SCIENCE NEWS®
The Weekly Newsmagazine of Science

A Science Service Publication
Volume 131, No. 3, January 17, 1987

Subscription Department
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., $29.50; 2 yrs., $50.00. (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., and additional mailing offices. 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

This Week

Research Notes

Articles

Cover: Alpha interferon — shown here with lab records detailing a patient's blood levels of the drug — is one of only a few human proteins made by recombinant DNA technology that are already on the market. But medical researchers are studying other body proteins that, if mass produced by the gene-splicing technique, might be strong defensive weapons against heart disease, cancer and other illnesses. (Photo courtesy Hoffman-La Roche, Inc.)

Departments

Letters

Animals and erosion

I was somewhat surprised by some of researcher Patricia Jacobberger's observations in "Erosion from water in parched lands" (SN: 11/29/86, p.343). Jacobberger notes, for example, "that she's seen only 10 cattle during her field studies, [and that] cattle are just a small part of the problem." Her study area, the Inland Delta of the Niger River, is an area of 30,000 square kilometers that provides dry-season pasturage for most of the livestock in Mali — which, according to 1983 FAO estimates, includes 5,400,000 cows, 6,450,000 sheep, 7,500,000 goats and lesser numbers of horses, asses, camels and swine. Livestock use has placed substantial pressure upon the environmental systems of the Inland Delta.

My remarks regarding perennial ground cover referred chiefly to perennial grasses. The grazing pressure of cattle and sheep has eliminated perennial grasses in many areas, resulting in ecological deflections from perennial grasses to short-lived annuals. This not only reduces dry-season carrying capacity, but also results in increased surface exposure at the onset of the rainy season. In this area of Mali, the rainy season lasts for three to four months. During this period, there are approximately 24 rainfall events of 5 to 50 millimeters per event. The combination of high-intensity rainfall and reduced ground cover has resulted in reduced rainwater infiltration, correspondingly increased runoff and increased soil erosion. There are, of course, other factors contributing to erosion in the Inland Delta, but they seem to be less significant than the impact of livestock.

Jeffrey A. Gritzner
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What's a mother to do?

"Bottle + breast = risky combination?" (SN: 12/13/86, p.375) concludes with two approaches suggested by W. Allan Walker for avoiding the potential problems of combining breast and formula feeding. Both involve the use of commercial infant formulas. I'm sure the manufacturers of formulas would be delighted with these solutions, but they are not in the best economic interests of the mothers nor the best health interests of the infants.

There are at least two other approaches that Dr. Walker has ignored: (1) the mother can pump her breast milk and leave a supply with the infant's caregiver during working hours, or (2) the employer can provide on-site day care so that the mother can continue to nurse her infant after returning to work. The latter has the advantages that the infant receives the healthful benefits of breast milk and the bonding process between mother and infant is enhanced. In the long term, the employer also might offset some of the costs of providing day care with lower costs for health care and health insurance for workers' families.

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