

GRAPE EXPECTATIONS

*John Marshall
Great River Vineyards*

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Grapes are not a common sight in Minnesota or surrounding climates. They've come to be regarded as a warm-climate fruit that will not grow in northern regions. Sure, one comes across the occasional vine growing on a back fence, but on the whole, there are few vineyards to be seen in this area.

Such was not always the case. Early records of the Minnesota State Horticultural Society repeatedly mention grapes as one of the first and best of the pioneer fruit crops (see sidebar). Earliest reports of grapes in the area predate the Civil War, and by the 1870s a number of substantial vineyards were being developed. By the 1880s significant vineyards had been developed around Lake Minnetonka, and one report suggests that by the mid-1880s, 150,000 pounds of grapes were being grown there annually. Even the islands of Lake Minnetonka were being cleared and planted to vines.

By 1900 the Minnesota grape crop had reached over 600,000 pounds a year and over 2,000 farms reported production of grapes. This was the zenith of early grape production, however, as the advent of refrigerated rail cars allowed California growers to inundate local markets with inexpensive grapes. Prices dropped, and soon Minnesota vineyards began to disappear. The University of Minnesota began promoting 'Beta' grape as a hardy and viable alternative and plantings and production rebounded, but only temporarily. By the 1960s grape production in the state had fallen to near zero, and interest in grapes and grape growing was nil.

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Grapes were successful in pioneer Minnesota because, unlike tree fruits, they could be buried in winter and thus bear fruit even though the varieties grown were not very cold hardy. However, once grapes became available locally, regional grapes became less of a novelty. 'Beta' grape was not good for eating or wine making, and it simply could not compete. The extra difficulty and expense of covering some of the more desirable grapes became a liability. Grapes gracefully disappeared from the scene.

During the late 1960s and early 70s America's now famous Wine Revolution began to revive interest in grapes and grape production in many places. Vineyards were planted in climates that had not seen grapes since prohibition or before.

When planning a vineyard, keep the following things in mind:

- * Grapes need sunshine. A vineyard should be planted so it will get full sun all day or nearly all day.
- * Grapes are susceptible to late spring and early fall frosts. Try to select a site on a hillside or hilltop to encourage air drainage. Low places and valley bottoms tend to collect cold air and should be avoided.
- * A warm south or southwest facing hillside is considered ideal, as it will encourage ripening of fruit and hardening off of wood in fall. A site near a good-sized body of water is also desirable as it moderates heat stress in summer and discourages spring and fall frosts.
- * Grapes are grown on a wide range of soils. Rich soils high in nitrogen are best for grapes as this brings on rampant growth and poor hardening of wood for winter. Sandy loams or gravelly soils beneath some topsoil do well. Extremely sandy soils are warm and will encourage ripening, but often need fertilizers to encourage adequate growth and bearing. Clay and hardpan soils with little topsoil are poor soils for grapes. Low, swampy sites should also be avoided.

During the early 1970s various horticulturists responded to this impetus by planting vineyards even in the frigid realms of Minnesota. The Minnesota State Horticultural Society began rounding up the various isolated grape growers and by 1975 managed to organize them into an association. This group has experienced remarkable success and now has approximately 250 members as the Minnesota Grape Growers Association (see sidebar). The association vigorously promotes local wines and wineries, grapes and vineyards. Nevertheless, the impetus of their work from the very beginning has been to test and release information about what varieties can be grown here.

It is encouraging to see that much progress has been made. The state has gone from no wineries in 1975 to five in 1992. A sixth winery is slated to open for business during July of this year. There are over 100 acres of producing vineyards in the state now. Although 100 acres worth of grapes probably fall off the trucks that deliver fruit to the wineries and packing houses of California, here it represents important progress in cold-climate viticulture.

The challenge has been to identify grapes that will survive and ripen in this severe climate without the need to cover them in winter. The University of Minnesota has begun a grape hardiness hybridization project that is recognized nationally and internationally. They have developed a valuable collection of grape varieties and their performance trials are establishing important data and experience on a great range of trials.

It is time for home horticulturists and amateur fruit growers to dip into this wealth of experience and add grapes to their collections. A wide variety of grapes have been found to be adaptable to the climate and a small vineyard or backyard fence collection can add much to a home or hobby farm.

For More Information

Readers interested in planting a few vines on the back fence or renovating an old vineyard will be interested in the Minnesota Grape Growers Association's 62-page booklet titled *Growing Grapes in Minnesota*. It is the final product of many growers' experience over many years and has evolved into a comprehensive and valuable manual on cold-climate grape culture. It

deals with site selection, planting, pruning, weed control, spraying, trellis construction, recommended varieties and more. It is available for \$7 postpaid plus 6 1/2 percent tax in Minnesota from Tom Plocher, 9040 152nd Street North, Hugo, MN 55038.

Mail-order Sources of Hardy Grapes

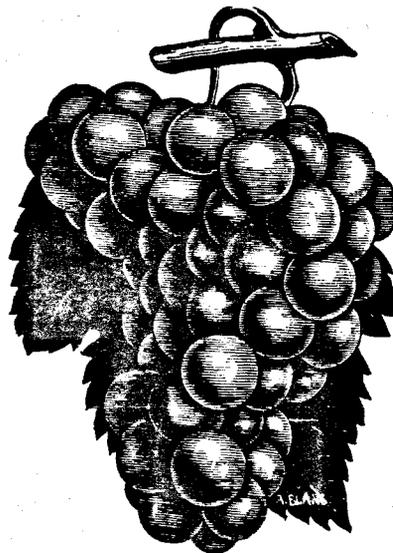
St. Lawrence Nurseries
RR 5, Box 324
Potsdam, NY 13676
(315)265-6739

Lake Sylvia Nurseries
Rout 1, Box 149
South Haven, MN 55382

Northwind Nursery and Orchard
7910 335th Avenue NW
Princeton, MN 55371
(612)389-4920

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HARDY GRAPES

Deciding which varieties of grapes to grow is of great importance. Decisions will depend on whether the grower is a wine maker or is looking for grape juice, jelly or table grapes. Early ripening is another point of extreme importance in northern areas, as is cold hardiness.

The most widely planted grapes in Minnesota are 'Beta' and 'Concord'. However, a number of far superior cultivars have been developed that will grow well here, and the Minnesota Grape Growers Association no longer recommends either of these. 'Beta' grows reasonably well here but is generally only of value as a jelly grape. It is very high in acid and is not good to eat. Even the juice tends to be very tart and the wine is not desirable. 'Concord' is not reliably hardy in Minnesota and often suffers cold injury. It is also very late and the true 'Concord' will sometimes fail to ripen. Both 'Worden' and 'Bluebell' grapes are hardier, earlier to ripen and better tasting.

The Minnesota Grape Growers Association has put together the following list of recommended cultivars based on the members' most recent experiences.

Table Grapes

'Bluebell' is an old University of Minnesota introduction. Its hardiness, early ripening and disease resistance have led to renewed interest by Minnesota growers. When pressed out it also produces a delicious fresh grape juice. It is winter hardy in southern Minnesota.

'Edelweiss' is an early ripening, large-clustered green table grape with a strong "foxy" flavor. It also makes a nice white wine when picked before becoming too ripe. Although quite disease resistant, 'Edelweiss' is not reliably hardy in Minnesota, but performs well when given winter protection.

'Kay Gray' is an extremely hardy and disease-resistant early ripening white grape that is worthy of trial in northern areas of the state. The clusters are small, but berries are good sized and have a mild flavor.

'Swenson Red' is a delicious, high-quality red table grape with a firm texture, thin skin and a pleasing flavor. Unfortunately it is not reliably hardy in most of the state and should be covered in winter.

'Valiant' is an extremely cold hardy, very early ripening blue grape that might be attempted in northern areas of Minnesota. Its clusters and berries are small, but it is a usable home table grape where other grapes fail. It also produces a delicious red grape juice and excellent jelly.

'Worden' is a very old 'Concord' type that has long been grown in the state. While 'Concord' is

not recommended for Minnesota, 'Worden' ripens earlier and has sufficient hardiness to be grown without protection in the southern half of the state.

Wine Grapes

'Marechal Foch' is a red wine cultivar from France that is the most widely grown grape in Minnesota. Local commercial wineries have repeatedly won awards with Minnesota-grown 'Foch' wines. 'Foch' combines good wine qualities with early ripening and very good disease resistance. It usually requires some winter protection except on the best sites in southern Minnesota.

'Seyval', when properly grown, produces a pleasant, neutral, white wine. However, 'Seyval' requires both winter protection and cluster thinning for success in our area.

'St. Croix' is a locally developed red wine cultivar that is becoming popular because of its winter hardiness and good wine quality.

'St. Pepin' was developed by Elmer Swenson of Osceola, Wisconsin. Although it does require cross pollination, 'St. Pepin' is a promising variety because of its excellent fruity white wine. It is also very good for juice. 'St. Pepin' has borderline hardiness in southern Minnesota.

'Ventura' is a productive, late-ripening, white wine cultivar that has high acidity. It can produce a pleasant labrusca-style white wine and appears to have sufficient hardiness to be worthy of trial in southern Minnesota.

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Minnesota Grape Growers Association

PURPOSE The promotion and extension of the art and science of viticulture in Minnesota and other cold climates, including any and all agricultural and horticultural purposes connected therewith

YEAR FOUNDED 1975

AUDIENCE All amateur and commercial grape growers, wine makers and researchers having an interest in cold-climate viticulture

MAJOR CONTRIBUTIONS TO HORTICULTURE Production of a 62-page booklet titled Growing Grapes in Minnesota; passage of Minnesota's Farm Winery Law; obtaining grape research appropriation for the University of Minnesota; developing and publishing reliable cold-climate viticulture information

MEMBERSHIP DUES \$15 per year; new members receive a copy of Growing Grapes in Minnesota

BENEFITS OF MEMBERSHIP Quarterly newsletter; large, educational Annual Report; discounts on all association events and various horticulture and viticulture publications

SPECIAL EVENT The association will be touring the new winery at Aamodt's Apple Farm in Stillwater, Minnesota, in July

ANNUAL EVENTS Annual meeting in January; spring seminar in March; summer tour and picnic; tour of the University of Minnesota's Horticultural Research Center vineyards in September; fall pruning clinic; State Fair booth

PERSON TO CONTACT FOR INFORMATION John Marshall, RR 2, Box 233, Lake City, MN 55041 (612)345-3531

MEETING INFORMATION The Minnesota Grape Grower Association has an annual meeting the second Saturday in January. The meeting's location changes each year; it is open to the public.

SPECIAL PLANTS For recommended cultivars of grapes see page 24.

ADDITIONAL COMMENTS The Minnesota Grape Growers Association has a great interest in viticultural research, particularly grape hardiness hybridization, and has enthusiastically supported the University of Minnesota's breeding program, as well as the hybridization work of Elmer Swenson and the work of other local private projects. The association also has a strong interest in wine making, including the exchange of information and expertise and the tasting of local wines.

