

THE UNKNOWN

THE NEVER-ENDING SEARCH FOR NESSIE

BY AMANDA HOLPUCH

For more than 1,000 years, people have reported seeing a mysterious and terrifying creature in Loch Ness, a lake in northern Scotland. But here's the thing: In all that time, no one has been able to prove that the Loch Ness Monster actually exists. No one has proved it doesn't, either, so people keep looking. This summer, people staged the largest search in half a century.

The 500s: First known report
An Irish monk named St. Columba visited Scotland. According to

an old account of his life, he saw people burying a man they said had been killed by a water beast.

May 1933: 'Nessie' is born
A local newspaper reported that two people had seen a "fear-some-looking monster" with a whalelike body as they were driving along the loch ("loch" means "lake" in Scottish Gaelic). People started coming to the lake to look for the Loch Ness Monster and gave it a nickname: Nessie.

January 1934: Probably not a monster, scientists say
Many scientists guessed that Nessie was actually a regular water creature, like a seal. Wil-

liam Beebe, an American wildlife researcher, said he believed "it is nothing more than a great squid."

April 1934: A famous photo
The Daily Mail, a British tabloid newspaper, published a black-and-white photo showing a long neck and head lifted from the water. Sixty years later, in 1994, the image was revealed to be a hoax. It was actually a 12-inch-high model.

1972: Honey, what is that?
Robert H. Rines, an inventor from Boston, was honeymooning with his new wife by Loch Ness when they saw what appeared to be a big, grayish hump with the texture

of elephant skin rise out of the water. Rines became obsessed with finding the monster, and he led a monthslong search. His team searched the bottom of the lake with sonar (which uses sound to "see" underwater) and took more than 108,000 underwater photos. The expedition found nothing.

July 2003: Sonar sweep
The British Broadcasting Corporation used 600 sonar beams to investigate the loch and concluded that Nessie did not exist.

2019: Oh, eely?
One popular idea from the 1900s was that Nessie was a reptile that had survived from the time of the

dinosaurs. In 2019, a professor in New Zealand tested it by analyzing 250 water samples from Loch Ness. He found lots of eel DNA, but nothing dinosaur-ish.

August 2023: The biggest search in 50 years
Dozens of volunteers gathered at several locations around the loch to watch the surface for strange movements or objects. (Hundreds more tuned into a livestream.) Some observers took photos and videos of blurry shapes on the loch's surface or moving "humps" that disappeared in the water. But the hunters did not find any evidence that proves Nessie exists. The search continues. ♦

A MYSTERIOUS ILLNESS SPREAD OVER THE INTERNET



BY AZEEN GHORAYSHI

ONE DAY IN 2021, 16-year-old Aidan Dupis came home from school one afternoon jerking uncontrollably, whistling and whooping. Not long after, neurologists — doctors who specialize in brain illnesses — began reporting other cases of sudden spasms in teenagers around the world. Most of them were girls, and their tics were sometimes identical.

Doctors were stumped. Later they learned that many of the teenagers had watched TikTok videos of young people with similar tics. Aidan, who lives in Canada and uses they/them pronouns, had also seen them. The illness became known as the TikTok Tics.

HOW DID THIS HAPPEN?
For a long time, scientists have known that some illnesses can be produced by the brain. Think about how being excited can create the feeling of butterflies in your stomach. Or how stress makes the heart race.

In rare cases, the symptoms can be more intense. Sometimes, they can even spread among friends. In 2011, a group of girls at a high school in New York began to have tics out of nowhere. Doctors showed that there was no secret illness driving their spasms. Instead, they were being caused by stress and were spreading because of the strong social connections the girls had.

Scientists think the TikTok tics were the first example of such a cluster spreading over social media. Teenagers were stressed because of the pandemic, being pulled out of school and feeling very isolated. Their symptoms spread in part because they were watching the same videos online.

Aidan says they were very lonely, but didn't realize it at the time. The tics filled a need. "My brain grabbed on to it as an answer when I didn't have any," Aidan says.

WHERE DID THE TIKTOK TICS GO?

The good news is that this type of illness is very treatable. With therapy to help with the stress, as well as taking time away from social media, most kids have been able to get better.

Aidan got better, too. Now, they're 18 and studying art in college. They haven't had a tic in more than a year. The next big challenge on their horizon? "I'm hoping to get my driver's license," Aidan says. ♦

WHO'S THERE?

KNOCK KNOCK.

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KNOCK KNOCK.

...

KNOCK KNOCK.

DRACULA,
I CAN
SEE YOU ON
THE
DOOR CAM.
I'M NOT
LETTING
YOU IN.



JOURNEY THROUGH THE FOG

BY EMILY REILY

FOG TURNS A REGULAR evening into a fright-fest. When a ghostly fog surrounds you, anything could be hiding just out of sight. "Fog usually comes and goes very quickly," says Harindra Joseph Fernando, who studies atmospheric science at the University of Notre Dame. It's hard to predict where and when it will happen. If fog freaks you out, let's clear the air.

1. Fog is a cloud, but it's on the ground. It forms when tiny water droplets become trapped between a layer of warm air above and the colder earth below.

2. Fog often happens when the sun goes down, bringing an eerie feeling to the onset of night. It happens then because that's when air cools down, making water vapor in the air condense into droplets.

3. During a battle in the American Revolutionary War, George Washington and about 9,000 troops escaped from the British by hiding in a fog bank.

4. In very cold places, fog can freeze, forming an icy layer on trees, cars and roads. It's known as "pogonip fog" in the

Western United States, and can be painful to inhale. Indigenous Shoshone people referred to it as "white death."

5. In October 1948, a dense fog enveloped the small valley town of Donora, Pa. It mixed with smoke from nearby steel and zinc factories to form a toxic "smog" that hung around for days. People got sick, and 20 people died. The event helped push the government to do something about pollution — although it took a while. In 1970, a law called the Clean Air Act was passed to regulate emissions.

6. Rainbows can form in a fog — but they're mostly white. They're called fog-bows or ghost rainbows.

7. The Grand Banks, a popular fishing area in the Atlantic Ocean, near Canada, are widely considered the foggiest place in the world. There, the cold Labrador Current coming down from the Arctic mixes with the warm Gulf Stream and interacts with the air above, creating about 150 foggy days a year (that's almost half the year). Other places known for their foggiest: London and San Francisco.

8. Fog doesn't just make it hard to see; it can also make it hard to hear. When sound travels through thick fog, the moisture interacts with sound waves, distorting them. Low tones get through better than high-pitched noises, which is why foghorns that alert boats to rocky coastlines always use deep notes.

9. In a scary movie from 1980, a thick fog covers a quiet California town. Then terrifying supernatural things start happening. The movie was called (what else?) "The Fog." ♦

GREAT UNKNOWN

WHY DO I FEEL AS IF I'VE SEEN THIS BEFORE? IT'S YOUR FIRST TIME VISITING THE ART MUSEUM. BUT YOU'VE BEEN HERE BEFORE... IN A DREAM? ARE YOU PSYCHIC? PROBABLY NOT. THAT WEIRD SENSATION IS CALLED "DÉJÀ VU," (FRENCH FOR "ALREADY SEEN"), AND IT'S PRETTY COMMON. SCIENTISTS DON'T KNOW MUCH ABOUT WHY IT HAPPENS. ANNE CLEARY, A PSYCHOLOGY PROFESSOR, THINKS IT MIGHT OCCUR WHEN A PLACE IS SIMILAR TO SOMEWHERE YOU'VE BEEN BEFORE: MAYBE THE HOSPITAL CAFETERIA HAS THE SAME LAYOUT AS YOUR OLD SCHOOL'S. OTHERS THINK IT HAPPENS WHEN A PART OF YOUR BRAIN THAT CREATES MEMORIES GOES INTO OVERDRIVE.

Tics: Illustration by TKTKTK

THE UNKNOWN

THE UNEXPLAINED HALL OF FAME

BY DANIELA HAMILTON AND SCOTT YACYSHYN

Stonehenge

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Stonehenge is one of the most famous, and most mysterious, sites in the world. It's a circular monument made up of giant upright stones in a field in England. But no one knows what it actually is. It was built more than 4,000 years ago by people with no written lan-

guage. The stones are 13 feet tall or taller. Archaeologists think the stones, which weigh around 50,000 pounds each, were brought from over 100 miles away. But how? And why? Experts think it might have been a burial ground and ceremonial gathering place.

THE Bloop

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It's a terrifying sound with a silly name. The Bloop was an ultra-low-frequency noise recorded in 1997 by researchers in the Pacific Ocean. It almost sounded like a whale ... only much, much bigger. It freaked a lot of people out until 2005, when it was discovered that the sound was an icequake — a monstrous glacier splitting in two.

Amelia EARHART

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A true adventurer, Amelia Earhart was the first female pilot to fly across the Atlantic Ocean. In 1937, she tried to fly around the world and went missing somewhere over the Pacific Ocean. People have been searching for evidence of what happened to her ever since. This year, researchers uncovered what could be a new clue: A photo taken during an underwater expedition 14 years ago shows what could be part of a 1930s-era plane. Experts are analyzing the photo to see if the plane could have been Earhart's.

Pyramids

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The Great Pyramid of Giza is 481 feet tall — more than 100 feet taller than the Statue of Liberty. When the ancient Egyptians built it over 4,000 years ago, they didn't have cranes, electricity or even the wheel yet! So how did they pull off such an impressive construction job? For some people, the only logical answer is that aliens must have lent a hand with futuristic technology. But Roland Enmarch, an Egyptologist at Liverpool University, credits a big work force who used an advanced system of ramps and large sleds to stack massive stone blocks into one of the Wonders of the World.

EL Chupacabra

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In Southwest Texas, people talk of a beast with scaly gray skin and vicious fangs. This is el Chupacabra (Spanish for "goat sucker"), a cryptid with the nasty habit of eating pets and livestock. Sightings are common, and a family claimed to have captured one alive in 2014. The truth is that el Chupacabra is real, in a way: A 2017 study concluded that these monsters are actually coyotes infected with mange, a disease that eats away their fur and leaves them with hairless, scaly skin and a terrifying appearance.

SPONTANEOUS HUMAN Combustion

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Since the 1700s, there have been over 200 recorded deaths attributed to spontaneous human combustion. That's when the human body bursts into flames without an external source of fire. How could it happen? Some thought that a fever or a raging temper would ignite the oxygen in people's bodies. The truth is, human bodies do not randomly ignite. Forensic anthropologists — scientists who study human remains — typically blame fallen candles or cigarettes.

Blood RAIN

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Instances of blood-red rain pouring down from the sky have been recorded since the days of the ancient Greeks. But was it actual blood falling from the sky? Unlikely! Scientists think there are other possible answers for the "bloody" weather events, like desert dust or algae spores.

Bigfoot

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Bigfoot is supposedly a hairy, apelike creature that walks on two legs and is around 8 feet tall. It has been spotted all across America, and even shows up in centuries-old cave paintings. But don't expect to see one at the zoo: Bigfoot (a.k.a. Sasquatch) is a cryptid, an animal that hasn't been proved to exist. Some think Bigfoot sightings are hoaxes by tricksters with costumes and phony footprints. Others, like the Bigfoot researcher Cliff Barackman, think they're real, and that no one has been able to find one in part because they're very rare. "There's probably 200 bears for every one Sasquatch out there," he says. (A similar creature, the yeti, is said to haunt the Himalayas in Asia.)

THE Voynich MANUSCRIPT

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Written in a language that no one can read, and filled with drawings of bizarre plants that no one can identify, this handwritten book has everyone baffled. Linguists and codebreakers have been trying to make sense of it since it was discovered in Rome in 1912. Lisa Fagin Davis has been studying the unreadable book for 35 years. She believes it's around 700 years old, and could be a how-to health book written by women.

THE NAZCA Lines

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The southern deserts of Peru are decorated with giant drawings of animals, people and shapes as long as five football fields. Some are so gigantic that they can only be seen by airplane. The Nazca Lines are something called geoglyphs, which were made by removing the red desert rocks to reveal

the white sand below. The Nazca people mapped out the images using ropes and stakes over 2000 years ago. Why? That's a stumper. To this day, no one knows for certain what the lines are for. But the pictures are fun!

MONGOLIAN Death WORM

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If the thought of an everyday earthworm icks you out, then read no further. The Mongolian Death Worm is a cryptid said to be covered in a slime so poisonous that it kills with just a touch. Rumors

of the deadly invertebrate probably stem from sightings of a real Mongolian desert-dweller, the Tartar sand boa — a thick-bodied snake with eyes so tiny it could be mistaken for a giant worm.

THE Bermuda TRIANGLE

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There's a mysterious area of the Atlantic Ocean near Florida known as the Bermuda Triangle. Many ships, planes and people have disappeared without a trace there. Some people think the reason must be alien abductions. Or maybe ships are sunk by underwater eruptions of methane gas called oceanic flatulence — in other words, exploding water farts. The probable truth is that stormy weather is what sinks ships and downs planes. One strange piece to this puzzle is that some compasses act funny within the Bermuda Triangle, which might send sailors off course.