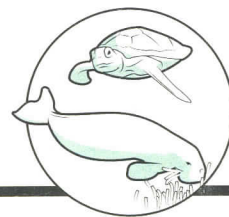


CONTENTS



The decline of seagrass meadows

3 AUGUST 2018 • VOLUME 361 • ISSUE 6401



441

Technicians test solar cells on NASA's Parker Solar Probe by shining a laser on them.

NEWS

IN BRIEF

432 News at a glance

IN DEPTH

434 RESEARCHERS WELCOME TRUMP'S PICK TO HEAD SCIENCE OFFICE

Kelvin Droegemeier is steeped in Washington science policy
By Science News Staff

435 EU VERDICT ON CRISPR CROPS DISMAYS SCIENTISTS

Decision to tightly regulate gene-edited plants is a blow to biotech and science, critics say
By K. Kupferschmidt

436 DID KINDNESS PRIME OUR SPECIES FOR LANGUAGE?

Animal studies suggest tameness was key to language evolution
By M. Erard and C. Maticic

► PODCAST

438 'ENDING AIDS' MOVEMENT FALTERS WORLDWIDE

But studies confirm treatment can slow infections in entire communities
By J. Cohen

439 HOW ISLANDS SHRINK PEOPLE

Evolutionary dwarfing affected living people on the island of Flores, and may explain the stature of the extinct hobbit
By A. Gibbons

► REPORT P. 511

440 STAYING SLIM DURING PREGNANCY CARRIES A PRICE

Japanese are shrinking as low birth weight rises; their health may be at risk as well
By D. Normile

FEATURE

441 A PLACE IN THE SUN

Spacecraft are venturing closer than ever to the sun to probe its mysterious atmosphere
By J. Sokol

► VIDEO

INSIGHTS

PERSPECTIVES

446 A CALL FOR SEAGRASS PROTECTION

Seagrass conservation is crucial for climate mitigation, biodiversity protection, and food security
By L. C. Cullen-Unsworth and R. Unsworth

448 LIQUID WATER ON MARS

A water body exists below the martian south polar ice cap
By A. Diez

► REPORT P. 490

449 SHOULDERING RESPONSIBILITY

Leaders do not shy away from responsibility when others' welfare is at stake
By S. M. Fleming and D. Bang

► RESEARCH ARTICLE P. 467

451 WHEAT—THE CEREAL ABANDONED BY GM

Genetic modification of wheat for disease resistance could help stabilize food production
By B. B. H. Wulff and K. S. Dhugga

POLICY FORUM

453 INDIGENOUS COMMUNITIES, GROUNDWATER OPPORTUNITIES

A U.S. court decision unlocks vast potential to improve sustainable freshwater management
By P. Womble et al.

BOOKS ET AL.

456 NEURODIVERSITY, IN PROFILE

In the tradition of Oliver Sacks, two tomes investigate rare brain conditions
By S. T. Casper

458 POETIC AND POLEMIC

A physicist muses on science, politics, space, and more
By M. Livio

LETTERS

459 BRAZIL'S PROTECTED AREAS UNDER THREAT

By F. A. O. Silveira et al.

459 BRITISH COLUMBIA'S WILDLIFE MODEL REFORM

By K. A. Artelle et al.

460 CANADA BEGINS A GREAT GANJA EXPERIMENT

By C. Schluttenhofer

460 TECHNICAL COMMENT ABSTRACTS

PRIZE ESSAY

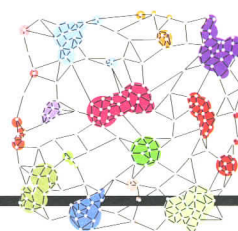
461 MODULATION WITHOUT SURGICAL INTERVENTION

Noninvasive deep brain stimulation can be achieved via temporally interfering electric fields
By N. Grossman

CREDITS: (GRAPHIC) V. ALTOUNIAN/SCIENCE; (PHOTO) NASA/JOHNS HOPKINS APL/ED WHITMAN

CONTENTS

3 AUGUST 2018 • VOLUME 361 • ISSUE 6401



Mapping cellular organization

RESEARCH

IN BRIEF

463 From *Science* and other journals

REVIEW

466 CELL BIOLOGY

Here, there, and everywhere: The importance of ER membrane contact sites *H. Wu et al.*

REVIEW SUMMARY: FOR FULL TEXT:
dx.doi.org/10.1126/science.aan5835

RESEARCH ARTICLES

467 NEUROSCIENCE

Computational and neurobiological foundations of leadership decisions
M. G. Edelson et al.

RESEARCH ARTICLE SUMMARY: FOR FULL TEXT:
dx.doi.org/10.1126/science.aat0036
► PERSPECTIVE P. 449; PODCAST

468 CELL BIOLOGY

Multiplexed protein maps link subcellular organization to cellular states *G. Gut et al.*

RESEARCH ARTICLE SUMMARY: FOR FULL TEXT:
dx.doi.org/10.1126/science.aar7042

469 MICROBIOLOGY

Emergent simplicity in microbial community assembly *J. E. Goldford et al.*

475 PLANT EVOLUTION

Selective trade-offs maintain alleles underpinning complex trait variation in plants *A. Troth et al.*

REPORTS

479 SUPERCONDUCTIVITY

Scale-invariant magnetoresistance in a cuprate superconductor
P. Giraldo-Gallo et al.

482 BLACK HOLE PHYSICS

A dust-enshrouded tidal disruption event with a resolved radio jet in a galaxy merger *S. Mattila et al.*

486 OPTICAL SEISMOLOGY

Ultrastable laser interferometry for earthquake detection with terrestrial and submarine cables *G. Marra et al.*

490 MARTIAN GEOLOGY

Radar evidence of subglacial liquid water on Mars *R. Orosei et al.*

► PERSPECTIVE P. 448

494 THIN FILMS

Giant polarization in super-tetragonal thin films through interphase strain
L. Zhang et al.

498 PALEOCLIMATOLOGY

Quantification of drought during the collapse of the classic Maya civilization
N. P. Evans et al.

502 PLANT SCIENCE

HAIRY MERISTEM with WUSCHEL confines CLAVATA3 expression to the outer apical meristem layers
Y. Zhou et al.

506 STRUCTURAL BIOLOGY

Cryo-EM structure of a mitochondrial calcium uniporter
J. Yoo et al.

511 HUMAN GENOMICS

Evolutionary history and adaptation of a human pygmy population of Flores Island, Indonesia *S. Tucci et al.*

► NEWS STORY P. 439

DEPARTMENTS

431 EDITORIAL

Nudge, not sludge
By Richard H. Thaler

522 WORKING LIFE

Paying it forward as a mentor
By Balkees Abderrahman

ON THE COVER



Jets of hot plasma trace magnetic field lines that leap out into space from the Sun's surface, as shown in this colorized image from NASA's Solar Dynamics Observatory, which stares at the

Sun from a vantage near Earth. New observatories will study these magnetic fields up close to understand how they heat the Sun's atmosphere and launch the solar wind. See page 441.

Image: Nathalia Alzate/SDO/NASA

Science Staff 430
New Products 518
Science Careers 519



CREDITS: (GRAPHIC) G. GUT ET AL.; (PHOTO) MARK BRENNER

SCIENCE (ISSN 0036-8075) is published weekly on Friday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2018 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership, including subscription (12 months) \$165 (\$74 allocated to subscription); Domestic institutional subscription (51 issues) \$1808; Foreign postage extra: Mexico, Caribbean (surface mail) \$55; other countries (air assist delivery) \$89. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request. GST #125488122. Publications Mail Agreement Number 1069624. Printed in the U.S.A. Change of address: Allow 4 weeks, giving old and new addresses and 8 digit account number. Postmaster: Send change of address to AAAS, P.O. Box 96178, Washington, DC 20090-6178. Single-copy sales: \$15 each plus shipping and handling; bulk rate on request. Authorization to reproduce material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and others who use Copyright Clearance Center (CCC) Pay Per Use services provided that \$35.00 per article is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. The identification code for Science is 0036-8075. Science is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.