

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 129, No. 3, January 18, 1986

E.G. Sherburne Jr.	Publisher
Joel Greenberg	Editor
Dietrick E. Thomsen	Senior Editor/ Physical Sciences
Laurie Jackson	Managing Editor
Wendy McCarren	Production/Design Director
Bruce Bower	Behavioral Sciences
Joanne Silberner	Biomedicine
Stefi Weisburd	Earth Sciences
Julie Ann Miller	Life Sciences
Janet Raloff, Ivars Peterson	Policy/Technology
Jonathan Eberhart	Space Sciences
Susan Welch Gilday	Assistant to the Editor
Diane D. Edwards	Science Writer Intern
Jane M. Livermore	Books
Donald R. Harless	Advertising/Business Manager

Copyright © 1986 by Science Service, Inc.,
Editorial and Business Offices,
1719 N St., N.W., Washington, D.C. 20036.
Republication of any portion of SCIENCE NEWS
without written permission of the publisher is
prohibited.

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

Letters

City critters

Although city dwellers are often wary when dealing with feral or otherwise unfamiliar animals ("The Concrete Jungle," SN: 12/14/85, p. 380), there are many of them who truly care and endeavor to preserve urban wildlife. It is not uncommon for urban wildlife, especially small terrestrial animals such as squirrels, to come in contact with hazards unimagined by their wild cousins. Cars, bulldozers and other heavy machinery commonly injure urban wildlife. Occasionally, domestic animals and people will also injure wild animals.

The University of Pennsylvania School of Veterinary Medicine has a wildlife service run by students and faculty advisers. The service provides free veterinary care to injured wildlife referred through other veterinarians, clients, etc. There is enough concern in the Philadelphia area for the service to see over 300 cases in one year, ranging from abandoned nestlings to hawks afflicted with "bumblefoot" or multiple fractures. It is the policy of the wildlife service to discourage people from picking up animals considered to be in the

This Week

- 36 Mexico City's Earthquake: Lessons in the Ruins
- 36 Optical seals record nuclear tampering
- 37 Sea-surface shape by satellite
- 37 Cleaning coal to cut acid rain
- 38 Blown away: Froth of cosmic bubbles
- 38 Was a fifth force felt?
- 38 Herbal medicine: R_x for chimps?
- 39 Voyager 2: On the threshold of Uranus
- 40 Tropical trickery: Birds sound false alarm
- 40 An economic case for banning smoking?

Research Notes

- 42 Astronomy
- 42 Biotechnology
- 43 Food Science
- 43 Health Physics

Articles

- 44 Nicotine: A Drug of Choice?

Cover: A close look at this syringe reveals a smoldering cigarette, as researchers compare cigarette smoking with physical addiction to drugs like heroin and explore the "beneficial" side effects that contribute to nicotine craving. In terms of litigation and legislation, however, nicotine's addictive status remains hazy. (Photo: SmokEnders)



Departments

- 35 Letters
- 46 Books

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation.
Board of Trustees — *President*, Glenn T. Seaborg; *Vice President*, Gerald F. Tape; *Treasurer*, Willis Harlow Shapley; *Secretary*, Hilleary F. Hoskinson; *Joseph W. Berg Jr.*; *Edward Bliss Jr.*; *Bowen C. Dees*; *David A. Goslin*; *Milton Harris*; *Elena O. Nightingale*; *O. W. Riegel*; *H. Guyford Stever*; *John Troan*; *Deborah P. Wolfe*.
Director: E. G. Sherburne Jr.; *Assistant Director*: Dorothy Schriver; *Business Manager*: Donald R. Harless.

high-risk group for rabies. In the Atlantic Coast region, these include raccoons, bats, squirrels and foxes.

I feel that concern for urban wildlife welfare is present, yet some of the "less cuddly" species could probably use a boost. This can be done by increasing people's understanding of the benefits presented by an urban ecosystem as well as their awareness of the services available to deal with its animal inhabitants.

Jaime F. Modiano
University of Pennsylvania
School of Veterinary Medicine
Class of 1988
Philadelphia, Pa.

It seems too bad stray dogs are seen by many as the most aggravating of urban wildlife species, when far too often the responsibility for the tragic condition of an unwanted animal traces to malnourishment, terror and contact with a cruel human being.

As a member of the Memphis Humane Society, I have seen people leave on vacation with pets left to fend for themselves. People

move and leave dogs chained to the fence, or turn them out in the country to survive, reasoning, "Dogs have fur coats, so why worry in the bitter cold?"

Dogs give far more in affection, companionship and protection from intruders than they require in return — decent food, clean water, a warm place to stay and kind words with a hug when the job is well done.

Nan E. Grosmaire
Memphis, Tenn.

The spider, which appears as an "unwelcome insect" in "The Concrete Jungle," is indeed an entity of the same phylum (Arthropoda) as an insect, but in actuality is not an insect at all. Spiders, which are arachnids, are characterized by eight legs, whereas insects, class Insecta, have six.

Cockroaches, bedbugs and even fleas are true insects and are as unwelcome in the home as spiders!

Gary N. Bullinger
Aurora, Ill.

My apologies to the insect world, and others.

— D.D. Edwards

JANUARY 18, 1986

35