THE AGRONOMIC SIDE OF THE 1997 RYDER CUP Victor A. Gibeault University of California-Riverside

The 1997 Ryder Cup was the first played outside Great Britain or the United States, with the competition between the U.S. and European teams being held at the Valderrama Golf Club in the Andalucia region of Southern Spain, on the Mediterranean Sea. The Club is owned and operated by Mr. Jaime Ortiz-Patino. A Robert Trent Jones designed course, Valderrama features 'Penncross' creeping bentgrass greens and 'Tifway' hybrid bermudagrass fairways and tees. Roughs are typical of transitional climate golf courses with mixes of bermudagrass and cool season grasses, including fescues and ryegrasses, with the respective grasses predominating based on site-specific conditions, such as shade or no shade from the widely used Cork Oaks.

The Club has policy statements that clearly set the environmental and cultural philosophy for the agronomics of turf and landscape maintenance to be performed. As an example, Valderrama's policy is to safeguard the environment while providing sporting excellence and fostering human well-being. The policy aims toward the harmonious integration of golf and nature, including the wise use of natural resources, by using appropriate management practices and utilizing the ecological potential of the golf course, and by communicating and educating a positive environmental attitude.

The agronomics at Valderrama Golf Club for the Ryder Cup conformed to the most up-to-date Best Management Practices and concentrated on optimum mowing, fertilization, and irrigation methods for the grasses used. Routine cultivation practices included vertical mowing, aerifying, and topdressing. Integrated Pest Management utilized a preventative approach by using sound cultural practices for the on-site grasses and a daily (for greens and tees) monitoring program, including review of an automated weather station data. Pests were controlled chemically when necessary.

The agronomics practiced on the turfgrasses are intended to provide play surfaces with the following characteristics.

All greens, including the practice green, had the *speed, firmness* and *smoothness* for Ryder Cup play so maintenance techniques such as mowing height and methods, equipment care, mowing timing, pin movement and placement, fertilization or pesticide use, irrigation (amount, frequency and watering guidelines used) and etc. were performed to give the desired results. Tee maintenance included the primary turfgrass management practices and also the practices of divot repair and tee-marker movement.

Firm and tight turf was the play standard for the fairways. Mowing, fertilization, irrigation, pest control, divot repair and the details there relating were practiced. Mowing for fairway definition was used. Special attention to the agronomic practices in the landing zones received prioritization. Roughs were of low turfgrass density and penalized players with a higher mowing height.

The 1999 Ryder Cup will be held at The Country Club in Brookline, Mass.