



Green Section

BEST MANAGEMENT PRACTICES CASE STUDY



Precise chemical edging with a shrouded single-nozzle sprayer helps maintain cart path edges with minimal inputs.

CHEMICAL EDGING OF AGGREGATE CART PATHS

Mission Valley Golf And Country Club | Nokomis, Fla. 34275

David Emmons, superintendent

ISSUE

Cart path edging is performed at many golf courses to create a distinct border between paths and adjacent turf. A conventional edging process using hand tools and blowers can be extremely time consuming on aggregate cart paths. Edging the cart paths at Mission Valley Golf and Country Club required three staff members and nearly 100 labor hours to complete because the crushed limestone path material allowed for significant encroachment from the surrounding rough. Chemical edging with non-selective herbicides like glyphosate can be an effective alternative for controlling encroachment of vegetation along aggregate cart paths, but there is a serious risk of damaging adjacent turf if the herbicides are not applied with extreme precision. Traditional sprayers cannot typically make such a precise application without the risk of unintended turf damage.

ACTION

Superintendent David Emmons attached a single-nozzle sprayer onto a utility cart to allow for precise chemical cart path edging at Mission Valley. Using a solenoid-controlled nozzle body eliminated any dripping when the nozzle was not spraying and a shroud was made to surround the nozzle and prevent overspray or wind drift. Several different materials were evaluated for the shroud before settling on a synthetic roofing membrane. When vegetation encroaches on a path, staff members slowly drive the vehicle down the path and apply herbicide precisely along the edge to control vegetation encroachment quickly and effectively.

RESULTS

The results of this system have been tremendous for Mission Valley. Chemical edging with glyphosate creates a distinct edge between the aggregate paths and surrounding turf and there has been no unwanted turf injury from drift or dripping. Chemical edging also saves a considerable amount of resources. What once required nearly 100 staff hours now only requires approximately three hours and less than \$50 of product. Since it only requires a few hours, chemical edging can take place more often to maintain the improved aesthetics. In fact, Emmons is considering adding another nozzle to the utility cart to enable spraying on both sides of the cart path simultaneously. This would create a consistent cart path width throughout the course and reduce total spray time.