BURNING DESIRE

Meet the elite hotshot team fighting the Arizona wildfire war

By Erik German
Videos by Solana Pyne

If fighting wildfires is a war, then hotshots are the Green Berets.

They attack fire with fire. They throw dirt and water, too — but mostly these elite 20-man teams of wilderness firefighters battle wildfires with sweat.

This week, the front lines are located in a rugged patch of Arizona backlands called the White Mountains where the largest wildfire in state history has destroyed 32 homes and scorched half a million acres of country. Forest officials said yesterday the blaze is 38 percent contained, but they remained concerned as

Get fired up

Rick Servatius/NIFC

blustery desert wind whipped flames onto fresh ground. Stopping the fire will depend in no small part on the teamwork, grit and skill of 19 hotshot crews.

"I don't want to imagine a world without them," said Jerome MacDonald, operations chief for the fire.

The Wallow Fire, named for the Bear Wallow Wilderness area where it began, has so far taken more than $60 million in federal money and 4,150 people to fight. While only about 400 of that number are hotshots, they've played a key role recently chopping and burning away vegetation in the fire's path to protect homes and slow the flames' advance.

"They're a critical piece of the puzzle," MacDonald said. "They're mobile, they get here quicker and we put them right up front."

America's 100 active hotshot crews make up just over 10 percent of the 15,000 wildland firefighters nationwide. Trained to handle the biggest fires and the most rugged terrain, hotshots are regarded as a "national resource" by the U.S. government. They must remain on call 24 hours per day, every day of the summer wildfire season.

"We come in and do things that other crews aren't going to be able to do," said Joshua Strahan, 24, a hotshot from Garden Valley, Calif. "Kind of like the Special Forces of the forest service."

Even so, hotshots are perhaps less famous than their airborne counterparts, the smokejumpers. As for which group is actually the toughest?

"There's a big rivalry," said Deirdre McLaughlin, 44, a former hotshot who served among the handful of superfit women who make up just over 5 percent of crews nationwide.

Interviews with a dozen or so hotshots suggest the smokejumpers' relative strength is a subject few care to discuss. Hard woodland labor doesn't attract the conceited.

"No comment," one hotshot captain said.

But press long enough

PHYSICAL REQUIREMENTS:

Hotshots must meet strict fitness and strength standards and also pass the Forest Service's work capacity test at the "arduous" level.

ARDUOUS LEVEL

45lbs
3 miles in 45mins

RUNNING

1.5miles
in 10 minutes 35 seconds or less.

PUSH-UPS

25 in one minute

SIT-UPS

40 in one minute

PULL-UPS

7 pull-ups (110 lbs or less)

6 pull-ups (110-135 lbs)

5 pull-ups (135-170 pounds)

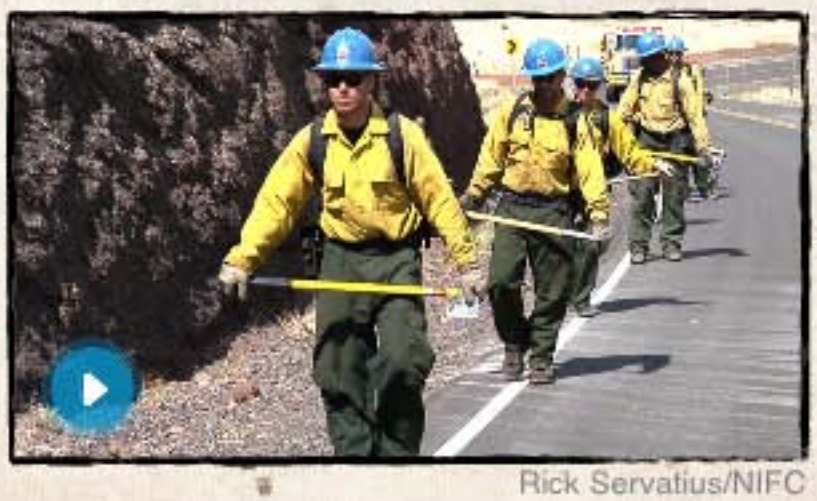
4 pull-ups (170+ pounds)

Kari Greer/US Forest Service

Hotshots are masters of fighting fire with fire.

and you'll get the goods on 'shots versus 'jumpers. "The toughest? We definitely are," said Brent Davidson, 35, superintendent of a hotshot crew from Flagstaff, Ariz. "I'm biased, but we have to hike in.

The hotshot mystique



Rick Servatius/NIFC

They get to parachute in."

And hiking to the fire is only where the toil begins. Shifts last 12, 16, even 20 hours at a stretch, with crews doing everything from protecting homes to running controlled burns and cutting fire line. Cutting line means using chain saws and hand tools to chop away all trees and vegetation in a narrow band across the fire's path. The goal is to gouge an earthen border that the fire can't cross, scraping down to bare mineral soil with shovels, rakes or Pulaskis — entrenching tools that combine hoe and ax blades.

And they do all this work while carrying 30- to 50-pound packs full of MREs, batteries, chain saw gas and 6 quarts of water. According to one Forest Service

nutrition guide, a wildland firefighter working full-bore burns 6,000 calories per day.

"The first season for the kids on a hotshot crew are hard because they don't mentally know what they're going to be asked to do or if their body will respond," said Matthew Radtke, 32, captain of a hotshot crew from Foresthill, Calif. "There's just something about being on your feet for 16-plus-hour days with 40 pounds on your back that you really can't duplicate in training."

To even be considered for the job, prospective hotshots must be able to meet strict fitness and strength standards and also pass the Forest Service's work capacity test at the "arduous level," which means carrying a 45-pound pack 3 miles in less than 45 minutes.

"They're highly trained and highly skilled, but endurance is what sets them apart," said Don Smurthwaite, with the National Interagency Fire Center in Boise, Idaho. "It does tend to be a young person's game."

It also tends to be a brave person's game. You'd be hard-pressed to find a hotshot willing to boast about it, but their work can be deadly. In 1994, 14 firefighters — including nine members of a hotshot crew based in Prineville, Ore. — were killed on a Colorado mountainside after a wind-swept wildfire overtopped their line. Afterward, members of one hotshot's family told a reporter the bodies were burned so badly they had to be identified with dental records.

"Yeah, my mom and dad worry," said Adam Leyba, 38, a hotshot crew superintendent. "I'm engaged to be married and she's worried like crazy."

Whether the hotshots' pay merits all that risk seems to be a matter of perspective. The starting wage is around $15 per hour, and the less senior firefighters tend to work only in the summer. But hotshots do receive overtime and a 25 percent hazard differential when fighting fires, and those hours can add up.

"It's lucrative for someone in their mid-20s," said Kurt Ranta, who leads a hotshot crew based in Washington State. "A temporary, seasonal guy could probably gross $50,000 in a good season."

But James Murphy — a hotshot who

Springerville, Ariz.

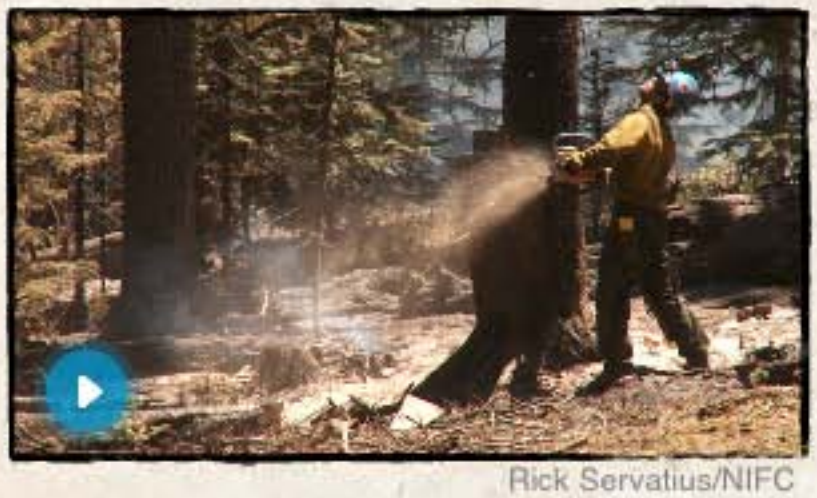
Young men and fire

Rick Servatius/NIFC

fought his first fire the day he turned 18 — said money isn't the principal draw.

"It's not really the main reason I come out to fight fires," he said. A lanky 21-year-old with a sparse beard, Murphy

The toughest job



Rick Servatius/NIFC

was still wide awake and wearing fire boots after a 16-hour shift. His crew, the American River Hotshots, had just finished battling a particularly nasty corner of the Wallow Fire where the flames overran part of a small town.

"I look forward to the future and picture somebody coming home to their house," he said. "Though it might be surrounded by black, it's not burned down."

The owner of a three-bedroom ranch house in Eagar — one of several towns evacuated in the path of the Wallow Fire — had just such a homecoming after authorities allowed residents to return last week. "My home is safe, my animals are safe," said Elizabeth Ketring, 60, a retired nurse who's lived in Eagar for 35 years. "None of it got burned."

Safe in the yard, Ketring found her 30 chickens, her 13-year-old dog, Buddy, and her cat named Fat Cat. ("Because he really is a fat cat," she said.) Inside the house, the retired nurse said she keeps a 20-year-old

Another long day at the "office" for this hotshot.

photograph of her brother Michael, now 55. In the photo, a younger but tired-looking man wears khaki clothes and his face is black with soot.

He was a hotshot, Ketring said, just home from a fire. While acknowledging the possibility of bias, Ketring says she knows who she wants to thank for her unburned home.

"I don't want to hurt anyone's feelings," she said, "but it was the hotshots that got in there and conquered the demon."

MEET THE CREW

Erik German/The Daily

Superintendent

The leader of a hotshot crew. Responsible for hiring and training crew members, as well as keeping them safe on the fire line. Here, Adam Leyba, superintendent of the American River Hotshots, keeps an eye on his hotshots as they conduct a mop-up operation.

COMMONLY USED TOOLS

Nomex Radio

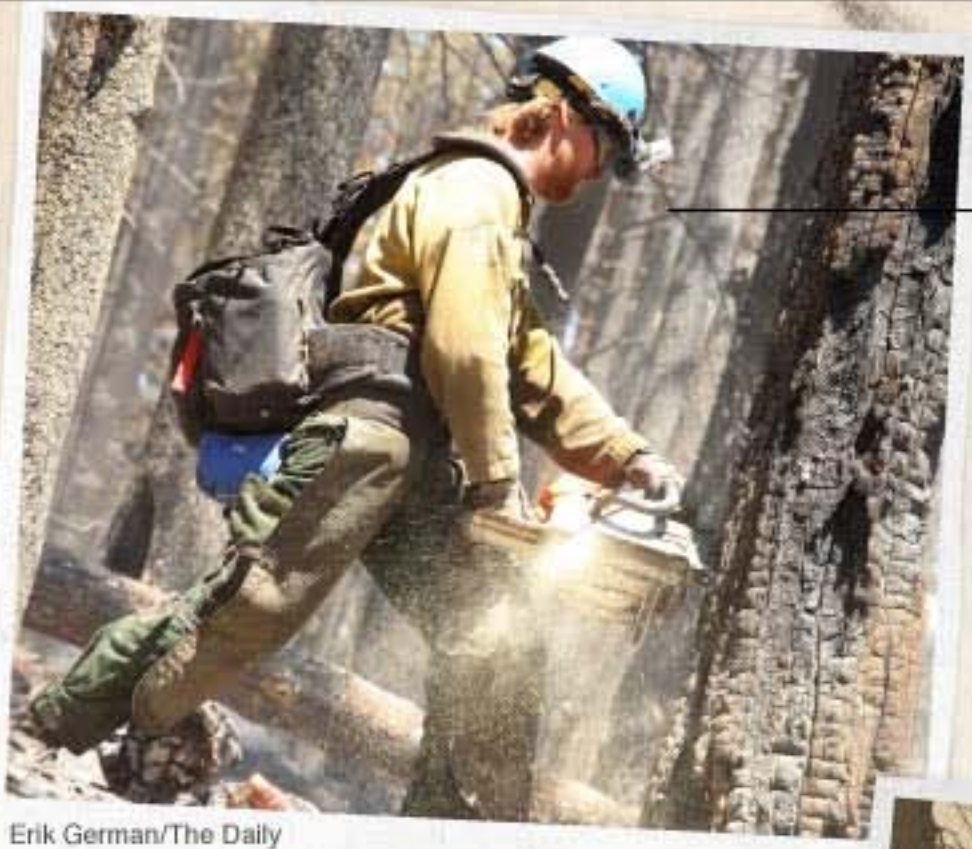
Solana Pyne/The Daily

Captain

Also sometimes called an assistant superintendent or foreman, the captain often oversees smaller squads within a crew as they carry out specific jobs in the field. Here, Matthew Radtke, a captain with the American River hotshots, hangs out by the crew's "buggy," the gear and personnel truck that becomes the crew's second home on the road.

COMMONLY USED TOOLS

Nomex Radio



Erik German/The Daily

Sawyer

Tasked with what may be the toughest job on a crew, sawyers clear brush with chain saws, operating the heavy machines for 16 hours at a stretch. Sawyers also carry heavier loads, as their line packs are weighed down by spare chains, tools and the saw itself.

COMMONLY USED TOOLS

Nomex

Chainsaw

Karl Greer/US Forest Service

Scrape

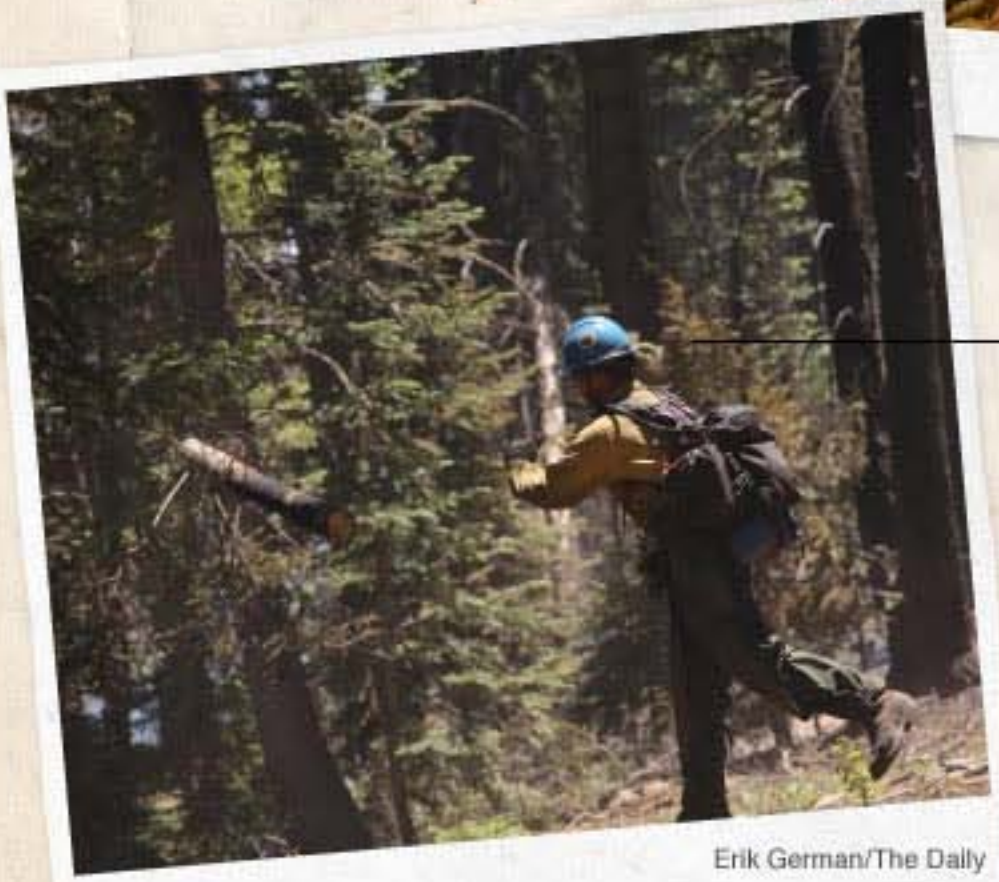
A basic but essential part of the crew, the scrape is one of the "human shovel motors" who wield shovels, rhinos or Pulaskis on the fire line.

COMMONLY USED TOOLS

Rhino

Pulaski

Shovel



Erik German/The Daily

Swamper

Working in tandem with the sawyer, swampers clear brush and heave it aside after the sawyer cuts it. Here, a member of the American River hotshots clears a sapling during a mop-up operation on the western edge of the Wallow Fire.

COMMONLY USED TOOLS

Nomex

Geared up

Hotshots use all types of specialized gear when tackling massive infernos. Here are some of the tools they lug around that are crucial to success.

Heavy-duty chainsaw

Next to the swamper, this is the sawyer's best friend. Stihl or Husqvarna are the preferred brands.

Nomex wear

Brush shirt and brush pants made from flame-resistant Nomex.

Rhino

A heavy-duty hoe used for scraping away vegetation when building fire line.

Fire boots

No steel toes here — around wildfires they can become hot enough to sear feet. A pair of lug-soled wildland fire boots can cost around $300, and they often need to be rebuilt or resoled every season.

100 oz. CamelBak

Dehydration is a constant risk on the fire line. In addition to a full CamelBak, hotshots also carry several more quarts of bottled water in their line packs, with the combined weight sometimes totaling 50 pounds.

Pulaski

Part hoe, part ax, Pulaskis are used for chopping dirt, roots and thick vegetation on the fire line.

Fire hose

A wildland fire hose needs to be light enough to carry and long enough to reach from trucks parked on logging roads — or mobile water storage units called "pumpkins" — into the woods.