

THE EXTENSION LINE

Bob Mugaas of the University of Minnesota Extension Service is a regular contributor to Hole Notes. As Hennepin County Extension Agent, Mr. Mugaas compiles various articles related to the golf field for our information. Bob is an excellent source for answers to many questions on horticultural problems. He may be reached at 612/542-1420. Written requests should be sent to:

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Minnesota Extension Service-Hennepin County
701 Decatur Ave. N.
Suite 105
Minneapolis, MN 55427

This month's articles cover Cankers, Pruning and Pesticide Containers.

WINTER TEMPERATURE VARIATIONS

LEAVE PLANTS

SUSCEPTIBLE TO CANKERS

Schoeneweiss D. F.
J. of Arboriculture Vol. 15, No. 19, 1989

Popular belief says the culprit behind severe winter injury to woody landscape plants is prolonged cold weather. However, most winter stress and injury is due to sudden temperature changes (often associated with passing cold fronts) rather than deep cold spells. Much, if not most,

winter injury follows rapid radical temperature drops to below-freezing levels following extended mild fall weather. This is why extensive "winter" damage can appear following a warmer-than-average winter. To complicate diagnosis, however, such injury does not usually become apparent until after buds break the following spring--when the previous fall's freeze has been forgotten. In many cases, the sensitivity of a plant part to low temperatures limits the plant's geographic or economic use. For example, temperatures drop low enough in many northern regions to kill a peach or plum's flower buds without affecting the rest of the tree. In general, however, very low temperatures are much less important to a landscape plant's survival than a rapid and severe variation in temperature.

Nursery notes, Oct. 1989
Ohio Cooperative Extension Service

PRUNING GUIDE

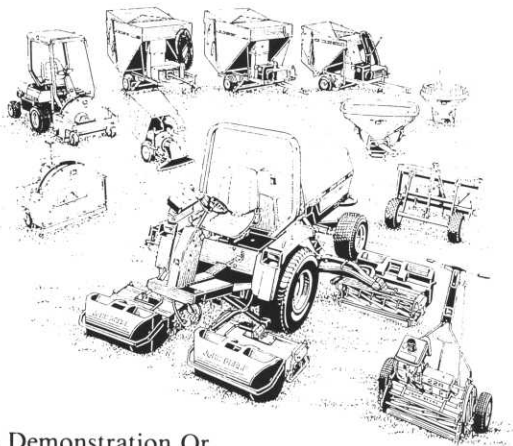
The following is a pruning guide adapted from the September 1989 "Dundee Leaflet" newsletter by Dundee Nursery and Landscaping, and the Minnesota Extension Service publication "Pruning Trees and Shrubs"(AG-FO-0628) by Mervin C. Eisel, Extension Horticulturist.

Common questions asked at the Extension office and at local nurseries is when to prune a particular kind of shrub or tree. Hopefully this guide will aid in knowing the correct time of year to prune for optimum effect. Any dead, diseased, or damaged branches can be pruned as soon as they are noticed even though the time of year may be less than desirable for pruning.

KEY:

- 1 - WINTER: December, January, February. This helps prevent possible disease and insect infestations. "Bleeding" of sap doesn't hurt trees.
- 2 - SPRING: before growth starts. Usually because flowers on new wood or because plant is grown for foliage effect.
- 3 - EARLY IN GROWING SEASON: generally May-early June.
- 4 - DURING GROWING SEASON: pines should be pruned before candles (new growth) have fully opened and become woody. Usually in early May.
- 5 - RIGHT AFTER FLOWERING: usually done because plant flowers on old wood.
- 6 - SUMMER: best time is when it is not rainy or humid. Locust should be done after July 15.
- 7 - FALL: best when plant has lost its leaves for the year.

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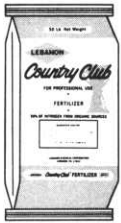
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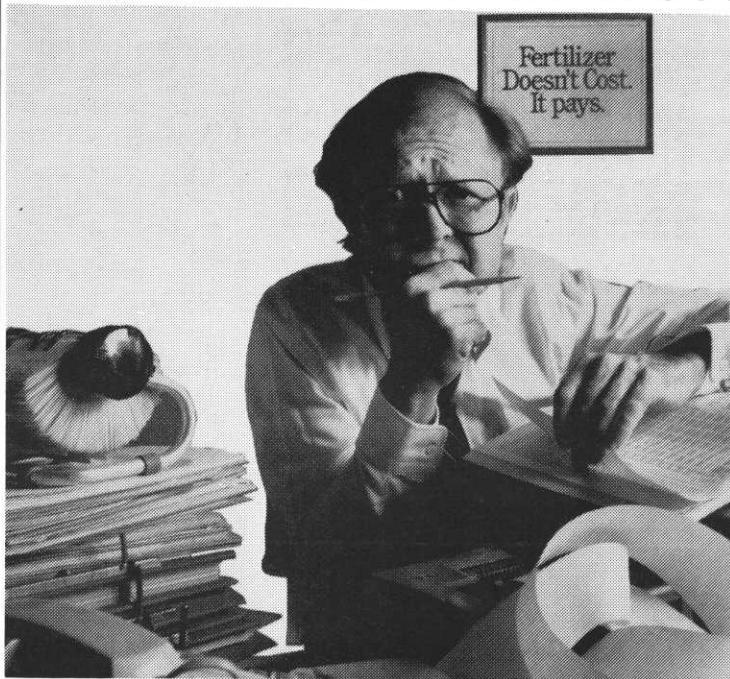
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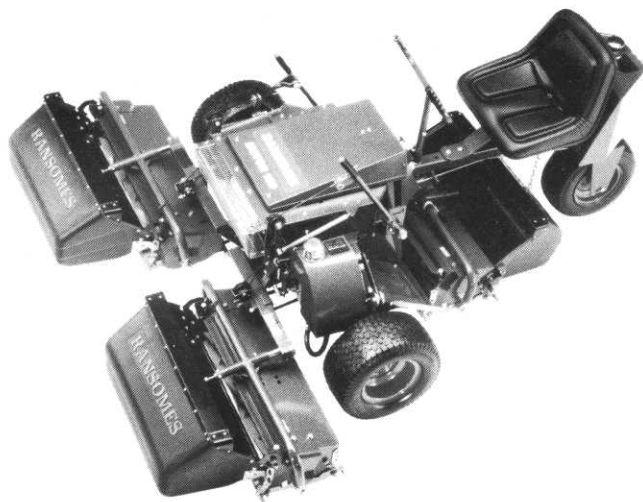
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PLANT	PRUNE	PLANT	PRUNE	PLANT	PRUNE
Almond, Flowering	5	Elder	2	Plum (fruit tree)	1
Apple	1	Elm	1	Plum (ornamental)	5
Apricot	1,5	Euonymus,		Poplar	1,6,7
Arborvitae	3	(Burningbush)	2	Potentilla	2
Ash	1,6,7	Falsespirea	2	Privet	5
Aspen	1,6,7	Fir	2	Rhododendron	5
Azaleas	5	Forsythia	5	Rugosa (shrub) rose	2,5
Barberry	2	Ginkgo	2	Serviceberry	5
Birch	1,6,7	Hackberry	1	Smoketree	2
Boxwood	3	Hawthorn	1	Snowberry	2
Buckeye	2,7	Hemlock	3	Spirea (Anthony	
Buckthorn	2	Honeylocust	1,6	Waterer; Goldflame;	
Cherry, Canada Red	1,5	Honeysuckle	5	Curly Leaf; Daphne;	
Cherry, Meteor;		Hydrangea	2	Froebeli)	2
North Star	1,2	Ironwood	1,2,6	Spirea (Arguta: Fairy	
Cherry, Nanking	5	Juniper	3	Queen; Snowmound;	
Cherry Plum	1,2	Lilac	5	Prunifolia;	
Chokeberry	5	Linden	1,6,7	Vanhoutte; Thunbergi)	5
Chokecherry	5	Magnolia	5	Spruce	2
Coffeetree,		Maple	1,6	Sumac	2
Kentucky	1,2,7	Mockorange	2	Tamarack	2
Coralberry	2	Mountain Ash	1	Tamarix	2
Corktree	1	Ninebark	2	Viburnum	5
Cotoneaster	1	Oak	1,7	Walnut	6
Crabapple	1	Olive, Russian	1	Weigela	2
Curant, Alpine	2	Pear	1	Willow	1,6,7
Deutzia	5	Peashrub	5	Winterberry	2
Dogwood	2	Pine	4	Yew	3

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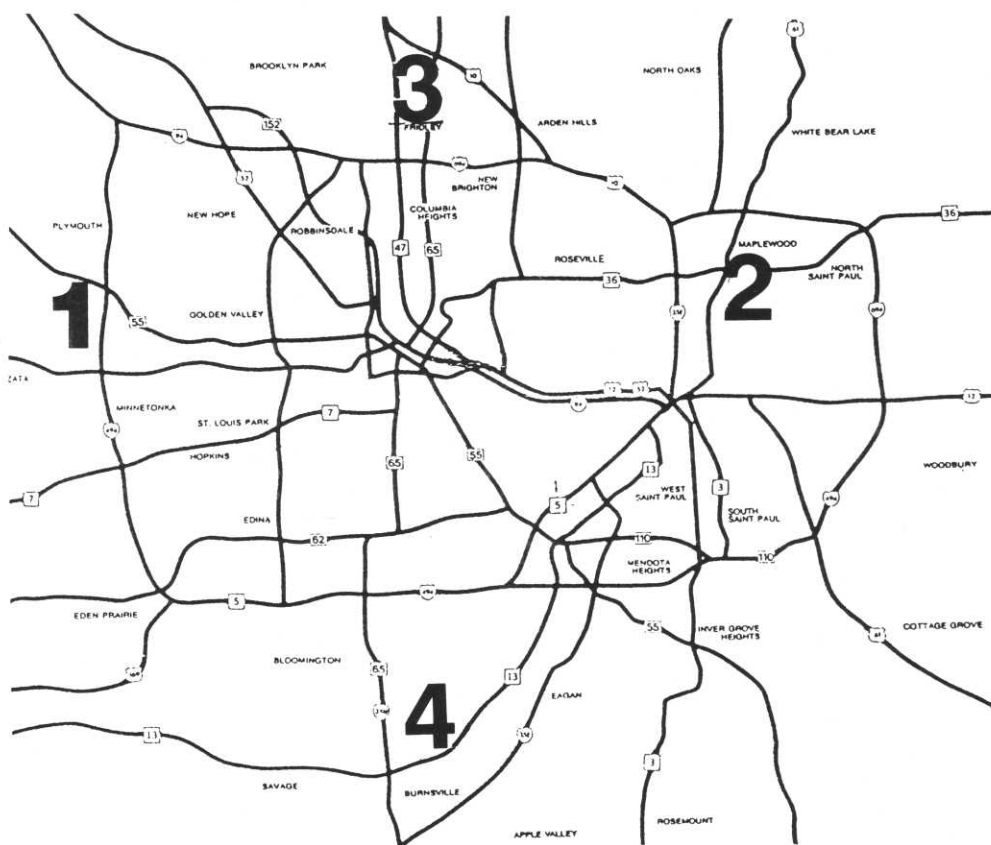
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INFORMATION PACKETS ARE AVAILABLE ABOUT RINSING PESTICIDE CONTAINER

by Bert T. Swanson

**Extension Horticulturist-Nursery Management
Minnesota Extension Service**

The Minnesota Pesticide Container Advisory Committee, a group of farm, environmental and industrial organizations, state agencies and the Minnesota Extension Service, has developed an awareness and information packet about the proper rinsing of empty pesticides containers.

This packet will include information about pesticides and pesticide containers, why it is necessary to properly rinse pesticide containers, and how to do the rinsing.

The Advisory Committee is also scheduling seven demonstrations on the proper rinsing and disposal of empty pesticide containers. These demonstrations are in conjunction with the University of Minnesota Experiment Station field days and Farmfest. A schedule is included in the packet.

If you would like a packet, write to Rick Hansen, Environmental Quality Section, MN Department of Agriculture, 90 West Plato Blvd., St. Paul, MN 55108 or Dean Herzfeld, Minnesota Extension Services, 1991 Upper Buford Circle, St. Paul, MN 55108.

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ORLANDO -- THE MAGIC KINGDOM AND MORE

Orlando, Florida is not just any "Mickey Mouse" convention city.

No, GCSAA's host city in 1990 offers much, much more besides Mickey and the rest of the attractions at Walt Disney World.

The 61st GCSAA International Golf course Conference and Show will take place February 19-26 at the newly remodeled and expanded Orange County Convention/Civic Center, a 350,000-square-foot complex set on a 115-acre, tropically landscaped site that is no more than 15 minutes from any of the 17 GCSAA Orlando hotels.

Within an hour of the city, guests will find a multitude of attractions, from the alluring natural beauty of central Florida and its warm, sun-drenched climate to the dizzying variety of visitor attractions.

The Walt Disney world Resort complex alone offers the fantasy of the Magic Kingdom, the marvels of EPCOT Center, the "Hollywood" glamour of the new Disney/MGM Studios theme park, the wet and wonderful Typhoon Lagoon water park, Pleasure Island night life and more.

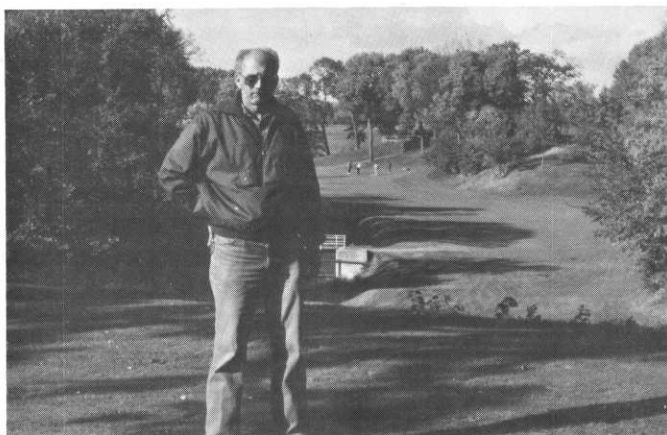
And then there's Cypress Gardens, Gatorland Zoo, Boardwalk and Baseball, Busch Gardens, Spaceport USA, Silver Springs nature theme park and Sea World.

More than 60 golf courses are within a 30-mile radius of the city, and 2,000 area lakes offer fishing, water-skiing and other water sports. for sun-seekers, miles and miles of sandy beaches along the Atlantic and Gulf coasts are only an hour's drive away.

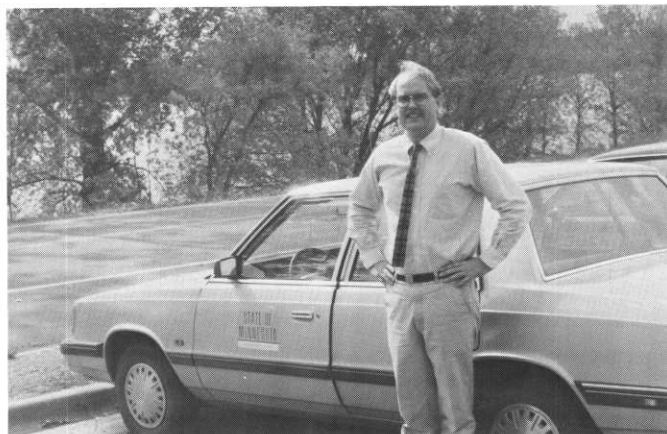
Fine dining, theater, museums, galleries, cruises, hot-air balloon flights, helicopter tours, sports and numerous shopping opportunities all await GCSAA Orlando Conference and Show participants and their families.



WINDOWS ON WILLMAR



Willmar's Head Superintendent, Jim Wodash had the course in just super condition. Well worth the trip!



Jim Japs of the Minnesota DNR, Division of Waters gave a most informative talk on water use and conservation.



Mike Olson of Golden Valley CC and John Harris of Lafayette Club check out the Kromer Company Sprayer.

GREEN CLIPPINGS

POTPOURRI

Look for the **MGCSA** sponsored **GCSAA regional seminar** to be held at **Lafayette Club** during early March . . . **Andy Lindquist** of **Brookview GC** resigned from the Board of Directors effective 10/27/89. Hope all goes well for you at **Blake Schools**, Andy. Thanks for all the hard work! . . . Use the enclosed membership application to entice new members. There's always room for more! . . . Over 45 members attended the **October meeting** at **Willmar**. Contact **Jim Japs** of the **Minnesota DNR** to receive the latest info on "**Understanding Ground Water Trends**" 612/297-2835 . . . **Harold Stodola Scramble** returned over \$3,000 to **Research Fund** for a total of over **\$19,000** donated to Research this year . . . Many thanks to **Tom Mundy** and **E-Z-GO** for free use of carts at **Edinburgh**. Also to **Tom McCann**, **Landscape and Turf Specialists**, and **Dave Krupp**, **Turf Supply Co.**, for manning the TV raffle on the 8th tee at **Edinburgh** . . . By the way, **Russ Adams** won the 26 inch color TV. This'll give you something to do over the winter, Russ! . . . Look for possible restrictions in ground water use in the future, especially near river basins that are deficient in flow . . . Over \$13,000 in Research donations received so far. Many thanks! . . . A bill was introduced at last year's legislative session which would mandate a 10% reduction in pesticide use each year for 5 years, resulting in a 50% required reduction. This bill did not receive a committee hearing . . . After July 1, 1994, firms selling pesticides must accept containers brought back by consumers/farmers plus any pesticides left in the containers.

1989 HAROLD STODOLA SCRAMBLE RESULTS

<u>Place</u>	<u>GROSS</u>	<u>NET</u>
1st	Pebble Creek	Anguishire
2nd	Edina	Terrace View
3rd	Lake City	Grandview Lodge
4th	Minikahda	Bunker Hills
5th	Pebble Lake	Hastings
6th	Rolling Green	Stillwater

LONG DRIVE - Richard Oden

CLOSEST TO THE HOLE - Tom Haugen

'ROUND THE REGION - Regional reports:

NONE - too busy with closing tasks.

MEMBERSHIP UPDATE - ANDY LINDQUIST

A special welcome to the following new members admitted to MGCSA at our October meeting in Willmar.

Roger Schumacher, Class BII, Head Superintendent, **Meadowlark C.C.**, Melrose, MN.

Bruce McCann, Class BII, Asst. Superintendent, **Daytona C. C.**, Dayton, MN.

James Weibys, Class F, Sales Manager, **Miltona Golf Products**, Miltona, MN.

The following class change was approved.

Joe Check, form class E to class AA.

HOLE NOTES' NOTES

If you have a topic or subject you would like to write about in the **HOLE NOTES**, contact Editorial Chairman, **Greg Hubbard**. Our publication is only as good as the members make it. Also, you will receive a small gift for your trouble and then all of the members will have your knowledge.

The deadline for **HOLE NOTES** is now the 15th of the preceding month. Editorial and advertising contributions for the next issue should now be in the works so they can make to new deadline.

Contact the MGCSA Office for an application for any co-workers or colleagues that may wish to join the MGCSA. Remember that you must also apply for classification changes. Contact the Office for a change of classification form.

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