Scientists will set 1,000 traps for murder hornets this year

BY NICHOLAS K. GERANIOS

Associated Press

SPOKANE, Wash. — Scientists will set about 1,000 traps this year in their quest to wipe out the Asian giant hornet in Washington, the state Department of Agriculture said Tuesday, May 24.

Scientists believe the hornets, first detected in the Pacific Northwest state in 2019, are confined in Whatcom County, which is located on the Canadian border north of Seattle.

We are doing pretty good right now," said Sven-Erik Spichiger, who is leading the fight to eradicate the hornets for the state Department of Agriculture. "We know about where the nests are located in Whatcom County."

The insects are the world's largest hornets, with queens reaching up to 2 inches (5 centimeters) long. They are considered invasive in North America for their ability to kill other bee and hornet species, which is how they got the nickname "murder hornets.

Hornets caught in traps help scientists find the location of nests. The state eradicated three nests last year, all near the town of Blaine, Washington, and there have been no confirmed reports of Asian giant hornet nests so far this year, Spichiger said.

Most of the traps will be set in northern Whatcom County, but a few will be set in the city of Bellingham, he said.

The agency is also encouraging residents to set their own traps, to cover more ground.

The hornets will not be considered eradicated until Washington has gone three full years with no detections, the agency said. The first confirmed detection of an Asian giant hornet in Washington was made in December 2019.



Washington State Department of Agriculture-TNS A dead Asian giant hornet (Vespa mandarinia), or "murder hornet."

Spichiger said the Entomological Society of America is also working to establish an official name for the insect. Asian giant hornet, or the popular nickname murder hornet, are not official names, he said.

The hornets can also deliver a painful sting, which can result in death if a person is stung repeatedly. Asian giant hornets rarely attack humans unless provoked. About 30 to 50 people die annually from Asian giant hornet stings in Japan, one of their native habitats.

Meanwhile, hornets, wasps and bees typically found in the United States kill an average of 62 people a year, the U.S. Centers for Disease Control and Prevention has said.

The battle to prevent the Asian giant hornet, an apex predator, from establishing a foothold in North America is being fought mostly in Whatcom County, Washington, and

the nearby Fraser Valley of British Columbia. Whatcom County is about 55 miles (88 kilometers) south of Vancouver, British Columbia.

Another effort is underway to determine exactly where in Asia these hornets came from, to try and learn how they are getting across the Pacific Ocean, scientists said. The theory is they are crossing on cargo ships, officials have said.

Hornet queens tend to emerge from winter quarters in the spring and establish nests to birth worker hornets. The hornets start attacking and destroying beneficial honey bees later in the year, eating the bees for protein as they raise more hornets.

A small group of Asian giant hornets can kill an entire honey bee hive in a matter of hours. The honey bees pollinate many of the crops in Washington's multibillion-dollar agriculture industry.

US releases study about new Idaho test nuclear reactor

BY KEITH RIDLER

Associated Press

BOISE — U.S. officials have released an environmental study for a proposed nuclear test reactor to be built in eastern Idaho that backers say is needed to revamp the nation's fading nuclear power industry by developing safer fuel and power plants.

The U.S. Department of Energy earlier this month released the environmental impact statement for the Versatile Test Reactor that would be the first new test reactor built in the U.S. in decades. Scientists have said it could help lead to new nuclear reactors and reduce the use of fossil fuels blamed for global warming.

The environmental impact statement noted that the reactor would produce spent nuclear fuel beyond 2035, going past a deadline the Energy Department has with Idaho concerning spent nuclear fuel at the site. The document states that the Energy Department would explore possible approaches with Idaho regarding that issue.

The document also said that new structures would cover about 25 acres and produce spent fuel that would be treated and packaged at the site and placed on a spent fuel pad pending shipment off the site.

Energy Department officials have praised the project.

"VTR will provide U.S. researchers from industry, academia, and our national laboratories with a critical tool for developing transformational technologies that will expand nuclear energy's contribution to abundant, carbon-free energy," Kathryn Huff, assistant secretary for the Energy Department's Office of Nuclear Energy, said in a

She added: "VTR's contribution to the fight against climate change begins with our commitment to designing, constructing, and operat-

statement.

ing the VTR in a way that protects the environment and nearby communities."

Federal officials have said the proposed test reactor would help create new and safer fuels, materials and reactors being developed by civilian companies in the U.S. About 20% of the nation's energy comes from about 100 nuclear power plants.

The reactor would give the nation a dedicated "fast-neutron-spectrum" testing capability. Such reactors are called fast reactors. The advantage of such a test reactor, scientists say, is that fast neutrons have a higher energy level and speed the testing of materials, fuels and instruments needed in a new wave of planned commercial nuclear reactors.

The disadvantage of such reactors, other scientists have said, is that they are cooled with harder to control liquid sodium and fueled by plutonium, increasing potential nuclear terrorism risks because plutonium can be used to make nuclear weapons. Critics also say they produce waste even more hazardous and difficult to dispose of than conventional reactors.

U.S. officials have said Russia, China and India already have such test reactors.

Plans call for building the reactor at the Energy Department's 890-square-mile site that includes the Idaho National Laboratory by the end of 2026. Construction of the proposed reactor depends on funding from Congress.

Scientists at the Idaho National Laboratory earlier this year completed a rare overhaul of the Energy Department's Advanced Test Reactor, one of the world's most powerful nuclear test reactors.

And in 2018, the Energy Department restarted the Transient Test Reactor at the Idaho National Laboratory to test new nuclear fuels. That facility had been on standby

What is monkeypox and where is it spreading?

BY MARIA CHENG

Associated Press LONDON — Health au-

thorities in Europe, North America, Israel and Australia have identified more than 100 cases of monkeypox in recent

Officials around the world are keeping watch for more cases because, for the first time, the rare disease appears to be spreading among people who didn't travel to Africa, where monkeypox is endemic. They stress, however, that the risk to the general population is low.

wnat is monkeypox?

Monkeypox is a virus that originates in wild animals like rodents and primates, and occasionally jumps to people. It belongs to the same virus family as smallpox.

Most human cases have been in central and west Africa and outbreaks have been relatively limited.

The illness was first identified by scientists in 1958 when there were two outbreaks of a "pox-like" disease in research monkeys — thus the name monkeypox. The first known human infection was in 1970, in a young boy in a remote part of Congo.

What caused this latest outbreak?

Health officials are still investigating, but a top adviser to the World Health Organization said this week that the leading theory is that monkeypox was likely spread after sexual activity at two recent raves in Europe.

Dr. David Heymann, who chairs WHO's expert advisory group on infectious hazards, said monkeypox can spread when there is close contact with someone already infected with the disease, and that "it looks like sexual contact has now amplified that transmission."

Authorities in countries including Britain, Spain, Germany and Portugal say most of the known cases in Europe have been among men who have sex with men, but experts emphasize that anyone can be infected through close contact with a sick person, their clothing or bedsheets.

Scientists say it will be difficult to determine whether the spread is being driven by sex or merely close contact.

Why are most of the current infections outside africa in men who have sex with men?

It's unclear, but the disease is no more likely to infect gay and bisexual men than any-

Presumptive case reported in Seattle

SEATTLE (AP) — A "presumptive" case of monkeypox is being investigated in the Seattle area, local health officials said Monday, May 23.

Dr. Jeff Duchin, health officer at Public Health - Seattle & King County, said at a news conference Monday afternoon the case was in an adult male who had travelled internationally in the last month to a country that had reported monkeypox cases.

Duchin said initial testing was completed Monday at a state laboratory. A test to confirm the case will be done by federal of-

The person was isolating and was not considered a risk to others, Duchin said.

"This individual was not hospitalized and is recovering at home," he said, adding the person was cooperating with local health authorities.

Health officials do not believe there is a high risk to the public. Monkeypox is rarely identi-

fied outside of Africa. Duchin said four cases have been confirmed in the United States.

To date, the World Health Organization has recorded more than 90 cases of monkeypox in a dozen countries, including Canada, Spain, Israel, France, Switzerland, the U.S. and Australia.

Although the disease belongs to the same virus family as smallpox, its symptoms are milder. People usually recover within two to four weeks without needing to be hospitalized, but the disease occasionally is deadly

Health officials say most of the known cases in Europe have been among men who have sex with men, but anyone can be infected through close contact with a sick person, their clothing or bedsheets.

"This may just be unlucky that (monkeypox) happened to get into this one particular community first," said Dr. Jake Dunning, an infectious diseases researcher at the University of Oxford, who is also involved in treating cases in London. "It's just that they are a community and by having sex with each other, that is how it's spreading," he said.

Other experts warn the disease could spread more widely if measures aren't taken to stop the outbreak.

Infectious diseases don't care about borders or social networks. Some groups may have a greater chance of exposure right now, but by no means is the current risk of exposure to monkeypox" exclusive to men who have sex with men, said the CDC's Dr. John Brooks.

What are the symptoms and how is it treated?

Most monkeypox patients experience only fever, body aches, chills and fatigue. People with more serious illness may develop a rash and lesions on the face and hands that can spread to other parts of the body.

Most people recover within about two to four weeks without needing to be hospitalized. Monkeypox can be fatal for up to 6% of cases and is thought to be more severe in children.

Smallpox vaccines are effective against monkeypox and anti-viral drugs are also being developed.

The European Centre for

Disease Prevention and Con-

trol recommended all suspected cases be isolated and that high-risk contacts be offered a smallpox vaccine. The U.K. is offering high-risk contacts the smallpox vaccine and recommending anyone who might be infected to isolate until they recover.

The U.S. has 1,000 doses of a vaccine approved for the prevention of monkeypox and smallpox, plus more than 100 million doses of an older-generation smallpox vaccine in a government stockpile, officials said.

How worrying is this outbreak?

Any outbreak of an emerging virus is concerning, but most of the cases have been mild and there have been no deaths so far.

Monkeypox also requires very close contact to spread, so it is not likely to prompt big waves of disease like COVID-19, which can be transmitted in the air by people with no symptoms.

Still, Britain's Health Security Agency has said it expects to see new infections on a daily basis and WHO's Europe director warned that the summer season of festivals and parties could spread the disease. Many of the cases being identified have no links to previous infections, suggesting the virus is already spreading widely.

On Tuesday, Germany's Health Minister Karl Lauterbach said the outbreak "is not the beginning of a new pandemic" but needed to be contained quickly.

How many monkeypox cases are there typically?

The World Health Organization estimates there are thousands of monkeypox infections in about a dozen African countries every year. Most are in Congo, which reports about 6,000 cases annually, and Nigeria, with about 3,000 cases a year. In the past, isolated cases

of monkeypox have been spotted outside Africa, including in the U.S. and Britain. The cases were mostly linked to travel in Africa or contact with animals from areas where the disease is more common.

In 2003, 47 people in six U.S. states had confirmed or probable cases. They caught the virus from pet prairie dogs that been housed near imported small mammals from Ghana.

