

NEBRASKA TECHNICAL NOTE

U. S. DEPARTMENT OF AGRICULTURE



SOIL CONSERVATION SERVICE

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Woodland Technical Note No. 53
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ADAPTED CLARKE-MCNARY TREES AND SHRUBS BY WINDBREAK SUITABILITY GROUPS

The attached is a quick method for determining the adaptability of Clarke-McNary trees and shrubs for any selected windbreak suitability group. This method was developed by Bill Wester and submitted as an employee suggestion, for which he received a cash award.

It is recommended that field office personnel prepare a table, as outlined in the employee suggestion, for their county. A blank table is attached for this purpose. Tree heights could be placed in the suitability group columns in place of the "X" used in the example.

The table should be a handy reference that will save time in your windbreak planning. As Bill pointed out, the table is not intended to replace the windbreak suitability groups in the Technical Guide, but it can be used as a supplement to them. The table should not be filed in your Technical Guide. It should be used as a working tool and maintained with your other windbreak planning references.

Attachments

Summary of Suggestion

I suggest that each district conservationist develop and initiate use of a table showing adapted Clarke-McNary trees and shrubs by Windbreak Suitability Groups (see attached table). Purpose is to save planning time and provide information to land users.

Explanation

During the planning process for farmstead windbreaks or shelterbelts, the land user often wants "on the spot" information about species of trees he can include in his windbreak. Usually, a land user selects trees from the list of species available through the Clarke-McNary program. This information requires time to look through the 24 pages of Nebraska Technical Guide Notice 105 and compare with the list of available species after finding the proper Windbreak Suitability Group (WSG).

The attached table is a quick and accurate way of providing the information wanted. The Clarke-McNary species suitable for each site is summarized on one sheet. The sheet can be tailormade for each county it is used in, showing only the WSG's found in the county and the species suitable for the vegetative zone the county is found in.

Procedure for use follows:

1. Determine the soil for planned windbreak from soils maps or field trips;
2. Find WSG for the soil on soil identification legend; then
3. Consult table of adapted Clarke-McNary tree and shrub species by WSG to find species which can be used.

The table is not intended to replace Technical Guide Notice 105, only supplement it. If more detailed information such as expected heights or adapted non-Clarke-McNary species are needed, then Technical Guide Notice 105 can be consulted. For most windbreak planning, the table is adequate and saves time.

William P. Wester
District Conservationist
Loup City, Nebraska

Vegetative Zone III - Adapted Clarke-McNary Tree and Shrub Species by
 Sherman County Windbreak Suitability Groups.

Species	Windbreak Suitability Groups										
	1	2S & 2W	2D	3	4C	5	6G	7	8	9S	10*
<u>Coniferous</u>											
Red Cedar	X	X	-	X	X	X	X	X	X	X	X
Rocky Mt. Juniper	X	X	-	X	X	X	X	X	X	X	X
Ponderosa Pine	X	X	-	X	X	X	X	X	X	X	-
Austrian Pine	X	X	-	X	X	X	X	X	-	-	-
Scotch Pine	X	X	-	X	X	X	-	X	-	-	-
Jack Pine	X	-	-	X	X	X	-	X	-	-	-
C. Blue Spruce	X	X	-	X	X	X	-	-	-	-	-
<u>Deciduous</u>											
Siberian Elm	X	X	-	X	X	X	X	-	X	X	X
Hackberry	X	X	-	X	X	X	X	-	X	-	-
Honeylocust	X	X	-	X	X	X	X	-	X	-	-
Cottonwood	X	X	X	X	-	-	-	-	-	-	X
Silver Maple	X	X	-	-	-	-	-	-	-	-	-
Black Walnut	X	-	-	-	-	-	-	-	-	-	-
Green Ash	X	X	-	X	X	X	X	-	X	X	X
Russian Olive	X	X	-	X	X	X	X	-	X	X	X
<u>Shrubs</u>											
Cotoneaster	X	X	-	X	X	X	X	-	-	-	-
Lilac	X	X	-	X	X	X	X	-	X	X	X
Honeysuckle	X	X	-	X	X	X	X	-	X	X	X
Chokecherry	X	X	-	X	X	X	-	-	-	-	-
Nanking Cherry	X	-	-	X	-	-	-	-	-	-	-
American Plum	X	X	-	X	X	X	-	-	X	-	-
Autumn Olive	X	X	-	X	X	X	-	-	-	-	-
Skunkbush Sumac	X	X	-	X	X	X	X	-	X	X	X

X = Suitable

- = Not Suitable

* = WSG 10 not suited for windbreaks except for special treatments.
 Selection of trees must be tailored to the site.

ADAPTED CLARKE-MCNARY TREE AND SHRUB
 SPECIES BY WINDBREAK SUITABILITY GROUPS

County _____ Vegetative Zone _____

Species	Windbreak Suitability Groups *												
	1	1L	2S & 2W	2D	33	4L	4C	5	6G &6R	7	8	9S	9N
<u>Coniferous</u>													
Red Cedar													
Rocky Mt. Juniper													
Ponderosa Pine													
Austrian Pine													
Scotch Pine													
Jack Pine													
C. Blue Spruce													
<u>Deciduous</u>													
Siberian Elm													
Hackberry													
Honeylocust													
Cottonwood													
Silver Maple													
Black Walnut													
Green Ash													
Russian Olive													
<u>Shrubs</u>													
Cotoneaster													
Lilac													
Honeysuckle													
Chokecherry													
Nanking Cherry													
American Plum													
Autumn Olive													
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