care of the thatch research now is trying to determine.

**Explains Plant Disease**

Dr. Wm. Klomparens, plant pathologist, The Upjohn Co., showed on the screen vastly enlarged slides of fungus growths that account for plant diseases.

Kломparens, who has conducted valuable grass disease clinics for several regional organizations of supt.s, told of elements of attacking fungus and parasitic growths and the principles of control measures.

He said that without moisture and certain temperatures plants cannot become diseased.

Prompt and accurate identification of the disease of the grass, shrub, tree or flower is a “must” in any control measure, Klomparens stressed. He described some methods of application of toxic materials and called attention to variable susceptibility and resistance to disease as complicating the fungus disease control problem with which supt.s must contend.

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**New Turf, New Labor Practices Needed**

*By A. M. Locke*

Supt., Longmeadow (Mass.) CC

To satisfy the demands of golfers today for a well groomed golf course at all times — with fairways cut at ½ in., greens mowed practically every day, rough cut and held at 2 in., with sand traps, tees, aprons and approaches in perfect condition at all times, having a constant run of tournaments through the complete season, (April through October) including the regular routine of play — requires the constant attention of the maintenance staff during the playing season. This work should not be interrupted with major construction operations such as, building traps, causeways, bridges, etc. Any major emergency construction during this period should be done by an outside contractor. The time for this type of work is after the playing season is over.

The demand for close cutting of fairways is creating a very serious condition on many of the older golf courses that were seeded with the old stand-bys, Kentucky bluegrass and the fescues. Regardless of constant attention, fertilization and aerification, close cutting is constantly killing these grasses off; consequently, the old menace poa annua is taking over. Fertilizer and aerifying does help the old grass to survive longer.

This is a problem that must be over-

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come by some method of replacing these grasses with the newer types of grass, such as, Merion blue or the bent grasses that will tolerate close cutting. Areas that are heavily infested with poa annua and weeds should be killed off with sodium arsenite, turned under and seeded.

If the committee will not tolerate the closing of fairways for this drastic operation then the next step would be to aerify severely and seed. This method would also apply to aprons and tees where poa annua has invaded these areas. Poa annua seeds twice a year and is carried onto the greens by equipment, wind and tracked on by players.

During the ten weeks of drought last summer in New England, with the temperature soaring in the upper nineties, poa annua took a terrible licking, especially on putting greens.

No doubt it would be advisable with greens heavily infested to start a nursery with better strains of grass such as, Arlington C-1, Congressional C-19, Collins C-27 or a mixture of these three; or a mixture of 50 per cent C-1 and 50 per cent of C-19, and resod the green or use a temporary green and plant to stolons or seed.

Key Men for 12 Months

One of the major problems today is labor. All golf courses do not operate with the same number of employees, as no two courses compare the same. On an 18-hole golf course there should be at least three key men on the pay roll the year round. There is work to be done during the winter months to keep these men busy, such as overhauling engines, grinding and lapping mowers; overhauling and painting equipment, markers, signs, O.O.B. stakes, flag staffs, etc.; construction, plowing snow, cutting brush inside bounds, trimming trees, sanding traps and numerous other jobs.

These key men are a tremendous aid in preparing the course for play in the spring and are necessary to teach and supervise the inexperienced men. Time is limited in the spring as some golfers think they should be playing as soon as the last snow has melted away.

Nearly all operations on a course today are done with power equipment. It requires men with some intelligence to operate this modern equipment — men who know the difference between the grass catcher and the spark plug. In order to obtain this type of men to prop-
just as we've been telling you...

"The time has come for the superintendents and the club officials to solve their labor problems in a different and a permanent way. The superintendent must study the course and make changes which will eliminate hand labor without affecting the strategy of the course from the standpoint of play. Every manual operation should be scrutinized and mechanized wherever possible,"...from GOLFDOM

Savings in manhours in the proper preparation of top dressing of up to 89% are made with a Royer Compost Mixer. Send for Bulletin 46 giving sizes and models available. Hundreds of golf courses are satisfied users.

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Ernie Augustin has been at White Lake Country Club, Whitehall, Michigan, for over a quarter century. There are many out of state members from Chicago and elsewhere who summer at White Lake. During all these years Ernie Augustin has never lost a green. The turf on them, the tees and fairways, is exceptional. The only nitrogen and phosphoric acid they get is from Milorganite.

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erly operate an up-to-date golf course there has to be a better inducement offered. A large majority of golf course employees throughout the country are underpaid; this also includes the superintendents.

The time is here now when golf clubs have to compete with other industries in this respect. To carry out the maintenance problems on a golf course today, requires the full cooperation of everybody around the club from the president down to the caddy. And it is high time that some golfing members started to carry some of their own responsibilities; replacing divots, smoothing out tracks in sand traps and refraining from walking up the back of traps.

Without cooperation the superintendent and the green chairman get nowhere fast. There is nothing in any golf club that lessens the spirit or morale of officials, members and employees any quicker and deeper than a minority group of irate golfers in the locker room condemning the condition of the golf course and ridiculing the chairman and superintendent. This type of criticism should not be tolerated at any golf club; no chairman or superintendent objects to constructive criticism.

What the golfers frequently don't realize — although it is quite obvious — is that the superintendent's actual boss is Mother Nature and she can be discouragingly fickle. But when she's good, she's very, very good, and we're grateful for that.

1954 TURF CONFERENCES

Apr. 5-6—SOUTHERN TURF ASSOCIATION ANNUAL MEETING, Jackson (Miss.) CC.

Apr. 21-22—8th ANNUAL SOUTHEASTERN TURF CONFERENCE, Tifton, Ga.

Aug. 5-6—UNIVERSITY OF FLORIDA TURF CONFERENCE AND FIELD DAY, Gainesville.

Aug. 19-20—23rd ANNUAL RHODE ISLAND TURF CONFERENCE AND FIELD DAYS, University of Rhode Island, Kingston.

Oct. 4-5—SOUTHERN CALIFORNIA CONFERENCE ON TURF CULTURE, University of California, Los Angeles.

Oct. 4—FIELD DAY, Oregon Experiment Station, Oregon State College, Corvallis.
others co-starred with Gay James ... Fred Corcoran promoting deal for TV films of girls' tournaments ... New tournament committee of Ladies' PGA is Babe Zaharias, Patty Berg and Louise Suggs ... Ladies changed their minds after appointing another tournament committee a couple of weeks earlier ... Can't tell the Ladies PGA tournament committee without a scorecard ... Snead signs with Indianapolis film company for TV series ... Paul Hahn's 16mm. color films "Tricks N' Sticks" released.

Harry Cooper from Lakeside GC (LA dist.) to become pro at Metropolis CC (NY Met dist.) ... Harry, now 49, once one of the greatest players but never won a US or British major title ... After 5 years as pro at Oahu CC, Honolulu, he came to Lakeside in 1949 ... Ted Martz now mgr., Minnehaha CC, Sioux Falls, S. D. ... Earl Ross, former pres., Metropolitan (NY) Golf Assn., presented at association annual meeting with plaque for spearheading drive against steep calcutta gambling.

Joseph W. Burnam, supt. of East Lake CC, Atlanta, Ga., 2 18-hole courses, is new pres., Georgia Turf Assn. ... Burnam also appointed to USGA Green Section committee ... Other officers elected by Georgia Turf Assn.: Lester Lawrence, Fort Benning CC, vp; George Thomas, Meadowbrooks CC, Atlanta, sec.-treas. ... Dr. B. P. Robinson, Coastal Plains Experimental Station was principal speaker at the meeting ... Roy Jones new supt., Holston Hills CC, Knoxville, Tenn.

George Rolff, Roselle (Ill.) CC, elected pres., Midwest Assn. of Golf Course Supts. ... Frank Dinnelli, Northmoor, and Walter Killmer, Ravisloe, elected vps., and Al Johnson, Indian Hill, elected sec.-treas. ... Directors elected: Wm. Kraft, Southmoor; Ray Davis, Medinah; Bill Stupple, Exmoor.

Olin Outra, 53, and pro at magnificent layout of Club de Golf Mexico, recently won first Mexican PGA championship, played at Dutra's home club ... Dugan Aycock, Lexington (N. C.) CC re-elected pres., Carolinas PGA for 7th time ... Purvis Ferree, Old Town CC, Winston-Salem, N. C., re-elected sec.-treas. for 11th time ... George Corcoran, Greensboro (N. C.) CC, was elected honorary pres. ... Vps elected: Clarence Owens, Catawba CC, Hickory, N. C.; Charlie Farlow, Starmount.
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Your turf can only be as beautiful as your soil will permit it to be. A soil infected with harmful lawn insects can seldom produce a healthy, attractive turf. That's why control of lawn insects with Chlordane is so important. Chlordane controls ants, chiggers, white grubs, earwigs, chinch bugs, mole crickets, Japanese beetle larvae and sod webworms or lawn moths. Talk with your supplier today about positive soil protection with Chlordane.

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Forest CC, Greensboro, N. C.; Palmer Maples, Benvenue CC, Rocky Mount, N. C.; Grant Bennett, Florence (S. C.) CC; Wallace Palmer, Greenwood (S. C.) CC.

Hillcrest CC, Lubbock, Tex., new course already getting around 2000 rounds per month play . . . Warren Cantrell, Hillcrest pro and architect, designed new 9-hole at Lovington, N. Mex., now under construction . . . Cantrell also designing new muny 9 holes for Hobbs, N. Mex.; county-owned 9-hole course at Andrews, Tex., and doing some work on new 18-hole private club being organized at Amarillo, Tex. . . . Construction of new Amarillo course to start soon . . . Leonard Warren now pro at Hillandale CC, Corinth, Miss. . . . Add second 9 to Green Valley GC, Greensboro, N. C.

Victor C. Armstrong, Baltusrol GC senior, has invented "Teer-Up," a device that places ball on peg tee into tee turf at desired height without player bending . . . Device consists of slender aluminum tube with ball and tee held at the bottom and teed by a plunger.

Wm. F. Gordon Co. has started construction of Louvier course of DuPont CC, Wilmington, Del. . . . This will give DuPont club 63 holes . . . Engagement of Lila Helfinger to navy Lt. Harry Coleman is announced . . . She's daughter of Tot, USGA pres. in 1952-53 and with her mother and dad has sweetly adorned some golf championship galleries.

Mike Shearman's 70th birthday and 40th year as pro at Sioux City (la.) CC celebrated with 200 at party at Hotel Martin, Sioux City...Mike was given gifts by loving club members, a scroll from Iowa PGA which Chick Adams presented, a lot of wires from stars of yesterday and today, and hearty oratory . . Bill Adams and Dave Bonella among those making talks about Mike as an all-time prize of the pro crop . . . Bill talked about Shearman and Adams in the old days . . . After the party some of the boys put on a nightcap affair for Mike out at Dave's house . . . Everything was settled by dawn's early light with Mike still going strong.

Strike up the band, let the crowds cheer . . . New daughter, Jennifer Leilani, in the home of the George A. Davis . . . Papa is Chicago golf supply and equipment magnate.

Divots from Rocky Mountain PGA dug by pen of the brisk Mick Riley . . . Ray Boudy from Tooele (Ut.) GC to Elko (Nev.) GC as pro-mgr. . . . Walt Harris scored
highly successful first season at Ft. Douglas ... Tony Macaluso at Price (Ut.) CC showing results of 16 years of fine training with Paul Scott at Griffith Park, LA ... Pros in Rocky Mountain area talking about how their junior girls are going to be nation's stars ... Big activity in girls' junior golf last year ... Had 78 girls taking lessons at Meadow Brook where Tony is pro-mgr. ... Marvelous cooperation from club's women's junior girls' advisors ... Dixie Walker again won Utah girls' title ... Meadow Brook's Mary Lou Baker won her 6th Utah women's championship ... Meadow Brook's women's team won Utah women's "A" team title ... L. R. Ivins won first Utah Seniors' championship which Meadow Brook is sponsoring as an annual event.

Swell job in golf Christmas gifts catalog sent by Henry Lindner, pro, Augusta (Ga.) CC to his members ... Jack Ryan from Shawnee-on-Delaware to CC of Buffalo, N. Y., as pro ... Hugh Moore, Sr. to Sunset CC, Moultrie, Ga., as pro-supt.-mgr. ... Moore built the course in 1944.

Villa Olivia course west of Chicago, sold to Walter Wallace, operator of Cherry Hills CC, Chicago dist. semi-private course ... Ralph L. Sawyer heads group planning to build Pleasant Valley CC, north of Worcester (Mass.) CC ... Wm. F. Mitchell, Sutton, N. H. has drawn plans for Pleasant Valley's 18 holes ... Sylacauga (Ala.) boasting, with justification, about its recently opened 9-hole Marble City CC.

Construction in progress of first 9 holes of North Ridge CC, Sacramento, Calif., to plans of late Billy Bell ... His son, Wm. T., following thru on the job ... Glen Oak CC, Waverly, Pa., planning busy season on its course officially opened last October ... South Bend, Ind., Eberhart-Petro muny course receipts for 1953 highest since course opened ... City Recreation director Raymond Cook credits golf league and junior promotion by pro-mgr. John Bobick, Jr., with record play.

Story in Elmira (N. Y.) Star-Gazette on retirement of Tom Bonnar after 35 years at Elmira CC and his asst., Frank Socash, taking over, was written by Alan Gould, Jr. ... He's son of another veteran, Alan Gould, who covered a lot of golf as Associated Press reporter and sports editor and now is AP gen. mgr.

Burlington (S. C.) Chamber of Commerce and Merchants Assn. urging construction of muny course ... Hugh Love, formerly mgr., Essex Felis (N. J.) CC now...
Great on the 19th hole

Teacher's Highland Cream
86 Proof Blended Scotch Whisky
Made by WM. Teacher & Sons, Ltd.
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Jack Harden, Jake Garmon and Phil Hesler, El Paso (Tex.) pros have designed 27-hole Ascarte Park muny course . . . Construction to start soon . . . Palm Springs, Calif., considering construction of 18-hole muny course . . . Port St. Joe, Fla. planning course . . . Bob Renaud, pro-mgr., recently opened Thomson (Ga.) CC 9-hole plant.

Elko (Nev.) 9-hole course to open this spring . . . Course built by Glenn Robey to plans of Pete Marich . . . Ben Toski from Forest Park CC, Adams, Mass., to pro job at Cedar Hill CC, Livingston, N. J. . . . Summerville, W. Va., Jaycees' trial 6-hole course at Nicholas County Memorial Park so successful county authorities grant Jaycees right to construct 3 more holes.

Notable job done by Joe Mayo and John Hanley in getting fine new 18 of Sundown Ranch GC, Phoenix, Ariz., in playable condition rapidly . . . Course officially opened with exhibition including Horton Smith, PGA pres.; Sundown pro George Mackey (formerly at Warren District CC, Bisbee, Ariz.) and others . . . Course part of real estate development owned by Wm. Guse of Detroit, Oliver F. Burnett, Jr., of Arizona, and Jervis Webb estate.

Mexicali, Mo., Jaycees completing new muny course and clubhouse . . . New clubhouse of Kennett (Mo.) CC completed . . . Parks commissioner Krist Hansen of Jamestown, N. Y., had cups placed in short-mowed spots adjacent to municipal stadium to give golf interest a test before building muny course.

Planning golf course on famous Ossian Hall estate in Fairfax Co., Va., purchased recently for division into small estates . . . Ossian Hall 1800-acre tract first settled 224 years ago.

Dick James now pro at Court House Club, Fairfax, Va. . . . Reuben Hines, Jr. is Court House supt., succeeding Mickey Burkholder who now is supt. Fairfax CC, following the late Wm. Glover . . . To renovate and reopen Loch Alpine course near Ann Arbor, Mich. . . . Course is on estate of deceased Detroit millionaire which has been acquired for real estate development.

Jack Morton has designed 9-hole course to be built this spring at Freeport, Ill . . . Joe LaMachia, Locust Hill CC (Rochester, N. Y.) re-elected pres., Western N. Y. PGA
... Ed Bullock now pro at Cedarbrook CC, Elkin, N. C., succeeding Newell Baker who moved to North Wilkesboro (N. C.) CC as pro.

Runaway Brook CC, Bolton, Mass., 9-hole club established in 1900, bought by group which includes Alex Briggs, formerly pro at Oak Hill CC, Fitchburg, Mass. ... Pryor (Okla.) new muny 9-hole course, designed by Hugh Bancroft, Tulsa, has Bill Cobbler as pro. ... Parsons (Ks.) CC to install grass greens.

With Charley Schalestock going from Farmington CC, Charlottesville, Va., as supt., his protege Marcus Pleasants became supt. at Farmington.

Cleveland District Golf Assn. recorded 1190 golfers from the 21 member clubs of the organization playing in the 8 CDGA-sponsored events in 1953 ... Eddie Schultz starting his 28th year as pro-supt., Troy (N.Y.) CC. ... Northeastern N.Y. Golf Course Supts.' Assn. has a "Trouble Shooting Committee" that turned in valuable performances for their fellow members last year. ... When several really smart men get together and probe for the answer to a maintenance problem the bright supt. who asks them in, and his club, usually get the right answers.

Borrego Valley Associates to build 18 hole course at Borrego Springs, Calif. ... Lawrence Hughes is architect of the course ... N. Jack Benson and George J. Kuhurts III are co-chmn. of Borrego Valley Associates.

Mary Lena Faulk, US Women's cham-

LLOYD MANGRUM
Leading Tournament Golfer
says,

"Etonic SUPER-LITES are the Greatest Advance in Golf Shoes I've ever seen!"

Flexible Stainless Plate. You never feel the spike. Spike receptacles are squarely riveted to plate.

Every golfers' dream. A sound, solid, ruggedly constructed golf shoe that's so light, so flexible, it adds new meaning to golfing comfort. Soft Cush-N-Crepe soles and heels — plus stainless Mid-sole plates that anchor spikes permanently in place — make Etonic Super-Lites America's most revolutionary golf shoe. You never feel the spikes!

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Fine Shoe Makers Since 1876.

March, 1954
pion and Marlene Stewart, Canadian girl who holds British women’s title, have accepted invitations from John E. McAuliffe, to play in field of 16 which will include 14 women pros, at Triangle Round Robin. Event will be played June 3-6 at Cascades CC, Virginia Hot Springs, Va., and will be sponsored by McAuliffe’s Triangle Conduit and Cable Co. Invited pro girls will play for $7500.

Hugh Ross, Sunnybrook GC, re-elected pres., Metropolitan Golf Assn., whose members are Detroit district semi-public course operators, Frank Durek, vp; Ed Morey, sec.; and Victor Kingsley, treas.; also re-elected, Metropolitan planning group fire, liability and compensation insurance. Association in controversy with Michigan Unemployment Commission, complaining MGA clubs are over-taxcd. Member clubs have contributed to legal costs of case in which lower court restrained a course use of lake water.

Bronze plaque placed in fairway 104 yds. from 18th cup at Tam O’Shanter CC (Chicago dist.) marking spot from which Lew Worsham played his famous TV shot and holed out to win 1953 World’s Championship. Women’s Metropolitan (NY) Golf Assn. 1953 report showed 1,147 members representing 122 clubs. It was the association’s 54th year.

Fred S. Slyder, Midlothian, elected pres., Chicago District Golf Assn. Vp is Sidney T. Jessop, Medinah; Treas. is Charles N. Eckstein, Ravilloe; Sec. is Andrew W. Gatesby, Beverly, and Gen. Counsel, Stacy W. Osgood, Flossmoor. Slyder succeeds Charles J. Morgan, Park Ridge, as CDGA pres. CDGA admitted 12 more clubs to membership in 1953 and on its annual Veterans’ Day last year raised almost $10,000 to provide and maintain golf facilities at veterans’ hospitals.

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MACGREGOR’S NEW No. 5 WOOD

With the growing popularity of No. 5 woods MacGregor has enriched the beauty and appeal of this utility club. Their new MT 5 wood, made of persimmon, has a red fibre insert and is finished in a rich coal black glaze. Streamlined “Swan Neck” gives additional strength. Details from MacGregor Golf Co., Cincinnati 32, Ohio.

Jacobsen Mfg. Co. announces production of a limited number of its Lawn Queen power mowers with headlights for night mowing and white sidewall tires. Outfit has a 12-volt generator and 6-volt, 45 ampere lights.

S & S Farm Equipment, Inc., 820 S. Adams St., Peoria, Ill., has new price lists and literature on its Ezee Flow Olympia Fertilizer Applicators.