



# Capital Press

EMPOWERING PRODUCERS OF FOOD & FIBER

By CAROL RYAN DUMAS  
Capital Press

**T**WIN FALLS, Idaho — Brent Frei grew up on a dryland wheat farm on the Camas Prairie of northern Idaho. And like every farm kid, he picked his share of rocks without giving much thought to the age-old, perennial chore.

It is one of the worst jobs on any farm.

Now, after a successful career in high-tech, he has turned his attention to that chore, starting a company that uses high-flying drones and robotics to locate and pick up the rocks that can damage farm implements.

### High-tech career

After graduating from Grangeville, Idaho, High School in 1984, Frei set out for Dartmouth College in New Hampshire. He earned a bachelor's degree in mechanical engineering in 1989.

From there, he went to work for Motorola, where he learned software development and designed batteries for cellular phones. He moved to Microsoft in Bellevue, Wash., where he built customer data systems.

Along the way, he founded two software companies, Onyx Software and Smartsheet, which he took from inception to initial public offering.

He also founded Harvest West Investments, a farmland investment fund that owns and manages farms in Washington, Oregon and Idaho.

Frei left his executive role at Smartsheet in 2016 but remains on its board of directors. That gave him more time to return home and help out on the family farm, which has grown to 6,000 acres.

And that's where he was — in the heat, picking rock by hand with his 81-year-old dad — when the absurdity of the manual task hit him.

"I thought, why isn't this automated?" he said. "Everything is automated."

He was a successful businessman who knew a lot about software, robotics and artificial intelligence, but he was still picking rock by hand all day in the hot sun. And he couldn't understand why technology hadn't been applied to the worst, most boring job on the farm. "Why has this not been solved?" he said.

He realized all the pieces for

See Robot, Page 9

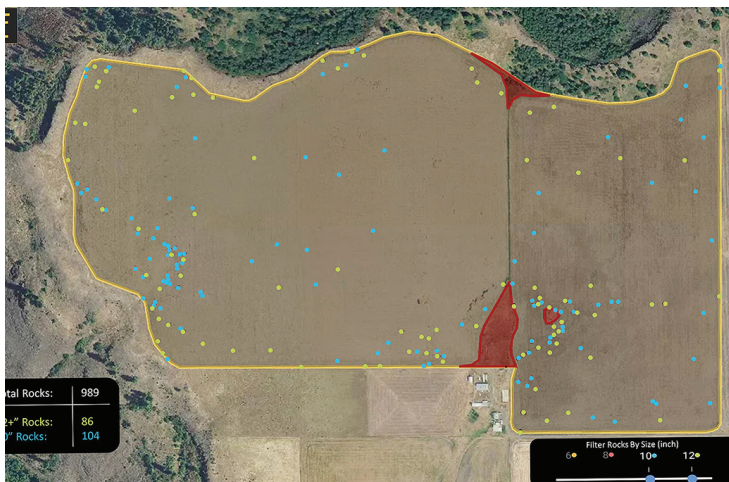


# ROCK-PICKING ROBOT

Drone maps field, then system uses automation to remove rocks



ABOVE: TerraClear's leaders are, left to right, Ryan Frei, operations; Heidi Lindsley, marketing director; Brent Frei, CEO and founder; and Trevor Thompson, president. TOP: A drone is used to locate and measure all of the rocks in a farm field.

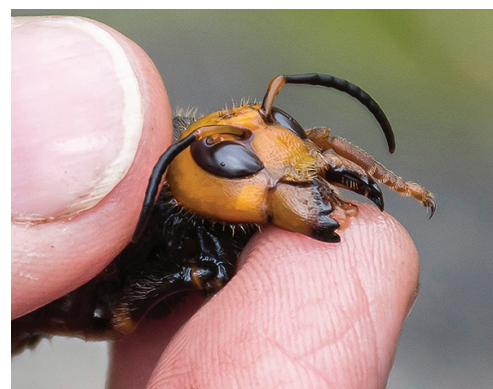


After the drone flies over the farm field, it generates a map showing the location and size of rocks.



TerraClear's rock picker is used in conjunction with a drone-generated map of all the rocks in a field. The operator follows the map to find each rock.

## Timing key to how Asian giant hornets might impact hives



Karla Salp/WSDA

An Asian giant hornet.

By DON JENKINS  
Capital Press

SEE RELATED STORY  
ON PAGE 9

Bees pollinate berries in northwest Washington before Asian giant hornet colonies mature in the summer, a sequence that may shield commercial beekeepers and farmers from being stung by the invasive wasp.

Western Washington's largest beekeeper, Eric Thompson, pollinates raspberries and blueberries in the spring in northern Whatcom County, the only area

in the U.S. where Asian giant hornets have been seen.

Thompson said March 18 that people he hasn't heard from in decades call up and ask if he's concerned. By the time the hornets come out, though, his bees are off to other jobs, spread out as far away as Montana.

"The news media in this country has run wild with the murder

hornet thing," he said. "I haven't worried about it.

"I don't see how they can be detrimental to agriculture at this point."

Asian giant hornets have a fearsome reputation for decapitating honeybees. Agriculture officials in Washington and British Columbia are out to search and destroy nests before the hornets slaughter pollinators.

A bigger threat may be to the ecosystem if the hornets attack wild bees, wasps or other insects.

Asian giant hornets are a public hazard, too, inflicting sometimes lethal stings.

Washington State University bee expert Tim Lawrence, pictured on his college webpage happily covered in live bees, said public safety concerns are real, but it's too early to say hornets menace agriculture.

"Let's not go overboard. It's already hyped up more than it needs to be," Lawrence said. "To

See Hornets, Page 9

## Five wolves found dead in NE Oregon

By GEORGE PLAVERN  
Capital Press

An investigation is continuing into the deaths of five wolves discovered early last month in northeast Oregon.

On Feb. 9, the Oregon Department of Fish and Wildlife reported a GPS collar on a wolf emitted a "mortality signal" in the Mount Harris area near La Grande. Officers with the Oregon State Police Fish and Wildlife Division found

five wolves dead.

The carcasses were taken to a U.S. Fish and Wildlife Service forensic lab to determine a cause of death. Results have yet to be released.

OSP Capt. Tim Fox said he could not immediately provide additional details about the dead wolves, such as their size, sex and pack. Roblyn Brown, wolf program coordinator for ODFW, also declined to comment, citing the pending investigation.

Oregon has a minimum wolf population of 158, as of the most recent ODFW survey in 2019, though the actual number is likely higher. Most packs are concentrated in the state's northeast corner, including Union County where the five dead wolves were found.

Kathleen Gobush, Northwest program director for the conservation group Defenders of Wildlife, said the deaths were suspicious, though without knowing the cause of death, they cannot say whether

poaching may have been to blame.

"It highlights the pressing need for a thorough investigation, for sure," Gobush said.

Gobush, who is in Seattle, said she has never heard of so many wolves found dead at once in either Oregon or Washington.

"We're all waiting to hear what the cause of death is," she said. "A lot of this is a mystery."

Rodger Huffman, a rancher in

See Wolves, Page 9

**March is about Honoring our AG PRODUCERS.**  
THANK YOU! TO EACH OF OUR AG PRODUCERS.

WE UNDERSTAND YOUR WORK AND DEDICATION. WHAT YOU NEED TO BE SUCCESSFUL.

Bank of Eastern Oregon's Mission has always been to provide Financial Support for the Ag Industry.

Member FDIC

OREGON BOARDMAN BURNS  
CONDON ENTERPRISE HEPPNER  
HERMISTON IONE IRRIGON  
JOHN DAY LA GRANDE MADRAS  
MORO ONTARIO PENDLETON  
WASHINGTON DAYTON PASCO POMEROY  
IDAHO CALDWELL

Bank of Eastern Oregon ONTARIO / 541-889-4464 / 435 SW 24TH ST.



7 29467 70125 0

5228546-1