

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 126, No. 20, November 17, 1984

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Subscription Department
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50;
3 yrs., \$67.00. (Foreign postage \$5.00 additional per
year.) Change of address: Four to six weeks' notice is
required. Please state exactly how magazine is to be
addressed. Include zip code. For new subscriptions
only call (1) 800-247-2160. Printed in U.S.A. Second
class postage paid at Washington, D. C. Title
registered as trademark U. S. and Canadian Patent
Offices. Published every Saturday by SCIENCE
SERVICE, Inc. 1719 N St., N.W., Washington, D. C.
20036. (202-785-2255)
ISSN 0036-8423

Letters

'Dawn horse' outdated

In "Fossils may clarify mammal evolution"
(SN: 10/6/84, p. 213) hyracotherium is described
as the "dawn horse."

It is, and it isn't. The animal was formerly
called eohippus, which means dawn horse, and
it is usually placed at the beginning of the equid
line. However, it is now considered ancestral to
a whole range of mammals, including tapirs and
rhinoceroses, which is why eohippus was
replaced by hyracotherium, which means
"mouse shrew animal," and the old drawings of
a 15-inch-high horse with toes instead of a hoof
are no longer considered appropriate rendi-
tions of hyracotherium.

Arthur J. Morgan
New York, N.Y.

Engineering hearing

The pictures of a hair cell ("Crafting Sound

This Week

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Cover: Worker oversees installation of tubewells to extract water for irrigating crops in Bangladesh. Though such irrigation technologies have been available for hundreds of years, only recently has much attention been given to the development of related technologies to cope with the soil salinization that irrigation usually fosters. (World Bank photo by Tomas Sennett)



Departments

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From Silence," SN: 10/20/84, p. 252) suggest a possible method of controlling the frequency response of the cell. The kinocilium appears to have most of its mass near its tip. As shown by mechanics, as the mass of a vibrating system is increased, the natural frequency is decreased. It seems possible that the kinocilium could be programmed (chemically?) to maintain the mass necessary in its tip to hold a specific natural frequency for the stereocilia bundle.

Albert L. de Richemond, P.E.
Doylestown, Pa.

'Come hail or high water'

I can think of a couple of reasons why Thomas A. Seliga's hail-predicting system should not be introduced into NEXRAD ("Radar polarizes weather community," SN: 9/29/84, p. 198). The first is that, though the system may be able to identify hail in clouds, there is no way to predict where that hail will actually fall, for it

tends to be highly concentrated and maddeningly selective. More important is the point that, come hail or high water, the crop must stand in the field until it is mature and there is no way to protect it, warning or no warning.

Joan Matheson
Valentine, Neb.

Much of what you say is true. Nonetheless, Seliga argues that there are a number of situations in which knowledge that a hailstorm has passed could be of help to farmers. For example, a farmer with hail insurance might not make a claim if he or she erroneously thought that wind had caused the damage. As for long-term forecasting, Seliga maintains that better information might help scientists determine the environmental conditions and topography that influence the movement and growth of hailstorms.

— S. Weisburd

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