

Outreach news

Jose Luis Villegas/UC Davis



Greg Massey/UC Davis

Above left, an oiled bird. Above right, UC Davis researchers will test the use of infrared thermography to take the temperature of oiled birds. Bird on right is cold (blue neck and head); bird on left is warm (red neck).

control birds with tiny backpack-style radio transmitters so their whereabouts and survival can be tracked.

The team is also launching several new studies aimed at increasing the survival of oiled birds. These include using infrared thermography to determine whether cleaned birds are still losing body heat, and identifying the causes of anemia, which is common in birds that ingest oil. A related project will determine whether various blood tests can predict survival. "The oiled birds' blood will be analyzed for hemoglobin, which might be a better indicator for anemia in dehydrated birds, as well as fibrinogen, a protein indicative of inflammation," Ziccardi explains.

To better protect the birds' health, tests will be conducted on the air, water, hard surfaces and feeding tubes in the rescue center for a mold called *Aspergillus*. To better protect the rescue

workers' health, tests will be done for the presence of zoonotics — disease-causing organisms that can travel from animals to humans — such as *Salmonella* and *Campylobacter*.

The studies will be led by Ziccardi and UC Davis spill response veterinarian Greg Massey. The research teams will include veterinary and postgraduate students at the UC Davis School of Veterinary Medicine, as well as scientists from the U.S. Geological Survey, U.S. Fish and Wildlife Service, California Department of Fish and Game's Office of Oil Spill Prevention and Response (OSPR), and Humboldt State University.

"We want to take advantage of this tragic spill to gather as much information as possible so that we can improve our effectiveness and save more birds in the future," Ziccardi says.

— Robin Meadows and Editors

FOR MORE INFORMATION

International Bird Rescue Research Center:
<http://ibrrc.org/index.html>

Oiled Wildlife Care Network:
www.vetmed.ucdavis.edu/owcn

UC Cooperative Extension helps people cope with Southern California wildfires

The wildfires that devastated Southern California in October 2007 came only 4 short years after the region's previous catastrophic burn, which was in October 2003. These two firestorms had many similarities, with both being fanned by hot, dry Santa Ana winds, and both ultimately burning hundreds of thousands of acres. But there was also a key difference: UC Cooperative Extension made it easier for people to cope with wildfire the second time around.

"After the 2003 fires, we realized that we didn't have a way to help people during and after a fire," says Terry Salmon, director of San Diego County Cooperative Extension. "There was lots of information but it wasn't centralized."

Wildfire Web site

To fix this problem, Salmon and his colleagues developed a comprehensive wildfire Web site called the Wildfire Zone. The site has three main sections explaining what to do before, during and after a fire, and was adapted from a University of Nevada Cooperative Extension Web site. The project was in collaboration with the County of San Diego, and received funding from the County as well as the Federal Emergency Management Agency.

Fortuitously, the Wildfire Zone was finished just in time for the 2007 fires. "It hadn't even been advertised, and it got 300,000 hits the day after the first fire," says Salmon, adding that the Web site was also useful to the county Office of Emergency Services. San Diego got the worst of the fires, which burned 380,000 acres there in a week, forcing the evacuation of half a million people and destroying well over a thousand homes.

People accessing the new Web site got immediate practical information. For example, before evacuating, they should help firefighters by filling garbage cans with water, propping a ladder against the roof, and turning on all the lights to make the house easier to find in the smoke. In addition, people could enter their ZIP code to find out which emergency number to call. "It's confusing because there are so many fire departments in the county," Salmon says.

Fire-safe homes

The Wildfire Zone's initial focus was on how to prepare for fires. "You can do a lot to protect your house from a wildfire," says Stephen Quarles, a wood durability advisor at Contra Costa County Cooperative Extension. The Web site has step-by-step advice on retrofitting houses to reduce their

fire risk, from using noncombustible building materials such as concrete roof tiles to establishing 100 feet of “defensible space” around homes to hinder the spread of fire. Ways to create defensible space include landscaping with fire-resistant plants, irrigating regularly and using rocks instead of wood mulch right next to a house.

The Web site also has links to demonstration fire-safe gardens, and plans are under way for demonstration retrofitted buildings. “We don’t want to just tell people what to do, we want to show them,” Salmon says. For example, many houses burn because a wood fence catches on fire. This can be avoided by adopting the current code for new buildings, which stipulates that wood fences can’t touch a house.

New building codes

Now, the Wildfire Zone’s post-fire section is being expanded. One important update for people who lost their homes is that there is a new state building code for the wildland-urban interface, where the risk of fire is most severe. While current law requires that materials be fire-resistant, the new law will go even further and require that materials be ignition-resistant.

The goal is to protect buildings from embers, which can fly up to a mile from a wildfire. “Vents offer an easy entry point for burning embers,” Quarles says. “Embers that slip through attic vents can ignite debris and items stored there, and subsequently construction materials, setting the home ablaze from within.” The new building codes are effective Jan. 1, 2008, in areas under state jurisdiction, and July 1, 2008, in areas under local jurisdiction.

More outreach

Because fire is a fact of life throughout the Western states, UC Cooperative Extension organized a regional workshop for wildfire specialists to pool their resources. The first Western Region Cooperative Extension Wildfire Workshop was held in June 2007 in San Diego, and the second is planned for 2008 in Lake Tahoe.

To help get information to more people in San Diego, Salmon’s team has prepared 12 tip cards based on the Wildfire Zone Web site. The plan is to make these cards available in touch-screen information kiosks in places such as libraries and building supply stores. “We want to make it easy for them to get what they need,” he says. “We don’t want to overwhelm people with a 500-page book of information.”

“As we get more houses in the wildland-urban interface, the impact of these wildfires will continue to grow,” Salmon says. “They’re never going to go away.”

— Robin Meadows



CAL FIRE/Wes Schultz



Above, firefighters attempt to protect a home from the Harris Fire in San Diego County, October 2007. Left, San Diego County Cooperative Extension developed a Web site to help prepare residents for wildfires (www.wildfirezone.org).

Outreach aids Spanish-speaking firestorm victims

During the recent wildfires, the University of California’s News and Information Outreach in Spanish (NOS) (<http://espanol.ucanr.org>) focused on working with UC Cooperative Extension (UCCE) staff in the affected areas to quickly provide information to Spanish-speaking firestorm victims. Their efforts included:

- Providing translations of fire-related materials for fire Web sites in San Diego and Los Angeles.
- With staff from the UC Division of Agriculture and Natural Resources’ Consumer Economics program in Riverside, developing “Don’t Get Burned Twice,” a bilingual brochure with information on how to avoid being victimized in the aftermath of a firestorm. The brochure includes warnings about home repair fraud, charity fraud, phony “officials,” advance fee loans and other schemes.
- Producing a special edition of Radio Noticias, the monthly CD distributed to more than 100 Spanish-language radio stations in California. The CD included 30 news and public-service messages on recovering after a firestorm, and tips to prepare for future natural disasters.
- Promoting AsisTel — the statewide toll-free service [(800) 514-4494] that provided assistance and critical information to the victims of the Cedar fire in October 2003 — to UCCE county offices, media and relief agencies. The message-on-demand service features information on recovering after a fire, completing insurance claims, food safety during a power outage, dealing with exposure to smoke and ashes, and other fire-related topics.