

Should You Change from Triplex Green Mowers to Walking Green Mowers?

by **ROBERT RANDQUIST**

Superintendent, Southern Hills Country Club, Tulsa, Oklahoma

AT SOUTHERN HILLS Country Club, the winter before we were to host the 1982 PGA Championship, we made a significant change in our putting green maintenance operations. We switched from triplex putting green mowers back to single walking green mowers! It was not a hasty decision; the green committee had studied the economic, agronomic, and aesthetic factors involved for several months.

Dr. Douglas T. Hawes, Director of the Mid-Continent Region of the USGA Green Section, has noticed a similar trend throughout his territory. I would recommend that anyone interested in or contemplating such a change should take

careful consideration of the factors outlined below.

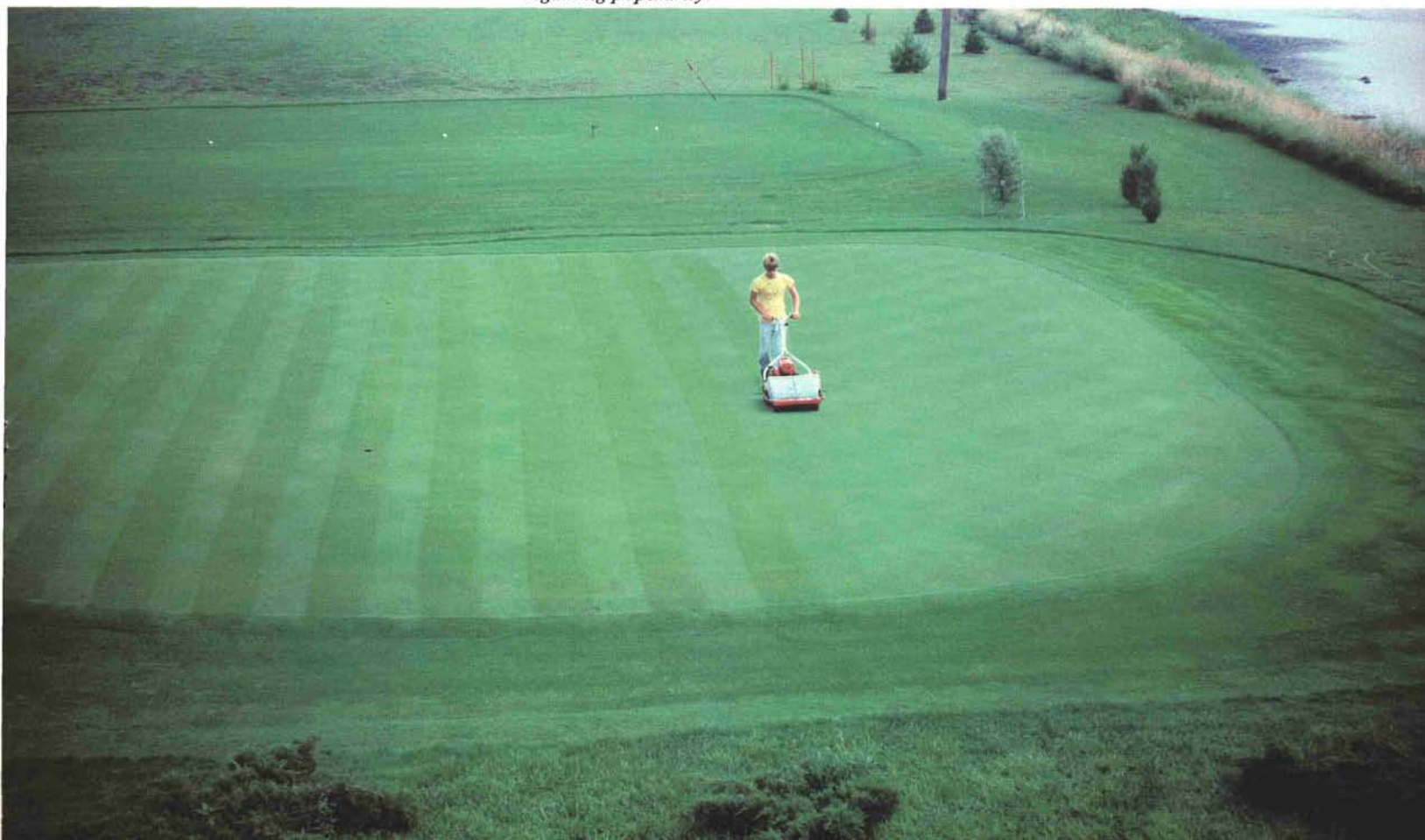
The first factor we examined was cost. How much money is really saved by using triplex green mowers? We were using two triplex green mowers on greens and replacing the units every three to four years. Two of these units cost about \$18,000 to \$20,000 (without trade-in). To accomplish the same work, we felt we would need eight 22-inch walking mowers. Each crew member could mow three greens, with one mower for the practice greens and one mower for collars or for use in case of a breakdown. Eight 22-inch mowers cost about \$17,000 to \$19,000. Since there is

only a minimal difference in original equipment costs, the comparison of equipment costs becomes a comparison of life-span maintenance costs. After consulting with several golf course superintendents, we determined that:

1. The projected average life-span is three to five years for triplex green mowers and eight to 10 years for walking green mowers;

2. Average yearly costs for repair and replacement parts for two triplex mowers is about \$1,000 to \$1,200, and for eight walking mowers it is about \$800 to \$1,000 (this slight difference in repair costs is due to replacement of parts in the hydraulic system);

Among many superintendents and green committees, the walking putting green mower is regaining popularity.



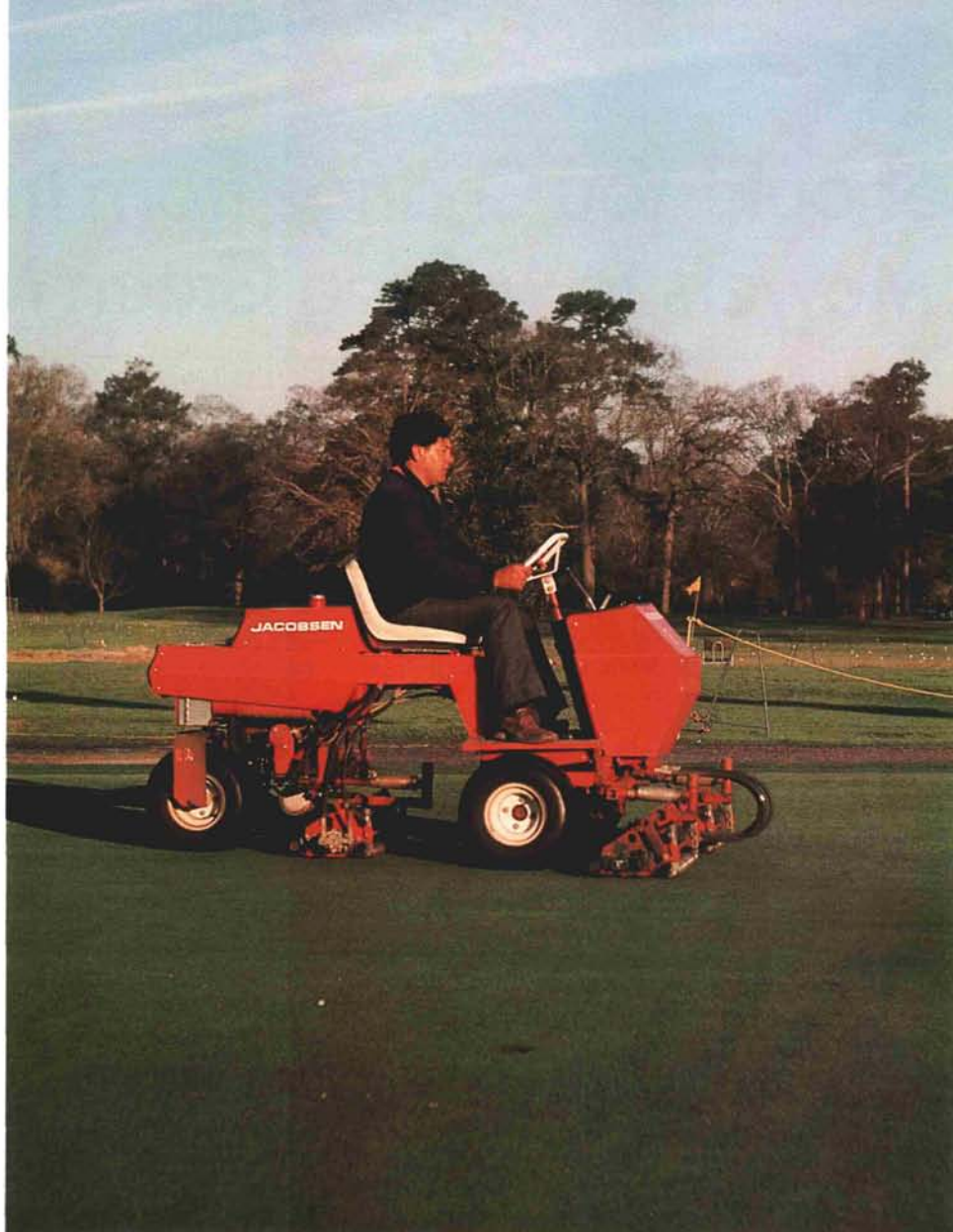
3. Labor for maintaining either two triplex mowers or eight walking mowers is about \$3,500 to \$4,000 a year.

We can see from these figures that the reason why we have an appreciable difference in equipment costs between walking mowers and triplex mowers is because the average projected life-span of the walking green mowers is double that of the triplex green mowers. Over an eight- to ten-year period, equipment costs for using walking mowers will be about \$2,000 a year less than for using triplex green mowers.

WE NEXT EXAMINED the savings in labor costs from mowing with triplex green mowers. At most we mow greens six days a week for 10 months a year and twice a week for two months. Our greens average 5,000 square feet, and it takes two triplex mowers one-and-a-half hours each to mow greens. At a cost of \$5.50 an hour for hourly wages and \$8.25 an hour for overtime wages, it costs us \$5,313 a year to mow our greens with triplex mowers. In comparison, we can mow our greens with walking mowers, using six men for one-and-a-half hours each. Using the same mowing frequency and hourly wages, it cost us \$15,394 a year to mow with walking mowers. On the surface it appears that triplex mowing of greens saves us about \$10,000 yearly in labor costs. However, other labor costs are associated with triplex mowing that are not necessary when walking green mowers are used.

At Southern Hills we have bermudagrass tees, fairways, collars, and roughs. Our greens are creeping bentgrass. It has been my experience that during the dormant period for bermudagrass, areas around the greens suffer heavy damage caused by turning triplex green mowers. This condition is especially noticeable in areas of tight bunkering around the greens. We tried wider turning radiuses and slower turns, but the damage problem persisted. It became a matter of resodding 1,000 to 1,500 square feet of bermudagrass around each green every year. At a cost of 13¢ a square foot, this was costing us \$3,000 to \$3,500 yearly.

We also had problems with bentgrass thinning out in the cleanup circle around the perimeter of our greens. Alternate day mowing did not solve this "triplex ring" problem, and we began mowing the cleanup circle with a walking green





(Opposite page, top) Hard to avoid the fact that triplex green mowers do reduce mowing time and have been used for championships. (Opposite page, bottom) Hydraulic leaks are the most dramatic problem encountered in triplex mowing. They are not uncommon but preventive shop maintenance will greatly reduce them. (Above) Triplex mowers weigh a good deal more than the walking green mower and their turning patterns have been blamed for damage to collars on several golf courses. Zoysia and bermudagrass collars have shown damage early in the spring due to turning of triplex mowers on them.

mower. This increased the cost of triplex mowing — one crew member, three days a week at \$5.50 per hour for six months a year = \$1,000.

Another cost that may be considered is repairing the damage caused by hydraulic leaks. This cost can be minimized, however, by good preventive maintenance, and we did not include it in our cost analysis.

CONSIDERING ALL these figures, it cost us about \$3,500 to \$4,000 more a year to mow with walking green mowers than to mow with triplex green mowers. This figure for other golf courses would be higher or lower, depending on several factors, including green size, labor market, mowing frequency, length of season, etc. For example, a golf course with large greens, no wear problems around the greens, and a long growing season might realize a savings of \$15,000 to \$17,000 yearly by using triplex green mowers. On a golf course with small greens, tight bunkering around the greens, and a short growing season, using walking mowers could be less expensive than using triplex mowers.

Other factors that influenced our decision included changes in cultural practices over the last few years because of problems associated with triplex mowing. Vertical mowing, topdressing, and brushing frequencies had been dramatically increased because of increased problems with grain and thatch accumulation. Weed control around the greens became more difficult and expensive from thinning of turf caused by wear and compaction of the triplex green mowers. It is difficult to place a price on not having the best possible turf in these critical areas.

Should you change from triplex green mowers to walking green mowers? The answer for Southern Hills and many other golf courses is a resounding "yes!" The added cost of \$3,000 to \$10,000 out of a labor budget of \$100,000 to \$200,000 a year is a small price to pay for improved putting quality, better turf around the greens, and elimination of unsightly hydraulic spills. Using walking green mowers for the past two years has confirmed our original analysis, and I encourage you to consider making this change if your overall conditions warrant.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Act of October 23, 1962; Section 4369, Title 39, United States Code.) 1. Date of Filing — October 1, 1983. 2. Title of Publication — USGA GREEN SECTION RECORD. 3. Frequency of issues — Six issues a year in January, March, May, July, September and November. 4. Location of known office of publication — Golf House, Far Hills, N.J. 07931. 5. Location of the headquarters of general business offices of the publishers — Golf House, Far Hills, N.J. 07931. 6. Names and addresses of Publisher, Editor, and Managing Editor: Publisher — United States Golf Association, Golf House, Far Hills, N.J. 07931. Editor — William H. Bengeyfield, Golf House, Far Hills, N.J. 07931. Managing Editor — Robert Sommers, Golf House, Far Hills, N.J. 07931. 7. Owner (if owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of individual owners must be given). If owned by a partner, partnership or other addresses — United States Golf Association, Golf House, Far Hills, N.J. 07931; President — William C. Campbell, Golf House, Far Hills, N.J. 07931; Vice-Presidents — William J. Williams, Jr., and James R. Hand, Golf House, Far Hills, N.J. 07931; Secretary — William C. Battle, Golf House, Far Hills, N.J. 07931; Treasurer — C. Grant Spaeth, Golf House, Far Hills, N.J. 07931. 8. Known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities — None. 9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation. 10. This item must be completed for all publications except those which do not carry advertising other than the publisher's own and which are named in sections 132.232 and 132.233 Postal Manual (Sections 4355a, 4344b and 4356 of Title 39, United States Code).

	Average No. Copies Each Issue During Preceding 12 Months	Single Issue Nearest to Filing Date
A. Total No. Copies Printed (Net Press Run)	14,167	14,500
B. Paid Circulation		
1. Sales through Dealers and Carriers, Street Vendors and Counter Sales	30	35
2. Mail Subscriptions	12,310	12,490
C. Total Paid Circulation	12,340	12,525
D. Free Distribution (including samples) by Mail, Carrier or other means	400	385
E. Total Distribution (Sum of C and D)	12,740	12,910
F. Office Use, Left Over, Unaccounted, Spoiled after Printing	1,427	1,590
G. Total (Sum of E and F)	14,167	14,500

I certify that the statements made by me are correct and complete.

Robert Sommers, Managing Editor