

Ode to E Pluribus Unum for Sunday August 10 2025



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A Plutonian Landscape

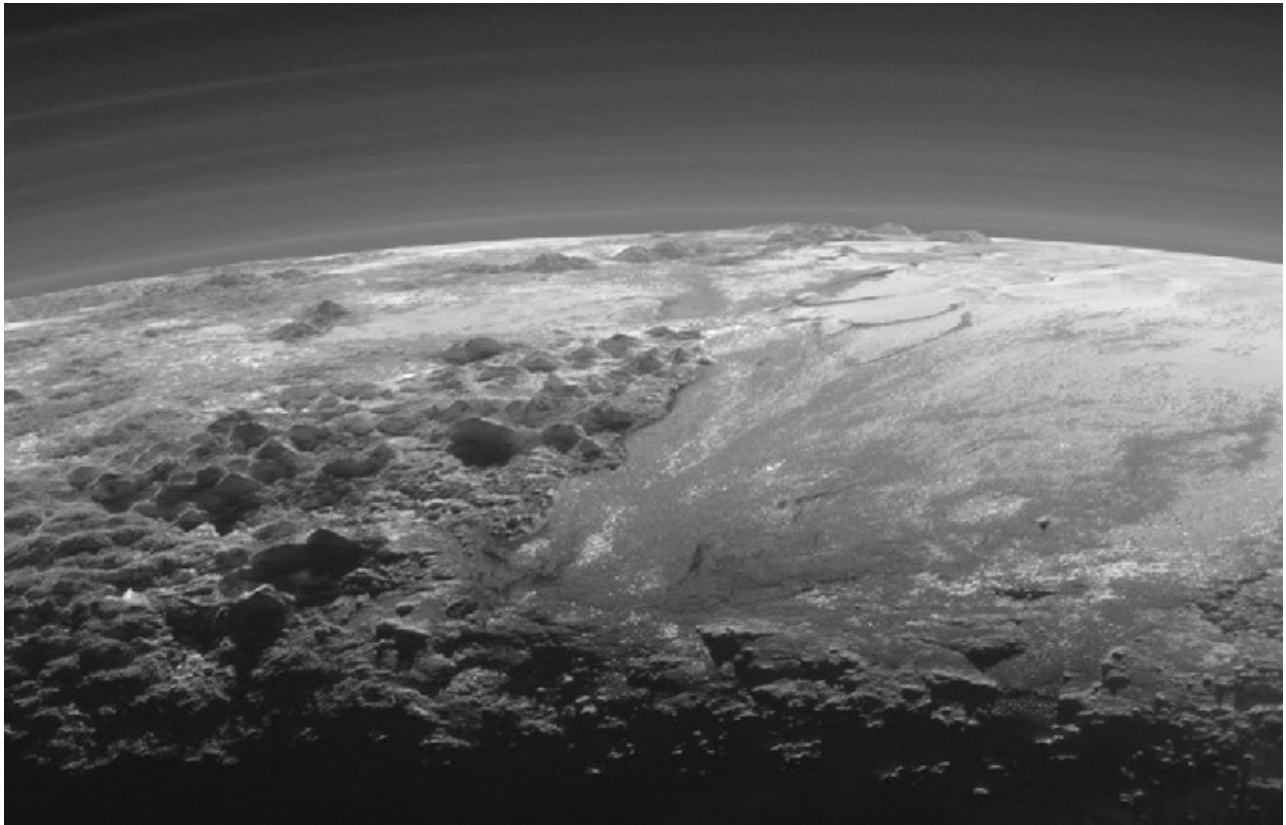


Image Credit: NASA, Johns Hopkins Univ./APL, Southwest Research Institute

This shadowy landscape of majestic mountains and icy plains stretches toward the horizon on a small, distant world. It was captured from a range of about 18,000 kilometers when New Horizons looked back toward Pluto, 15 minutes after the spacecraft's closest approach on July 14, 2015.

The dramatic, low-angle, near-twilight scene follows rugged mountains formally known as Norgay Montes from foreground left, and Hillary Montes along the horizon, giving way to smooth Sputnik Planum at right.

Layers of Pluto's tenuous atmosphere are also revealed in the backlit view. With a strangely familiar appearance, the frigid terrain likely includes ices of nitrogen and carbon monoxide with water-ice mountains rising up to 3,500 meters (11,000 feet). That's comparable in height to the majestic mountains of planet Earth. The Plutonian landscape is 380 kilometers (230 miles) across.

Do you think this vista was what Edgar Allen Poe had in mind when he penned his description of 'The night's Plutonian shore' in The Raven?

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Corsair Lost Over Midway During WWII

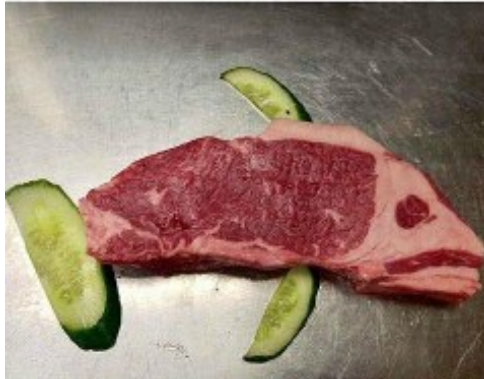


Kelly Gleason

Odester Gary Gleason's daughter was the archeologist for NOAA in Hawaii. Here she is photographing an upside down Corsair with its landing gear extended offshore Midway for the Navy.

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The doctor said I need to eat
more fish. . . 😂😂😂



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Using AI to Advance Scientific Discovery

Illustration by Clément Barbé



Some five years ago, mathematician Sergei Gukov began teaching himself how to build the neural networks that are the foundation of artificial intelligence, simply to see whether they might be useful in the realm of pure mathematics. He was, he admits now, skeptical whether the supremely complicated and complex questions being asked by pure math would be within the reach of AI's ability to process information.

Across the Institute, researchers are learning that AI can help them to think bigger and do more. They are confident about the varied roles the technology can play in scientific research, whether that involves crystallizing mountains of data into new and useful insights, uncovering patterns in data too subtle for humans to notice, or using the power of neural networks or machine learning to streamline experimentation and create new knowledge, develop new therapies, or understand the world and its complex systems in new ways.

<https://bit.ly/44Mgnb5>

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Chords & Riffs

John Williams (



starwarsnewsnet.com

In a career that spans five decades, John Williams has become one of America's most accomplished and successful composers for film and for the concert stage. He has served as music director and laureate conductor of one of the country's treasured musical institutions, the Boston Pops Orchestra.

He has composed the music and served as music director for more than one hundred films. His 40-year artistic partnership with director Steven Spielberg has resulted in many of Hollywood's most acclaimed and successful films, including *Schindler's List*, *E.T.: The Extra-Terrestrial*, *Jaws*, *Jurassic Park*, *Close Encounters of the Third Kind*, four *Indiana Jones* films, *Saving Private Ryan*, *Amistad*, *Munich*, *Hook*, *Catch Me If You Can*, *Minority Report*, *A.I.: Artificial Intelligence*, *Empire of the Sun*, *The Adventures of TinTin* and *War Horse*. Their latest collaboration, *The BFG*, was released on July 1, 2016. Mr. Williams has composed the scores for all seven *Star Wars* films, the first three *Harry Potter* films, *Superman: The Movie*, *JFK*, *Born on the Fourth of July*, *Memoirs of a Geisha*, *Far and Away*, *The Accidental Tourist*, *Home Alone*, *Nixon*, *The Patriot*, *Angela's Ashes*, *Seven Years in Tibet*, *The Witches of Eastwick*, *Rosewood*, *Sleepers*, *Sabrina*, *Presumed Innocent*, *The Cowboys* and *The Reivers*, among many others. He has worked with many legendary directors, including Alfred Hitchcock, William Wyler and Robert Altman.

In 1971, he adapted the score for the film version of *Fiddler on the Roof*, for which he composed original violin cadenzas for renowned virtuoso Isaac Stern. He has appeared on recordings as pianist and conductor with Itzhak Perlman, Joshua Bell, Jessye Norman and others. Mr. Williams has received five Academy Awards and 50 Oscar nominations, making him the Academy's most-nominated living person and the second-most nominated person in the history of the Oscars. His most recent nomination was for the film *Star War: The Force Awakens*. He also has received seven British Academy

Awards (BAFTA), 22 Grammys, four Golden Globes, five Emmys, and numerous gold and platinum records.

In addition to his activity in film and television, Mr. Williams has composed numerous works for the concert stage, among them two symphonies, and concertos for flute, violin, clarinet, viola, oboe and tuba. His cello concerto was commissioned by the Boston Symphony Orchestra and premiered by Yo-Yo Ma at Tanglewood in 1994. Mr. Williams also has filled commissions by several of the world's leading orchestras, including a bassoon concerto for the New York Philharmonic entitled The Five Sacred Trees, a trumpet concerto for the Cleveland Orchestra, and a horn concerto for the Chicago Symphony Orchestra. Seven for Luck, a seven-piece song cycle for soprano and orchestra based on the texts of former U.S. Poet Laureate Rita Dove, was premiered by the Boston Symphony at Tanglewood in 1998. At the opening concert of their 2009–2010 season, James Levine led the Boston Symphony in the premiere Mr. Williams' On Willows and Birches, a concerto for harp and orchestra.

On Willows and Birches <https://youtu.be/3rexV9AAu5I?list=RD3rexV9AAu5I>

The Five Sacred Trees <https://youtu.be/LMjXHYHZtrE?list=RDLMjXHYHZtrE>

Prelude and Scherzo for Piano and Orchestra
<https://youtu.be/dQ5Mj1sRAeM?list=RDdQ5Mj1sRAeM>

Exultate Justi (Empire Of The Sun)
<https://youtu.be/p5v6KNngzQs?list=RDp5v6KNngzQs>

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Poetry Corner

Carolina Wren



From the mountain top to the
Seclusion of a glen
Echoes of music resound
From the Carolina Wren.
A joyful little bird
Offering a duality
Sharing messaging
As well as its genuine vitality.
Accepted in wildlife as a balladeer
The Carolina Wren chirps and tweets music
Throughout the year.

Music is fundamental to all
God's creatures
Rhythm and harmony are

Its nurturing features.
Music is a peaceful way to share
We stand and sing, united we care.
Like the Carolina Wren,
We each offer our song
And listening to others'
We sing along.
Francie Troy '25

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1st Pill for Obstructive Sleep Apnea Could Be Around the Corner

The pill showed "significant" reductions in airway obstruction after 26 weeks.



Grandriver/Stock Photo/Getty Images

OSA is a sleep disorder in which the airways become narrowed or blocked while sleeping, causing breathing to pause, according to [MedlinePlus](#).

"With two large Phase 3 studies now demonstrating a consistent and significant efficacy profile for AD109, we are closer to delivering the first oral pharmacotherapy for over 80 million U.S. adults with OSA," Dr. Larry Miller, CEO of Apnimed, said in a statement. "Given the scale of unmet need in OSA, where the majority of patients remain untreated, we believe AD109, as a simple once-daily oral drug, has the potential to expand and reshape the treatment landscape, which would represent a significant commercial opportunity for Apnimed."

At the end of the study period, which concluded at 51 weeks. At the end of the trial, nearly 23% of participants saw "complete disease control."

<https://bit.ly/3U4lOvU>

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Hacking Swamps Could Curb Methane Emissions, But

Rising levels of the potent greenhouse gas prompt "delicate" steps into new kind of geoengineering



Emissions from vast tropical swamplands in the Sudd, in South Sudan, have helped drive global methane levels to new highs.

Phil Moore/AFP via Getty Images

With their sluggish, oxygen-starved waters and buffets of organic muck, wetlands are ideal habitats for anaerobic microbes that produce methane, a potent greenhouse gas. In a menacing feedback, a warming climate seems to be turbocharging that microbial activity, helping drive a [global surge in methane](#)—which leads to more warming. To interrupt it, some researchers are exploring an exotic idea: hacking the swamps.

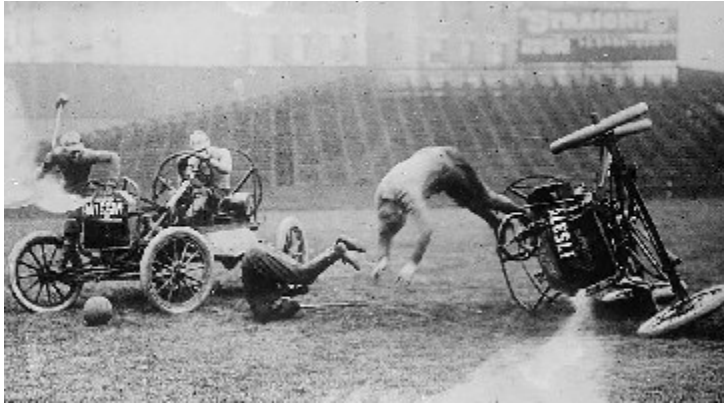
Starting this year, an effort called Feedback Research and Action on Methane Emissions (FRAMES) plans to treat wetland microbial ecosystems with chemicals that could curb their methane releases, first in the lab and later in small field trials. The researchers stress that this new kind of geoengineering could have unforeseen consequences; understanding them is a primary reason for the work. "This is delicate," says Brian Buma, who co-leads the Climate Innovation Initiative at the Environmental Defense Fund, the U.S. nonprofit backing the effort. "We're in uncharted waters."

<https://bit.ly/3ILFJxe>

In a similar approach, the Los Angeles SCL/LEA is employing Microbiology-based Mitigation (Soil Enhancement Protocols) at the Sunshine Canyon Landfill to supplement the effectiveness of soil, mulch, compost, or combination thereof.

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The Chaotic, Crash-Tastic Sport of Auto Polo from the 1910s



Moss & Fogg

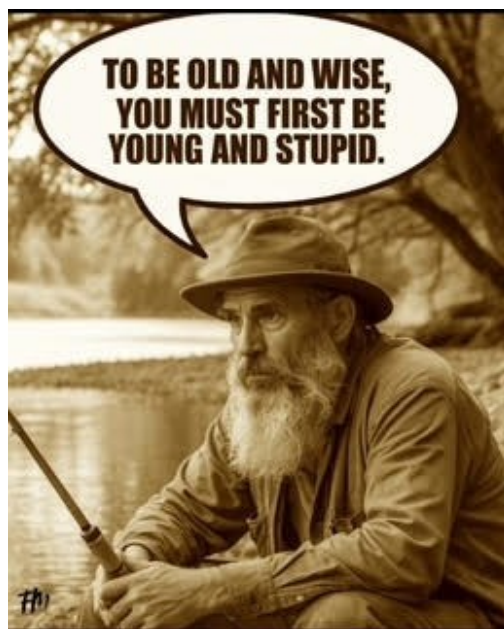
Auto Polo took the traditional game of polo and gave it a gutsy, gasoline-fueled upgrade. Instead of horses, players mounted stripped-down Ford Model Ts, careening across fields in a thunderous chase after an oversized ball.

Played on dirt tracks with makeshift goalposts, the sport was chaotic, dangerous, and irresistibly thrilling for spectators.

<https://bit.ly/45jBIOG>

It made a short lived return on television in the 1950s with a car redesigned for the task

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GOOD EATS FROM THE ODE

Cookies, Apple, Kerber family (27 July 2025)

They seem like a lot of work, but they are not, and after your taste test, you will be happy with your work. Make sure the butter and eggs are at room temperature; preheat the oven to three hundred fifty degrees:

A: into a large bowl, stir or sift together 2 ¼ cups flour, 1 teaspoon of baking soda

B: into a mixer bowl, place ½ cup of room temperature butter, 1 ⅓ cups brown sugar, ½ teaspoon of salt. Beat them together until the butter becomes creamy and light yellow.

Into the butter/sugar mix, add 2 teaspoon cinnamon, 1 teaspoon cloves, ½ teaspoon nutmeg, ¼ cup of buttermilk, and two eggs. Beat together.

Fold the wet mixture B into A. (Beat them together and you will form gluten, and create a more breadlike texture than cookie.)

Fold in 1 cup of chopped walnuts or pecans, 2 cups chopped unpared apple*, one cup raisins.

The best way to bake is to put them on a silicone pad in your cookie tray. If you do not own a silicone pad, you will have to spray coat pan with an oil of your choice. Place a single cookie on the tray – about 1/3 cup in size, and test bake for 13 minutes. The edges should be crisp; the center soft and chewy. You may need a minute more or less depending upon your oven temperature experiment.



These cookies deserve a light glaze. When they are warm:

Back to the mixer: add 1 tablespoon of soft butter, ¼ teaspoon vanilla, and 1 ½ cups of confectioners sugar together. Slowly. Add 2 – 3 tablespoons of real cream until you get the consistency you want.

Spoon about 1/3 teaspoon on each cookie –the glaze will soften and melt, covering the cookie top.

The apples are key, aren't they? If you use a sour apple, like Granny Smith, you will need an additional ¼ cup of sugar. I find the best to be something like a honey crisp. Simply core the Apple – don't peel it – then cut it into 1/4 – 1/3 inch pieces.

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Toy Crazes Over the Years

Labubu is not the first toy craze, and it certainly won't be the last



Pop Mart via AP

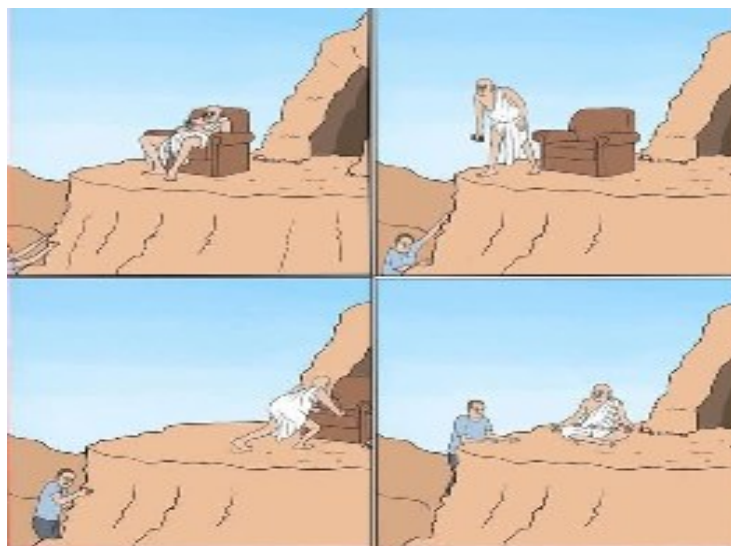
Pop Mart has struck it rich. The Chinese company that caters to toy connoisseurs and influencers said this week that it expects profit for the first six months of this year to jump by at least 350% compared with the prior-year period, largely because of its smash hit plush toy, the Labubu. Pop Mart joins a small list of companies that have tapped into the zeitgeist, drawing in millions of buyers who, for one reason or another, simply must get their hands on a toy or gadget of the moment.

But what makes the Labubu a must-have, or any toy for that matter, is a decades-old question that toy makers have yet to figure out.

Here's a look at some of the most popular toys over the years.

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Why Is Color Blindness So Much More Common In Men?

About 1 in 12 men is color-blind. Why doesn't this condition affect women as often?



Color blindness is known to be more common in males. That comes down to the genetics of the condition.

(Image credit: Dima Berlin via Getty Images)

An estimated 300 million people worldwide are color-blind. This typically means they can't distinguish certain shades of color, they struggle to tell how bright colors are or, more rarely, they can't see any colors at all. Color blindness doesn't affect males and females equally, though. According to Cleveland Clinic, the condition affects about 1 in 12 males, compared with 1 in 200 females.

The answer comes down to the genetics governing the function of the human eye. People see colors using specialized cells in the backs of their eyeballs called cones. There are three types of cone cells, and each is tuned to be most sensitive to certain [wavelengths of light](#).

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The Humble Recorder

A gateway instrument for millions of schoolchildren



LA Johnson/NPR

A recent report found that the number of kids learning the recorder has declined over the years in schools in the United Kingdom. Teachers in the U.S. say the instrument's popularity has declined here, too, due to COVID-era restrictions and the rise of popular alternatives like the ukulele.

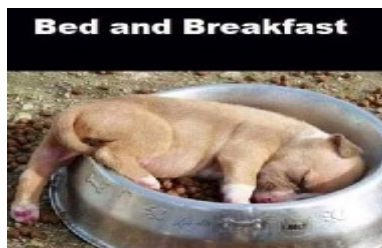
"There's really no other instrument, other than maybe the keyboard, where it is so easy for a beginner to actually make a sound," says Michael Lynn, professor of recorder and baroque flute at Oberlin College and Conservatory in Ohio.

It's also cheap, and the size is just right, says Karen Dolezal, a former music teacher at Athens Montessori School in Athens, Ga., who's now retired. "It's a small, portable instrument that small hands can master," she explains.

Both educators say it's great for teaching kids how to read music. Unlike the guitar, which is written in its own language of chords, or the piano, which typically involves reading and playing multiple lines of musical annotation at once, the recorder only requires you to read and play one line at a time. That allows kids to quickly get the hang of songs.

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FLASHMOB CENTRAL

Central Station Antwerp



youtube

Grease https://youtu.be/s_hlvRNqGOQ

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Meet the Robot That Can Sauté Shrimp

Stanford engineers created a low-cost, mobile robot that has quickly learned to do complex household tasks including cook, put away dishes, and clean up spills. Other chores aren't far behind.



Kurt Hickman

Earlier this year, a robot took the internet by storm by sauteing shrimp. In addition to this culinary feat, Mobile ALOHA was shown performing other acts associated with the long-held dream of general-purpose household robots, such as vacuuming, doing laundry, and watering plants. ([See video](#))

While some of the tasks Mobile ALOHA has performed on video weren't autonomous, its ability to someday perform nearly any daily chore is not far-fetched. Behind the dazzling

demonstrations is a unique teleoperation structure that allows Mobile ALOHA to learn many complex activities, impressively fast.

So far, the researchers have taught Mobile ALOHA to autonomously put away a cooking pot in a cabinet, call an elevator, push in chairs, sauté shrimp, clean up a wine spill, and give high-fives. Future versions of the robot may be smaller with greater freedom of movement, and be easier for non-experts to operate.

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A Bionic Knee Integrated into Tissue Can Restore Natural Movement

In a small clinical study, users of this prosthesis navigated more easily and said the limb felt more like part of their body.



The new system is directly integrated into the user's muscle and bone tissue, giving much more control over the movement of the prosthesis.

MIT News

MIT researchers have developed a new bionic knee that can help people with above-the-knee amputations walk faster, climb stairs, and avoid obstacles more easily than they could with a traditional prosthesis.

Unlike prostheses in which the residual limb sits within a socket, the new system is directly integrated with the user's muscle and bone tissue. This enables greater stability and gives the user much more control over the movement of the prosthesis.

The [paper](#) appeared on July 11, 2025 in Science.

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Back-Up System May Hold Off Collapse of Key Atlantic Currents

Rising temperatures in the North Atlantic are slowing vital currents, but a new process in the Arctic could save the day, scientists say.



Researchers have discovered a process in the Barents Sea that could keep Atlantic currents going strong.

(Image credit: Anton Petrus via Getty Images)

Key Atlantic Ocean currents that appear to be slowing down due to climate change may be more resilient to global warming than scientists previously thought — thanks to a secret back-up system, a new study shows.

Dense water formation in the Nordic Seas has decreased since 1993, which spells trouble for the entire Atlantic circulation system — were it not for a newly found back-up system, Årthun said. The researchers published their findings Friday (July 11) in the journal [Science Advances](https://doi.org/10.1126/sciadv.1250000).

<https://bit.ly/469TcJ4>

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Could Artificial Blood Revolutionize Trauma Care?

So far, the invention has been successful in animal experiments.



alvarez/ iStock

Just add water and wait one minute, and you'll have ready-to-use blood. That's according to Dr. Allan Doctor, the lead scientist developing an artificial blood that could transform emergency medicine, particularly in situations where real blood can't be supplied.

"It is shelf-stable for years, and it can be easily transported. And so the point is so you can give a transfusion at the scene of an accident," Doctor told NPR. Called ErythroMer, the synthetic blood can be stored in powder form, no refrigeration necessary.

While ErythroMer is not meant to replace donated blood when available, the invention could be critical to saving lives in remote and disaster settings, as well as aiding wounded soldiers. Indeed, the Defense Department is investing more than \$58 million to help fund a consortium that's developing the blood.

If human trials go well, it has the potential to address blood shortages, revolutionize trauma care, and, ultimately, reduce the number of preventable deaths from bleeding. "It would change the way that we could take care of people who are bleeding outside of hospitals," said Doctor. "It'd be transformative."

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17 images from the 2025 Shark Photographer of the Year Awards

See sharks feeding, swimming, and interacting with photographers.



Byron Conroy, Shark Trust

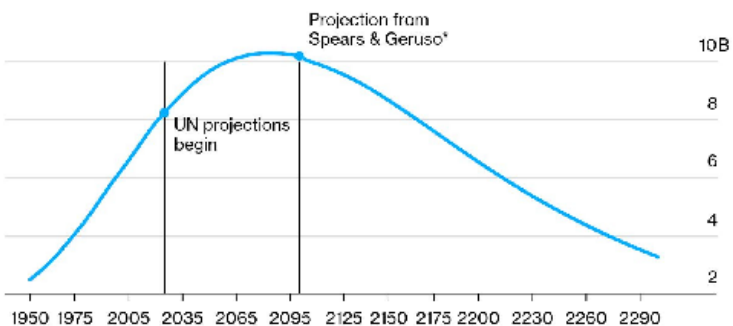
July 14 marks Shark Awareness Day and to celebrate, Shark Trust announced the captivating winners of this year's contest. More than 1200 species of sharks and rays navigate Earth's waters, but the animals face increasing challenges from overfishing, climate change, and habitat loss.

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A Shrinking World

Estimated Global Population



Source: UN Population Division; "After the Spike" by Dean Spears and Michael Geruso
Note: "After 2100 is a scenario from Spears/Geruso where global fertility rates converge at 1.6, the current US level.

Bloomberg

By the end of this century, the global population will almost certainly start to shrink. Then it will keep shrinking until and unless something happens that has never happened for as long as reliable records have existed: Global birth rates will have to increase and stay there.

"The evidence seems fairly clear that governments will not be able to quickly reverse fertility decline through modest cash transfers or incremental financial incentives," write economists Melissa Kearney and Phillip Levine in a recent paper. They attribute lower fertility around the world to a shift in what people want from their lives rather than any narrow economic calculus.

Discussion of aging economies often conclude that workers will have to stay in the labor force longer. If the goal is maintaining innovation, that may be particularly true in science and technology. In a world where economies can't count on population growth as a source of new ideas, they'll need to somehow ensure that as we age we become more creative and inventive, not less.

Is this a real threat to humanity or another version of the Malthusian Trap? Somehow I think the end is not nigh... but what do I know.

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The Largest Human Gathering in the World and How it Works



600 million people attended the 2025 event

Every 12 years the festival carries the prefix “Maha,” which means great, as it’s the largest gathering of the Kumbh Mela that’s held every three years in one of four cities.

This year’s festival has taken years of planning and millions of dollars to build facilities for the influx of visitors to Prayagraj, a city normally home to 6 million people.

Around 160,000 tents, 150,000 toilets and a 776-mile (1,249-kilometer) drinking water pipeline have been installed at a temporary tent city covering 4,000 hectares, roughly the size of 7,500 football fields. Check out this [video](#).

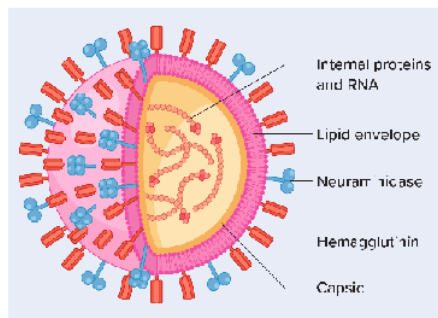
Yikes

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Everything You Need to Know About Bird Flu

How dangerous is it? Where did it come from? H5N1 influenza’s origins stretch back to the 1990s, and key events paved the way for the outbreak we’re seeing today.

Influenza virus anatomy



SOURCE: ADAPTED FROM ALEXANDER_P / SHUTTERSTOCK

KNOWABLE MAGAZINE

Influenza viruses share the same basic structure, but diversity within their genes and proteins

means that they can mutate and morph to infect different hosts and evade immune defenses.
Credit: Knowable Magazine

In early 2024, the bird influenza that had been spreading across the globe for nearly three decades did something wholly unexpected: It showed up in dairy cows in the Texas

If two different flu viruses meet in a cell that they've both infected, they can swap genes back and forth, creating new kinds of flu offspring.

Thus, all sorts of influenza A viruses infect the guts of wild waterfowl, usually without harm to the birds. But the viruses can cause trouble if they move into other creatures.

<https://bit.ly/4nVTzNw>

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Octopuses Fall For the 'Rubber Arm' Illusion, Just Like Us

Experiment shows octopuses feel body ownership, a trait previously seen only in mammals



Realistic 3D rendering
openart.ai

The human brain can bring rubber to life with one simple trick: Cover a person's hand and place a rubber hand next to it, then stroke their hand and its facsimile, and suddenly the person will begin to "feel" the touch in the fake appendage. The rubber

hand illusion helps demonstrate how our senses work together to create the feeling of ownership over our bodies, a fundamental part of self-awareness. And now, a new study in *Current Biology* demonstrates that octopuses also fall for the rubber arm trick—the first documentation of the phenomenon outside of mammals.

<https://bit.ly/3IDNSnh>

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This Robot Scans Rare Library Books at 2,500 Pages Per Hour

Digitizing rare manuscripts is getting increasingly hands-off.



The ScanRobot 2.0 uses gentle puffs of air to turn a book's pages.

Credit: Treventus

For decades, preservationists charged with digitizing rare books have faced an ironic challenge. The whole point of scanning these often one-of-a-kind objects is to keep the delicate manuscripts from harm. To do that, however, required a much more hands-on approach.

After two years of research, archivists at the University of Tulsa's McFarlin Library recently decided to try out a machine called the Treventus ScanRobot 2.0. Built in Austria, the bot does exactly what its name implies—it autonomously scans and digitizes manuscripts. But whereas it might take a single librarian days or weeks to scan a single book, the ScanRobot 2.0 can handle up to 2,500 per hour. It's not sacrificing safety for speed, however. The setup relies on a unique toolkit to ensure it digitizes a book quickly, but with the least amount of direct contact possible.

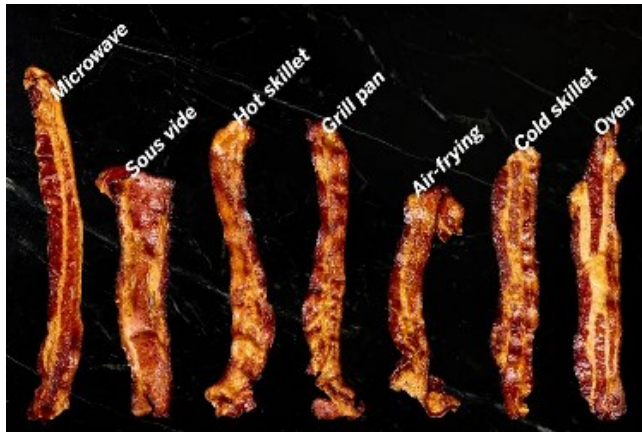
<https://bit.ly/4ILOQN4>

Anyone who has ever tried to scan a book knows how great this is.

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7 Ways to Make Bacon — One Was the Clear Winner

From frying to grilling and baking, we put bacon cooking methods to the test. Here's what came out on top.



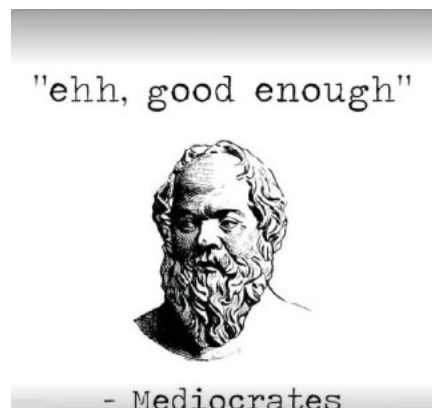
Credit: Food & Wine / Photo by Robby Lozano / Food Styling by Craig Ruff

Bacon goes with just about everything. From melty egg sandwiches and grilled burgers to crisp salads and even sweet ice creams, that combination of salty, savory, and slightly smoky flavor is the perfect complement to any meal of the day. When it comes to how bacon is prepared, however, there are really two camps — one for those who like an evenly crispy, well-rendered strip of bacon, and another for those who like it a bit chewier.

All of the methods we tested (oven, cold start in a skillet, hot skillet, air fryer, grill pan, sous vide, and microwave) technically worked, but their effectiveness at producing evenly crisp, well-rendered, and slightly chewy bacon varied greatly.

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Could Private Companies Manage Air Traffic Better Than the Feds?



airnav.ie

Dorothy Robyn, a senior fellow at the Brookings Institution and a former White House staffer, says the administration must do more than simply throw money at the problems. She tells Reason that air traffic control needs a complete overhaul, and that the system should be spun off from the Federal Aviation Administration (FAA), which has run air traffic control since the 1930s.

"Air traffic control is a 24/7 operation," says Robyn. She says trying to run what amounts to a business out of a "regulatory agency" is a "fundamental clash."

<https://bit.ly/44SNH09>

There's a lot to think about here, but the bottom line is that the system needs to be recast.

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Hacking Swamps Could Curb Methane Emissions, But

Rising levels of the potent greenhouse gas prompt "delicate" steps into new kind of geoengineering



Emissions from vast tropical swamplands in the Sudd, in South Sudan, have helped drive global

methane levels to new highs.

Phil Moore/AFP via Getty Images

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How The Tomato Created the Potato

The starchy staple evolved from the tomato about 9 million years ago.



*Tomatoes and potato-like plants called *Etuberosums* share a common ancestor from 14 million years ago.*

Capelle.r via Getty Images

About 9 million years ago, a natural inbreeding in the wild between tomato plants and a potato-like plant species in present-day South America gave way to what we know as the potato. This new (and nutritious) plant arose from an evolutionary event that

triggered the formation of the tuber—the underground structure that plants like potatoes, yams, and taros use to store food. The findings are detailed in a [study published July 31 in the journal Cell](#).

<https://bit.ly/4mlynys>

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Excessive Screen Time and Heart Health Risks in Kids



onlymyhealth.com

Screen time doesn't just affect [mental health](#). It may also take a toll on the physical health of [children and teens](#), according to new research.

Published in the [Journal of the American Heart Association](#) Wednesday, the research found 10- and 18-year-olds who spent more time focused on devices, including phones, televisions, computers and gaming consoles, were at higher risk for cardiometabolic diseases, including high blood pressure, high cholesterol and insulin resistance.

<https://bit.ly/41sU9Zz>

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Scientific Fraud Has Become an 'Industry,' Alarming Analysis Finds

Sophisticated global networks are infiltrating journals to publish fake papers



Davide Bonazzi/Salzmanart

For years, sleuths who study scientific fraud have been sounding the alarm about the [sheer size and sophistication of the industry that churns out fake publications](#). Now, an extensive investigation finds evidence of a range of bad actors profiting from fraud. The study, based on an analysis of thousands of publications and their authors and editors, shows paper mills are just part of a complex, interconnected system that includes publishers, journals, and brokers.

The paper, published today in the Proceedings of the National Academy of Sciences, paints an alarming picture. Northwestern University metascientist Reese Richardson and his colleagues identify networks of editors and authors colluding to publish shoddy or fraudulent papers, report that large organizations are placing batches of fake papers in journals, suggest brokers may serve as intermediaries between paper mills and intercepted journals, and find that the number of fake papers—though still relatively small

<https://bit.ly/41r0QeA>

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Vibrating Flight Suit Helpa Guide Pilots in Disorienting Situations



AJ_Watt/ iStock

Being disoriented isn't a good feeling, even when our feet are firmly on the ground. But for pilots who are operating an aircraft thousands of feet up in the air, it can be downright dangerous. That's why researchers at the University of Maryland are developing a vibrating flight suit that could help pilots combat spatial disorientation, an issue that causes 5%-10% of all general aviation accidents, with 90% of those being fatal.

"Spatial disorientation is a big deal in aviation and it's basically where the pilot cannot determine which way is up or down or whether the airplane is banking to the left or to the right," former National Transportation Safety Board chairman Robert Sumwalt explained to CBS News. This often occurs in situations like flying through clouds or over featureless terrain.

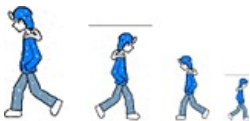
To help counteract confusion, the flight suit uses haptic vibrations to provide pilots with extra sensory feedback that guides them when signs of disorientation appear.

"Basically, the suit provides another sensory cue to try and deconflict the conflicts that may arise from reading their instruments and whatever the pilot is feeling," said lead researcher Umberto Saetti.

The aim is to test the new tech in real-life flight scenarios and hopefully make flying safer for all. Watch a [simulated flight](#) showing how it works.

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My Walking Thoughts



For Sunday August 10 2025

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Heading for the VMA 533 Hangar...

but first a little history

As I crossed the service road to the hangar, I found myself thinking that as they sat there on the flightline Skyhawks were rather silly looking – spindly landing gear long enough you need a ladder to get to the cockpit, little thingamabobs hanging down from the front of the wings, tiny wheels and tires, even tinier delta wings seeming too small to provide enough lift. In short, just a simple tinkertoy that for some reason had emerged as the Navy and Marine Corps' principal attack platform. Well that has to count for something, I told myself.

In the fifties when we were the only big dudes on the block, there had been talk of using them, first in Korea, and then several years later in Indochina to prevent the downfall of the French regime. Neither happened.

By 1970, with the USSR now in possession of both fission and thermonuclear weapons, the world found itself held fast in the grip of a bipolar global 'cold' war, whose dimensions set by who had the nukes and also had the capability to deliver them. But that wasn't the only battleground that confronted the US.

So while some war planners cast about looking for alternatives to the way wars of the future might be fought, the US military found itself in the midst of an internecine war... USAF/Army bunch holding to the position that Navy/USMC gang were superfluous money hogs. Their rationale was that with thousands of B-36s, hundreds of siloed surface to surface missiles, and a few dozen Long Tom howitzers, the nation's security could be assured without the need of ships or people going to shore from them. Things looked pretty bad for the N/MC-team unless it could find a way to get a seat at the WMD table... a seemingly impossible task.

After a couple abortive attempts to field a carrier aircraft capable of delivering nukes, the Navy approached Douglas Aircraft to build a twin engine attack bomber, the upshot of which was the A-3D Skywarrior. While it was large and powerful enough to tuck a 30-inch diameter, 1,600 pound Mark 7 nuclear weapon into its belly and drop it somewhere, it was too large to operate from the majority of the Navy's carriers. Ding!

Here's where we now come to Ed Heinemann's stroke of genius... the pocket-sized, no frills, A-4 Skyhawk, that with its high stance could carry a Mark 7 on its centerline station, cost 10% of the Skywarrior, and could operate from any of the Navy's carriers.

So with the emergence of the Skyhawk, the N/MC-team's fortunes blossomed, fielding in the bargain what turned out to be the finest, most cost efficient carrier attack aircraft that ever was.

Now harboring a vastly better vision of what awaited me than just minutes before, it was time to suck it up and announce my presence, which I proceeded to do with just the slightest tickle of fear.

Next week join me as I march forward into the world of idiot loops and other wonders of the pre-NATOPS yesteryear.

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