The only truly heavy-duty blower now available, the Model 40’s powerful 250 m.p.h. blast easily blows leaves, light snow, grass clippings and trash into windrows—saves up to 70% on sweeping time. An excellent means of clearing dew in minutes from work or play areas for early morning mowing or recreation.

The Jacobsen Model 40 Blower has proven itself by years of use on golf courses, cemeteries, schools, parks and airports. Its heavy-duty design with 3-point hitch, chain driven 36” impeller powered from P.T.O. and all-steel welded frame provides efficient one-man operation.

CLEAN UP PROBLEMS THIS FALL?
JACOBSEN-ROGERS HAS THE ANSWER!

MODEL 154
SELF PROPELLED
SWEeper

Model 154 Riding Sweeper gathers wet or dry grass clippings - leaves - rocks - bottles - papers - dead branches . . . all types of unsightly debris. 48” sweeping width. A real time saver!

JACOBSEN

Heavy-duty Model 40 rides on pneumatic tires and has twin castor-type wheels for maximum stability.

Big twelve-bladed 36” impeller delivers air velocity many times hurricane speed.

MODEL 40 BLOWER

LET A GOULD DEMONSTRATION
PICK THE EXACT UNIT YOU NEED

MODEL 720E
PULL BEHIND
SWEeper

Has all the “Clean-Sweep” features of the 720, but has its own 14 h.p. engine and standard universal hitch so it may be towed behind any vehicle at a constant sweeping RPM and follows easily in congested or heavy tree areas.

Sweeps wet or dry, positive pick-up of even the most stubborn trash. Features a full 60 inch swath, and holds a full five cubic yards of material in Hopper.

MODEL 154
SELF PROPELLED
SWEeper

Sweeps wet or dry, positive pick-up of even the most stubborn trash. Features a full 60 inch swath, and holds a full five cubic yards of material in Hopper.
FROM THE PRESIDENT'S DESK

Gross incomes are at their highest point in several years at nearly every swimming pool in this area. Great news for those concerned! However, the weather conditions that are great for swimming are generally detrimental to the golf industry.

Disease, thatch build-up, wet spots from irrigating, puffiness and mower scalping are some of the problems caused by extreme heat and humidity.

Well, enough for the bad news. The good news is that the golfing public has played 65% of its total golf for the season, and as the golf pressure decreases so does the pressure on the superintendent.

We are nearing the best time of the year for renovation and seeding projects and as play decreases and weather conditions improve, most of the traffic-worn turf area will recover.

On behalf of all attending the July picnic at Braemar Golf Course, thank you to Club Manager John Vallerie and Host Superintendent John and Lesley Nylund for the use of the fine facilities. For the excellent picnic dinner, thank you so much Milt, Catherine, John and Renee Wiley and your families for your hospitality and generosity. We all appreciate your efforts and thank you very much.

Remember August 12 is the date and Host Superintendent Cliff Reynolds and the Lake City Club invite you to attend the AUGUST MEETING AND GOLF OUTING.

The M.G.C.S.A. Golf Tournament is scheduled for Wayzata Country Club on Monday, September 15. Look for the special mailing announcing the event complete with entry form.
The season began with rebuilding the plot sprayer. The first tricycle sprayer lasted nine years and started to give us trouble, i.e. leaks, weak joints and poor seals. We rebuilt the frame and replaced one wheel, added a new larger tank and two new booms with shields. The unit works great. Plots being treated with this sprayer are located at Somerset Country Club, Interlachen Country Club, a home lawn and campus. Disease work includes: Fusarium Blight, Pythium Blight, Dollar Spot and Helminthosporium Leaf Spot tests. Presently, I have no significant data but the Pythium and Dollar Spot plots do look good and the Fusarium Blight plot may still develop. We didn't have any Helminthosporium Leaf Spot as yet.

The Disease - Fertility plots at Duluth, Hopkins and Rochester are in the last year and next spring final evaluations will be made. The plot at Rochester has some Dollar Spot and a little Brown Patch while the other two have no disease problems. Duluth still is recovering from snow mold injury and Hopkins has recovered quite nicely. The Disease - Fertility plots will again this fall be test sites for Snow Mold.

In visiting with Superintendents most have recovered from the winter problems and have had several encounters with disease. The hot wet weather has allowed Pythium Blight several opportunities to develop and Dollar Spot is present on many courses. As we go into August, Dollar Spot problems should increase and we should not forget about Anthracnose. This disease is also present on several courses. Greens have been good but "Triplex compaction" on the outer edge was a common problem at several courses.

SPECIAL NOTICE!

A campus Golf Course Superintendent plot tour is planned for August 18 - 1:00 - 4:00 p.m. I'll be present to discuss the Dollar Spot test and Dr. Donald Taylor, the new Horticulture Turf Extension man will also be present. His sand/water infiltration plot is near the turf shed. Why not stop in and observe the plots and visit with us. Bring your problems. Enter the St. Paul Campus from Larpenteur Avenue, go south on Gortner Avenue and watch for signs that point to the turf plots. See you on the 18th.
Cushman® Turf Care System cuts equipment costs 35%, labor costs 50%.

Purchase one of the basic Cushman Turf- Truckster vehicles available in 3 or 4 wheel models with 12 or 18 hp. Then add as many of the new modular accessories as you need for the work you have to be done. No need to buy another expensive vehicle. In minutes you can attach the module you need by using simple pins that slide in and out. No need for tools.

84” TRIPLEX
National’s 84” Triplex is one of the best hill-climbing, rough terrain machines made today. Operates as efficiently on an 83 per cent grade as on a level. Its no-nonsense design makes maintenance easier and faster.

68” TRIPLEX
With its low center of gravity and wide track, National’s Model 68 maneuvers sharply, climbs banks and hillsides easily and safely. Unit mows a 68-inch swath at speeds up to 4 MPH... that’s half an acre in 15 minutes. Wings fold to 37 7/8”.

Don’t look for chrome frills or shiny hubcaps on any National Mower... we’ve been adding nothing but quality since 1919.

CALL JERRY, JOHN OR TIM
FOR DEMONSTRATION ON CUSHMAN’S NEW “FRONT LINE” MOWER

SPREADING
Spread up to 40’ swath.

TOP DRESSING
Mounts on Truckster chassis. No need for separate engine.

HAULING
Two box sizes. Mounts in seconds.

PREVENT BACK PROBLEMS

Maybe it’s happened to you. The box didn't look that heavy and it didn’t have to be moved that far, so you decided to pick it up and carry it yourself instead of calling a dolly. As you lifted it, you felt a sharp pain in the lower part of your back, a pain that stayed with you for weeks. Maybe it still gives you trouble. According to the National Safety Council, approximately one out of every four occupational injuries occur during the manual handling of materials. Many of these accidents result from improper lifting methods. Here’s the recommended procedure for lifting heavy objects: 1) Part your feet so that one foot is alongside the object to be lifted and the other is behind. 2) Crouch close to the object and keep your back straight, as close to vertical as possible. 3) Tuck in your chin so that your spine remains straight through your neck and head. 4) Grasp the object firmly with both hands, using the palms as well as the fingers. 5) Tuck your arms and elbows close to your body as you draw the object toward you. 6) Position your body so that its weight is centered over your feet. Start the lift by pushing on your rear foot as you straighten and stand by using your leg muscles instead of your back.

Before you lift an object to move it, make sure your route is clear. If there are obstacles, move them first. If you will need help with doors, stairs or elevators, make sure someone will be there to lend a hand. Avoid twisting your body as you carry a heavy object, as this is a leading cause of back injuries.

Reprint FORE FRONT
Factors Affecting A Spray Application
by O. W. (RED) KROMER

To have a successful spray application, a number of factors must be considered. Controlling these factors is more important for a herbicide application than for applying insecticides or fungicides. These factors are:

1. Nozzle spray pattern and discharge rate.
2. Boom and hose capacity.
3. Accurate pressure control.
4. Speed of travel.
5. Chemical and water mixtures.
6. Spray swath overlap or skip.
7. Boom stability and boom height above the target area.
8. Wind and climatic conditions.

The first five subjects were briefly covered in my first two articles. However, it must be considered that with use, nozzles wear which increases their discharge rate and narrows their spray fan. This can happen quite quickly with the old style fan nozzle with a sharp oval shaped orifice. The flooding type fan nozzle will retain its accuracy and fan width much longer. It also produces larger droplets which are less affected by wind. The larger droplets also give better control of broad leafed weeds by actual University tests.

The boom and hoses should be of sufficient size and smoothness so that all nozzles will discharge the same quantity of fluid. This becomes increasingly critical for higher gallonage applications. For low pressure spraying, 30 to 60 lbs., a low pressure regulator must be used. A high pressure regulator is not sensitive enough for low pressure work. If the sprayer has the pump and hose capacity for high pressure use (500 to 600 lbs.) then both high and low pressure regulators should be used in the system with valving, so either system can be used. A sprayer of this type with a piston pump is useful for cleaning machinery, tree spraying, fire fighting, etc.

Accurate travel speed is essential for a herbicide application. A good slow speed continued on Page 6
speedometer (0-10 M.P.H.) would be very helpful. This speedometer can be obtained as a sprayer accessory and is equipped with a small rubber tired wheel which can be mounted against any wheel that rolls on the ground - even cleated tractor tires - and will register accurate ground travel speeds.

Chemical and water mixing must be done accurately especially when topping off a partially filled tank. Spray swath skip or overlap is especially difficult to control. For accurate application, the outer nozzle on the boom on the return trip would have to be held 20 inches over from its previous position - for a boom with 20 inch nozzle spacing, this is impractical under field conditions. For agricultural spraying, with sensitive grain crops, a die marker is used. However, for golf course use this would be objectionable. Therefore, as grass is not as sensitive to the spray chemical as grains it is better to overlap the spray swath.

The boom should be held rigid when spraying. It should not be free to swing. Also it should be held above the spray target at least 20 inches so the nozzle pattern can spread to give a uniform coverage.

Wind and climatic conditions can have a detrimental effect on a spray application. For weed control, a clear, warm, sunshine day with no prospect of an immediate shower are ideal conditions. Timing refers to the growth stage of the weed when the spray application will be most effective.

A word on the use of a hand gun for spraying greens or other broadcast applications. For an accurate application, a hand spray boom should be used and be at least 20 inches above the spray target unless 10 inch nozzle spacing is used. Then the boom could be 12 inches...
James E. McLoughlin has been named Executive Director of the Golf Course Superintendents' Association of America. The announcement was made by GCSAA President Melvin B. Lucas, Jr., CGCS. McLoughlin is well known in the national golf community, having served as Executive Director of the prestigious Metropolitan Golf Association since 1966. He will begin his duties with GCSAA this September.

In making the announcement, Lucas stated, "GCSAA recognizes there are many new challenges facing the golf club industry in the 1980's and the Association's continued goal is to be a responsible contributor within this forum. The future welfare of the golf, club and turf industries will require greater communications among all golf related organizations in the years ahead, and, often, a common effort. Jim McLoughlin's diversified background will facilitate GCSAA's support of this concept."

The Metropolitan Golf Association is the nation's oldest and largest district golf association and serves more than 225 private and public clubs within the tri-state metropolitan New York area providing programs and services to member clubs and the local golf community. These services include a computerized handicapping service, a course rating and measuring program, an active tournament program, rules service and tournament counseling, junior golf program and numerous programs designed to help individual clubs in areas of taxation, finance, management and liaison among club officials.

McLoughlin is a graduate of Holy Cross College. He holds a law degree from Fordham University and a Master's in physics from Syracuse University. He was a high school physics teacher and coach for six years before taking over as Executive Director for the Metropolitan Golf Association in 1966.

President Lucas added, "GCSAA is confident that the choice of Jim McLoughlin as Executive Director is one that will bring new dimensions to GCSAA and the golf world. He brings extensive golf association management and administrative experience with him. He has a keen respect for our profession and this association. He is sensitive to what needs to be done in order for the golf course superintendent to meet his responsibility to himself, his club and his industry. His feel for the new technology of the 1980's, communications, educational program development, membership development and fiscal management, will benefit all of us."

In accepting the position, McLoughlin stated, "it is important to recognize that the superintendent works within a challenging club environment where the game of golf is intended to be played in a very special way. Accordingly, the superintendent will be faced with new responsibility and abundant opportunity in the years ahead. It is the GCSAA's role to prepare its members for these eventualities and to support the game of golf and the industry within which it exists."

above the target. The support wheels for the spray boom should be 1/2 the spray nozzle spacing beyond each end nozzle. Then you can use the wheel tracks as a guide on the return trip. A pressure gauge should be on the hand spray boom to indicate the pressure there.

If you have any questions on sprayers or equipment, I will be happy to work with you.
Vertagreen
A product for all reasons

- Balan offers pre-emergence control of Poa Annua, crabgrass, goose grass, water grass and foxtail.
- Uniform particles flow smoothly, spread evenly.
- One-fourth the nitrogen is Urea-Formaldehyde
- Contains secondary and micro-nutrients — S, B, Mn, and Zn.
- All potash derived from sulfate of potash.

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WHEN MINUTES COUNT

This golf season has been the most difficult one that I have ever been through! It seems to have been a year when if something could go wrong, it did. Broken irrigation pipes, long dry periods, hot humid weather, three storms causing considerable course damage, equipment breakdowns, lightning damage to irrigation controllers and employee accidents. This combination of events can really take the enjoyment out of what is usually a great occupation. However, we must not get depressed and discouraged! No doubt that in times like these, we learn much more as we search for ways to overcome our difficulties.

One invaluable tool that has become a part of my program as a result of a bad situation is a file box with a card for each employee located next to the phone in the maintenance building. On the card are the employee's name, home phone number, home and work numbers for people to be contacted in case of an emergency, the employee's doctor and the clinic or hospital where medical records are located. We all realize the importance of safety, but if and when an accident occurs, this information should be very readily available. A couple of weeks ago, one of my employees was injured when the truckster she was riding dropped into a soft spot created when an irrigation main burst. She was thrown ahead of the truckster when it stopped suddenly. She was in shock when the paramedics arrived and was asking for her mother. I did not know where her mother or father worked. The paramedics wanted to know who her family physician was. I did not know. If one of the other employees had not known this information, a very bad situation for her and for me would have been worse.

Granted, this information is probably on file in the clubhouse office. However, when minutes seem like hours, the clubhouse is not the only place this information should be. I have learned from this bad experience. I highly recommend that everyone give some thought to what you would have done if you would have been in my situation that day. You may be!

BE PREPARED!

THE TROUBLE WITH THE GUY WHO TALKS TOO FAST IS THAT HE OFTEN SAYS SOMETHING HE HASN'T THOUGHT OF YET.

DIVOT NEWS
## Model 48

### Olathe Sweeper

**MODEL 48 SWEEPER**

- **Sweeper Width:** 48 inches
- **Engine:** 16 Hp Briggs & Stratton
- **Pick Up:** Mechanical, 2 reels that are timed with chain, rubber fingers 'sure grip' notches.
- **Pick Up Fingers:** Abrasion resistant, high modulus rubber, 116 in number
- **Frame:** Steel
- **Hopper:** 1-1/4 cu. yd.
- **Dump:** Self dumping activated from seat
- **Bearings:** Self sealed throughout
- **Drive to Wheels:** Chain coupler from engine to pump hydraulic to motor, chain to differential.
- **Brakes:** Spring loaded to neutral, parking brake.
- **Tires:** Front & rear 18 x 8.50-8
- **Height Adj.:** Linkage to reels that pivot, positive adjustment from operators position, instant.
- **Dimensions:**
  - Height 62”
  - Width 67”
  - Length 56”
  - Shipping Weight 1900 lbs.

### Also Available:

- Pull type and high lift model sweepers
- Brush chippers
- Stump chippers
- Seeders
- Thatchers
- Aerators
- Slicers

For further information contact:
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