

SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication
Volume 145, No. 23, June 4, 1994

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SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$39.50 for 1 year or \$68.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, DC 20036. Second-class postage paid at Washington, DC, and additional mailing office. **POSTMASTER:** Send address changes to SCIENCE NEWS, P.O. Box 1925, Marion, OH 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided.

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Editorial and Business Offices:
1719 N St., N.W., Washington, DC 20036
(202-785-2255)

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Subscription Department:
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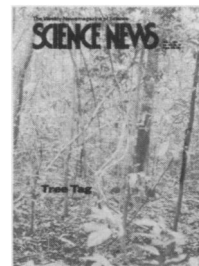
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Cover: On Barro Colorado Island in Panama, more than 200,000 trees bear ribbons or metal emblems, tags that enable researchers to track the growth and diversity of tropical forests. (Photo by Marcos A. Guerra/Smithsonian Tropical Research Institute, Panama)



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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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Letters

Views on a moth-eaten issue

For about 100 years people have been attacking gypsy moths, to virtually no avail ("Squelching Gypsy Moths," SN: 3/19/94, p.184). I lived in Massachusetts from 1966 to 1981 and noticed neither widespread destruction nor any kills of healthy trees.

Is this a cosmetic problem or a real problem? Good scientific inquiry would examine the assumptions underlying the eradication program. It would also dictate that the costs and benefits be rationally reviewed from a total ecological viewpoint, including direct and indirect costs to our own culture and biology.

John C. Reardon
Seattle, Wash.

According to U.S. Forest Service staff, the agency sprays only areas that are at risk of defoliation and that have valuable timber or recreational uses. Also, the agency tries only to suppress the moth; a national eradication program would be a losing proposition. The Department of Agriculture does try to eradicate the moth if an outbreak occurs in an otherwise uninfested state.

Massachusetts got off easy during much of the 1970s, according to the Forest Service. But in 1979, gypsy moths defoliated more than 30 percent of 226,000 acres of trees in the state. — T. Adler

As a field agent working exclusively with gypsy moth control attempts for nearly 5 years, I take exception to the simplistic portrayal of "good" vs. "bad" control measures.

The single biggest factor in this equation is the environmental impact of gypsy moths themselves. Other species are heavily affected by defoliation in terms of loss of food plants, mast crop, tons of frass (droppings) shed into leaf litter and water systems, midsummer drying of leaf litter due to unnatural exposure to sunlight, and so on.

I consider myself a very concerned environmentalist and, based on first-hand experience and observation, consider Dimilin the best available alternative at this time. New practical solutions would be welcome, but attacking our current best alternative accomplishes nothing!

Janet P. Gillies

West Virginia Department of Agriculture
Baker, W.Va.

The fungal pathogen *Entomophaga maimaiga* first appeared in gypsy moth populations in the northeastern United States in 1989, but it remains a mystery exactly when and where it was introduced to North America. We know it was introduced to the Boston area in 1910 and 1911, but it was never detected until 1989.

We introduced this pathogen to gypsy moth populations in southwestern New York and northern Virginia in 1985 and 1986; however, subsequent sampling did not verify establishment. In 1989, the fungus was distributed far from the 1985 and 1986 release sites. We now think that the strain of *E. maimaiga* in North America today is either a more virulent strain arising from the 1910-1911 introductions or a more recent accidental introduction.

As this fungus becomes established and spreads in North America, there is much interest regarding its potential impact on species other than gypsy moths. We will be investigating the potential impact of *E. maimaiga* on these hosts in the field this year.

Ann E. Hajek
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