



Vol. 33, No. 2
MARCH/APRIL 1994

USGA® Green Section RECORD

USGA PRESIDENT:

Reg Murphy

GREEN SECTION COMMITTEE CHAIRMAN:

Thomas W. Chisholm
26101 Northwestern Highway, Southfield, MI 48076

EXECUTIVE DIRECTOR

David B. Fay

EDITOR:

James T. Snow

ASSISTANT EDITOR:

Dr. Kimberly S. Erusha

ART EDITOR:

Diane Chrenko Becker

DIRECTOR OF COMMUNICATIONS:

Mark Carlson

NATIONAL OFFICES:

United States Golf Association, Golf House
P.O. Box 708, Far Hills, NJ 07931 • (908) 234-2300

James T. Snow, *National Director*

Dr. Kimberly S. Erusha, *Director of Education*

Nancy P. Sadlon, *Environmental Specialist*

P.O. Box 2227, Stillwater, OK 74076 • (405) 743-3900

Dr. Michael P. Kenna, *Director, Green Section Research*

GREEN SECTION AGRONOMISTS AND OFFICES:

Northeastern Region:

United States Golf Association, Golf House

P.O. Box 708, Far Hills, NJ 07931 • (908) 234-2300

David A. Oatis, *Director*

James E. Skorulski, *Agronomist*

Robert Y. Senseman, *Agronomist*

Mid-Atlantic Region:

P.O. Box 2105, West Chester, PA 19380 • (610) 696-4747

Stanley J. Zontek, *Director*

Robert A. Brame, *Agronomist*

Keith A. Happ, *Agronomist*

Southeastern Region:

P.O. Box 95, Griffin, GA 30224-0095 • (404) 229-8125

Patrick M. O'Brien, *Director*

Florida Region:

P.O. Box 1087, Hobe Sound, FL 33475-1087 • (407) 546-2620

John H. Foy, *Director*

Chuck Gast, *Agronomist*

Great Lakes Region:

11431 North Port Washington Rd., Suite 203

Mequon, WI 53092 • (414) 241-8742

James M. Latham, *Director*

Robert C. Vavrek, Jr., *Agronomist*

Mid-Continent Region:

720 Wooded Crest, Waco, TX 76712 • (817) 776-0765

James F. Moore, *Director*

George B. Manuel, *Agronomist*

Western Region:

3704 125th Street N.W.

Gig Harbor, WA 98332 • (206) 858-2266

Larry W. Gilhuly, *Director*

22792 Centre Drive, Suite 290

Lake Forest, CA 92630 • (714) 457-9464

Paul H. Vermeulen, *Agronomist*

Patrick J. Gross, *Agronomist*

Turfgrass Information File (TGIF) • (800) 446-8443

1 **Equipment Replacement:
Choosing a Path of "Leased" Resistance**
by George B. Manuel

6 **Squamish Valley —
The Home to Birdies and Eagles**
by David Banbury

8 **Rain Making**
by Paul Vermeulen

11 **Assessing Chemical Hazards on Golf Courses**
*by C. J. Borgert, S. M. Roberts, R. D. Harbison,
J. L. Cisar, G. H. Snyder*

15 **On Course With Nature
Grass Carp: Are They Really the Perfect Solution?**
by Nancy P. Sadlon

16 **Spring News Notes**

17 **All Things Considered
Let's All Be Responsible**
by Paul Vermeulen

**Back
Cover** **Turf Twisters**



Cover Photo:

*Even small equipment can be leased
as part of a package.*

©1994 by United States Golf Association®. Permission to reproduce articles or material in the USGA GREEN SECTION RECORD is granted to publishers of newspapers and periodicals (unless specifically noted otherwise), provided credit is given the USGA and copyright protection is afforded. To reprint material in other media, written permission must be obtained from the USGA. In any case, neither articles nor other material may be copied or used for any advertising, promotion, or commercial purposes.

GREEN SECTION RECORD (ISSN 0041-5502) is published six times a year in January, March, May, July, September, and November by the UNITED STATES GOLF ASSOCIATION®, Golf House, Far Hills, NJ 07931. Postmaster: Send address changes to the USGA Green Section Record, P.O. Box 708, Golf House, Far Hills, NJ 07931-0708. Subscriptions, articles, photographs, and correspondence relevant to published material should be addressed to: United States Golf Association Green Section, Golf House, Far Hills, NJ 07931. Second-class postage paid at Far Hills, NJ, and other locations. Office of Publication, Golf House, Far Hills, NJ 07931. **Subscriptions \$12 a year. Foreign subscriptions \$15 a year (surface mail) or \$24 a year (air mail).**