Michael A. Jones* (jonesm@mail.montclair.edu), Department of Mathematical Sciences, Montclair State University, Montclair, NJ 07013. Scoring Rules for Golf.

The Professional Golfers' Association of America (PGA) uses both stroke play and the modified Stableford scoring system to determine tournament winners. These two methods of scoring, as well as the Stableford scoring system, are compared by viewing the scoring systems as voting vectors. The winner of the tournament is the winner of the corresponding election. Stroke play is equivalent to the Borda count and the Stableford system is equivalent to a truncated Borda count.

The voting vector is multiplied by matrices generated by tournament data to determine golfers' scores and tournament rankings. Real PGA data is used to demonstrate that the winner under one scoring system may not win under a different scoring system. Linear algebra is used to determine when this happens in general. Also, the effect of the scoring systems on a golfer's approach to a tournament is discussed. (Received September 21, 2005)