NEED A SEEDER?  
Why not choose the best?

MODEL  
524-100

Jacobsen seeders plant your seed in the ground... where it belongs. Planting the seed prevents it from being washed or blown away or turning out to be the free lunch for the birds that broadcast-type seeders provide.

With Jacobsen seeders you get 70% germination on overseeding as well as new seed beds. Broadcast-type seeders give you 10% to 15% germination on over-seeding and 30% to 40% on new seed beds. The cost of seed and labor makes the percent of germination an important consideration in your budget.

MODEL  
548-100

And the Model 548-100 is more than a seeder. It removes thatch, aerates and plants the seed all in one operation. With the seeder attachment removed, it's still an Aero-blade that renovates, thatches, vertical mows, spikes and aerates areas that do not require overseeding.

With the Model 524-100 Jacobsen seeder, one man can remove thatch, aerate and plant seed all in one operation. You get the same advantages of planting seed and maximum germination as with the larger Model 548-100.

Specialists in mowing and turf grass maintenance equipment
for: GOLF COURSES • CEMETERIES • SCHOOLS • PARKS
LANDSCAPERS • INDUSTRY

FOR DEMONSTRATION CALL
612-484-8411
As I embark upon my term as President of M.G.C.S.A. several thoughts have occurred to me concerning the purpose and future of our organization. The most basic purpose for which we exist is to serve you, the membership of our association. The better we serve you, the more secure is our future because the membership is the future of this association.

As I have served on various committees and moved through the chairs of the Executive Board I have been impressed by the sense of purpose and the dedication to personal and professional improvement within the membership. If in the coming year we provide the membership with the services and opportunities necessary to maintain the existing attitudes, I will feel successful.

As you will notice, the Board Members this year come from various sections of Minnesota as well as one from Wisconsin. Chances are that you may live and work near one of these people. I would like to encourage all of you to make suggestions and address any problems or complaints to a member of the Board of Directors. There is a great deal of knowledge and many ideas out there yet to be tapped. Indications are that the quality that has been exhibited in the past will continue as we welcome to leadership roles these individuals you have recently elected as directors and officers of M.G.C.S.A.

I wish all of you a Happy and Successful 1985. I'm looking forward to seeing everyone at a monthly meeting or event in the coming year.
SUPERVISING YOUR EXPENSES
by RICK FREDERICKSEN
SUPERINTENDENT
ROLLING GREEN COUNTRY CLUB

Being a golf course superintendent not only means supervising your crew, it also means supervising your expenses. Setting a realistic budget at the beginning of the year and staying with it can make your job much easier. This can only be accomplished by careful record keeping done daily.

The goals of course management at a country club are no different than the goals of any other department in the service industry. You strive to keep expenses down and provide the best playing conditions for the dollars. As the price of labor, materials, equipment, electricity, etc. continue to rise, the importance of justifying raising the amount of budget increases. The key to a successful budget projection is knowing where the potential expenses lie and when they will appear. Being able to plan out an entire season of expenses is a challenge, especially when trying to second guess the weather.

Keeping detailed records from year to year allows for a much more accurate budget. Along with your fertilizer, chemicals and weather record, a method of recording expenses should be kept by you. This protects you from unauthorized use of your account at local stores and other businesses. It also gives a quick reference of expenditures, regardless of whether they were yesterday or six months ago.

At Rolling Green we implemented a program where all items purchased must have a purchase order written up. The order form is the club’s authorization to buy. For locally obtained items, the purchase order is sent with the person buying the item. When ordering items ahead of time in large quantities, a purchase number off the order form is assigned at that time.

Written on the purchase order is the name of the supplier, items purchased, individual cost and total cost, authorization signature and account number. Each item bought is given an account number. This account number, when fed into the computer, places the cost into the appropriate category. Each category deals with a different expense heading such as chemicals and fertilizers, gas and oil, seed, labor, etc.

The purchase orders are turned in monthly and attached by the bookkeeper to the appropriate bill. The bills are then authorized and payment made. By the tenth of the following month a computer printout with the monthly expenses is given to me with a comparison sheet. The comparison sheet lists expenditures for each account number. There are six columns on the comparison sheet which give you actual, projected and actual last year figures both for the current month and year to date. The comparison sheet enables me to explain to the greens committee chairman expenses incurred for the month of any variances from the projections.

These monthly figures allow me to keep close touch of department expenses. It helps in justifying an unexpected expense...such as a needed chemical application that you may not be asked to explain until the end of the year when your chemical budget is overdrawn. Having these figures available to me is a valuable working tool in supervising expenses.

“ENJOYMENT”
To Mow around a Tree, You planted years ago,
And enjoy It’s progress, as It grows.
It’s gained another inch in breadth,
Steadily climbing towards the Sky,
Providing shelter for Our Feathered Friends,
Beauty, as well as Shade, for You and I.
Escaped Pestilence, all kinds,
Lightning, Animal’s and Insect Woes.
How about Mower Blight?
The Good Lord only knows.

Kenneth R. Zanzig
New Options

- **NEW BACKLAPPING KIT Model 04425**
  Backlapping Kit for Greensmaster 300.

- **NEW QUICK HEIGHT-OF-CUT CONVERSION KIT Model 04451**
  Quick Height-of-Cut Kit allows 6 cam setting by flip of a handle, each altering H.O.C. by 1/100 inch, total range of 1/2 inch above base setting of cutting unit.

- **NEW PULL FRAME — LIMITED FLOATATION Model 04453**
  Replaces standard floating carrier frame for special cutting applications requiring more down force.

- **ROLLERS AND SCRAPERS**
  Wiehle, full and swedged front rollers available. Front roller scraper with polyurethane comb is standard and scraper with brush is optional. Spring-mounted rear roller scraper also available.

- **ROLLERS AND SCRAPERS**
  Weihle, full and swedged front rollers available. Front roller scraper with polyurethane comb is standard and scraper with brush is optional. Spring-mounted rear roller scraper also available.

- **THREE BEDKNIVES TO CHOOSE FROM**

- **Rear Roller Cleaner Kit**
  Spring-mounted to assist in keeping rear roller free of grass buildup.

- **Variable Speed Kit**
  Provides infinitely variable speed control from 0 to 3.5 mph. Allows operator to select the constant ground speed that ensures the desired constant clip as the cutting units mow. For a finer clip at low heights of cut, or for easy maneuvering in tight spots, simply adjust the speed downward.

- **New Greensmaster 300**
  Variable Speed Kit
  Provides infinitely variable speed control from 0 to 3.5 mph. Allows operator to select the constant ground speed that ensures the desired constant clip as the cutting units mow. For a finer clip at low heights of cut, or for easy maneuvering in tight spots, simply adjust the speed downward.

- **New Options**
  NEW QUICK HEIGHT-OF-CUT CONVERSION KIT Model 04451
  Quick Height-of-Cut Kit allows 6 cam setting by flip of a handle, each altering H.O.C. by 1/100 inch, total range of 1/2 inch above base setting of cutting unit.

- **NEW PULL FRAME — LIMITED FLOATATION Model 04453**
  Replaces standard floating carrier frame for special cutting applications requiring more down force.

- **Roller Shut-Off Kit**
  Allows operator to shut off one or two reel assemblies when cutting around greens.

- **Toro's special profile-tooth blades spike cleanly without ruffling turf so greens are playable immediately after spiking. An adjustable transfer spring brings weight from the traction unit to bear on the reels 5/2" spiking width to achieve the maximum penetration of 1/4".**

- **The spiral blade pattern of Toro's thatching units means less wear on the drive motors through more efficient thatching and throwing of thatch into baskets. The spacing between blades over the three reels 59" thatching width is adjustable from 1/4" to 3/4" to allow depth-of-thatch adjustments in meeting varying turf conditions.**

- **MTI DISTRIBUTING CO.**
I find myself in very fast company having been assigned the "AWESOME" responsibility of the Editorial Committee. Boots Fuller, I feel, got the HOLE NOTES headed in the right direction with having fellow superintendents writing articles as well as our associate members' contributions. Then came Doug Mahal who continued in the same fashion but with his own personal touch. I hope that in the coming year I will continue to keep the momentum going. The HOLE NOTES is OUR newsletter and I feel that we as a group should be responsible for its contents and continued growth. So please, when I call and ask you for an article, just think about it for a minute. Don't feel that you have to be a Pulitzer Prize winner to write. Everyone of us has something important to say. So let HOLE NOTES be the vehicle in which we express ourselves. Besides, if you say no, I'll arrange for some of my "best" 36 handicappers to test drive your course.

I would like to take this time on behalf of the Board of Directors as well as the membership in thanking the following people for volunteering their time in handling our annual conference registration: John Wiley, John Sniker, Dan Miller, Dave Krupp, Kent Kromer, Tim Commers, John Hopko, Tom Haberman and a "special" thanks to Barb Glader. You all did an exceptional job in making the conference run smoothly. Thank you to Keith Scott and Jim Wodash for assembling an excellent slate of speakers and their respective topics. Without their time and dedication our conference would not have the tremendous impact that it does. Keith and Jim reported that this year's conference had over 300 registered and 162 attended the banquet on Friday night. They would also like to express their thanks to all the speakers, chairpersons, registration people and everyone involved in the success of the conference. Anyone with future ideas or comments are asked to contact the Education Committee.

Taking the conference one step further, if at all possible you should think about attending the National Conference. It is being held in Washington, D.C. on February 9th through 12th. There are many seminars, educational sessions and an equipment display that is the largest in the world.

At the last board meeting the following committee positions were appointed by President Dale Caldwell:

Arrangements: Randy Nelson
Membership: Doug Mahal
Bylaws: Scott Hoffmann
Editorial: Fred Anderson, Jr.
Education: Keith Scott, Tom Fisher, Lyle Olson
Research: Kerry Glader, Mark Smith, Scott Hoffmann
Nominations: Don Lindblad
Industrial Relations: Don Lindblad

Dale Caldwell

The following are the 1985 officers:

President: Dale Caldwell
Vice-President: Kerry Glader
Secretary: Lyle Olson
Treasurer: Mark Smith
Ex-Officio: Don Lindblad

I hope that you all had a happy and blessed holiday season. Don't forget to attend the January 7th meeting at Izatys. Word has it that there are plenty of fish left! See you there.

ASSISTANT NEEDED

DEGREE OR TECHNICAL TRAINING PREFERRED....GOLF COURSE EXPERIENCE REQUIRED....SUPERVISORY EXPERIENCE REQUIRED.

SEND RESUME TO JOHN GRANHOLT, SUPT.
EAU CLAIRE GOLF AND COUNTRY CLUB,
2100 MAIN STREET, EAU CLAIRE, WI 54701
YAMAHA GOLF CARS
EXPANDING MODEL CHOICES FOR AN EXPANDING MARKET

Over the years Yamaha has developed and finely honed what has become the most reliable, highest quality line of golf cars on the market. These original gas and electric power designs are used in numerous applications including golf course fleets, privately owned cars for local courses, closed community transportation, as well as many specialized and industrial applications. Yamaha Golf Cars, with their outstanding quality and versatility, can no longer be considered just basic golf cars.

Yamaha has recognized the diversified requirements of this ever expanding market, and we have expanded our model line-up to provide greater choices. Customers can now choose the Yamaha car to more precisely match their particular needs. Two of these new cars are the G2-A5, which has a 4-stroke gasoline engine, and the electric-powered G2-E5.

We did not want these new cars to be just new models for the sake of being new. We wanted cars that were special, with features designed to meet specific needs, cars that would appeal to more customers than ever before. So the Engineering Department was given some design targets for these new models.

These new models would have to have:

- Competitive fleet pricing
- Exterior durability
- Mechanical reliability
- Easily performed, low cost maintenance
- Performance
- Quiet and clean operation
- Maneuverability
- Attractive, functional design
- Low weight
- Comfort and easy operation

Each of these areas received careful consideration. In the end, we felt we had successfully met our objectives in each area.
ANNUAL MEETING HIGHLIGHTS

NEW DIRECTORS. Getting the feel of the podium are newly elected directors. Left to right, Randy Nelson, Fred Anderson, Jr., and Tom Fischer.

BIG WIGS. President Dale Caldwell of MGCSA welcomes Don Hearn, Director of GCSAA, who updated members on the National Association.

HONORED. Retiring Howard Kaerwer of Northrup King and his wife, Barbara, admire plaque presented at banquet.

James M. Latham, Jr. Named Green Section Director, North-Central Region

FAR HILLS, N.J. — James M. Latham, Jr., of Fox Point, WI, has been named Director of the North-Central Region of the United States Golf Association Green Section.

Latham, whose appointment is effective Dec. 1, will replace Stanley J. Zontek, who will become Director of the Mid-Atlantic Region, replacing William G. Buchanan. Latham will be based in Fox Point, WI, and will be responsible for Turf Advisory Service visits to USGA Member clubs and courses in the states of Iowa, Illinois, Indiana, Michigan, Minnesota and Wisconsin.

Born in Hillsboro, TX, Latham was graduated from Texas A&M College in 1954 before additional graduate study at Rutgers University. He is presently Manager, Agronomy and Promotion, for the Milwaukee Metropolitan Sewerage District.

He served on the USGA Green Section as the Northeastern Agronomist in 1956 and the Southeastern Agronomist from 1957 through 1960. He joined the Milwaukee Metropolitan Sewerage District as chief field agronomist in 1960 and served in that capacity until 1978, when he was named manager of Marketing and Agronomy.

Created in 1920, the USGA Green Section is a scientific agency dedicated to improving the playing conditions of golf courses in the United States.

25 BIG ONES. Cal Polsean of Sioux Falls, S.D. shows off 25-Year Membership Plaque presented at the annual meeting. Doesn't look that old, does he?
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WHAT’S NEW WITH THE ASSOCIATES

DAN MILLER TAKES A LOOK INTO THE FUTURE

The ever changing world is not going to bypass the turf industry. The changes in store are going to be quite dramatic and occur more rapidly than anyone of us might venture to guess.

It's hardly any soothsayer talk to know that mowing may eventually be done by lazer beam — though up to now, the one man necessary to push, one to carry power unit and the all important one with fire extinguisher - doesn't sound too practical as yet.

On the other hand, remote control mowing seems to be making considerable headway. With today's computer technology a mowing program is set up and you watch your greens and fairways get clipped from your air conditioned clubhouse room.

And there's more than a hint of new grass strains with amazingly slow growth patterns, maybe cutting the number of mowings in half. A new family of growth retardants is in the offing controlling the speed of growth or limiting height.

We're all going to have to exercise a bit of patience with these developments, but they're definitely on the way. Some things are considerably closer. There is a definite trend toward lightweight fairway mowing equipment - hydraulically or electrically powered reels and these are going to come with specific clip frequency control rather than MPH or RPM. This sort of thing is way beyond the drawing board right now.

The tendency toward one prime power source and many attachments has already made its appearance but you can expect this to make extreme advancement and refinements in the next few years. The advantages of this are quite obvious to all of us.

This list could go on and on. It will be a changing turf industry. There is no question about that and we're all going to fit into it. The results of change, obviously, have to be better greens and fairways with less effort and we'll all accept these objectives and watch carefully as the future brings these changes in turf management.

ASSOCIATE’S CORNER

by RICHARD P. BERSCHEIT
P & H WAREHOUSE SALES INC.

P & H Warehouse Sales Inc. was formed in 1970 as a plastic pipe and fitting distributor for Cresline Plastics in Minneapolis. The following year, 1971, we acquired the master turf distributorship for Rain Bird Irrigation Equipment in Minnesota and South Dakota which is the area we service. Since that time our efforts have focused on designing systems and selling and servicing equipment in the turf irrigation market in our area. This includes golf courses, contractors, municipalities and schools.

We are located at 9865 10th Ave. North, Plymouth, MN. At this location we stock a complete line of Rain Bird and Hunter sprinkler equipment. We also have access to Weather-Tec, Skinner, Thompson and Champion equipment. We stock all related accessories that are required to install or service a turf sprinkler system. We also do in-house controller repair at our facility.

I personally joined the company in 1971 doing irrigation design part-time while attending school for landscape architecture and design. I graduatated in 1973 and became involved full-time in the turf irrigation industry. Since that time I've seen numerous changes in our industry. I guess that's what makes our industry so exciting and challenging.

As we move into the future with all the new sophisticated equipment that is available, our goal remains the same: "To design, sell and service competitive and efficient turf sprinkler systems that will provide the consumer with the expected end result - lush, healthy turf". I look forward to servicing you in the future.
The compact, lightweight

Motor 180
Ride-on triple mower

THE COMPACT, LIGHTWEIGHT RIDE-ON TRIPLE WITH CUTTING WIDTH OF 71 IN.
REDUCES COMPACTION, INCREASES PRODUCTIVITY, ELIMINATES SCALPING.

The Motor 180 is versatile enough to trim golf tees and surrounds. Its low profile design hugs
the ground giving outstanding stability and performance, even on steep slopes. Instant response
from the single foot pedal control for forward or reverse drive gives the ultimate in handling ability.
Choice of 5 knife fixed head and 7 knife floating head cutting units lets you choose the right finish
for your turf. With cutter drive completely independent of ground speed the cutting efficiency is
maintained even when maneuvering at low speed. Units latch out of work manually. Mechanical
lift to units from the operator's seat and grasscatchers are optional.

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