

Sisco
ENGINEERED RAIN

Turf Topics

THE FUTURE IS NOW
at Johns-Manville.


KCS COMPUTERIZED
CONTROLLER FOR GOLF
COURSE IRRIGATION.

KCS is a keyboard controlled, all solid state mini-computer with memory -- multiple program -- digital display -- central processor -- and many more features.

Control the entire irrigation system from your desk.

The KCS central processor is the only true two-wire system. KCS programs are easy to set up and easy to change.

Call Paul Bando or Al Warshawsky at SISCO for a personal demonstration.

Buckner® 
Johns-Manville

Sisco
ENGINEERED RAIN

Write or call direct

Sprinkler Irrigation Supply Co. A division of A.J. Miller Inc.
1316 No. Campbell Rd. Royal Oak, Mi. 48067 Phone (313) 398-2233
Chicago Sales Office/Warehouse
1738 Armitage Court, Addison, Ill. 60101 (313) 629-7730



WIPE OUT WEEDS

with Banvel® 4S & Banvel®+2, 4D

HERBICIDES

**The broadleaf weed 'specialists'
designed for professional turf programs.**

Here's why BANVEL® herbicides are the professionals' choice for weed control:

- Used as directed Banvel will not harm trees, ornamentals or turf—it just eliminates weeds.
- No season restrictions. Lay down Banvel from early spring to late fall—all through the growing season.
- Rain will not affect Banvel. It keeps on working because it translocates—penetrates leaves and is absorbed through roots to attack every part of the weed.
- No special spraying equipment necessary. It is easy to clean out of equipment after use.
- Mixes readily with hard or soft water.
- Easily stored through winter months without losing potency.

**Banvel herbicides—products
for professional turf men**



Velsicol

VELSICOL CHEMICAL CORPORATION
341 East Ohio Street
Chicago, Illinois 60611

©Velsicol Chemical Corporation, 1976

Schroeder's Nursery, Inc.



TREES - EVERGREENS - SHRUBS

Specializing in large Caliper shade trees and Ornaments.
We also offer complete installation service.

TELEPHONE: (312) 546-9444

Arthur E. Schroeder
Richard A. Schroeder
Don Virgens

GRAYSLAKE, ILL.

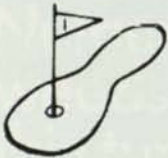
Rt. 1 - Box 34-W

Nursery on Rt. 60 between Rtes. 12 (Volo) and 83 (Ivanhoe)

Dear Ray,
Dr. Joe Ouich has asked me to speak at Penn State's 50th Turf Conference on Tuesday, February 13th. It will be an anniversary for me also, 25 years since I graduated from Penn State. (20 years at Silver Lake already, time really flies)
My topic will be "The Men in my Life", a sequel to my earlier talk on women. I hope to trace the characters I've met in the turf business in the last generation. Warren Bidwell is also on the program, and also Dr. Jim Watson (his topic: Water-Water-Water).
Hope you are keeping warm and healthy.

Dudley H. Smith

PENNCROSS & TORONTO C-15 BENT SOD
and
TORONTO C-15
BENT STOLONS



- Pure to Strain
- Maintained at 1/4" mowing height with "Greens King"
- Grown on Sandy Loam Soil
- Toronto C-15 Strain resistant to leafspot

ALSO FEATURING

- XL-100 Bluegrass Blend Sod

"For the Superintendent who wants the best"

XL-100 is a blend of five bluegrass varieties that were ranked superior in tests conducted at major Midwest Universities.

XL-100 is disease resistant, shade tolerant (60%) and adaptable to close mowing.



H & E Sod Nursery, Inc.

3900 West 167th Street
Markham, Illinois 60426

312/596-7200

ROSEMAN

2620 CRAWFORD AVE. 864-1842
EVANSTON, ILLINOIS

TURF EQUIPMENT HEADQUARTERS

ROSEMAN GANG MOWERS	FORD TRACTORS
TILLER RAKES	DEDOES AERIFIER
LELY SPREADERS	LOADERS
SEEDERS	LEAF MULCHERS
ROTO TILLERS	ROTARY MOWERS
HOMELITE CHAIN SAWS	HOMELITE PUMPS

SALES ● SERVICE ● PARTS ● RENTALS

BOJO TURF SUPPLY CO.

ALL MAJOR TURF SUPPLIES

BoJo

**TURF
SUPPLY CO.**

- PAR-EX
- Vertagreen
- Du Pont
- Diamond Shamrock
- Sand Blasters
- Cyclones
- Fore Par

R R 1, Box 52
Peotone, Ill.
312-258-3485



Vertagreen

A product for all reasons



- Uniform particles. 90% minus 10 plus 20 mesh U.S. Sieve.
- Half the nitrogen is Urea-Formaldehyde.
- Uniform balance of secondary and micro-nutrients in slow-release form — Ca, Mg, S, B, Cu, Fe, Mn and Zn.
- All potash derived from sulfate of potash.
- Available in regular or polyethylene packaging.



Agri-Chemicals

Division of United States Steel

P.O. Box 1685

Atlanta, Georgia 30301

CHICAGO GOLF CLUB 1921

The Chicago Golf Club, Wheaton, IL is known as the oldest 18 hole golf course in the United States. Recently, in the estate of a former member, an account was found describing the reconstruction of the golf course in 1921 and 1922. To some of us "old timers" the information is familiar. To the rest of you the text could be a revelation or simply entertaining.

LABOR SECURED

Local labor or imported labor was the first question for consideration. We found that we could secure contract labor thru an employment agency at 30 cents per hour, but such contract would have put upon the Club the necessity of housing the labor and providing for timekeepers, porters, transportation and a fee to the employment bureau. All of these items taken into consideration indicated an eventual cost of 35 cents and a fraction per hour. Investigation of the conditions around Wheaton indicated that we could engage men for this price and relieve ourselves of housing the men and other onerous details necessary if contract labor were used. We set a figure of 35 cents per hour, at which price we operated throughout the entire season for all labor, except subforemen and men for special work. The plan had proven very satisfactory; we have had a splendid class of labor and it is the opinion of your committee that results have been accomplished at a minimum labor cost.

Method of Constructing New Greens

The greens were located by Mr. Raynor, architect and a model furnished by him was staked out on the ground, carefully surveyed as to contour and shaped in the rough with earth taken from bunkers surrounding the greens, or, as in the case of #7 and #13, hauled from other parts of the grounds. Each green after it was shaped was inspected by Mr. Raynor, and instructions were given as to desired changes in contour, and as to the use of cinders and drainage. In some cases cinders and tile were used. #12 was netted with tile and covered with four inches of cinders, whereas #13 on account of the lay of the land and its construction required neither cinders nor tile; #8 was tiled across the front; #6 was tiled thru the center, and in like manner each green received individual consideration.

When greens were shaped and ready to finish each was built up; first with four inches of sod; then four inches of manure which had been previously piled and well rotted; then five to six inches of top soil carefully selected from various parts of the grounds. The green was then sanded, limed and raked, and was ready for the compost and seeding.

In May compost piles were started - built up of manure, humus from the bog south of the polo field, sand and lime. These piles were watered constantly to prevent heating and to assist rotting, and at proper intervals were turned and screened.

When ready for seeding, the new greens were covered with one inch of compost, marked out in squares of about one yard and hand seeded with the proper amount of seed for each square, then lightly raked and rolled, and turned over to nature to do the rest.

The fairways built this year were first heavily manured (about a car to the acre) then plowed, disced and harrowed; they were then planted in cowpeas and buckwheat. In preparing for seeding, manure was spread over the cover crop at the rate of about a car to the acre and all plowed under. The ground was then disced both ways, harrowed and then worked either with a plank drag or with a chain drag, and where necessary was hand raked and rolled. The seeding was

done with wheel-barrow seeders, the ground being laid out in squares so that all parts would receive the proper amount of seed.

Effect of Dandelions on Next Year's Operations

The question of handling the fairways to be seeded in 1922 is a problem; this year we seeded very little sod land. In 1922 we will encounter almost entirely sod land which was overrun with dandelions. We hope these lands, plowed as they have been, will freeze out the dandelions so that we can put in a cover crop in the spring. If, however, the dandelions do not winter kill, we must depend upon constant cultivation next year, in order to eradicate them in time for fall seeding. We must also prevent the blowing of dandelion seed from the property on the west. We may be able to keep the blossoms picked so that they will not seed, if not, we may be obliged to seek permission of the property owners to plow and reseed their land, or at least weed their lawns. We hope to solve this problem effectively at the lowest possible cost, but we believe action is necessary to eliminate this pest. On our own property we have plowed most of the rough and the balance will be treated next year.

Water System

Although the general layout was not changed, all three engineers criticized the size of the pipe which was proposed to install, with the resulting installation of

6,865 feet of 6" pipe

10,412 feet of 4" pipe

7,144 feet of 2" pipe

24,421 feet — total

All pipe was laid below the frost line, most cases being five (5) feet below the surface, though the contract stated four and one-half (4½) feet, and the system is provided with adequate outlets of self-draining, non-freezing type. Three 4" and three 6" fire hydrants have been installed for the protection of the Club property, and the water mains have been laid to reach every part of the course with hydrants installed every one hundred fifty (150) feet throughout the fairways, so that the entire course can be watered with an adequate supply at high pressure.

Pressure Tank \$6,250.00

A tank was installed for pressure purposes of capacity of 50,000 gallons on a 125-foot tower, giving us approximately 70 pounds pressure at the base of the tank and not less than 50 to 60 pounds pressure at all hydrants. This pressure is sufficiently strong, when using suitable sprays, to break the water up into fine mists for the proper watering of the greens. Pressure from the old tanks was so low that sprinklers would scarcely operate.

Water Storage Pond \$11,741.00

The system as recommended by Mr. Raynor called for a consumption of 250,000 gallons of water per day. The water issuing from our wells at a temperature of about 50°, when used directly on the greens, chills the roots of the grass and is considered detrimental to the welfare of the greens. To provide a quarter of a million gallons a day, it was necessary to dredge the pond and get adequate storage capacity, and means of tempering the water before its use on the course. The pond now has a capacity of approximately 3,000,000 gallons which is nearly two weeks' supply. You will readily appreciate the advantages of having the water in storage for this length of time. When sprinkling the fairways and greens at night, our consumption of water will be approximately 450 gallons per minute for eight to ten hours.

Sand and Cinders

Some sand and cinders will be needed for new greens in 1922. The biggest expenditure will be for bunkers. The method planned for building bunkers is to put in about 6" of cinders, to be well tamped, and then 6" of sand. Mr. Raynor advises that we will not have the same trouble with the clay working up thru the sand, as we have had in the past. Many of the bunkers at present on the course are packed hard and we believe that the proposed method will overcome this fault. We estimate that twenty-five (25) cars of cinders and fifty (50) cars of sand at \$10,000.00 based upon this year's cost, will be sufficient.

CHICAGO GOLF CLUB
RECONSTRUCTION WORK

SEEDS USED

GREENS

(Sow 1 pint to square yard)
Mixture 1921 - 4 bu. Chewing Fescue
1 bu. Creeping Bent
1/2 bu. Red Top
1/2 bu. Colonial Bent

Mixture 1922 - 4 bu. Chewing Fescue
1/2 bu. Colonial Bent
2 bu. Creeping Bent

FAIRWAYS

(Sow 10 bushels to acre)
Mixture 1921 - 4 bu. Chewing Fescue
1 bu. Red Top

Mixture 1922 - 4 bu. Chewing Fescue
1 bu. Rhode Island Bent

ROUGH

(Sow 6 bushels to acre)
Mixture 1921 - 4 bu. Sheep Fescue
1 bu. Blue Grass
1 bu. Red Top

Mixture 1922 - 4 bu. Sheep Fescue
1 bu. Red Top
(No Blue Grass-account of poor quality of seed)

OUTLYING GROUND TO BE SOWN

Hayland (eventually Blue Grass)
Sow per acre - 1 1/2 bu. Oats
1/2 bu. Timothy
6 quarts Clover

Alfalfa Land

Sow per acre - 20# Alfalfa

RECONSTRUCTION COST

EQUIPMENT

	Materials	Labor	Total
<u>HOSE & SPRINKLERS</u>			
500' 2" Rubber Hose	334.85		
500' 3/4" Rubber Hose	67.50		
1000' 1" Rubber Hose	225.00		
Suction Hose	9.39		
Hose Washers, Spanner Wrenches, Nozzles, Sprinklers, Siamese Connections, etc.	104.62		
2 Boston Park Sprayers	291.48		
1 Rainmaker	1032.84		
			1032.84

TOOLS & MACHINERY

1 Case Tractor & Bosch Magnet (10-18)	536.50
1 Spring Tooth Harrow (3 section)	46.75
1 7' Double Disc	90.00
1 9' Culta Pack	85.00
1 2-bottom Tractor Plow	
2 extra shears	111.00
1 55 bu. Manure Spreader	182.00
1 Holden Lime & Fertilizer Spreader	35.00
1 9' Chain Drag	80.00
1 Soil Mixer	377.03
1 10' Double Disc	142.80
10 Thompson Grass Seeders	161.92
Shovels, Spades, Rakes, Sod- cutters, Grub Hoes, Picks, Wheelbarrows, Gas Tanks, Pipe Cutters, Stock & Dies, Wrenches, Chisels, Tape, Axes, Hammers, Lanterns, Pails, Dippers, Oil Cans, etc., etc.	786.89
Mat Compost Screens	27.86
Paint	2.40
1 Roll Galv. #12 Fence Wire	3.70
9 Rolls Chicken Wire used around greens	16.62
6 Rolls Roofing Paper for tool shed	9.00
	2694.47

2694.47

TOTAL EQUIPMENT COST\$3727.31

RECONSTRUCTION WORK

MATERIALS USED

	1921	1922	Total
Cars of Manure	114	20	134
Cars of Fertilizer	2	--	2
Cars of Limestone	3	--	3
Cars of Sand	11	33	44
Cars of Cinders	11	38	49
Cars of Gravel	2	3	5
Cars of Stone	13	--	13
Cars of Tile	3	--	3
Cars of Pipe	8	--	8
Cars of Lead	1	--	1

Editor's note - this is very interesting. Some contrast of today's work.

-next page-

Nels J. Johnson, Tree Experts, Inc.

SINCE 1930

Complete, economical tree service for Private Estates, Parks, Municipalities, Golf Courses, Cemeteries, Schools, Industrial Areas.

All phases of Arboriculture, Diagnosing, Pruning, Treating, Transplanting, Fertilization, Hydraulic and Mist Spraying, Removals, Stump, Routing, Municipal Forestry.

—FULLY INSURED—

Licensed under the Illinois tree expert act. Nels J. Johnson, Sr., Joel Johnson, Jr., and Karl Johnson.

MAIN OFFICE: 912 Pitner Avenue, Evanston, Illinois
Phones: GReenleaf 5-1877 — GR 5-5255
Hinsdale, Illinois — FA 5-0970

FOR THE FINEST IN SOD

THORNTON'S TURF NURSERY

312 - 742-5030

Rt. 2 Box 72

Elgin, Ill.

GROUNDS BUDGET MARCH 1st to NOVEMBER 30, 1923

	Rate	Total	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1 Green-keeper	250	2250	250	250	250	250	250	250	250	250	250
1 Mechanic	160	1440	160	160	160	160	160	160	160	160	160
6 Greensmen	100	5400	600	600	600	600	600	600	600	600	600
12 Greensmen	95	7980	---	1140	1140	1140	1140	1140	1140	1140	---
1 Teamster	95	855	95	95	95	95	95	95	95	95	95
1 Fairway Man	95	665	---	95	95	95	95	95	95	95	---
1 Fairway Man	95	570	---	95	95	95	95	95	95	---	---
2 Greensmen	90	900	---	---	180	180	180	180	180	---	---
4 Sprinklers	45¢ hr.	2000	---	---	400	600	600	400	---	---	---
		<u>22060</u>	<u>1105</u>	<u>2435</u>	<u>3015</u>	<u>3215</u>	<u>3215</u>	<u>3015</u>	<u>2615</u>	<u>2340</u>	<u>1105</u>

WEEDERS

1 Foreman	150	675	75	150	150	150	150	---	---	---	---
6 Weeders	105	4275	315	630	630	630	630	630	630	630	---
10 Weeders	105	3150	---	525	1050	1050	525	---	---	---	---
20 Weeders	105	5250	---	1050	2100	2100	---	---	---	---	---
		<u>13800</u>	<u>390</u>	<u>2355</u>	<u>3930</u>	<u>3930</u>	<u>1305</u>	<u>630</u>	<u>630</u>	<u>630</u>	<u>---</u>

MISCELLANEOUS

Power	900
Oil, Gas & Feed	1500
Supplies & Repairs	600
	<u>2500</u>

Editor's note - How does this compare to your budget of today?

EQUIPMENT

1 Tractor	1000
6 Mowers (Tees)	168
8 Mowers (Greens)	280
100' 2" Hose	125
1 Roller	150
2 Sweepers	220
Screen	250
	<u>2193</u>

How to stop diseases, kill weeds and make your job easier... all with one company... W.A.Cleary

Fungicides	Herbicides
3336 Turf Fungicide	MCP
Bromosan • Spectro	MCP Plus 2,4-D
Cleary's Granular Turf Fungicide	Methar 30
Spotrete • PMAS (10%)	AMA Plus 2,4-D
Caddy • Cad-Trete	AMA (Super Methar)

Specialties

• All Wet • Clear Spray • Tank Cleaner • Ball Washer
• Tru-Green • Grass-Greenzit • Defoamer

W-A-CLEARY CHEMICAL
CORPORATION

P.O. Box 10 Somerset, N.J. 08873 • (201)247-8000

A fisherman was lugging a large fish when he met another fisherman with half a dozen small ones on a string.

"Howdy", said the first fisherman, dropping the huge fish and waiting for a comment.

The fellow with the string of small ones stared and stared. Then he said calmly, "Just caught the one, eh?"

LABOR-**SAVING** GRASSES



GLADE KENTUCKY BLUEGRASS

- Does Great in Sun Or 60% Shade
- Excellent Disease Resistance to Powdery Mildew — Stripe Smut — Leafspot — Rust
- Quick Recovery — Fast Germinating

Adelphi

KENTUCKY BLUEGRASS

- Greens Up Earlier in Spring — Stays Green Longer In Fall
- Great Resistance To Disease

CITATION

FINE LEAF PERENNIAL RYEGRASS

- Performs Great In Hot, Humid Areas
- Improved Mowing Qualities
- Blends Well With All Other Grasses

- Low Growing — Tolerates Close Mowing

FOR MORE DETAILED INFORMATION AND
TEST RESULTS WRITE TO:
VAUGHAN'S

5300 Katrine Avenue, Downers Grove, Illinois 60515, (312) 969-6300

WAREHOUSES LOCATED IN:

Bound Brook, New Jersey • Landover, Maryland • Ovid and Grand Ledge, Michigan • Spokane, Washington

PRECISION BLENDED TOP DRESSING

Custom blended to your specifications
by our modern equipment.

*Buy when you need —
Eliminate costly storage*

We sell an air dried, uniform and
free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HUMUS — BLACK SOIL

HENRY FRENZER

Area Code 312
658-5303

620 Webster St.
Algonquin, Ill.
60102

w

We plan it, design it,
guide it, gun it, pump it,

a

pivot it, trickle it,
mist it, spray it, travel it,

t

sprinkle it, meter it,
filter it, control it,

e

conserve it. Complete irr-
igation systems, supplies,

r

design counsel, drawings, specs . . .
for turf, nursery, greenhouse,
agriculture. Biggest stock and
selection in the midwest.

Master Distributor

RAIN BIRD®

Century Rain Aid

341 Lively Blvd.
Elk Grove Village, IL 60007
(312) 640-6660

31691 Dequindre
Madison Hts., MI 48071
(313) 588-2990

- All Major Turf Supplies
- Par-Ex
- Bean Sprayers
- DuPont
- Chipco
- Vertagreen
- Daconil - Dacthal

Quality — Value — Service

PAARLBERG CHEMICALS

1840 E. 172nd & Paxton, So. Holland, Ill.
GR 4-3086 747-0630

LETTERS TO THE EDITOR



**LOWER RATES FOR PROXOL
NOW APPROVED**

Kalamazoo, Michigan (June 19, 1978) -- Proxol 80 SP, an insecticide for use on golf courses and other fine turf areas, has received label approval for reduced rates in the control of cut worms, sod web worms and army worms. The new low application rate is 1-1/2 oz. of Proxol per 1,000 sq. ft.

This reduced rate of applying Proxol offers the flexibility of adjusting the dosage to insect population pressures. In addition to improved economics of spraying fairways and other large turf areas, the lower rate of application permits the programming of Proxol 80 SP with turf fungicides on an alternate weekly basis.

For golf course greens and other small turf areas, Proxol should be mixed in 5 to 10 gallons of water for uniform application to 1,000 sq. ft. On fairways and larger areas, Proxol should be applied using sufficient water (not less than 10 gallons per acre) for complete coverage.

Apply Proxol 80 SP when the insect population reaches sufficient levels to warrant control spraying. For best results, mow the turf and rake dead grass from the damaged spots before watering the turf, and allow the grass to dry before spraying.

As a part of a total pest control program, Proxol helps keep insects under control, thus contributing to the health and appearance of fine turfs. It selectively controls damage causing insects without appreciatively reducing beneficial insect populations.

Proxol can be used at higher rates in the control of white grubs, as well as cut worms, sod web worms and army worms.

For more information concerning the use of Proxol 80 SP at the new reduced rate, write: "Proxol 80 SP" TUCO, Division of The Upjohn Company, 9823-190-1, Kalamazoo, Michigan 49001.

NATIONAL CHEMSEARCH CORP.

222 South Central Ave.
St. Louis, Missouri 63105

ILLINOIS LAWN EQUIPMENT, INC.

SALES, SERVICE AND PARTS HEADQUARTERS FOR

JACOBSEN and CUSHMAN

14750 La Grange Road - Orland Park, Illinois 60462

TELEPHONE: (312) 349-8484

(800) 942-8610
Illinois Wats

(800) 323-7042
Indiana-Michigan Wats



DAVIS GRASS SEED/DACO FERTILIZER

SOME OF THE LINES WE CARRY TO SERVICE YOU . . .



FERTILIZERS

Daco

Milorganite

USS Vertagreen

Vitex

FUNGICIDES/HERBICIDES/INSECTICIDES/REPELLANTS/RODENTICIDES

Amchem
Aquatrols
Chevron
Diamond Shamrock

Du Pont
Elanco
Geigy
Gordon

Mallinckrodt
Marine Biochemist
Ortho
Rhodia

Riverdale
Rohm & Haas
Tuc
Velsicol

TURF AND GROUNDS EQUIPMENT

Ames
Brutus
Cyclone
Gandy
Giant Vac
Gilson

Goodall
Green Machine
Hahn
Howard Commercial Mowers
Howard Rotovator
Jaydee
Larson

Lindig
Line King
Locke
MTD
Mc Guire
Mott
National

Parker
Ryan
Sensation
Turf Vac
Union Fork & Hoe
Weed Eater

TREE AND SHRUB EQUIPMENT

H. K. Porter

Lombard

Stihl

McCulloch

Snap-Cut

TEE AND GREEN EQUIPMENT

Chicopee
Henry

Lewis
Par Aide

Shen Products
Sherrit
Stewart-Decatur

Shur-Way
Standard

George A. Davis, Inc.

5440 NORTHWEST HIGHWAY, CHICAGO, ILLINOIS 60630 • 312-763-6363