THE EXTENSION LINE

Bob Mugaas of the University of Minnesota Extension Service is a regular contributor to Hole Hotes. 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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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

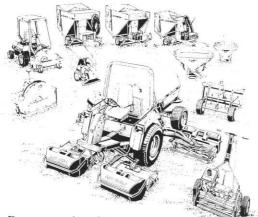
The following is a pruning guide adapted from the September 1989 "Dundee Leaflet" newsletter by Dundee Nursery and Landscaping, and the Minnesota Extension Service publication "Pruning Trees and Shrubs" (AG-FO-0628) by Mervin C. Eisel, Extension Horticulturist.

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
- 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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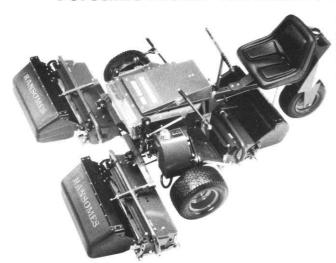
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PLANT	PRUNE	PLANT	PRUNE	PLANT	PRUNE
Almond, Flowering	5	Elder	2	Plum (fruit tree)	1
Apple	1	Elm	1	Plum (ornamental)	5
Apricot	1,5	Euonymus,	1	Poplar	1,6,7
Arborvitae	3	(Burningbush)	2	Potentilla	2
Ash	1,6,7	Falsespirea	2	Privet	5
Aspen	1,6,7	Fir	2	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;	X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	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)	
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 5
Corktree	1	Ninebark	2	Viburnum	5
Cotoneaster	1	0ak	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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