## MOSS ENCROACHMENT CONCERNS IN PUTTING GREENS-1998 Robert Vavrek USGA Green Section Agronomist North Central Region

It comes as no surprise that the number of courses affected by significant moss encroachment in putting surfaces has steadily increased over the past several years across the North Central Region. This concern coincides with the average golfer's desire and demand for faster and faster green speeds for day-to-day play. The maintenance practices that generally produce an increase in green speed, such as ultra-low mowing heights, limited fertilizer inputs, excessive grooming/verticutting, etc., tend to thin out the turf cover and provide conditions that favor the growth of moss more than the growth of bentgrass or *Poa annua*.

The panel will probably spend much more time debating the best method to control moss instead of exploring ways to prevent moss encroachment in the first place. There are numerous labeled materials available to superintendents for controlling moss in turf and some of the more popular "home remedies" that suppress moss growth will undoubtedly be discussed as well. However, research clearly indicates that the best way to control moss is to increase the height of cut and/or increase nitrogen inputs to the putting green. Moss simply cannot compete with a healthy vigorous stand of turf.

Killing moss, just like eliminating *Poa annua* from a putting surface, is not a difficult feat for any superintendent. Winterkill periodically eliminates *Poa annua* from greens at a few courses each year—free of charge. The trick is to prevent the unwanted turf or moss from rapidly becoming reestablished into the green and to maintain an acceptable playable surface during the transition.

The superintendents who have had the most success eliminating moss from greens have always developed an integrated approach to moss control. The silver bullet approach to moss control (one treatment = loss of moss) has not produced the desired result. Reasonable mowing heights, timely cultivation operations, sensible fertility/irrigation practices, and other maintenance operations that result in healthy turf growth are the key to successful **long-term** moss control. Another essential, but often-overlooked factor, is establishing a dependable line of communication with golfers and developing a reasonable green speed policy.