



Approximately 60 greensmen attended the annual Iowa State College greenkeepers short course March 3-4 at Ames. Prof. S. W. Edgecombe, in charge of the greens course and extension horticulturist at the college for many years and who recently assumed the position at the University of Manitoba, Winnipeg, Can., is shown at extreme right in back row. Prof. H. L. Lantz, who is continuing the fine turf research work at ISC, is shown sixth from left in front row.

2 years someone will be saving money and golf balls.

What will happen to the cement job in the winter? I do not know. Analyzing the situation, it appears we will have a semi-solid slab resting on a soft, flexible support; expansion and contraction are unrestricted, with running water present through the winter. With these factors in mind, I do not expect any excessive winter damage to the job.

The experiment looks very good to me; it gives a solid, clean bottom to an otherwise black, soft-bottom brook.

The idea comes from a member of the club, a construction engineer, D. MacNamee, member of the board of governors.

\* \*

#### By W. H. JOHNSON

*Griffith Park Municipal Courses, Los Angeles, Calif.*

It will be hard for us to economize further at Griffith Park as our play is much heavier now than in previous years. Our main saving revolves around our watering of the courses. The golf superintendent has had to sacrifice condition of courses to satisfy the demand of golfers for soft greens. I think that cutting down on watering will benefit the golf courses, save labor, electricity, and fertilizer, so, by less watering we won't leach out so much of the elements in the soil. Fungicides, also, will be saved, for if you keep your greens soggy all the time they will develop fungus.

The usual demand of golfers is to have the greens soggy so as to hold the ball, whereas, if the golfer would play the shot to hold and not depend on the green you will have healthier greens. A good green requires as much air as water, and by keeping your greens toward the dry side, rather than wet all the time, they will be more friable and less coagulated.

On the fairways we have cut out one watering a week, thereby cutting down

on our water bill and mowing. We mow fairways twice a week. At the first of the week we come in from edges and go within 200 yards of tees; last of the week we mow everything. Mow mounds on traps and grassy swales every two weeks instead of once a week, making grassy swales in some of our traps, thereby saving sand, and hand labor of raking traps.

\* \*

#### By WILLIAM SLACK

*U. of Mich. CC, Ann Arbor, Mich.*

Our biggest maintenance problem will be getting help. I have at present 5 men. My usual crew has been 11 in the past. How I can keep this place anything like what it has been in the past with 5 men is going to be a headache. Three of the 5 men never worked on a golf course before.

I have decided to mow the fairways, starting about 75 yards from the tee, which will save about 3 hours. As the tees are all fairly low I am going to mow them with the fairway units at the same time as I mow the fairways, which will save more time. Some of the traps have been filled up and seeded. The remainder will be raked about 3 times a week instead of 7. The greens are all mowed by power and it will be impossible to save time there unless they are mowed smaller and less often. I will mow them every other day and cut out Sunday work, which will save considerable time.

The rough will be mowed with fairway units at about 2 inches when necessary. The fairways I am afraid will not be watered when we are short of help. The fairways will be mowed twice a week, saving both gas and wear on the equipment. Fortunately, I am blessed with good equipment and it is well taken care of, being overhauled and painted during winter months. That is, in my

opinion, money well spent, as I have at the present time a tractor and a set of fairway mowers which have been in use for 12 years.

What I think is smart is to have on hand the most essential spare parts for the equipment in case of breakdowns. It now is hard to say if I will be able to have the hoses out at night, when not in use. There is risk of them being stolen, but I probably will take the chance, as it would be quite costly to have to haul them in to the shed every day. I have also been considering using two tractors and units on fairways and getting them mowed in 7 hours, to see if I could save anything. Early in the season there is very little saving, but by fall I probably will have figured out lots of ways to save.

Our greatest cost in time and money is the greens. They have a total area of 160,000 sq. ft. and to have to mow them every day, besides having to water them and do the many other things that have to be done to them, such as fertilizing, applying chemicals, etc., costs plenty.

\* \*

#### By NELSON MONICAL

*Westfield CC, Le Roy, O.*

We operators of small nine-hole courses with a minimum of labor long ago reduced our maintenance practices to a sharply economical basis.

This winter in looking over the problems for the coming year, keeping in mind the present standard of our course, I found we could reduce our costs a little by cutting greens only 4 times a week, giving the time saved to odd jobs which usually required some overtime.

On our course where we have watered fairways I noticed that in seeding with a mixture of bluegrass—red top and a small percentage of bent I ended up with about 95% bent so am eliminating the bluegrass and red top seed in all future planting.

Our president one evening suggested that all existing equipment be put in shape to last as long as possible. Now all of mine is painted, repaired and I expect no trouble for 2 years.

During the overhauling of the mowers, I looked at those bed knives—twice—left them on for another possible half year's wear, oiled up the new ones, stored them away. Lord only knows if we will ever be able to buy any more.

Along our creek and in the farm lands above us I noticed some native bent grass.

In places it had gotten out into the fairways during floods and it looked mighty good. So two years ago I laid a tee down on a short hole with some of the stolons and it proved very satisfactory, recovering very quickly from divot holes. Last fall I put down 2 more. On one other tee I tried cutting the grass very close, treated with sodium arsenite to check the clover, and retard the grass, then topdressed heavily and planted the same stolons. This spring the tee looks like it soon would be all bent and with very little cost.

Maybe everyone is not so fortunate in having such grass so handy, but it certainly is going to save me some money both in seed and growing stolons.

Having a Board with a little foresight certainly saves one a lot of worries. I made some recommendations last fall and early winter, and my shed is now well supplied.

\* \*

#### By ROBERT F. POLLOCK

*Llanerch CC, Manoa, Pa.*

First, golf will have the wage problem. We will have to raise the wages of the help so they will receive a satisfactory income and be genuinely interested in the work on the golf course. With this in mind and the fact we will have to run the course with three less men, less mowing at our course is imminent.

In eliminating some of the work on the greens, we shall cut fewer times, perhaps a trifle higher, and use less fertilizer, therefore eliminating some of the watering. Less watering and less fertilizing may mean to some extent less fungus. Less brown patch will mean less mercury which in turn will mean less expense and labor.

With curtailment of gas in the East, we will have to cut the fairways fewer times. I intend to rake the traps once or twice a week instead of every day. So, I believe, with the program I have planned, I will be able to run this year with fewer men, pay them more, and still keep within this year's budget.

\* \*

#### By ROBERT LEE MITCHELL

*The Edison Club, Rexford, N. Y.*

I believe that preventing ball loss will be of primary importance to all greenkeepers this year, for without golf balls there can be no golf. Prevention or reduction of lost balls can be accomplished primarily (at least in my case where we

*(Continued on Page 41)*

# "Thiosan"—A New Turf Fungicide

By CARL HORN

AS supplies of mercury available for civilian use dwindle, the question is no longer, "Which mercurial for brown patch and dollar spot control?" but "What can we use in place of mercury?" This question, new, perhaps, to most of those engaged in controlling brown patch and dollar spot, is an old one to the plant pathologists and chemists of the Bayer-Semesan Company and its affiliates.

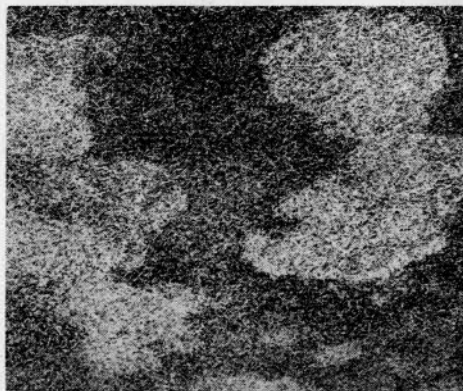
Surely among the hundreds of thousands of compounds, organic and inorganic, there must be some, one at least, that possesses the high order of fungicidal efficiency for which the mercurials are known. As compound after compound emerges from the chemist's laboratory and comes under the critical eye of the plant pathologist, however, the wonder grows that Nature has apparently bestowed her prizes for highest fungicidal efficiency on so many mercurials and on so few non-mercurials.

But out of all this sifting and painstaking examination of these thousands of chemical compounds comes an occasional bright promise to the searchers. One of the most promising of these non-mercurial fungicides is an organic compound of sulfur, tetramethyl thiuramdisulfide,\* which is to be marketed as a new turf fungicide under the trade-mark "Thiosan". Containing neither mercury nor any other

metallic element, it is relatively non-poisonous to warm-blooded animals but toxic to fish. The formula for use on turf will provide a finely-divided powder with only a slight odor, which is not disagreeable. Although water insoluble, it disperses readily in water with a little agitation.

Although not in the same fungicidal class with the highly active ethyl mercurial compounds, used in seed treatments for grain and cotton, the new product does compare favorably with hydroxymercurichlorophenol and hydroxymercuricresol as represented by products sold under the trade-marks, "Semesan" and Special "Semesan", which are now widely used as turf fungicides. The effectiveness of this newcomer to the list of available fungicides has been demonstrated by tests on turf nurseries and on 18 playing greens in Delaware and New Jersey. Comparative tests carried out by spraying half of each green with 1 lb. of Special "Semesan" to 6,000 sq. ft. of turf and the other half with the same amount of "Thiosan" have shown the new product to have approximately the same fungicidal value as the mercurial.

Confirmation of the merits of tetramethyl thiuramdisulfide as a turf fungicide has come from the USGA Green Section in a report by Harrington. (*Science*,



Tests have shown that the new turf fungicide, "Thiosan," gives approximately the same fungicidal value as the mercurial in controlling brown patch (shown left above) and dollar spot (at right).



Workman is shown applying new non-mercurial fungicide "Thiosan" to green with power sprayer. In tests conducted at the Bayer-Semesan Research Laboratory, Minquadales, Del., and on playing greens in Del. and N. J. "Thiosan" has compared favorably with the mercurials commonly used in checking attacks by brown-patch and dollar spot fungi.

Vol. 93, No. 2413, P. 311). In discussing experimental results for 1940, he states that of the more than 100 chemicals tested, tetramethyl thiuramdisulfide is one of the most promising.

One of the outstanding and very desirable advantages of the new fungicide is the high degree to which it is tolerated by bent grass and most other foliage. The plant pathologist says it has a wide margin of safety, meaning that many times the effective dosage may be applied without injury. On Washington, Metropolitan, colonial, and velvet bent turfs, for example, applications of 4 lbs. to 6,000 sq. ft. at weekly intervals for 6 weeks did not produce any indications of yellowing or retarded growth. In these times when greenkeepers may need to depend on inexperienced workmen, this wide margin of safety may be particularly advantageous.

Lest some read too much between the lines, it should be said that "Thiosan" is not fool-proof; it does not take the place of the greenkeeper's skill, watchfulness, and judgment. Grass grows rapidly, and sometimes the brown patch and dollar spot fungi grow even more rapidly. No matter, therefore, how effective the fungicide used, it, like others, will fail dismally unless the greenkeeper watches weather conditions closely, and uses all his powers of observation, skill, and experience in applying suitable dosages at the right time.

Translated into terms of greenkeeping practice, this means that the dosage and

•

Mower lapping mixture: Instead of emery and oil or greases for mower reel lapping in, use liquid or paste (soft) soap with the grit. After sharpening, just wash off with water, with no oil to dissolve.—CKB

intervals between applications will not be the same for all conditions. While applications of 1 lb. to 6,000 sq. ft. (2 2/3 oz. to 1,000 sq. ft.) at intervals of 7 to 10 days seem to be optimum under ordinary conditions when a preventive program of disease control is followed, it may be necessary to double the dosage when conditions unusually favorable to infection occur or are anticipated.

To summarize, it is believed that "Thiosan," the new turf fungicide, containing tetramethyl thiuramdisulfide, will fill a gap left by the scarcity of mercury, and that it will accomplish its task of disease control without injury to the grass.

\* The use of tetramethyl thiuramdisulfide in the field of turf fungicides is covered by U. S. Patent No. 1,972,961.

**New Greens Group Formed.**—Thirty-five greensmen attended the first meeting of the newly organized Michiana Greenkeeping Supts. Assn. March 23, in Michigan City, Ind. Among the speakers were Gus Brandon, national GSA secy-treas., John Darrah, Beverly CC, Bruce Matthews and Wm. Philipson of Grand Rapids, Mich., and Dr. James Tyson, Michigan State College, who talked on fairway cutting and bent grass. Brandon also showed two films pertaining to fine turf.

President of the new association is Mavor Boyd, Longwood CC, Dyer, Ind. Chester Keeley, Notre Dame GCse, is vice-pres., and Amos E. Lapp, Long Beach CC, Michigan City, Ind., secy-treas. April meeting was held April 20 at the Spaulding hotel in Michigan City, at which time directors were chosen and by-laws of the association set up.



# What Is The Ball Outlook?

By **HERB GRAFFIS**

Pros' responsibility is to keep balls in play, and distributed as evenly as possible, to prevent some clubs getting into a serious situation, to say the least.

**G**OLF is awakening to the urgent importance of a job it'll have to handle wisely if it's going to keep going.

The job is that of rationing the comparatively few new golf balls that are on the market and the fairly large stocks of reconditioned balls. How many of the reconditioned balls there will be is almost anybody's guess. Estimates made by experienced men in the business range from 2,000,000 dozen to 5,000,000 dozen. The driving ranges have supplied a market for used balls during the past several years and have collected a surplus stock that, properly reconditioned, should supply balls well into the 1944 season.

In view of the probability at least of a two year stock of balls, new and reconditioned, being available under normal demand and distribution the hoarder should have a long wait before he gets an edge over those who buy for current use. But the hoarder, like any other breed of hog, doesn't figure things that way. He wants to get everything he can right now even if he outsmarts himself in his avarice.

The threatening aspect of the situation in golf is that the hogs are stampeding fellows who habitually buy only the balls they need for immediate use. Especially since the reconditioning ball business has come to the front are men and women getting the idea they should have their supply of old golf balls renewed and keep this reconditioned supply under lock and key. That is beginning to take golf balls out of play.

## **Educate to Stop Hoarding**

Unless an educational campaign to stop hoarding is started and public acceptance secured for a sane and easy rationing program golf's one hope is the now fairly remote one of getting a satisfactory synthetic ball. Synthetic materials are coming under priorities rather extensively so even the synthetic ball prospects may be a mirage.

Government action to halt golf ball

hoarding is out of the question. In the face of the necessity for attending to essential matters any government official will figure that if golfers are such boobs they can't cooperate among themselves to spread out the ball supply, they don't deserve consideration. Hence the golf associations, amateur and pro, and club officials must act quickly in a situation that is developing critically.

With the ball supply getting compacted into fewer hands it is logical that clubs will have a slump in play, and that potential new players will have no interest in taking up a game they won't be able to play without paying a heavy premium for balls. This condition, rushed to its eventual development by unrestricted hoarding of golf balls, will mean that courses will be taken out of play because of lack of patronage. Then the golf ball hoarders will be left holding a stock for which there's no market. Everybody will lose.

## **Don't Think Too Wishfully**

This prospect may seem to be unduly dark but if the American has learned anything since Dec. 7, 1941, he should have learned not to kid himself that things will work out pleasantly without his individual effort and thought.

Pros are beginning to see signs of concentration of golf ball stocks and are having their troubles in endeavoring to put into operation rationing plans that will spread out the supply of new and reconditioned balls. And one of the sorriest aspects of the situation is that stores, which do not have any special regard for the preservation of the game, generally allow sales of reconditioned balls on basis per customer far beyond the customer's normal requirements.

One of the foremost makers and reconditioners of golf balls comments:

"Right now in the program of gathering old golf balls, the question is commonly being raised as to just how many new

balls an individual player or a golf pro will get back in return for the number of old golf balls the individual player—or the golf pro—turns in to the manufacturer.

"If the golf professional takes the position that he will return to his member a new ball for every old ball the member turns in, and he continues that policy throughout, it is obvious that the following condition could easily be created: A few members who happen to have a fairly sizable quantity of old golf balls would turn them in and in return would receive an equally good supply of new balls as the new balls were made available. Other members who are not so fortunate as to have any supply of old golf balls would have none to turn in and would, therefore, be unable to obtain any new balls. It would seem logical that these members in this class would, therefore, not be able to play golf; would lose interest in the club and, in all probability, would resign.

"Consequently, it would seem that the golf professional has a real obligation to all of the members of his club and to the officers of the club who are his employers to see to it that a condition such as just described does not arise.

"If this is the case, then the golf pro should not, under any circumstance, make commitments to individual members as to exactly how many new balls will be made available to the member who turns in some specific quantity of old balls.

#### Should Explain to Members

"It would seem that the golf professional should make the situation clear to each member in reply to questions that will be presented to him by these members. It seems equally obvious that if this situation is described carefully by the pro, to the members, that they will see the soundness of it and in their own interest will be only too glad to have the pro allocate the supply of new balls that he is able to obtain as evenly as possible to the entire membership so that the entire playing membership can be kept

in a position to play and in that way salvage the club and keep it alive.

"These thoughts are brought forcibly to my mind because I am having reported to me from so many quarters the insistence on the part of golf professionals to know just how many golf balls they are going to get back in return for old balls they turn in and because the golf professionals report that they are making commitments to their members that they will give the member certain specified quantities in return for the old balls the member turns in.

"It seems to me that the situation is so grave and is so far-reaching that it is absolutely necessary that every individual connected with it do his share. I feel confident that if every individual does do his share, a sufficient quantity of golf balls can be made available, not only for this year, but for 1943, to practically insure the maintenance of golf play and, along with it, to maintain the private clubs in existence. If this is not done, it would seem to me that it would be entirely possible for the lives of a number of private clubs to be placed in serious jeopardy."

---

### Joseph G. Davis, Oldest Golf Writer, Dies

JOSEPH GARIBALDI DAVIS, 79, for the past 16 years executive sec. of the Chicago District GA, died April 3 in a Chicago hospital, after a 7-weeks' illness. For 25 years Joe was golf editor of the Chicago Tribune. He was born in England. He resided in Florida for a short time after coming to the U. S. and moved to Chicago in the 80s.

He was among the first to play golf in the Chicago District and did much to build the game in the midwest. He was probably the first sports writer in the U. S. regularly assigned to golf. Thousands knew Joe and loved him. He was a real gentleman sportsman. His amazing memory and extensive acquaintance accounted for keeping the history of mid-western golf complete and accurate.

---

Elmhurst (Ill.) CC began something other clubs are adopting. Elmhurst called one of its traps the USO trap. Every player who hits a shot into that trap deposits a quarter in a box in the clubhouse. The collection is forwarded to the USO.

A sign located not to interfere with play marks the trap.

Such a trap, with a dime or quarter penalty, might well be designated at every golf club in the United States and bring in a goodly piece of money for USO operations.

# NUMBERED TAGS SOLVE CADDIE PROBLEM

**G**UY PAULSEN comes up with an idea that will help pros who have to handle caddies. Guy worked it out at the Old Town Club, Winston Salem, N. C., where he was pro up to a few weeks ago. He's now in defense plant work.

The system is based on the use of numbered brass tags with the numbers being assigned to the boys. The boys' names are under their respective tags. If a boy improves in his work his name is moved up on the list. If his work is not commendable he is moved back in numbers.

The system works especially well at the smaller clubs. The board at the caddie pen should be located where it can be seen from the pro-shop, as caddies must have their numbered discs displayed on the board when waiting for a bag.

Nady Cates, Winston Salem Sentinel sports writer, gave Paulsen's system an illustrated feature story, in which he described the operation of the system as follows:

When the caddie reports for work, he takes his number off the board in the pro shop and carries it to the caddie pen, where he hangs it on another board.

As the golfers come up to play, the pro looks at his board which shows him how many boys he has in the pen, who they are and the order in which they are supposed to work. When he calls up a boy from the pen, the caddie brings in his number and hangs it on the pro shop board, thus indicating that for the next two or three hours he will be lugging a bag around the course.

## Members Like the System

Old Town Club members say the system works admirably.

Here are the advantages of the system:

It saves the labor of half a man in handling caddies—always one of the biggest headaches of a golf club.

It gives the caddie a clear idea of where they are supposed to be at all times. (No crowding around the clubhouse, pestering golfers with pleas to carry their bags; no aimless wandering away from the caddie pen. A caddie is supposed to stick to his badge like a postage stamp and the badge must be on one of two boards at all times.



Old Town caddies (top photo) in caddie pen waiting call from pro to go to work. They have removed their own numbered tags from board in pro shop and hung them on board in pen. Caddie in lower photo has received call and is preparing to hang his numbered tag on board in pro-shop, prior to leaving for his trip around the course.

It does away with "floaters" (unreliable caddies dropping in just to make a little change and then disappear).

It keeps out outlawed caddies (boys who are suspended for infringement of the rules), for no boy may work who does not have a badge.

It keeps the boys located and away from the clubhouse.

It saves the salary of one employee.

At Old Town Club caddies are placed in two classifications, the regulars and the extras. When their badges are hung on the board, they are arranged in the order of preference, based on the quality of their work and their regularity in reporting for work.

There will be  
golf equipment  
for 1942





**R**IGHT NOW Spalding's first consideration—like everybody else's—is winning the war. Our factories are turning out their share of war supplies. But in spite of material shortages, we shall continue to make golf equipment as long as it is possible to do so.

### GOLF BALLS

We're doing our best to make 'em available. We need your help. If you want to keep your members swinging this summer, push Spalding's Salvage Plan. Ask, urge, tell them to bring in their old golf balls. The harder you drive this plan, the more you do to help golf—and your business—survive the war.

### GOLF CLUBS

Spalding 1942 features are geared to straight-down-the-middle play to conserve precious golf balls.

**SPALDING TRU-FACE WOODS**—Sensational new development that takes the slice and hook out of heel and toe shots. Gives more distance—saves strokes.

**SPALDING SHORT-HOSEL IRONS**—Weight shifted down to the blade grooves your swing like a pendulum—mechanizes your control. All your hitting power is translated into distance. Crisper, sweeter feel. Sold at Pro shops only.

A. G. SPALDING & BROS., DIVISION OF SPALDING SALES CORP.

# SPALDING

*Sets the pace in Sports*



# Club Operating Figures Compared!

Analysis of financial operations of 27 country clubs completed by Horwath & Horwath; marks the first official cost comparison.

**A**N interesting analysis of the financial operations of 27 country clubs in 1941 was made by Horwath and Horwath, club and hotel accountants, for the Club Managers Assn. of America.

This is the first time an attempt has been made to compare operating figures of country clubs in various localities. Several of the questionnaires returned could not be used because of incomplete returns or doubtful figures. Horwath and Horwath analysis of the usable returns are shown in accompanying tables.

The accounting firm, which has had extensive and successful experience in recommending club and hotel operating methods from the basis of study of revealing financial data, comments on the analysis:

"It was originally intended to use the total dues and fees as the base for calculating the ratios, but it was found that quite a number of the clubs had considerable departmental business from which there was a sizeable profit and, of course, this meant that expenses, other than those of the revenue department, were higher than they would otherwise have been. It was therefore deemed advisable to use as the base total dues, fees and to add departmental profits or to deduct losses. About one-third of the 27 clubs showed losses from the revenue departments.

## Show Only Operating Expenses

"The figures show only operating expenses and do not take into account depreciation, interest on bonded indebtedness, assessments, and extraordinary charges and credits.

"It will be noted that the median method has been used in determining the average ratios rather than the arithmetical average. Most statisticians favor the former method as it tends to minimize the effect of unusually high or low ratios on the group as a whole. The median figure is arrived at by listing the individual ratios in order from the highest to the lowest and selecting the middle figure.

"The division into two classes of those clubs with over and less than \$75,000 income is interesting. Those with over \$75,000 income are the clubs with the largest number of members and the highest dues and show considerably lower ratios of expenses than those in the below \$75,000 class. In examining the individual groups of expenses, you will note that in only a few cases is there any great variation from the average. There are one or two which show consistently high ratios all along the line apparently because of a low rate of dues.

## Grounds, Greens Lumped Together

"It was the intention to show grounds and greens expenses separately, but the majority of the clubs reporting combined them. Caddie and golf expenses are fairly uniform as are those for heat, light and power and fire and windstorm insurance. Real estate taxes show considerable differences as was to be expected, since local conditions govern this item. Repairs and maintenance is another expense which varies considerably because of the current requirements of each club. The differences in clubhouse and administrative and general expenses are probably due to the individual methods of distributing these expenses. This condition would be remedied if the operating expenses were distributed on the basis of the uniform system of accounts for country clubs.

"Many of the Food Department questionnaires could not be used because the results for this department were combined with those for the Beverage Department. Although twelve of the clubs show a loss in this department, most of those showing a profit did considerable business.

"In addition to those clubs which could not be included because food and beverage expenses were combined, there were others which had to be disregarded because they indicated bottle sales only and still others which gave incomplete information.

Analysis of the 27 clubs' operations is shown on tables on following two pages.