

Weekly Science Report

December 22, 2023

“We believe in the systematic understanding of the physical world through observation and experimentation through argument and debate. But most of all freedom of will.”

Stargate

Table of Contents

Introduction	2
News Articles	3
Paleontology, Evolution and Prehistoric Studies	3
History	4
Archaeology.....	6
Egyptology.....	7
General Science	8
Physics, Earth and Space Sciences	9
Environment, Climate Change and Alternative Energy Sources.....	10
Biological, Genetics and Medical Sciences	11
Other	12
Additional Informational	13

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/weeklysciencertpt/>
- Twitter: <https://twitter.com/wklysciencertpt>

News Articles

Paleontology, Evolution and Prehistoric Studies

Scientists have found the mostly intact skull of a giant, deadly sea reptile

<https://www.npr.org/2023/12/11/1218499369/scientists-have-found-the-mostly-intact-skull-of-a-giant-deadly-sea-reptile?sc=18&f=1001>

First discovery of carbon-based cave art in France's Dordogne region could pave way for precise radiocarbon dating

<https://phys.org/news/2023-12-discovery-carbon-based-cave-art-france.html?fbclid=IwAR3WhtUX8XTI1j9q2uUjX5uOTFg-6Yaxmzal8dOPRgrmA3GokochHDWijHkE>

Early Neolithic high mountain settlers were already carrying out complex livestock and farming activities, finds study

<https://phys.org/news/2023-12-early-neolithic-high-mountain-settlers.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>

History

The Children Who Went Up In Smoke

https://www.smithsonianmag.com/history/the-children-who-went-up-in-smoke-172429802/?utm_medium=social&utm_source=facebook&utm_campaign=editorial&utm_term=12102023&utm_content=archival&fbclid=IwAR1wOwRX_CFAIzmVHwhsjlWZvRtdGGGPkOGA7EcHYLCybCmPsl50i7P3X9k

Archaeologists' 'Exciting' Pre-Viking Discovery Rewrites History

<https://www.newsweek.com/archaeologists-exciting-pre-viking-discovery-rewrite-history-1850146>

The Napoléon that Ridley Scott and Hollywood won't let you see

<https://theconversation.com/the-napoleon-that-ridley-scott-and-hollywood-wont-let-you-see-218878#:~:text=A%20missed%20opportunity&text=After%20all%2C%20Napol%C3%A9on's%20history%20of,depicted%20on%20a%20Hollywood%20screen.>

How 'Schindler's List' Transformed Americans' Understanding of the Holocaust

https://www.smithsonianmag.com/history/how-schindlers-list-transformed-americans-understanding-of-the-holocaust-180983408/?utm_medium=social&utm_source=facebook&utm_campaign=editorial&utm_term=12142023&utm_content=new&fbclid=IwAR0alz8Q-We_h_zihKGoCfz5n2g6N2thUVu66uV5gR2GOM7oYn7RMkYwwbQ

This monument stood for hundreds of years before vandals smashed it. Historians say it must never happen again

<https://www.cnn.com/2023/12/13/india/india-delhi-zafar-mahal-mughal-vandalism-intl-hnk/index.html#:~:text=India's%20Zafar%20Mahal%20Mughal%20palace,years%20before%20vandals%20smashed%20monument>

To fight so-called book bans, some states are threatening to withhold funding

<https://www.npr.org/2023/12/14/1219428691/librarians-will-be-watching-when-illinois-anti-book-ban-law-goes-into-effect?sc=18&f=1001>

Judge allows the removal of a Confederate memorial at Arlington Cemetery

<https://www.npr.org/2023/12/20/1220573980/confederate-memorial-arlington-cemetery-removal>

A cardinal is convicted of embezzlement and sentenced to 5 1/2 years in Vatican trial

<https://www.npr.org/2023/12/16/1219839096/cardinal-vatican-embezzlement-trial-guilty?sc=18&f=1001>

Pope Francis allows blessing same-sex relationships

<https://www.americamagazine.org/faith/2023/12/18/pope-francis-blessing-lgbt-gay-same-sex-relationships-246749?fbclid=IwAR2GuNFO-YZj1xvB88ywJGmiVWYrWVrxIGtI9efZzqr9xeKxSnt25opeicg>

Timbuktu: Mali's ancient city defies jihadist siege to stage a festival

https://www.bbc.com/news/world-africa-67732586?xtor=AL-72-%5Bpartner%5D-%5Bbbc.news.twitter%5D-%5Bheadline%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D&at_ptr_name=twitter&at_campaign_type=owned&at_medium=social&at_link_origin=BBCWorld&at_format=link&at_link_type=web_link&at_bbc_team=editorial&at_campaign=Social Flow&at_link_id=72E3FD08-9E10-11EE-9C85-B0F8E03B214A

Taino language returns to its people

https://ictnews.org/opinion/taino-language-returns-to-its-people?fbclid=IwAR09T1tKS_QkEHvcNGN351wWMnM1YZsaaAgL45gCn4a0BX1h_c8RTEK5RSM

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>

How the Women of the North Platte Canteen Fed Six Million Soldiers During World War II

<https://www.smithsonianmag.com/history/how-the-women-of-the-north-platte-canteen-fed-six-million-soldiers-during-world-war-ii-180983441/>

The Many Myths of the Boston Tea Party

<https://www.smithsonianmag.com/history/the-many-myths-of-the-boston-tea-party-180983399/>

Descendants of Black Civil War Heroes Wear Their Heritage With Pride

<https://www.smithsonianmag.com/history/descendants-black-civil-war-heroes-wear-heritage-pride-180983397/>

Archaeology

Study of remains uncovered in Argentina's Patagonian region shows locals raised and ate horses
https://phys.org/news/2023-12-uncovered-argentina-patagonian-region-locals.html?fbclid=IwAR3xXTDktcov44rBlpEpUNQhS76BDeiDwo_YikNyUlBAl8QTxCmLm0rAyQE

Her quest was to excavate not the soil, but the record
https://www.csmonitor.com/Books/2023/1214/Her-quest-was-to-excavate-not-the-soil-but-the-record?utm_term=Autofeed&utm_medium=Social&cmpid=FB&utm_source=Facebook&fbclid=IwAR30mfg3COD668iopkuNomz_46Rq46ZaZ5coTz7VAYqWmnQkD4-APUysK78#Echobox=1702586555

A father and his 6-year-old daughter were fishing on Lake Michigan. Then they stumbled upon a century-old shipwreck
<https://www.cnn.com/2023/12/16/us/lake-michigan-shipwreck-discovery-trnd/index.html>

Archaeologists Find Ancient Native American Calendar on Colorado Border
<https://www.newsweek.com/archaeologists-find-ancient-native-american-calendar-colorado-border-1852956>

Ancient Inscribed Bricks Contain Evidence of Mysterious Magnetic 'Anomaly,' Scientists Find
<https://www.vice.com/en/article/4a3pam/ancient-inscribed-bricks-contain-evidence-of-mysterious-magnetic-anomaly-scientists-find>

'Fake' Seal Impression of Biblical King Jeroboam Is Authentic, New Study Says
<https://www.haaretz.com/archaeology/2023-12-18/ty-article/fake-seal-impression-of-biblical-king-jeroboam-is-authentic-new-study-says/0000018c-7853-d98c-abef-fed7f4370000>

Tracking Ancient Animals
<https://www.archaeology.org/issues/538-2401/digs/11952-namibia-animal-track-way-rock-art>

2,000-Year-Old Skeleton of Sarmatian Man Identified in England
<https://www.archaeology.org/news/12012-231221-england-sarmatian-skeleton>

How 'listening' to archaeological sites could shed light on the past
<https://phys.org/news/2023-12-archaeological-sites.html>

Egyptology

Nothing to report

General Science

Norwegian company unveils a vessel concept with a thorium molten salt reactor

https://interestingengineering.com/transportation/norwegian-thorium-molten-salt-reactor?utm_source=Facebook&utm_medium=content&utm_campaign=organic&utm_content=Dec06&fbclid=IwAR2rxXZeK-FKaxupOlzqFrdHDVmaMjb620QOvEVtsvoESMYOz6fPzqdkTE

Robo dogs and AI inspectors might be coming to the border

https://www.axios.com/2023/12/12/border-patrol-us-mexico-ai-robo-dogs-drones-inspectors?utm_source=twitter&utm_medium=social&utm_campaign=editorial

Swift 4-D printing with shape-memory polymers

<https://phys.org/news/2023-12-swift-d-shape-memory-polymers.html>

Physics, Earth and Space Sciences

Starlink loses out on \$886 million in rural broadband subsidies

<https://www.theverge.com/2023/12/12/23999070/spacex-starlink-fcc-rural-digital-opportunity-fund-fcc-rejected>

Hackers prove it doesn't take much to hijack a dead satellite

https://www.popsci.com/technology/hackers-dead-satellite/?fbclid=IwAR0PsB7ZnTw3TkJNTfTXDLMqyU4UvVwkMGZEt3_bXrQgHIFDr5xIrl328oE

Voyager 1 stops communicating with Earth

<https://www.cnn.com/2023/12/13/world/voyager-1-computer-issue-scni/index.html>

China launches experimental spacecraft into orbit for third time since 2020

https://www.reuters.com/technology/space/china-launches-experimental-spacecraft-into-orbit-third-time-since-2020-2023-12-15/?taid=657bd8a554058e00016dc75e&utm_campaign=trueAnthem:+Trending+Content&utm_medium=trueAnthem&utm_source=twitter

Wild new NASA plasma tech reduces drag during hypersonic flight

https://www.space.com/nasa-hypersonic-magnetohydrodynamic-control?utm_campaign=socialflow&utm_source=facebook.com&utm_medium=social&utm_content=space.com&fbclid=IwAR0RQI3FC0D4oIkUY5HSFqdFXoKPzTNLIIM81OsURI2becP59XEZvTyCqYE

A volcano on Hawaii's Big Island is sacred to spiritual practitioners and treasured by astronomers

<https://apnews.com/article/hawaii-mauna-kea-volcano-spiritual-astronomy-7ae1c1d446b199f0b6f8709a77220dfe>

Could we defend Earth against a 'rubble pile' asteroid?

https://www.space.com/asteroids-rubble-piles-earth-planetary-defense?utm_medium=social&utm_content=space.com&utm_campaign=socialflow&utm_source=facebook.com&fbclid=IwAR2vUAq8RGUEAnkzimvJ45UI0kxeI3q1SN6iXDqnUqFE8IGsI9HLfHdexMw

NASA releases new images of Uranus and its moons

<https://thehill.com/policy/energy-environment/4366352-nasa-new-images-uranus/>

NASA's Hubble watches 'spoke season' on Saturn

<https://www.eurekalert.org/news-releases/1029790>

Mapping magma chambers under the Hunga volcano before and after the 2022 eruption

<https://phys.org/news/2023-12-magma-chambers-hunga-volcano-eruption.html>

What happens if you put a black hole into the sun?

<https://phys.org/news/2023-12-black-hole-sun-1.html>

Researchers study a million galaxies to find out how the universe began

<https://phys.org/news/2023-12-million-galaxies-universe-began.html>

Environment, Climate Change and Alternative Energy Sources

Tribes celebrate historic deal with White House that could save Pacific Northwest salmon
<https://www.npr.org/2023/12/14/1219431385/tribes-are-celebrating-a-white-house-deal-that-could-save-northwest-salmon?sc=18&f=1001>

A volunteer effort is hoping to save California's Joshua trees
<https://www.nbcnews.com/science/environment/volunteer-effort-hoping-californias-joshua-trees-rcna121891>

Brazilian lawmakers pass bill to pave highway through Amazon rainforest
<https://www.nbcnews.com/news/world/brazil-amazon-rainforest-highway-paving-lawmakers-vote-rcna130637>

New material allows for better hydrogen-based batteries and fuel cells
<https://techxplore.com/news/2023-12-material-hydrogen-based-batteries-fuel-cells.html>

Polymer-air battery research investigates advanced energy storage solutions
<https://techxplore.com/news/2023-12-polymer-air-battery-advanced-energy-storage.html>

Biological, Genetics and Medical Sciences

Eels Can Genetically Modify Nearby Fish With Their Electrical Pulses

https://www.smithsonianmag.com/smart-news/eels-can-genetically-modify-nearby-fish-with-their-electrical-pulses-180983422/?utm_medium=social&utm_source=facebook&utm_campaign=editorial&utm_term=12132023&utm_content=new&fbclid=IwAR380xw23JvkG7whh0F-NU2zY09x4IU8zw6lpXZl_jrqtDU7VQRqKkddzTs

Native health program celebrates first four graduates

<https://ictnews.org/news/native-health-program-celebrates-first-four-graduates?fbclid=IwAR25Yrinc9h-li6Q16k6pB-BiiX0yxxv8YrHsHGHey2WyXIDKz4HXhLHwwl>

Two men charged with killing approximately 3,600 birds, including bald eagles

<https://www.npr.org/2023/12/14/1219424322/montana-men-bald-eagle-killing-case?sc=18&f=1001>

World's 1st 'conversation' between humans and whales could help us talk to aliens someday, scientists claim

<https://www.livescience.com/space/extraterrestrial-life/worlds-1st-conversation-between-humans-and-whales-could-help-us-talk-to-aliens-someday-scientists-claim>

The future of canine stem cell therapy: unprecedented, painless, and feeder-free

<https://www.eurekalert.org/news-releases/1011174>

Engineers develop a vibrating, ingestible capsule that might help treat obesity

<https://medicalxpress.com/news/2023-12-vibrating-ingestible-capsule-obesity.html>

Other

Inside Mathematicians' Search for the Mysterious 'Einstein Tile'

<https://www.scientificamerican.com/article/inside-mathematicians-search-for-the-mysterious-einstein-tile/>

Additional Informational

Interactive bioacoustic playback as a tool for detecting and exploring nonhuman intelligence: "conversing" with an Alaskan humpback whale

<https://peerj.com/articles/16349/>

Monuments Men and Women Foundation Newsletter

<https://bos.etapestry.com/prod/viewEmailAsPage.do?erRef=1237.0.5911409&databaseld=MonumentsMenFoundationFortheP&mailingld=45613970&jobRef=1237.0.118915182&key=4e8412ad48562e3c9934f45c3e144d48&personaRef=1237.0.5911408&memberld=1638661242>

NASA's MAVEN Observes the Disappearing Solar Wind

<https://mars.nasa.gov/news/9519/nasas-maven-observes-the-disappearing-solar-wind/>

Aurelia Institute Newsletter

<https://mailchi.mp/aureliainstitute/december2023?e=57e055f9a1>

NASA Uses Two Worlds to Test Future Mars Helicopter Designs

<https://mars.nasa.gov/news/9513/nasa-uses-two-worlds-to-test-future-mars-helicopter-designs/>

ALIPH Foundation Newsletter

https://issuu.com/aliphfoundation/docs/en_newsletter_number_6_aliph_active_on_all_front?fr=sNzQ4YzYzMDEyMTE

International Science Council Newsletter

<https://us5.campaign-archive.com/?e=725b365f54&u=2e9b648776114e2888e7ea8c5&id=9dfdc1b6a4>

NASA Orbiter Snaps Stunning Views of Mars Horizon

<https://mars.nasa.gov/news/9514/nasa-orbiter-snaps-stunning-views-of-mars-horizon/>