



50 Years Ago

In a written answer in the House of Commons on June 24, the Minister of Technology, Mr. F. Cousins, gave the names of 17 research associations which actively encouraged the use of computers in their respective industries; of 18 research associations which had access to computers on their premises, at universities or at member firms... In another written answer on June 24, Mr. Cousins stated that of 4,064 non-industrial Civil Servants employed by his Department... 1,400 had university degrees or equivalent qualifications in scientific or technological subjects, and about another 1,400 had other scientific or technological qualifications. In a third written answer, Mr Cousins stated... action was in hand... to promote the greater use of technological subjects in television and radio programmes, and to produce special booklets and films for wide distribution among young people.

From *Nature* 10 July 1965

100 Years Ago

Among the recent additions to the zoological department at South Kensington are some specimens which are surely destined to possess historical interest for posterity. They consist only of two or three examples of harvest-mice and one house-mouse, but they were caught in the trenches in northern France, in that part of the trenches, in fact, occupied by some of our Indian troops. These specimens were collected and presented to the museum by one of the officers of an Indian regiment, whose keenness for his favourite pursuit of natural history allowed him in the intervals of being heavily shelled by the enemy a little relaxation in the way of trapping and skinning any animals for the national museum in London.

From *Nature* 8 July 1915

factors such as spatial scale, logging-practice terminology, disturbance history, hunting pressure, road-building activity, survey intensity and observer experience. Moreover, although the total species list seems extensive, it contains numerous open-country or garden birds (such as the common bulbul *Pycnonotus barbatus* and the house wren *Troglodytes aedon*), along with highly conspicuous dispersive taxa (such as parrots and raptors) that may have been observed flying between primary forest patches rather than using logged forests. Inclusion of these categories may obscure the key impacts of logging on populations of forest-dependent species. Similar issues arise with species traits, which Burivalova *et al.* treat in a simplified form. For example, the authors assigned bird species to one of seven feeding groups (carnivores, insectivores, granivores, nectarivores, frugivores, omnivores or herbivores), but many species belong in multiple categories, and shift between categories over space and time⁹.

Many of these issues can be addressed by expanding or refining the underlying environmental and biological data. Attempts should be made to coordinate and standardize methods across the current spate of long-term initiatives that monitor the effects of selective logging at the local and landscape scale in tropical and temperate forests. In addition, the immediate prospects for improving information on species traits are good, particularly for birds. For instance, comprehensive data sets that describe the diet, habitat use and biometrics of birds are available (see ref. 9, for example). These offer a more nuanced assessment of key attributes such as dietary niche and dispersal ability,

which are relevant to ecosystem processes such as seed dispersal.

Incorporating these advances into global models will shed further light on the role of species traits in predicting responses to land-use change, as well as the broader implications for ecosystem function and services^{10,11}. Thus, although Burivalova and colleagues' efforts may fall short of providing a workable model for sustainable forestry, they point the way to more-sophisticated approaches that can help us to understand the impacts of selective logging on biodiversity, and to develop guidelines for logging practices that balance the needs of people with biodiversity across the tropics and beyond. ■

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ASTROPHYSICS

A twist in the tale of γ -ray bursts

An unusually long burst of γ -rays zapped Earth in December 2011, lasting 4 hours. The cause of this burst is now proposed to be a peculiar supernova produced by a spinning magnetic neutron star. SEE LETTER P.189

STEPHEN J. SMARTT

The story of γ -ray bursts (GRBs) originates in nuclear-weapons monitoring during the cold war, and has been elaborated by subsequent technological developments and scientific detective work. GRBs were discovered by the Vela satellites launched in the late 1960s by the US Air Force. The spacecraft carried sensitive γ -ray detectors to monitor the Soviet Union's compliance with the Nuclear Test Ban Treaty. No nuclear

explosions on Earth were seen. Instead, mysterious γ -ray flashes were detected, randomly distributed on the sky¹. On page 189 of this issue, Greiner *et al.*² present data for a γ -ray flash that suggest an association with a rare type of supernova, similar to an unusual type of stellar explosion that has been recognized only in the past few years³.

Nearly 50 years after the end of the cold war, following several space missions dedicated to high-energy astronomy and the harnessing of the most powerful ground-based telescopes,