writer, is an ideal teammate for the WGA's educational director R.F. McGuigan in the Evans Caddie scholarship program and in extending this pattern to other amateur groups. Dann's savvy and judgment has been very useful to members of the Tournament Sponsors' Assn.

Kenneth W. Emerson, executive director of the National Club Assn. has an important and difficult job of operating the newest of the national club business organizations. The NCA was formed by club officials and club managers to represent in protective and promotional legislative and tax matters at Washington country and city clubs and amateur and professional golfer interests not vigilantly and energetically operative on Congressmen and bureaucrats.

Eddie Susalla, who moved from La Costa CC, Rancho La Costa, Calif., to become executive director of resort operations at Pinehurst, was executive director at La Costa for seven years. Before that he was professional at Tuscon (Ariz.) CC, Thunderbird CC and Indian Wells CC in the Palm Springs area. Susalla is one of the soundest, best informed, all-around businessmen in professional golf. A star in pro shop operations, he also knows the score on course management and clubhouse operations and has a long time record as a prized teammate of superintendents and managers. He has talent just short of genius in analyzing members' and guest' needs and learning what the money score is from club financial statements which often are more confusing than enlightening.

Big businessmen who got themselves tangled in golf business discovered that Eddie was more than a professional, a superintendent or a manager. They found he was all three and a man of their type who could treat a dollar and its golfer with respect and foresight.

Susalla was the one who tipped off this writer to the big change accenting management in the better paying professional jobs. Business executives who hired Eddie to watch and make profitable their interests in multi-million-dollar investments in golf told of selecting Susalla because he had a broad, keen view of coordinating operations. One of them said, "We can get plenty of pros who can break 70; what we need is a pro who won't break us." Pinehurst with Tuft's imagination, timing and management has been enormously important in the development of American golf. Maybe with Pinehurst under ownership of Diamond Head Corp. and with James Harrington as Pinehurst president and Susalla directing, American golf is coming into another wonderful era of growth.

Boise Cascade, gigantic lumber company that is using timberlands for recreation resorts now has 24 golf courses. It got big by selecting the best man for its operations. Gordon Brinkworth, with an outstanding record of success in managing Canadian and American golf courses, now is at Los Altos (Calif.) G & CC and managing four of the chain's biggest courses. Carlton E. Gipson, who presented revolutionary and successful ideas of course management at the GCSAA conference, is operating in Texas the Elkins Lake CC, Huntsville; Lakewood CC, Hilltop Lakes, and River Plantation, Conroe, courses of a holding corporation with methods providing highly satisfactory playing conditions with efficiency that saves money.

There is a revolution in golf business operations at private and pay- (Continued on page 25)
Day after day, Jacobsen's gets you to the forefront.

Here's how: First there's the new Jacobsen Greens King.
   Over five years of factory tests plus 2 years of customer usage have produced one of the most superbly engineered mowers available.
   Check the facts.
   It can speed through 18 average greens in less than 4 hours.
   Travel from one green to another at 8 mph.
   And mow straight or elliptically with all its controls operating hydraulically.
   What's more, reels are raised, lowered, engaged, and disengaged with one easily operated pedal.
   One more thing. The convenient step cut feature allows reels to operate at different mowing levels.
   One more reason why you should learn how easily the new Jacobsen Greens King can take you to the forefront.
   In championship style.

The Jacobsen Turf King. In addition to cutting tees, this versatile reel mower is ideal for cutting around greens, walks, clubhouses, and other areas that can't be serviced with larger equipment. The Jacobsen Turf King: take your choice of either the 76” or 84” cut.
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The Jacobsen Greens Mower is a real hustler when it comes to providing you with the fine, precision mowing demanded of today's championship courses. It's also perfectly balanced to assure accurate cutting.

The Sod Master Mete-R-Matic Top Dresser is the only machine that drives top dressing materials down to the base of the turf. Exclusive rotating brush action does the job like nothing else. Capable of spreading at the rate of 225 feet a minute.

The Sod Master Edge-R-Rite cuts a strip—both vertically and horizontally. Twelve times faster than by hand. And it takes but one man to efficiently operate. Suddenly areas around sand traps, walks, driveways, tree bases and shrubs are cut to perfection.

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play courses. Too many don’t realize this and account for unnecessarily high costs of golf. The general management idea is a fine theory but depends on who knows what and how much in general about golf business operation.

Recently I heard of one case where a general manager of a golf club was told by the directors to cut expenses. He was primarily a restaurant man. He promptly eliminated Green Section visiting service cost. The club’s superintendent had inherited an old, badly built course, mismanaged for years. Suddenly it went real sour. Maybe the Green Section consultation would have helped prevent the costly damage, maybe not. Anyway, loss of play, members’ opinion of club management and slump in house and pro shop business cost much more than the Green Section service.

Green Section visiting service subscribers decreased in 1970 by 117 from 1969. There were 839 subscribing courses in 1970. The USGA had 2,227 regular and 360 associate clubs of 18 holes and larger in 1970 and a total membership of 3,830. Only 839 subscribing courses out of 2,277 18-hole and larger clubs, each spending from $65,000 to $125,000 a year on course maintenance is a dangerous indication of poor business management. Whether the fault is that of golf club officials or of Green Section officials in not doing a good selling job calls for some realistic skull-searching.

There was a time when superintendents resented Green Service, thinking it might be regarded as suspicion of the superintendent’s ability. That attitude vanished as superintendents became more confident of themselves and more conscious of their heavy responsibilities. Superintendents began calling for all the highly competent consultant help they could get. At the GCSAA conference at Denver, superintendents pointed out that in most cases of the best maintained course superintendents made valuable use of the Green Section’s experts, and club officials recognized the service as an indication of top-grade management of the course.

Bob Westfall now professional at Lorenze (Tex.) CC . . . Marshall Cain leaves assistant post at Haggin Oaks course, Sacramento, Calif., to be professional, at Perkins Golf Center . . . Frank Sosch, Elmira (N.Y.) CC veteran professional, is new president PGA Seniors, succeeding Denny McGonagle. Harry Pezzullo of Mission Hills CC, Northbrook, Ill., is first vice president; Ray Hill, Hillcrest CC, is second vice president and Don Soper, Royal Oak (Mich.) GC is secretary/treasurer.

Joe Schwendeman, ex-Philadelphia sports writer, who’s done great work for PGA’s TPD players and Joe Dey as publicity director now is PGA executive secretary under Dey. He succeeds Fred J. Mock, who’s become tournament manager of the Liggett and Myers Match Play championship, new on the 1971 schedule . . . John Ross, formerly GOLF Magazine editor and head of Golf Promotions, now is TPD public information director.

Frank Gilholm came out from St. Andrews 47 years ago to a pro golf job in the States. Highland CC, Attleboro, Mass., recently gave Frank a grand party celebrating his 41 years as pro at that club . . . Pat Schwab gets the pro job at the new Playboy Club course at Great Gorge, N.Y., designed by George Fazio to be built this summer.

Ten good reasons you should Recommend Golden Ram!

1. It has the liveliest center of any golf ball made. Out-of-bounds liquid centers by as much as 50%.
2. The Golden Ram has maximum high-tension windings.
3. It features a Du Pont Surlyn "A" cover that simply will not cut.
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8. Its outstanding construction provides a crisp "click" and distance equal to, or better than any ball made.
9. The Golden Ram must pass more tests (Air-cannon, initial velocity, compression, rebound, extreme temperature, etc.) than any other ball.
10. The Golden Ram is field tested and played in tournaments by many of the leading touring and home Professionals.
A hard look at financial realities

Golf courses are being squeezed from several fronts. Taxes are up. Income tends to be down. Costs of equipment and services are up. Spending among unemployed executives, who are normally high salaried, is down. Many articles have been published that document details behind these oversimplified statements.

The hard facts are that the total situation means "belt-tightening" on the part of the golf course superintendent. He will be expected to maintain high-quality turf as usual, but his budget may not be approved to cover the higher costs of operation. Not all clubs will be affected equally. For those that are feeling the squeeze, there may be some guidelines that will help them weather the storm.

Reduce water use. It must be conserved and recycled. Less frequent irrigation will result in less frequent mowing.

Introduce drought-tolerant grasses. It is one thing to introduce these grasses, it is another to manage them properly. Overwatering has reduced turf quality in countless cases. Golfers like to hit controlled golf shots. I recall vividly hitting golf shots years ago with Al Watrous and the late Horton Smith in the Detroit area. Both men preferred unwatered fescue turf for playing a controlled shot. They did not care whether the grass was brown, yellow, black or green—they wanted primarily close-cut firm turf.

Our principal fairway grasses are, in the main, drought tolerant. Bluegrass and bermuda can survive for weeks without supplemental irrigation particularly if the grass is well nourished.

Return to nature. I cannot believe that every weed from fence to fence has to be killed to provide enjoyable golf. Many lovely wildflowers have been destroyed by all-out weed control programs. Many sloping areas out of the line of play can be seeded to ground covers that require no maintenance. One superintendent asked, "Will golfers accept this?" My answer was to the effect that they will have little choice and that they might be pleasantly surprised.

This brief discourse is only a beginning. I've made no pretense at completeness. Much more will be written on these subjects in the months to come. Hopefully my readers will contribute their ideas so that we can plan future guidelines.

Less artificiality, more naturalness

Q:—At Penn State I recall hearing you talk about turf in South Africa and that almost without exception the turf is composed of some type of bermudagrass (Cynodon). You said that the turf is dormant and brown during the winter months and that little, if any, over-seeding with cool-season grasses is done. Don't golfers object to the brown color of the turf? Do they play the year around?

A:—There is little or no over-seeding done. There is golf activity 12 months of the year. The players are used to the fast brown turf and they voice no objections that I could determine. There does not seem to be the demand for such a high degree of perfection as there is in the United States, yet everyone seems to enjoy his game. There is less artificiality and more naturalness.

Q:—I would like to increase the supply of magnesium in my putting green soils. What method would you suggest? I have nine holes that are two years old which test "good." The greens on the old nine that are 10 years old test "medium." The pH is perfect.

A:—The best and most economical source of magnesium is dolomitic limestone that has a high magnesium (Continued on page 29)
Step 1 in the Du Pont TERSAN® 1-2-3 Total Disease Preventive Program

Spray now with TERSAN® LSR to stop spring turf diseases before they start.

Leaf spot problems caused by over-wintering spores of Helminthosporium spp. can be stopped. So can Rust and Rhizoctonia. Non-mercurial TERSAN LSR, applied right now, is the specific fungicide to use. TERSAN LSR will stop the Helminthosporium spp. cycle before it starts.

TERSAN LSR is the first fungicide you use in a season-long Du Pont turf program that prevents troublesome diseases... on tees, greens and fairways. The Du Pont TERSAN 1-2-3 Total Disease Preventive Program is effective, economical and all non-mercurial. Proven at experimental stations and on many golf courses around the country, TERSAN LSR, TERSAN 1991 and TERSAN SP prevent or control all major turf disease problems.

For full information on the new Du Pont TERSAN 1-2-3 Total Disease Preventive Program, just call your golf course supplier.

With any chemical, follow labeling instructions and warnings carefully.
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Why is it a 4-Wheeler?
A leading insurance authority predicts an end to the 3-wheel golf car by 1975. The 4-wheel CAROCHE outperforms a 3-wheeler, with greater safety and stability. Lighter than most 3-wheelers, it costs about the same. And its sturdy aluminum frame and fiberglass body will never rust, corrode or need painting.

Why is it electric?
Congress has set 1975 as the deadline for eliminating harmful exhaust from cars. The electric CAROCHE will go 36-54 holes on hilly courses, without the pollution, smoke, noise, odor or fire hazard of gas cars. In addition, independent studies have proven electric vehicles cost considerably less to operate and maintain than those powered by gasoline engines.

Why is CAROCHE ahead of its time?
When CAROCHE was introduced in 1970, it caught the golf car industry by surprise. For instance, it was the first golf car to employ both automotive type hydraulic wheel brakes and a mechanical braking system on both rear wheels. It was the only golf car available with supplementary bag racks—easily attached or detached at rental points—enabling it to carry either three or four bags. Its combination of lightweight, compact size and easy serviceability made it an instant winner with fleet owners. And how do you make the best even better?

That's the story for CAROCHE in 1971.

Why don't you at least ask for a demonstration?
Some golf cars will have obsoleted themselves by 1975. CAROCHE may be as much as a decade ahead of its time. Write or call today for a free demonstration of the golf car of the future — CAROCHE.

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content. You say that your pH is perfect which indicates that you may not need to apply limestone at this time. This will give you time to locate a source of high magnesium dolomitic limestone ready for your next application. My feeling is that with reading of "medium" and "good" you do not have a problem of magnesium deficiency nor are you likely to have one in the near future.

Less costly greens

Q—Anticipating some curtailment in operating expenses, several of us have been discussing the possibility of some other grass for putting greens than bent or bermuda. Didn’t you write once about some zoysia greens in the Washington, D.C., area? What kind of zoysia is it and are those greens less costly to maintain? Do they satisfy the golfers? (Virginia)

A—The putting greens at the Naval Ordnance Lab near Washington are Meyer (Z-52) zoysia. They were installed in 1948 to 1949 as the result of a request for greens that could be maintained at low cost. Several years ago Ed Ault redesigned and relocated some holes that were dislodged because of highway construction. The new greens were Meyer zoysia. Those people wouldn’t have anything else now. They are mowed at one-fourth inch whenever they need it. Very little irrigation water is used. No pesticides have been used to my knowledge. Slow-release fertilizer maintains reasonable color and slow steady growth. You have to see them and putt on them to believe them.

Q—We are studying about what kind or kinds of grass to plant in the roughs of our new course. Someone mentioned weeping lovegrass as a possibility. What would be your opinion? Our soil is on the sandy side. (Tennessee)

A—Weeping lovegrass (Eragrostis curvula) could be very good choice for your roughs. I saw a lot of it in golf course roughs in South Africa, which is its native habitat. It makes a bunchy clumpy turf which exacts rather severe penalty. It is extremely drought tolerant and singularly free of insects and diseases. It grows well on extremely poor soils and can tolerate occasional mowing. The seed is very small and usually not more than five to 10 pounds per acre are required. It is used extensively on high-slopes and in combination with lespedeza and crownsvetch through a large part of the South and as far north as Maryland.

Q—We have sodded our tees with Warren’s A-20 bluegrass. Should we remove the clippings? What is the best mowing height? What is a good level of nitrogen feeding? (Maryland)

A—Yes, remove the clippings by all means. Mow regularly at three-quarters inch except for a three-foot wide strip in the day’s teeing area; mow this at one-half inch. Maintain nitrogen levels the same as for Merion, at about six pounds nitrogen per thousand square feet for the season. Balance nitrogen with approximately equal quantities of potassium sulfate of potash. Maintain pH at 6.7 to 7.0; keep the phosphorus level low with a once-a-year fall application of 20 per cent superphosphate. Irrigate as needed.

DuPont discontinues Corfam

Plagued by insufficient sales volume, DuPont has announced plans to discontinue the manufacture and sale of Corfam, a material used extensively in golf shoes and to a lesser degree in golf bags.

Cut mowing time in half around greens and traps

National Triplex mowers cut 68 and 84 inches wide, several times the width of a hand-propelled trimmer mower. But they maneuver sharply, climb banks, cut on hillsides. You get the advantages of a wide cut, with small-mower neatness, do a precision job without skips or scalping.

Reels reach over to trim the edges of traps and they’re free-floating to dip down in hollows and climb over ridges. Trim close around trees and hazards, cut through heavy growth on roadsides.

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COMING EVENTS

Florida Turfgrass Trade Show, Sarasota Motor Hotel, Sarasota, Fla., May 9-12.


Southern California Turfgrass Institute, California Polytechnic Institute, Pomona, Calif., May 18-19.

2nd Annual Georgia GCSA/University of Georgia Turfgrass Short Course, Center for Continuing Education, University of Georgia, Athens, Ga., May 23-25.


Landscape Architects' Field Day, Cole Nursery Company, Inc., Circleville, Ohio, August 11.


Alabama-Northwest Florida Annual Turfgrass Short Course, Auburn University, Auburn, Ala., September 19-22.


Midwest Regional Turf Foundation Field Day, Purdue University, Lafayette, Ind., September 27.