

DO PLANTS RESPOND TO LOVE?

To this question there are those who will answer emphatically and unequivocally, "Yes!" High school students repeatedly in science fair projects have subjected various types of plants to "thought waves" and to "sound waves." One set of plants, assaulted and bombarded with raucous rock and roll at high decibel levels, grew stunted and unthrifty. Another equal set heard only calm, soothing music (Brahms, Mendelssohn, Stravinsky and others). Reports indicate that the calm "loving" music produced more robust, healthier plants that bore flowers and fruit profusely.

Other projects report on the effects on plants of the human voice and mental attitude of the gardener. One set of plants was subjected to harsh, coarse voices. An equal set "heard" soft, loving voices and received tender loving care. Again, love conquered; the plants produced abundant flowers and fruit.

I would have a hard time finding these references again among all the various magazines I read voraciously. What I have synopsized above accurately describes the information I have gleaned from authentic publications.

Occasionally, I accept a reading assignment that is so difficult I must keep my dictionary open at my side. Such a book, which I've only read once (but will re-read many times), is "The Delicate Creation, Towards a Theology of the Environment" by Christopher Derrick, published by Devin-Adair. In the book the author suggests that 20th century man contains within himself a tendency toward an ancient heresy (Manichaean), which views the world and environment as evil and hostile and nature as an enemy (hate). He suggests, for the good of man's future, that man replace this hostility with a "cosmic piety" (love). This view acknowledges the world as good and lovely, as something to be loved and cherished, although it may cost man something in material comfort and economic expansion. A workable "cosmic piety" might give all of us a chance to sit quietly, get our breath back and discover peace, quiet and the human value of friends and neighbors. Perhaps the hard-to-read brilliance of Derrick and his "cosmic piety" does have something in common with the science fair students' experiments.

Before the environmental crisis destroys all of us, certainly we will lose nothing if we develop a calm, quiet loving approach to nature. I believe most of my friends in turf practice "cosmic piety" without being aware of it. Our rare and fragile home, earth, has not yet been destroyed. With our help, it may yet be renewed.

O—We have an area (tee size) adjacent to one of our teeing areas that is continuously saturated. There is no good way to drain it. We think there may even be a spring there. Our mowers frequently get bogged down. It's an eve sore. Do you have any suggestions? (Pennsvlvania) A-Yes, capitalize on the continuous supply of moisture. Stop trying to grow and mow grass and convert the "eye sore" into a beauty spot by growing wetland and bog plants for beauty, interest and utility. Space the plants and identify them with suitable modest markers. Tell your members through continued on page 12

A Most Economical Fine-Bladed Grass **Highland Colonial Bent**

Always in steady economical supply, Highland Colonial Bentgrass is an attractive blue-green fine bladed grass with a variety of strengths.

Durable under heavy foot and vehicle traffic, it is known the world over for its ability to thicken and heal scars on playing surfaces.

Adaptable to varying soils and climatic conditions, it is ideally cut at ³/₄ inch, but will also thrive on close-cutting to ¹/₄ inch.

A slow-growing grass, Highland Colonial Bent is attractive in unmowed roughs. A winter-hardy grass, Highland retains good color in winter and is durable under heavy foot and vehicle traffic.

> FREE INFORMATIONAL BROCHURES AVAILABLE Dept. A

Highland Colonial Bentgrass Commission

Suite One, Rivergrove Bldg. 2111 Front St. N.E. Salem, Oregon 97303

For more information circle number 183 on card 1/73 GOLFDOM MAGAZINE 11

GOLF BAG STORAGE RACKS



TRADE

MARK

38 YEARS IN BUSINESS Call Collect 301-322-3900 **Or Write For Free Literature**

INSTALLATIONS INCLUDE:

Chevy Chase C.C., Chevy Chase, Md. Congressional C.C., Bethesda, Md. Garden City G.C., Garden City, N.Y. Dunbar C.C., Lake Arrowhead, Calif. Scarsdale G.C., Hartsdale, N.Y. Royal Poinciana G.C., Naples, Fla. Longboat Key C.C., Sarasota, Fla. Woodbridge C.C., Woodbridge, Conn.

IMPROVE BAG STORAGE BEST BY TEST

WE DESIGN YOUR LAYOUT-ECONOMICAL-EASY TO ASSEMBLE HEAVY DUTY FURNITURE STEEL NO OTHER PARTS TO BUY-



ACME IRON WORKS, INC. 4900 Frolich Lane, Kenilworth Ind. Park Tuxedo, Md. 20781



GRAU from page 11

the club bulietin what you are doing in the name of ecology. Convert your liability into a humaninterest asset and save the cost of maintenance.

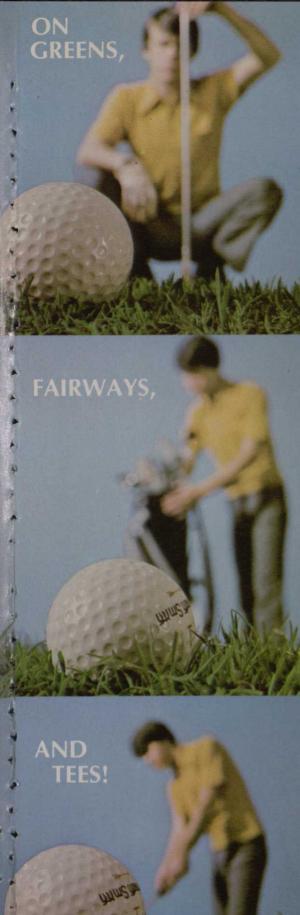
Here's a partial list of wetland type plants for a starter: ferns, bulrush, sedge (Cyperus spp), cattail, hibiscus, pitcher plant, swamp maple, corkscrew, willow, saggitaria (arrow-leaf), calamus (sweet flag), skunk cabbage, mint, watercress, jewelweed, marsh marigold, Venus flytrap.

With the help of the National Arboretum, I am compiling a more comprehensive list. Good luck, and let me hear from you.

Q-Many superintendents have mixed natural organic materials with their moist compost to produce heat which kills weed seeds and provides clean topdressing material. When these same materials are applied to putting greens during cold, wet weather, there is no response. Do they lie there in "cold storage" until suitable temperatures occur? Sometimes there are multiple applications made to try to get a response. Would an application of a quick-acting soluble be advisable to get things going? When the weather turns hot and wet. is there a possibility that, in the micro-climate of the greens, we might have a miniature "compost pile" with development of heat (and rapid release of nitrogen) that the grass can't take? (Pennsvlvania) A-You have done some good deductive reasoning. These materials do lie in "cold storage" during cold, wet periods. The "multiple applications' act as a single application when breakdown starts. A soluble-containing material can trigger the action as temperatures rise. The development of heat is a reasonable possibility.

CORRECTION

In Dr. Grau's September, 1972, column on page 17 a mistake was made in line eight. The corrected line should read: "In reseeding (a necessity) we were advised to add Pennfine or Manhattan perennial rvegrass (two to three pounds per 1,000 square feet) to the 11/2 pounds of Penncross."



The grass that makes you look good all over...

Seed it and see. Recognized as the best grass for greens, Penncross creeping bentgrass is also best for fairways and tees. It adds beauty and reduces problems on courses wherever superintendents, greens committees and players recognize that unsatisfactory turf needn't be a part of the game.

Vigorous-starting, winterhardy Penncross creeping bentgrass – 8,368,000 certified seeds per pound. More color and density, more resistance to disease, weeds and divots.

There's no finer turf in golfing. But you already knew that . . .

PENNCROSS



Marketers for The Penncross Growers Association

For more information circle number 154 on card

FUNGO[®]-50

BRAND SYSTEMIC TURF FUNGICIDE

New Safe Turf Disease Control

Highly effective new discovery. Wide turf safety tolerance, even at higher-than-recommended rates.

Wide-spread tests show FUNGO-50 effective to prevent and control major turf diseases such as brown patch, dollar spot, fusarium blight, stripe smut, copper spot, red thread, and others. Effective as any organic fungicide known for turf disease control, FUNGO-50, is far less toxic to fine turf. Heavy overdoses have not discolored fine turf.

FUNGO-50 contains the methyl form of thiophanate, the new highly effective agent for preventing and controlling turf diseases.



BROWN PATCH

PINK SNOW MOLD



Ask your distributor for free Mallinckrodt booklet

Turf Improvement and Protection System

Mallinckrodt MALLINCKRODT CHEMICAL WORKS St. Louis Jersey City • Los Angeles • Montreal

For more information circle number 137 on card

PGA TERMINATES CREASEY PALM BEACH GARDENS, FLA.—The Professional Golfers' Assn. of America has terminated the services of executive director Robert T. Creasey, who has held the position since January 1, 1966.

The unexpected announcement was made by the executive committee of the PGA at the club championships in Pinehurst, N.C., the week of October 20th. A member of the executive committee indicated to GOLFDOM that a substantial vote favored Creasey's termination.

He indicated that Creasey had become too controversial a figure among national and sectional officials to function effectively, adding that the executive director must coordinate these officials. When someone in the position becomes controversial, the official said, he cannot possibly carry out this function, and it eventually affects important PGA business and activities.

Lloyd Lambert, executive secretary, has been named acting executive director.

Creasey was unavailable for comment.

"ACE" REWARDS FROM GAC HYANNIS, MASS.—The elusive holein-one now carries more than intrinsic rewards. A new club, called *Golfer's Ace Club*, is offering to those members who make an ace, the chance to play in the Golfer's Ace Club tournament. The tournament will be played each fall at a

commodations will be paid by GAC. Other benefits, to members include a free year's subscription to GOLF Magazine, a \$200 bar bill insurance, membership card and bag tag. Membership is \$15 a year.

top course; transportation and ac-

There also is a bonus available to the golf professional. If 25 or more of his members join, the professional gets a pair of top-of-the-line Stylist golf shoes; 50 or more, the professional receives a golf sweater, and 100 or more, the professional will be sent to the tournament, all expenses paid, as a guest of GAC.

Professionals can send for a poster and for application blanks for his pro shop to: Golfer's Ace Club, Inc., Sullivan Building, Route 132, Hyannis, Mass. 02601.

andandan Sauland. SAVE TIME—SAVE MONEY

with this COMPLETE BOLT & NUT ASSORTMENT especially designed for GOLF COURSE SUPERINTENDENTS

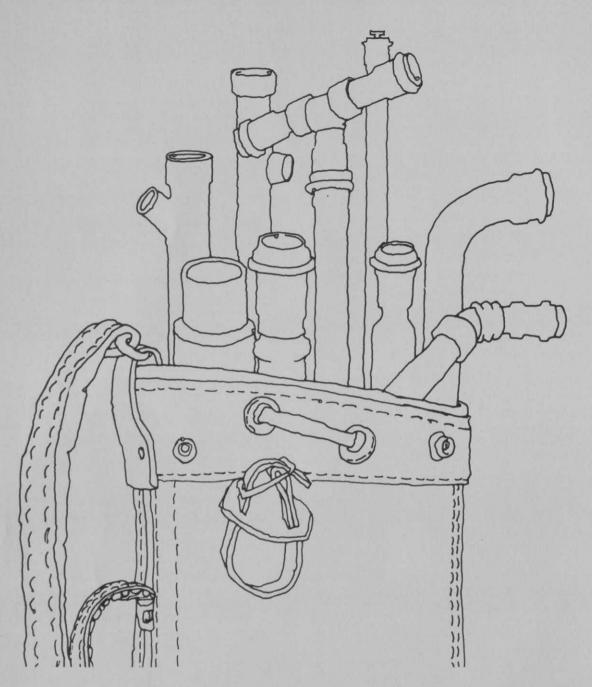
Keep your golf course equipment running and in good repair, avoid down time, mechanic's lost time, and endless trips to buy those constantly needed parts. Fine for repair of mowing units, tractors, sprayers, golf carts, tee and green accessories, club house general repairs, swimming pool and patio furniture, and countless other items. Assortment contains over 25,000 useful pieces such as bed

knife screws, bolts, nuts, screws, washers, threaded rod, sheet metal screws, cotter pins, self-locking nuts, cap nuts, wood screws, clevis pins, set screws and many others. All are ZINC GOLD CHROMATE ELECTROPLATED for corrosion resistance to golf course fertilizers and chemicals.

MID-STATE BOLT & NUT CO., INC., 1575 Alum Creek Drive, Columbus, Ohio 43207 Phone: 614/253-8631



WRITE TODAY for low prices and complete description in FREE brochure! For more information circle number 138 on card



A Golf Course Irrigation Package From The Underground Pros

Easy to install. Long lasting.

FLINTKOTE'S "Underground Pros" can provide all the pipe and fittings you'll need to irrigate and drain any golf course... and do it economically.

It's part of our pipe package, a single source concept that gives you FLINTKOTE'S installation experience plus corrosion-resistant products like FLINTITE AsbestosCement pressure pipe for large mains, FLINTKOTE Bell Joint PVC Pipe for mains and laterals, Orangeburg SP service pipe for laterals around greens and tees, and Orangeburg drainage pipe for greens, tees and other wet areas.

For more "Package" information contact the Pipe Products Division at Ravenna, Ohio 44266. We will deliver.



BUILDING PRODUCTS GROUP PIPE PRODUCTS DIVISION RAVENNA, OHIO / ORANGEBURG, N. Y. NEWARK, CALIF. / LOS ANGELES, CALIF.

For more information circle number 190 on card



Bright aloha shirts and colorful muumuus will be the unofficial dress when more than 1,300 club managers and their wives convene at the 46th Annual Club Managers Assn. of America Conference in Honolulu, Hawaii, February 13 to 17.

Cinaa

Taking advantage of the balmy climate, the exotic location and the many historical monuments on the Island of Oahu, the emphasis of the conference will be on the Polynesian culture, the people and how their climate and geographical location contributed to both. Preparation and service of food and beverage indigenous to the South Pacific will be the subject of one of the seminars.

Professor Chuck Gee of the University of Hawaii will serve participants the various fare prepared during this tasty seminar.

The major thrust of this educational highlight of the year for managers of private clubs will be on learning about the latest developments that affect their clubs. Topics include: food and beverage; taxation and legal matters; administration; marketing; developments in sports as they pertain to clubs and many more areas relevant to the operation of the club.

The conference will get under way with registration of delegates on Sunday and Monday, February 11 and 12. A golf tournament and fishing derby will also be held on Monday. On Tuesday the "Idea Fair" opens. This annual competition features entries from club managers throughout the United States who have developed innovative ideas and have put them into practice at their own clubs. Valuable information may be gained by carefully reading and studying "how other managers did it."

A new seminar has been added to the conference this year, to be held on Tuesday, February 13. Recognizing the many military members of CMAA and their special problems, this seminar will be geared to their needs.

Tuesday evening's attendees may enjoy the International Night Buffet, which will be held at the Hilton Hawaiian Village. Food from China, Japan, continued on page 18 The first easy-reference. illustrated turfgrass guidebook. A must for every turf professional.

Concise and complete . . . the ProTurf GUIDE TO GRASSES is pocket-size, contains beautifully detailed drawings and descriptions of grasses. Ringbound, with tough leatherette cover and wear resistant pages, this comprehensive handbook will provide years and years of invaluable service for anyone concerned with turfgrass.

Indexed and cross-indexed by region and major features, the Guide identifies over 60 grass varieties by color, physical characteristics, size of blade and many other details. Finely detailed drawings by Mr. Converse are included for all grass types. The ProTurf GUIDE TO THE IDENTIFICATION OF GRASSES is already being used in

GUIDE TO THE CATION IDENTIFICATION

OF GRASSES

by Jim Converse, Profin author and illustrator

over 450 colleges and universities; it is used as part of the curriculum in many of these schools. Hundreds of turfgrass professionals throughout the United States and Canada are finding it more and more indispensible every day.

If you're into grasses, in any way, you should have the ProTurf GUIDE TO THE IDENTI-FICATION OF GRASSES in your pocket. Wherever you go. It's just \$3.50. Send the coupon below, with your check, for as many as you want.

Please send me GUIDE TO THE II I enclosed my check	copies of the ProTurf DENTIFICATION OF GRASSES, at \$3.50 each. .for \$
NAME	POSITION
ADDRESS	
TOWN	STATE ZIP
	Send to: Jim Converse, ProTurf Division, O.M. Scott & Sons, Marysville, Ohio 43040 GO-1/73
	For more information circle number 164 on card
QUALITY • SERVIC	THE UNITED WAY: Thanks to you, it's working
9	
	United

CMAA from page 17

Thailand and Hawaii will be served.

The opening business session on Wednesday, February 14, will be formally called to order by CMAA President Laurice T. Hall.

Following the opening session, a Legislative and Tax Clinic will be held, conducted by Jack Janetatos, legal counsel, National Club Assn.

Wednesday's luncheon will honor those managers who have attained the Certified Club Manager (CCM) designation, past presidents and members of the 25-year club.

Thursday, February 15, three seminars will run simultaneously. Each will be presented twice in the morning and cover: Foods of the Islands, conducted by Professor Chuck Gee; Marketing Seminar, conducted by Dr. E.M. Barnet of the University of Hawaii, and Operating Systems and their Profitability, conducted by Dr. Lendal Kotschevar, food consultant for the United Nations and now a visiting professor, University of Hawaii.

Thursday's luncheon officially introduces the candidates seeking office on the board of directors. The guest speaker will be Larry Renson, vice president of the First Hawaiian Bank and a noted expert in motivation. He will lay the groundwork for a seminar on Friday.

Friday morning Professor Gee repeats his dishes for more seminar attendees. At the same time, Dr. Revel Denny, professor at the University of Hawaii, will hold a seminar: Club's Role in Modern Society. Dr. Denny is well versed on this subject. In addition, Renson will conduct his follow-up seminar.

Roundtable discussions will be held Friday afternoon. These will be presented in a new way this year. Previously divided by types of clubs, the discussions this year will be divided by subject and will be moderated by members of CMAA's Speakers Bureau. The subjects will be chosen on the basis of their application to all managers, regardless of the size or type of club they have.

Saturday morning will begin with an early breakfast seminar, followed by the closing business session in which new officers and directors will be elected and awards made.

On Sunday, the closing day, a breakfast luau beach party will be held in front of the Village.

Westinghouse tamed the Bonneville Salt Flats. 33.9 miles without recharging.

Our cars racked up an incredible 33.9 miles in a sanctioned straightaway test on the Bonneville Salt Flats.* That's 59,664 yards without recharging. How long's your course?

Westinghouse electrics deliver. Power to spare. For rugged grades. Over long courses. And they're priced right to help you make money whether you buy or lease.

Safe, too, with automotive-type brakes on both rear

wheels. The most important thing is they're built to operate from dawn 'til dusk, day after day, on an overnight charge.

Looking for power? For distance? Look to Westinghouse electrics. Westinghouse Electric Vehicles, Westinghouse Building, Pittsburgh, Pennsylvania 15222.

*Test sanctioned by the U.S. Auto Club with Westinghouse 3- and 4-wheel golf cars each using six Trojan 6-volt, 217-amp batteries.

For more information circle number 175 on card





The handsome new foursome from Harley-Davidson.

Photographed at: The World Of Palm Aire, Pompano, Florida.

Until now, if you compared ease of operation, stability, economy, styling, maneuverability, quiet performance, service, comfortyou've really had just one choice among golf cars. Harley-Davidson. Now you have another choice; now

you can get those advantages in the new Harley-Davidson 4-wheel cars, too. Like their 3-wheel brothers, our new 4-wheel cars are available in gas or electric models. And independent suspension on all four wheels provides the safest, For more information circle number 160 on card

smoothest ride you can find on any course. Anywhere. That means the choice is now twice as great: Harley-Davidsonor Harley-Davidson. AMF | HARLEY-DAVIDSON Milwaukee, Wis. 53201.

