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**Mow cleanly, catch all the clippings and then dump them, without ever leaving your seat!**

The computer designed 60" high-lift cutting deck combined with the "Grass Caddy" vacuums up clippings and litter for professional well groomed turf.

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or blower to maintain; one reliable Cushman-built power plant does it all.

There's no mower on the market to match it. When you



want well-groomed turf fast and economically, nothing compares to the Cushman Grass-Grooming System.

For a free demonstration on your grounds, contact your Cushman Dealer or call us toll-free 1-800-228-4444.

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# 30-day control of dollar spot, fusarium blight, and anthracnose is no longer a small miracle.



## A NEW GRASS GROOMING SYSTEM

...and well-groomed turf that's economically, nothing compares to the Cushman Grass-Grooming System. For a free demonstration on your grounds, contact your Cushman Dealer or call us for the 1-800-228-4444.

...of blow to maintain one year's die Cushman-built power plant does it all. There's no mow on the market to match it. When you



...how cleanly, catch all the clippings and then dump them without ever leaving your seed. The computer designed 80" high-life cutting deck combined with the "Grass Gobby" vane cut to clip and lift for professional well-groomed turf. The operator can see when the 18" diameter hopper is full, he then dumps it hydraulically into a container or pickup bed as high as 47 feet without ever leaving his seat. The "Grass Gobby" gives you clean and continuous service and gets you into the mowing season. There's no machine going

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# With BAYLETON, it's par for the course.



When it comes to these common fungus diseases, <sup>®</sup>BAYLETON Fungicide is uncommonly effective.

Apply BAYLETON according to label directions and you get lasting control of dollar spot, fusarium blight, and anthracnose. Control that lasts a full 30 days, sometimes longer.

BAYLETON is more than a contact fungicide, more than a systemic fungicide with only foliar activity. With BAYLETON, you get contact action plus systemic action with both foliar and root uptake. The result is unequalled staying power and the broadest spectrum of control available in one product.

BAYLETON not only gives

you 30-day control of dollar spot, fusarium blight, and anthracnose, but also combats brown patch, copper spot, powdery

mildew, red thread, rusts, smuts poa annua decline, pink snow mold, and grey snow mold.

With its excellent efficacy and lasting residual action, BAYLETON requires fewer applications and is more economical than ordinary fungicides. Your turf chemicals distributor has it.



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# LANDSCAPE

## UPDATE

### Robertson director of programs

Linda A. Robertson has been appointed Director of Programs and Administration for the American Society of Landscape Architects.

Robertson, formerly ASLA's director of membership and chapter services, will be responsible for coordinating ASLA annual meetings, professional awards programs and educational seminars. Robertson replaces William W. Oyler who resigned from ASLA in February.

ASLA also announced the appointments of Teresa M. Morris, formerly membership coordinator, as director of membership; Anne M. Tierney, formerly project coordinator, as director of chapter services; and Ned Flaherty, formerly ASLA's automated systems consultant, as manager of information systems and landscape architecture bookstore.

For pricing and additional information, write Associated Landscape Contractors of America, 1750 Old Meadow Road, McLean, VA 22102, (703) 821-8611.

### NLA elects new directors, officers

At the 44th annual meeting of the National Landscape Association, Joe Wayman of Forrest Keeling Nursery, Elsberry, MO, was elected the association's president and Robert Siebenthaler of The Siebenthaler Company, Dayton, OH, was elected its vice president. NLA's new secretary-treasurer is Denny Church of the D.R. Church Landscape Co., Addison, IL.

Directors elected for two-year terms are: Robert Siebenthaler, Richard Campbell of Campbell's Nursery & Garden Center, Lincoln, NE; and Wayne Hardy of Vista Landscaping, Orlando, FL. Gerald Harrell of Landscapes Unlimited, Houston, TX, was elected director-at-large.

### ALCA tape offers irrigation basics

Contractors can learn about design and installation of landscape irrigation systems through a one hour, color, video tape called "Basic Landscape Irrigation" from the Associated Landscape Contractors of America. The program covers the basic essentials that need to be considered before undertaking the design and installation of an irrigation system.

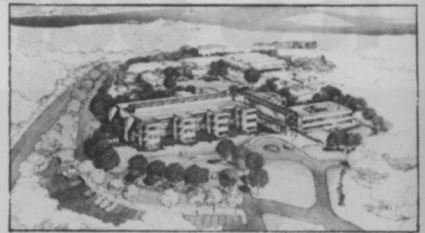
The videotape follows a professional contractor on a job from beginning to end. The tape shows how to measure and stake a project, install a complete system, flush it out and final fine-tuning adjustments to put it into operation.

Also included on "Basic Landscape Irrigation" is basic concepts of designing an efficient irrigation system. There are examples of various types of systems and treatments for different irrigation situations like lawns, groundcovers, flower beds, slopes, planters and other areas that need special consideration. The tape also examines in detail the various components such as sprinklers, drip equipment, valves, controllers, pipe and fittings and explains their operation, function and application in the system.

## NEWS from page 10

For the last 15 years, Showa Denko and Diamond Shamrock have been in a joint venture in Japan for the production and sales of the fungicide, Daconil.

Diamond Shamrock's agricultural chemicals and animal health sales are expected to reach \$260 million in 1983 with operating profits of about \$40 million.



A new \$38 million agricultural chemicals research facility to be located in Richmond, CA, will consolidate the research and development activities of Chevron Chemical Company's Ortho divisions. The new facility, to be called Ortho Research Center, will comprise a two building complex enclosing 135,000 square feet. The new scientific complex is scheduled for completion and occupancy in 1985.

## TURF

### New York State turf field day set

Cornell University and the New York State Turfgrass Association will co-sponsor a turfgrass field day June 21 at the Turfgrass Field Laboratory, Ithaca, NY.

The all day program includes turfgrass management, diseases, fungicides, insect problems, insecticides, growth regulators, wetting agents and weed control. For more information, contact Dr. A. Martin Petrovic, Plant Science Bldg., Cornell University, Ithaca, NY 14853.

## SEED

### Turf-Seed sponsors Blue Tag promotion

Turf-Seed, Inc. of Hubbard, OR is sponsoring a Blue Tag Promotion that is offering a free Oregon Deep Sea Salmon fishing trip, gourmet Hubbard hams and Oregon Products Gift Packs. Prizes will be awarded based on the total number of points accumulated during the promotion. Points will be awarded for each Oregon Blue Tag

*continued on page 16*

# Does anyone's career depend as much on timing as a turf manager's does?



## Possibly.

Pennfine Perennial Ryegrass covers more ground than any other turfgrass variety in the world. This message recognizes the people who made it happen.

For your free full-size (22" x 28") poster of this ad, send your name and address to:  
Pennfine Poster # 5, P.O. Box 923, Minneapolis, MN 55440. ( Watch for the other five ads in this series. )

## UPDATE

### **EPA, White House mix Superfund with politics**

The resignation of Ann Gorsuch Burford and the installation of William Ruckelshaus as EPA Administrator overshadowed discoveries by a Congressional Subcommittee of political cooperation between Rita Lavelle, fired head of the hazardous waste program, and White House staff.

Lavelle's office was secured when she left and documents were found that indicated Lavelle met with White House aide James Medas in July 1982 to discuss how Superfund spending could be manipulated to help out candidates in close races for reelection. One example is the funding provided to Massachusetts months before the election to help former Governor Edward King.

Lavelle and Burford both face contempt charges. The subcommittee hopes to call Medas to testify to explain the notes found in Lavelle's office.

### **Label disposal guidelines expanded**

New pesticide storage and disposal requirements for labels of pesticides have been expanded to include a mandatory disposal warning and directions for storage and disposal. Storage directions will cover temperature, humidity and handling. Disposal directions will be based upon container type, such as aerosol or plastic containers, and type of chemical.

### **Change in EPA leaders may delay FIFRA changes**

A temporary hold on amendments to FIFRA until new EPA leadership has had time to make their own suggestions is being discussed by members of the House Agriculture Committee. A subcommittee to the committee has received numerous amendments to FIFRA and held hearings. A two-year extension for FIFRA is being considered giving the new administrator time to study the issues and changes required in FIFRA.

### **Caribbean Initiative reintroduced**

The Senate Finance Committee has been holding hearings on Senate Bill 544, known as the Caribbean Basin Initiative. The bill passed the House prior to adjournment but was not considered by the Senate. The bill seeks to exempt nursery products from a duty-free status allowed to Caribbean growers. Leather and sugar have already been exempted from the duty-free status. The Interior Plantscape Association and the American Association of Nurserymen are supporting the bill.

saved that carries the variety name or seed mixture of a Turf-Seed, Inc. proprietary. Different seed kinds carry different point values. Varieties and mixes participating in the Blue Tag promotion and the corresponding point values are:

CBS, 1; Citation, 1; Omega, 1; Birdie, 1; Oregreen, 1; Birdie II, 1; Manhattan II, 1; Columbia, 2; Shasta, 2, Midnight, 2; N-535, 2; Fortress, 2; Shadow, 2; Waldina, 4; Aurora, 4; and Olympic, 1.

Each participant who accumulates any combination of tags valued at 2,000 points wins the fishing trip; 100 points wins a ham and 25 points earns a Gift Pack. Qualifying turf associations may redeem blue tags for cash at the rate of \$.50 per point. This program will have an initial run of three years. Tags can be saved from year to year.

### TURF

#### **Bidwell joins Tee-2-Green Corp.**

The Tee-2-Green Corporation is sponsoring former golf course superintendent Warren Bidwell as speaker for local GCSAA chapter meetings and state agricultural schools offering a turf seminar program to discuss the merits of Penneagle and Pencross Bentgrass. Bidwell has over 52 years experience in turfgrass. His career has been varied, including major construction and landscaping. He was sent abroad by Tee-2-Green in 1974, '76, '80 and '81 to acquaint fellow turf growers with the merits of Penncross and later, Penneagle. On two occasions, he was guest lecturer at the South African Greenkeepers and Club Managers Associations, the 4th and 6th Australian Turf Conferences and the New Zealand Turf Seminar at Palmerston North, and later at the Kansai Turf Station in Japan.

#### **Stauffer promotes Wissmiller in sales**

Stauffer Chemical Company has named James E. Wissmiller national sales manager for the company's Agricultural Chemical Division.

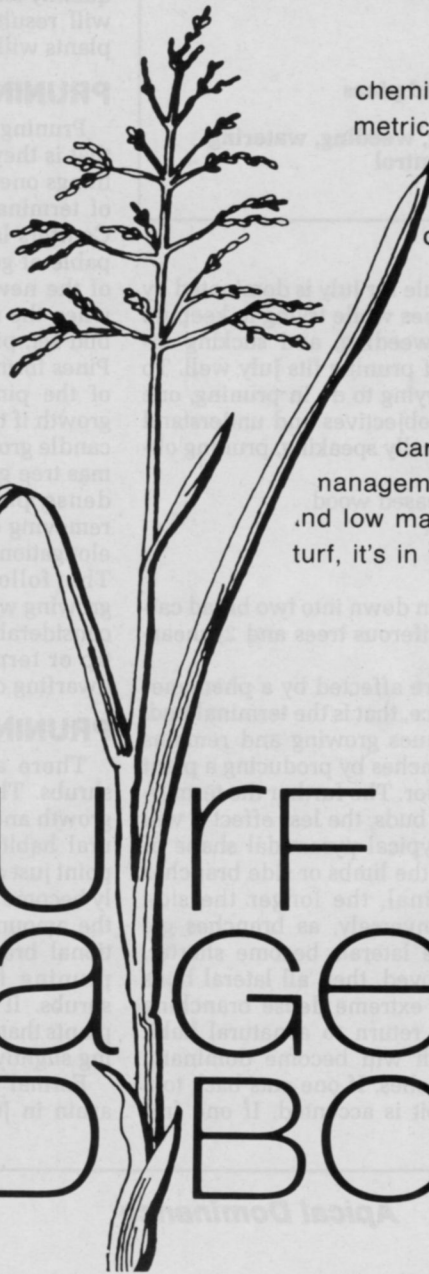
For the past four years, Wissmiller has served as director of marketing for Stauffer Produtos Quimicos Ltda., Sao Paulo, Brazil, a wholly-owned Stauffer subsidiary. Since joining Stauffer in 1970, Wissmiller has also held positions in agricultural chemical sales and sales management. In his new position, Wissmiller will be located at the company's Westport, CT headquarters.

# Finally, An Aid For Teaching Turfgrass

Superintendents, Contractors, Lawn Care Managers, New, On-the-Job Reference.

The Turf Managers' Handbook is a comprehensive, organized approach to turfgrass science and care. It has been designed and written by leading turf specialists from Purdue, Dr. William Daniel and Dr. Ray Freeborg, for on-the-job reference and as a text for students.

The book contains 150 illustrations and 96 color photographs. Data includes 240 tables and forms. Included are specifications for rootzones, employment, calculations for



chemical applications, and extensive metric-imperial conversion. Business

and technical aspects of turfgrass management are covered in this 424-page book.

Planning, purchasing, hiring, construction, and plant selection are put together for easy on-the-job reference.

Markets covered include lawn care, sod production, golf course management, cemeteries, athletic fields, and low maintenance areas. If it concerns turf, it's in the Turf Managers' Handbook.

## TURF managers' Handbook

### Ordering Information

Please send \_\_\_\_\_ copies of the hardback (\$23.95\* ea.)  
\_\_\_\_\_ copies of the paperback (\$18.95\* ea.)

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# LANDSCAPE LOG

By Douglas Chapman, Dow Gardens, Midland, MI

## JULY JOB FOCUS

1. Shearing hedges and pines
2. Continued mowing, weeding, watering and sucking insect control

The maintenance schedule for July is dominated by shearing of hedges and pines while trying to keep up with mowing, irrigation, weeding, and sucking insects. This shearing type of pruning fits July well. To understand what we are trying to do in pruning, one must remember the main objectives and understand the plant's response. Generally speaking, pruning objectives for plants include:

- removal of dead and diseased wood
- enhance the natural habit
- formal shearing (shaping)
- height maintenance

This shearing can be broken down into two broad categories—1) pruning of coniferous trees and 2) shearing or pruning of shrubs.

Physiologically, plants are affected by a phenomenon called apical dominance, that is the terminal bud, or apical meristem, continues growing and remains dominant over all side branches by producing a plant hormone, or growth regulator. The further the terminal is away from the lateral buds, the less effect it will have and, therefore, the typical pyramidal shape of trees, meaning the further the limbs or side branches are away from the terminal, the longer the side branches will be and, conversely, as branches get closer to the terminal, the laterals become shorter. Once this terminal is removed, then all lateral buds will break and, therefore, extreme dense branching can occur but allowed to return to a natural habit again, the terminal growth will become dominant, thus suppressing side branches. If one cuts back to a bud, then the natural habit is accented. If one fre-

quently shears off the terminal, no apical dominance will result and, therefore, dense shaped hedges or plants will be the result.

## PRUNING PINES, CONIFERS

Pruning of pines and other conifers is time specific, that is they must be pruned in July. Further, the only things one can do in pruning is to reduce the amount of terminal growth or completely remove a branch. Conifers lack adventitious tissue, or lateral buds, capable of generating suckers. Thus, complete removal of the new growth will result in a dead branch. But when the new growth is in the "candle stage" prior to bud set, pines can be pruned and new buds will set. Pines form these buds once a year; therefore, pruning of the pines must be confined to current season's growth if the branch is to be retained. Shearing of the candle growth is a common technique used by Christmas tree growers or anyone trying to produce a thick dense pine. This shearing is nothing more than removing one-half of the candle during the period of elongation. The result is the formation of many buds. The following year these many buds continue growing with one becoming dominant, but the plant is considerably denser with extensive branching at the tip or terminal. If this practice is continued, then dwarfing of the tree is the result.

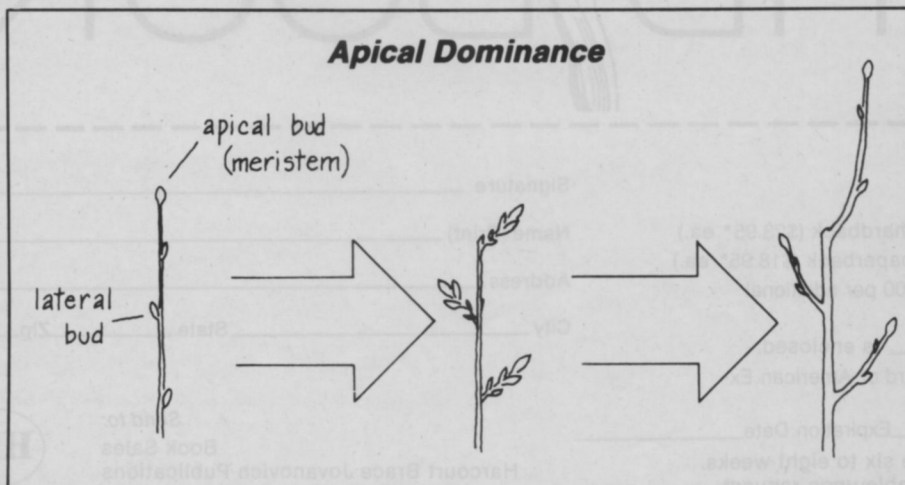
## PRUNING OF EVERGREEN SHRUBS

There are two types of pruning for evergreen shrubs. They include accenting the natural habit of growth and formal shearing. When accenting the natural habit of growth, one always prunes back to a point just acropetal to a bud so that bud will eventually become dominant, but one has reduced the plant by the amount of growth removed, while causing additional branching. This is the most difficult type of pruning for junipers, yews, and any deciduous shrubs. It can be the most rewarding, resulting in plants that maintain their own natural habit, while being slightly dwarfed and dense.

Formal hedge shearing is usually accomplished again in July. The most important considerations in

formal shaping are: 1) deciding what shape is desired, 2) that this shearing be done at least once and, in the case of yews, twice each year, and 3) that the upper portion of the plants be narrower than the bottom. While shaping hedges, it is important to remember that leaves remain on the plants only when they receive sunlight; therefore, the lower branches should be longer than the upper branches. Often hedges

*Continued on page 20B*





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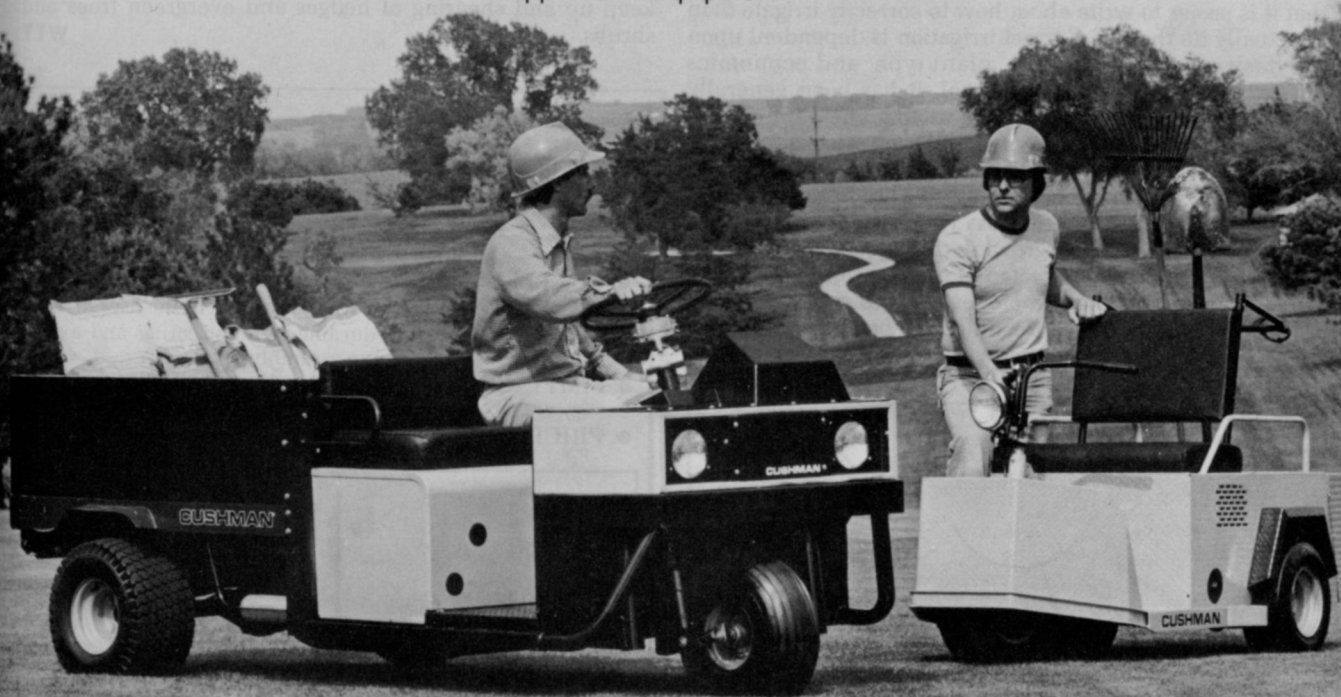
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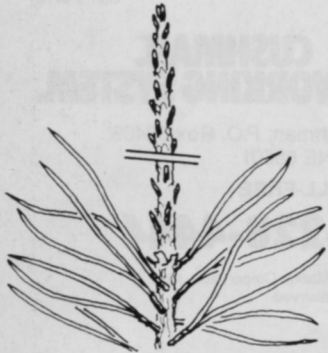
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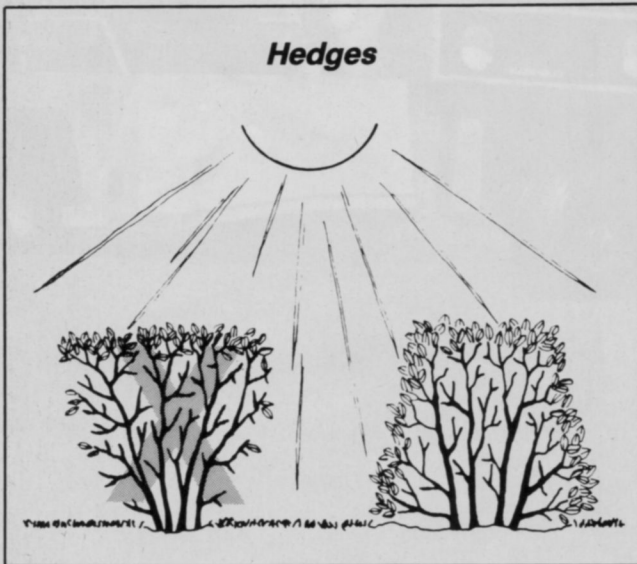
are pruned with the top broader than the base. This results in shading and complete loss of lower leaves. It is, thus, important to remember the effect of sunlight on plants and their ability to retain leaves. Hedges or formal shaped plants should be pruned just after the flush of growth. For some plants, such as junipers, that is once annually. Privets can require three to four shearings each growing season. Yews require pruning twice a year. The order of maintenance from least to most when considering shearing is: juniper—yew—privet.

With the hot weather of

July comes two additional tasks: 1) providing added moisture for turf and 2) controlling of sucking insects.

Artificial irrigation is one of the most challenging tasks in maintenance of the landscape. One must clearly understand that it is easier to write about how to correctly irrigate than to actually do the job. Correct irrigation is dependent upon the desired effect, soil type, plant type, and economics (availability of water in your area). It has been generally stated that one should consider applying one-acre inch of water per week to keep a lawn actively growing throughout the summer months. In looking carefully at the objectives and as water becomes more limited, we are beginning to research the use of different grass types which require less water to remain actively growing throughout the summer. Some research will be directed at cool season grasses. The three schools of thought include: 1) grass types that will grow in the southwest; 2) breeding new bentgrass cultivars; and 3) breeding bluegrass that will be drought tolerant. The

**Hedges**



fact remains that breeding custom-designed turfgrass cultivars for disease resistance and minimal water utilization with maximum growth during doughty months is paramount.

The soil has major impact on how one irrigates. For an ex-

remely light sandy soil, it would not be uncommon to irrigate frequently, that is every other day. But provide no more than one-third to one-half inch of water per application. If a clay loam soil, then one should probably irrigate once a week, providing an acre-inch of water to maintain actively growing turf.

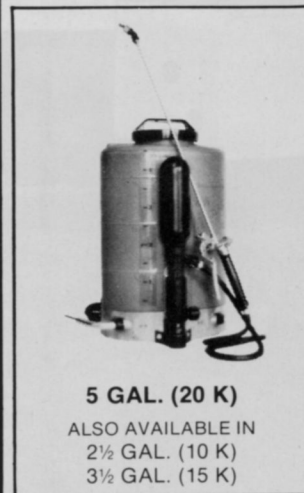
Although insect control will depend on the type of insects that may affect your landscape and the part of the country you are in, certainly during the hot dry periods many trees and shrubs are infested by sucking insects, e.g. aphids and mites. In reference to aphids, one wants to control infested plants by the frequent irrigation where the foliage is thoroughly soaked, often resulting in washing off the insect and, therefore, should control the aphids. As populations increase, there are many chemical alternatives to control, but one should be sure that populations warrant it and that simple syringing is not enough. Mites are another insect where as the temperature increases, they more rapidly grow and their life cycles, therefore, have potential for population buildup when the temperatures reach approximately 80°F. As one sees a slight yellowing or bronzing of the foliage, then a close inspection is worthwhile. If population is significant, then either a miticide to provide long residual protection or an ovicide would be appropriate to control the rapidly growing populations.

July's maintenance log is a month dominated by trying to keep up and shearing of hedges and evergreen trees and shrubs.

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