

06.2018

NATIONAL GEOGRAPHIC

PLANET OR PLASTIC?

*18 billion pounds
of plastic ends up
in the ocean each
year. And that's
just the tip of
the iceberg.*



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On the Cover

A plastic shopping bag has a “working life” of about 15 minutes, and we’re using a trillion of them a year. That’s one highly visible source of plastic trash—but it’s only the tip of the iceberg in an ocean saturated with plastics.

PHOTO ILLUSTRATION BY JORGE GAMBOA

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North Korea Portraits

In a nation that doesn’t emphasize individuality, portraits of ordinary citizens may look like propaganda. Viewed as a group, they’re unsettling.

PHOTOGRAPHS BY STÉPHAN GLADIEU

EMBARK

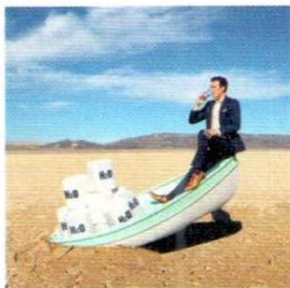
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THE BIG IDEA

To Conserve or Hog Resources

If society depended on it, would you share—or would you be selfish?

BY DYLAN SELTERMAN



GENIUS

Trash to Treasure

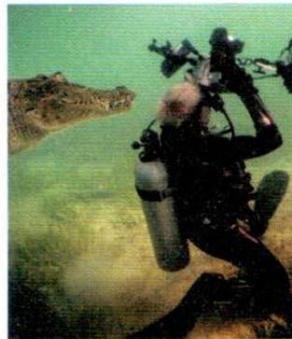
Engineer Arthur Huang is finding new uses for garbage—and revolutionizing recycling in the process.

BY CHRISTINA NUNEZ

ALSO

Pollution on a Stick
Mushroom Cleaner
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A Chance Meeting

They were studying marine life—at closer range than planned.

BY DAVID DOUBILET AND JENNIFER HAYES

DECODER

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In a Canadian forest fungi and trees have developed a hidden intelligence.

BY DAISY CHUNG AND RYAN T. WILLIAMS

ALSO

Desert Dunes
Future Earth
Sex and the Queen



FEATURES

Plastics

We make them. We depend on them. We're filling the ocean with them. Beyond what we've incinerated or recycled, a staggering 5.5 billion tons remain, taking centuries, or more, to break down. Can we enjoy this miracle material and have a clean environment too?

BY LAURA PARKER
PHOTOGRAPHS
BY RANDY OLSON

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Parrots may be too popular for their own good.

BY CHRISTINE DELL'AMORE
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Pellet gun injuries deepen a decades-old territorial dispute.

BY RANIA ABOUZEID
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BY JOEL K. BOURNE, JR.
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What happened on Roanoke Island?

BY ANDREW LAWLER
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BY MARK THIESSEN

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NAT GEO
WILD

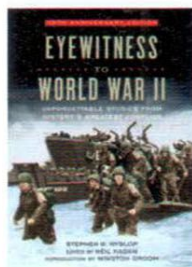
Track the Inhabitants of *Wild Russia*

Spanning 11 time zones and stretching halfway around the world, Russia is the largest country on Earth. From deserts and semiarid steppes to dense forests and Arctic tundra, it's a land of dramatic contrasts. It's also home to one of the last great wildernesses, where some of our planet's rarest species carve out their existence. The four-part series *Wild Russia* will air on Fridays at 10/9c from June 1 to 22 on Nat Geo WILD.

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BOOKS

Experience World War II as an Eyewitness

Filled with searing photos and vivid maps, *Eyewitness to World War II* is the unforgettable story of WWII told by those who lived it, from Hitler and Patton to soldiers at the front and families at home. It's available where books are sold and at shopng.com/books.

TRAVEL

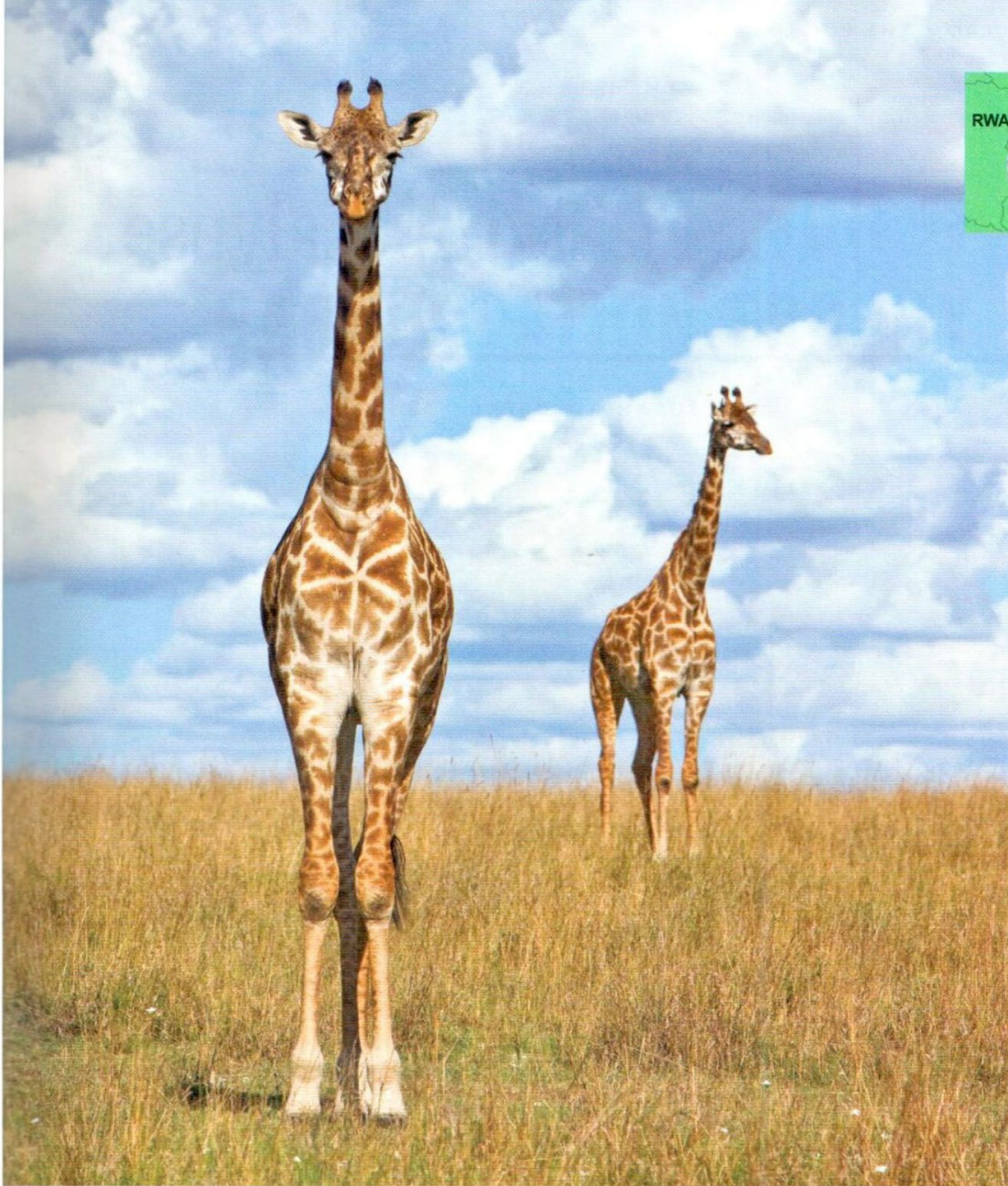
Vote for Our Travel Photographer of the Year for 2018

Visit natgeo.com/travelphotocontest to vote for your favorite images in National Geographic's Travel Photographer of the Year contest—and check back June 28 to learn who has won.

TELEVISION

Picasso Paints On

Follow Pablo Picasso from his boyhood in Spain to the top of the art world. The series *Genius: Picasso* airs at 10/9c on Tuesdays through June 19 on National Geographic.



Masai Giraffe

(*Giraffa camelopardalis tippelskirchi*)

Size:
Body length,
4.2 - 5.3 m
(13.8 - 17.4 feet)

Weight:
703 - 1,395 kg (1,549
- 3,075 lbs)

Habitat:
Acacia savannahs in
Kenya, Tanzania and
Rwanda

Surviving number:
Estimated at 60,000

*Photographed by
Ingo Arndt*

WILDLIFE AS CANON SEES IT

Above it all. The Masai giraffe's towering stature gives it a privileged position on the savannah, allowing it to outcompete other plant foragers and spot predators long before they get near. Built for height, the giraffe has dense, strong bones closer to the ground, while those in its neck and head are relatively light. Males even use their long necks as weapons when fighting

each other. But the world's tallest animal has no defense against the dual scourges of illegal hunting and habitat loss.

As Canon sees it, images have the power to raise awareness of the threats facing endangered species and the natural environment, helping us make the world a better place.



EOS System

Canon

DESERT DUNES

20 camels. Two paragliders. Two weeks. A mission to explore the Gobi's



T MINUS SIX MONTHS GEARING UP

For a project to photograph the world's extreme deserts, I wanted to visit the giant sand dunes in China's Inner Mongolia. The only way into the Gobi is on foot or by camel. The Chinese military controls access, so I teamed up with Chinese scientists studying desertification. The plan was that I'd fly over the dunes and they'd follow on camel. Six months beforehand I went to Beijing to pick up the permits and arrange for a caravan to meet us at the edge of the desert.

T MINUS TWO WEEKS ESSENTIAL PACKING LIST

I did test flights each week before leaving to make sure the paraglider worked properly. In the desert you have to be your own repair shop. And if you run out of gas—you're out of gas.

- Two aircraft and spare parts
- 200 liters of fuel (five flights each for two gliders)
- Rice and noodles
- Chinese military maps—no longitude or latitude listed
- Both shorts and fleece for the dramatic day-to-night temperature variation
- A camel load of beer and whiskey

T MINUS TWO DAYS READY FOR LAUNCH

We flew from Beijing to Lanzhou and then drove to a town near the edge of the desert to meet our camel team. We camped in the sand the last night before setting off into the dunes. I didn't unpack the aircraft (right) until we got out there and set up camp under the stars in the valleys between the dunes.



'LAKE WATER PERCOLATES THROUGH
THE SAND, SO YOU CAN DRINK
FRESHWATER OUT OF YOUR
FOOTSTEPS AS YOU WALK AROUND.'

—George Steinmetz

thousand-foot-high sand dunes.

BY THE NUMBERS

500,000

SQUARE MILES OF DESERT

6,700

MILES TRAVELED FROM HOME

1,400

SQUARE MILES
ANNUAL RATE OF DESERT GROWTH



STORY AND PHOTOGRAPH BY **GEORGE STEINMETZ**

FUTURE EARTH



WORLD RESHAPED



1 200 MILLION YEARS AGO
Early dinosaurs roamed the last supercontinent, Pangaea, formed by the collision of older continents.



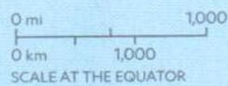
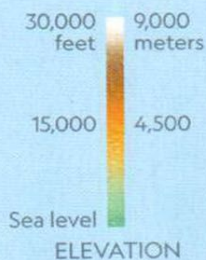
2 100 MILLION YEARS AGO
As Pangaea divided into distinct landmasses, the coasts of today's continents began to emerge, along with the Atlantic and Indian Oceans.



3 PRESENT DAY
Today's landscape is a blip in geologic time. The Atlantic Ocean widens by an inch a year as plates under it spread apart, forming new crust.



4 100 MILLION YEARS IN THE FUTURE
Plate activity along eastern North America will cause the Atlantic Ocean to shrink and continents to converge.



The continents are in constant motion: Tectonic plates crash together and break apart, creating new crust while old crust is pulled below the surface. The process shrinks and widens oceans, uplifts mountain ranges, and rearranges landmasses. In about 250 million years a new supercontinent, Pangaea Proxima, will form.

BY MATTHEW W. CHWASTYK

5 250 MILLION YEARS IN THE FUTURE

Only a vestige of the Atlantic Ocean remains as landmasses are joined together into a new supercontinent. New high mountains mark the sites of massive collisions.



150 years ago
we created
a lightweight,
strong, and
inexpensive
material.

We made it.

Today this
miracle material
helps keep hearts
beating and
planes in the air.

We depend on it.

We're drowning in it.

More than
40 percent of it
is used just once,
then tossed.

Some
9 million tons
of it end up in the
ocean each year.

Plastic

BY LAURA PARKER PHOTOGRAPHS BY RANDY OLSON



The
"working life"
of a plastic bag
is 15 minutes.









Plastic bottles choke the Cibeles fountain, outside city hall in central Madrid. An art collective called Luz-interruptus filled this and two other Madrid fountains with 60,000 discarded bottles last fall as a way of calling attention to the environmental impact of disposable plastics.

PREVIOUS PHOTO

After sheets of clear plastic trash have been washed in the Buriganga River, in Dhaka, Bangladesh, Noorjahan spreads them out to dry, turning them regularly—while also tending to her son, Momo. The plastic will eventually be sold to a recycler. Less than a fifth of all plastic gets recycled globally. In the U.S. it's less than 10 percent.