**The Volunteer or Call Firefighter in the Los Angeles County Fire Department**

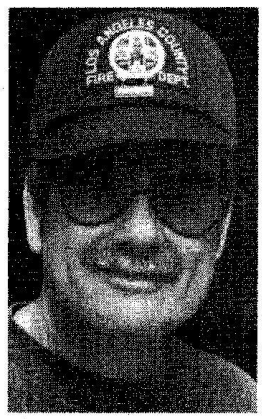
About 1980 or even in the late 1970s, community leaders in Topanga Canyon continued their push for volunteer members of their community to be trained and recognized as volunteer firefighters by the Los Angeles County Forester and Fire Warden (the County Fire Department). Within downtown headquarters it became known that the Chief was strongly opposed to this, as the Department would only consist of paid, uniformed, unionized fire personnel. However, Topanga is a unique and vocal community and one of its members was also retired Deputy Fire Chief Harvey Anderson, who also supported the idea behind the scenes. He had joined the Fire Department in the 1920s when it was still known as perhaps a more innovative, community-minded County Forestry Department where you did lots of volunteer work within the community without reimbursement, as he had expressed to me.

Well, whatever was reported in the news right or wrong, the behind-the-scenes struggle went back and forth with some of us within the Department rooting for "Topanga." The community finally outlasted the naysayers when on May 18, 1983, the local *Topanga Messenger* newspaper proudly announced, "They are trained, they're ready, and they're street legal! Topanga Canyon's Call Fire Fighters Engine Company #269. The 14-strong all-volunteer citizens' fire crew—complete with its own 13-ton pumper—splashed onto the pages of history Tuesday April 19 at a graduation ceremony attended by the L.A. County Fire chief and the 5th District Supervisor."

# Those Amazing Men and Women in their..

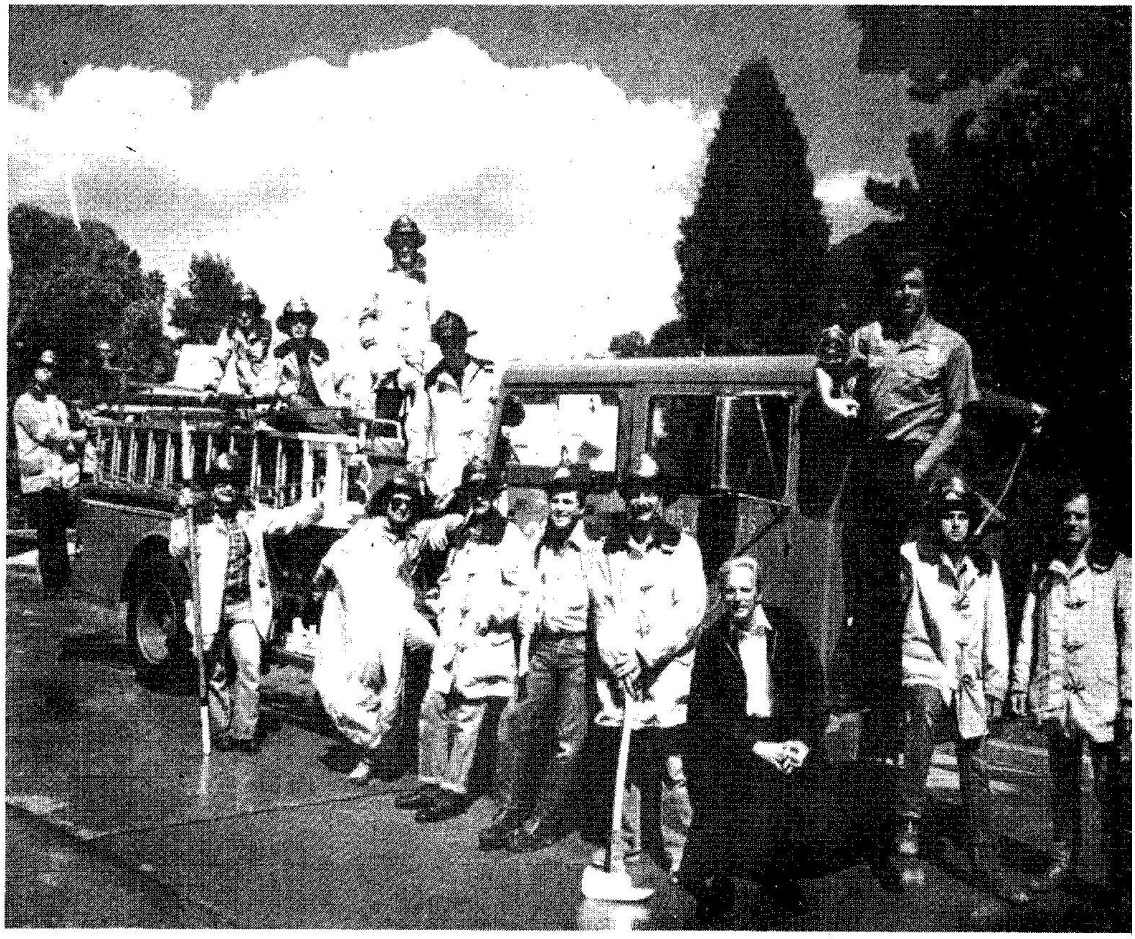
They're trained, they're ready, they're street-legal! Topanga Canyon's Call Fire Fighters Engine Company #269. The 14-strong all-volunteer citizens' fire crew—complete with its own 13 ton pumper—splashed onto the pages of history Tuesday April 19 at a graduation ceremony attended by L.A. County Fire Chief Clyde Bragdon Jr. and 5th District Supervisor Michael Antonovich.

The first auxiliary unit ever set up to augment a regular County Fire Department—our own Station 69. But who are these guys?



**Larry S. Cole**

Larry S. Cole was born in Sacramento in '39.



# RED MACHINE

"The first auxiliary unit ever set up to augment a regular County Fire Department—our Station 69. But who are *Those Amazing Men and Women in their Red Machine.* Each of these amazing men and women were then featured in the article with one stating, 'Living and working in a brush area and working with trees made me realize everything is really all interconnected. The community, the people, their homes, the brush and the fires. It's all part of a bigger picture and I'm happy to be part of it.' Another stated, 'Sure, community service, that goes without saying. But really, being a fireman is one hell of a good hobby. I am just a community fireman, no big deal.' "

Once this "no volunteer firefighters taboo" was broken and rattled by continuous wildfires, residents of other parts of the Santa Monica Mountains then also took up the call to become Call Fire Fighters for the Los Angeles County Fire Department. Leading the way were volunteers in Corral Canyon where coastal sage scrub, which can become highly flammable within seven to ten years after a previous fire, is responsible for the highest fire frequency documented in the Santa Monica Mountains. This group of Call Fire Fighters were also apparently instrumental in leading the Corral Canyon Fire Safety Alliance to secure auxiliary Fire Engine 271, funded by the community but leased to the fire department so that it can insure and equip it with materials and firefighters as needed.

While local fire officials acknowledged that Engine 271 is "earmarked" for the protection of Corral Canyon residents, it became a bone of contention during the 2018 Woolsey Fire when the fire was headed to Kanan Road and the Corral Canyon Call Fire Fighters then rallied local residents before being dispatched to Fire Station 71 and manning their Fire Engine 271. However, a higher ranking fire chief pulled ranks, ordering the Call Fire Fighters off their engine, stating, "Take all the Call Firefighters and your equipment off the engine. We're going to staff it with full-timers." While the Call Firefighters dared to question the order, as they had been directed by Station 71's captain to join 71 in a strike team, the ranking fire chief made it clear that the new order was to be followed or else. The Call Fire Fighters were instructed to "go back to your community, protect it and do the best you can (without their engine)." They therefore sped back to Corral Canyon, split their forces to the Upper Bowl and El Nido and, along with about another dozen neighbors who stayed, focused their fire hoses on homes the entire time the fire came through. As a result, no homes were lost in El Nido, the exception being two homes on a nearby ridge with just minimum access.

However, a rare lesson was not only learned but demonstrated here. Rather than having just one engine and being tied to it or having an out-of-the-area strike team reluctantly responding into unfamiliar terrain, the "boots on the ground" local Call Fire Fighters, along with local residents, all familiar with the area, saved more houses than would have been possible otherwise.

But back to Topanga where it all started. During the November 2-3, 1993 Old Topanga Fire, the community was again spared the worst when the eastern flank of the fire expanded into Topanga at night as the Santa Ana winds largely died down. The winds had again spared the community a fire disaster when they blew in a southwesterly direction, as could be expected, instead of southerly after the fire had started. But is the community prepared for a fire disaster with the Santa Ana winds blowing down Old Topanga Canyon or Topanga Canyon in a southerly direction? Presently it is not as not much has changed over time except for the fact that flammable fuels consisting of homes, landscape and native vegetation have greatly increased along with people.

However, to its credit the community has prepared and published one of the most comprehensive and candid Disaster Survival Guides[1] that is presently available by a community group. It even acknowledges that evacuation is not

[1] **Topanga Disaster Survival Guide**
I am honored to present the inaugural edition of the Topanga Disaster Survival Guide. Topanga is a unique community—in terms of both its community spirit and its natural beauty—but that natural beauty comes with a price. The same forces of ecology and geography that make Topanga one of the most spectacular places in Southern California have also made it particularly vulnerable to natural disasters such as brushfires and floods. In order to better prepare for this threat, an extraordinary collaboration among members of the Topanga Community, numerous County Departments, and other government agencies has come together over the past two years to strengthen disaster response plans and make sure that every Topangan knows what to do when a disaster strikes. The Guide is an important tool in this effort, and I urge everyone to read it and use the checklists to plan and prepare now, because you never know when you will need to act quickly to protect yourself and your loved ones. Topanga's effort will be a model of disaster preparedness for the rest of the County, and I congratulate all those who worked on this effort.
Sincerely, Zev Yaroslavsky, Supervisor Third District.

mandatory but recommended by the fire department, as it has a legal responsibility to protect a person if he/she decides to stay with the home but could thereby hamper efficient fire suppression operation. The guide also points out the important fire protection services the local fire station provides by stating, "The station is staffed by four firefighters, three of whom are assigned to Engine 69; the fourth firefighter mans Patrol 69. Fire Station 69 is also home to Engine 269, which is staffed by call firefighters. These call firefighters (generally Topanga residents) are on call and are dispatched via a paging system. They respond with Engine 69 to any major incident in the jurisdiction. Fire Station 69 is one of only ten fire stations in the County to utilize the Call Firefighter Program. Station 69 firefighters also become brush inspectors before each fire season. Every property in Topanga is inspected and notices are left identifying further steps property owners must take to come into compliance with brush clearance rules. Your local inspector will meet with you individually at your request to discuss proper clearance."

At the same time the Disaster Preparedness Guide strongly discourages owners from protecting their homes (sheltering in place) by stating the following:
"Although there are areas in the Santa Monica Mountains referred to in the wildland fire brochures published by the County of Los Angeles Fire Department about sheltering in place, Topanga is not one of the communities where this practice is recommended. There are several factors that make sheltering in place a very dangerous option in Topanga, including steep terrain, a dense canopy, the direction wildfires come from, and extreme fluctuations in water availability and water pressure during a massive wildfire. Neither a garden hose nor a fire hose can put enough water on this type of fire to extinguish it. Therefore, a resident should not shelter in place unless told to do so by a Sheriff's deputy, other law enforcement, or the Fire Department. If the Fire Department knows there are citizens who have stayed, the Fire Department must attempt to rescue these citizens. This pulls critical resources away from fighting the fire and saving homes and jeopardizes the lives of firefighters as well as other citizens who are trying to evacuate."

If every property had been properly inspected as stated and made "fire-safe," much of the Topanga community would not be in the "design-for-disaster" situation it apparently presently still is. It would not need to depend again on nature and the direction of the fire winds to bail it out when a fire starts at the northern end of the community during Santa Ana wind conditions without a Catalina eddy to provide a cooling ocean influence. While the actions of Topanga Call Firefighters seem to be more curtailed compared to those at Corral Canyon as outlined in the Disaster Preparedness Guide, they nevertheless have the opportunity to be proactive, step up to the plate and prepare the community more effectively. How? If every Call Fire Fighter as well as full-time uniformed fire personnel living in fire-prone environments would set an example of creating a truly fire-safe home environment on their property and nearby homes, the community would take notice and would follow suit. But there is often such a disconnect with the public when even fire personnel living in fire-trap environments do not set an example of providing a fire-safe environment which is also often even reflected at public buildings and fire stations.

As reported in the Los Angeles Times[2], many communities within the Santa Monica Mountains have formed fire-safe councils with Topanga Canyon at the forefront of community self-help. Besides the emergency preparedness group, it has a volunteer Arson Watch, a Community Emergency Response Team of volunteers trained to assist the fire and sheriff's departments and a Fire Safe Council that over the years has obtained $350,000 in grants to improve fire preparedness. As reported in the Topanga Messenger on May 21, 2009 by Michelle Johnson, such grants started in about 2008 with about $100,000 in grants from the National Park Service (NPS) with the latest grant titled Guidance for Sustainable Defensible Space Landscaping in the SMMNRA and southern California (17-FP-LAC-0146) earmarked by Cal FIRE in August 2918 for the Resource Conservation District of the Santa Monica Mountains (RCDSMM).

Yes, such grants can and have made some sections of the community more fires-safe by also creating safer escape routes through removal of highly flammable trees that had been ignored for more than a lifetime. Fuel modification and finally acknowledging that landscape vegetation can be as flammable as native vegetation is an important step in the right direction. But to really make a community more fire-safe, we have to take a more inclusive approach that starts with the house itself, the area directly around it and its location. At risk homes can be made more fire-safe which is still the responsibility of individual homeowners but owners have to be taught how to do it. Did not during the 2018

[2] Smith, Doug and Ben Welsh. Los Angeles Times. *A million California buildings face wildfire risk. "Extraordinary" steps are needed to protect them.* Dec. 23, 2018.

Woolsey Fire more than half of about eight "ridgetop" homes in the Santa Monica Mountains burn where fuel modification had been performed with public grants? If so, we must be more inclusive in our approach.

# Hillside Homeowners win $100,000 in Firesafe Grants

## National Park Service (NPS) To Host Grants Workshops in Topanga

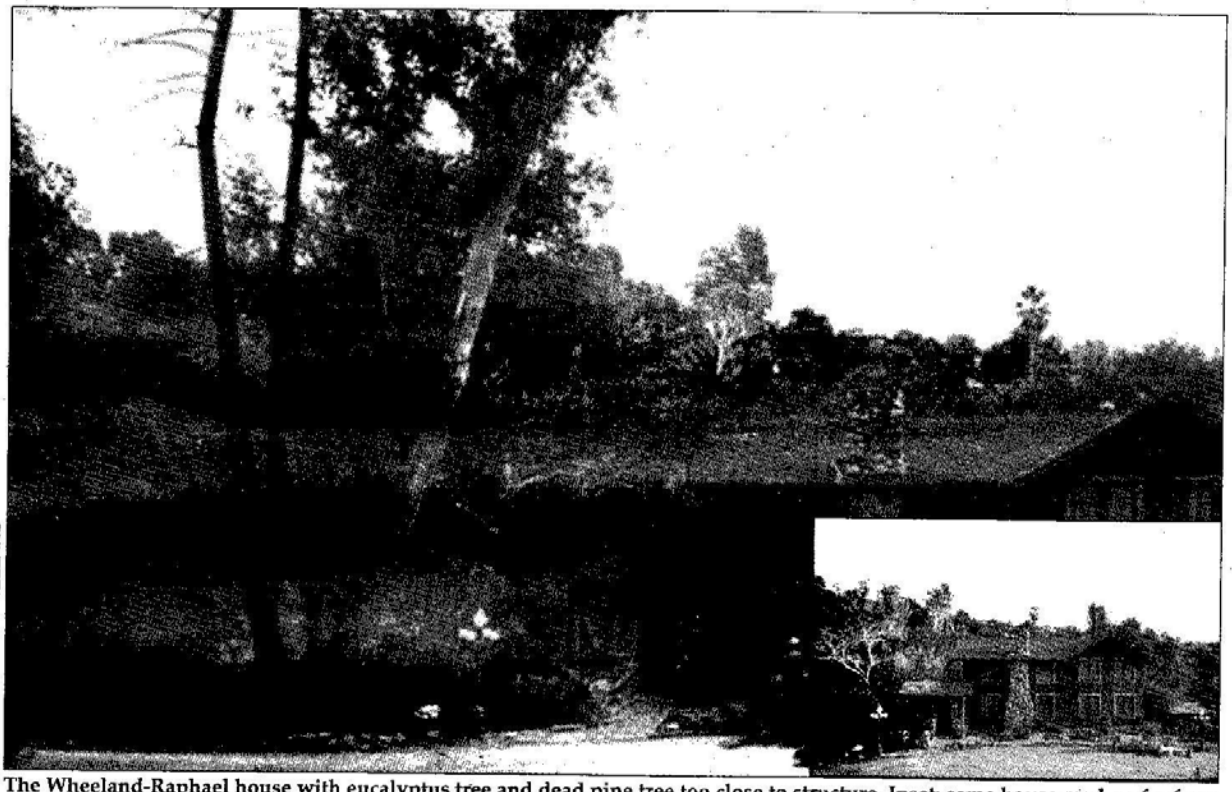


PHOTO BY KEN WHELLAND

**The Wheeland-Raphael house with eucalyptus tree and dead pine tree too close to structure. Inset: same house made safer from fire danger after dangerous trees were removed as part of the neighborhood's first grant of $40,000 from the NPS.**

**By Michele Johnson**

Shortly after noon on Saturday, May 9, as ocean fog broke the hold of Santa Barbara's catastrophic blaze, word of a fire in Topanga on Santa Maria Road near Mulholland barreled through the canyon. Thanks to a quick response by firefighters and the forgiving weather, the 20-acre blaze was put down in an hour, but Topangans heaved a collective sigh at surviving another close call.

Since that incident, the story of a small group of Topangans doing what they can to help keep their homes safe resonates. After months of effort, nine families living at the base of West Hillside Drive won a $65,250 grant from the National Park Service (NPS) to protect their homes against wildfire. Their agenda: to remove dangerous pine and eucalyptus trees as part of a carefully crafted plan to make their neighborhood "fire-safer."

This is the second NPS grant the committed group, working as the West Hillside Firesafe Council, won in the last year. The first was $40,000 for seed money

Hillside to one-quarter mile up the hill, began to remove the most dangerous trees. Their goals were to create a 30-foot perimeter around each home and clear trees overhanging the road. By doing that, they would also protect approximately 150 people who live above them and could be trapped during a fire. "Forty-nine houses will be directly impacted by what we do," explains one of the organizers, artist Joyce Wisdom. Over 30 trees were removed in January by Gold Coast Tree Service. Wisdom says they don't miss them. "These trees were planted in the '20s. They're very sick and dying. We have so many oaks here that we think when we take those trees out, others will start up. It's a natural oak grove." The new grant will allow the group to continue the work of culling out the dangerous trees, working as Kirkpatrick puts it, "house out." Wisdom is gratified. "It gets the rest of the really big, bad trees. We'll be a little more than halfway through."

### THE HILLSIDE ACTIVISTS

whom have lived on lower Hillside for more than 30 years. Lynne Haigh says theirs was "just about the first neighborhood network," combining forces during the fire of 1977 when her daughter, Heather, was just a baby. The group has an activist bent that goes way back. It includes hydrologist and conservationist Richard Brody; Chuck Quigley, Executive Director of a foundation that promotes the Constitution and Bill of Rights; and Dr. Paul Rosenberg, who with Gerry Haigh, founded the Topanga Chamber of Community Relations in 1968 to mediate between Topanga hippies and the local police.

"Paul actually planted in eucs, was surrounded by eucs," Wisdom says. "Now he gets a lot more sun and his fruit trees and willow will do better." Wisdom moved to the canyon 25 years ago and has always been nervous about fire, working through her feelings by creating huge fire canvases, one of which hangs in the Firehouse restaurant in Venice.

The effort was originally Topanga Stream Team member Ken Wheeland's

September 25, 2019

**An Open Letter to Topanga Residents:**
**IT COULD BE YOU – THE NEXT WILDFIRE FATALITY**

Just out of high school and trying to make a living as a gardener, I lived with my grandmother in Old Topanga Canyon from 1962-1963. Despite the idyllic life there, we moved back to the Valley because the jobs were there and I was concerned about my grandmother being a victim of fire if I am not around to evacuate her.

The area I had lived in at that time has not burned since, the chaparral and landscape fuels pose an even greater fire danger now, and the people have also greatly increased as I can see in my former garage, now another SFR.
Topanga Canyon has now been designated as an extreme fire danger area where only evacuation is recommended with residents hopefully escaping through largely narrow, winding roads (however, remember that most wildfire fatalities occur during evacuation). This, despite the fact that the community has one of the best Disaster Survival Guides, has its own volunteer firefighters, and has received about $350,000 in public grants to make it more fire-safe.

Have your houses just become sitting ducks for the next wildfire because you like your lifestyle? Are you not just playing Russian roulette with your own and your family's life? What are you doing for yourself, your neighbors, and the community to create a truly greater fire-safe environment and not become the next fire statistic? Have we gotten too old? Have we given up? Is the real community spirit dead? What is happening? Remember that it is your legal responsibility to maintain a fire-safe environment within your property.

What can we do to immediately prepare for the overdue fire invasion? Not having a chipper or chainsaw is no excuse to create a more fire-safe environment immediately. Go out, buy a good pair of bypass pruners, long-handled loppers, and a pruning saw and get to work and inspire your neighbors. As a wildfire moves through an area propelled by the wind, it "feeds" on fine, dead, dry fuels under ½" in diameter while preheating the heavier fuels to the ignition point. Removing first all fine dead fuel from your own and your neighbors' property and following up with the thicker-diameter dying fuels while also limbing up trees to at least 10 feet above ground will be a key step in saving your home and safely evacuating if you so desire. Look inside the shaded crowns of any plants around you and you will notice that the often beautiful exterior hides/covers fine dead fuels waiting to explode in a wildfire. If you want to stay, and depending on your location, move any flammable materials at least 20 feet away from around the house, which also applies to clearing around propane tanks. Also protect all your windows and vents with inexpensive plywood shutters that can be placed from the outside at ground level and from the inside on two-story homes, or have storm shutters installed that can be hand- or remotely-operated. Next, don't forget a water source. Place plastic trash cans filled with water around the house along with some rags or "gunny sacks" and a shovel to knock down the burning embers after the fire front has passed. And don't forget the prolific railroad tie "Roman candles." Cover the tops with "dirt" and have a pile of loose "dirt" ready to cover them as they reignite. Remember, you must have either safely evacuated or sheltered in place inside your home as the fire front approaches and during the initial burnout period of the surrounding heavier fuels. When you then exit your home to chase firebrands, you must be properly dressed with long clothing to be protected from radiating heat sources and also wear a face-covering, smoke mitigating cloth/bandana. Jumping in the pool as the fire approaches may not be an option as you may be just breathing superheated hot air just above the water level that can kill.

Topanga Canyon has survived fire disasters in the past because of its unique topography with the interplay and direction of local and fire winds and the cooling coastal air largely smothering out fires in the afternoon. But you are still facing a war and an all-too-quick invasion by fire! Are you prepared for a predictable direct "bull's eye" hit as it happened to Point Dume during the 2018 Woolsey Fire? Will you be prepared in the daily self-help community spirit of the WWII Victory gardens or will you largely rely on the often insufficient insurance "bailout" with heartburns and often resulting legal tangles. Would you be willing to live where and how you are if insurance rates would not be subsidized by every other citizen living your "idyllic" life to make it more affordable for you? Probably not, so let us work together now and be prepared!!!

Klaus W. Radtke, Ph.D., Wildland Resource Scientist (www.firesafetyus.com)
Attachment

## Understanding Wildland Heat Sources as Measured by Flame Length

**Flame length less than 4 feet** (fire line intensity will be normally less than 100 Btu/feet/second): fires can generally be attacked at the head or flanks by persons using hand tools. Hand lines should be able to hold the fire.

**Flame length 4-8 feet** (fire line intensity 100-500 Btu/feet/second): fires are too intense for direct attack by persons using hand tools, and hand lines can not be relied upon to hold fires; however, bulldozers, pumpers, and aircraft can be effectively used. It is time for a homeowner to get off the roof of the house or only continue protecting the outside of the house if he/she is well dressed with protective clothing and can be shielded from the heat of the fire.

**Flame length 8-11 feet** (the height of a single-story home): wildfires may present serious control problems, and torching out, crowning, and spotting may occur. Control efforts at the head of the fire are probably ineffective and the flanks must be attacked for most effective fire control.

**Flame length in excess of 11 feet** (fire line intensity greater than 1,000 Btu/feet/second): crowning, spotting and major fire runs are likely, and control efforts at the heart of the fire are ineffective.

**Flames in excess of 30 feet**: fires are considered to be out of control using the then-present fire control technology.

NOTE: Under extreme fire weather conditions, an uphill-moving fire on steep slopes could already produce flames of 25 feet in two-foot-tall, overmature low-fuel plants such as coyote brush (Baccharis pilularis), and flame length could exceed 80 feet in six-foot-tall chaparral (HOGFW p.18, K.R. 1982). When an unprotected house is located on top of slopes without setbacks, sideslope, in draws or "fire chimneys," meaningful brush clearance and fuel modification distances should greatly exceed the flame length that can be expected from burning vegetation under extreme fire weather conditions, especially if a house is unattended.

## Understanding Your Body's Response/Tolerance/Survival to Heat

The most common cause of thermal/heat injury is direct contact with flames. Although a significant amount of radiant heat can be created in wildland fires, firefighter clothing is usually enough to offset serious burns. Temperatures may be extreme at the fire front but they are of short duration. The worst burn events typically involve civilians who are inexperienced with wildland fire behavior or with rapid, unanticipated changes in fire behavior and do not have the proper equipment and clothing to protect themselves from such extreme exposure. Immediate death is primarily due to incineration.

**Turnover burns** (The most common cause of death in wildland fires): It occurs when a firestorm burns over the individuals in the path of an advancing fire front. Of the 133 firefighter fatalities during 1990-1998, 29% were turnovers.

**Heart attacks** (Most common death with volunteer firefighters/homeowners).

**Inhalation burns** (mostly seen in firefighters but also in panicked homeowners trying to outrun a fire and inhaling superheated air. Such supraglottic (above the glottis) heat injury is largely indicated by swollen lips. Advanced airway interventions may have to be done quickly and if the person has severe shortness of breath, he/she may have to be treated with high flow oxygen. Protecting the airway from extremely hot air is always a firefighter's primary concern. Breathing through a wet shroud or bandana exposes the airways to hot, moist air, which can be much more harmful than hot, dry air. Protect the face with a dry cloth/bandana. A wet cloth/bandana should only be used to protect from inhaling smoke after the flame and heat of the fire have passed.

**Respiratory tract injury** (breathing superheated air): Face, neck, and upper body facial burns, inclusive of nasal hair singeing, facial edema, stridor, and early respiratory distress are tell-tale signs. Serious respiratory burns are most often seen in casualties trapped in the burning area or trying to outrun a fire, as these people have no choice but to breathe the smoke and hot air. The level of injury is directly correlated with the amount of time spent in the burning area and the actual temperature of the air being breathed. Thermal/heat injuries to the respiratory tract can be insidious, with a delayed onset of respiratory distress after contact with superheated air. Significant respiratory distress may be present as late as 24 hours after the exposure. Thermal airway injury is always associated with edema, which can rapidly occlude the airways.

Air, fortunately, is a poor conductor of heat and the upper airway is very efficient in thermal or heat exchange. A healthy person can breathe air at a temperature of up to 199° F (92° C) for 30 minutes and more for shorter periods without serious injury such as in a fire shelter situation. Although most of the injuries to the respiratory tract are therefore generally mild and they involve only the upper airways, anyone with a significant history of exposure should receive a medical evaluation as soon as possible.

**Soft body tissue injury**: In stark contrast to the higher temperatures generally required for respiratory tract injuries, soft body tissue thermal burns can already occur when the skin is exposed to temperatures above 115° F (46° C). At temperature exposure greater than 120°F for three seconds, a child's skin can be burned severely enough to require surgery.

**Smoke Inhalation**: Overexposure to carbon monoxide and respiratory irritants is likely among firefighters when direct control of fires is required and smoke production is intense. Because smoke is a given in any fire, the elderly and infirm should consider evacuation. Smoke exposure is likely to be highest along the fire front in high winds (as the smoke lies low on the ground), large fire situations that suffer from poor atmospheric wind dispersal, and where topography dams air movement.

## (Re)landscaping/Protecting your Home and Planning your Escape Route

**Point source of radiation** (such as a tree or bush): the heat intensity decreases with the square of the distance from the source. Therefore, a tree burning within 20 feet of a window transfers only one-fourth the heat to the house compared with a tree burning within 10 feet and only one-sixteenth of the heat compared with a tree within five feet!

**Line source of radiation** (such as a hedge or row of trees): the heat intensity only decreases with the distance instead of the square of the distance and a house receives this heat from all points along the line. Thus the heat intensity received 20 feet from a burning hedge is still one-half that at 10 feet and one-fourth that at 5 feet!

**"Fire-resistant Plants:"** The term 'fire resistant' is a misnomer in relation to flammability of plants and gives the homeowner a false sense of security. All plants will burn under the proper fire weather conditions, especially if they are-drought-stressed and have a high percentage of fine, dead fuels. In fire ecology the term 'fire-resistant' denotes that a plant is adapted to fire.