

species is now known as *Ginkgo cranei*, but Crane is more taken with the joy of discovery than the honour of having a plant named for him.

As for the living tree, Crane fills us in on some of its peculiarities, not least its swimming sperm — studied by the reproductive-rights pioneer Marie Stopes during her career as a biologist — and the strange stalactite-like growth it uses for propagation. I went straight out to look at the ginkgo in front of London's Natural History Museum with new eyes.

Ginkgo ends with a beautiful section on the importance of this tree to human culture. It is revered for its longevity (the most venerable is some 3,500 years old) and beautiful form in China, Japan and Korea, and is one of the commonest street trees in the temperate zone in the West. The tree's loveliness is counterbalanced by a distinct autumnal odour: in Manhattan, where one-tenth of street trees are ginkgos, butyric acid in the seeds' fleshy covering gives off a whiff of rancid butter.

As Crane aptly puts it, its charisma — a mixture of unusual form, strange leaves and sheer staying power — has been an important element in its success and symbiosis with humans. Giant ginkgos are lovingly cared for and replaced when they start to die: the tree at London's Royal Botanic Gardens at Kew, planted some 250 years ago, is cared for as well as any national monument made by human hands.

The ginkgo was common over what is now the Northern Hemisphere between 100 million and 40 million years ago, but is elusive in the 'wild' today. Putatively wild ginkgos are known only from a couple of places in China, and they might be relics of old monasteries or human cultivation. Does it matter? On one level, no: that this species is still with us is itself to be treasured. On another, it does.

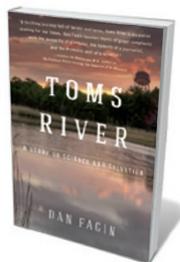
Earth's biodiversity has persisted through aeons, but no species has ever affected the planet as we have. Crane provides a wonderful precis of the politics of conservation, and how our own short ecological memories mean we often don't see the forest for the trees, however culturally important. People care for ginkgo trees because they are seen as special. But what of the rest of biodiversity? How can we conserve what we do not know?

The renowned naturalist Alfred Russel Wallace summed it up beautifully in 1863, saying that future generations "will charge us with having culpably allowed the destruction of some of those records of creation [species] which we had it in our power to preserve".

Ginkgo will inspire you to know and care for the organisms with which we share this planet in a new way. ■

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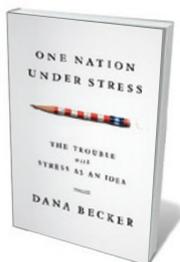
Books in brief



Toms River: A Story of Science and Salvation

Dan Fagin BANTAM 560 pp. \$28 (2013)

This hard-hitting account of cancer epidemiology in the New Jersey town of Toms River is a triumph. Hinging on a prolonged bout of toxic dumping by several companies up until the 1980s, journalist Dan Fagin's chronicle mixes reportage with science and industrial history. Thousands of drums of carcinogenic waste were buried in unlined pits, contaminating ground water; waste water was piped to coastal waters. In 2001, a landmark ruling linked some local cancers to local air and water pollution — a development with resonance, Fagin argues, for China's new industrial boom towns.



One Nation Under Stress: The Trouble with Stress as an Idea

Dana Becker OXFORD UNIVERSITY PRESS 256 pp. \$35 (2013)

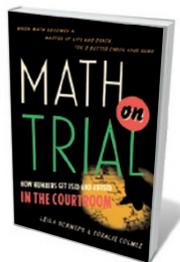
Is stress a 'lifestyle problem', or the inevitable result of larger social and political inequities, imbalances and shifts? Sociologist Dana Becker argues that in the United States, the diffuse concept of stress now covers all kinds of tensions — effectively masking their triggers, from dual-career marriages to the frenetic, technology-driven pace of daily life. As a result, real social change in areas such as health care stalls. Becker's analysis tracks the evolution of 'stressism' from its origins as the 'price of progress', through medicalization, gender politics and conditions such as post-traumatic stress disorder.



Are We Being Watched? The Search for Life in the Cosmos

Paul Murdin THAMES AND HUDSON 224 pp. £16.95 (2013)

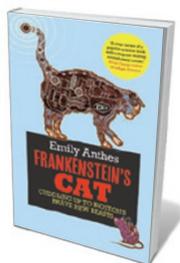
Discoveries such as exoplanetary systems, water ice on Mars and extremophile bacteria on Earth, have energized the scientific quest for extraterrestrial life. Here, distinguished astronomer Paul Murdin, who discovered the first black hole in the Milky Way, uses findings from planetary and climate science, astronomy, the evolution of life on Earth and the missions of the Voyager and Galileo spacecraft as a springboard for astrobiological speculation. But this is a measured investigation: Murdin, ever clear-eyed, is well prepared to accept that we are unique.



Math on Trial: How Numbers Get Used and Abused in the Courtroom

Leila Schneps and Coralie Colmez BASIC BOOKS 272 pp. \$26.99 (2013)

How does court evidence add up? Mathematicians Leila Schneps and Coralie Colmez show that it often doesn't: calculations, statistics and probability can be misused, with dire consequences. The authors forensically unpick ten cases in which justice was undone in this way, from recent trials to that of Alfred Dreyfus in nineteenth-century France. Dreyfus suffered a hellish imprisonment for treason after a handwriting expert exaggerated probability — a miscarriage of justice later exposed mathematically by Henri Poincaré.



Frankenstein's Cat: Cuddling Up to Biotech's Brave New Beasts

Emily Anthes ONEWORLD PUBLICATIONS 256 pp. £8.99 (2013)

Tusked mice, transgenic goats lactating antithrombin, dogs with prosthetic testicles: science writer Emily Anthes reports from the wilder shores of animal biotechnology. A team at Fudan University in Shanghai, China, for instance, has created 500 strains of modified lab mouse — and hopes to engineer 100,000. A Florida medical team has made a prosthetic tail for an injured dolphin. There is plenty more, but Anthes devotes the final word to bioethics, arguing that the advances are a chance to commit anew to animal well-being.