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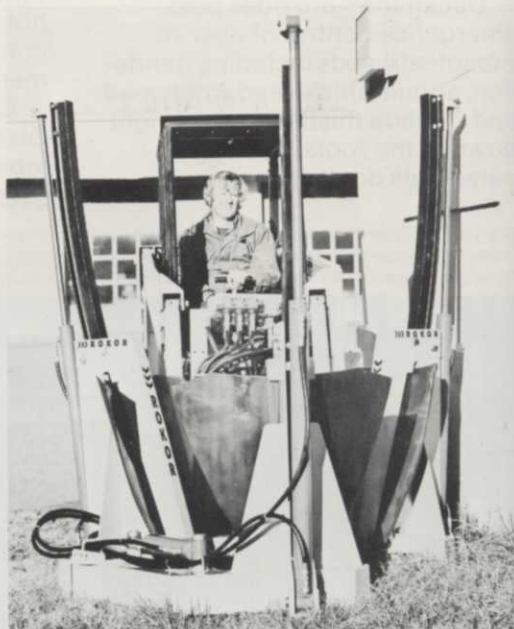
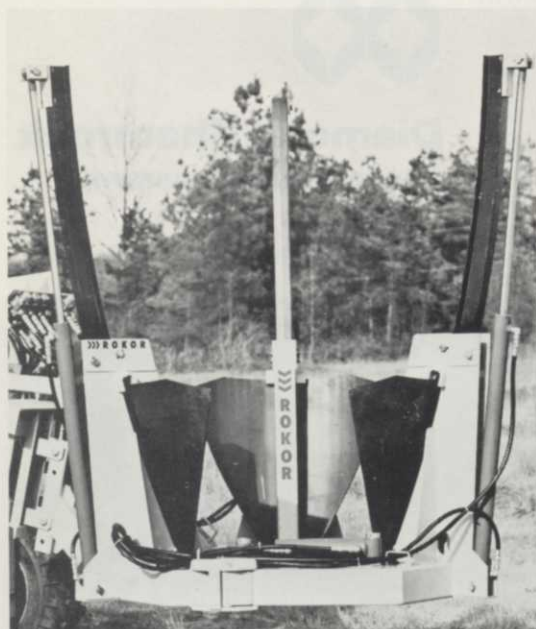




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**MODEL TD-32.** Weight—1,070 lbs. Digs a 420 lb. ball; a true 32" wide and 28" deep; trees up to 3" diameter. Complete with hydraulics and adapter for skid loader or tractor mounting. As shown.

**MODEL TD-40.** Weight—1,600 lbs. Digs a 950 lb. ball. Ball is a true 40" wide; 38" deep. Handles trees up to 4" in diameter. Furnished complete with hydraulics, adapter and lift attachment, if required.

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There are a number of soluble N-P-K formulations on the market including Prolawn, Sta-Green and Rapid-Gro. Most of the soluble fertilizers are formulated from the same nutrient sources and, therefore, give similar results when applied at the same rate. You should price the fertilizers and compare the cost per nutrient pound.

Micronutrients are available in the chelated form as Sequestrene and as soluble salts such as ferric nitrate and magnesium sulfate.

**Q:** What is the composition of Wilt-Pruf? Can this product serve as winter guard?

**A:** Wilt-Pruf NCF is a low molecular weight, Lewis acid catalyzed polymer of beta-pinene. It is chemically di-l-p-Methene.

Wilt-Pruf reduces tissue desiccation and is labeled for winter protection.

**Q:** I need the name and vendor of a product that will help to eliminate Christmas tree poaching. I understand that such a spray is available that will not harm trees but will give off an offensive odor when the tree is placed indoors.

**A:** You are probably referring to the deer repellent which gives off an offensive odor at room temperature. Such a product was used by the Somerset County Parks Commission in New Jersey this past winter. Contact Jack Moody, secretary-director of the commission, for evaluation of the product. **WTT**

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## Davey announces a two-week seminar for urban forestry foremen.

The Davey Horticultural Institute in Kent, Ohio, will conduct a series of special two-week courses in tree-care maintenance operations beginning May, 1979. Any federal, state, municipal or institutional employee can enroll. Since 1904, Davey has been conducting formal training programs on tree-care maintenance.

You will be able to expand your knowledge in all phases of tree maintenance through lectures, demonstrations and concentrated work in the field. You're assured of ample individual attention because the student/instructor ratio will be 8 to 1, or less.

**Subjects covered will include:** • Pruning • Climbing • Transplanting • Cabling • Tree insects • Fertilizing • Bark tracing • Girdling roots • Spray equipment • And much, much more

Your \$575 tuition covers all reference books, study pamphlets, supplies, equipment rental fees, materials for field operations and insurance.

Low-cost accommodations are available at Kent State University's Korb Guest House. The Kent area has a number of inexpensive restaurants. Regular limousine service links Cleveland-Hopkins Airport with the Institute.

Classes are limited to just 24 students on a first-come, first-served basis, so we urge you to act today. For complete information, please contact:

Richard E. Abbott  
Vice President, Davey Environmental Services  
117 S. Water Street, Kent, Ohio 44240

**Tel: (216) 673-9511**

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MARCH 1979/WEEDS TREES & TURF



# PROSCAPE

By Michael Hurdzan, Ph.D., golf course designer and consultant

**NOTE:** In the January 1979 issue of WTT, I advised you on a late fall fertilization to be applied in late November and early December. Although I have seen good results with fertilizer applications during this period, I believe that you will have better results with a mid-October application instead. This change in thinking is basically a product of many discussions with turf managers and researchers this fall and winter.

**Q.** I have heard and read many viewpoints on thatch and mat in turf and in almost every instance the definition of the two has been reversed. Please give an example and illustration of each (thatch and mat). Also, has any information on the use of Posan to retard seeding of *Poa annua* on greens been compiled, or is Posan strictly for fairways? Oxnard, CA

**A.** The difference between mat and thatch is only in degree. The term mat is meant to connote about 1/4" or less of undecomposed stems, leaves, stolons or rhizomes, that accumulate between the soil surface or rootzone and the living plant. In most instances mat is a desired condition because it provides resiliency to the turf and thus lessens mechanical damage to the plants, resists compaction of underlying soils, and reduces rapid evaporative moisture loss from the soil. In short it is a thin manageable, thatch layer. On the other hand, thatch is the excess accumulation of the same dead plant parts which results in all the commonly associated, and too well known problems.

The use of Posan should be confined strictly to fairways and a Bensulide based product used on greens. Check the September 1978 Proscap column for elaboration.

**Q.** Is there a school in the U.S. where you can take a landscape architect course by corresponding? B.H., Accomac, Va.

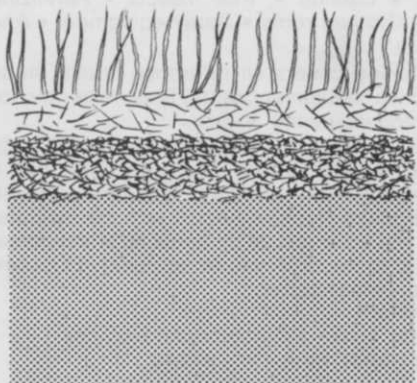
**A.** Not that I know of and if there was such a course I would advise you not to waste much money or time with it. The reason for such a strong

negative reaction is that to learn landscape architecture skills by correspondence is analogous to learning medicine by mail. To do landscape architecture (not to be confused with landscape design) requires using: Detailed problem and situation analysis; applying a suitable design process; formulating and presenting the design in standard architecture language; selling the design intention from a basis of history, economics and limitations using many graphic skills; and then being able to technically advise and inspect the work during construction phases. The really proficient landscape architect also has the ability to advise on long term maintenance of the design features to insure it remains as he planned it. To acquire these basic skills requires 4-5 years of total immersion in a classroom/studio situation where you learn most from your fellow classmates, much from the professors and critics, and some things from your own efforts. This program is very intense and requires extreme discipline of mind and body to endure the rigors of a program that sets high standards in such diverse subjects as:

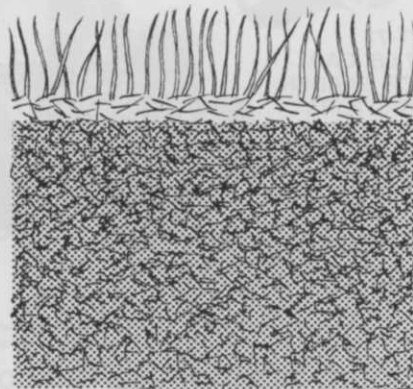
- 1) History
- 2) Basic design
- 3) Graphic and design language
- 4) Architecture appreciation
- 5) Problem analysis and construction methods
- 6) Communicative skills
- 7) Plants, plant materials, and construction materials
- 8) Advanced math or computer science.

To dramatize the dedication that such a program requires, it is not unusual for many large universities to start with 200 L.A. students as sophomores and only graduate 40 or 50 of that group. The benefit to the general public is that this harsh selection process insures only qualified practitioners.

In addition, most states require that a landscape architect be registered within that state and often this requires extensive testing. To pass these rigorous tests nearly mandates a formal college program. Check Proscap in the January issue of WTT for more information on available schools.



**Thatch, as illustrated** on the left, is an excessive accumulation. Mat, illustrated on the right, is an acceptable amount of thatch that actually enhances the micro-environment. (Photo courtesy of *Turf Manager's Handbook* by W. H. Daniel and R. P. Freeborg.)





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*Ceratocystis ulmi*, the fungus that causes Dutch elm disease.

- Even though it is more effective and convenient, ARBOTECH costs about the same to use as other elm fungicides.

This year, put ARBOTECH to work in your disease control program. It's the strongest protection you can give an elm against Dutch elm disease.



## Arbotect

### Strong protection for elms.



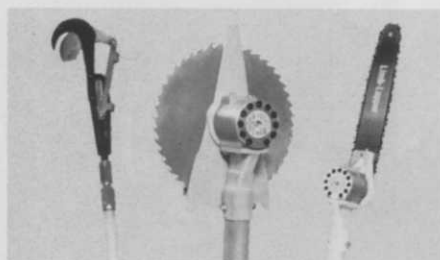
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## NEWS *Continued from page 14*

Nurserymen's Association and the Columbus Landscape Association. Dr. Chadwick has organized a steering committee representatives from the Kiwanis Club, The Ohio State University Horticulture Department, Secrest and Dawes Arboretums, and the Metropolitan Park District of Columbus, Ohio.

A master plan is being proposed that will incorporate the best in new varieties of ornamental plants within the natural beauty of Inniswood Gardens. Some plantings are scheduled during 1979, with the greatest emphasis during the 1980 and 1981 planting seasons.

### NURSERY

#### HRI approves funds for fifteen projects

The Horticultural Research Institute, Washington, D.C., recently approved funding for 15 Richard P. White \$500 Research Grants for 1979.

Any organization conducting nursery research is eligible to apply including state and federal research laboratories, land grant universities, forest research stations, and arboreta.

Recipients are selected on the basis of their responses on a one-page questionnaire. The only restrictions are grant recipients must agree to use the money to purchase supplies or equipment to continue or complete a project and they must report the progress and/or results of their research to HRI for distribution to the nursery industry.

Grant applications are available from HRI, 230 Southern Building, Washington, D.C. 20005, and must be

returned by May 1.

In related news, an expanded edition of the HRI publication *New Horizons* is now available. The booklet has been expanded in 1979 to include reports from HRI contract researchers and Richard P. White grant recipients.

Cost of the 40-page publication is \$2.50 per copy for educators and \$4 per copy for others from HRI, 230 Southern Building, Washington, D.C. 20005.

### RESEARCH

#### Degassed water shows growth advantage

Two Russian scientists have discovered that "degassed" water promotes increased growth in plants. Igor and Vadim Zelepukhin, of the Institute of Fruit-Growing and Vine-Growing of Kazakhstan, Kazakh, U.S.S.R., accidentally discovered that water which is boiled and cooled rapidly is several times more biologically active than meltwater.

Test showed that seeds soaked in the "degassed" water produced increased yields and some crops watered with it produced 10 to 12 percent higher yields.

The researchers said higher yields result because "degassing restructures" the water molecules so they are in the proper pattern to pass more readily through cell walls and be utilized immediately in vital cell functions.

The "degassing" process involves boiling the water, thereby removing dissolved gasses, and quickly cooling it, under airless conditions, so no gasses can re-dissolve into the water.

55 Years and over 5 million trees



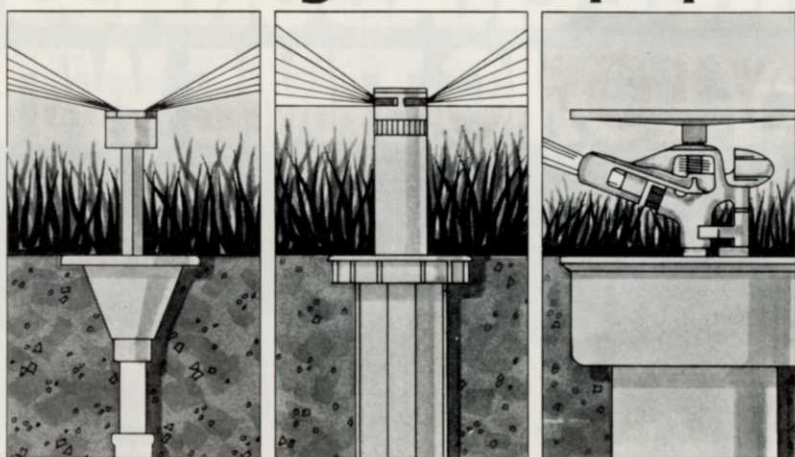
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## Century City

accessible places are treated bi-monthly with a quick release fertilizer. The slow release is applied once a year and then we have intermediate fertilizers for areas scheduled for treatment three or four times a year." Zessau's fertilizer decisions are not made by guesswork, though. His soil amendments are scientifically formulated from soil samples and lab analysis done by O. A. Matkin, Soil and Plant Lab, Los Angeles. Zessau credits Matkin with a major role in the overall up-keep of plant nutrition at Century City.

Decisions concerning fertilizer breakdown and concentration are only one aspect of Zessau's soil amendment program. Fertilizer applications are common at Century City. Fertilizers are applied when needed and Zessau has learned that when spraying any chemical in an urban area people are inevitably going to be concerned. "I don't care if you're spraying water — somebody is going to get uptight about it," he said. Zessau has found that a little psychology goes a long way; instead of applying liquid fertilizers, he's switched to granular mixes. "Oddly enough, people don't look twice if you're applying a granular," he observed. "The only time we ever apply a liquid fertilizer is in extremely hard-to-get-to places where we sometimes inject the fertilizer into the sprinklers. This can also be a tremendous labor saver when you consider the fact that we don't have to send a man carrying a 100 pound bag of granular fertilizer climbing up into some awkward bed."

Sprinkler systems, both overhead and drip, are all hooked up to automatic timing devices which saves Zessau's maintenance crew countless hours. Taken a step further, Zessau explained that some of the development's sprinklers are even more sophisticated — triggered automatically when tensiometer readings in a given bed fall below a certain moisture level.

Landscape technology obviously has come a long way from the days of peat moss and a hoe. For John Zessau, it's taken what would have been a horticultural pipe dream twenty-years ago and made trees grow over six story underground parking lots, made roses flourish in steel and concrete; and helped ivy thrive for miles over a thin layer of sand and backfill mix. **WTT**



# WE CONTROL CRABGRASS, C FOR A VERY LONG TIME WITH

## MARCH

SUN	MON	TUE	WED	THURS	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## APRIL

SUN	MON	TUE	WED
	2	3	
8	9	10	
15	16	17	
22	23	24	
29	30		

## MAY

SUN	MON	TUE	WED	THURS	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## JUNE

SUN	MON	TUE	WED
3	4	5	
10	11	12	
17	18	19	
24	25	26	

Please read labels carefully, and use only as directed.

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# GOOSEGRASS AND POA ANNUA NEED VERY EARLY APPLICATION.

URS	FRI	SAT
5	6	7
12	13	14
19	20	21
26	27	28

URS	FRI	SAT
	1	2
7	8	9
14	15	16
21	22	23
28	29	30

Now, in established perennial Bluegrass, Bermudagrass, Perennial Ryegrass and St. Augustinegrass turf, Chipco® Ronstar® G gives effective control of Crabgrass, Goosegrass and Annual Bluegrass (*Poa annua*), as well as five other major annoyances to you and your golfers.

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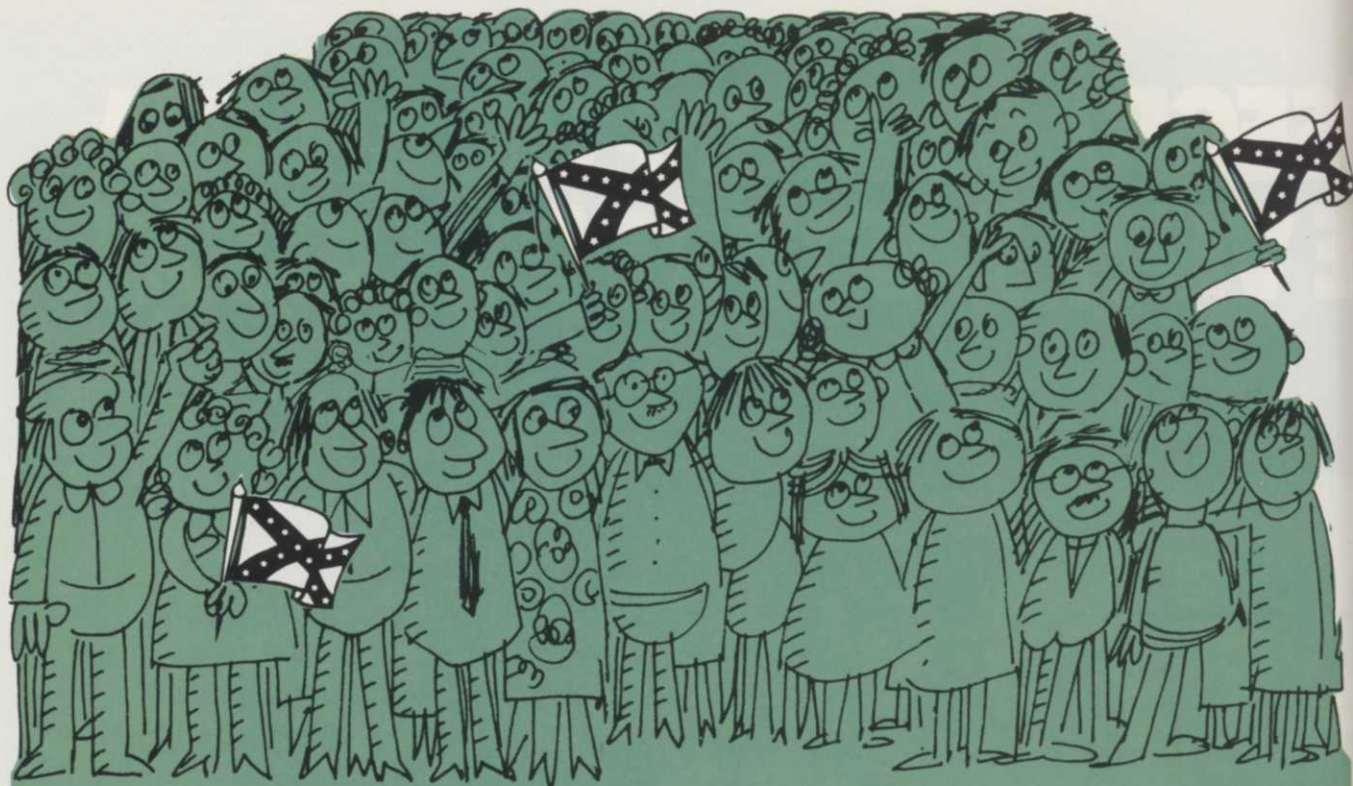
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