



FACES: The Story of the Victims of Southern California's 2003 Fire Siege



Photo courtesy Dan Megna

Lives Lost • Lessons Learned

Robert W. Mutch
July 2007



Setting the Stage

Whether you are a wildland fire professional, a wildland-urban interface resident, a community planner, a builder, or ...

We must *all* learn from the wildland-urban interface deaths described in this report.

Then, we must share what we learn, so that we can *all* live in a safer wildland-urban interface environment.

What is a Learning Organization?

A learning organization is an organization that . . .

- ❖ Creates, acquires, interprets, transfers, and retains knowledge; and
- ❖ Purposefully modifies its behavior to reflect new knowledge and insights.

Six Critical Tasks

A learning organization tries to . . .

1. Collect intelligence about the environment.
2. Learn from the best practices of other organizations.
3. Learn from its own experiences and past history.
4. Experiment with new approaches.
5. Encourage systematic problem solving.
6. Transfer knowledge throughout the organization.

(David Garvin “*Learning in Action*”)

The FACES of the 2003 Fire Siege is a case study of how these six critical tasks provide the foundation of a learning organization. As you read this important report, this quickly becomes obvious. In his dogged and determined quest to unearth the answers to so many questions about how these fires claimed so many people’s lives, Bob Mutch’s actions and findings epitomize *all* six of these Organizational Learning characteristics.

We—and the entire national wildland fire organization—are forever indebted to Bob Mutch for this work. We express sincere thanks to Bob and to Paul Keller—who worked with Bob as this report’s technical editor—for enlightening us all to the significant new knowledge and insights embodied in this report.

Paula Nasiatka, Center Manager
Wildland Fire Lessons Learned Center

The Wildland Fire Lessons Learned Center

A lesson is truly learned when we modify our behavior to reflect what we now know.

www.WildfireLessons.net and www.MyFireCommunity.net and now also www.IMTCenter.net

No Culture for Evacuation Plans

This county has no culture regarding evacuation plans. The only community that had an evacuation plan prior to the Cedar Fire was Palomar Mountain. Where evacuation plans were in place and practiced, like Palomar Mountain, evacuations went well. Where they were not in place, like the majority of San Diego County and the entire perimeter of the Cedar Fire, evacuation did not go well.

We got caught in a relatively rare situation where the fire spread faster than people could evacuate. We have always openly stated that we failed to accurately predict the speed of the Cedar Fire . . .

But what was different was the condition of the vegetation. A lot of the chaparral had died due to the extended drought. We had no firefighting experience, no point of reference, for this kind of fire spread— where none of our models worked and none of our projections worked.

Spot fires had a 100 percent chance of ignition. Houses were catching fire from spotting embers that came from a mile away.



Rich Hawkins
Fire Staff Officer
Cleveland National Forest

Contents

I Preface – What Can They Tell Us?	7
--	---

Section One – The 2003 Fire Siege: What Happened?

II The Fatal Fires' Chronologies	13
III Introduction	21
IV The Stories of the Faces	
The Cedar Fire Victims	
Gary Downs	25
Galen Blacklidge	26
Stephen Shacklett	26

What If 22 Firefighters Had Perished in the 2003 Fire Siege?

The Governor's Blue Ribbon Commission and a host of other after action reviews attempted to make sense of the 2003 Southern California Fire Siege. They all recommended actions to reduce future losses.

But other than simply citing the number of fatalities, these many reports were essentially silent on the deaths of the 22 residents. Remarkably, these 22 lives that were taken by these fires hardly received any attention in these after action reports.

How could such an important discussion be omitted?

If 22 firefighters had died during the Fire Siege of 2003, the reporting process would still be ongoing to document the lessons learned.



James, Solange, and Randy Shohara	27
John and Quynh Pack	28
Ralph Westly.....	29
Robin and Jennifer Sloan, and Mary Peace.....	30
Christy-Anne Seiler Davis.....	31
Steven Rucker.....	31



Hundreds of Scripps Ranch homes will be totally consumed when the Cedar Fire burns through this community.

Photo courtesy John Gibbins, San Diego Union-Tribune newspaper

When wildfire threatens an area, those at risk have three general options:

1. They can evacuate well in advance of the fire front;
2. They can prepare themselves and their property and stay; or
3. They can wait until the fire front arrives and leave at the last moment.

This report will examine all three of these options.

Paradise Fire Victims	
Nancy Morphew.....	36
Ashleigh Roach.....	38
The Old Fire Victims	
James W. McDermith, Chad Williams, Charles Cunningham, Gene Knowles, Robert Taylor, and Ralph Williams.....	43

Section Two – The 2003 Fire Siege: The Aftermath

V Escaping Death – The Stories of the Survivors

Cheryl Jennie.....	45
Rudy Reyes.....	50
Allyson Roach.....	51
Promoting a Sense of Responsibility for Living in a Fire-Dependent Place.....	52

VI Success Stories

Mountain Area Safety Task Force Critical in Quick Evacuation of 70,000 people	53
Ventura County Has Beneficial Success in Responding to Fire Siege.....	54
Fire Councils Prove Their Worth During 2003 Fire Siege.....	55
Follow-up Success Story: Cedar Fire Prompts Need for Chimney Canyon Fire Safe Council at Scripps Ranch.....	58

VII After the Fire Siege: Sixteen More People Die	60
---	----

Section Three – When Wildfire Threatens Your Home – Should You Leave or Stay?

VIII Fire Safe Homes – A Homeowner Responsibility	62
Our Land Managers Need to Heed Potential “Fire Threat Zones”....	64

Taking Steps to Ensure a Fire-Safe Environment in the Interface

If homeowners can see how vulnerable they are, they might try and take appropriate actions. We have developed an assessment technology based on the literature in Australia, the United States, and the Colorado Springs model. We want to give people an idea of their exposure by clicking on a parcel to see where they stand in a report card fashion . . . So people can see where their parcel stands in terms of risk.

We want to develop a suite of tools that can be applicable across the state. The assessment needs to be based on the weakest link, like a wood shake roof. If that is not addressed, other aspects will be compromised. The assessment process being developed is intended to help homeowners know where to start in making their property more fire safe.

Dr. Max Moritz, Fire Science Professor
University of California – Berkeley

IX Don't Flee – Prepare, Stay Home, and Defend	65
Another Example of "Leave or Stay" Working in This Country.....	68
2,500 People Shelter-in-Place at Barona Casino—Avoid Cedar Fire	69
Prior Fuel Treatments Near Esperanza Allow Safe Shelter-in-Place...	69
X What Should Your Decision to "Leave or Stay" Depend On?	71
Sheltering in Place – A Model for the Future Located Outside San Diego.....	74
Simple Precautions Can Make Wildland-Urban Interface Homes Survivable.....	75
"Prepare, Stay, and Defend" – It Can Be Accomplished Here.....	76
Section Four – Lessons Learned	
XI Summary of Key Lessons Learned.	78
XII Should We or Shouldn't We Be: Introducing Fire in These Chaparral Ecosystems?	80
XIII 12 Critical Lessons Related to the 22 Resident Deaths	84
XIV Passing Through a Safety Portal to Help Ensure That Others Will Now Survive	91
XV Conclusion – Vital Next Steps	94
Section Five	
XVI Acknowledgements.	96
XVII References	101

I Preface

"To actually see the faces of these people who died in the 2003 Fire Siege and to read their compelling and informative stories . . ."



What Can They Tell Us?

I closely follow southern California's 2003 Fire Siege in the print and visual media. I become—*and still am*—shocked at the tragically huge number of people who are killed by these fires: 22 residents and 1 firefighter.

A few months after these fatality fires, I search the Internet to download lessons

learned and after action reports from this significant event. I want to discover who these people are who lost their lives. I want—yes, *need*—to know their stories.

To appropriately honor these individuals, I realize that I also need to see every one of their faces.



Photo courtesy Dan Megna

Why?

The fires of the 2003 Fire Siege claim 23 human lives. How? Why? What can we learn from these tragedies?



Top photo of 2003 Fire Siege courtesy Associated Press. Middle (courtesy Craig Logan) and bottom (courtesy Mark Olsson) photos taken as Cedar Fire burns into community of Scripps Ranch —where hundreds of homes are destroyed.

But, remarkably, all of the 2003 Fire Siege follow-up reports are mysteriously silent on these people's deaths. I am incredulous. There are no faces. All I can find are numbers—mere columns of statistics. In fact, the meager accounts of these people's deaths that I do find would not begin to even provide an appropriate footnote to this horrible tragedy.

Lessons Learned

In February 2006, I attend a workshop sponsored by The Nature Conservancy at the University of California at Berkeley. Here, fellow participant Andrea Tuttle, former Director of the California Department of Forestry and Fire Protection, comes to my rescue.

Before the workshop concludes, Andrea provides me with many pages of detailed information, mostly from newspaper accounts, about the people—the *faces*—of that 2003 Fire Siege. After so many months of searching for answers, to actually see these people and to read their compelling and informative stories finally provides me with some measure of closure. Next, I needed to share all that I had learned.



People evacuating their homes to escape the outbreak of the fatal Santa Ana wind-driven fires clog Interstate 15 on Sunday morning. Photo: Courtesy of John Gibbins, San Diego Union-Tribune newspaper.

This report is therefore dedicated to the memory of these 23 people who fell—forever—to the fast-advancing flames of the Cedar Fire, the Paradise Fire, and the Old Fire. My hope is to help ensure that their deaths are not in vain. This report is therefore intended to honor their stories and to share the resultant lessons learned with this country’s wildland fire community, its continually growing wildland-urban interface publics, and its land managers and policy makers.

Three Key Objectives

Thus, this report honors each of the 2003 southern California Fire Siege victim’s

stories and shares the associated—and vital—lessons learned by:

- ❖ Explaining each of their circumstances at the time of their entrapment,
- ❖ Using their stories as a catalyst to motivate others into making the appropriate changes in the wildland-urban interface for the future survival of others, and
- ❖ Reviewing the already noted lessons learned and developing additional wildland-urban interface learning insights—with an emphasis on the successful Australian strategy of “*Prepare, Stay, and Defend.*”

Robert W. Mutch

July 2007



Photo courtesy Howard Lipin of the San Diego Union-Tribune newspaper

An underlying and key objective of this Wildland Fire Lessons Learned Center report is to learn everything we can from the 23 human deaths caused by the 2003 Fire Siege.



Photo courtesy Brian Hom



Deaths and Injuries

The blazes of the 2003 Fire Siege—especially the Cedar and Paradise fires—evacuate tens of thousands of residents. Thousands of people are displaced from their homes, communities, schools, and workplaces. Besides the 23 deaths, a total of 23 people are also admitted to the regional burn center with burns covering from 1 to 85 percent of their bodies. These fire injuries include smoke and heat inhalation. The burn center will use 120 square feet of donated skin on these burn victims.

Compromised Initial Attack; Depleted Resources

On October 21, 2003, the first fire of the siege, the Roblar 2 Fire, ignites in the practice range at Camp Pendleton Marine Corps Base in San Diego County. The Roblar 2 Fire is followed in rapid succession by 13 more major wildfires: Grand Prix/Padua, Pass, Piru, Verdale, Happy, Old, Simi, Cedar, Paradise, Mountain, Otay, and Wellman.

These 14 large fires—burning simultaneously—compromise initial attack capabilities and deplete vital resources needed for the conflagration's major fires.



Wildfires rage across San Diego area in late October 2003, fueled by dry vegetation and pushed by strong Santa Ana east winds. Smoke from the massive—and fatal—Cedar Fire completely obscures the city of San Diego.

Images courtesy Jacques Descloitres, MODIS Rapid Response Team, NASA.



First 14 Hours: Cedar Firestorm Leaps From Neighborhood to Neighborhood

Thousands of rural and backcountry residents jumped into cars, rode on horseback, and drove in motor homes yesterday, fleeing a firestorm that leapt erratically from neighborhood to neighborhood.

At least 200 homes burned and others were being consumed or threatened last night in Ramona, Barona Mesa, Poway, Alpine, Crest, Blossom Valley, Flinn Springs, Lakeside, Santee and Harbison Canyon.

Firefighters and law enforcement officers raced along streets warning residents to get out as flames bore down on community after community, consuming dry brush, burning through steep canyons and racing up hillsides . . .

As they attempted to get everyone out of the fire's path, they were hampered by shifting winds that blew the fire in several directions. At times, they had to watch homes burn as they moved on to warn others . . .

Excerpted from the October 27, 2003 San Diego Union-Tribune Newspaper; Reporter Irene McCormack Jackson

II Fatal Fires' Chronologies – The First 14 Hours

Saturday, Oct. 25, 2003

The Genesis of California's Largest Wildfire Ever: Lost Hunter Lights a Signal Fire

5 p.m.

It is a breezy Saturday afternoon in southern California's Cleveland National Forest. A 33-year-old hunter is lost. For the last few hours—dehydrated and disoriented—he has wandered inside the steep and rugged—roadless—Cedar Creek Falls area. As the sun begins to disappear—desperate for help—he lights a small signal fire.

5:35 p.m.

Herb Haubold, who lives in the rural Barona Mesa community that borders Cleveland National Forest lands, spots a smoke column. He calls 911.

5:38 p.m.

A mountain bike rider reports—from his cellular phone—seeing the fire.

5:43 p.m.

Someone in the nearby ranch-style San Diego Country Estates community several miles away calls in the fire to the 911 dispatch center.

5:44 p.m.

The Federal Aviation Administration relays that an airline pilot has seen the smoke from the air.

5:50 p.m.

A helicopter pilot, San Diego County Sheriff's Deputy Dave Weldon, who is flying over the area looking for the lost hunter (the hunter's separated partner called 911 to report him missing) says the fire's flames cover half a football field-sized area.

He radios for helicopters and air tankers from nearby Ramona Airport.

5:53 p.m.

A U.S. Forest Service dispatcher informs that federal rules prohibit flying aircraft any later than 30 minutes before sunset—now 14 minutes away.

Ten engines, two suppression hand crews, and two water tenders are dispatched to respond to the fire.

6:09 p.m.

The fire is now 20 acres. It is burning in 12-foot high chaparral on the Cleveland National Forest one-half mile from the nearest dirt road.

Firefighters are enroute to nearby San Diego River canyon to attempt to check the fire's spread there.

6:19 p.m.

An order is placed for 15 more hand crews, two more water tenders, and one engine.

Rich Hawkins, the Cleveland National Forest's fire staff officer, realizes that this fire is burning in the same approximate area where the fatal

44,000-acre Inaja Fire raged another dry fall season 47 years before. That blaze overran and killed 11 Forest Service firefighters. Hawkins will later tell the North County Times newspaper: "*That was heavy on our minds that evening.*"

6:41 p.m.

The wind is not affecting the fire. It is holding at 20 acres.

But an updated weather forecast calls for east winds after midnight that could increase to 35 mph—with 50 mph gusts. Humidity will be in the 8-16 percent range overnight and drop to a low 2 percent tomorrow.

10 p.m.

The fire is 100 acres.

11:22 p.m.

Authorities plan to announce *voluntary* evacuations of the nearby 10,000-resident San Diego Country Estates community.

11:48 p.m.

Authorities change their minds. The evacuations will be *mandatory*.

Sunday, Oct. 26

Santa Ana Winds Push Fire on 28-Mile Trail of Death and Destruction

12 midnight

The hope of containing this blaze—the Cedar Fire—in a triangle of ground lined by Eagle Peak Road on the west and north, Cedar Creek on the south, and Boulder Creek on the east, is lost.

Whipped by Santa Ana winds, the fire jumps the San Diego River and roars toward the residences of the 10,000 people living in San Diego Country

Estates—at a time when the majority of the population is asleep in bed.

Another finger of the fire pushes south through a canyon and runs toward the area of El Capitan Reservoir.

12:09 a.m.

The mandatory evacuation is underway.

San Diego County Sheriff's deputies take to the air in helicopters to try to

Merely a Few of People's Fire Escape Stories

In the community of San Diego Country Estates, at 1:15 a.m. in the 26700 block of Matlin Road, the Cedar Fire burns its first house.

Before this infamous, record-setting run is done, the fire will race 28 miles in 14 hours and consume 2,231 more homes. It will kill 15 people and will injure 113 others.

With thousands of people evacuating from the front of the head of this fire's wind-driven swath, often with only seconds to spare, it is impossible to calculate the number of "near misses"—the people who barely make it out, or who choose to stay in their homes and survive.

Some of these stories—merely a few, and therefore just a fraction of the total number of personal fire escape experiences that people endure during the Southern California 2003 Fire Siege—are documented in this chronology and throughout this report.

warn residents of the approaching flames and fire.

1 a.m.

The fire has stormed two miles from the San Diego River. It enters San Diego Country Estates.

1:15 a.m.

In the 26700 block of Matlin Road, the Cedar Fire burns its first house.

Twenty-five miles northwest of the raging Cedar Fire, an arsonist starts a new fire near Paradise Creek Road.

The Paradise Fire Blows Up 25 Miles Away

1:30 a.m.

This new Paradise Fire start is pushed by 35 mph winds. Firefighters are having trouble keeping up with this moving blaze.

California Department of Forest and Fire Protection (CDF) Battalion Chief Kevin O'Leary will later tell the North

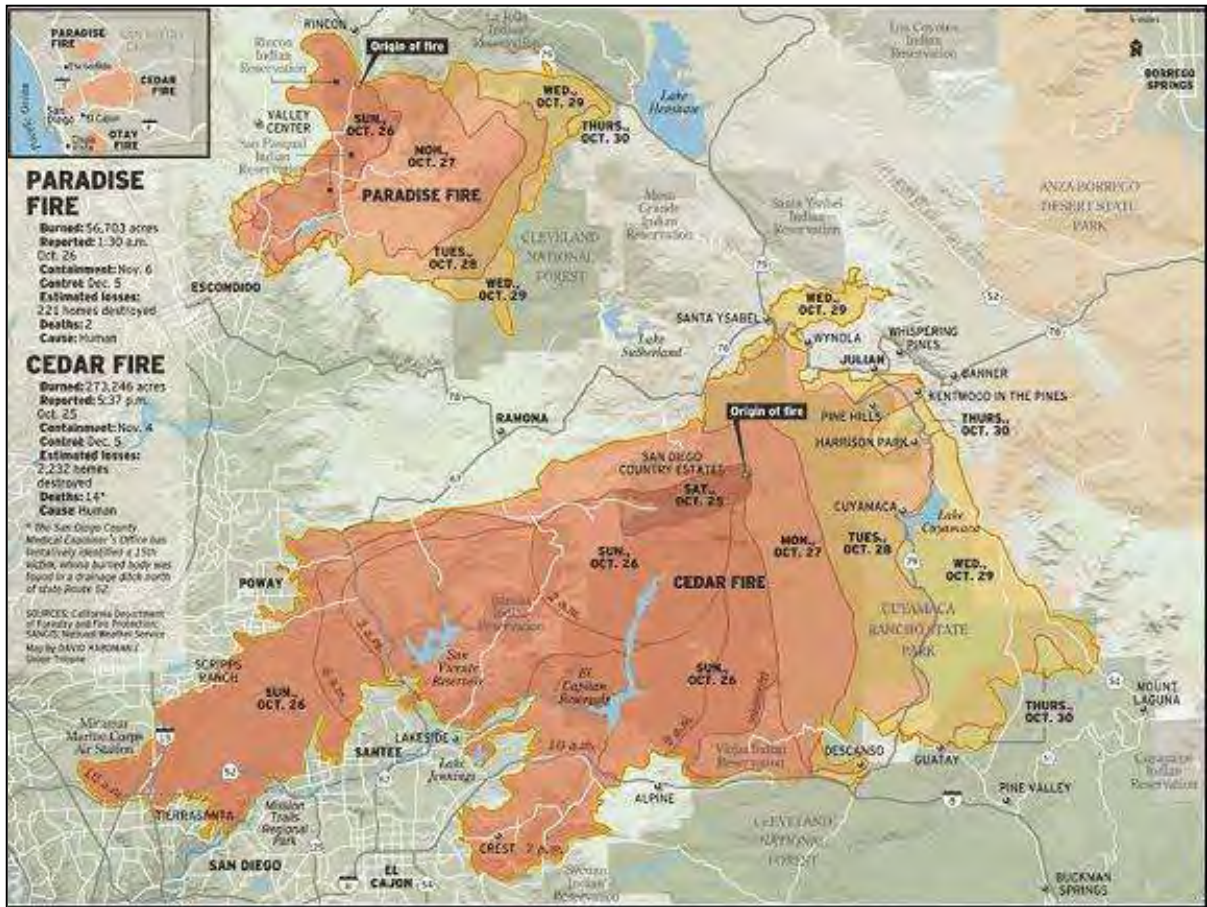
County Times newspaper: *"It was spotting ahead of itself. That was the hardest thing to keep up with. You had spot fires a quarter mile and half-a-mile out in front of the main fire."*

Sixty-five engines are ordered for this new blaze. *"But because the Cedar Fire was also exploding, we didn't know when we were going to get them,"* O'Leary tells the newspaper.

A neighbor calls Valley Center resident Nancy Morphew to warn her of the approaching flames. Morphew will nonetheless become the Paradise Fire's first victim. [See Nancy Morphew's story, page 36.]

1:46 a.m.

Authorities inform the nearby Barona Casino operators that the Cedar Fire is headed their way. They suggest the casino evacuate all people.



Map courtesy San Diego Union-Tribune newspaper



2003 Fire Siege

Photo on left courtesy Michael Campell. Photo on right courtesy Associated Press.

The Death and Destruction Comes Quickly . . .

. . . The death and destruction came quickly, as the largest fire in state history surged down the canyon, creating two hours of terror and panic. Witnesses said the people who died had little chance.

Some died in their cars, trying to escape as the fire roared in from the northeast . . . Some were trapped in their homes. Others were turned back by flames and smoke.

Some made split-second decisions that cost them their lives. Others made equally snap decisions that spared them from certain death.

It got so bad, so quickly, that fire crews had to turn back. Many residents say they had little or no warning.

"It's sick. Nobody can figure out what happened," said Fred Wallhauser, a relative of one of the victims who burned to death in her home.

While some residents say a lack of warning was partly responsible for the loss of life Sunday morning, others put the blame on conditions beyond anyone's control . . .

Excerpted from the November 1, 2003 San Diego Union-Tribune; Reporters Michael Stetz and Chris Moran

2 a.m.

The Barona Indian Reservation fire station employees are informed that the Cedar Fire should reach it in less than 20 minutes.

Like many others, Lakeside resident Gary Downs—who lives on his 40 acres down off Wildcat Canyon Road just east of the Barona Indian Reservation—tries to escape the Cedar Fire in his car. Wildcat Canyon Road—winding and steep—runs through the reservation. Downs becomes this fire's first fatality. His body—and those of his two cats—will be found beside his burned car. [See *Gary Down's story, page 25.*]

Marlon "Lonnie" Bellante lives near Downs' 40 acres. Bellante awakes to a phone call that warns that a firestorm is quickly approaching. He and his wife and two children must flee immediately. They jump from bed, hurry into their truck, and "run for their lives." But the fire cuts off their escape route to Wildcat Canyon Road. Bellante decides to try to drive to a nearby pond. Before

they can reach the water, the fire surrounds them. The Bellante's hurry on foot to a dry riverbed, where they will huddle for hours as the fire makes runs all around them. All family members receive burns and the wife is hospitalized for two weeks. As they successfully hunker down in this riverbed, several people who live near the Bellantes will not be so lucky.

Bellante rents three residences, one to Galen Blacklidge and husband Jim Milner, one to Ralph Westly, and one to husband and wife John and Quynh Yen Chau Pack. As they try to escape the sudden flames of the Cedar Fire, four of these people will be killed. Before he flees, Ralph Westly drives to his nearby neighbors to check on the women who live there. The flames overcome him on their property. [See *his story, page 29.*] Three of these neighbors, Robin Sloan and her daughter Jennifer, and family member Mary Peace, will also die. [See *their story, page 30.*]

“Many residents were angry about the lack of warning. Someone had to know the fire was heading their way, they said.

A few were roused by sheriff’s deputies. But that was at the last second, they said, before residents could do much of anything besides make a crazed dash for their lives.

But fire officials argue that the people who live in such areas—particularly during fire season—should never delay when fire is spotted anywhere close.”

San Diego Union-Tribune Newspaper

The Cedar Fire’s death toll will be the greatest here in a five-mile swath that stretches from east of Barona Casino to San Vicente Reservoir.

Also at this time, Valley Center resident Lori Roach calls fire dispatch to ask if their family should evacuate from their Station Road home. Within hours, the Paradise Fire’s overnight rampage will take her 16-year-old daughter as its second victim. Her 20-year-old daughter will barely escape the flames. She will be severely burned over 85 percent of her body. [See the Roach family story, page 38.]

2:30 a.m.

San Diego Country Estates residents Jim and Melanie Piva wake up to the smell of smoke. Then they hear the sound of firefighters yelling “Get out! Get out!” Because they believe their cul-de-sac home will be shielded from the Cedar Fire’s approaching flame-front by the adjacent golf course grounds—they stay inside their home. And survive.

Lakeside resident Richard Hess wakes up to use the bathroom. He looks out to see “an incredible” wall of fire. “If my husband hadn’t gotten up to go to the bathroom, we wouldn’t have gotten out,” Marilyn Hess will tell the North County Times newspaper. The couple quickly snatches four family photos off the wall, grabs the cat, and safely drives away. Later, on television at their in-

laws’ house, they will watch the Cedar Fire burn their house to the ground.

Old Barona Road resident Diane McLean wakes up and smells the smoke. Still half-asleep, she grabs the phone to call her cousin, but—fortunately for several lucky people—she inadvertently dials the home of her sister. Her sister’s husband answers. Once awake, he, too, now smells the smoke—and then looks up to see the fire approaching down a nearby ridge. He phones other neighbors, who phone other neighbors—until their entire neighborhood is alerted. They all successfully escape the moving firestorm.

Meanwhile, Diane McLean also drives away from her home, hurrying through her Lake View Hills Estate’s only exit, which leads to Muth Valley Road—the only route to Wildcat Canyon Road and, hopefully, to safety. She makes it. Only 15 minutes later, however, other people won’t be so fortunate.

2:45 a.m.

Shortly after Diane McLean successfully drives out of her Lake View Hills Estates neighborhood to safety, several escaping residents from this same neighborhood are cutoff by a

huge wall of smoke and flames:

- Larry Redden, a retired firefighter, returns home—where he manages to successfully defend his house with garden hoses and buckets. [See *Cheryl Jennie's story*, page 45.]
- Robert Daly also drives back to his house. On foot, he tries to make it down an access road to the nearby San Vicente Reservoir. But within 50 yards, the surging flame and heat are too overbearing. He turns around and hurries back toward his house.
- Neighbors James and Solange Shohara and their son Randy drive down this road toward Daly. With the smoke and fire blowing everywhere, Daly warns them about trying to flee on this road. The Shohara's continue on. It will be the last time anyone sees them alive. [See *the Shohara's story*, page 27.]
- Like the Shohara's, Lake View Hills Estates residents Cheryl Jennie and Steve Shacklett try to outrun the flames by driving away down Muth Valley Road in two vehicles. She will make it. He won't. [See *Steve Shacklett's story*, page 26.]

Robert Daly and his wife end up escaping the fire by jumping into their swimming pool.

3 a.m.

In an attempt to warn sleeping residents of the approaching Paradise Fire, firefighters—where they can—are filling the early morning's darkness with an eerie wail of air horns and sirens.

Down Wildcat Canyon Road, approximately one mile below Muth Valley Road, Rudy Reyes is awakened by a warning phone call from his sister. He opens his eyes to see the orange glow approaching. He first wakes up his mother and brother and ensures that they are both into their cars and driving

away. Then, by the time Rudy jumps into his Toyota, in the hot black air—thick with smoke—the vehicle's engine won't turn over. Rudy tries to make a run for it through the fire. This 30-second sprint will change his life forever. [See *Rudy Reye's story*, page 50.]

3:45 a.m.

Lakeside resident Liza Pontes' family awakes to find that their house is surrounded by fire. Wrapped in wet towels—with flames burning at their feet and flashing overhead—they run to their car. Driving through the fire, they watch a next door neighbor's manufactured home explode into flames.

5:30 a.m.

Like so many people caught in the paths of the Cedar and Paradise fires, the Ortega family—who live in Valley Center—is never told of the Paradise Fire's approach. The Ortega parents awake to smoke and flames. They grab their kids and run to the family's van. But the fire is everywhere. There is no where to go. With towels over their faces, they huddle together in their vehicle as—nearby—the flames devour a truck, their next door neighbor's home, a car, a flock of chickens, and, finally, *their* home. As the inferno begins to lick at their van—before their tires melt—they are able to drive away. It will take months for their children to overcome the trauma of this single night.

8 a.m.

The Santa Ana winds are now propelling the Paradise Fire in all directions.

Officials gather in Valley Center to devise a comprehensive evacuation plan. San Diego County Sheriff's supervisors call in every available deputy.

"We had fire fronts everywhere" making it nearly impossible to establish a line, CDF's Battalion Chief O'Leary—who also doubles as Valley Center's fire chief—will later tell the North County Times newspaper. "We sounded sirens, air horns, evacuated people. There was very little actual firefighting until we were sure that everyone was notified."

8:30 a.m.

The thick, smoky sky over Valley Center is black as night. Drivers must turn their headlights on to see. A car drives down the road with all four tires on fire. An officer bursts into the ongoing Valley Center fire strategy session and shouts: *"The fire's behind the station!"* The official evacuation plan that these officials are working on is never implemented.

9 a.m.

The Cedar Fire's assault extends into the community of Poway. Firefighters knock on the front door of Sycamore Canyon Road resident Everett Siehe's house to tell him that he must evacuate. But Siehe explains that he has seen this same unfolding scenario before—four times. That's why he has "fire-safed" his house. All the vegetation has been cleared every where around it. But he is still told that 100 firefighters could not stop the fire's charge toward his home.

Siehe, nonetheless, stays put in his house. It never burns.

9:47 a.m.

The Cedar Fire jumps three multi-lane freeways: Interstate 15, Highway 52, and Highway 63.

10 a.m.

The Cedar Fire enters the upscale 28,000-population Scripps Ranch community.

An emotionally devastated woman on a Scripps Ranch sidewalk is crying. She calls 911 on her cellular phone: *"I can see flames getting bigger and bigger and bigger. And there's no one here to put them out."*

Crisis counselors are already being summoned to staff the various evacuation centers that will be set up during this day—as both the Cedar and Paradise fires continue their rampaging assaults.

Hunter Who Set Cedar Fire Sentenced

The lost hunter who admitted unintentionally setting the Cedar Fire was sentenced by a federal judge to five years probation, six months to be spent in minimum-security confinement, and ordered to pay \$9,000 in restitution—monies targeted for teaching outdoor safety to hunters and hikers. The 35-year-old was also required to complete 960 hours of community service.

Home Sweet Home: They are Safe

Old Barona Road residents Carol Tilden and Bill Bream awake to the sounds of someone blaring warnings about the approaching fire. To the northeast, above the ridgeline, they look up to see a wide red glow. They jump into Bream's Chevy Tahoe and try to make an escape in the wind and smoke to Wildcat Canyon Road. Embers blow by them. Grass and brush is catching fire. And when they get to Wildcat Canyon Road, they find a backlogged line of desperate motorists all trying to get out. Bream realizes that one single collision could entrap everyone from ever making an escape down the road to the south to safety—away from the deadly, out-of-control fire. He and Tilden decide to turn around and see if they can make it back home. When they get there, the fire has already made its runs past their house. The residence sustained only minimal damage. Bream and Tilden get out of their Chevy Tahoe and go back inside. They are safe.



Trying
To
Flee the
Cedar Fire.

The stories of these individuals can motivate others to take appropriate precautions prior to the onset of future wildfires.

III Introduction

That Quickly Approaching Firestorm . . .

A teacher. A six-foot four-inch construction superintendent. A five-foot two-inch outdoors woman who loves to dance and cook. A nurse. A 50-year-old father and small business owner found with his two cats near his car, crammed with his valuables. A 45-year-old Wal-Mart employee. A husband and wife married 40 years and their 32-year-old son, an expert body boarder—rated among the top 100 of the sport's

competitors in the world. A 28-year-old man with the body of his dog cradled in his arms. A 17-year-old high school senior who has just gotten her driver's license and likes to go to football games. A 51-year-old horse breeder who is trying to reach her Arabian horses. A 77-year-old retired sales clerk who—at 2 a.m.—has gone off to warn his neighbors of the quickly approaching firestorm.

A neighbor would say later that he did two tours in Vietnam, but he was never as frightened over there as he was right here on Station Road that morning—with the flames and heat and wind of the Paradise Fire bearing down on them.

On one particularly significant issue, these many 2003 Fire Siege reports were essentially silent: the terrible and tragic deaths of 22 people.

These are some of the local residents—they could have been your own neighbors—who will perish in the quick onslaught of flames in southern California’s October 2003 Fire Siege when 14 major fires conspire to become the most devastating series of wildfires in California’s history.

Fires’ Impacts Stagger Imagination

The impacts of these fires stagger the imagination. Twenty-three people killed. A total of 3,710 homes totally destroyed. Almost 800 thousand acres—more than 500 square miles—burned. Up to 14,000 firefighters out on the firelines. Tens of thousands of people evacuated.

Not everyone, however, will make it out alive.

The Governor’s Blue Ribbon Commission and a host of other “after action review” reports attempt to make sense of this horrendous fire siege. To reduce future losses, a series of actions are recommended. Yet, on one particularly significant issue, these many reports remain essentially silent.

Other than citing the number of fatalities, in all of these follow-up reports, the terrible and tragic deaths of these 22 civilians—taken away from us forever by wildfire—get practically zero attention.

It may well be that these “civilian” victims are forgotten largely because the various wildland fire services view them as “a sheriff’s department issue” and the various sheriffs’ departments view these

perished human beings as “a wildland fire issue.”

For whatever reason—except in newspaper accounts¹—the important stories and significant circumstances surrounding these individuals at the time of their tragic deaths remain essentially untold.

In every instance but one,
those who die
while evacuating
are leaving homes
that are eventually
destroyed by the fires.

This Report’s Objectives

Therefore, the objectives of this report, sponsored by the Wildland Fire Lessons Learned Center, are to highlight—and remember—these people’s stories. To honor them by learning everything we can from their tragic deaths.

All victims of the Cedar and Paradise fires succumb to the flames, either in their homes or in the process of evacuating their homes. One of these people who is burned to death is fleeing from a home that, as it turned out, *did not even burn*.

¹ The San Diego Union-Tribune and the North County Times newspapers did an especially thorough and informative job of reporting the circumstances of the Fire Siege of 2003, including the stories of those who died.

Some are Concerned About the Welfare of Their Neighbors

The faces of this tragedy belong to everyday people who did everyday tasks in very special ways. On October 26, 2003, some of these people are concerned about the welfare of their animals and die trying to save them. Some of them are concerned about the welfare of their neighbors. One is an outdoor-loving person trying to save her home. She dies while doing so—but not before perhaps saving a neighbor's life with her warning knock on the door. Two different couples flee—at the same time—in separate vehicles. In both cases, one partner lives and the other dies. Another of the faces is a sparkling high school junior who is overcome by a fire and dies in an evacuating car—just 500 feet from a fire station where, in her short life, she had made many friends.

IV The Stories of the Faces

The Cedar Fire – A Wildland-Urban Interface Conflagration

In its first 36 hours, the 280 thousand-acre Cedar Fire spreads at a remarkable rate of 3,600 acres per hour. Described by one astounded observer as “a blowtorch,” at one point this fire consumes 40,000 acres in a single hour.

The Cedar Fire rapidly becomes a wildland-urban interface conflagration.

Early in this incident, neighborhoods are directly threatened. The potential loss of human life becomes a dire reality.

Operational priorities therefore shift to the protection of civilian lives.

At one point
this fire consumes
40,000 acres
in a single hour.

Evacuation notification to residents is issued primarily by door-to-door contact, or via loudspeakers on emergency vehicles (San Diego County Safety Review 2003).

Despite the blowtorch fire behavior during the Cedar Fire, there are still examples of people staying at home, or returning home, and surviving.

Success Stories, Too

Although the losses from the 2003 Southern California Fire Siege were horrendous, many success stories also emerged from this tragic event.

Some of these successes, including the significant work of Fire Safe Councils, are chronicled in this report.

We must also recognize that the fire services were extremely challenged on this fire siege's unprecedented simultaneous occurrence of 14 major fires. Despite these demanding and difficult circumstances, these people's heroic firefighting efforts—under almost impossible Santa Ana wind and fuel conditions—saved untold numbers of homes *and* lives.

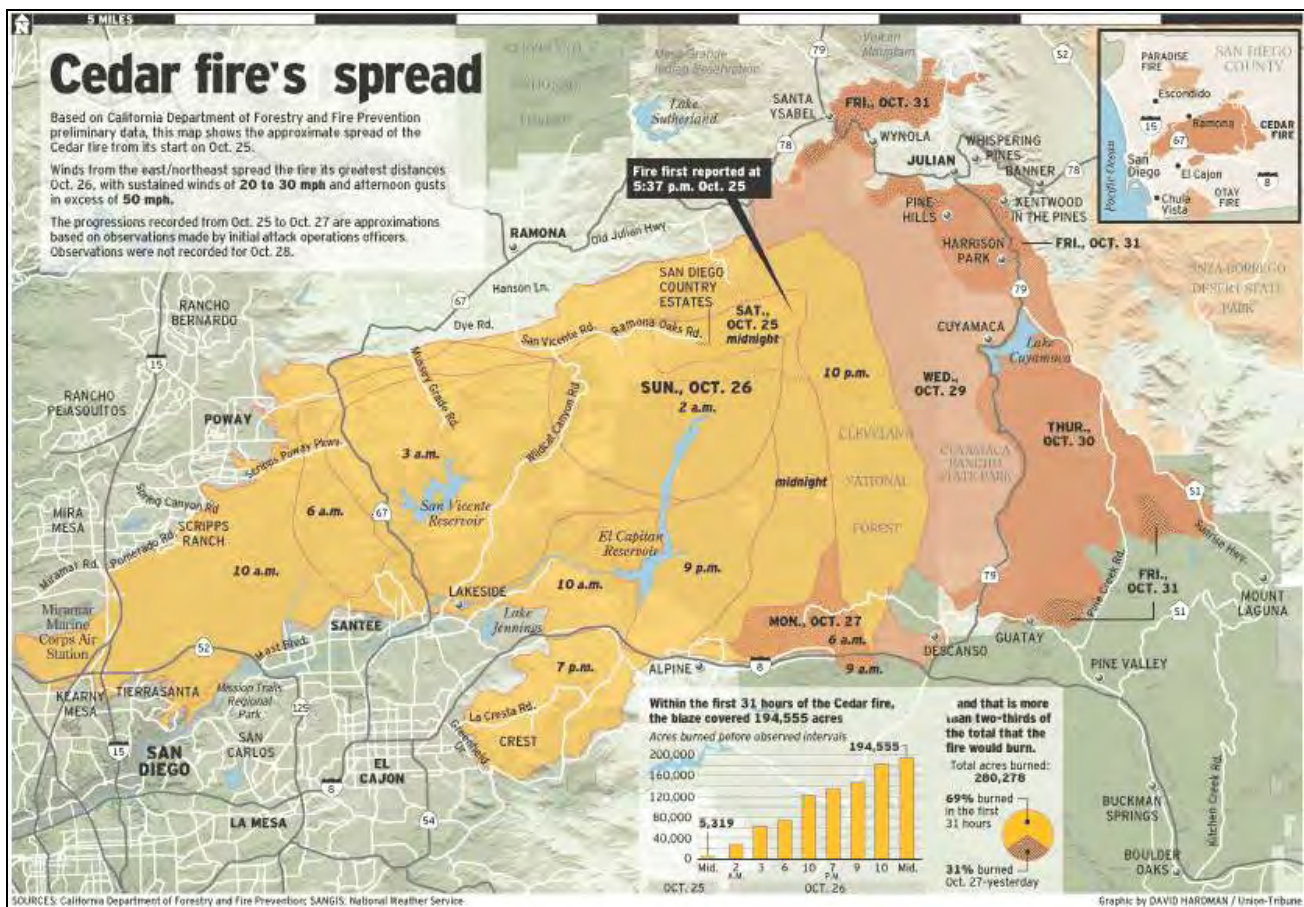
Our Community Lost Its Sense of Security

I was awakened in the predawn darkness on Sunday to be informed of the smoke filled skies and the illuminated hills northeast of town. Turning on the television, I was shocked to see the images of the fire that had already burned 6,000 acres.

In disbelief, I listened as the news commentator said that homes were burning and the flames were racing west through Wildcat Canyon and Moreno Valley—pushed by fierce Santa Ana winds. By 3 p.m. that day, the fire had burned over 100,000 acres and there was no end in sight. But now the monster had a name.

In the Cedar Fire, our community lost its sense of security as many homes burned to the ground. But worse, we lost the lives of so many friends, neighbors, and loved ones. Through misty eyes I read the list of the 15 who perished by fire in the Cedar Fire.

Richard White, President of Lakeside Historical Society
November 2003





Gary Downs



The Cedar Fire is approaching fast. Gary Downs grabs his 2 cats, leaves his home, and jumps into his car. In the early morning dark and wind-driven smoke and flames, he flees down Wildcat Canyon Road. He becomes the Cedar Fire's first victim. He will not be the last. With little notice of the looming early morning firestorm, many people living here off Wildcat Canyon Road—the appealing tranquil rural area north of the community of Lakeside—will be killed by the fire. Gary's body—and those of his cats—are eventually found near his car. Packed with his belongings, it had veered off the road. His dearly loved house, that he had purchased two years before here on 40 acres two miles north of the Barona Indian Reservation, also burns.

Gary Downs, 50, missed a Sunday lunch appointment with his 20-year-old daughter, Erin. This was totally unlike this loving and devoted father. His former wife of 21 years, Mary Ann Downs—who'd already heard the first news reports about the fire—had a terrible feeling.

On Monday—with still no word from him—Gary's 17-year-old son, Sean, along with his daughter Erin, and Mary Ann spent the entire day searching for him. They looked in all the makeshift fire evacuee shelters in high schools, they called hospitals, and they contacted the various police agencies. That afternoon, they were finally allowed to drive up Wild Cat Canyon. Gary's house was gone. There was no sign of Gary or his car. On Monday night, authorities officially confirmed his family's worst fears. Gary had perished in the Cedar Fire.

Gary operated his own successful business—that he started in 1987—that provides motorcycle escorts for funerals and parades. He was known for his good-natured tenacity. "Gary would make a joke—even when things were going bad for us," said Joe Marin, who worked alongside Downs for 15 years. "He was always going forward, never going back—always fighting." Marin said that whenever a family couldn't afford their company's services for a funeral, Gary would donate the services for them.

Mary Ann Downs said that Gary was a compassionate person who loved listening to all kinds of music and was an avid reader of history. He also volunteered at KPBS Radio—reading the newspaper for the blind.

Galen Blacklidge



The Cedar Fire is approaching fast. In separate cars, Galen Blacklidge and husband Jim Milner flee their residence near Wildcat Canyon Road. In blinding, thick smoke and heat, Milner's car stalls out. As he walks on in the dark, looking for any sign of Galen and her escape, he is picked up by neighbor Molly Sloan, 85, who is also trying to flee the flames in her car. They make it to safety in Sloan's car, hoping that Galen—and their other neighbors—did likewise. Unfortunately, the Cedar Fire catches Galen and she perishes. Jim Milner, her husband, will be the one who goes

back into the fire's swath and finds her—50 feet from her car.

At a special public ceremony marking the Cedar Fire's one year anniversary, Jim Milner speaks plainly about the horror of discovering his wife's burned body near her car after the fire's surprise attack that night. He also talks of resilience and hope. *"I'm filled with gratitude. Gratitude for all the support and nurturing, the love and the beauty that's still with us. I look at this day, at the clouds and the faces, the light pinging off the leaves of the trees, and I think, my God, life is astounding."*

Milner's wife, Galen Blacklidge, 50, was an art teacher at a local design school who, friends say, "loved her job." She leaves behind a daughter and granddaughter. One friend described her as a "jewel." *"Galen was really special. One of the best people I've ever known."* Another friend said that if you

rearrange the letters of her first name, it spells "Angel." Blacklidge and Milner's residence that they evacuated burned in the Cedar Fire.



Photo courtesy Scott Linnett
San Diego Union-Tribune Newspaper
Tom Medvitz (right), who also lost his home to the Cedar Fire, embraces his neighbor Jim Milner, whose wife, Galen Blacklidge, perished trying to flee the blaze.

Stephen Shacklett



The Cedar Fire is approaching fast. Around 5 a.m., Cheryl Jennie, Stephen Shacklett's 23-year partner, looks out the window and sees flames. They decide to flee their Lakeside area home in two vehicles. He takes their beloved Irish wolfhounds in their motor home, she takes their other dog, a Shih Tzu, and leads the way in their other car. In the smoke, flames and darkness, their two vehicles become separated. A thick wall of fire forces Cheryl to turn around. She heads back toward San Vicente Reservoir—hoping Stephen can make it through the fire. She ends up finding refuge at a neighbor's house—where she spends hours helping douse embers. On the 12000 block of Moose Valley Road, just outside their gated Lakeview Hills Estates community, Stephen's motor home is overtaken by fire. He and their animals perish. The couple's house—where they had lived for 23 years—also burns to the ground.

Six foot, four-inch Stephen Shacklett was a 55-year-old construction superintendent who helped build schools in nearby Julian and Ramona. He leaves behind a son and two young grandchildren. When his son, Stephen Jr., hears the details of his father's death, he is dumbfounded. *"They were less than 100 yards from my dad's house,"* he says of the firefighters who were ordered to pull back before they could warn residents of the Lake View Hills Estates about the rapidly approaching inferno.

"Stephen was wonderful," says longtime partner Cheryl Jennie. *"He was the best thing that ever happened to me. I still wonder why I didn't die, too,"* said Jennie, a legal secretary, who has not been back to their property since the fire. She says she has no interest in rebuilding there. Jennie explains: *"It's still too awful to me."* (See her amazing survival story on page 45.)

James and Solange Shohara and Son Randy Shohara



The Cedar Fire is approaching fast. James and Solange Shohara, husband and wife for 40 years—along with their son, Randy—drive away from their home on Lake Vincent Drive. The parents are in one car; the son in another. They want to try to escape to the nearby San Vicente Reservoir. But like so

many others this fateful early Sunday morning, they never make it through the dark and smoke and fire to safety. All three perish in the fast running Cedar Fire's flames. Neighborhood resident Robert Daly, who survives the Cedar Fire's run by staying in his swimming pool with his wife, finds the Shoharas. James and Solange are still in their

sedan. Randy is down a hill—50 feet away.

James and Solange were inseparable. They had worked together as guards at R.J. Donovan state prison in nearby Otay Mesa. They died as they had lived—side by side. Their son Randy, 32—who also was burned to death near them—was an expert body boarder, one of 86 professional contestants to compete in the 10th annual Morey Boogie World Championship at Banzai Pipeline in Hawaii.

As they prepared for retirement, James, 63, and Solange, 58, had recently built their dream home, a two-story house overlooking San Vicente Reservoir in Lake View Hills Estates. The Cedar Fire also destroyed their house.

Loving husband and father James had served 20 years in the U.S. Air Force. The Shohara's funeral service was provided full military honors, including a 21-gun salute by an Air Force honor guard. After performing a flag-folding ritual, the honor guard presented American flags to the couple's surviving children.

At the end of the ceremony for these three Cedar Fire victims, 33 white doves were released into the sky.

John and Quynh Pack



The Cedar Fire is approaching fast. Here, off Wildcat Canyon Road near the Barona Indian Reservation, as the fire rages toward them, the Packs, husband John and wife Quynh—both 28 years old—want to evacuate their home by trying to take Wildcat Canyon Road to any safe haven. But the firestorm sweeps down the canyon over them. Fire officials will find him with one of their dogs in his arms. She also perishes in the fire. Their house burns, too.

The couple—she was born in Vietnam; he was a native of San Diego—meet in a San Francisco restaurant where she is working. He is her customer.



Three years later, John James Pack and Quynh Yen Chau marry. They return to his hometown San Diego. But they don't move to the beach. Instead, they choose the quiet of country life up there outside of the community of Lakeside.

A rented cabin in the hills perfectly suits their desire for a private life together. (Their landlord also rents to neighbors Galen Blacklidge and Ralph Westly—who will also perish early that morning trying to escape the Cedar Fire flames.)

Friends say that the Packs lived simply, with their two beloved large dogs. *“They were together in life and together in death,”* the minister observed at their memorial service.

Outside their home, John Pack had created a garden for his wife to use in preparing her popular Asian meals. She attended California State University, where she had only one semester left before earning her accounting degree. She also worked full time. He was a handy, jack-of-all-trades who worked as an auto mechanic and at a plating company.

“They didn't have children,” Quynh's brother explained, *“so they loved those dogs just like their kids.”*

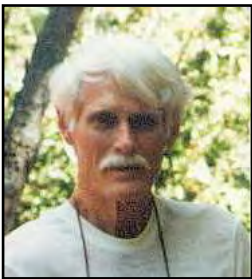
Kathleen Cook, John Pack's mother, said her son—a twin—was happily married and that he and Quynh loved their cabin's peaceful surroundings. Cook said her son had recently embraced a relationship with his estranged father. *“My son just got to meet his dad,”* she explained. *“We had a misunderstanding years ago. We recently found him and they got together. They got along, fell deeply in love with each other. It's such a loss.”*

Might We Learn These Lessons?

"How many deaths must be offered up on the altar of remorse before we learn some lesson or other about how to better live in a world that always has, always will, and, indeed, *should* burn? Might we learn lessons *without* flag-draped caskets? I think so, if we can just remember."

David J. Strohmaier
From his book *Drift Smoke*

Ralph Westly



The Cedar Fire is approaching fast. It is 2 a.m. The flames awaken retiree Ralph Westly, 77, who lives alone in his rural cabin just east of the Barona Indian Reservation. Rather than escape the inferno, this compassionate gentleman—known for always looking out for his friends—first drives up to his neighbors’ homes to warn them—four women—of the wind-driven wildfire that is quickly barreling down on them. (Three of these neighbors—Robin and Jennifer Sloan and Mary Peace—will perish in the early morning blaze.) Rescuers will eventually find Ralph’s body here, beside his vehicle just off Wildcat

Canyon Road, out on his neighbors’ property.

Family and friends all vouch that it was so typical for Ralph Westly to try to warn his neighbors of a dangerous wildfire burning out-of-control in the middle of the night. “*I know he had gone over to the Sloans’ place to make sure they were out,*” says his daughter, Laurel Westly. “*He just must have got trapped up there.*”

The retired retail clerk who loved the out-of-doors had lived in this hilly, rural area for more than 10 years, reports his landlord, Marlon “Lonnie” Bellante.

Daughter Laurel said her father was an avid reader. He had recently completed all of Shakespeare’s plays and was just beginning “The Canterbury Tales” in original form. Westly was often seen riding his bike or running. In more recent years, he became a frequent walker. Three months prior to his death, his daughter and he had gone on a two-day backpacking trip. “*For a 77-year-old guy, he was pretty healthy,*” she said.

This Cedar Fire victim cut his own firewood with a handsaw and loved organic vegetable gardening. “*Ralph was a quiet, gentle man,*” his landlord said.

Family Members Robin Sloan, Jennifer Sloan, and Mary Peace

(Pictured: Robin Sloan, top; Jennifer Sloan, middle; Mary Peace, bottom.)



The Cedar Fire is approaching fast. Sometime after midnight, Molly Sloan, 85, gets a phone call from her daughter, Mary Peace—who lives nearby on the family’s rural property located off Wildcat Canyon Road, as does Molly’s daughter-in-law, Robin Sloan, and her granddaughter, Jennifer Sloan. Peace tells her mother that she smells smoke—a wildfire is burning toward them. They must leave. Sloan quickly gathers up important papers, clothes, and silver to put into her car. But another neighbor runs up and yells that she must leave now. Sloan hurries into her vehicle and drives away—assuming that her daughter, daughter-in-law, and granddaughter have all already done the same. But—with the nightmare orange flames and smoke circling in on them, Robin Sloan—with her daughter Jennifer—rushes over to warn other friends. Mary, however, has tried to flee on Wildcat Canyon Road. Trapped by the surging flames and smoke, she returns home. All three women try to seek refuge from the flames and smoke in her home. When the fire burns through the house, all three die. They are found huddled together in the bathroom. Robin Sloan’s nearby car—crammed with mementos—survives the fire.

Robin Sloan, 45, who worked at the Wal-Mart in El Cajon, lived with Jennifer, 17, her youngest daughter on their 14-acre Sloan family spread. This rural property held four homes where three generations of the Sloan family lived. This included Robin and Jennifer, Jennifer’s grandmother, Molly Sloan, 85, and Molly’s daughter (Jennifer’s aunt), Mary Peace, 54.

Mary was a nurse who was much loved by all of her patients. She was the devoted mother of two young-adult children. These children had just lost their father to cancer on the preceding July. Mary had been working many, many hours putting together a special photo album that reflected each of her children’s lives with their father. These albums—vital family keepsakes—also perished in the Cedar Fire. For Christmas, Mary had made a quilt adorned with family pictures of the Sloans.

Friends say that Robin was the mom of all moms. “She always had big hugs for everyone,” said friend Shannon Kerr. Seventeen-year-old daughter Jennifer had been ecstatic about recently getting her driver’s license. She loved going to El Capitan High School football games and was about to start her first part-time job.

Mother Robin and daughter Jennifer were best friends. In a photograph taken the day before their deaths, the two are together—hugging and smiling. Robin is survived by her oldest daughter, Jamie. Unfortunately, Mary and Robin will never know that they were to become grandmothers within the next few months after the Cedar Fire.

Their surviving family members wholeheartedly agree that they both would have been passionate grandmothers.



Christy-Anne Seiler Davis

The Cedar Fire is approaching fast. Christy-Anne Seiler Davis's home near the end of remote Vista Viejas Road is located directly in the fire's path. Christy-Anne is alone. Her husband is away. Crews hurry down her road warning residents to evacuate. Christy-Anne notices that her neighbor Gwen has not awakened. She goes over and pounds on her friend's door until the woman wakes up—and flees. ("Christy saved Gwen's life," her landlord would later confirm.) Friends say that up until the final moments before the fire swept down through Vista Viejas Road canyon, Christy—a 10 year resident here—was determined to try to protect her home. Her body was found inside her burned house by family members.

Christy-Anne Seiler Davis, 42, loved the outdoors. Friends say that behind this pretty woman's always-bright smile radiated a rugged outdoors woman who loved to ride horses and take hikes with her beloved dog, Poncho—who was injured, but survived the fire.

Her family has established a scholarship fund in Christy's name, *The Christy Seiler Davis Memorial Scholarship Fund* at Grossmont College in El Cajon, CA. The scholarship is targeted to women 35-years of age and older who are reentering college (as Christy was). More information on this special scholarship is available at www.grossmont.edu/foundation.

Christy-Anne's mother says that her daughter's 5-foot-2 frame was packed with tons of spirit. "She loved to dance. She loved to cook," she said. "She was just always so alive."



Steven Rucker

On the third day of the Cedar Fire—the largest wildfire in California history—it is still making runs across the landscape and into populated communities. Steven Rucker, a structure firefighter from the San Francisco-area suburb Novato and his 4-member Novato Fire Protection District engine company are part of a strike team assigned to protect homes built out in the hinterlands of rural San Diego County. It is 1230 hours. They are trying to save a home located in the trees just off of State Route 79 on Orchard Lane. The fire suddenly flares up and makes a wind-driven run through heavy brush directly toward them. (See photo next page.) Steven and his fellow firefighters run toward their engine, parked in the home's driveway. But as the flames and heat roll across the driveway, Steven's captain orders everyone to return to the house—approximately 170 feet away. Two make it to the house. They realize that their captain and Rucker aren't with them. When they can, they retrace their steps to find their captain prone on the patio. He is dazed. His legs, arms, and face are burned. He tells them that—farther back—Rucker fell down behind him. The two find Rucker and try to revive him. But the fire's blow-up pushes everyone back into the house.

The two are admitted to an area hospital for smoke inhalation. They are released the next day. The captain receives second-degree burns on 28 percent of his body. He is treated at a burn unit and returns home 6 days later. Steven Rucker, overcome by the Cedar Fire flames, perishes beside the Orchard Lane wildland-urban interface home that he is trying to protect and save.



Fatal Burn Over

This photo was taken by a crewmate of perished firefighter Steven Rucker moments before the blow-up burned over them. A spokesman for the Cedar Fire tells the media that the house they were trying to defend is located in the “urban intermix—where houses are designed to be integrated into the wilderness.” He also reports that there was a large amount of vegetative growth near this house.

Steven Rucker was known for organizing toy drives and children’s events every Christmas and Easter. He was the type of guy who was always willing to help. The 11-year veteran of the Novato Fire Protection District, the only firefighter to die in the wildfires that stormed across southern California in the fall of 2003, is survived by his wife, Catherine, and two children, Kristen, 7, and Wesley, 2.

While wife Catherine said she always perceived that there could be great danger involved in suppressing wildfires, she also knew that her 38-year-old husband needed to join these wildland-urban interface suppression efforts. “*I let him go and I don’t regret it,*” she says. “*If I had said ‘no,’ it would have broken his spirit. He had to go and help.*”

This firefighter and paramedic who gave his life trying to protect a San Diego County home has been honored with a roadway officially named in his honor. The Steven Rucker Memorial Highway is a 15-mile stretch of State Route 79 that connects the mountain communities in north San Diego County that Steven fought to save.

Fatal Inaja Fire Occurred Nearby

Inaja Memorial Park is located just a few miles down the highway from where firefighter Steven Rucker died. The park honors the 11 U.S. Forest Service firefighters who died in the fall of 1956 trying to suppress the Inaja Fire. They had been sent into a nearby canyon when a 50-mile-per-hour wind spread the flames into them. The firefighters had nowhere to run.

They died within minutes.

After the Firefighter's On-the-Job Death: His Fire Chief's Message—Rucker Should Not Have Been There

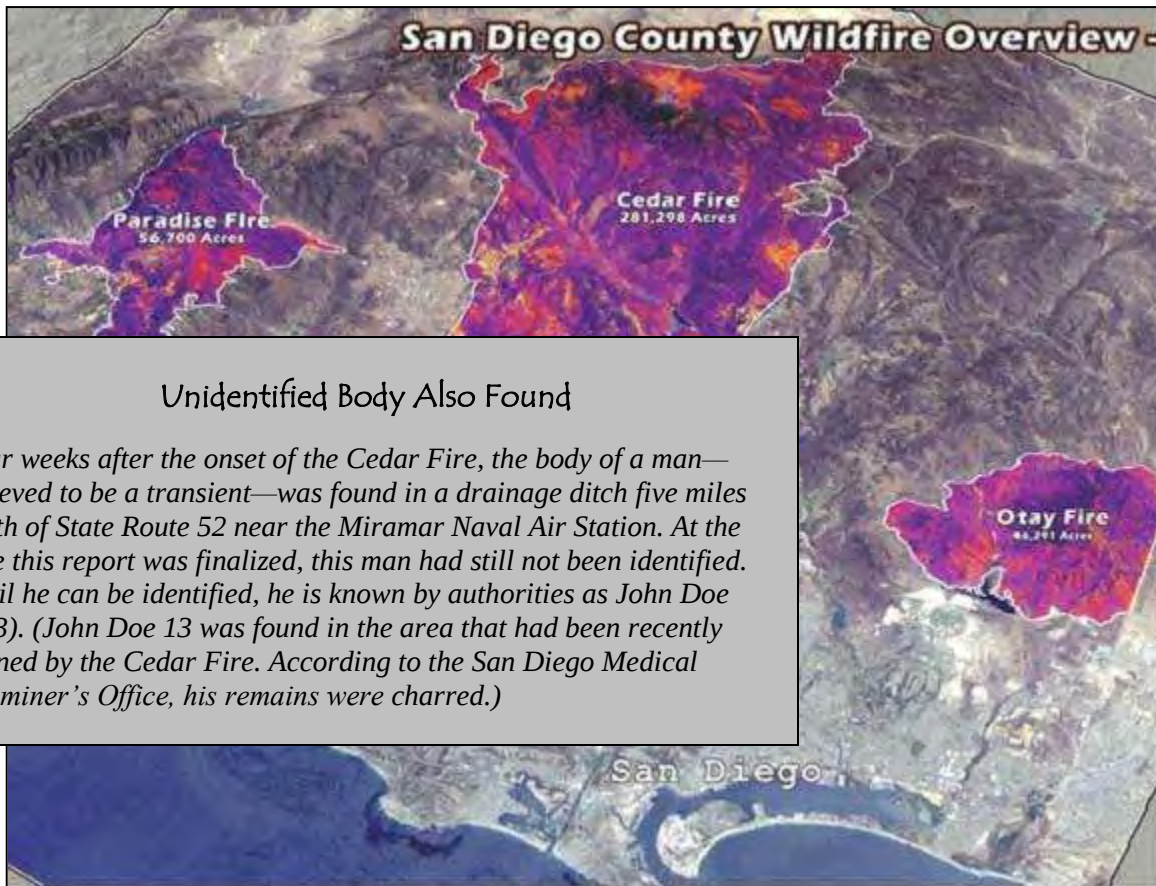
In the aftermath of Novato firefighter Steven Rucker's death resulting from his suppression actions on the Cedar Fire, his fire chief is on a quest to ensure that such a tragedy never occurs again.

"It has really been a very difficult year," Novato Fire Chief Jeff Meston tells the southern California North County Times newspaper in 2004. "It is a very high-profile story that has never gone away. During the flurry of memorials, we

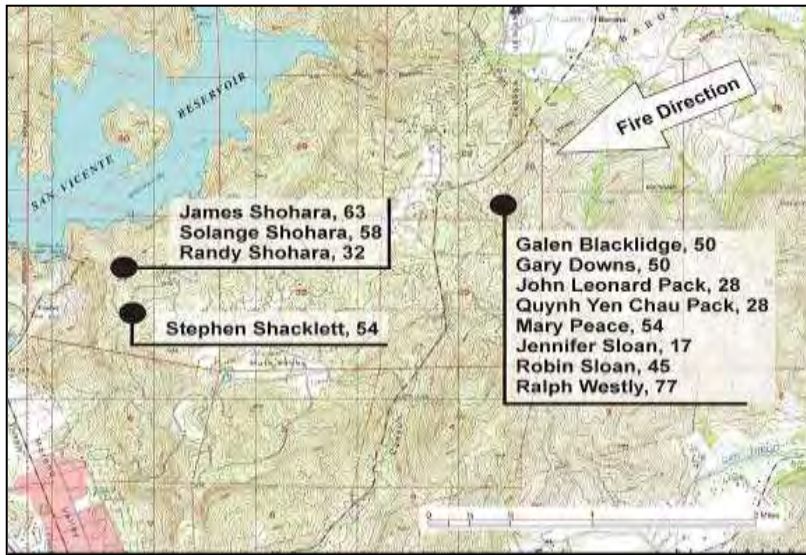
decided that we needed to do something about Steven's death."

Chief Meston now travels the country teaching firefighters why Rucker shouldn't have been there trying to defend that home in the first place.

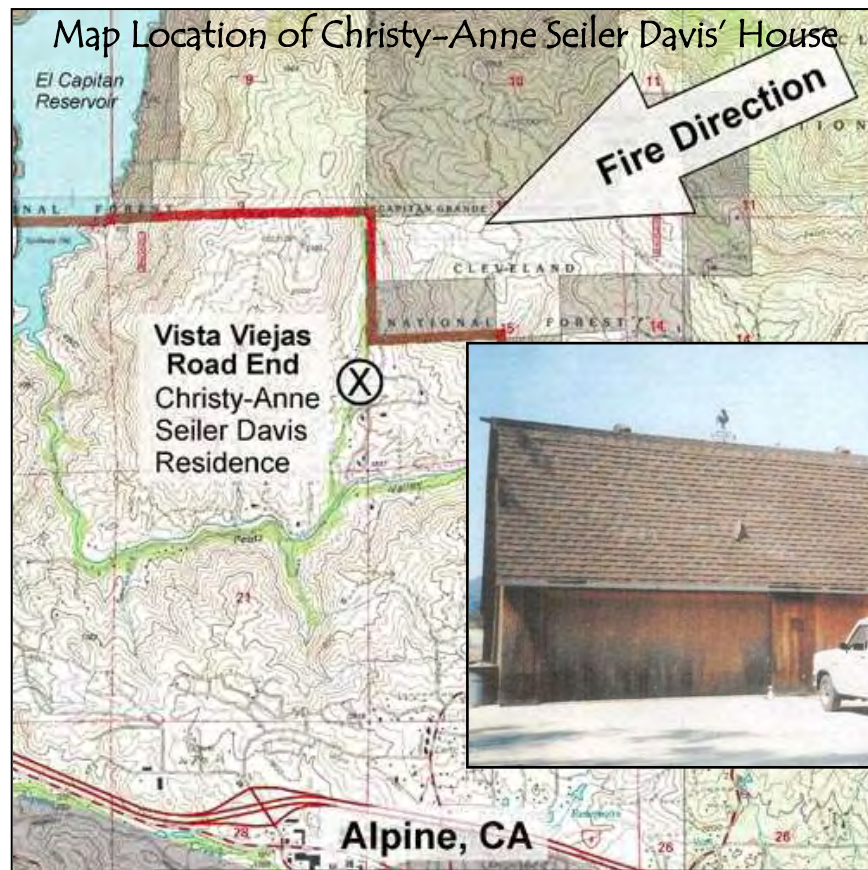
"We are suggesting and have given permission to our firefighters to turn down a (fire) assignment if there is too much to lose," Meston tells the North County Times. "It is just a building."



Due to prevailing Santa Ana winds, the Cedar Fire initially spread toward the west. Next, when the winds shifted, it became an eastward-spreading fire. This eastward spread killed firefighter Steve Rucker near Julian.



Burn over locations of the wildland-urban interface residents who lose their lives to the explosive Cedar Fire.



Top Photo: Christy-Anne Seiler Davis' house and truck before the Cedar Fire. Bottom Photos: Christy-Anne's house and truck after the Cedar Fire.



The Faces of the Two People Who Perish Trying to Flee the Paradise Fire



Photo courtesy John Gibbins, San Diego Union-Tribune newspaper

The human-caused Paradise Fire—located north of the Cedar Fire in the semi-rural, wildland-urban interface prone community of Valley Center—is reported at 1:30 a.m. on Oct. 26. Even at this time in the morning, the temperature is 78 degrees. Relative humidity is less than 10 percent. The Santa Ana east winds are blowing at 35 mph—with 45 mph gusts. The fire spreads so fast, it outpaces human evacuations. By 7 p.m.—due to these hot, dry winds and an abundance of extremely dry fuels—the Paradise Fire is 15,000 acres. And growing. It will kill two people, destroy 221 homes and 192 other structures, and ultimately spread to 56,700 acres.



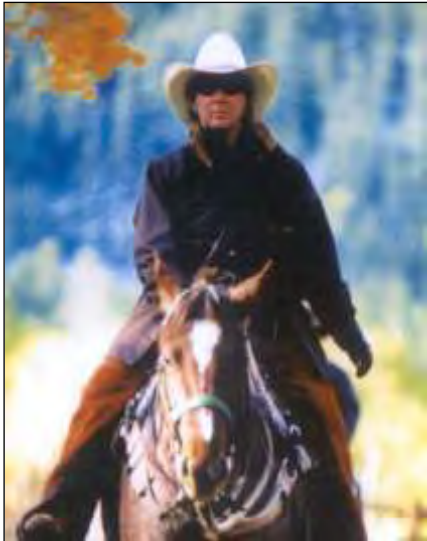
Photos: (l) John Gibbins, San Diego Union-Tribune newspaper; (r) Jacques Descloitres, MODIS Rapid Response Team at NASA.

Never Be the Same

"I think of that fire a zillion times a day. It has not been an easy year for anybody involved in this. I don't think that any of us will ever be the same."

Lois Wheeler

Commenting at the one year anniversary of the fatal 2003 Fire Siege. She is a friend of Nancy Morphew's who was nearby when Nancy was overcome and killed by the Paradise Fire.



Nancy Morphew

The Paradise Fire—in the middle of the night—is approaching fast. At 1:30 a.m. Nancy Morphew calls Lois Wheeler, who is boarding her Arabian horses in Morphew's barn. "She told me that she could smell the fire and that she knew it was close," Wheeler recalls. "She said that you'd better get out here and get your horses out." Within that same hour, Nancy Morphew will be dead—overtaken by the Paradise Fire's flames. What happened?

and smoke leap out of the night toward them, David Wallace runs to his neighbor Nancy and Steve Morphew's house to alert them. "She met me at the door and said *'I know, I know—go help other people,'*" Wallace remembers. "It seemed like she had a plan."

Rather than immediately flee, Morphew, 51, an Arabian horse breeder, first tries to rescue her horses. As husband Steve starts to evacuate their log cabin "dream home" that they'd built on their 12-acre Valley Center ranch, Nancy heads for the barn and corral.

"Her horses were not merely animals," explains Morphew family friend Brian Lavette, "they were her babies." Eric Goldy, engaged to Nancy Morphew's daughter, echoes those sentiments. He says it didn't surprise him one bit that

As
walls of
flame

Morphew wouldn't abandon her horses. "She would not have left her kids behind—and her horses were her babies."

Nancy and Steve had been married 31 years. In 1991 they bought their piece of land outside Valley Center and moved from San Diego out to their country-style dream home. "The country life beckoned to them," friend Lavette said. They built their own home here using a log cabin model. Nancy designed the roof and swimming pool.

Friends liked to say how Nancy, mother of two, seamlessly transitioned from "tennis mom" to "cowgirl."

"Whether Nancy knew you well or not, if you needed anything, she was right there to help," vouches fellow horse rider Carol O'Neill. "Nancy was easygoing and loved to work around her ranch."

“She was a very giving person,” says Mimi Gaffey, president of the Tierra Del Norte Arabian Horse Association, where Morphew regularly helped hand out ribbons after competitions. “Whenever I called her for volunteering—I always got a ‘yes,’” Gaffey said. “She was always glad to help.”

Nancy, friends say, was the person you’d call if your cat was sick. She took care of her ailing mother and brother in her home before they both passed away. And everyone marvels at how well she took care of those horses.

In the early morning hours of October 26, with the surprise attack of the Paradise Fire approaching, Nancy Morphew tries to rescue those horses. She climbs into her truck with the horse

trailer. Driving through the blinding smoke trying to reach the horses, the horse trailer topples. The truck and trailer catch fire and burn.

Nancy’s body is found nearby. She becomes the Paradise Fire’s first fatality. Unfortunately, she won’t be the last.

Ironically, the flames avoid the corral that Nancy was rushing toward. Her horses are spared. While the barn burns, the Morphew’s nearby log home receives only minor damage from the fire.

“I have a home,” husband Steve confirms, “but who cares. This fire took my wife.”

To Flee
or
Not to
Flee?



Photo courtesy Riverside County Fire Department

“The majority of these deaths are caused by people trying to escape this fire and not following directions they are given,” said San Diego County Sheriff Bill Kolender. “When you are asked to leave, do it immediately. Do not wait.” “There are a lot of people who just don’t want to leave their house,” said San Diego County sheriff’s spokesman Chris Saunders. “I don’t know if they’re not taking the warning seriously enough—or, it’s an instinct some people have to protect their properties.” Many people who survived the 2003 southern California Fire Siege fires, however, say that they were never warned to evacuate. For more information on why it might be wise to plan to *not* evacuate, but, rather, to stay home when wildfire approaches, see chapters IX and X in this report.

Ashleigh Roach



The Paradise Fire—in the middle of the night—is burning in the hills east of the John and Lori Roach family’s Valley Center home out on Station Road. At 2 a.m. Lori calls to see if evacuation is recommended. An emergency dispatcher tells her that the blaze doesn’t appear to be headed in their direction. Just in case, the Roach family members gather-up family photos and prepare their Ford Expedition for a possible evacuation. They all sleep in their clothes and take turns staying awake—always having someone carefully watching the direction of the fire’s glow up there in the nighttime sky.

At 8 a.m.—with a strong smell of smoke in the air—a sheriff’s deputy pulls up and informs the Roach family that the fire has jumped the road. He figures that they have 20 minutes to evacuate. Lori runs from room to room waking everyone.

Twelve minutes later, John, 43, starts to open the front door. A wind gust blows the door open. Smoke and flames—along with fire brands—spew into the house. The living room carpet begins to burn.

Outside, the front of their house is catching on fire, too.

“Everyone out,” John screams. “NOW!”

Wife Lori, also 43, hears him from the bedroom. She stops packing and runs to the front door. Out there in the fire and billowing smoke and heat, John is spraying the garden hose—trying to provide a safe passageway from the house to all the vehicles for Lori; their two daughters, Allyson, 20, and Ashleigh, 16; son Jason, 22; and their three overnight guests: Marilyn Hardy, 50, Steven Lovett, 21, and Marlena Clayton, 21. As they run out the door for the vehicles, the front porch is on fire.

In the confusion and commotion of the surrounding and suffocating wind-driven fire and smoke, Ashleigh climbs into her brother’s Mustang. John and Lori jump into their vehicle.

Allyson and Lovett head down the hill first in his Hyundai. Because of the way he’d parked, they have to back down the narrow driveway. Flames are hitting the car. The smoke is so dense, they can’t see any more than five feet away.

Unfamiliar with the driveway, Lovett misses a curve and veers down a slope. The two get out. Allyson burns her hands trying to protect her face. Steven, a Navy corpsman who happens to be wearing fire-retardant Navy clothing, shields her with his body.

Marlena Clayton drives through the smoke without seeing them. So does Marilyn Hardy. So do John and Lori.

They all somehow manage to drive the one-third mile down Station Road and out of the firestorm to the safety of the Valley Center Fire Station #73. With everyone else safe, John quickly jumps out and looks back for his children.

□□□□□□□□

As Jason drives away from the house, he sees—through the smoke and flames—the shape of something else. It is Allyson. She is horribly burned. He doesn't see Lovett. (A neighbor will pick him up. With severe burn injuries to his face and arms, he will be taken to the burn unit.)

Jason quickly jumps from the car, grabs his injured sister, and pushes her into the front seat—as younger sister Ashleigh slides into the back seat.

The surging smoke starts to surround them in even thicker blasts. Jason punches the gas and heads them toward the fire station. Through the darkness of the billowing veil of smoke and fire, a car suddenly appears—pulling out in front of them.

The two vehicles collide.

The Mustang's air bags explode. Its steering wheel locks. The car skids into one of the pepper trees—that has caught fire—lining Station Road. The vehicle is immediately engulfed in flames. Jason yells for everyone to get out.

He is able to maneuver his driver side door open and slide out. Allyson climbs across the seat behind him. She tells Ashleigh to follow her.

□□□□□□□□

The sheriff's deputies have grabbed John to prevent him from running back down into the Station Road smoke and fire.

He looks up to see his son Jason emerge from the hot shroud of smoke and collapse onto the ground. Daughter Allyson stumbles out of the fire behind him. Her face is white with ash. Her hair and clothes are smoking.

A deputy standing nearby sees Allyson's condition—over 85 percent of her body is badly burned—and hurries to her. He knows they need to get this girl into an ambulance—right now.

John Roach runs to his children. "Where's Ashleigh?" he asks.

Son Jason, still on the ground—whose face, scalp, and arms have also been burned—can only choke out two words.

"Back there."



The Cedar Fire
burns toward the
community of
Scripps Ranch.

Photo courtesy John Gibbins,
San Diego Union-Tribune
newspaper

Jason and Allyson Roach are hurried to the hospital. After a gut-wrenching wait, a friend of John and Lori Roach's—a local sheriff's deputy—has the solemn task of telling these parents the terrible news about their other daughter. Ashleigh never made it out of the car's back seat. She is dead.

Perhaps the young 16-year-old was frightened by the raging fire and in further shock by seeing what it had done to her terribly burned sister. The little girl never moved.

She becomes the second person to be

caught in the Paradise Fire's path and perish.

Jason, who suffered 1st and 2nd degree burns to his arms, face, and scalp is treated that day and released. Allyson's 2nd and 3rd degree burns—over most of her body—require the amputation of all 10 fingers and numerous—more than 20—painful surgical skin grafts.

For 3 long months she remains in the burn intensive care unit. Upon release, Allyson is placed in Palomar Hospital's acute rehab unit for an additional 26 days. She is finally discharged to go home—2 days before her 21st birthday.



Fatality Site

Map shows the short distance from the Roach family home at 31393 Station Road to the fire station "safety zone." But—through the night—the intense, rapidly spreading Paradise Fire burns down from the "wildlands" into this "interface" area more quickly than anyone anticipates. In the sudden invasion of thick, blinding smoke and fire, a collision occurs between two evacuating cars. A young girl, Ashleigh Roach, fails to flee this car with her brother and sister. She perishes. (A couple hours before this, the fire also kills resident Nancy Morphew.) The Roach home also burns. Pushed through an abundance of dry fuels by Santa Ana winds, the Paradise Fire continues its western march, consuming a total of almost 60,000 acres.

The Brightest Young Star You Could Ever Imagine

Ashleigh Roach, 16, a junior at Valley Center High, played the xylophone in the high school's band and danced with the Rose Academy of Irish dance. She had recently been named as Queen of the House of Ireland in Balboa Park.

"She was the brightest star you could have ever, ever imagined" said an emotional Lori Roach, Ashleigh's mother. "Everyone who came in contact with her just adored her."



Ashleigh Roach, 16, Queen of the House of Ireland in Balboa Park.

An empty garden plot beside Fire Station No. 73—located near the Roach family's home—has been transitioned into a memorial garden (see photo below). It is dedicated in memory of Ashleigh and Nancy Morphew—who also lost her life in the Paradise Fire's initial run—and to *all* those affected by this tragic October 2003 event.

It is hoped that this Paradise Fire Memorial Garden will serve as a place of meditation and reflection for the people of Valley Center.

"Three years ago today, as a mother, I stood on this road and watched our world fall apart," Lori Roach, an emergency room trauma nurse at the Palomar Medical Center, said at the garden's dedication ceremony. "Three years later our scars are still there, but we do offer hope. We are reaching out our hand so that anybody else who needs assistance might be able to find it." Lori Roach said the garden design captures the spirit of her

energetic daughter. "The dancing water fountain is just incredible because it really exemplifies life, and Ashleigh was always moving," she explained. "We are just so thrilled for the memorial. Ashleigh loved being at the fire station and she enjoyed her friends there."

The structure firefighters have promised to tend to the garden—as a special tribute to the child who they watched grow up.



An empty garden plot beside Fire Station 73 has been transitioned into a memorial garden for Ashleigh Roach and Nancy Morphew—as well as to all those people who were affected by the tragic Paradise Fire.

“The Roaches mean a lot to us,” said Kirsten Walkowiak, a Valley Center firefighter engineer.

“We really grew close to Ashleigh over the last six years. This garden is a really nice idea because it gives people a way to honor her (and Nancy Morphew) and reflect on what happened here in 2003.”

The memorial garden hosts a variety of roses—Ashleigh’s favorite flower—including a type known as “Stairway to Heaven.”

“I like the connotation of that name,” said the memorial garden’s designer, Nancy Cowie of Daybreak Community Church in Encinitas, that helped Valley Center residents recover from the Paradise Fire.



Nancy Morphew and Ashleigh Roach fall victims to the Paradise Fire as it quickly spreads through San Diego County’s Valley Center area early on October 26, 2003.



Photo courtesy Wildlandfire.com

The Old Fire evacuates 70 thousand residents, burns 940 homes, and claims six more human lives. Two months later, it will take another 16 lives in flash floods caused by rain run-off from this fire's steep burned-off hillsides. (See page 60.)

The Old Fire Claims Six More Human Lives

The Old Fire, an arson-caused blaze burning in San Bernadino County—one of the 14 fires that comprises the 2003 Fire Siege—claims six human lives by causing fatal heart attacks or strokes in panicked and overwhelmed fire evacuees:

James W. McDermith,

James McDermith, 70, dies when he collapses as he tries to evacuate his San Bernardino home.

Gene Knowles

Gene Knowles, 75, dies of a heart attack as he tries to evacuate his home in Big Bear.

Charles Cunningham

Charles Cunningham, 93, dies as he stands in the street watching the fire consume his San Bernardino home.

Robert Taylor

Robert Taylor, a 54-year old San Bernardino resident, dies of a heart attack.

Chad Williams

Chad Williams, 70, dies of a heart attack as he tries to evacuate his Crestline home.

Ralph Williams

Ralph Williams, a 67-year old Cedar Pines resident, dies of a heart attack.

Old Fire Whips Across Dry Grass and Chaparral

The Old Fire starts at 9:16 a.m. on October 25 in the hills above San Bernardino. Pushed by Santa Ana winds, it quickly whips across dry grass and chaparral down into the city, eventually evacuates 70 thousand residents—causing 6 residents to die—and destroys 940 homes. Incident commanders use the county's Mountain Area Safety Task Force (MAST) to help successfully evacuate people (see page 53). The fire eventually grows to 91,000 acres.

Section Two
The 2003 Fire Siege: The Aftermath

Photo courtesy Howard Lipin, San Diego Union-Tribune newspaper

V Escaping Death – The Stories of the Survivors

Several stories of Cedar and Paradise fire survivors—residents who flee these fires and, in doing so, experience a “near miss” with death—have already been outlined in this report. This chapter will focus on Cheryl Jennie, Rudy Reyes, and Allyson Roach. While many people suffer burns while trying to escape from the flames of these sudden, middle-of-the-night fires, these three individuals barely escape—and two are nearly burned to death.

Cheryl Jennie’s Story: Prologue

Cheryl Jennie and Stephen S. Shacklett, Sr. had lived on their nine acres—overlooking Lake San Vicente—up there beside Muth Valley Road for 23 years.

“We were very happy in our home. We never wanted to leave it,” vouches Cheryl, a legal secretary. “We remodeled our home together. Over the years, I worked very hard to decorate it in a style that we both loved.”

For 12 years, Cheryl and Stephen raised, showed, and bred Irish Wolfhounds together. “Most of our vacations,” she recalls, “we would pack-up our motor home and take our ‘wolfies’ off to a dog show.” Many times—with Stephen “showing” the dogs—they won.

“I always enjoyed watching them in the ring. My Stephen was a very big man. Six-foot-four and 300 pounds. But he would look light as a feather in the ring running around with our dogs.” Their Irish Wolfhounds were also large—the males weighed more than 220 pounds.

“We loved our life,” Cheryl says. “And our dogs were a very big part of our lives.”

After 23 Years, A Single Night Changes Everything—Forever

In 2003, Cheryl and Stephen had two Irish Wolfhounds—brother and sister—McDermott, the male, and Ashlyn, the female. They also had a two-year-old female Shih Tzu. “That first day that I got her,” Cheryl remembers, “Stephen told me that I’d brought home a dust mop.” She fondly recalls how Stephen “fell madly in love with that little dust mop.” “I would always laugh at him when he would get up in the morning and sing our dogs ‘Amazing Grace’ in a tone that made him sound like Mickey Mouse.”

Around midnight on Oct. 26, 2003, Cheryl Jennie and Stephen Shacklett’s life together—everything that they had and everything that they had known—would begin to suddenly change. Forever.

Cheryl Jennie's Terrible Story: In Her Own Words

By Cheryl Jennie

Around midnight, the smell of smoke wakes me up. I get out of bed and go outside. (My husband Stephen broke his lower left leg a few days ago—he is in a cast that extends from his foot up to his knee.) I check all around our premises. But I can't see any evidence of fire—I can only smell it.

I go back inside and call the Barona Casino—located just up the road approximately 7 to 8 minutes away from our home. I ask them if there is a fire up there. They tell me “no.” They say not to worry. They tell me that the smoke I'm smelling is coming from Julian—the fire is some 40 miles away.

I go back to bed.

Around 5 a.m. Stephen wakes me and says that I better go out and close the umbrellas on our patios before the wind blows them away. There is a strong Santa Ana blowing. I walk out of the bedroom. That's when I see it.

The fire is coming right at us.



This photo of Cheryl Jennie and Stephen Shacklett Sr. was taken by her sister just four weeks before the Cedar Fire would change their lives forever.

I scream at Stephen to get up. When he sees the fire running toward us he tells me not to panic. He thinks that maybe the wind is changing directions. But, unfortunately, it isn't. The firestorm continues moving for us—even faster.

Stephen tells me to go start the motor home. I go out and try, but I can't get it started.

I end up helping Stephen—the big man in that big leg

cast—get up into our motor home. I run back into the house to get our “wolfies”—McDermott and Ashlyn—who, by now, are also panicking at the approaching fire.

Stephen gets the motor home started. I start wondering how I'm going to get those huge—spooked-by-the-fire—animals up into it. Somehow, one by one, I am able to grab the terrified wolfhounds and get them safely up into the motor home with Stephen.

I yell to him that I'll take my car and wait for him at the entry gate to our neighborhood. Our plan is to drive to the

big parking lot at the Albertson's in Lakeside. I go back in the house, get our little Shih Tzu dog, hurry to the car, and drive off.

Going To Die

I drive past our neighborhood's—Lake View Hills Estates—main entry gate and stop and wait for Stephen. Other neighbors are also driving away. As Stephen drives up behind me, I can see several other vehicles behind him. I start to drive away, with everyone else following behind me.

I immediately steer around a bend and drive directly into the fire. The flames and smoke cut me off. I am literally in the fire's path. I can feel its heat. The smoke is so dense, I cannot breathe.

I quickly back up to try and turn around. Without being able to really see anything, I get stuck in a ditch. Somehow, I am able to steer my Chrysler Sebring up and out of it and drive back into our neighborhood. I don't really know where I'm going—except away from the fire.

I look up as our motor home passes me—still heading in the opposite direction. Because of the smoke, I can't actually see Stephen. I say to myself: *"Goodbye Stephen, I love you"*—for I know that I am going to die.

Most of the homeowners I see are also turning around. Because Stephen is in our huge motor home and this large SUV behind him are bigger vehicles, I'm thinking that these two will probably make it through the fire.

I come to a fork in the road—one lane goes to the left, the other goes right. I don't know which one to take. Through the smoke, my eyes can see the faint red

glow of taillights moving down both of these routes. I just keep repeating: *"God help me, oh, God, oh, God; please help me."*

I'll never know why, but I turn to the right and follow the taillights up in front of me. (I will later learn that people who turned left here perished in the fire.) I end up in a driveway of people I don't even know. By now, the approaching fire tornado must be 300-feet tall. Fire is falling on us. Fire is everywhere.

I grab my dog and follow the people from the other car. The smoke is so thick that I can barely breathe. Fire and embers are falling all around us. We all run into this house's garage. The couple quickly shuts their garage doors. We all run up the stairs and into their home.

Someone screams that the house is on fire. The man of the house, Larry Redden—a retired fireman—runs to get into his fire suppression clothes. His wife, Reenie, hurries out and grabs a garden hose to try to put the fire out. The water runs long enough for her to douse the flames on the side of the house and for the rest of us—Reenie's dad and his wife and myself—to fill water into pots, pans, bowls, and every container that we can find. Then the water flow just stops. There will be no more.

Please Help Us

The smoke in the house is so dense, I cannot breathe. I keep dunking my face in a bowl of water. Smoke alarms—extremely loud—are going off everywhere. Reenie starts running around breaking them with the end of a broom handle. Now, the deck just outside the back door is on fire. Reenie puts that fire out and then both she and Larry go outside to fight the fires that are

igniting everywhere around their house. They use their swimming pool to fill buckets to throw water on these fires. They tell me to stay inside, to watch their animals—a dog and a cat—and to watch for fires.

The main fire is like a huge red demon tornado. All around us, home after home is quickly catching on fire and burning.

The deck catches on fire again. As I try to extinguish it, I yell out for someone to go under the deck to douse the flames down there too. For what seems like forever, I just keep moving from one side of the house to other, checking for fires and repeating over and over: *“Oh my God, please help us.”*

After what seems like an eternity, it starts to get light outside. It seems like that demon fire with its winds and flame and smoke is finally drifting away. *Did we make it? Did we actually live through this?* I go to the back door and look up to see a police car and other emergency vehicles coming down the road. Right then—for the very first time—I know we are going to make it.

Fifty Feet Away

Larry Redden and his father-in-law get into a truck to venture out to see the damage. (Besides so many totally destroyed houses, they will also see the bodies of burned people—some of whom are still in their vehicles, caught trying to escape the firestorm.)

I use Reenie’s cellular phone to call my daughter to let her know that I am still alive. I tell her to drive to Albertsons to

see if Stephen is there and to check everywhere for him. I want her to find him and let him know that I made it. A little while later, the two men return to tell me that our home did not make it. Our wonderful house—and *everything* in it—has completely burned to the ground.

One of the police officers informs that there is a motor home up in the middle

of the road that is not completely burned. Larry and his father-in-law go up there to check it out. That’s when they find my Stephen and our two dogs.

They have all perished.

Larry drives me to my daughter’s home. (We first had to sift through the ashes in my car to find my purse.) We slowly drive out of our neighborhood. Everything is burned and still smoldering. Where Stephen and my home had

once stood—just a few hours before—there is absolutely nothing. There is nothing there at all.

As we approach our motor home, Larry makes me put my head down on the seat. As he drives me to my daughter’s home, I realize, now, that I must somehow start to rebuild my life all over again. *Everything* has changed.

Many days later I will find out that as the fire approached us that night, engines from our local fire department were at our neighborhood’s gate between 3-3:30 a.m. But—because their lives were in jeopardy—these fire personnel were told to turn around and retreat.



Cheryl Jennie
Cedar Fire Survivor

We have heard that—because these firefighters knew that we were going to die in there—some of these men left crying.

If they had only taken a few minutes to blast their sirens and to warn us on their

loud speakers, maybe we *all* could have made it safely out before that terrible fire tornado swept down upon us.

Stephen and I lived only 75 feet away from that gate where they were parked.

120 Square Feet of Donated Skin

During the southern California Fire Siege of 2003, the University of California, San Diego Regional Burn Center treats more seriously burned patients than from any previous single fire event.

Within 72 hours of the first flames, the hospital sees 23 wildfire victims. Eighteen of these people's burn injuries require them to be admitted into the hospital.

In the wake of the wildland-urban interface rampaging Cedar and Paradise fires, the burn center conducts a total of 65 surgeries involving removal of burned skin, and tissue and skin grafting. These burn victim patients range in age from 11 to 79—with burns covering between 1 to 85 percent of their bodies. Some of these fire injuries include third degree burns—the most severe.

One year after the fires, most of these discharged burn patients are still receiving care on an outpatient basis. This ongoing recovery for many people includes both physical and psychological therapy, as well as care for scars, and assessment of progress toward healing.

“Because of the higher temperatures involved in these firestorms, these patients had a combination of smoke *and* heat inhalation injury,” UCSD Burn Unit Director Dr. Daniel Lozano tells the San Diego Union-Tribune newspaper. “One thing I realized about wildfires with these raging high temperatures is how damaging they can be to the lungs.”

He said that his hospital is now trying to learn from this tragedy by researching better ways to treat inhalation injuries caused by heat and smoke, rather than just smoke alone. Ongoing research at the hospital also continues in the use of special grafting materials to replace burned skin.

Dr. Lozano said his hospital used 120 square feet of donated skin to treat the numerous 2003 Fire Siege burn victims.

A Wildfire is Quickly Approaching . . .

It is 3 a.m. on October 26, 2003.

Rudy Reyes, 26, is living in a one bedroom house on his family's 2.5-acre property in Lakeside—located down Wildcat Canyon Road about a mile from Muth Valley, near the Barona Indian Reservation.

Rudy's sister phones to warn that a fire is quickly approaching. Rudy looks outside to see a moving orange glow.

First, he makes sure that his mom and brother are safely in their cars and driving away.

"He told me to go, and he'd follow," says Fernando Reyes, Rudy's brother. "He was more worried about me and my mom getting out in time than he was about himself."

But when Rudy jumps into his car, it won't start. In the thick, smoke-filled air, his motor simply refuses to turn over.

With the wind pushing the wall of fire into him, Rudy quickly decides that to save his life he must try to run through the flames and out to Wildcat Canyon Road. This 30-second sprint will change his life forever.

"I just covered my face with my hands and started running down the road and screaming," the plucky Cedar Fire survivor recalls. More than 65 percent of his body is severely burned. His lungs are seared by the super-heated smoke and air.

It is estimated that he endured 1,200-degree heat.



Photo courtesy Dan Trevan,
San Diego Union-Tribune newspaper

Cedar Fire survivor Rudy Reyes gets a hug from neighbor Debbie Clapp after being released from the burn center hospital—where he was for more than five months.

Rudy somehow makes it out to Wildcat Canyon Road. An evacuating neighbor stops and picks him up. She drives the burn victim to where emergency crews are staged along Wildcat Canyon Road. Seeing the young man's horrible burn injuries, they quickly sedate him.

A paramedic cuts away his clothes and tells him that he is going to put him to sleep. Rudy Reyes will not wake up again until Christmas Day. He is in the University of California, San Diego Regional Burn Center. And, due to his injuries, he won't leave this hospital until March of the following year.

This resident of Lakeside—where the Cedar Fire destroys 257 residences, including Rudy’s and the homes of four family members—undergoes 18 operations and battles pneumonia. He requires almost 20 square feet of donated skin.

Rudy’s doctors call his—extremely painful—survival “miraculous.”

“I’m so thankful for this,” Rudy tells his family, friends, doctors and nurses—who gather to wish him well when he is finally released after more than five months in the hospital. “Every day from here on is a blessing.”



Photo courtesy North County Times newspaper

Father John Roach embraces his daughter Allyson, who was severely burned by the Paradise Fire, but managed to escape it (see page 38). Her younger sister Ashleigh perished during their escape attempt. Mother, Lori Roach, is also pictured here at the dedication ceremony for the Paradise Fire Memorial Garden.

After The Fire – Rebuilding Homes and Lives

After the Paradise Fire kills one of their daughters and severely burns another, the Roach family decides to rebuild their burned Station Road home on the same property. But this time, they make sure to do it differently.

To help ensure that this new home is fire safe, they take additional construction precautions such as using concrete roof shingles and siding. They use no exposed wood. They also install an outdoor fire alarm and, at the back of their home, have a water main dedicated to fire.

In addition, they plant no vegetation near their new post-Paradise Fire home.

Son To Be Fireman

Fire-survivor son Jason Roach, an Eagle Scout, has dedicated himself to being a future structural firefighter.

“This (the fatal Paradise Fire) brought in perspective the things that *are* and are not important to me,” Jason explains.

“In this kind of (firefighter) career, it is impossible not to think about that day of the (Paradise) fire,” he says. “But I always learn something new in class about why this happened and it helps me put together pieces and parts of that day.”

“Three years ago today, as a mother, I stood on this road
and watched our world fall apart.”

Lori Roach, mother of Ashleigh, speaking at the
Paradise Fire Memorial Garden’s dedication ceremony.

Of course, there are still times when the sadness of his sister Ashleigh’s death overwhelms him. Jason said that, at these times, he deals with his emotions by thinking of his burn-survivor sister, Allyson—who has undergone more than two dozen skin graft surgeries.

“There are days when I have just wanted to roll over and go back to sleep. But Allyson can’t do that,” Jason Roach, now 23, explains. “She has to go to surgery and learn how to reuse her

hands. I can’t encourage her to get better if *I* am not.”

Allyson’s massive third degree burns required the amputation of all 10 fingers. She was treated in the burn intensive care unit for three months.

The Roach family has established the Ashleigh Roach Memorial Burn Foundation, which, among other efforts, is working to raise money for a burn ward at a future hospital in nearby Escondido, CA. An information line about the foundation has been provided at 760-749-8536.

Promoting a Sense of Responsibility for Living in a Fire-Dependent Place

One year after the southern California Fire Siege, the San Diego Natural History Museum opened an award-winning exhibit entitled “Earth, Wind, and *WILDFIRE!*” This comprehensive exhibition—that was showcased in the museum for more than two years—explored the powerful forces that shape southern California’s landscape: fire, nature, and people. It served as a testimonial to the splendor of nature, the power and inevitability of fire, the responsibility humans have for living with nature and fire, and the inspiration of recovery in nature and the community.

“We hope visitors will come away with a sense of awe for both the splendor of nature and the power of fire, and with a sense of responsibility for living in this fire-dependent place,” explained exhibition curator Dr. Anne Fege. She said the popular exhibit explored the powerful forces—nature, fire, and people—that shape this region and asked, “*How can we coexist with fire and nature?*” Fege said it was intended for visitors to leave the exhibition with four vital “take-home” messages:

1. *The biodiversity of San Diego County is unparalleled and uniquely adapted to low rainfall, rugged topography, and wildfires.*
2. *Fires have become more frequent with growth in human population. When fire is too frequent in coastal sage scrub and chaparral ecosystems, habitats cannot recover and are converted to dramatically different types.*
3. *With Firewise planning and design of communities and structures, we can reduce risk to human life and property and preserve native biological communities.*
4. *As humans, we can reduce our vulnerability to large fires by understanding and respecting the power of fire and the value of nature, and by adjusting our developments and our lifestyles to the setting in which we choose to live.*

VI 2003 Fire Siege Success Stories

Because of the sensible and far-sighted actions that several communities had taken to address wildland fire risks—and to better plan for wildland fire emergencies—people are safely evacuated and hundreds of homes are saved.

Mountain Area Safety Task Force Critical in Quick Evacuation of 70,000 People

The Mountain Area Safety Task Force (MAST) organization joins forces in the more remote mountain-area communities in San Bernardino and Riverside counties. Primary objective of this effort is to coordinate emergency response, to reduce the current region-wide risk of a major wildland fire, and to minimize impacts on mountain communities should a wildland fire occur.

In 2002, concerned about the increasing threat of wildfires in southern California, public officials and others formed MAST. During the course of that first year, the groups launched efforts to establish fuel treatment priorities, improve communications, identify and publicize evacuation routes, and determine safety zones. Many miles of dead trees were removed from evacuation routes by the San Bernardino National Forest.

In addition, the Office of Emergency Services organized simulation exercises to determine the readiness of 30 participating agencies.

MAST is now comprised of several government agencies, private companies, and volunteer organizations concerned with public safety and fire prevention in these mountain areas.

The San Bernardino County Fire Chiefs Association agreed that the MAST effort—including training and planning—saved a great number of lives and homes during the 2003 Fire Siege.

MAST effectively reduced the time required to establish an effective multi-agency, unified command. From the beginning of these fires, unified incident commanders successfully used MAST planning for strategic and tactical decisions.

When winds shifted and blew the fire into the mountain communities, the MAST effort proved critical to a successful evacuation of 70,000 people.

A five-point action plan—in place before the 2003 Fire Siege—has been initiated to:

1. Assure public safety (including evacuation plans, clearing hazard

- trees, and providing emergency planning information to the public).
2. Obtain funds to combat the problem.
3. Remove fuel and create fuel breaks.
4. Develop commercial wood utilization options.
5. Identify and develop plans for ensuring long-term forest sustainability.

San Diego County Lacking in Fire Evacuation Interagency Planning

In early 2003—prior to the southern California Fire Siege—the California Department of Forestry and Fire Protection (CDF) and the U.S. Forest Service helped initiate a group called the Forest Area Safety Taskforce (FAST).

This interagency team was brought together to prepare and practice an evacuation plan for Palomar Mountain (Lundberg 2005). The FAST exercise demonstrated that most communities in San Diego County did not have an evacuation plan. Unfortunately, for the most part, this was demonstrated when the multiple fire siege hit in October 2003.

Not surprisingly, when the need arose on the Old Fire, those in San Bernardino County who had planned for months in advance for the contingency of evacuation—under the Mountain Area Safety Task Force (MAST) preparations—were able to safely conduct an exodus of mountain residents to safer locations.

Those who had not accomplished similar interagency planning in San Diego County became victims of the fast spreading Cedar and Paradise Fires.

Ventura County Has Beneficial Success in Responding to Fire Siege

Even though Ventura County was hit with three of the 2003 Fire Siege's major wildfires (Piru, Verdale, and Simi), within this particular county, these fires did not produce the same proportionate losses that other neighboring jurisdictions suffered.

The success with managing these fires, including the 107,568-acre Simi Incident, was attributed to several

factors, including:

- Appropriate strategy and tactics coupled with sound firefighting,
- Updated building and fire codes for construction in the wildland-urban interface,
- An aggressive vegetation management program, and
- Effective community education programs.

Fire Safe Councils Prove Their Worth During 2003 Fire Siege

By the time the 2003 Fire Siege ravaged southern California, there were more than 50 Fire Safe Councils operating within this fire-prone region. Many of these councils help communities prepare for wildfire, as well as aiming to reduce wildfire's risks.

The umbrella, statewide Fire Safe Council was initiated in 1993 to inform and encourage California residents to prepare for the inevitable wildfires

before they occur. Sixty-one public and private organizations comprise the statewide council, instrumental in preparing and distributing fire prevention materials to local groups throughout the state.

In 1996, the California Department of Forestry and Protection was asked to include more community involvement in strategic fire planning.

Mountain Rim Fire Safe Council – A Leader in Outreach Programs

The Mountain Rim Fire Safe Council, located outside San Bernardino, was formed to address various issues in the aftermath of the 1997 Mill Fire. The original Fire Safe Council here has been successful in promoting education, communications, and cooperation to ensure fire safety, informs Laura Dyberg, president of the Mountain Rim Fire Safe Council.

With grant funds, it has completed several major fuel reduction projects, held neighborhood chipper days for clean-up, and scheduled valuable town meetings in various locations.

This council also serves as a focal point among various agency partners: U.S. Forest Service, California Department of Forestry and Protection, county fire, local fire districts, and the community. The council also has been a leader in outreach programs to encourage and develop new councils—and is a part of the Inland Empire Fire Safe Alliance.

Lytle Creek Fire Safe Council – Its Grants and Work Help Save Homes

During the 2003 Fire Siege, the Grand Prix and Old fires burn together to threaten the community of Lytle Creek, as well as other San Bernardino Mountain foothill communities.

The fire ran right up to where the Lytle Creek Fire Safe Council's defensible space project had been undertaken behind the community's homes. None were burned.

Just weeks before this fire, the fire safe council also worked with a disabled homeowner to remove branches away from her house and garage. During the ensuing fire, homes across the street were lost. Hers was saved.

“At one point, this community was completely surrounded by wildfire” says Ellen Pollema, Lytle Creek Fire Safe Council president. But, with the heroic efforts of firefighters, and the planning and preparations done by her council's membership, only 18 of 350 homes were lost to the fire.

“If it wasn’t for the Fire Safe Council being there for three years, no way would I have prevailed upon them (the engine crews) to fight this fire,” Jack Kennedy, U.S. Forest Service fire battalion chief, said of the 2003 suppression actions. During this fire, Kennedy—who had previously worked with the council—spoke to the fire incident commander about holding firefighters in place.

The community members had done their job in creating defensible space—and now the firefighters would use that space to defend it.

“If the canyon was pre-2000, it would have burned and we would have lost every home in there,” Kennedy assures (Wallace 2004).

BLM Grant Helps Create Defensible Space

In two out of the three years since its inception, the Lytle Creek Fire Safe Council has received funding through the Bureau of Land Management’s Community Assistance Program to reduce wildfire threats.

With this funding, the Lytle Creek’s Fire Safe Council was able to work with residents in a community of approximately 1,000 people in an area approximately eight-miles long to create defensible space around 95 percent of the community’s homes.

The Lytle Creek Fire Safe Council defensible space project—in combination with U.S. Forest Service fuel breaks along national forest lands adjacent to the community—was this community’s saving grace during the 2003 firestorm.

Sherilton Valley Fire Safe Council Fuel Treatment Project Saves 41 Homes

The Sherilton Valley Fire Safe Council was formed one year before the Cedar Fire. Therefore, before this inferno raged into their community—thanks in part to assistance from U.S. Forest Service grant funding—this council’s members had already initiated brush clearing projects around 41 of the community’s 50 homes (Pacific Southwest Region 2005). (The residents in these nine homes opted not to participate in the council’s brush clearing project.)

The council members also improved conditions along the roads that serve these 50 rural residences.

By the time the Cedar Fire broke out and spread through Sherilton Valley most firefighting resources were already committed elsewhere.

The Sherilton Valley Fire Safe Council members have successfully demonstrated that when people carry out fire safe actions, property can be saved—even when fire services are not available.

All 41 homes of the residents who participated in the Fire Safe Council's projects survived the incident unscathed. Unfortunately, however, the nine homes whose owners did not want to participate in the fire council's projects burned to the ground.

In addition, no horses or cattle were lost to the Cedar Fire due to the new Sherilton Valley Fire Safe Council's aggressive, cooperative clearing efforts.

Under the council's direction, community residents combined to provide:

- Road clearing,
- Defensible space and vegetation management,
- Chipping,
- Mapping,
- Hand held radios for communications,
- The creation of a telephone tree,
- The identification of water sources,
- The posting of signs,
- Shelter-in-place education,
- The identification of animal safe shelters,
- Neighborhood fire watches,
- Road work, and
- Information and education on proper building materials.

This success story is a prime example of people joining forces through a newly formed Fire Safe Council and ensuring their own fire safe destiny through community planning and on-the-ground actions.

The Sherilton Valley Fire Safe Council members have successfully demonstrated that when people carry out fire safe actions, property can be saved—even when fire services are not available.

Follow-Up Success Story

Cedar Fire Prompts Need for Chimney Canyon Fire Safe Council at Scripps Ranch

The 5,300-acre residential San Diego suburb Scripps Ranch holds 12,000 homes and 24,000 people. Its lands abound with city-owned open space canyons and hillsides—many abundant in volatile surface fuels and eucalyptus trees. Because of these adjacent open-space fire-prone fuels, the local fire department classifies about 60 percent of these residences as “very high-risk structures.”

Following the Cedar Fire—that destroyed 312 Scripps Ranch homes and severely damaged another 600—several residents whose homes were

spared decided to do something about their ever-present fire danger.

“We formed the Chimney Canyon Fire Safe Council, a community chapter of the statewide organization,” reports Jerry Mitchell, this safety council’s founder and director—think: ramrod.

“According to the San Diego Municipal Code,” Mitchell explains, “it is the city’s responsibility to provide adequate fire breaks between the homes and their open spaces.”



Photo courtesy Gael Courtney

After the Cedar Fire destroys 312 Scripps Ranch homes and severely damages another 600, several residents whose homes were spared decide to do something about their ever-present fire danger in this San Diego suburb with its abundance of fire-prone open space.

“If we want to live in a wooded area like this, and we wish to have fire protective defensible space between our homes and these open spaces—we must assume the ultimate responsibility ourselves.”

Jerry Mitchell, Founder and Director
Chimney Canyon Fire Safe Council

Mitchell said that it soon became obvious, however, that the city could not do this. “Nor could we expect state or federal funds to pay for our firebreaks,” he reasons. “If we want to live in a wooded area like this, and we wish to have fire protective defensible space between our homes and these open spaces—we must assume the ultimate responsibility ourselves.”

Mitchell, who helped spearhead this effort, said his fire safe council members then made it their mission to educate and convince the neighborhood’s homeowners that *they* must assume the responsibility, and the cost, of providing and maintaining firebreaks.

“It has taken some time to develop this concept,” Mitchell admits. “But once the homeowners realize that public funds are not available, and

that if they don’t take action they will continue to live in danger, we can help them get their firebreaks established.”

Thus, Mitchell has now helped form neighborhood chapters of his fire safe council, incorporating these areas into the council’s not-for-profit corporation.

“We prepare a ‘neighborhood profile’ that contains maps and identifies the homes and treatment areas. We evaluate slope, aspect, fuel types, density, access, and other physical or geographic issues,” says Mitchell. “We assist in obtaining right-of-entry and other permits, as necessary. If the treatment area is on public land, the California Conservation Corps may be an option for the work, and we can assist with scheduling and contracting.”

VII After the Fire Siege: Sixteen More People Die

The tragic deaths caused by the 2003 Fire Siege did not stop when the flames had passed.

On Christmas Day, 2003, 16 more people die when flash floods—caused by heavy rains inundating the denuded, burned-off slopes inside the Old Fire’s perimeter—sweep down through steep canyons without warning. The following people perish in these 2003 Fire Siege-triggered floods:

Janice Arlene Stout-Bradley, 60, of San Bernardino

Ivan Avila Navarro, 13, of San Bernardino

Wendy Morzon, 17, of Fontana

Jose Pablo Navarro, 11, of San Bernardino

Raquel Monzon, 9, of Fontana

Ramon Meza, 29, of San Bernardino

Jeremias Monzon, infant, of San Bernadino

Jose Carlos Camacho Pena, 34, of San Bernardino

Clara Monzon, 40, of Fontana

Jorge Monzon, 41, of Fontana

Rosa Aidee Juarez, 40, of San Bernardino

Edgar David Meza, 11, of San Bernardino

Carol Eugene Nuss, 57, of Willington, Kansas

Unidentified: Two Hispanic females, approximately 6-10 years of age; one Hispanic male, approximately 11-15 years of age

Section Three

When Wildfire Approaches
Your Home:

Should You Leave?
Or Should You. . .

Stay?

Photo courtesy Martin Mann



Photo courtesy Debbie McCleod

VIII Fire Safe Homes – A Homeowner Responsibility

Three basic principles guide the people who live within the wildland-urban interface:

1. In southern California, as in most locations in the United States, wildland fires are inevitable. It is essential to plan for them and take appropriate fire safe actions.
2. When fires occur, the fire services could be overwhelmed by their numbers and high intensities—preventing a response to all fires.
3. If homeowners take the appropriate pre-fire precautions to develop survivable space, homes can survive without the presence of the fire services.

Given such straightforward principles for protection, why is it that many homeowners have not assumed their protection responsibility? Several surveys of California and Nevada area homeowner attitudes have been aggregated by Smith and Rebori (2006) into 15 reasons why homeowners do not prepare defensible space:

- Lack of awareness
- Denial
- Fatalism
- Futility
- Irresponsibility
- Inability
- Lack of incentives
- Insurance
- Lack of knowledge
- Aesthetics
- Unnaturalness
- Disposal of slash
- Discomfort
- Illegality
- Lack of ownership

The above 15 attitudes—and rationalizations—regarding not adequately preparing for the advent of wildfire can be distilled into the “Five Levels of Apathy” (Rogers and Smalley 2005):

1. *“It will never happen.”*
2. *“It’s not going to happen here.”*
3. *“It won’t happen to me or my family.”*
4. *“If it does happen to me, it won’t be that bad.”*
5. *“If it does happen to me and it is bad...well, that’s why I have insurance.”*

Success Story: How Colorado Springs Became Truly Fire Safe

The successful implementation of the comprehensive Fire Mitigation Plan (2001) developed by the Colorado Springs Fire Department is strongly tied to an extensive and highly visible education program. In adapting and implementing this plan with the public, the “Colorado Springs experience” determined that:

- Firewise communities integrate activities that promote fire safety and forest health into their residents’ daily lives—and make them habitual.
- Fire safety considerations are included in community planning.
- People—as well as their organizations—share a common understanding of potential wildfire risk and strive to be responsible for mitigating this risk.

Colorado Springs fire managers discovered that to ensure that people are committed to “fire safe” actions, these proposed actions must be perceived to be both desirable and achievable. These fire managers have further determined that a community transitions through several stages enroute to successfully becoming Firewise:

1. The “raising awareness and promoting learning” stage.
2. The “persuading individuals and groups” stage.
3. The “taking action to promote fire safety and forest health” stage.
4. The “reviewing lessons learned” stage.
5. The “modifying the process—based on what was learned” stage.

The Four Stages of Learning Model

The Colorado Springs experience is also based on the “Four Stages of Learning Model” of Ignorance, Confusion, Confidence, and Mastery. At each of these stages, people require different levels of information before they can progress on to the next stage:

Stage 1 – Ignorance

In this stage people “don’t know what they don’t know.” Because they are not yet aware of the benefits of action, presenting lists of things to accomplish to people in this stage will not make a meaningful impression. At this stage, it is important to increase awareness by communicating why it is important to become involved in Firewise activities.

Stage 2 – Confusion

People at this stage “know that they don’t know” what to do about being Firewise. The objectives here are to reduce confusion through

education—to persuade people to adopt a desired viewpoint and get them to take action.

Stage 3 – Confidence

This is the “how” stage. It is the time to instill people with the confidence necessary to carry out the appropriate Firewise measures on their own.

Stage 4 – Mastery

The goal of this stage is to create more leaders, teachers, and knowledgeable people at the local level to ensure that Firewise momentum is accelerated.

Determining the Wildfire Hazard of Your Property and Home
The Colorado Springs Fire Department has created an innovative Web site that homeowners can visit to determine their property's wildfire hazard rating.
This site also provides information about what steps can be taken to reduce wildfire hazard. This Firewise Web site is available at <<http://csfd.springsgov.com/>>.

Our Land Managers Need to Heed Potential "Fire Threat Zones"

When implementing a strategy to safeguard people and homes in the wildland-urban interface, some land managers like to separate the interface protection strategy from the wildland restoration strategy.

This approach tends to foster a mentality that to guarantee wildfire defensibility, all one has to do is prepare the home ignition zone (the 100-foot radius area around the house) to be fire resistant and ensure that the house is fire resistant. Unfortunately, this line of thinking incorrectly overlooks the basic principle of ecology: *"Everything is connected to everything else."*

With this principle in mind, many fire specialists like to link management actions out in the general "forest zone" as an important adjunct to wildland-urban interface safety. By maintaining a healthier forest, we can reduce the amount of airborne embers that can result from high-intensity crown fires—and thereby threaten the nearby interface areas.

Dave Bunnell, former U.S. Forest Service wildland fire specialist, recommends a spectrum of treatments in the area that stretches from the interface out to the general forest zone. He defines three separate zones associated with managing fire risks and associated damage:

The Defense Zone

This is the populated wildland-urban interface area. The Firewise program can produce the greatest protection of homes and property values within this zone. (Note: This is also the zone where the "Prepare, Stay, and Defend" program [see chapters IX and X] would be implemented.)

The Threat Zone

This comprises the areas that are immediately adjacent to the Defense Zones. This zone needs specific and intense management to reduce the fire's flammability before it enters into the Defense Zone.

The General Zone

This is the area where fires can start and then spread downwind, causing damage many miles away from the interface. Treatment here should have the objective of reducing fire hazard and restoring ecosystem health through thinning, prescribed fire, and other fuel treatment measures.

IX Don't Flee – Prepare, Stay Home, and Defend

As we have seen, when fires threaten people and property in the United States, the common response of fire services and law enforcement personnel is to ask people to evacuate.

Not all countries approach the potential wildfire threat problem this way.

In Australia, for example, when there is a wildfire, the Tasmania Fire Service asks people to go home, *not* to evacuate. Over the years, Tasmania Fire Service managers have learned that when residents stay with their homes—that have been made fire safe—there is a better opportunity that the homes will survive because homeowners assist with fire suppression.

This Australian program is known as “Prepare, Stay, and Defend.”

Houses Protect People and People Protect Houses

The Australian Fire Authorities Council (AFAC) has provided guidance on wildfire safety and evacuation decision-making. Because human lives and property values are at risk when threatened by wildfires, exemplary cooperation and teamwork are required to ensure adequate safety margins.

Team members identified by AFAC for reducing the loss of life and property include:

- State agencies;
- Local government agencies;
- The communities, or collection of residents; and
- Individuals.

Time and again, fire experiences in Australia have demonstrated that “houses protect people and people protect houses.” Obviously, zones of



Cedar Fire Survivor: Completely Unscathed

During the 2003 Fire Siege's Cedar Fire, the residents of this fire resistant home, located near Wildcat Canyon, got into their vehicle and drove into the middle of their pasture—where they experienced extreme heat and suffocating smoke, but survived. Their recently built home endured the fire completely unscathed. In hindsight, these people, therefore, now realize they would have been far more safe by staying in their home with all of the doors and windows closed.

"I view the concept of Prepare, Stay, and Defend as an absolute necessity. It is perfectly in line with the accountability of the homeowner. We have hundreds of engines and hundreds of thousands of homes. There is no way that we can respond to all of these homes. The point here is, the homeowner should be responsible for the fire resistance of the home and the fire safety of the vegetation. It is a logical extension of that thinking that we would reach a point where the homeowner would stay and help with fire suppression."

Rich Hawkins
Fire Management Officer
Cleveland National Forest

defendable space around homes must be established in advance of fires. In addition, the young, elderly, and infirm are evacuated well ahead of the fire.

Because fire service personnel might not be available when burning conditions are severe, communities at risk from wildfires are encouraged to be responsible for their own safety.

This "Prepare, Stay, and Defend" wildland-urban interface vision is one in which houses are able to survive fires—even when fire services personnel are not available. To achieve this outcome requires effective partnerships and collaboration between fire services and residents. The successful "response theme" is comprised of the dual strategy of:

1. Adequate defendable space and fire resistant homes, coupled with
2. The resident's motivation to remain onsite and assist with the suppression of spot fires.

It's Worked in Montana

When the Razor Fire threatened residents of the West Fork area in western Montana in August 2000, many people refused to be evacuated by the sheriff's department. *(Note: six years later this community formally implemented a Prepare, Stay, and Defend protection strategy.)*

These people banded together to protect their neighborhood—creating survivable space, installing sprinkler systems, fighting fire, and providing local intelligence to incoming fire services.

The integration of this neighborhood force with the fire services was recognized as an effective strategy in protecting homes and property. And, it worked. Even though active crown fires were present, no homes or structures were lost in the area.

Therefore, in addition to creating survivable space for homes in the interface, perhaps residents and fire services need to test new methods of cooperating through programs like Australia's successful "Prepare, Stay, and Defend" strategy.

Perhaps the greatest future gains to be made in our always-growing wildland-urban interface areas will be the creation of collaborative networks among homeowners, fire services, and law enforcement departments. Such partnerships could help propel more proactive involvement of homeowners in reducing interface threats—even in assisting homeowners in the proven strategy of preparing, staying, and defending.

Prepare, Stay, and Defend Pilot Project

While differences might exist in wildland-urban interface conditions between Australia and this country, the fact remains that the concepts of Prepare, Stay, and Defend have already been used successfully on a case-by-case basis here.

The steps to establish a Prepare, Stay, and Defend pilot project might consist of these elements:

- Pick a new development where architecture and landscaping are fire safe. Or build a brand new development that is designed to be safe in a fire environment. Or choose an area like Rancho Santa Fe in San Diego County where the motivation already exists for a shelter-in-place concept (see page 74).
- Advise developers, builders, and homeowners to develop a fire safe environment through a fire-designed road system, vegetation clearances around homes, fire resistant housing designs, and a maintenance program for homes and grounds that sustain a fire safe environment over time.
- Train people to have the correct skills and equipment to stay and defend against ember fires.

Our Abundant Vegetation and Wind Conditions Amaze Aussies

After the 2003 Fire Siege, Max Moritz, Fire Science Professor at the University of California, Berkeley helped facilitate a tour for three Australian fire officials of southern California interface areas.

Two conditions that “amazed” these Australians were how much vegetation was present here and the extreme fire behavior during Santa Ana wind conditions.

They explained that the “stay or go” strategy in Australia is based on either getting out early enough to be safe—or, on staying and being actively engaged in the suppression of spot fires.

These Australian fire officials observed three significant conditions here:

1. Homeowners in this country are not trained to stay and fight fire.
2. Our housing stock here is older and more vulnerable to fire.
3. Fire behavior (in southern California) might be more extreme during Santa Ana wind conditions than in Australia.

Kim Zagaris, Chief of the Rescue Branch of California's Office of Emergency Services, notes that we have lost the opportunity for the Prepare, Stay, and Defend model when a wildland-urban interface fire transitions into an urban area and becomes an urban

conflagration—where one house ignites the next house.

When the fire starts burning from home to home, then Prepare, Stay, and Defend is no longer a viable option.

Another Example of "Leave or Stay" Working in This Country

Topanga Canyon in Los Angeles County is another area that has given considerable attention to the issue of "leave or stay" when a wildfire threatens this community area.

Topanga Canyon has a history of large and damaging wildfires. In the past 80 years, this area averaged one large fire every decade—and sometimes two (Feer 2000).

Following the 1993 Topanga Canyon Fire, the Topanga Coalition for Emergency Preparedness (T-CEP) was formed to gather critical information and to communicate this information to people in the community.

Today when a wildfire occurs here, T-CEP advises people to leave early if that is their choice—and to leave responsibly. For people who choose to stay and defend their property, T-CEP also advocates staying in a *responsible* manner. This means that well in advance of fires, residents must:

- Prepare their property to be fire resistant,
- Be equipped to deal with ember fires, and
- Be prepared—both physically and psychologically—to be able to confront wildfires. (In preparing—both mentally and physically—residents also need to understand that the heat, noise, and smoke of a wildfire can be especially stressful.)

In addition, as T-CEP strives to ensure, people who decide to stay need to equip themselves with the necessary personal protective equipment as well as basic firefighting tools.

For, as the Australians have demonstrated repeatedly, those who properly prepare to remain with their property *can* do so in a safe and effective manner.

2,500 People Shelter-in-Place at Barona Casino—Avoid the Cedar Fire Flames



Barona Indian Casino and Hotel.

At about 2 a.m. on the morning that the Cedar Fire was making its initial—fatal—run, the Barona Indian Casino and Hotel in Wildcat Canyon was threatened.

Because—under the circumstances—evacuation of the casino and its adjacent hotel was virtually impossible, its patrons were told to shelter-in-place.

With the facility's broad (non-combustible) parking lot, the Barona hotel-casino was undamaged from the Cedar Fire flames. In fact, the structure became a generator-powered overnight shelter for 2,000

customers and 500 employees who were unable to leave until Sunday afternoon. This sheltering action undoubtedly saved many lives.

Prior Fuel Treatments Near Esperanza Allow Safe Shelter-in-Place

The October 2006 arson-caused Esperanza Fire—that claimed the lives of five members of a Forest Service engine crew conducting initial attack suppression actions on a wildland-urban interface home near Cabazon—started in dry brush near Palm Springs, CA.

By the time it was contained six days later, the fire had consumed 40,200 acres and destroyed 34 homes and 20 outbuildings. Racing through grass, brush, and timber, the blaze forced hundreds of people to evacuate.

However, the residents of several communities located adjacent to a joint Bureau of Land Management and California Department of Forestry and Fire Protection “community fuel break” project—that got underway in 2000—were able to stay in their homes and successfully shelter-in-place.

The Firefighters Who Perish Trying to Save a Home From the Esperanza Fire

As the five Forest Service firefighters tried to defend a home near Cabazon (which was eventually lost), they were overwhelmed by the Esperanza Fire when winds shifted.

Captain Mark Loutzenhiser, 43; Firefighter Jess McLean, 27; Firefighter Jason McKay, 27; and Firefighter Daniel Hoover-Najera, 20; were all killed trying to protect the house.

Fellow Firefighter Pablo Cerda, 23, died later in Arrowhead Regional Medical Center from injuries he sustained while fighting the fire.



This image from the fatal October 2006 Esperanza Fire in southern California shows its proximity to local communities. Grey areas have already burned; red and orange depict active burning at the time of the imagery.

The strategic placement of this fuel treatment project protected the communities of Poppet Flat, Rancho Encino, and Silent Valley from the Esperanza Fire's run. The morning of October 26 as the fire approached these populated areas, its progress was slowed by the prior fuel breaks, and was also diverted by a previously burned prescribed fire area.

When the Esperanza Fire hit this prescribed burn unit it was diverted to

the north—around the communities. Nearby residents never had to evacuate. They successfully sheltered-in-place as the fire burned past.

During the Esperanza Fire incident's morning briefing, the incident command team thanked those responsible for the fuel projects and acknowledged their strategic importance in helping firefighters save the communities and allowing the local citizens to shelter-in-place.

X What Should Your Decision to “Leave or Stay” Depend On?

In his 2005 publication “*Public Safety in the Urban-Wildland Interface: Should Fire-Prone Communities Have a Maximum Occupancy?*” Thomas Cova reports that in many areas of the United States, housing is increasing *without* a commensurate improvement in primary road networks.

He indicates that this dilemma compromises our public safety, making emergency evacuation times too long in duration—as the risk of wildland and structural fuels in the interface increases. To help address this situation, the suggestion has been made to link building codes to maximum occupancy in an enclosed space—as well as outlining the required number, capacity, and arrangement of exits.

Rather than immediately evacuating when wildland fire strikes the interface, Cova described the Australian strategy of residents preparing, staying, and defending their homes—and themselves.

This strategy is based on a system in which capacity calculations for the interface can be adjusted when *all* residents do *not* need to evacuate because adequate defensible space has been established around homes—or adequate community safe zones have been designated and maintained.

Research presented at the 2004 29th Annual Hazards Research and Applications Workshop in Boulder, CO indicated that if residents are given the choice between evacuating and sheltering-in-place—by staying in their homes or in a community shelter—death

toll and injuries during wildfires are actually lower.

Of course, when a community has no shelter and when homes are not defensible, sheltering in place is *not* a good option. Such communities can be retrofitted to provide community safe zones with defensible space around homes.

Clearly, when wildland fire is approaching, the decision to “leave or stay” must be predicated on many elements, including:

- Prudent vegetation management in the community and the immediate area around homes,
- Fire safe building design,
- The ability—based on proper preparation—of homeowners to remain with the property,
- The nature of the road system, and
- The character of the anticipated fire behavior.

Planning and Preparation

For successful outcomes when wildland fire threatens residential areas, whether one leaves or stays, both actions require a considerable amount of advance planning and preparation to ensure success.

State law in Montana specifies that people cannot be forced to evacuate their homes when a wildland fire threatens. Instead, should serious problems arise, residents sign a waiver that releases local authorities of any responsibility.

Your Decision to Stay Or To Go . . .

"Your decision to stay or go is about making a survival decision that has implications for the welfare of your family. It needs to be carefully thought through. Regardless of the choice that is made, careful planning will ensure the best possible outcomes . . .

Once a fire has started, depending on its proximity, leaving your property becomes a different proposition altogether. Sirens, smoke, and flames are not appropriate signals for evacuation. Once a (wild)fire is under way, particularly if it is nearby, even evacuation over short distances can be extremely dangerous. During (wild)fires, more Australians die making late evacuations than in any other way—except as members of firefighting crews.

The second strategy, the 'stay' option, is a more complex and demanding one. Staying to defend a property is a viable option if a home is adequately prepared and if the people who stay are physically and emotionally capable of dealing with what will be—at best—an unpleasant and—at worst—a terrifying experience."

From The Australian Bushfire Safety Guide (Schauble 2004)

Despite such a law, fire services and law enforcement personnel typically like to remove people from the encroaching wildland fire's area. In Montana when people refuse to leave, they may therefore be "threatened" by law enforcement personnel with questions like: *"What's the phone number of your next of kin so they can be called to identify your body?"* Or: *"What is the phone number of your dentist, so that dental records can be used to identify your body?"*

The model in the United States is generally like Fig. 1 (see page 73) where people are warned of the dangers of fires and told to evacuate. In southern California in 2003, many of the 22 residents who died were in the process of evacuating their homes when they were trapped by the fires.

There have been applications of the Australian approach in the United States.

In 2000 and 2003 on the Razor Fire and the Wedge Fire in western Montana—despite evacuation orders—people prepared, stayed, and defended. This approach, however, unlike Australia, has not been institutionalized in this country.

The Australian model, depicted here in Fig. 2 (see page 73), has the fire services and the homeowners working in a close partnership that specifies how to prepare and stay as an integral part of the interface solution. [Note: Figures 1 and 2 are based on Fishbein's and Ajzen's (1975) definitions of belief, attitude, intention, and behavior.]

Australia's Tasmania Fire Service believes that empowering residents of communities-at-risk from wildland fire to perform an active part in their own protection is a viable long-term strategy that enables a safer coexistence with fire as an element of nature.



Fig.1

People in the United States are warned that fire is dangerous and that they need to evacuate. This "scare tactic" approach reinforces the idea that fires are always dangerous and people *must* leave their homes.



Fig. 2

In Australia, when a wildland fire approaches residential communities, people are informed that they can prepare, stay, and defend. Thus, a great number of people in this country do prepare their homes to be fire safe in advance of fires. When fires occur, they remain within their homes to help fight small fires on their property. Using this practice properly, people and property generally survive very well. While these people who adopt this approach to confronting wildland fire understand that fires can be dangerous, they develop the belief that—with proper precautions—they can remain with their home and become an important part of the solution to fire risk in the wildland-urban interface.

Sheltering in Place – A Model for the Future Located Outside San Diego

Perhaps a model for the future is taking place right now north of San Diego at the Rancho Santa Fe development where five new communities have been designed to ensure that residents “live safely in a wildland-urban interface community.”



When a wildfire threatens homes in the Greater Rancho Santa Fe area, evacuations are ordered and people move to established safe shelter locations until the fire threat subsides. Such a planned in-neighborhood evacuation prevents the panic and chaos that can occur during mass, unplanned evacuations—causing traffic collisions, blocked roadways, injuries, and deaths. In fact, most wildfire-related fatalities occur during evacuation efforts.

One of the five “Shelter-in-Place” communities at the Rancho Santa Fe development located north of San Diego.

The houses in five Rancho Santa Fe communities have been designed to shelter people within the safety of their fire resistant homes. All homes here have been designated shelter-in-place areas because they have the following design features:

- Constructed of fire-resistant materials,
- Boxed (closed-in) eaves,
- Residential fire sprinklers,
- Well-maintained fire-resistant landscape with a minimum 100-foot defensible space around all structures,
- A “Class A” non-combustible roof,
- Dual pane or tempered glass windows,
- Chimneys with spark arresters containing one-half inch screening,
- Adequate roadway and driveway widths to accommodate fire apparatus,
- Adequate water supply, and
- Vegetation modification zones surrounding the communities.

Once the fire front has passed, people in these communities are advised to thoroughly check their home, yard, roof, attic, and so forth, for fire—and to use a hose or fire extinguisher to suppress any spot fires or smoldering embers.

To be considered shelter-in-place, an entire community must be designed to withstand heat and flames from an approaching wildfire. This means that every home must share the same fire-resistant design elements, including a well-maintained fire district and approved vegetation management plan.



Rancho Santa Fe Fire Marshall Cliff Hunter (center) does final house inspection at one of the Rancho Santa Fe new "Shelter-In-Place" fire resistant homes.

Simple Precautions Can Make Wildland-Urban Interface Homes Survivable

Obviously, it makes sense to introduce fuel treatments to create survivable space in the immediate vicinity of homes in southern California. Furthermore, under some conditions, the strategic treatment of fuels should provide similar advantages.

The encouraging aspect of needed improvements in the wildland-urban interface is that simple precautions undertaken by homeowners can prove to be all the difference in making a home survivable.

A survivable home is one that can resist wildfires—even when the fire department is unable to respond. Unfortunately, the 2003 Fire Siege demonstrated all too often that homeowners either had *not* undertaken the essential steps *prior* to fires, or had little interest in doing so.

Even so, there were examples in which homeowners and communities *did* work together to ensure the safety of residents and property by taking the appropriate precautions. (See the Sherilton Valley story on page 56.) Examples also exist in southern California where communities have been successfully retrofitted to survive the inevitable fires. However, where homes had *not* been retrofitted with non-flammable roofs—like so many residences in San Diego's Scripps Ranch community—these shake roof homes were destroyed.

"Prepare, Stay, and Defend" – It Can Be Accomplished Here

Press Release from the Painted Rocks Fire District, Alta, Montana:

Prepare, Stay, and Defend Against Wildfires

Alta, Montana October 15, 2006

When wildfire threatens these Montana homes, able-bodied residents who prepare their homes are encouraged to stay through the fire front and protect their property. The Painted Rocks Fire Rescue Company has adopted the "Prepare, Stay, and Defend" policy for its isolated Montana community.

The concept comes from Australian and Tasmanian fire services which help owners and residents to prepare their homes and train them in simple but effective firefighting techniques. Occupied homes are far more likely to survive wildland fires if someone is there to look after them. And homes with a little preparation are good shelters from wildland fires. Painted Rocks residents who prepare to stay can safely ignore evacuation orders and can get access through roadblocks when everyone else must flee.

The volunteer firefighters of Painted Rocks unanimously voted to use the proven system to work with their community home owners to achieve Firewise standards and show residents how to keep their homes from burning. Through voluntary inspections and spring wildland fire training courses, local residents can create islands of safety for their homes and families and be prepared to stay and fight. Those who are unfit to stay through the fire are encouraged to leave early. Leaving late has resulted in more deaths than any other cause during major wildland fires. The panic, poor visibility, and road hazards create accidents with people stranded with no protection from smoke, heat, and fire. By taking responsibility for the protection of their own homes, residents free-up scarce firefighting resources to attack the wildland fire.

A major cost component of the state's firefighting bill is for static structure protection. By shifting these resources to suppression, the state saves money and the fire is extinguished sooner. Everybody wins. Painted Rocks is the same community where many residents chose to stay during the Montana fires of 2000, when three major fires encroached simultaneously.

The motivated vigilante firefighters received international attention for their many helpful efforts in patrolling and extinguishing spot fires that had jumped the fire lines. Although 50,000 acres burned around them, no structures were lost. As a result of their firsthand involvement, they later formed their own fire district.

Experts in field:

Robert Mutch, fire consultant (Missoula, MT) 406-542-7402

John Gledhill, Tasmanian Fire Service

Section Four: Lessons Learned



Photo courtesy Dan Megna

What Can They Tell Us?





The Cedar Fire devours homes at-will in Scripps Ranch. Photo: Courtesy John Gibbins, San Diego Union-Tribune newspaper.

XI Summary of Key Lessons Learned

Several significant lessons that we—both individuals and agencies—should all learn from the Southern California 2003 Fire Siege have been discussed in this report. They include:

- While the loss of life during the Fire Siege of 2003 was overwhelming and tragic—and should never be forgotten—we must also never forget that heroic firefighting on this massive incident under the almost impossible odds of Santa Ana winds and drought-stressed chaparral saved untold numbers of people and their property.
- Most of the people who died during the Cedar and Paradise fires did so while in the process of evacuating at the last minute. In every instance but one, those who died while evacuating were leaving homes that eventually were destroyed by the fires.
- Wildland fires in the wildland-urban interface are inevitable. Therefore, the growing numbers of people who live in these fire-prone areas must be responsible for taking the appropriate measures *in advance* to mitigate the unwanted outcomes from wildfires by ensuring that their homes and property are truly fire resistant.
- When severe fires occur, the fire services may not be able to respond to many fires because they are overwhelmed by the sheer magnitude of the fire siege itself.

- If homeowners take appropriate pre-fire actions to ensure that their homes are fire resistant with sufficient defensible space, these homes will then be able to survive—even when the fire services are absent.
 - When threatened by wildfire, people in the interface have three essential options: (1) evacuate early; (2) prepare, stay, and defend, and shelter in place; or (3) evacuate late. The lessons of the Cedar and Paradise fires instruct us that—if it can possibly be avoided—we do not want to be engaged in the third option. Evacuating late can often lead to death.
 - Education must be ongoing for *all* ages of people who live in this country’s sprawling fire-prone environments. As the 22 faces of the residents who perished in the 2003 Southern California Fire Siege should always remind us, it is crucially essential that if you live inside the wildland-urban interface, you must develop a mindful participation of living compatibly within these locations that will periodically burn.
-

Prior to the Next Outbreak of Severe Wildfire,
These Three Actions Require Our Priority Attention

- ❖ Rehabilitate areas drastically affected by fires and suppression actions.
 - ❖ Restore and maintain ecosystems in a healthy condition.
 - ❖ Return homes and surrounding landscapes in the wildland-urban interface to a survivable condition.
-

Should We or Shouldn't We Be: Introducing Prescribed Fire in These Chaparral Ecosystems?

The destructive and fatal 2003 southern California Fire Siege sparked a “long smoldering” argument about how to manage the volatile, explosive—and ever so fire prone—chaparral ecosystems that predominate this region.

Clearly, if prescribed fire is to be implemented on a large-scale basis in California to successfully reduce fire hazard and to accomplish other resource benefits, this practice must take full advantage of the latest technology—coupled with the capabilities of highly skilled people.

Unfortunately, there are mixed opinions here regarding the use of prescribed fire “fuel treatments” to reduce fire intensity and fire spread rates. Most of the fuel outside the residential homes that burned in the 2003 Fire Siege was “brushland,” a conglomeration of grasses, coastal sage scrub,

Scientists Divided Over the Wisdom of Fire Management in Chaparral Ecosystems

“Scientists are sharply divided over the nature of the chaparral fire threat, the extent to which human activity can be blamed, and what ought to be done to preserve lives, property, and wildlife habitat.

The debate is characterized as the “Minnich school” vs. the “Keeley school.”

Minnich is Richard A. Minnich, a blunt, outspoken professor of geography at UC Riverside, who argues that a century of active fire suppression—putting out wildfires as quickly as possible—has created a thick blanket of old, dead, highly combustible chaparral that is, in his words, akin to a ‘pool of gasoline.’ Minnich’s remedy: A regional, rotating program of controlled burns that would, over time, eliminate the most perilous patches of chaparral and create a mosaic of different-aged vegetation.

Keeley is Jon E. Keeley, a research ecologist for the U.S. Geological Survey. Though more soft-spoken than Minnich, Keeley is no less adamant in his opinions. By and large, he says, controlled burns are ineffective, inefficient and, if done too often, environmentally harmful. The ultimate villain here, Keeley says, isn’t ‘fuel load’—the amount of combustible vegetation—but wind. Keeley states that a fire in extreme windy conditions is going to burn through anything, old and young vegetation, and what it can’t burn, it will go around or jump by sending embers up to a mile ahead of it.

Both Keeley and Minnich share common ground when it comes to the wildland-urban interface. Both scientists believe that southern California land planners have failed to account for the fact of interface fires, allowing human development into high-risk fire areas without adequate precautions or common sense. Minnich advocates greater restrictions, even outright bans, on development in fire-prone areas. He says insurance rates in such places should be raised to accurately reflect the real risk.

The interface is where Keeley says controlled burns make some sense, if only to provide ‘defensible space’ for firefighters when a blaze does occur.”

Excerpted from May 12, 2004
San Diego Union-Tribune article
by staff writer Scott LaFee

Because home ignitability is limited to a home and its immediate surroundings, fire managers can separate the wildland-urban interface problem from other landscape-scale fire management issues (Cohen 2000). Research by Jack Cohen, a fire scientist at the U.S. Forest Service Fire Laboratory in Missoula, MT, indicates that the home and its surrounding 40 meters determine this home ignitability zone. Homeowners must step up and assume full responsibility for ensuring that their homes have low "home ignitability." At the same time, the fire services need to become full partners by providing homeowners with the appropriate technical assistance.

and various types of chaparral—typically a dense tangle of woody evergreens and dwarf trees such as chamise, toyon, and leather oak. This volatile fuel type covers a total of approximately 10 million acres of California's lands.

So, should we or shouldn't we be introducing prescribed fire here in these chaparral ecosystems—the prevalent fuel type that unquestionably fueled the 2003 Fire Siege?

No Consensus Viewpoint

Recognizing the fire risk severity in southern California's chaparral and the great risk to people and property from wildfires here, it is unfortunate that this debate has not yet been replaced by a consensus viewpoint.

For it is imperative that we now collaborate to find a "middle ground" that provides a reasonable balance for both views.

Obviously, when blowtorch Santa Ana winds prevail, differences in fuel age on flammability can readily be overcome by high-intensity flame lengths and long-distance spotting. Under these conditions, fires reach a point where less flammable younger age fuel classes can be bridged—as fires find their way over,

through, or around these younger age and less volatile fuels.

And yet most firefighters will say that they welcome the advantage provided by the less flammable younger fuels that can substantially reduce flame lengths. No one denies that reduced intensities can enhance suppression efforts. Furthermore, Santa Ana's don't push fires forever. When winds moderate, the age class mosaic can be more instrumental in complementing suppression success.

For these reasons, most agencies believe that fuel modification through mechanical treatment or prescribed burning can help reduce the fire risk to people and property in interface areas. In addition, a fuel mosaic that includes younger age fuels will produce less of a detrimental heat impact to the site than will uniformly older and heavier fuel loads. Thus, fires in such a fuel mosaic with younger fuels will result in less damage to soils and watershed values.

Chaparral Studies Needed

Therefore, current assessments of chaparral management need to be augmented by a rigorous analysis of fire behavior consequences of differing fuel treatment and non-treatment options.

New Land and Fuel Management Plans Emphasize Treatments

The Forest Service intends to build on existing unit-level efforts to develop a more comprehensive interagency, intergovernmental Wildland Fuels Management Plan for California (Pacific Southwest Region 2005). The essential components of this plan include:

- A “Balance of Harm Assessment” to evaluate long-term costs and risks to people, capital improvements, and natural resources including air/water quality and listed or endangered species.
- A Wildland Fuel Hazard rating to indicate flammability potential and locations of highest wildfire risk relative to social, community, and ecological values.
- A prioritized treatment schedule aimed toward achieving wildland fuel treatment objectives in a specified timeframe.
- Economic incentives to establish new, unconventional markets as a means to accelerate fuel hazard abatement treatment.

Moreover, new land management plans that emphasize fuel treatments are currently being prepared for four southern California national forests.

Indeed, substantial research and results from management actions have already verified that the arrangement of landscape-scale fuel treatments can *significantly* alter the behavior of wildfires by reducing intensities and altering fire spread patterns.

For example, an analysis of two 2002 Arizona wildfires that burned in previous prescribed fire sites reveal that these management-introduced fire treatments reduced wildfire severity and changed fire spread progress (Finney and others 2005).

A simulation system was also developed to explore how fuel treatments placed in random and optimal spatial patterns affected the growth and behavior of large forest fires when implemented at different rates over the course of five decades (Finney and others 2006).

This study found that with these fuel treatment prescriptions that involved thinning and prescribed burning, even optimal treatment arrangements required

at least 10 to 20 percent of the landscape to be treated each decade. To produce this same effectiveness, randomly arranged units—with the same treatment prescriptions—required about twice that rate.

Similar fire behavior studies in chaparral would be useful to determine the efficacy of fuel treatment to alter spread and intensity patterns, as well as to determine the optimum size and arrangement of chaparral fuel treatments to produce the greatest effects over the longest term.

Another study has confirmed that shaded fuelbreaks—coupled with area-wide fuel treatments—can reduce the size, intensity, and effects of wildland fires (Agee and others 2000). Such a strategy could be useful in places like the forested mountain communities near San Bernardino.

Prescribed Fire Benefits

In response to the critics of fuel treatment, it must be continually emphasized that practices like thinning and prescribed fire do not, of themselves, stop fires.

Fires are stopped by firefighters and the significant moderation of critical fire weather. Nonetheless, fuel treatments *can* provide firefighters important advantages for suppression success by:

- Reducing fire intensity,
- Modifying fire spread patterns, and
- Minimizing fire spotting distances.

There are instances, however, where chaparral has been replaced by invasive grasses, which ignite easily when cured and spread fire rapidly. This type conversion can be prevalent when prescribed fires are introduced more

frequently than the historical range of variability.

Prescribed Fire Escapes

It should also be pointed out that prescribed fire ignited to reduce fire hazard that escapes and transitions to wildfire is occurring more frequently on federal lands in California than anywhere else.²

According to U.S. Forest Service data analyzed by The Associated Press, at least 30 prescribed fires escaped in the state since 2003. This accounts for roughly half of all such fire escapes in the entire country. There's no question that prescribed burns are recognized as an advantageous method for reducing the risk of wildfire. In California, however, a dry climate, highly flammable vegetation—especially in the state's southern regions—strong winds, and steep terrain, all make prescribed burns more difficult to control.

Prescribed Fire Statistics

From 2003 to 2005 nationwide, prescribed burns on Forest Service lands escaped 0.5 percent of the time. Of the nearly 11,000 prescribed fires implemented during this time period, fire crews lost control of 54 that burned a total of 66,000 acres. In California, three percent of Forest Service prescribed fires (28 total) escaped, burning approximately 21,000 acres.

² Associated Press. Report: State's controlled fires often become wildfires. Gillian Flaccus. San Bernardino, The Sun. June 18, 2006.

XIII 12 Critical Lessons Related to the 22 Resident Deaths

The following lessons are either directly or indirectly related to the deaths of those 22 residents who perished during the 2003 Fire Siege.

One lesson in particular, the Australian practice of “*Prepare, Stay, and Defend*” in the interface, is relevant to the fire situation in southern California and elsewhere. Preparing, staying, and defending allows people to make homes and property fire resistant. This practice provides a safe haven for people to remain at home—with pets—rather than chance a risky evacuation in which, in the past, many people have died. Five communities in southern California’s Rancho Santa Fe are currently engaged in a strategy of sheltering in place (see page 74).

1. Lesson

If current fire information is not organized and disseminated in a timely manner by the agencies, a disorganized and even negative dispersal of news will result.

Implement a Joint Information Center (JIC) early in incidents to provide timely and accurate information to the media and to the public. During the 2003 Fire Siege, the San Bernardino area did this and received a positive public information experience. The San Diego area, however, did *not* do this and experienced a negative media backlash from some sources. Also, consider implementing non-traditional and Web-based information systems, even aiding those locally generated neighborhood Web sites that are established to spread the latest news about fires.

An in-depth analysis of communications with wildland-urban interface communities during the fire siege recommended that the fire management officials’ primary responsibility should be to “inform the network” (Taylor and others 2005). The authors of this report explain that the at-risk public is seeking real-time information. Thus, the key for fire management is to have accurate information readily available. A second recommendation was to provide a positive response to groups who are trying to provide a local information function for both firefighting and for media reporting.

2. Lesson

The residential evacuation process from a wildfire can be one of the most hazardous undertakings, resulting in human injury or death due to chaotic conditions and congestion on the roads. Many of those who died on the Cedar and Paradise fires were trapped by flames while trying to flee to safety.

Develop a multi-jurisdictional evacuation plan with all partners. Inform the public about evacuation procedures in advance and schedule evacuation simulations. Such a plan was instrumental in safely evacuating 70,000 people from the mountain resort area who were threatened by the Old Fire in the San Bernardino area. Except in the Mount Palomar area, such a plan was *not* in place in San Diego County.

3. Lesson

As they have learned repeatedly in Australia: *"People protect houses and houses protect people."*

When fires are spreading faster than people can be evacuated, it is time to consider a strategy like "Prepare, Stay, and Defend." If a house is fire-safe, then the best place for people to be is with their home. The home can provide a safe refuge for people and their pets. In addition, people who are prepared and trained can successfully protect their home from ember fires.

The indisputable key to "sheltering-in-place" is for the young, infirm, and older residents TO EVACUATE EARLY—and to stay and defend ONLY if you and your property have been properly prepared to do so WELL IN ADVANCE.

4. Lesson

A multiplicity of safety zones and refuges can provide people with alternative choices and options when the unexpected occurs and planned escape routes are no longer safe.

The strategy of community "safe refuge" areas—where people can congregate in a safe manner (places like golf courses, green belts, parks, casinos, etc.)—could be useful safe havens during emergencies. Wayne Mitchell, with the California Department of Forestry and Protection (CDF), described how this approach was implemented in Butte County, California:

"In 1996 the California Board of Forestry and Fire Protection adopted the California Fire Plan. This plan called for reducing the costs and losses associated with wildland fire by using a balance of suppression, prevention, and fuels management actions. The board also called for strong landowner and community involvement as local solutions were developed. Director Wilson advocated the formation of community action groups—FireSafe Councils—as a key to getting local involvement.

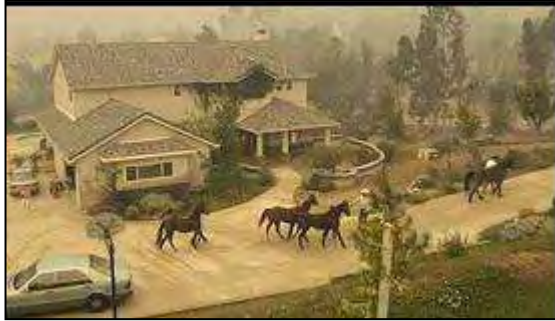
Chief Sager, Chief of the CDF Butte Unit/Butte County Fire Department, realized that the newly forming FireSafe Councils needed a project that they could accomplish quickly—that would be within their limited experience base. They decided to create community-based evacuation plans with escape routes and safety islands shown on maps. One side of the brochure showed the escape routes and safety islands. The other side included a checklist of things to consider during an evacuation. The safety islands were designed as collection points, or "staging areas," where homeowners could gather and prepare for an orderly evacuation from the general area. Fuel treatments around the safety areas quickly became a priority.

The FireSafe Council also recognized that fuel treatments along the escape route corridors were a high priority. This planning activity then led citizens to the realization that the areas around houses also needed to be treated so that the homes could survive. Chief Sager and the Butte FireSafe Council developed the model and many other areas around the state adopted the idea."

5. Lesson

During times of crisis—such as the 2003 Fire Siege and Hurricane Katrina—people will attempt every possible option to save pets.

Homeowners need to plan in advance regarding the needs of their livestock and pets for that day—or night—when wildfires threaten. The Rancho Santa Fe Fire Protection District provides the following information based on direction from the Federal Emergency Management Agency and the San Diego Humane Society:



Trying to save horses from the Cedar Fire.

“Before an emergency occurs, contact your local animal shelter, humane society, or veterinarian for information on caring for pets in an emergency. Find out if there will be any shelters set-up to harbor pets during emergencies. Ask your veterinarian whether they will accept your pet in an emergency.

Additionally, find out—well in advance—which local motels and hotels in your area allow pets. For

larger animals and livestock, arrangements for evacuation—including routes and host sites—should be made far in advance. Trucks, trailers, and other vehicles suitable for transporting livestock should be available, as well as experienced handlers and drivers to transport them. Whenever possible, the animals should be accustomed to these vehicles in advance to ensure they are less frightened and easier to move during the potential chaos of an emergency situation.”

6. Lesson

Incident coordination and command will be better served when there are fewer jurisdictions involved.

Due to the small number of jurisdictions involved, Los Angeles County, San Bernardino County, and Ventura County all experienced an effective emergency management environment during the 2003 Fire Siege. In a bigger area, such as San Diego County, a total of approximately 65 separate jurisdictions make cooperation and communications much more difficult. This predicament was highlighted in an article in the *Voice of San Diego* (August 14, 2006) by Sam Hodgson:

“San Diego is the largest county in California that doesn’t have its own fire department. Sixty-five separate agencies protect the county, but there is no unified command that binds them together. Many of the rural areas of San Diego are protected by understaffed and under-funded fire districts, officials say. In some of the unincorporated regions of the county, there is simply no fire department whatsoever.

The patchwork system began in 1974, when the county discontinued its funding for fire services and encouraged unincorporated areas to create their own volunteer fire departments. For more than 30 years, the county stayed out of the fire protection business. This year, the Board of Supervisors began to reverse that trend, approving a three-year program that provides \$5 million annually for such simple expenses as utility bills and gas for rural volunteer fire agencies. They approved an additional \$3.5 million this year. In the coming years, however, Intermountain Fire Chief Cary Coleman and other fire chiefs will be looking to the county to go a step farther and create a countywide fire district—complete with an elected board and county fire chief independent from county government.

Starting in 2004, San Diego's Local Agency Formation Commission, a group that attempts to discourage sprawl through strategic planning, has been studying the possibility of merging 24 rural fire agencies into one special fire district. LAFCO is contemplating six different fire protection plans right now that would, to various degrees, combine fire departments, improve the quality of volunteer fire crews, and, in some instances, hire paid personnel. The agency expects to deliver the results of this study in December."

7. Lesson

Numerous studies and observations in forest types have repeatedly shown that prior fuel treatments have been significant in altering fire spread patterns, reducing fire intensity levels, and shortening fire spotting distances.

Design and conduct a rigorous fire behavior analysis on the benefits and shortcomings of fuel treatments in chaparral ecosystems to help set treatment priorities and realistically determine the efficacy of producing and maintaining age-class mosaics to ameliorate fire behavior parameters in these fire-prone areas.

8. Lesson

During the 2003 Fire Siege when entire communities were threatened with major loss of life and property, it became apparent that emergency responders and the general public were both subjected to the trauma of critical incident stress.

Respondents to a lessons learned information collection team effort reported that they believed that critical incident stress resulting from the 2003 Fire Siege affected a very large number of individuals (Wildland Fire Lessons Learned Center 2003). In the same report, some senior leaders expressed a concern that their agencies would not provide an effective bridge between the critical incident stress counseling services available at incidents and an ongoing, comprehensive program at home units. Also, during the siege, large numbers of citizens availed themselves to stress counseling services from the American Red Cross and other such units.

It must be recognized that there are both benefits and limitations to the Critical Incident Stress Debriefing process (CISD). Hiley-Young and Gerrity report that CISD may provide some immediate opportunities for victims to talk to one another, but this is unlikely to provide effective treatment for complex, ongoing, or persistent problems that have resulted from: the disaster itself, pre-disaster vulnerabilities, or any variety of social conditions that surrounded the traumatic event (1994). At the same time, short-term group discussion also provides an opportunity to educate. The intent of such teaching is to normalize reactions, facilitate coping, increase awareness of adaptive and maladaptive behaviors, identify and refer individuals who may benefit from specialized assistance—and provide information about any related community resources.

These authors also recommend that debriefing be viewed within its function to address a limited aspect of a victim's disaster experience. They inform that such debriefing serves as a means to educate participants about other critical factors that affect stress response. They point out that this debriefing action can also serve as a means to make referrals to other related resources. Lastly, they recommend that other education-oriented interventions (such as outreach presentations to organizations, institutions, self-help groups, special populations, media programs, hot lines, etc.) and efforts to mobilize and strengthen social networks receive equal effort by disaster mental health practitioners.

9. Lesson

The entrapment circumstances of the people who perished during the 2003 Fire Siege tell a compelling story that can serve as a catalyst to motivate others to actively develop fire resistant homes and properties.

More Effective Disaster Warnings

The Working Group on Natural Disaster Information Systems, under the National Science and Technology Council, issued a November 2000 report on "Effective Disaster Warnings" that acknowledged that the rapid warning of what is happening during a disaster can be very effective in helping people reduce losses and damage as well as improve response. The report called for better coordination among the warning providers, more effective delivery mechanisms, better education of those at risk, and new ways for building partnerships among the many public and private groups involved.

The report concluded that many new technologies provide the chance not only to reach just the people at risk, but to also personalize the message to their particular situation. If we simply become better coordinated, opportunities are now available to significantly reduce the loss of life and economic hardship,

For example, telephones can be dialed by computers to warn people within a specific area (Reverse 911 or Call Warning). Available commercial systems now allow emergency managers to quickly specify the small region of interest—with as many as hundreds of computers dialing simultaneously with a specific message.

One of the more advanced warning systems available today is the All-Hazard Emergency Message System available on the NOAA Weather Radio (<http://www.weather.gov:80/nwr/allhazard.htm>).

The National Weather Service (NWS) broadcasts warnings, watches, forecasts, and other non-weather related hazard information 24-hours a-day. During an emergency, NWS forecasters interrupt routine broadcasts and send a special tone that activates local weather radios.

Weather radios (equipped with a special alarm-tone feature) then sound an alert with immediate information about a life-threatening situation. This weather radio system can broadcast warnings and post-event information for all types of hazards.

Establish a societal conscience to compassionately remember the victims of the Fire Siege of 2003. In addition to remembering these people in memorials and tributes, use their FACES and their stories to serve as a living catalyst to motivate others to now act in prudent and fire-safe ways. A FACES poster has been developed for use by FireSafe Councils and others to help instill an improved wildland-urban interface conscience.

10. Lesson

People who choose to reside in southern California's chaparral ecosystems must learn to live in this fire-prone environment in a compatible manner. In doing so, they must take full responsibility for all possible precautions to safeguard life and property.

Continue the educational message launched by the fire exhibit at the San Diego Museum of Natural History that encourages children—and adults—to be well-versed about living in harmony with the fire-prone chaparral landscapes in southern California.

11. Lesson

Repeatedly during the 2003 Fire Siege, interested people were developing informative Web sites to update and communicate essential—and useful—information about the progress and extent of the fires.

Agencies need to encourage such site-specific Web sites that can assist homeowners in determining both fuel hazards and mitigation measures for being more fire safe in the interface—as well as serving as critical links for helpful information *during* emergencies.

12. Lesson

In southern California, where steep slopes often are greater than the angle of repose, it is paramount that definitive systems be established by state and local authorities to warn people of floods and debris flows where vegetation has been removed by wildfires.

Barkley and Othmer (2004) suggest that there needed to be a heightened awareness at the local level to provide timely flood warnings after the 2003 Fire Siege:

“The threats posed by flooding, erosion, and debris flows following wildfires require a fundamentally different approach to preparedness and response. Due to the rapid occurrence of these events, advance identification of risks, effective warning systems, and coordinated response efforts are essential. For an event of the magnitude of the 2003 fires, state and federal assistance can be expected. But the rapid occurrence and extreme nature of these events places a premium on effective preparedness at the local level.”

VICTIMS OF THE 2003 CALIFORNIA WILDFIRES



**A REMINDER THAT EVERY
HUMAN LIFE IS PRECIOUS!**

Prepare Now!

Pass Through a Portal to Safety!

**Protect Family, Property, and
Animals in the Interface!**

Contact: www.firewise.org



Photo courtesy Dan Megna

This poster is being widely distributed on a national basis.

XIV Passing Through a Safety Portal to Help Ensure That Others Will Now Survive

“Career wildland firefighters usually pass through a ‘safety awareness portal’ that gives them new perspectives, alters their reality, and enhances their own personal approach to safety and risk. Transiting the portal is like a wakeup call.”

Paul Chamberlin

Fire Operations Safety Specialist
Northern Rockies Fire Operations
U.S. Forest Service

This country’s wildland-urban interface residents, just like its wildland firefighters, can also pass through a “portal to safety”—a personal transition toward a safer condition in which new perspectives are achieved and reality may be meaningfully altered.

Paul Chamberlin, Fire Operations Safety Specialist with the U.S. Forest Service’s Northern Rockies Fire Operations in Missoula, MT explains that, often times, transiting this so-called “portal” is related to traumatic events.

He is optimistic, however, that well-conceived fire safety initiatives can help people pass through and experience this portal *without* personal trauma to themselves. This is certainly a worthy goal to strive toward as we attempt to institutionalize the lessons learned from southern California’s 2003 Fire Siege. After reading this report, you now know how 23 people were overcome and died

such terrible and traumatic deaths trying to flee this Fire Siege’s flames.

You know each of these peoples’ faces—their stories, the reality of their tragedies. You know how quickly each of them was overcome by the flames and smoke from those fast spreading wildfires—and died.

Perhaps, now, these wildfire victim’s stories can help other wildland-urban interface residents to better prepare for *their* inevitable wildfires. And to do so *without* suffering the personal—and such potentially severe—consequences.

Chamberlin has also observed that involvement in a traumatic event is no guarantee that one will acknowledge and pass through a portal experience. Transiting a portal, he explains, is a deep and absolute process.

All of us who read about what these fires did to these San Diego area wildland-urban interface residents must now realize the absolute importance for creating fire resistant houses and property.

If people who live in the interface can take the trauma experienced by our 2003 Fire Siege victims to heart, they may be able to successfully pass through a “portal” to a safer reality. A new actuality in which:

1. Survivable space is created around homes;
2. People, thus, stay with their homes and property when a wildfire occurs; and
3. People successfully defend against the ember fires that typically accompany a firefront’s passing.

All of us who read about what these fires did to these San Diego area residents must now realize the importance of creating fire resistant houses and property.

This is a key legacy that has now been passed on to us by these 23 souls. As a tribute to them, we should all strive to honor their loss and ensure that their stories—their faces—will now help others to survive.

Ensuring Low-Ignitability Potential for Homes and Fire Resistant Landscaping

The vital importance of preparing homes and properties for wildfire is not a new notion.

Almost four long decades ago, the late John Zivnuska (1968), internationally recognized expert in forest economics and policy and former dean of forestry at the University of California, Berkeley called for practices that would demonstrate a reasonable degree of intelligence for living with southern California’s fire climate:

- Conversion from natural landscaping to irrigated landscaping and succulents,
- Good housekeeping involving the removal of flammable materials,
- Requirements for fire-resistant roofing materials,
- Zoning based on fire hazard considerations,
- Prohibition of cul-de-sac developments,
- Requirements for multiple routes of ingress and egress, and
- Other similar fire-safe practices.

Fortunately, today, there are numerous guides and brochures available to homeowners with helpful information on how to ensure that dwellings have low-ignitability potential and fire-resistant landscaping.

“A Homeowner’s Guide” authored by Klaus Radtke, a former forester with the Los Angeles County Fire Department’s forestry division, who now serves as a consultant for Firewise Communities, is a recommended source for such information. This publication is available from the City of San Diego Water Department.

The California Fire Safe Council also has “fire safe landscaping” brochures available—keyed to “Timberland, Brushland, and Grassland”—at its Web site <www.FireSafeCouncil.org>.

The Firewise program also offers effective materials for producing fire safe environments for homes and communities. The national Firewise Communities program is a multi-agency effort designed to reach beyond the fire services by involving homeowners, community leaders, planners, and developers to reduce wildfire risks to people, property, and natural resources. (See the Firewise Web site: <www.firewise.org>.)

This Firewise Communities approach emphasizes:

- Community responsibility for planning and designing safe communities;
- Individual responsibility for safer home construction and design, landscaping, and maintenance; and
- Effective emergency response.

Where local government actively supported and enforced hazard abatement programs, fewer homes were lost in communities in southern California in 2003 (Wildland Fire Lessons Learned Center 2003). Wildland-urban interface areas that had 100-foot abatement limits were extremely effective.

"I wish, interagency-wise, that all fire agencies could drop their egos and play together as a better team. If we were to maximize our similarities and minimize our differences, we'd be a much stronger team. The best professional sports teams play well together because they truly are a team—not individuals. I wish our agencies—and I say *ours*, mine included—could drop their egos and play together. If this could happen we would be a well-defined firefighting tool."

John Hawkins, Riverside Unit Chief, California Department of Forestry and Fire Protection, and Riverside County Fire Chief—who served as the Cedar Fire Incident Commander.

Many of the 2003 Fire Siege after action reports called for a much improved partnership among all agencies at the federal, state, and local levels.

XV Conclusion – Vital Next Steps

In reviewing today's wildland fire situation, it is apparent that a continued emphasis on solely the emergency response side of the wildfire "problem" will result in continued large and damaging fires.

It is therefore imperative that we couple our emergency preparedness and response programs with more sustainable land use policies and practices. This includes the recruitment of homeowners to become a significant part of the solution in their wildland-urban interface.

For only when sustainable land use practices and emergency preparedness measures complement each other will long-term benefits accrue for society and the wildland-urban interface.

Homeowners must become a significant part of the solution in their wildland-urban interface.

To reduce the threat of future fires and to ensure the survival of people and property everywhere, the following should all be developed and integrated on a landscape scale through the appropriate networks:

- ❖ Collaborative strategies for sound forest thinning practices,
- ❖ Community cooperation,
- ❖ Prescribed burning that reduces flammability, and
- ❖ The universal enactment of defensible space.

“Our challenge is to live and build our communities in a more fire-safe manner, reduce the unnatural fuel levels in our wildlands, and improve our evacuation plans and communication systems. We still need better preplanning and training across the more than 65 local fire and public safety agencies in San Diego.

I suggest looking at the success of the MAST effort in San Bernardino as a model. CDF and the U.S. Forest Service are constantly engaged in efforts to improve our coordination, command systems, and equipment. We in the public sector need to do our part, and the residents living in the wildlands need to do theirs.”

Andrea Tuttle, Director of the California Department of Forestry and Fire Protection (CDF) during the 2003 Fire Siege, in testimony to the Governor’s Blue Ribbon Commission.

Much Still Needs To Be Done

All of the “Lessons Learned” derived in this report are either directly or indirectly related to the circumstances of those people who lost their lives in the 2003 Fire Siege.

There is no question that much still needs to be done to apply these lessons to live more compatibly with chaparral in southern California—as well as within similar fire-prone ecosystems throughout this country.

Efforts like those now underway in the San Diego area’s Rancho Santa Fe—discussed in this report (*see page 74*)—provide us with a glimpse into a potential future where people actually *prepare, stay, and defend* against the inevitable cycle of wildfires.

For, as we all know, in these fire-prone landscapes, those flames *will* come again.

Thus, sustainable land use practices and emergency preparedness measures can

complement one another when we strengthen the vital harmony between people and ecosystems by empowering teams or networks—like FireSafe Councils—to work collaboratively toward systematic fire management on a landscape scale.

Then, when all segments of society work closely together to implement a suite of strategies to safeguard people and property, we will have less of a chance to repeat the tragic history of both the 1991 Oakland Fire—in which 25 residents died trying to flee the flames—as well as the fatal 2003 Fire Siege in southern California.

As this report underscores, the 23 victims of the 2003 Fire Siege have now given us a legacy—a constant reminder—that each and every human life is precious.

In the wake of their tragic deaths, the faces of these people—their stories—can now lead us toward a future in which *all* wildland-urban interface homes *and* their residents will be more fire safe.

XVI Acknowledgements – People Making a Difference in the Interface



Andrea Tuttle

Sincere appreciation is extended to Andrea Tuttle, former director of the California Department of Forestry and Protection (CDF), for providing the initial information that led to the idea for this special Wildland Fire Lessons Learned Center report.

Andrea has a keen grasp of the issues related to the 2003 Fire Siege and served as an excellent source of information about this event.



The Lakeside Historical
Society

The Lakeside Historical Society is gratefully acknowledged as the primary source of the initial images of the Fire Siege's victims as they appear on the Society's Web site: www.lakesidehistoricalsociety.org.

It is due to the society's kind support of this report's objectives that others will now have the opportunity to honor the lives lost, as well as learn about the circumstances related to these people's deaths.

I especially thank Lakeside Historical Society member Elaine Brack for her kind assistance in facilitating communications with the society, as well as her knowledge of the Cedar Fire in the Lakeside area.



Elaine Brack



Lori Roach

It is hard to imagine any greater suffering than that of a parent who has lost a child. I am certain that all readers will experience a sense of compassion when they read the compelling account of the last hours in the life of Lori and John Roach's daughter Ashleigh who, along with her brother and sister, were overrun by the Paradise Fire on Station Road in Valley Center.

Thank you, Lori, for understanding the importance of these stories and having the strength to recount the tragic events that occurred.

A very special thank you to Laurel Westly, daughter of Cedar Fire victim Ralph Westly, who provided helpful background information as well as several images of her father for use in this report.

Also, the deepest gratitude is extended to all of the other family members and friends of the Fire Siege victims for sharing their information and pictures. These generous people include Marcia Seiler-Christy, Molly Sloan, Andy Shohara, Steve Morphew, Anne McKittrick, Mary Ann Downs, and Lonnie Bellante.



Laurel Westly



Kim Zagaris

Wayne Mitchell of CDF and Kim Zagaris of California's Office of Emergency Services, provided key reports and reviews that highlighted the complex issues associated with the many fires that occurred during the Fire Siege. As this Lessons Learned report was drafted, Wayne and Kim were consistently available to answer questions and review material. Their sincere and knowledgeable assistance was instrumental in helping to identify future fire-safe solutions in the wildland-urban interface.



Wayne Mitchell



Mike Rogers

The assistance of Mike Rogers, Firewise 2000, is greatly appreciated. Mike served as a highly capable guide to the fire conditions that characterize southern California. He provided helpful insights into the prevailing fire behavior and community responses during the Fire Siege.

He was also able to enlighten me to the improvements that have been made within the San Diego area's interface zones since 2003. I am also indebted to Mike for arranging numerous contacts with key individuals in the San Diego area who were knowledgeable about the fires.

The help of Max Moritz, University of California, Berkeley was also significant.

Max carefully defined wildland-urban interface issues and solutions. He also described wildland-urban interface work-in-progress to better motivate and assist residents who live within these fire-prone areas.



Max Moritz



Mike Conrad

Mike Conrad, Chief of the San Bernardino City Fire Department (SBFD), was instrumental in describing the conditions that occurred on December 25, 2003, when 16 people died due to flooding—triggered by the Old Fire’s prior impacts—in Old Waterman Canyon and an adjacent canyon.

Assistance was also provided by Mike’s SBFD staff in highlighting prevailing conditions when the Old Fire entered their city and became an urban conflagration.



Jerry Mitchell

The insights of Jerry Mitchell and Laura Dyberg were particularly compelling in describing the roles of FireSafe Councils in gaining community support and action for defensible space.



Laura Dyberg

The help of Denny Simmerman, with the U.S. Forest Service Fire Laboratory in Missoula, MT, is gratefully acknowledged for producing the various graphics used throughout this report.

Thank you for your good work, Denny.



Denny Simmerman

“We hope you will come away with a sense of awe for both the splendor of nature and the power of fire, and with a sense of responsibility for living in this fire-dependent place,” Dr. Anne Fege, exhibition curator, explained to me as she provided a personal tour of the chaparral exhibit at the



Dr. Anne Fege

San Diego Museum of

Natural History. Designed to raise awareness of the history and inevitability of fire in southern California's arid and diverse wildlands, “Earth, Wind and *WILDFIRE!*” employs objects, videos, photographs, and interactive displays to communicate its compelling message. Visitors to this award-winning exhibit and I need to express a debt of gratitude to Anne Fege and her colleagues for this exceptionally well done educational project.

First grade girl dancing at “Earth, Wind, and *WILDFIRE!*” exhibit in San Diego. She is celebrating a better future living with fire.



Cliff Hunter

Sometimes, two individuals are on a collision course for a fateful meeting. Such was the case in November 2006 when I stopped in—unannounced—at the Rancho Santa Fe Fire Protection District Headquarters.

I was searching for Fire Marshall Cliff Hunter, the guiding light for implementing the concept of “Shelter in Place” within five of the district’s communities.

It was my good fortune that morning to not only discover Cliff Hunter in the reception area, but also to be invited to join him as he conducted the final compliance inspection of landscaping and home construction for a new house that had just been completed.

There could not have been a better opportunity to view his close attention to all the details that ensure a fire resistant housing site—another piece in the puzzle of safely sheltering in place. Thank you, Cliff, for allowing me to tag along with you that eventful morning.



Ken Burns

I gratefully acknowledge Ken Burns and John Gledhill of the Tasmania Fire Service for their in-depth coverage of the “*Prepare, Stay, and Defend*” fire protection strategy for the wildland-urban interface.



John Gledhill

My education in this regard included an on-the-ground tour of an area outside Hobart, Tasmania, that had been overrun by a eucalyptus wildfire. More than 90% of the residents had stayed in defense of their homes. Not one home was lost. As our country begins to consider a similar strategy for its interface areas, we look to examples such as this in Australia for guidance.



John Hawkins, Cedar Fire Incident Commander

I am particularly indebted to the in-depth interviews that were granted to me by Andrea Tuttle, Wayne Mitchell, Kim Zagaris, Max Moritz, Jerry Mitchell, Laura Dyberg, Mike Conrad, Rich Hawkins, and John Hawkins. Their keen understanding of events associated with the Fire Siege of 2003—and their concerns and insights about the wildland-urban interface—provided a significant context for this report.

Cheryl Jennie lost her husband and literally *everything* to the Cedar Fire. She almost lost her own life, as well. This devastating event continues to impact Cheryl in a variety ways—both legally and emotionally. And yet when we contacted her and informed her of the purpose of our report and asked if she could share her traumatic Cedar Fire story with us, she graciously and generously complied. I am humbled by her resilience. And I am forever thankful that she so willingly shared her story with us. The impact of this report would be incomplete without it. Thank you, Cheryl.



Cheryl Jennie

Finally, there is another group of people who must be respectfully acknowledged. This group comprises the living—those who are still walking, talking, and learning in San Diego County, San Bernardino County, Los Angeles County, and elsewhere. Unlike the FACES represented in this report—who are only with us today as vivid memories—the living must fulfill the legacy of those FACES and conduct themselves responsibly and compatibly within the inevitable fire environment in which they find themselves today.

To all of you I simply say: “*Modify your behaviors to practice what has been learned at the expense of the victims. Live your life safely and well in the interface.*”

Robert W. Mutch • Missoula, Montana • July 2007

XVII References

- Agee, James K., Berni Bahro, Mark A. Finney, Philip N. Omi, David B. Sapsis Carl N. Skinner, Jan W. van Wagtendonk, and C. Phillip Weatherspoon. 2000. The use of shaded fuel breaks in landscape fire management. *Forest Ecology and Management* 127:55-66.
- Barkley, Christopher M. and Edward F. Othmer, Jr. 2004. Response to post-fire flood threat: California 2003 • *Southwest Hydrology* 17.
- Blue Ribbon Commission Stakeholders' Ad hoc Committee. 2005. A report. 51 pp.
- Campbell, William (Chairman). 2004. Governor's Blue Ribbon Fire Commission. California. 257 pp.
- CDF and Forest Service. 2004. The Story—California Fire Siege 2003. California Department of Forestry and Protection. 98 pp.
- Chamberlin, Paul. 2004. Portals. Newsletter, Forest Service Fire Operations Safety Council, Issue 2.
- City of San Diego. 2004. City of San Diego Fire-Rescue Department (Jeff Bowman, Fire Chief)—Cedar Fire 2003 After Action Report. 88 pp.
- Cohen, Jack D. 2000. Preventing disaster—home ignitability in the wildland-urban interface. *J. Forestry* 98(3):15-21.
- Cova, Thomas J. 2005. Public safety in the urban-wildland interface: should fire-prone communities have a maximum occupancy? *Natural Hazards Review*, pp. 99-108.
- Feer, Fred. 2000. Evacuating Topanga: risks, choices, and responsibilities. Topanga Coalition for Emergency Preparedness. 56 p.
- Finney, Mark A., Rob C. Seli, Charles W. McHugh, Alan A Ager, Berni Bahro, and James K. Agee. 2006. Simulation of long-term landscape-level fuel treatment effects on large wildfires. *USDA Forest Service Proceedings RMRS-P-41*, pp. 125-147.
- Finney, Mark A., Charles W. McHugh, and Isaac C. Grenfell. 2005. Stand- and landscape-level effects of prescribed burning on two Arizona wildfires. *Can. J. For. Res.* 35: 1714-1722.
- Fishbein, M. and I. Ajzen. 1975. Belief, attitude, intention, and behavior: an introduction to theory and research. Reading, MA: Addison-Wesley.
- Gledhill, John B. 1999. Prepare, stay, and survive, *Wildfire* 8(6), 8.

- Halsey, Richard W. 2005. Fire, chaparral, and survival in southern California. Sunbelt Publications. San Diego. 188 pp.
- Handmer, John, and Amalie Tibbits. 2005. Is staying at home the safest option during bushfires? Historical evidence for an Australian approach. *Environmental Hazards* 6: 81-91.
- Hiley-Young, Bruce, and Ellen T. Gerrity. 1994. Critical incident stress debriefing (CISD): value and limitations in disaster response. *NCP Clinical Quarterly* 4(2).
- Keeley, Jon E., C.J. Fotheringham, and Max A. Moritz. 2004. Lessons from the October 2003 wildfires in southern California. *Journal of Forestry*, pp. 26-31.
- Wildland Fire Lessons Learned Center. 2003. Southern California Firestorm 2003—Report for the Wildland Fire Lessons Learned Center, Tucson, Arizona. 63 pp.
- Lundberg, Kirsten. 2005. When imperatives collide: the 2003 San Diego firestorm. John F. Kennedy School of Government, Harvard University. Case Study C16-05-1814.0, 29 pp.
- Mutch, Robert. 2004. Changing the paradigms of the interface. *In*, American Perspectives on the Wildland-urban Interface. National Wildland-urban Interface Fire Program, Quincy, Massachusetts. pp. 59-63.
- OES. 2004. 2003 Southern California Fires—After Action Report. Governor's Office of Emergency Services.
- Rogers, Michael J. and James C. Smalley. 2005. Protecting life and property from wildfire. National Fire Protection Association, No. WILD05. Quincy, MA.
- Roper, Robert. 2004 Ventura County wildland fire siege—October 2003. 22 pp.
- Rothermel, Richard C. and Charles W. Philpot. 1973. Fire in wildland fire management—Predicting changes in chaparral flammability. *J. of Forestry* 71(10): 640-643.
- San Bernardino County Fire Chiefs' Association. 2004. Old Fire: the fire storm of 2003. 53 pp.
- San Diego County. 2004. Firestorm 2003—After Action Report. San Diego County Sheriff's Department.
- San Diego County 2003. The 2003 San Diego County fire siege—fire safety review. 58 pp.

Schauble, John. 2004. The Australian bushfire safety guide. Harper Collins Publishers. 198 pp.

Taylor, Jonathan G., Shana C. Gillette, Ronald W. Hodgson, and Judith L. Downing. 2005. Communicating with wildland interface communities during wildfire. Open-File Report 2005-1061. U.S. Department of the Interior, U.S. Geological Survey. 26 pp.

USDA Forest Service. 2005. "The Story" one year later. Pacific Southwest Region, R5-PR-015. 51 pp.

Wallace, Glenda. 2004. California burning—success among the tragedies. Home and Fire 1 (2):8-13.

Zivnuska, John A. 1968. An economic view of the role of fire in watershed management. J. of Forestry 68:596-600.



Bob Mutch retired from a 38-year career in wildland fire research and management with the U.S. Forest Service in 1994. In the mid-1950s, he worked as a Forest Service smokejumper in Missoula, MT. Bob later served 11 years as a Fire Behavior Analyst on a national Type 1 Fire Management Team. He holds a B.A. degree in biology and English from Albion College in Michigan and a Master of Science in Fire Management (M.S.F.) degree from the University of Montana. In 2007, in acknowledgement of his ongoing accomplishments in the national and international wildland fire arenas, Bob was presented with an Honorary Doctoral Degree in Forestry from the University of Montana.

Bob's areas of special interest include: forest fuel management, fire ecology, fire behavior prediction, wildland fire training, public and firefighter safety, wildland fire suppression, prescribed fire in wilderness management, and international assistance. In 1994, he began serving as a fire management consultant for the United Nations and the World Bank with assignments in Brazil, Bulgaria, Ethiopia, India, and Mongolia.

Paul Keller, technical writer editor for the Wildland Fire Lessons Learned Center, collaborated with Bob Mutch to serve as technical editor of this publication. After graduating with honors from the University of Oregon with a B.S. in Journalism in 1972, Keller spent 12 years as a successful newspaper reporter, editor, and publisher. Beginning in 1985, he served four seasons on the Zigzag Hotshot Crew—when the late Paul Gleason was superintendent. He is a former Forest Service wilderness ranger and silviculture technician. Today, Keller's essays and articles are featured in national and regional publications, including The Oregonian newspaper.

