

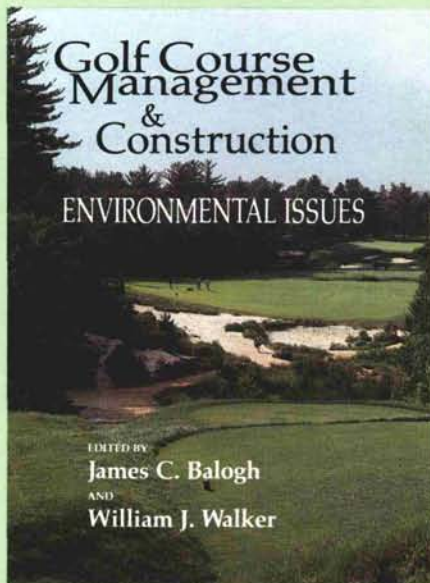
Fabric covers can be custom-cut to fit each green. Excelsior mats are supplied in 4 × 100 ft. rolls, so the task of installing and removing the covers is more time consuming and labor intensive. The wood fibers and the netting deteriorate over time and the average life expectancy of a mat is three to five years. Covers that are properly dried before being stored and are handled very carefully last up to seven years. On the other hand, they may only

last a year or two if they are stored wet or handled roughly. Proper storage is a must and is a significant cost item to consider before making an investment. Rolled mats take up a considerable amount of space; one superintendent rents seven to nine semi-tractor trailers to store the mats used to cover tees and greens.

In summary, excelsior covers are items to consider in areas where freeze/thaw problems exist. The initial cost of

the mats is relatively the same as custom-made fabric covers. They provide a bit more winter protection against crown-hydration winterkill of *Poa annua*. Both types of covers provide protection from desiccating winter wind and stimulate earlier green-up in spring. Whether or not excelsior mats are worth the trouble associated with installation, removal, and storage can only be determined by the superintendent at each golf course.

NEWS NOTES FOR SPRING



New Book on Golf Courses and the Environment Announced

Golf Course Management and Construction: Environmental Issues — available in May, 1992 — is a comprehensive reference book summarizing the scientific literature on the positive and potentially negative environmental effects of golf courses on surface and ground water quality, wildlife, and wetlands.

The book provides a scientific rather than emotional analysis of the environmental effects of golf courses and should prove invaluable to those debating golf courses and the environment. The book is based on Spectrum Research's (Duluth, Minnesota) review of pertinent scientific literature con-

cerning several of the environmental issues facing golf courses and reported to the USGA's Turfgrass Research Committee two years ago.

The easy-to-read book is divided into chapters, such as wildlife, water use, and pesticide applications, and includes an extensive reference section at the end of each chapter. The book should prove invaluable to anyone interested in the environment and golf courses, including superintendents, architects, green

committees, researchers, developers, and regulators.

Golf Course Management and Construction: Environmental Issues will be available in May, 1992, for \$72.25 (includes shipping and handling) from Lewis Publishers, 2000 Corporate Blvd. NW, Boca Raton, FL 33431, 1-800-272-7737, or the USGA, 908-234-2300.

The book will also be available for review at the U.S. Open Championship at Pebble Beach, June 18-21.

DONATION FOR TURFGRASS RESEARCH PROGRAM



Rick Fredericksen (right), President of the Minnesota Golf Course Superintendents Association, presents a check for the benefit of turfgrass research to Jim Snow, National Director and Chairman of the USGA Turfgrass Research Committee. The donation marks the sixth year the MGCSA has contributed to the USGA/GCSAA Turfgrass Research Program. The presentation was made at the GCSAA Conference and Show in New Orleans, Louisiana, in February.