Calling on Dutch Expertise to Hold Back the Sea
26 | DUTCH MASTERS:
The Netherlands exports flood-control expertise

Since the 13th century, the low-lying Netherlands has been developing innovative water management techniques and technologies, including recent projects like the Delta Works, the Zandmotor and Room for the River. Now, facing global sea-level rise, flood-prone coastal cities in the U.S., like New Orleans and New York, and elsewhere around the world, are calling on the Dutch to teach them how to hold back the sea. | Chris Iovenko

38 | TRAVELS IN GEOLOGY:
Roof of the Rockies: Trail Ridge Road

Often dubbed the Highway to the Sky, 3,713-meter-high Trail Ridge Road is the signature scenic drive and sole route across Colorado’s Rocky Mountain National Park. The winding ribbon of hairpin bends offers numerous vistas of soaring, snow-capped peaks, alpine tundra, abundant wildlife, and the colorful carpets of tiny wildflowers it hosts for a few weeks each summer after its dramatic opening. | Terri Cook and Lon Abbott

8 | COMMENT:
WHY IS IT SO HARD TO TEACH CLIMATE CHANGE?

Someday, today’s young people may amass enough momentum to take action on climate change, but will they have the knowledge to do so? | Glenn Branch

63 | GEOLOGIC COLUMN:
BONE UP ON YOUR SPOOKY GEO-VOCABULARY THIS HALLOWEEN

This list will help you summon an appreciation for the fiendish creativity and ghoulish humor that’s gone into earth science’s vast lexicon. | Timothy Oleson
NEWS

12 SUNNY SOUTHERN CALIFORNIA BURNS, MISSING ITS COASTAL CLOUDS

13 DRY RIVERS SECRETLY STAR IN CARBON CYCLE

14 METHANE EMISSIONS OFFSET SOME BLUE CARBON BURIAL BENEFITS

15 EARTH’S FIRST FOOTPRINTS

16 WHERE WILL THE SAN ANDREAS FAULT RUPTURE NEXT?

17 PLUTO’S SURPRISING DUNES

17 SURFACTANTS SLOW OCEANIC CARBON DIOXIDE UPTAKE

18 SIPPING CARBON-NEUTRAL FUEL FROM THE ATMOSPHERE

19 FIRST ANTARCTIC TETRAPODS

20 MONSOON STRENGTH AFFECTS GLOBAL ICE VOLUMES, NOT VICE VERSA?

21 ECUADORIAN VOLCANO PLAYS ITS PIPE

22 DANGERS OF VAN ALLEN BELTS DRIVEN BY “LOCAL ACCELERATION”

23 EXTINCT GIBBON FOUND IN CHINESE TOMB

24 ASTRONOMERS FIND MISSING HALF OF THE UNIVERSE

DEPARTMENTS

4 FROM THE EDITOR

48 MINERAL RESOURCE OF THE MONTH: Phosphate

50 GEOMEDIA: BOOKS: “The Big Ones” Looks to the Past to Help Prepare for Future Disasters

52 WHERE ON EARTH?

53 BENCHMARKS: OCTOBER 11, 1899: Second Boer War Begins, Fueled by Discovery of Gold

56 DOWN TO EARTH: With Volcanologist Thorvaldur Thordarson

59 CLASSIFIEDS: Career Opportunities

ON THE WEB AT www.earthmagazine.org