Lessons Learned from the Valley Fire

September 2015

The Valley Fire swept through 70,000 acres and 3 populated communities north of the Napa Valley in less than 48 hours beginning on September 12. Over 1400 homes were lost along with another 500 structures, as well as over 9,000 vehicles, 900 power poles, hundreds of miles of fencing, 4 human lives, and, sadly, an untold number animals—both domestic and wild. The scale and ferocity of the firestorm was unmatched by other California Wildfires, including the Rocky Fire (70,000 acres) and the Jerusalem Fire (40,000 acres) that burned adjacent to the Valley Fire only weeks earlier. The scene after the fire could only really be described as "post-nuclear."

Providing relief for the animals in the burned area involved organizing and coordinating a surprisingly large number of individuals and organizations. Middletown Animal Hospital became **the designated center** for Fire Animal Relief based on being activated by the Cal-OES State Operations Center per a request from the Lake County Emergency Operation Center. The California Veterinary Medical Reserve Corps (CVMRC) in conjunction with Santa Clara Office of Emergency Services, North Valley Animal Disaster Group, Yolo County Sheriff's Posse, and the UCDavis Veterinary Emergency Relief Team were the groups activated to the Hospital location. Because the local animal control agency was both unwilling and unavailable to participate in the Middletown relief effort, a coalition of out-of-county organizations provided the resources and logistical support for the affected animals over the next 7+ weeks (Petaluma Animal Services, CHANGE, HALTER, JARR, WCAL, SHS, Lost Hearts and Soles, CART, Sunrise Horse Rescue, many allied industry companies, and, literally, hundreds of other individuals and groups).

Because there were no in-County resources for the animals that the Hospital was triaging, **alternative options** for those animals were developed—UCDavis, Pet Care Veterinary Hospital, Sage Vet Centers, Calistoga Pet Clinic, Mendocino Animal Hospital, Yokayo Veterinary Center, Animal Hospital of Cotati, and several others received patients. In addition, there were scores of DVMs and Veterinary Technicians rotating through the hospital to provide care to all of the animals—some of them for multiple days and nights. All animals treated were carefully documented and posted to social media (FB, Twitter, and a dedicated website constructed specifically as central rehoming resource: ValleyFireAnimals.com) so that reunification would be as easy as possible. Much of these efforts had to be synthesized on the fly, because there was no pre-existing model or plan to follow.

The Middletown Search/Rescue Teams responded to hundreds of requests to visit people's properties and check on their animals as well as responding to reports and requests from CalFire, PG and E, and others within the burned area. The Middletown Veterinary Teams provided veterinary care and shelter to any lost, injured, or displaced animals presented to us by owners, residents, relief workers, disaster responders, or anyone else with a need. Over the first 2 weeks more than 500 animals were treated, while an additional 300 animals were treated the 2nd two weeks. 5-10 fire victims (residents that lost their home or business) have continued to be treated on a daily basis at the Hospital. All fire victims' pets and livestock have been and continue to be treated pro-bono and this has had a huge positive impact on a community that is still shell shocked and reeling from the disaster. In addition to medical care, no-cost boarding has been provided for all stray, lost or surrendered pets and livestock. The Middletown Animal Donation Operation received and distributed over \$80,000 worth of feed, food, crates, fencing and animal supplies over a 7 week period (that effort concluded on October

31, 2015) which was provided by the support team listed above. The many folks that supplied, manned and managed that huge operation deserve special thanks for the immense amount of work that they provided.

During the response nearly every domestic species was treated: Cats, dogs, horses, sheep, goats, chickens, cows, pigs, and even some rescued koi. Some of the surgeries that were performed: Digit amputation, Tendon repair, Bladder stone removal, Dental surgery, Wound/Burn debridement/repair, Upper respiratory repair, Limb amputation, and Prolapsed Rectal repair. Some of the conditions treated: Burns, Smoke Inhalation, Parasites, Vaccinations, Vomiting/diarrhea, Rehabilitation, Hip dislocation, Heart failure, Dermatitis, Heartworm Disease, Rectal bone removal, IVDD, Hemoabdomen (3 cases!—tumor, dog attack, HBC), Otitis, FAD, and Lameness.

These facts are most relevant when considered in the context of how to prepare the next clinic or the next community for its own disaster. In spite of all the preparation and organizations poised to aid in disasters, each disaster is unique and provides lessons in how to better prepare for the next one. Here are some insights from the Valley Fire:

Prepare and Pre-Defend your space. The things that burned during this fire were astounding: Homes, metal buildings, cars, tractors, telephone poles, fences, trailers, PVC piping, non-metal culverts, synthetic water troughs—really anything and everything. Many things that did not burn were melted or "kiln-dried" due to the immensely intense heat. Very few structures were "defended" by CalFire or owners because the firestorm was just too intense and fast moving. Structures—and animals—survived largely on the merits of their fire readiness: Building materials, defensible space, trimming and placement of vegetation and trees, location of combustible materials, proximity to other combustible structures or items, and access to fire suppression. Fire suppression was severely limited since power and the municipal water supply was lost early in the fire, and because all Fire Department resources were completely overwhelmed by the magnitude of the fire. Fire suppression was only successful in those cases where:

- 1. Independent power or gravity continued to provide water pressure;
- 2. Piping and water systems were metal or fire protected, particularly if they were pre-placed (roof or perimeter sprinklers); and
- 3. Vegetation, trees and combustible materials were not proximate to the structures.

Prepare for evacuation—and evacuate! The Valley Fire was unusual insomuch as very few people had time to prepare to evacuate. There were no "Advisory Evacuations," or even "Mandatory Evacuations" in most cases—it was simply a "Run For Your Life Evacuation." Hence, the extreme importance of preparing you space and structures: Use fire resistant materials. Have a WIDE defensible perimeter. Trim every tree above 10 feet and remove any ladder fuels. Keep combustible materials away from the buildings—hay bales, wine barrels, umbrellas, fire wood, dead leaves, everything! Think about OUTSIDE sprinklers for fire defense—on the roof, around the perimeter, and on any decks. And be sure to pre-determine if you have: Un-meltable pipes, your own water power (gravity or generator/gas pump), and a plan for sprinkler activation. Even so, preparing for the more likely scenario of following an Evacuation Order is critical. Prepare those essential items for yourself and your animals in one or two locations. Have a means of transporting and confining your animals—both pets and livestock. Have a destination to evacuate to, and a plan for care at that location. And have a "Plan B" if you do not happen to be home when disaster strikes.

Prepare for surviving the fire. When you return or if you do not evacuate, what are your options? Power, water, food, medicine for several days to several weeks. Do you have 20-30 gallons of potable water? A generator, as well as the essential home circuits connectable to that generator? A source or supply of fuel for vehicles and generators? A way to cook food or boil water without power? A method to heat or cool your home? A way to extinguish spot fires and burning hot spots (trees, power poles, fence posts, vehicles, hay bales, etc)? A way to remove downed trees or power poles or disabled vehicles from roads and driveways? A decent medicine cabinet and first aid kit? More than one way to communicate or get news? A phone tree or social site to post information to? A neighborhood plan for helping one another or sharing resources? All of these items need to be considered.

Prepare for the worst case. Imagine losing your home, your business, and all your possessions. Get the proper insurance and keep it current. Equally as important: Document all of the contents and possessions in those structures so your insurance will ACTUALLY replace what you lost. Video record a meticulous tour of your vehicles, home and business, opening all drawers, closets, and cupboards. Narrate that tour, calling out the specific items and exploring the hidden areas. Store that record in the Cloud or in several safe spots. Fire safes or even 2 different buildings in the same burn area would not have been sufficient to protect your records in this fire. Have some money set aside as a disaster fund until your insurance becomes available or until you can access your regular finances. Protect your irreplaceable keepsakes and documents like photos, birth certificates, and videos by having them duplicated in the Cloud.

If you are a veterinarian, consider the possibility that your clinic may become the best place from which to stage animal relief and rescue. Get disaster training and certification through sources like the CVMRC, UCDavis VERT, and the ICS Training system. Consider whether your facility can act as an animal EVAC or MASH unit. Anticipate how you might coordinate resources, provide relief, relocate stray and injured animals, triage pets to secondary facilities, provide power, water, and communications for your hospital, manage media inquiries, keep records, get employees back to the clinic, and manage the political and logistical needs of running such a relief effort. Last, think about how to help your clinic survive in the long term—interim funding, grants, donations, aid from rescue groups, and a plan to restart your own business. Your normal routine will be turned upside down, and you may need to provide housing, board, and support to the volunteers and employees showing up to help you. Be a leader in your community and lead the path to a well prepared and self-sufficient response for the next disaster. Integrate and work with other disaster relief organizations in your County and in surrounding Counties—remember that if your own County is devastated you may need to rely on neighboring organizations as we did in this case.

Do not count on the government to provide animal disaster relief. Who can or will provide assistance? Even if there is a plan, will it, or can it be followed (roads closed, resources exhausted, disaster conditions still active and progressing)? Often there is a 1 to 4 day lag in getting outside animal rescue services to the burned area. Some areas are much better prepared than others, both from a government and from an NGO perspective. Much of the government is focused on the human element as well as protecting structures. Animals are only a peripheral concern to the government even though they are often a central concern to disaster victims. Therefore, a well-stocked and functional Animal Hospital can be a huge resource, particularly in the days immediately following a disaster. It is far easier and far more effective to activate an existing hospital than it is to bring in mobile clinics or to

transport injured animals long distances for care. In addition, local hospital personnel know the local geography, the local animal owners, and the local conditions which can greatly enhance effective rescue, triage, sheltering and re-homing.

Organized Veterinary Medicine and Animal Rescue Groups. During the Valley Fire, the entire relief effort in the Middletown area was supported solely by agencies and groups from outside of our own County. Unfortunately, our County (a relatively poor one) has limited resources, as well as a particularly overwhelmed and ill-prepared animal control agency—so the resources that were supposed to be available in our area were not. Fortunately, an adjacent, out-of-county agency, Petaluma Animal Services, was well prepared, available, and willing to fill that need. In conjunction with CVMRC, OES, NVARG, Yolo Sheriff, and UCDavis VERT, an entirely out-of-County rescue operation was able to stage from the center of the burned area at Middletown Animal Hospital. All of the material resources that were provided for that operation came via a coalition of volunteer and rescue groups, who also were entirely from out of the County: CHANGE, HALTER, JARR, WCAL, SHS, Lost Hearts and Soles, CART, Sunrise Horse Rescue, and, a huge number of other individuals and groups. In addition, thousands of dollars in donations to fund the medical and husbandry needs of fire victims came through on-line donations, allied industry donations, individual donations, and rescue group donations. These funds provided the basis for a sustained and robust animal care relief effort.

Bottom Line: We will have more disasters, and very likely we will have more severe disasters. The idea that disaster will strike "somewhere else," or that "someone else" will respond to the crisis is precisely the reason why most folks are not prepared for these events. Even the best prepared groups and individuals must deal with unexpected and difficult contingencies during a disaster, but to the degree that everyone has prepared, those challenges are far more manageable. Particularly when it comes to animals, there is very little in the way of government focused resources or responses. Therefore, private practitioners, organized veterinary groups, animal rescue organizations, allied industry, and trained animal disaster rescuers must shoulder the responsibility of responding to the animal needs while still working within the government's disaster response structure. Dr. John Madigan of the UCDavis VERT did a great job of summing up why veterinarians—and all animal lovers—really should to be prepared to help:

Somewhere way back in our youth, there was an event with an animal—one needing care—and you and I and everyone else who 'gets it' felt a burning desire to help—leading us to decide we wanted to be veterinarians. In disaster events we have the direct ability to help an animal and that reconnects us with the basic core aspects of why we chose to become veterinarians. People think of disasters and ask how many animals were involved, treated, died, etc.—but I tell people that disaster medicine is one animal at a time. It's the black and white burned kitten taken in the truck to UC Davis and later adopted; It's the horse found hungry and upset in a pasture; It's some dog picked up wandering on the road because it's home burned down. Those experiences are never forgotten. They are precious moments that I feel lucky to have had.

~Jeff Smith, DVM Middletown Animal Hospital