF, page 2

Announcements

Discover the Secrets of the Chaparral on PBS television's "CALIFORNIA'S GREEN" with Huell Howser.

Be ready to see a classic presentation on California's chaparral as part of Huell Howser's California's Green series. The show will air this month on all PBS affiliate television stations statewide. It is by far the best video introduction to the chaparral plant community you will find anywhere. It is perfect for anyone interested in obtaining a clear explanation

about California's most characteristic wilderness. The show will be especially useful for teachers. DVD copies are available. To order, please send a check to the Institute for \$17 to the address above.

Currently scheduled show times. Please check local listings for any changes.

KPBS (San Diego): Nov. 5 at 5:30 PM.

KCET (Los Angeles): Nov. 9 at 6PM and 12:30 AM.

CDF continued from page 1

need to understand chaparral natural history and the impact fire has on the system. A conversation I had with a captain in the USFS should have provided me ample warning of the challenge ahead. He made it very clear what he thought about one of my favorite chaparral shrubs. “Do you want to know what I really think about Ceanothus?” he asked. “I hate it.”

Having to cut line through a mature stand of spiny, re-sprouting, whip-back-in-your-face shrubbery gives one a significantly different perspective than what would be expected from the average native plant enthusiast. Knowing both worlds well, it might have been helpful to tackle that contrast head on from the very beginning.

“Do you want to know what I really think about ceanothus? I hate it.”

Before developers began pushing into the backcountry, the CDF’s primary objective was to manage and protect California’s watersheds and timber lands from wildfire. Now, with an ever-increasing expansion of the wildland/urban interface, protection of life and property has become a dominate focus. Not only is CDF expected to provide wildfire protection, but also fuel reduction programs around communities, municipal fire services for a large number of contracted cities, emergency medical services and hazardous material containment. State and local governments have come to expect the CDF to be a full service fire agency that can handle any situation. This has often led to unrealistic expectations and is partially responsible for the unfair blame heaped upon the Department during the 2003 Cedar fire. It may also renew long festering efforts to split the CDF in two, with foresters separated from fire. Similar proposals have been suggested within the US Forest Service in an effort to create a national fire service.



USFS prescribed burn performed in Pine Valley, California, May 31, 2005.

What would it mean to remove landscape management from firefighting agencies? Put another way, what would be consequence of ignoring the impact of current practices upon natural resources 100 years from now?

Although chaparral does not have the same economic value as timber, it remains a valuable watershed and holds important recreational, cultural, and ecological values. Consequently, it makes sense for the CDF, California’s preeminent wildland management agency, to insure that chaparral, the state’s most extensive plant community, be managed with as much care as the state’s forests. As we go forward, the need for cooperation and interaction between firefighting and resource arms of the Department will only grow as development pressures and fire frequencies continue to increase. More frequent fires not only threaten communities, but entire ecosystems as well. The danger of type-converting native cover with alien weeds through shorter fire intervals is real and has serious economic as well as ecological consequences.

In respect to chaparral, there is enough fire on the ground already. Carefully planned, strategic vegetation management near communities and continued fire suppression efforts to protect natural resources require closer ties between wildland firefighters and fire ecologists.

As we confront the environmental implications of California’s growing population, CDF should be seen as a highly skilled resource manager and provided the financial support to accomplish such a role. The future of the state’s unique, native landscapes depends on it.

Editor's Note: The following article was written shortly after the Cedar fire and remains extremely relevant today in light of on-going post fire mitigation and continued misconceptions about why houses burn.

Loss and Renewal

Mike Evans

“Hope deferred makes the heart sick, but desire fulfilled is a tree of life.”
- Proverbs 13:12

Sometime when the flames were burning the north face of North Peak near the town of Julian during the Cedar fire, we lost our family's brand new cabin, the “Cuyamaca Rose.” It was our twelve-year dream. A lot of heart went into it.

Our cabin had a metal roof, thick plaster adobe style (straw bale) walls, no exposed wood, boxed in eaves (Hardyplank), dual pane windows, no curtains, 100' clearance to mineral soil in all directions, and the forest understory thinned for hundreds of yards all around. The Cuyamaca Rose had the best chance for survival on the mountain. Yet it burned to the ground. It appears that with the heat from burning tree crowns, the structure fire started on the inside; a piece of furniture, a pillow, a towel, the tablecloth (who knows?) ignited, perhaps spontaneously - and it was all over; unbelievable, but unfortunately, true.

About six weeks before the loss, our friend Betty Birdsell told me “It's the most beautiful home I have ever seen.” All the elements of the surrounding wilderness were used inside... stone, milled woods, timbers, logs, adobe, red clay, earth-tone tiles, western decor. As a family, we had big dreams for many good times in that place.

The months after the fire were rough on all of us. Our hearts broke for those who not only lost their homes, but lost their loved ones as well. Tears will be shed for quite some time in those cases. I pray that families and lives will heal quickly. And I am certain of the land's ability to heal as well.



I have had a life-long love affair with the back-country of San Diego County and an intimate relationship with a certain 10 acre parcel of wilderness, my “North Peak Canyon Ranch.” Our place is surrounded by tens of thousands of wild acres. The land is burnt, but still wild. I pray that it will stay wild, but I know that indiscriminate, post-fire tree cutting, grading, planting, and seeding could change the face of the landscape and not for the better.

Big fires start as small fires. Big impacts on the land can start as small mistakes made by people who mean well, trying to help the land heal, but without knowledge of their long term ecological consequences. There was no single jurisdiction responsible for land and resource management after the 2003 fires. A concerted effort by all affected land managers was needed to address the potential for

Please see Cuyamaca on page 5



News and Links

Tom Chester's Native and Introduced Plants of Southern California website is a priceless collection of identification tips, plant lists for specific regions, and descriptions of trails across southern California:

<http://tchester.org/plants/index.html>

The San Diego Natural History Museum's developing Plant Atlas site is an excellent source of additional botanical info:

<http://www.sdplantatlas.org>

Ione Chaparral

The place was surreal. It was twilight when I finally arrived along this rural California by-way. Long abandoned mining activity was the first thing I noticed, having exposed large deposits of fine, white sands and strange layers of ancient marine sediments all laid down 35 to 57 million years ago during the Eocene; high acidity, lots of aluminum and lousy fertility. One mining pit was filled with water, colored powder-blue from the dissolved minerals and fine sands.

Everything living thing looked stunted, stooped, vulnerable. I jumped over a shallow drainage ditch



Past Land Use. Isolated individuals of sticky whiteleaf manzanita (*Arctostaphylos viscida*) are associated with Ione manzanita. Mine pit filled with water in background.

next to the road to get a better look and it took me awhile to recognize what was under my feet. Creeping along the ground in low mounds were the inter-mingled mats of my quest, Ione manzanita (*Arctostaphylos myrtifolia*), the diminutive namesake of this isolated patch of fragile ecology; the town of Ione itself lies about three miles to the north. First identified in 1886 by Charles Parry, the species survives on a geological island of



Ione Chaparral. Olive green mounds just over one foot tall are individual Ione manzanita shrubs.

approximately 1000 acres, portions of which are being preserved through a cooperative effort between the land owner and various interested parties (including the California Native Plant Society).

Exploring the site with me was Ione native Chris Waters, the Vegetation Management Coordinator for the CDF's Amador-El Dorado Unit near Placerville. He guided me through the elfin landscape, relating stories of his family's long history in the area as well as his adventures while growing up. "It's hard to imagine now," Chris remembered, "but last winter this entire hillside was covered in white from all the manzanita in bloom."

As we dropped down into a small arroyo, we observed an unsettling scene. Large mats of manzanita had died, leaving behind only pale, woody skeletons.

More to come...

Cuyamaca from page 3

localized erosion problems (as necessary) without compromising the integrity of the ecosystem. Unfortunately, many of the decisions and actions taken were not properly thought out and have severely affected the natural landscape.

At the Tree of Life Nursery, a native plant nursery in San Juan Capistrano I founded and co-own with Jeff Bohn, we received numerous calls and inquiries about “What to do after a fire.” This is a summary of how we answered that question.

“In most cases, the best thing to do is NOTHING.”

The Cedar fire moved through several vegetation types and ecosystems in a huge, contiguous area. Migration patterns, wildlife movement, and many factors will affect plant colonization from seed. Latent (dormant) seed on site or new seed imported by animals (from where?) will begin the early stages of herbaceous cover as the ecosystem starts to heal. Many woody shrubs will sprout from the base, though they are burned to the ground or have only dead branches. Many trees, especially oaks may appear dead, but will actually sprout new leaves and branches from old wood. In most cases, the best thing to do is NOTHING. Seeding will not help the land and it could actually be very harmful. The soil surface should not be disturbed, as valuable seed, bulbs, and root systems in addition to many beneficial microorganisms lie just below the surface. The above-ground vegetation relies on a healthy below-ground ecosystem, especially after a major fire.

Fire is an integral part of southern California’s chaparral, woodland and forest ecosystems. As a society, we need to learn to live safely in this environment. A big part of this realization is learning to cope with the problems on and around our land after the fire.

Q: Will the natural plant communities recover?

A: In areas that have not been converted to weedy areas by too many fires, yes, as they have been doing for millions of years.

Q: How long will it take?

A: Recovery happens in stages and each stage is important. The first stage is perhaps the most important. It takes coastal stage scrub 5 - 10 years, chaparral and woodland, 15-20 years, and mixed evergreen forest (mountains) 20-30 years to properly recover and develop healthy stands.

Q: What can I do to speed the process?

A: Nothing. In fact, this is a wonderful opportunity to observe and document the process. Each stage is beautiful in its own way.

Q: Will seeding immediately after a fire help?

A: No. Even if there were no ecological consequences, seeding is a bad idea. The seed is left on the surface of ash where it will not germinate. During the winter months, the soil is too cold, the days are too short for germination. Wildlife, especially birds, (though perhaps scarce) are all too ready to eat the seed, since the local resource has been burned. Any seed that survives the winter usually ends up at the toe of the slope when spring germination begins.

Q: What about grasses?

A: Most grass species for “erosion control” are cool season annuals. They are inexpensive and therefore popular after a fire. If they germinate at all, they will choke out native species, interrupting the first (most important) stage in recovery. The grasses will die in the spring/summer heat and be unsightly, weedy, and flammable. They are of little value to wildlife. They may even re-seed, making the problem worse year by year. In addition, the seed lot may be contaminated with noxious weeds, which you will never get rid of.

Q: Wouldn’t it be OK to seed with native species?

Please see Cuyamaca on page 6

Cuyamaca from page 5

A: In theory, yes, and in some cases, yes. If the area to be seeded was a weed lot before the fire, this might be a good chance to try to get natives back on the site. If it was native vegetation that burned, native seed, bulbs, and roots are in the soil already and will come back on their own. In that case, seeding is not necessary. In fact, the wrong composition of species, or the wrong genetic make-up could cause a lot of damage to the natural area in its early stages of recovery.

Q: Are there cases when native seeds or plants should be planted after a fire?

A: Yes, usually in instances where native plants were absent before the fire and the new goal is to create a naturalistic plant community on bare earth. This would be a step in the right direction.

Q: What are the advantages of not seeding?

A: You get to watch and marvel as nature’s processes unfold. Nature’s results are always a success. You will have a healthy landscape. You save a lot of money and effort.

Q: What about landscape plants?

A: Of course, we promote the idea of naturalistic garden design. For landscape areas (as opposed to wild lands), native plants and seeds are ideal for all the same reasons it is best to leave wild lands alone. Beauty, wildlife habitat, involvement in self sustaining plant community-based design, and cost savings will reward all who appreciate native plants in the garden or in the field.

Please Join the California Chaparral Field Institute and support our research and educational efforts to help promote a better understanding and appreciation for California’s most characteristic wilderness, the chaparral!

_____ \$30 Citizen Naturalist: Fire Bulletin plus one additional benefit (check preference below).

_____ \$50 Chaparralian: Fire Bulletin plus TWO additional benefits (check preferences below).

_____ Signed Book: “Fire, Chaparral and Survival in Southern California”

_____ DVD of the KPBS/Huell Howser’s California’s Green “Secrets of the Chaparral” show

_____ California Chaparral T-Shirt. Please circle size: S M L XL

Your Name: _____

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