



USGA GREEN SECTION RECORD

A Publication on Turf Management by the United States Golf Association

© 1970 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.

VOL. 8, NO. 4

JULY, 1970

The Golf Course and Ecology	by James W. Timmerman	1
Solving Drainage Problems at El Macero	by D. W. Henderson, Don T. Bradley, Jack Jagur	6
Fairway Renovation at Baltusrol	by Joseph R. Flaherty	11
Plants to Enhance Environment	by Eliot C. Roberts	15
Better Turf Through Research		18
Turf Twisters		Back Cover



COVER PHOTO:

A golf course must be considered as having an ecology of its own. Understanding this ecology is essential to the performance of turfgrasses used for golf turf.

Published six times a year in January, March, May, July, September and November by the UNITED STATES GOLF ASSOCIATION, 40 EAST 38th ST., NEW YORK, N. Y. 10016. Subscription: \$2 a year. Single copies: 35¢. Subscriptions and address changes should be sent to the above address. Articles, photographs, and correspondence relevant to published material should be addressed to: United States Golf Association Green Section, P. O. Box 567, Garden Grove, Calif. 92642. Second class postage paid at Albany, N. Y. and New York, N. Y. Office of Publication: 40 East 38th Street, New York, N. Y. 10016.

Editor: William H. Bengueyfield

Managing Editor: Robert Sommers

Art Editor: Miss Janet Seagle

Green Section Committee Chairman: Henry H. Russell, P.O. Box 697, Miami, Fla. 33157

Green Section Agronomists and Offices

EASTERN REGION

P.O. Box 1237

Highland Park, N. J. 08904

Alexander M. Radko, Director, Eastern Region
and National Research Director

James W. Timmerman, Eastern Agronomist
(201) 572-0440

MID-CONTINENT REGION

P.O. Box 592, Crystal Lake, Ill. 60014

F. Lee Record, Director, Mid-Continent Region
(312) 943-5022

SOUTHERN REGION

P.O. Box 4213

Campus Station, Athens, Ga. 30601

James B. Moncrief, Director, Southern Region

Holman M. Griffin, Southern Agronomist
(404) LI 8-2741

WESTERN REGION

P.O. Box 567

Garden Grove, Calif. 92642

William H. Bengueyfield, Director, Western Region
and Publications Editor

G. Duane Orullian, Western Agronomist
(714) 638-0962