Introducing our all-new golf car batteries. We've gone to great lengths to make sure they'll go the distance.

Longer.

All golf car batteries look alike on the outside, but inside there's a big difference.

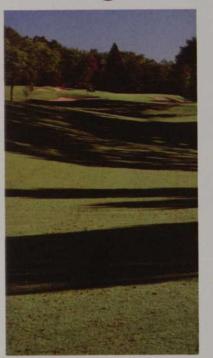
This year, we completely redesigned and improved our Action Pack electric vehicle batteries. To give you more mileage, longer life, and an even better value for your battery investment.

No course is too tough for them.

Heat and hills are no problem for these batteries. They'll take everything your course and Mother Nature can dish out. And bounce back to maximum available capacity, charge after charge. Round after round.

Our secrets of longevity.

Inside, we gave our batteries new PVC fiberglass mat separators for greater service life and less internal resistance. Thicker plates and high-density oxide for improved cycle life. Increased electrolyte above the plates, to reduce the chances of low water-level failure. And unique gridalignment lugs that lessen the possibility of premature shorts.



In all, they're the longest lasting 6-volt electric vehicle batteries we've ever made. And further proof that at Gould, up to par isn't good enough.

MAIL TO: Gould, Inc. P.O. Box 43140 St. Paul, MN 55164 Attn: Mark Stump
Yes, I'd like to know more. Please send me your complete Action Pack electric vehicle brochure.
NAME
NO. OF GOLF CARS IN FLEET ADDRESS CITY STATE
Or call us, (612) 681-5188 _{GB 011}

Committed to making batteries better than ever.



Presenting the for your

Options include reel shut off kit, quick height of cut adjustment, 3 rollers, comb, brush/scraper.

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Greensmaster 3

Isolated cutting heads give each green uniform cutting height, appearance, playing characteristics.

> Spiral thatching blades for more efficient thatching and throwing into baskets.

Quick disconnect reel motor means easy change to spiking or thatching reels.

Turf Pro 84

Reversible reel motor permits "backlapping" for reduced sharpening frequency.

Hydraulically powered reels and wheels eliminate belts and gears.

> For your greens, our Greensmaster 3th still has no equal. Because no other greensmower has cutting heads isolated from the traction unit and grass baskets.

And meet our Sand Pro*

All wheels are drive wheels for excellent traction and maneuverability.

Reels with independent suspension follow ground contour, improve quality of cut.

You're concerned with not only the appearance of your course but every facet of its playability.

So we're letting you in on some ways we engineer turf care products with you in mind. Consider this Toro foursome of Professionals. Our Turf Pro 84™ is an all hydraulic triplex with the ability to give you the right clip for each desired height of cut and type of grass.

Toro Professionals course.

HTM-175"

Exclusive reel couplings mean more freedom to follow ground contour for finest quality cut.

TORO

Gentler on the grass with custom designed reel units that weigh 110 lbs. less than our wheel drive gangs.

Reliable 4cylinder diesel engine with 236 cubes of lugging power for hills and heavy cutting.

Simpler to drive with automotive steering out front. Minimizes operator training.

Maneuvers completely around in its own length for raking traps and tight 'peninsulas".

Sand Pro

The only trap rake with total hydraulic power. Plus the lower upkeep, longer life and superior performance that go with it.

à

Q,

Finally, the ultimate in precision. Our HTM-175TM Its superbly balanced cutting units can match the needs of your course with a smooth, exacting cut down to % of an inch. Want to know more?

Call your Toro distributor. He's a professional, too.

Write 130 on reader service card

TORO.

The Professionals The Toro Company, 8111 Lyndale Ave. So., Minneapolis, MN 55420

See us at the GCSAA Convention island 150



TWO GREAT GAMES ONE GREAT GRASS

Super Bowl XIV and the Rose Bowl classic were the great games. The turf? That was Derby Turftype perennial ryegrass.

Derby was selected by George Toma, the man responsible for the Super Bowl XIV turf and Gus Huntly, turf manager for the Rose Bowl game, because of the special requirements for these special games.

Toma and Huntly wanted a fast-germinating, dark-green, handsome grass as well as one tough enough to take a pounding and still look great for the television cameras.

And Derby did it all. Of course, it will do more. It mows beautifully and thrives when cut at $1\frac{1}{2}$ inches or at 3/16 inch on golf greens. In Southern areas it's a top choice for winter overseeding of golf greens.

Derby is also a great mixer, combining with the fine fescues and bluegrasses to form an outstanding turf.

HERE'S WHAT DERBY WILL DO

- Persists in heavy, compacted, poorly drained areas where traffic is not intense
 - Tolerates a wide range of soil types from heavy clay to sandy
 - Retains its deep green color during chilly Southern winters
 - · Germinates in less than a week under ideal conditions
 - Thrives when cut to 3/16, 1 inch or 11/2 inches
 - Mixes nicely with fine fescues and bluegrass

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Program: 52nd GCSAA Conference

GCSAA, Speakers and Topics SATURDAY AND SUNDAY

- Nutrition Seminar
- Instructors: Dr. Robert Shearman, Dr. Thomas L. Watschke, and Dr. James B. Beard

- Meets 8 a.m. to 5 p.m. Saturday and Sunday, Jan. 24 and 25.
- Disease Seminar Instructors: Dr. Houston B. Couch and John F. Shoulders
- Meets 8 a.m. to 5 p.m. Saturday and Sunday, Jan. 24 and 25.
- Insect Seminar
- Instructors: Dr. Harry Niemczyk and Dr. James A. Reinert
- Meets 8 a.m. to 5 p.m. Saturday and Sunday, Jan. 24 and 25. Irrigation Seminar
- Instructors: Bill Speelman and David D. Davis
- Meets 8 a.m. to 5 p.m., Saturday and Sunday, Jan. 24 and 25. Management Seminar Instructor: Ronald C. Frame
- Meets 8 a.m. to 5 p.m. Saturday and
- Sunday, Jan. 24 and 25. Cardiopulmonary Resuscitation Seminar
- Instructor: Orange County Heart Association
 - Meets 8 a.m. to 5 p.m.
- Meets o a.m. to 5 p.m. Saturday, Jan. 24 or 8 a.m. to 5 p.m. Sunday, Jan. 25 Photography Seminar Instructors: George S. Butt and Gary Whelpley Meets 8 a.m. to 5 p.m.

- Meets 8 a.m. to 5 p.m. Saturday, Jan. 24, or 8 am. to 5 p.m. Sunday, Jan. 25

Thinking Superintendent— Meeting the Challenge

- Session Chairman:
- James W. Timmerman, CGCS
- 1:30-1:45 p.m. Building a Solar Greenhouse, Mark G. Fuller 1:45-2 p.m. Color on the Golf Course,
- **Ronald Pecoff**
- 2-2:15 p.m. Heating Greens for Early Spring Start, Sidney E. Puddicombe 2:15-2:30 p.m. Irrigation System Maintenance, Dan Jones, CGCS 2:30-2:45 p.m. Recovering from

- 2:30-2:45 p.m. Recovering from Hurricane Damage, William M. Norris, Jr., CGCS 2:45-3 p.m. Fairway Renovation of Cool Season Grasses, Gerald L. Faubel
- 3-3:15 p.m. Having a Purchasing Agent, Thomas J. Burton 3:15-3:30 p.m. Golf Course Personnel

- Management, Fred Reese 3:30-3:45 p.m. Employment Opportunities and Your Personal Goals, William L. Burdick
- 3:45-4 p.m. Certification—A Controversy, A Viewpoint, A Tool, Stephen K. Gipson, CGCS 4-4:10 p.m. Half Cut Greens, J
- John Souter
- 4:10-4:20 p.m. To be announced

TUESDAY

- The Researcher's Challenge
- Session Chairman: C. Richard Skogley 1-1:15 p.m. Ophiobolus Patch: An Increasing Turf Disease Problem,
- Increasing Turf Disease Problem, Noel Jackson 1:15-1:30 p.m. Use Patterns for Systemic Fungicides in the Control of Turfgrass Diseases, Houston B. Couch 1:30-1:45 p.m. Water Conservation Research with Turfgrasses, William R. Kneebone 1:45-2 p.m. Coping With Turfgrass Heat Stress, Robert Shearman 2-2:15 p.m. Root Die Back/Preliminary Cultural Effects on Ball Roll, James B. Beard

- James B. Beard
- 2:15-2:30 p.m. Impact of Volcanic Ash on Turfgrasses in the Pacific
- Northwest, Roy L. Goss 2:30-2:45 p.m. Comparisons of Poa Supina, Annua, Pratensis,
- Supina, Annua, Pratensis, William Daniel 2:45-3 p.m. Nitrogen Sources for Turf Maintenance, Victor Gibeault 3-3:15 p.m. Frequent Sand Topdressing Up-date, John H. Madisen 3:15-3:30 p.m. Wetting Agents— What's the Difference?, Paul E. Rieke 3:30-3:45 p.m. Nortron for Poa Annua Control, Ray Dickens 3:45-4 p.m. Electrostatic Pesticide Spraying of Turfgrass. S. Edward Law Efficiency in Ornamental Pest Control

- Spraying of Turfgrass. S. Edward L
 Efficiency in Ornamental Pest Control
 Session Chairman: Donald J. Pakkala, CGCS
 1-1:20 p.m. Northern Climate Insect Control, David G. Nielsen
 1:20-1:30 p.m. Question and Answer Period
 1:30-1:50 p.m. Southern Climate Insect
- 1:30-1:50 p.m. Southern Climate Insect Control, James A. Reinert
- 1:50-2 p.m. Question and Answer Period 2-2:20 p.m. Northern Climate Weed 2-2:20 p.m.
- Control, Clayton M. Switzer 2:20-2:30 p.m. Question and Answer Period
- 2:30-2:50 p.m. Southern Climate Weed Control, Clyde Elmore
- 2:50-3 p.m. Question and Answer Period 3:30 p.m. General Disease Control,
- Noel Jackson
- 3:30-3:45 p.m. Question and Answer Period
- 3:45-4 p.m. General Question and Answer Period
- WEDNESDAY

- Efficiency Through Planning Session Chairman: James G. Prusa 9-9:30 a.m. Organizing Multiplex
- Maintenance, Richard L. Lemmel
- 9:30-10 a.m. Pon Kent W. Kurtz Pond Management,

- 10-10:30 a.m. Water Wasted to Air, M. Kate Williams 10:30-11 a.m. Let's Not Plant a Problem, Douglas J. Chapman

- 11-11:30 a.m. Effective Report Writing James W. Timmerman, CGCS 11:30 a.m.-12 Public Speaking,
- H. A. Richardson **Efficient Management**
- Session Chairman: Tom Burrows 9-9:30 a.m. Pesticide Use From an Historical Perspective,
- William A. Harvey 9:30-10 a.m. Update on RPAR Registration, Warner H. Anthony 10-10:30 a.m. Care of Reel Mowers, Robert Krick

- KODERT KRICK 10:30-11 a.m. Hydraulics—A Power Source, A Labor Saver, Chuck Alsdurf 11 a.m.-12 Fitness for Busy People— The Answer to Rising Medical Costs, Ronald E. Useldinger THURSDAY

Meeting Our Challenges in the '80s USGA Green Section Educational Con-

- ference ference Session Chairmen: Stephen J. Horell and Alexander M. Radko 9-9:15 a.m. Welcome and Introductions, Stephen J. Horrell 9:15-9:40 a.m. Quality Playing Conditions Every Day, Robert V. Mitchell, CGCS 9:40-10 a.m. Efficient Use of Our Natural Resources, Melvin B. Lucas, Ir., CGCS

Melvin B. Lucas, Jr., CGCS 10-10:20 a.m. Designing Golf's Challenges for Economy and Maintenance, Richard M. Phelps 10:20-11:05 a.m. Quality Playing

Quality Playing Conditions and Budgeting, C. William Black, CGCS Quality Playing Conditions and Proper Equipment, Richard H. Eichner, CGCS

Richard H. Eichner, CGCS 11:05-11:45 a.m. Experience from the Field and Quality Playing Conditions North—Stanley Zontek Southeeast—James B. Moncrief Southwest—Dr. Douglas T. Hawes East—William G. Buchanan III West—Don D. Hoos 11:45 a.m.-12 USGA Green Section Award Presentation

Award Presentation

Charles White

Award Presentation 2-2:30 p.m. A Breakthrough—New Spray Techniques for the '80s, Edward C. Law 2:30-2:45 p.m. GCSAA Citation of Performance Presentation 2:45-3:05 p.m. Quality Playing Conditions—The Chairman's Challenge, George Thwing 3:05-3:30 p.m. The Challenges of Industry Hills, William H. Bengeyfield 3:30-4 p.m. Conditioning the Golf Course; Grooming the Putting Surface, James T. Snow Fertility-Low Levels of Nitrogen,

Fertility-Low Levels of Nitrogen,

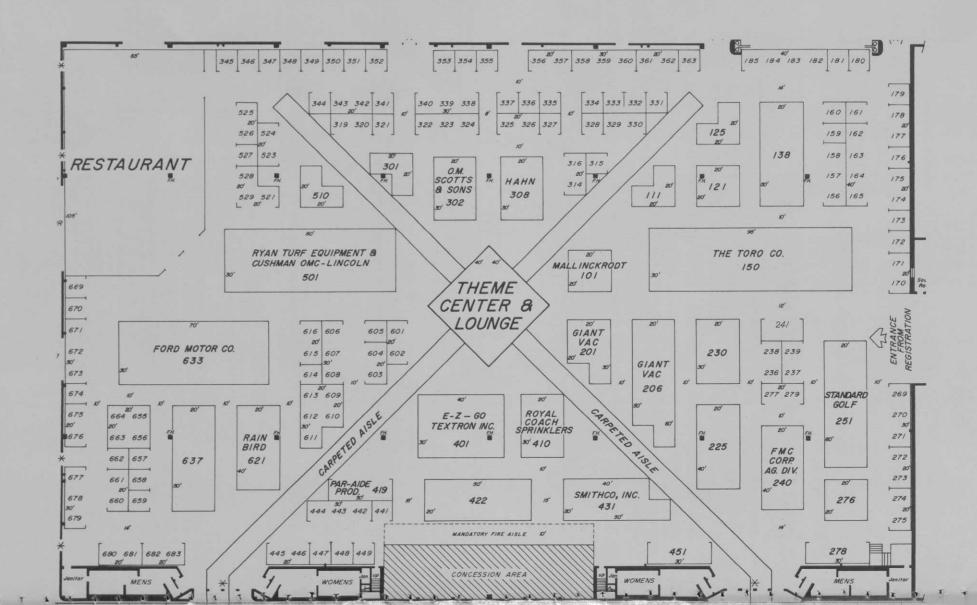
4 p.m. Question and Answer Period

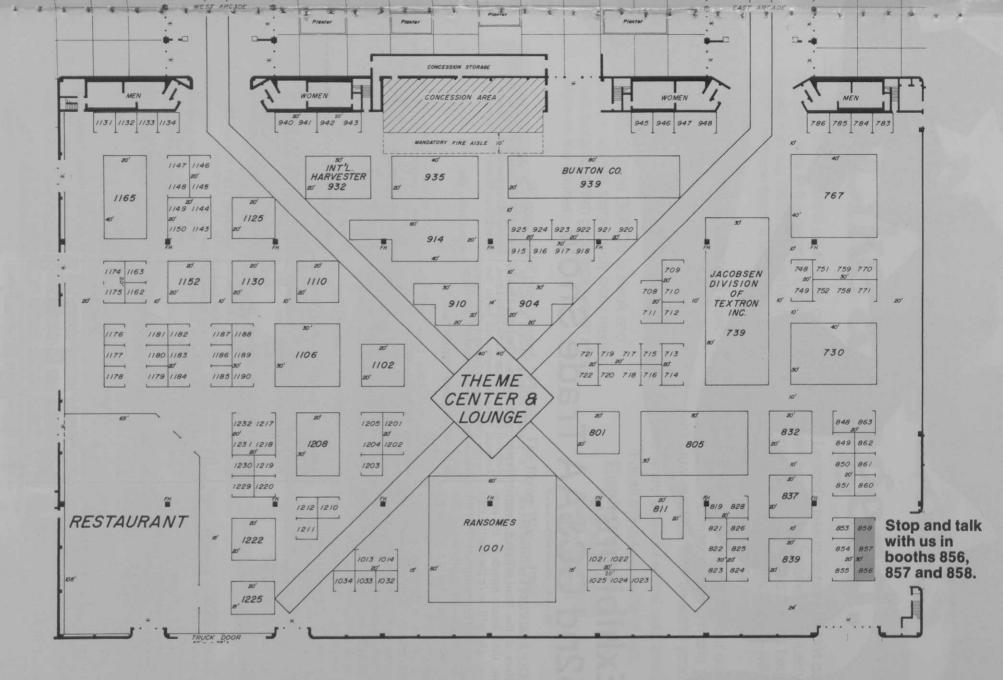
Tim Ansett Little Things That Count, William S. Brewer The Stimpmeter—A Management Tool, Patrick M. O'Brien Water Use and Energy Conservation, Charles White

Golf Business/January 15

Conditions and Priorities. Edward C. Horton, CGCS

Floor plan: 52nd GCSAA Trade Show





Anaheim Convention Center, Anaheim, California

Exhibitors: 52nd GCSAA Trade Show

GOLF BUSINESS has listed the exhibitors at the 52nd GCSAA Trade Show, their booth numbers, the personnel who will be in the booths, and the products and equipment that the companies will be exhibiting(to the best of our knowledge at press-time). A floor plan is located on pages 16 and 17. Because the show will cover approximately four and one-half acres this year, it is essential to plan your time and visits so that you see whom you want to see. By getting business out of the way first, there will be plenty of time to stroll and enjoy all the fine equipment and products that are being displayed.

A-1 Turf Irrigation Sales, Inc. Booth 660, 661 Write 792 on Reader Service Card

AMF/Harley Davidson Motor Co., 3700 West Juneau Ave., Milwaukee, WI 53201 Island 230

Harley-Davidson will be exhibiting three- and four-wheel cars, gas and electric, including their Classic America limited edition model.

Personnel attending: Tom Duffey, Mgr./Prod. Mktg., Dick Gaedke, Gen. Sales Mgr.; George Hollander, Hugh Rawlings, Mike Stapleton, all district sales personnel, along with engineering and service staff.

Write 701 on Reader Service Card

Advanced Drainage Systems, Inc., 330 Riverside Dr., Columbus, OH 43221 Booth 160 F. J. (Bill) Palacek, Market Manager, Commercial Sales, Carl Hedlund, Regional Sales Manager, and Mike Love, Regional Sales Manager, will be in the booth exhibiting Advanced Brainage's corrugated polyethylene plastic drainage tubing

tubing. Write 702 on Reader Service Card

American Pelletizing Corp., P.O. Box 3628, Des Moines, IA 50322 Booth 1220

Marv Zelibor will be in the booth exhibiting Reveille limestone pellets, gypsum pellets and dolomitic limestone pellets.

Write 294 on Reader Service Card

American Society of Golf Course Architects Booth 1023 Write 793 on Reader Service Card

AMETEK/Plymouth Products Div., 502 Indiana Ave., Sheboygan, WI 53081 Booth 659

Ed Knauf, Bill Kreisa and Ken Lasky will be in the booth exhibiting Ametek's line of Turf Irrigation Control Boxes with Evergreen Covers. Write 703 on Reader Service Card

Cal-Turf, AMFAC Garden, 2186 Knoll Dr.,

Ventura, CA 93006 Booths 1131-1132 Wm. Flannigan will be in the booths exhibiting stolons and stolon planting ser-

vices. Write 803 on Reader Service Card

The Andersons, P.O. Box 119, Maumee, OH 43537 Booths 177, 178

Bob Scobee, Doug Masters, Roger

Brown, Darrell Johnson and Mike Bryant will be in the booths exhibiting fertilizer and fertilizer pesticide products. Write 295 on Reader Service Card

Aquashade, Inc., P.O. Box 198, Eldred, NY 12732

Booth 176

Billie Wilson will be in the booth exhibiting Aquashade which controls aquatic weeds by reducing light level. Write 704 on Reader Service Card

Aquatrols Corp. of America, 142 Union Ave., Pennsauken, NY 08110 Booths 314, 316

Robert A Moore, President, Edward A. Oberright, Director of Research, Demie S. Moore, Director of Marketing and Sales, and Jerry Curtis, Southwestern and Western representative, will be in the booths exhibiting Aqua-GRO "L" and Aqua-GRO "S" wetting agents. Write 705 on Reader Service Card

AquaTurf, 11363 San Jose Blvd., Jacksonville, FL

Booth 605

R. K. Curley, Charles Patrick, and W. Dawes will be in the booths exhibiting AquaTurf's programmable Pumping System with a "brain". Write 706 on Reader Service Card

Ashland Chemical Co., P.O. Box 2219, Columbus, OH 43216 Booth 1212

Write 796 on Reader Service Card

Atwater Strong Co., 6284 Waterloo Rd., Atwater, OH 42201 Booths 269, 270, 271

Continues on page 23

Grey background indicates a January advertiser.

Nothing Lasts Like a Legend.

Legend is the newest idea in golf cars. The best idea of the decade. Legend's award-winning Reaction Injection Molded (RIM) Urethane body is the toughest on the market.

So strong, it's able to withstand most impact without damage. So tough, it resists nicks and scrapes. So durable, it won't rust or corrode. And only Legend has it.

The new Legend Golf Car is sleek and sporty — and its extra-sturdy body means it will keep its stylish good looks even after years on the course. But, Legend's beauty is not just skin deep. Its well-engineered features and quality components are designed to keep Legend running smoothly and efficiently — with a minimum of maintenance.

Put the tough new Legend on your course today, for performance, strength and good looks that last year after beautiful year.

Three-wheel and four-wheel cars available.

For all the details, write or call:

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