

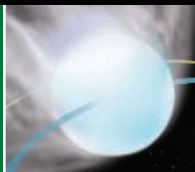
On essences and the supernatural

1392



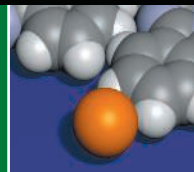
How pulsars evolve

1396



Charging individual atoms

1397



LETTERS | BOOKS | POLICY FORUM | EDUCATION FORUM | PERSPECTIVES

LETTERS

edited by Jennifer Sills

Redesigning the Wildlife Trade System

K. F. SMITH *ET AL.*'S POLICY FORUM ("REDUCING the risks of the wildlife trade," 1 May, p. 594) aptly proposes the need for a priori restrictions to be placed on newly traded wildlife species to predetermine their environmental, health, and economic impacts. The need for such restrictions is clear for the conservation of these traded species as well. For example, some reptile species collected for the exotic pet trade have been driven to near extinction, or extirpated from their type localities, immediately after their description in the scientific literature (1) and before receiving any protection through registration in the Convention on International Trade in Endangered Species (CITES) of wild fauna and flora.

The novelty and potential rarity of newly traded species could result in the occurrence of anthropogenic allee effects (2), which may ultimately lead to heavy population declines, even during the time



Endangered. The Roti Island snake-necked turtle is one example of a species threatened by wildlife trading.

required to process CITES registrations (3). Automatically restricting the trade in these species could allow conservation assessments to be undertaken in addition to risk analyses of their potential impact. Given all the knowledge we have accrued

about the negative impacts of the wildlife trade, perhaps it would make more sense to adopt a system whereby permissions are sought to include a species in the international trade, rather than requiring hasty applications for limits when it may already be too late.

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Wood Energy: Predicting Costs

THE POLICY FORUM "WOOD ENERGY IN America" (D. deB. Richter Jr. *et al.*, 13 March, p. 1432) was a much-needed and long-overdue contribution to energy discussions. However, fossil fuels are not four times more expensive than wood per unit energy. Rather, most fossil fuels are still less expensive than wood in most places, though the price of wood shows more local variation and is more volatile even than that of fossil fuels. Global mean wholesale price for sawlogs in the first quarter of 2008 was about \$170 per metric ton (MT), or about \$10/GJ (1). The mean wholesale price for pellets then was about \$200/MT, or about \$11/GJ (2). Since then (because of the housing crash), the price of sawlogs has dropped dramatically in the United States (3), but the global wholesale price of wood pellets has remained stable (2).

At \$60/barrel, oil is \$10/GJ; natural gas currently is about \$4/GJ (4). The latest Energy Information Administration projections place the mean cost of coal to U.S. utilities in 2009

at \$2/GJ, though high-grade coals can be three times as expensive (\$180/MT) (4).

The cost of wood seems likely to soar again within a few years. A severe pine-beetle blight began in North America in 1999, and today vast expanses (several gigatons, over 500,000 km²) of the forests in North America are dead (5). These forests (containing over four times as much dead wood as current global wood annual usage) will be largely destroyed by wildfires over the next 6 years. Even in the United States, wood pellets have recently sold for over \$320/MT in some areas (6), and some projections indicate global wood-pellet usage will continue to grow at over 20% annually for the next decade (7). It's hard to image wood pellets being under \$400/MT (\$22/GJ) by 2013.

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Wood Energy: Protect Local Ecosystems

IN THEIR POLICY FORUM PAPER "WOOD ENERGY IN America" (13 March, p. 1432), D. deB. Richter Jr. *et al.* argue cogently for deployment of advanced wood combustion (AWC) systems to meet a range of objectives, and they demonstrate the potential economic and energy values of community-based AWC in the United States. The accuracy of their estimates of U.S. energy potential from AWC is dependent, in part, on estimates of wood supply. This includes logging residue (tops, branches, and foliage) from sustainably