Sometimes it is the simplest of things that we tend to overlook in communications. I personally experienced this while presenting a keynote paper before the World Scientific Congress of Golf at St. Andrews University in St. Andrews, Scotland. The title of the paper was “Environmental Protection and Beneficial Contributions of Golf Course Turfs”. It was published in “Science in Golf II” edited by A.J. Cochran and M.R. Farrallay and published by E and FN Spon of London, England, UK.

In the introductory section of this ten page paper is a summary of the comparative types of use and maintenance on a representative 18 hole golf course (see Table 1).

Table 1. Comparative turf use by area for a representative 18-hole golf course in the United States.

<table>
<thead>
<tr>
<th>Turf Use</th>
<th>Area in hectares (acres)</th>
<th>Percent of total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roughs-water - woodlands</td>
<td>52.7 (130)</td>
<td>72.2</td>
</tr>
<tr>
<td>Tees</td>
<td>0.93 (2.3)</td>
<td>1.3</td>
</tr>
<tr>
<td>Fairways</td>
<td>16.2 (40.0)</td>
<td>22.2</td>
</tr>
<tr>
<td>Buildings- parking lots</td>
<td>2.1 (5.2)</td>
<td>2.9</td>
</tr>
<tr>
<td>Putting greens</td>
<td>1.0 (2.5)</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72.9 (180)</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The audience consisted predominantly of individuals involved in golf equipment manufacturing, professional golfers, architects, and golf association leaders from around the world. To my surprise the one bit of information which I received the most comment on and evidently created the most stir was that only 1.4% of a golf course is devoted to the more intensive maintenance for putting greens and another 22.2% on average is devoted to intermediate maintenance of fairways. They were surprised to learn that it is not the entire golf course acreage. Evidently these non-turfgrass oriented individuals associated with the golf industry had never considered this fact in relation to criticisms related to the environmental issues they encounter. They have assumed that the same pesticides and other chemicals were being applied fence-to-fence. This illustrates an important impact-statement that many of us may have overlooked in the past, but may be one of the first facts we should emphasize.

Note: A survey among those reviewing my revision of “Turf Management for Golf Courses” reveals an interesting trend in fairway size in the United States. Specifically, the average acreage of fairways on 18-hole golf courses has declined from 50 to 35 acres (20 to 14 hectares). While the intensity of fairway maintenance has increased, the size has decreased greatly with much of that area being converted to lower-maintenance intermediate rough and/or primary rough.
1996 INSTITUTE PROGRAM:

A frequently received question concerns the specific activities of the International Sports Turf Institute. Thus, as we start the 1996 year it seems appropriate to give a review of the planned program of activities for the year. There are four basic areas of activity. They are as follows:

EDUCATION - 40%.

The major activities involve lecturing at turfgrass conferences and presenting 2- to 3-day seminars in various countries around the world. Typically, the seminar presentation also involves the writing of a manual which is translated into the specific language of the host country. During 1995 extended seminar presentations were given in Argentina, Japan, Malaysia, and the United States. Invited lectures were presented in France, Spain, Italy, Canada, and the United States.

RESEARCH - 30%.

Specific activities involve major efforts in research planning, staff training and monitoring, data collection and analysis, and research report preparation for a range of turfgrass research activities. We now have substantial field research programs in Italy, Japan, and United States. Additional research programs are in the planning stage in several other countries. Institute Research Associate Sam Sifers devotes a considerable portion of his time to these research efforts.

TURFGRASS TECHNICAL ASSISTANCE - 20%.

Technical assistance in turfgrass-soil problems is provided on-site at various locations around the world. This activity involves a broad range of turf uses including golf courses, sport fields, bowling greens, horse race tracks, tennis courts, polo fields, and sod production operations.

BOOK WRITING - 10%.

Considerable effort is focused on book authorship. Scheduled to be completed during 1996 are three books.

- TURFGRASS HISTORY OF SPORTS, LAWNS, AND GOLF. This turfgrass evolution and history book is a unique one-of-a-kind effort which has evolved over the past 30 years. It includes extensive early photographs and quotes from early turfgrass books.
- A second revision of TURF MANAGEMENT FOR GOLF COURSES, authored in association with the United States Golf Association. This second edition contains significant modifications that reflect the changes in turfgrass science and technology on golf courses that have occurred during the past 12 years.

All three books should be available in early 1997.

PEST MANAGEMENT STATUS:

United Kingdom. The registration of carbaryl (Sevin®) has been revoked for most non-agricultural uses in the United Kingdom, including as a garden-lawn pesticide. However, they are allowing its use for head lice control in the hair of humans. They also are allowing the use of carbaryl on vegetable crops because “the intake levels detected were 1000 to 6000 times less than the dose at which an increased incidence of tumors occurs in rats and mice.” Editor note — How this relates to the real world of humans has not been demonstrated!

Hong Kong. Was surprised to learn from the Park Department officials that the government of Hong Kong has withdrawn the registration of glyphosate (Roundup®). When I asked the reason why, no one could explain.

United States. Finally, propiconazole (Banner Maxx®) is now officially registered for the control of take-all patch (Gaemummomyces graminis var. avenae) on bentgrass (Agrostis spp.) in the U.S., plus certain other patch diseases.

Note: The 8th International Turfgrass Research Conference sponsored at 4-year intervals by the International Turfgrass Society is scheduled for July 20 to 26, 1997 in Sydney, Australia.