Wildland-Fire investigators sift through the charred remains of devastation as they search for evidence with profound consequences.

FIGHTING FIRE WITH SCIENCE

DISCOVERING ANSWERS IN THE ASHES

By John Riha

Tom Kluge was at home getting ready for work when he got the call from an emergencty command center dispatch. It was Nov. 8, 2018, and a wildland fire had been spotted northeast of Pulga, a remote community tucked away in the northern Sierra Nevada mountains about 35 miles from where Kluge was stationed.

At the time a fire captain specialist and 16-year veteran of a division of the California Department of Forestry and Fire Protection known as Cal Fire, Kluge had multiple responsibilities. He was a law enforcement officer for Cal Fire's sprawling, 31-million-acre jurisdiction. He was weapons certified and able to make arrests like any state

On the day of the call, Kluge's situational awareness was on high alert. Another nearly rainless summer had left the Sierra Nevada forests desert dry, and the National Weather Service had issued a Red Flag warning for strong winds and low humidity. The fire had started in an area that Kluge knew well; narrow river canyons there made the region prone to high-velocity winds channeled through the rocky corridor.

"When I heard the location, my gut just sank," says Kluge. "I knew it was going to be a bad fire." He was right: What followed was the deadliest and most destructive wildland fire in modern California history.

That morning, Kluge was the closest wildland fire investigator to the newly reported blaze. He jumped into his Cal Fire-marked Dodge pickup, and roared out. His fire-resistant Nomex clothes were already stashed in the truck — vital protection he would soon need. As he drove toward the fire, lights flashing and siren wailing, the severity