



Fighting Wildfires

Wildfires can be dangerous and unpredictable. They can creep along, slowly inching down a hillside or sprint across a prairie, burning the length of a football field every minute. They can burn through entire communities in a matter of hours. And they can do it with reckless disregard, destroying some homes while leaving others untouched.

In Texas, 80 percent of all wildfires burn within two miles of a community. That's increasingly problematic as the population continues to skyrocket and more and more residents move into previously wild areas, unaware of the dangers or how to protect themselves.

Local fire departments are the first line of defense in Texas. But when they need help, Texas A&M Forest Service steps in. We use special tactics and equipment to control these destructive wildfires, which helps keep Texans safe.

ENGINES

Smaller than a typical municipal fire engine, wildland fire engines are specially-designed to handle remote, off-road areas and difficult terrain.

The trucks carry 50 to 800 gallons of water, as well as a compliment of hand tools and hoses. Generally, they're staffed by a crew of two to five wildland firefighters.



HEAVY EQUIPMENT

Bulldozers fitted with safety cages are critical tools for containing wildfires. Large, commercial bulldozers often are used on the open plains in South and West Texas, while smaller tractor-plow units are more common in forested areas in Central and East Texas.

Both dozers and tractor-plows are used to put a control line — often called a fire line or fire break — around the flames. Doing so removes all the vegetation, or fuel, that would spread the fire.





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Water Tenders

Because wildland firefighters don't have access to fire hydrants, they must bring the water they need with them.

Tenders are capable of ferrying large quantities of water — up to 5,000 gallons — to fire engines working on the fireline, allowing crews to fight the fire without stopping.

When empty, these water-shuttling trucks can return to a nearby city or town where hydrants are available or they can draft from a lake, pond or stream in the area.



Hand Crews

A hand crew consists of highly-skilled wildland firefighters who use hand tools and chainsaws to clear the vegetation in front of an advancing fire.

These crews are used in areas where heavy equipment can't go, such as remote areas with rugged terrain. Generally, there are about 20 people on the crew, though that number can vary slightly.



Aircraft

Firefighting aircraft are a valuable tool for wildland firefighters. The specially-equipped firefighting helicopters and airplanes can be used to drop water or fire retardant, but they don't extinguish the fire.

The move instead serves to slow down the spread of the flames and cool off the surrounding area, which allows ground crews to get closer and make more progress in containing the fire.



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