



By JIM SNOW

ST. ANDREWS, Scotland — The Second World Scientific Congress of Golf was held July 4–8, at the University of St. Andrews here. The conference is a quadrennial affair, the first congress having been held in St. Andrews in 1990. Its purpose is to bring together scientists from all

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facets of golf who have a scientific interest in the golfer, the equipment used to play the game, and the maintenance and playing characteristics of the golf course itself. Several hundred people attended the congress, including more than a dozen American turfgrass scientists who presented research papers concerning their recent studies.

The attraction of this congress, in addition to its location at the home of golf, is the opportunity

to interact with scientists from other parts of the world and from disciplines other than those normally encountered in the sphere of turfgrass specialists. More than 90 scientific papers were given, covering a wide array of golf topics. Several dozen posters also were presented, allowing participants to speak directly with researchers about their work. To get a flavor for what was discussed, consider the following titles:

- Discrete pressure profiles of the feet and weight transfer patterns during the golf swing
- A study of golfers' ability to read greens
- The search for the perfect handicap
- A new aerodynamic model of a golf ball in flight
- Does it matter what ball you play?
- A method of classifying the quality of golf green turf
- Health risk assessment from

pesticide use on golf courses in Korea

- Discipline and flourish: golf as a civilizing process?

From a turf and environmental standpoint there were 22 papers presented, representing the work of scientists from the United States, England, Wales, Spain, Japan, Korea, New Zealand, and Australia. There were four keynote addresses made to the entire congress during the four days, each representing a major section of the conference program. Dr. James B. Beard delivered the keynote address for the agronomy section, summarizing the environmental benefits of golf course turf.

Part of the excitement and interest of an international conference is being exposed to ideas that you haven't thought about before, but which could hold great value if applied correctly. For example, imagine being able to take several simple measurements of the physical and playing characteristics of a golf green and using that information to predict the overall quality of that green throughout the year. Research work being conducted by the scientists at the Sports Turf Research Institute in Bingley, England, is attempting to devise just such a system.

Simply put, they are taking extensive measurements of green characteristics and classifying each green into one of nine classes, based on visual appearance and playing quality. Then the many different measurements will be statistically analyzed, and a simple set of measurements to predict overall quality will be developed. If you wonder what good all this work will accomplish, just ask yourself if you would like to be able to answer two of the most commonly asked questions in golf: 'Why are our greens so slow?' and 'Why don't our greens hold a shot?' When their study is complete, we may be able to provide straightforward responses to those questions.

Convinced? Did you wonder what the answer is to the question raised in the paper, 'Does it matter what ball you play?' Although there was some statistical difference in length of drives and accuracy, especially for the low-handicap golfer, the final sentence in the paper sums it up quite nicely: "Thus (personal preference) and price are likely to affect golf ball purchases, and regular lessons with the professional rather than the search for a 'magical' ball may be a better way of lowering a handicap."

Care to know more about the 92 papers presented at the Second World Scientific Congress of Golf? Fortunately, the full proceedings of the congress, titled *Golf and Science II: Proceedings of the World Scientific Congress of Golf*, has been published and is available from Chapman & Hall, One Penn Plaza, New York, N.Y. 10119. The cost of the book is \$59.95, and orders can be placed by calling 1-800-634-7064.

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