LETTERS

edited by Jennifer Sills

Barry Commoner's Place in History

THE BRIEF ANNOUNCEMENT ON THESE PAGES OF DR. BARRY COMMONER'S PASSING ECHOED those of mainstream media outlets, which lauded his work in environmental politics ("Early leader of environmental movement dies," News of the Week, 5 October, p. 23). More important, Commoner's life in science offers a crucial perspective on the development of science and public life through the 20th century.

In addition to receiving the 1953 Newcomb Cleveland Prize for his work on the tobacco mosaic virus (*1*) and conducting groundbreaking work on free radicals (*2*), Commoner was at the vanguard of the science information movement, an early effort to promote science literacy and to engage the public in the importance of science to public life and policy. Commoner sought to stress that the scientist's primary obligation was to society, and he practiced that belief in his professional work. He worked tirelessly through the 1950s to affirm AAAS's integrity and relevance. As early as 1953, Warren Weaver recruited him to revitalize the society's examination of science's social integration (*3*). He became a member of the Social Aspects of Science Committee and subsequently chaired the Committee on Science in the Promotion of Human Welfare. During the 1955 conference in segregated Atlanta, Commoner worked as a catalyst with former AAAS president Detlev Bronk and Margaret Mead to push for a AAAS Council anti-segregation resolution (*4*).

Barry Commoner.

Commoner was prominently involved in raising public awareness about the threats inherent in nuclear fallout. Linus Pauling's 1957 petition to the United Nations to end nuclear weapons testing (*5*) was drafted in Commoner's office at Washington University in St. Louis. In addition, Commoner helped to direct the Greater St. Louis Committee for Nuclear Information, whose studies on strontium-90 absorption by primary teeth were reported in *Science* (*6*). This work was cited by President Lyndon Johnson as an important influence for the decision to ban above-ground nuclear weapons testing (*7*).

Commoner would later claim that his efforts to stop nuclear weapons testing made him an environmentalist. He dedicated his career to promoting greater awareness of the risks to public health derived from certain industrial practices, and remained an outspoken critic of both the petrochemical and nuclear industries. In 1966, he founded the Center for the Biology of Natural Systems, which continues to work at the intersections of science and policy to advocate more environmentally sustainable solutions to continuing pollution and health-related problems. This work remained consistent with his early devotion to informing the public, providing them with an accessible vernacular body of scientific information on the environmental crisis.

Commoner's Four Laws of Ecology (*8*) (everything is connected to everything else, everything must go somewhere, nature knows best, and there is no such thing as a free lunch) are perhaps of more social consequence than scientific, but by the 1970s Commoner was—as *TIME* magazine rightly observed—a scientist "with a classroom of millions" (*9*). His life and career constitute a model for science activism and social engagement. He should be remembered for his deep-seated belief in the scientist's social responsibility, his duty to the public, and his unwavering faith in an informed citizenry.

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Letters to the Editor

Letters (~300 words) discuss material published in *Science* in the past 3 months or matters of general interest. Letters are not acknowledged upon receipt. Whether published in full or in part, Letters are subject to editing for clarity and space. Letters submitted, published, or posted elsewhere, in print or online, will be disqualified. To submit a Letter, go to www.submit2science.org.

Climate Change–Induced Salinity Threatens Health

SEA-LEVEL RISE, STORM SURGES, AND cyclones exacerbated by climate change have begun to severely affect coasts and river estuaries in low-income countries. The resulting increased salinity in soil and drinking water has health implications for large populations.

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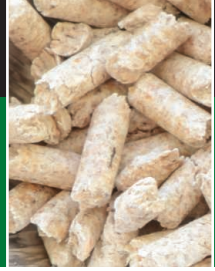

The value of biochar
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In coastal Bangladesh, natural drinking water sources such as rivers and groundwater are threatened by saltwater intrusion from the Bay of Bengal (*1*). The U.S. Environmental Protection Agency's recommended water sodium level for human consumption is 0.02 parts per thousand (ppt), and the World Health Organization's drinking water standard, above which sodium may affect the taste of drinking water, is 0.2 ppt. However, river salinity in some southwest coastal districts of Bangladesh reaches as high as 4 ppt in the rainy season and 13 ppt in the dry season (*2*).

The increased salinity in drinking water will likely affect health over the long term. Excreting more than 100 mmol/day of sodium over a 30-year period is associated with an increase in systolic blood pressure by 3.1 to 6.0 millimeters of mercury (mmHg) and in diastolic blood pressure by 0.1 to 2.5 mmHg in an average man or woman of 20 to 59 years (*3*). In a coastal Bangladeshi rural population, the mean urinary sodium excretion among healthy pregnant women in 2011 was 170 mmol/day of sodium (*2*), twice the recommended level (*4*). Extrapolating forward 30 years, this level of sodium will significantly increase systolic and diastolic blood pressure, potentially leading to a substantial rise in cases of hypertension, as well as other associated health problems. Indirect estimates of salinity are available for other areas, such as the Pearl River Delta, China (*5*); the San Joaquin Delta, California (*6*); and in the Netherlands (*7*), Australia (*8*), and Brazil (*9*). These estimates show that salinity may be an increasing problem in a number of coastal areas affected by intrusion of salty water into rivers.

To mitigate the risk of high blood pressure, cardiovascular disease, and other associated health problems caused by climate change–induced salt intrusions, we must take immediate action. Adaptation measures, including rainwater harvesting and solar distillation, require coordination among governments and nongovernmental organizations. Putting these prevention plans in place will be far less expensive than treating the disease that will occur later if salt intrusions continue unabated.

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CORRECTIONS AND CLARIFICATIONS

Reports: "Corals chemically cue mutualistic fishes to remove competing seaweeds" by D. L. Dixson and M. E. Hay (9 November, p. 804). The genus and species names of the goby were spelled incorrectly in the abstract. The correct names are used throughout the Report *Gobiodon histrio* and *Paragobiodon echinocephalus*. The names have been corrected in the HTML and PDF versions online.

Perspectives: "Quantum procrastination" by S. Lloyd (2 November, p. 621). In references 1 and 2, the year should be 2012, not 2007. The PDF and HTML versions online have been corrected.

Table of Contents: (26 October, p. 433). On page 435, the title of the Report by J. L. Garrison *et al*. was incorrect. The correct title is "Oxytocin/vasopressin-related peptides have an ancient role in reproductive behavior." The title is correct online.

Review: "Anticipating critical transitions" by M. Scheffer *et al*. (19 October, p. 344). In the print article, reference 44 was incorrect and reference 45 was mistakenly omitted. Reference 44 should be: T. M. Lenton, V. N. Livina, V. Dakos, E. H. van Nes, M. Scheffer, *Philos. Trans. R. Soc. London Ser. A* **370**, 1185 (2012). Reference 45 should be: J. M. T. Thompson, J. Sieber, *IMA J. Appl. Math*. **76**, 27 (2011). The references are correct in the HTML version online.

News & Analysis: "Oh, baby: Fight brews over U.S. import of beluga whales" by E. Underwood (12 October p. 180). The last request to the U.S. government for a permit to import wild-caught cetaceans was in 1993, not 1988.

News & Analysis: "Calling all baby boomers: Get your hepatitis C test" by J. Cohen (24 August, p. 903). The article incorrectly stated that the hepatitis C test was first introduced in 1992. The first test was licensed in 1990. In 1992, a much improved test came to market.

Journals: Increase Revisions, Not Rejections

IN THEIR REPORT "FLOWS OF RESEARCH manuscripts among scientific journals reveal hidden submission patterns" (this issue, p. 1065; published online 11 October), V. Calcagno *et al*. discuss an enlightening and unexpected finding about the path that manuscripts often follow in the publication process. Among other insights, they show that previously rejected manuscripts that are submitted to other journals ultimately receive more citations, once published, than papers in the same journal that were not previously rejected. In light of this result, a feature on this Report in *Nature* (*1*) quotes physicist Michael Schreiber from the Technical University of Chemnitz in Germany, who suggests that journal editors should reject more manuscripts because that improves their citation count. I argue that editors should do the opposite to improve their own journal's citation impact.

According to Calcagno *et al*.'s findings, rejecting to improve the quality of papers, as suggested by the *Nature* article (*1*), will not directly benefit the journal that rejects the paper. Journal editors could increase the quality of papers published in their own journals by exacting more rigorous standards for revision without rejecting them. Providing authors more opportunities to revise and resubmit manuscripts following peer review, while being clear to authors that substantial improvement must be made before a final decision is reached, would increase the citation impact of an editor's own journal.

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