

Weekly Science Report

December 8, 2023

“All humans are born with a curious nature. It stems from our need to understand our world. The fear of the other is a drive that runs counter to our curious nature. To be curious is to understand the so called other, which often eliminates this fear. One wonders why certain people want us to ignore our innate curiosity of different people, lifestyles, cultures, and viewpoints.”

Author Unknown

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Introduction

Steve Detwiler created this publication with the support of Graham Hancock and the late John Anthony West to share news and information on various disciplines to include but not limited to paleontology, space sciences, genetics, and archaeology. His goal behind sharing this publication has always been very simple, by sharing knowledge we can make our world a better place. This publication is Mr. Detwiler's contribution to bring people together and share ideas and discoveries with his fellow humans.

I hope you enjoy this publication and that the content challenges and inspires you!

The Weekly Science Report is also on social media at:

- Facebook: <https://www.facebook.com/weeklysciencerpt/>
- Twitter: <https://twitter.com/wklysciencerpt>

News Articles

Paleontology, Evolution and Prehistoric Studies

Drought Reveals Rare American Lion Fossil in Dried-Up Mississippi River

https://www.smithsonianmag.com/smart-news/drought-reveals-rare-american-lion-fossil-in-dried-up-mississippi-river-180981166/?utm_medium=social&utm_source=facebook&utm_campaign=editorial&utm_term=11262023&utm_content=archival&fbclid=IwAR3g4DmlXstDKGgOZ6BqebFoicbBH-1BEc80TXhhsABUlPOWiVaaZxLwj0

New fossils from Patagonia may rewrite the history of duck-billed dinosaurs

<https://www.sciencenews.org/article/fossils-patagonia-duck-billed-dinosaurs?fbclid=IwAR3gaGHC5vD8BV7d2KoGVjQIRyXPtmfQeyXhscmjfNzVkJGcP90mbc0jf4o4>

Hunting of straight-tusked elephants was widespread among Neanderthals 125,000 years ago, finds study

https://phys.org/news/2023-12-straight-tusked-elephants-widespread-neanderthals-years.html?fbclid=IwAR2OmNs5iKvp2Q9bVGbeCGWC_x4aWf0nYmdcZv7nM_xHvYChGbwbCjXwbKU

Closer look at the Menga dolmen shows it was one of the greatest engineering feats of the Neolithic

<https://phys.org/news/2023-12-closer-menga-dolmen-greatest-feats.html?fbclid=IwAR0SE1jj3OVwCU6HjsronUtMp5MjgPqalTk1Ta589ZQxY0V3Cp9osGzHjs>

World's oldest forts upend idea that farming alone led to complex societies

https://www.science.org/content/article/world-s-oldest-forts-upend-idea-farming-alone-led-complex-societies?utm_campaign=SciMag&utm_source=Facebook&utm_medium=ownedSocial&fbclid=IwAR2VR0NZDV75t9Ov-dvXoIHzBya0oeHTwQJIJPtmJ7RTaEugFyqJK0j3ww

Humanity's oldest art is flaking away. Can scientists save it?

https://www.nature.com/immersive/d41586-023-03818-5/index.html?fbclid=IwAR1ejbuhMPhCQ3Sh6wR0XWX_eIYnRLVSfHHYYn9cmwETdQQ36d6B-1b7qHg

New genetic research uncovers the lives of Bornean hunter-gatherers

<https://phys.org/news/2023-12-genetic-uncovers-bornean-hunter-gatherers.html>

Study suggests climate played a crucial role in human migration from Africa

<https://phys.org/news/2023-12-climate-played-crucial-role-human.html>

Ancient 20-inch-long hand ax discovered in Saudi Arabia may be world's largest

<https://www.livescience.com/archaeology/ancient-20-inch-long-hand-ax-discovered-in-saudi-arabia-may-be-worlds-largest>

5,200 years of migrations from Mexico to California may be the origin of a mystery language

<https://phys.org/news/2023-11-years-migrations-mexico-california-mystery.html>

Early humans in the Paleolithic Age: More than just game on the menu

<https://phys.org/news/2023-11-early-humans-paleolithic-age-game.html>

Genetic research into a 9,000-year-old shaman burial in Germany

<https://phys.org/news/2023-11-genetic-year-old-shaman-burial-germany.html>

Research pieces ancient ecosystems together to reveal new details about the end-Triassic mass extinction

<https://phys.org/news/2023-12-pieces-ancient-ecosystems-reveal-end-triassic.html>

Tyrannosaur's Stomach Contents Have Been Found for the First Time

<https://www.scientificamerican.com/article/tyrannosaurs-stomach-contents-have-been-found-for-the-first-time/>

History

Henry Kissinger, a dominating and polarizing force in US foreign policy, dies at 100

<https://www.cnn.com/2023/11/29/politics/henry-kissinger-dead/index.html#:~:text=Henry%20Kissinger%2C%20a%20former%20US,He%20was%20100>

Teen believed to be victim of 'Scorecard' serial killer identified nearly 50 years after his death

https://www.nbcnews.com/news/us-news/scorecard-killer-rodney-crafts-alleged-victim-identified-nearly-50-yea-rcna127370?cid=sm_npd_nn_tw_ma&taid=6568a6fcf8ba0d0001949fb9&utm_campaign=trueant hem&utm_medium=social&utm_source=twitter

It was a popular national monument, until it was robbed to extinction

https://thehill.com/homenews/nexstar_media_wire/4082787-it-was-a-popular-national-monument-until-it-was-robbed-to-extinction/

Tiwanaku: The civilisation that mysteriously disappeared- Video

<https://www.bbc.com/reel/video/p0gx2hv/tiwanaku-the-civilisation-that-mysteriously-disappeared>

Navy veteran: The reason I can't stay silent on book censorship in schools

<https://www.palmbeachpost.com/story/opinion/columns/2023/11/30/veteran-freedom-and-school-book-censorship-dont-go-together/71723398007/>

The Texas Historical Commission Removed Books on Slavery From Plantation Gift Shops

<https://www.texasmonthly.com/news-politics/texas-historical-commission-book-removal/>

Kissinger's obsession with Chile enabled a murderous dictatorship that still haunts the country

https://theconversation.com/kissingers-obsession-with-chile-enabled-a-murderous-dictatorship-that-still-haunts-the-country-218982?utm_term=Autofeed&utm_medium=Social&utm_source=Twitter#Echobox=1701919550

National Museum Cardiff paintings at risk from leaking rain

<https://www.bbc.com/news/uk-wales-politics-67627036>

One year countdown: Notre Dame on track to reopen in December 2024

https://www.csmonitor.com/World/Europe/2023/1207/One-year-countdown-Notre-Dame-on-track-to-reopen-in-December-2024?utm_term=Autofeed&utm_medium=Social&cmpid=FB&utm_source=Facebook&fbclid=IwA R3cVgOdFdhr9Q4k5vZxJgU10v4SeZgFBnq4_rqn7q91naFE7QQyyvDcbkw#Echobox=1701967008

Ancient DNA analysis reveals how the rise and fall of the Roman Empire shifted populations in the Balkans

<https://www.sciencedaily.com/releases/2023/12/231207161343.htm>

Carved trees and burial sites: Wiradjuri Elders share the hidden stories of marara and dhabuganha

<https://phys.org/news/2023-11-trees-burial-sites-wiradjuri-elders.html>

Museum classifies Roman emperor as trans—but modern labels oversimplify ancient gender identities

<https://phys.org/news/2023-11-museum-roman-emperor-transbut-modern.html>

New research sheds light on Bantu-speaking populations' expansion in Africa
<https://phys.org/news/2023-11-bantu-speaking-populations-expansion-africa.html>

Germany Repatriates Artifacts to Mexico
<https://www.archaeology.org/news/11926-231201-mexico-repatriation-huastecan>

The Black Sailor Whose Heroic Actions During a Shipwreck Made Him an Instant Celebrity of the Roaring Twenties
<https://www.smithsonianmag.com/history/lionel-licorish-vestris-black-sailor-heroic-shipwreck-instant-celebrity-of-the-roaring-twenties-180983385/>

Why America Is Just Now Learning to Love Thaddeus Stevens, the 'Best-Hated Man' in U.S. History
<https://www.smithsonianmag.com/history/america-just-now-learning-love-thaddeus-stevens-best-hated-man-us-history-180983235/>

Ukraine Planned an Ambitious Memorial at the Site of a Holocaust Massacre. Then War Came to Kyiv
<https://www.smithsonianmag.com/history/ukraine-babyn-yar-memorial-site-holocaust-massacre-war-kyiv-180983232/>

55 cultural practices added to UNESCO's list of Intangible Cultural Heritage
<https://www.npr.org/2023/12/08/1218354470/55-cultural-practices-added-to-unescos-list-of-intangible-cultural-heritage?sc=18&f=1001>

Treasures destroyed and masterpieces in vaults: War's toll for art in Israel and Gaza
<https://www.npr.org/2023/12/08/1214058177/israel-gaza-hamas-museums-art-cultural-landmarks?sc=18&f=1001>

Centenarian Pearl Harbor survivors return to honor those who were killed 82 years ago
<https://www.npr.org/2023/12/07/1218044792/centenarian-pearl-harbor-survivors-return-to-honor-those-who-were-killed-82-year?sc=18&f=1001>

Archaeology

Not just Pisa - Bologna's leaning tower on 'high alert' over fears it may collapse

<https://www.euronews.com/2023/12/02/bolognas-other-leaning-tower-on-high-alert-over-fears-it-may-collapse>

'Unusual' ancient graves found near Arctic, but no remains discovered inside, study says

https://phys.org/news/2023-12-unusual-ancient-graves-arctic.html?fbclid=IwAR3sNiabfvEtMxJ4H9ahvLCYquCMf3rc-x-YsLQo0DDGao_3wo1cDiA0hRc

Mysterious Objects Found Underwater in Potentially 'Mind-Blowing' Discovery

<https://www.newsweek.com/mysterious-objects-found-underwater-potentially-mind-blowing-discovery-1846880>

Scandinavia's oldest known ship burial is located in mid-Norway

<https://phys.org/news/2023-12-scandinavia-oldest-ship-burial-mid-norway.html>

Byzantine Gold Coin Found in Norway

<https://www.archaeology.org/news/11980-231206-byzantine-gold-norway>

Temple linked to Hercules and Alexander the Great discovered in ancient megacity in Iraq

<https://www.livescience.com/archaeology/temple-linked-to-hercules-and-alexander-the-great-discovered-in-ancient-megacity-in-iraq>

Tomb holding hundreds of ancient relics unearthed in China

<https://www.cbsnews.com/news/tomb-ancient-relics-unearthed-china/>

How 'listening' to archaeological sites could shed light on the past

<https://phys.org/news/2023-12-archaeological-sites.html>

A new type of settlement from the time of the Wari State found in Peru

<https://phys.org/news/2023-11-settlement-wari-state-peru.html>

Archaeological findings decode islanders' home

<https://global.chinadaily.com.cn/a/202311/30/WS6567e6bba31090682a5f0b3b.html>

New Studies Debunk Controversial Biblical 'Curse Tablet' From Mt. Ebal

<https://www.haaretz.com/archaeology/2023-11-30/ty-article/new-studies-debunk-controversial-biblical-curse-tablet-from-mt-ebal/0000018c-20b6-d21c-abae-76bee75f0000>

Archaeologists stunned by evidence of Vikings in Iraq after discovery of ancient jewellery

<https://www.express.co.uk/news/world/1840784/archaeology-vikings-arab-world-spt>

73 Pre-Incan Mummies, Some with 'False Heads,' Unearthed in Peru

<https://www.scientificamerican.com/article/73-pre-incan-mummies-some-with-false-heads-unearthed-in-peru/>

Israeli strike badly damages Gaza's oldest mosque

<https://www.npr.org/2023/12/08/1218317088/israeli-strike-badly-damages-gazas-oldest-mosque?sc=18&f=1001>

Egyptology

Scottish boy digging for potatoes found 'masterpiece of Egyptian sculpture' on his school grounds. How did it end up there?

https://www.livescience.com/archaeology/ancient-egyptians/scottish-boy-digging-for-potatoes-found-masterpiece-of-egyptian-sculpture-on-his-school-grounds-how-did-it-end-up-there?utm_source=facebook.com&utm_content=livescience&utm_medium=social&utm_campaign=socialflow&fbclid=IwAR3usZ3cOCinDO9eHfV4I5P74inAQOJIOCtVrU1oigFWOR-MB9IR-XV4KUk

Baboons in captivity in Ancient Egypt: Collection of mummies offers insights

<https://phys.org/news/2023-12-baboons-captivity-ancient-egypt-mummies.html>

General Science

Quantum computers could solve problems in minutes that would take today's supercomputers millions of years

https://www.cbsnews.com/news/quantum-computing-advances-60-minutes/?fbclid=IwAR0Fkf7ZqDfBEEskfNq5K-1uJB0nxc_aVNWGQfVRuly5FVQObsKXH_UV1WM

Behind the Curtain: U.S. not ready for era of robotic, AI world wars

<https://wwwaxios.com/2023/12/04/artificial-intelligence-us-military-weapons>

Europe reaches a deal on the world's first comprehensive AI rules

<https://www.npr.org/2023/12/09/1218374512/europe-first-comprehensive-ai-rules?sc=18&f=1001>

Physics, Earth and Space Sciences

SpaceX rockets keep tearing blood-red 'atmospheric holes' in the sky, and scientists are concerned

<https://www.livescience.com/space/space-exploration/spacex-rockets-keep-tearing-blood-red-atmospheric-holes-in-the-sky-and-scientists-are-concerned#:~:text=Astronomers%20have%20discovered%20new,problems%20for%20astronomy%20and%20communication.>

Why have aliens never visited Earth? Scientists have a disturbing answer

https://www.space.com/alien-civilizations-doomed-to-collapse?utm_source=facebook.com&utm_medium=social&utm_content=space.com&utm_campaign=socialflow&fbclid=IwAR3QYYxEPdiAvl82q9wcBmDJmQeV2QYIxkTn7uvsRQLgbCj3i5P2Ao1KE

A six-planet solar system in perfect synchrony has been found in the Milky Way

https://www.nbcnews.com/science/space/six-planet-solar-system-perfect-synchrony-found-milky-way-rcna127378?cid=sm_npd_nn_tw_ma&taid=6568ae08cf876000010b0a45&utm_campaign=trueanthem&utm_medium=social&utm_source=twitter

New theory claims to unite Einstein's gravity with quantum mechanics

<https://phys.org/news/2023-12-theory-einstein-gravity-quantum-mechanics.html?fbclid=IwAR1S1AskolfPACqJEPCbMuUhtuXQZ3GqSKXk7qYDxeFj5ZLMTSWrXLBvNgc>

Life on Venus? Intriguing molecule phosphine spotted in planet's clouds again

https://www.space.com/venus-clouds-phosphine-evidence-debate?utm_medium=social&utm_content=space.com&utm_campaign=socialflow&utm_source=facebook.com&fbclid=IwAR0jIROIQrORXbfUuOL0gYPYafP0GhkKODbEuXN2zGNRASi2TdSIEo0sdtk

'Space Rescue Service' needed for coming space tourism era, report argues

https://www.space.com/rand-space-rescue-service-astronaut-tourist-help?utm_medium=social&utm_campaign=socialflow&utm_source=facebook.com&utm_content=space.com&fbclid=IwAR0iNvPrurKjUzRAkbdHkgllaaFycifqvaeFAgAiild3Tby9gqhkSDMrqoE

26 Aerospace Giants Unite Against Debris-Producing ASAT Tests

<https://orbitaltoday.com/2023/11/16/26-aerospace-giants-unite-against-destructive-debris-producing-asat-tests/>

Nuclear power on the moon: Rolls-Royce unveils reactor mockup

https://www.space.com/moon-rolls-royce-nuclear-reactor-concept-unveiled?utm_source=facebook.com&utm_campaign=socialflow&utm_content=space.com&utm_medium=social&fbclid=IwAR2zVpAeldLdecEDBGETJUDJwPB-wppR7MzuLKtoPGp_2SPjkTX6cjll2Pk

A superconducting junction made from a single 2D material promises to harness strange new physics

<https://phys.org/news/2023-12-superconducting-junction-2d-material-harness.html>

Environment, Climate Change and Alternative Energy Sources

New technology installed beneath Detroit street can charge electric vehicles as they drive

https://apnews.com/article/wireless-roadway-electric-vehicle-charging-detroit-22fcdeab026d81712a0c1a12b190d9a?utm_campaign=TrueAnthem&utm_medium=AP&utm_source=Facebook&fbclid=IwAR06wrhFvw_qDbYs91VnqXzxDhmCRGynxYQApUEQ4yPFTJZMrxR2s10Mpw4

Deep-sea mining in the Arctic Ocean gets the green light from Norwegian lawmakers

<https://apnews.com/article/norway-underwater-mining-arctic-663c7fceba5fc41e84affc5f84d52504>

Geothermal energy now helps power Google's desert data centers

<https://www.popsci.com/technology/google-fervo-geothermal-energy/?fbclid=IwAR3TxIYvLDsd7NJtubhJQDrYeEEDRBk4iSKKYiAwemSQUbPpbGBIL-82UU8>

Atlantic Ocean near Bermuda is warmer and more acidic than ever, 40 years of observation show

<https://phys.org/news/2023-12-atlantic-ocean-bermuda-warmer-acidic.html>

Climate Adaptation Can Backfire If We Aren't Careful

<https://www.scientificamerican.com/podcast/episode/climate-adaptation-is-backfiring/>

Biological, Genetics and Medical Sciences

Before dying, she made a fund to cancel others' medical debt — nearly \$70m worth
<https://www.npr.org/2023/11/27/1215420434/medical-debt-insurance-ovarian-cancer-casey-mcintyre?sc=18&f=1001>

Chimps use military tactic only ever seen in humans before
https://www.livescience.com/animals/monkeys/chimps-use-military-tactic-only-ever-seen-in-humans-before?utm_content=livescience&utm_medium=social&utm_campaign=socialflow&utm_source=facebook.com&fbclid=IwAR3OfwFb3KK-QS1KexICn9YK-2IN3piomTyUwhpECivXSsnGFHexsnj2f4sU

Bottlenose Dolphins May Have an Electric Sense, Study Finds
https://www.smithsonianmag.com/smart-news/bottlenose-dolphins-may-have-an-electric-sense-study-finds-180983358/?utm_medium=social&utm_source=facebook&utm_campaign=editorial&utm_term=1212023&utm_content=new&fbclid=IwAR2VR0NZDV75t9OOvdXoIHzBya0oeHTwQJIJPtmJ7RTaEugFyqJK0j3ww

Psychologists say they can't meet the growing demand for mental health care
<https://www.npr.org/sections/health-shots/2023/12/06/1217487323/psychologists-waitlist-demand-mental-health-care?sc=18&f=1001>

FDA approves first gene-editing treatment for human illness
<https://www.npr.org/sections/health-shots/2023/12/08/1217123089/fda-approves-first-gene-editing-treatments-for-human-illness?sc=18&f=1001>

A vaginal ring that discreetly delivers anti-HIV drugs will reach more women
<https://www.npr.org/sections/goatsandsoda/2023/12/08/1217384103/anti-hiv-drugs-vaginal-ring?sc=18&f=1001>

Soundwaves harden 3D-printed treatments in deep tissues
<https://www.eurekalert.org/news-releases/1010319>

Study of Philippine sea cucumber shows it may have biomedical applications
<https://phys.org/news/2023-12-philippine-sea-cucumber-biomedical-applications.html>

Genetic mutations that promote reproduction tend to shorten human lifespan, study shows
<https://phys.org/news/2023-12-genetic-mutations-reproduction-tend-shorten.html>

Catalyst makes drugs inside the body to minimize side effects
<https://phys.org/news/2023-12-catalyst-drugs-body-minimize-side.html>

A shape-shifting robotic catheter could make heart surgery safer
<https://medicalxpress.com/news/2023-12-shape-shifting-robotic-catheter-heart-surgery.html>

Other

How the Roswell 'UFO' spurred our modern age of conspiracy theories

<https://www.npr.org/2023/11/27/1215372533/how-the-roswell-ufo-spurred-our-modern-age-of-conspiracy-theories?sc=18&f=1001>

United Nations: The Other West Opens Off-Broadway November 26

https://www.playbill.com/article/united-nations-the-other-west-opens-off-broadway-november-26?fbclid=IwAR0vIZf4FmXdDa1z5r3reaYvwE0yqeEps1zUjuR8uz4cgF5Oe9Kk3N_A10Y

Additional Informational

Sand Creek Massacre National Historic Site

<https://www.nps.gov/sand/learn/historyculture/index.htm>

New ISC policy brief: A call for a formal scientific voice in the global fight against plastic pollution
https://council.science/current/blog/a-call-for-a-formal-scientific-voice-in-the-global-fight-against-plastic-pollution/?utm_source=International+Science+Council&utm_campaign=fe951da40e-November+2023&utm_medium=email&utm_term=0_6e20810dfd-fe951da40e-233954506&mc_cid=fe951da40e&mc_eid=725b365f54

Secretary Haaland Announces National Park Service to Collaborate with Tribes on Theme Study of Native American History

<https://content.govdelivery.com/accounts/USDOI/bulletins/37e8b47>

Interior Department Announces Final Rule for Implementation of the Native American Graves Protection and Repatriation Act

<https://www.nps.gov/orgs/1207/interior-department-announces-final-rule-for-implementation-of-the-native-american-graves-protection-and-repatriation-act.htm#:~:text=The%20final%20rule%20makes%20a,lineal%20descendants%2C%20Tribes%20and%20NHOs.>

Indra Killed Vritra in 9703 BCE: The Rigvedic description of the Comet Impact that ended the last Ice Age

https://grahamhancock.com/dmisrab16/?fbclid=IwAR3MabHwmVXf_tMqFPaiiAV3xKNDnKscjvLZXtAtAhe66qPCkSIhakAiP_M

Select Space Concepts for the New Space Era Report

<https://www.rand.org/pubs/perspectives/PEA2644-1.html>