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CONTENIDO

VOLUME 101, No. 1, JANUARY-FEBRUARY 2013

DEPARTMENTS

- 2 From the Editor.**
- 3 Letters to the Editors.**
- 6 Macroscope.**
Do we really need the s-word?
Megan D. Higgs.
- 10 Computing Science**
Imitation of life.
Brian Hayes.
- 16 Marginalia**
Comments and corrigenda in scientific literature.
Joseph F. Grcar.
- 22 Engineering**
Engineering in the abstract.
Henry Petroski.
- 27 Science Observer**
A different kind of CSI • Serious nonsense • In the news.
- 56 Sightings**
3D carnivorous plants.

SCIENTISTS' BOOKSHELF

- 58 Scientists' Reviews.**
River History • Marie Curie • Zoonosis • Mandelbrot's memoir • New cartography • Coffee-table books.

FROM SIGMA Xi

- 72 Distinguished Lectureship, 2013-2014.**
- 75 Sigma Xi Today**
Reflections from Stan Ovshinsky • The Annual Meeting in photographs • Reiss shares Nobel Prize.

FEATURE ARTICLES

30 Nature Is Dead. Long Live Nature!

What is the natural world? And other thorny questions in restoration ecology.
Robert J. Cabin.

38 Switching Colors with Electricity.

Electrochromic materials can combat glare, manage energy or fashion fabrics.
Roger J. Mortimer.

46 Aviation Migration: The Ultimate Red-Eye Flight.

Most passerine birds travel between breeding and wintering grounds by night.
Paul Bartell and Ashli Moore.

THE COVER

Wind tunnels — such as this one at the Max Planck Institute of Ornithology in Seewiesen, Germany — are at the cutting edge of methods for studying bird migration. This example, built in 1999 under the dome of a planetarium, has been used to study migratory bird metabolism, navigation and orientation. Paul Bartell and Ashli Moore explain what ornithologists and neurobiologists now know about birds that migrate only at night in “Avian Migration: The Ultimate Red-Eye Flight” (pages 46-55). These small birds undergo extremes in sleeplessness and metabolism, feats that are not humanly possible. (Cover image courtesy of Axel Griesch.)