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The Windbreak Cookbook

Featuring Fruits of Prairie Forests



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Value of Trees and Forests in North Dakota

How much are trees and forests worth? Economists have been struggling with this issue for decades.

Sometimes, answers have been very clear, based on products. For example, how much lumber can be sawed from a tree stem? The value of services—shade, wind protection—can be estimated as well, although the answers are often less precise.

When value is based on perceptions—beauty and aesthetics—then the answers become even more vague. But we can at least use these estimates as a starting point.

What does this have to do with a cookbook? This book helps show us some of the extra value our shelterbelts in North Dakota provide. We know about the services windbreaks provide.

Anyone who has been outside in January knows the value of a dense, properly placed shelterbelt when the temperature is 10 or 20 below. Windbreaks act as living snow fences, providing safer roads in winter. And let's not forget the protection provided to soils, crops and livestock. The services that windbreaks provide are truly a blessing.

Wild-harvested foods often are considered to be a part of the “specialty forest products” group. I think most of us have had Juneberry pie. Or Juneberry jelly. Or Juneberry ice cream. Or something made with chokecherries or plums or buffaloberries or You get the picture.

And in addition to all the home-cooked jams and jellies, drinks and desserts out there, North Dakota has quite an industry based on wild-harvested fruits. More than a dozen vineyards and wineries are scattered throughout the state. Several businesses make jams and jellies as part of their product lines. North Dakota also has “you-pick” businesses, and when Juneberries, plums and chokecherries are in season, you always can find them at the farmers markets.

So enjoy this book and its recipes. Share your creations with family and friends. And remember the value of trees and forests in North Dakota.

I can't wait to try the plum kuchen recipe!

Joe Zeleznik, Extension Forester



The Great Plains Food Bank's mission is to end hunger in North Dakota and western Minnesota through community partnerships. We are the largest hunger-relief organization in North Dakota and serve as its only food bank, partnering with local charitable feeding organizations to reach our food-insecure neighbors. Each year, we touch the lives of one in nine individuals who seek emergency food assistance.

Each year, the Great Plains Food Bank supports North Dakota and Clay County, Minn., by recovering and distributing more than 13 million pounds of donated surplus product. While the number of pounds has increased, so has the need for fresh food.

By working together, we are pioneering new ways to reduce waste, better utilizing resources available in this land of plenty, and helping bring more food to those in our communities who are hungry.

Do you have surplus from your fields and trees this year? We welcome donations to your local food pantry or to the Great Plains Food Bank. For more information on where to donate, please visit our website, www.greatplainsfoodbank.org, for a list of pantries in your area or reach out to Great Plains Food Bank directly by calling 701-232-6219.

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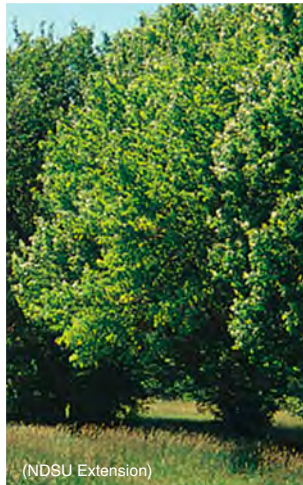
Fruit-bearing Windbreak Plants

This section contains descriptions and growing requirements for possible windbreak plants. Please contact your local NDSU Extension office, NDSU North Dakota Forest Service or local Soil Conservation District staff member for more information about plants best suited for your property or project.

Trees



(NDSU Extension)



(NDSU Extension)



(NDSU North Dakota Forest Service)

Apple (*Malus spp.*)

Blossom: mid-May to early June

Harvest: mid-August to October

Whether planted as part of a shelterbelt or inside the protection of one, apples are North Dakota's most popular fruit to grow. Older shelterbelts have common apples and crabapples, and most were chosen for their care-free habits, not their fruit quality. Despite this, many of these apples make good cider, sauce, pies and crisps.

Apple trees that become too shaded or too old will stop bearing fruit. Pruning can rejuvenate an older tree, but often the best thing to do is to start with a new tree. Choose a variety that is hardy to zone 3 or 4 and ripens by mid-September.

In general, apple trees require full sun and good air movement to ward off diseases. Some training and selection of good branches in young trees will reap benefits when the tree starts to bear fruit. Picking up fallen fruit each fall and mowing fallen leaves are two easy tasks that go a long way toward tree health.

Your local Extension agent can advise you on apple tree care, and you can find good Extension apple publications online.

Pests: In North Dakota, black rot has become more common. We also see fire blight, apple scab and apple maggots. All of these problems are improved with pruning, increased sunlight penetration through the leaves and good sanitation of the area under the trees. Trees may need to be protected from rodents, deer browsing and deer rubbing to reduce damage.

Characteristics for Windbreak Design

Soil types: adapted to a variety of soils but prefer a heavy loam soil with a slightly acidic pH

Light needs: full sun.

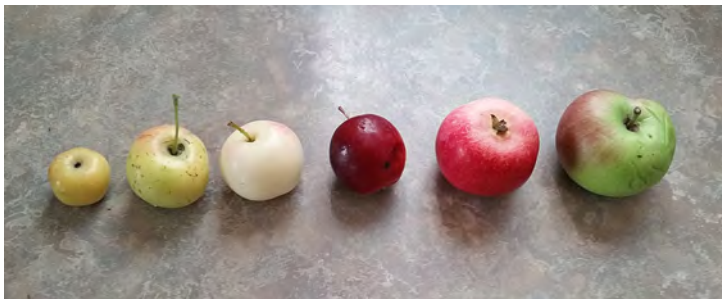
Water needs: well-drained, moist soils; supplemental water may be needed on dry sites

Height: varies; 10 to 25 feet

Growth habit: varies; dependent on tree genetics and damage from disease, dieback or animal browsing; natural forms range from round to spreading or drooping types

Life span: moderate-lived; survival and life span are very dependent on disease and pest resistance, and site selection

Apple (*Malus spp.*)



These crabapples were collected from a single windbreak row in central North Dakota. Apples naturally come in all shapes, sizes and colors. Some apples are better for some uses than others. Be sure to try many varieties! (NDSU North Dakota Forest Service)



Apple trees have a large amount of diversity. Tree shape, fruit flavor and disease resistance are important factors when selecting which apples to plant. (NDSU Extension)

Boxelder (*Acer negundo*)

Blossom: Flowers in April before leaves; not showy

Harvest: Varies; usually March, while sap is flowing and buds have not broken; however, sap flow depends on location, climate and sunlight exposure

Boxelder is a native maple tree. Its common name in Canada is Manitoba maple. It was more commonly planted in windbreaks a half-century ago, but it has dropped in popularity because its rapid growth leaves it more susceptible to herbicide damage. It is still an excellent choice for windbreaks around farmsteads or in fields that are not heavily treated with phenoxy herbicides, such as 2,4-D.

Like most other maple trees, boxelder trees can be tapped for their sap. Gathered in early spring, the sap can be drunk as a refreshing, light drink or boiled down to produce syrup.

People often think of boxelder bugs when they think of boxelder. Boxelder bugs eat boxelder seed, but they also eat and live around many other plants. The bugs do not harm the tree and can be food for wildlife.

Syrup can be made from the sap of other maple trees and many other types of trees. However, boxelder produces syrup most similar to syrup from sugar maples.

Characteristics for Windbreak Design

Soil types: adapted to a wide range of soils

Light needs: full sun to partial shade

Water needs: does best on well-drained, moist soils along stream banks, but moderately drought tolerant; supplemental water may be needed the first few years; after that, it can develop an extremely deep root system to access water

Height: 30 to 60 feet

Growth habit: short, crooked trunk commonly divides into several stout, wide-spreading branches, forming a rounded to irregular-spreading crown

Life span: moderate-lived; re-sprouts heavily from the stump if cut down or damaged

Boxelder (*Acer negundo*)

Boxelder trees at Fort Stevenson State Park have been tapped to demonstrate how to make syrup from the native trees.

(Photo courtesy of North Dakota Parks and Recreation Department)



Boxelders often have round, multistemmed canopies that allow them to fill in gaps quickly. They can be short-lived in some windbreaks, but they grow very quickly and regrow easily.

(NDSU Extension)

Bur Oak (*Quercus macrocarpa*)

Blossom: late April to mid-June; not showy

Harvest: varies; mature acorns usually drop August-October; acorns dropping earlier likely will be immature, and acorns staying longer may have been eaten inside by insects

Most people do not consider bur oak to have an edible fruit; however, bur oak acorns have been eaten by Native Americans for centuries. Although better tasting than other oak species, acorns should be boiled or roasted to break down the tannins in the flesh of the acorn.

Bur oak is a hardy native tree that is adapted to a wide range of conditions. It can be drought-tolerant once established and also is moderately flood-tolerant.

Native bur oak in North Dakota have smaller acorns than the bur oak farther to the south and east. The acorns also lack the showy fringe around the acorn that gives the oak its other common name, mossycup oak. It is slow to establish because it puts its energy into developing an extensive root system early in its development. Yet once established, it can grow more than 2 feet a year on favorable sites.

Bur oak crosses easily with other white oaks, such as gambel oak and English oak. These crosses often grow faster and have earlier acorn production. However, some hybrids are not hardy in the state.

Pests and disease: Deer and rodents commonly cause damage to branches and stems. Young seedlings likely will need protection before their bark is thick enough to deter browsing. Most common pests and diseases do not cause permanent damage to healthy oak.

Characteristics for Windbreak Design

Soil types: grows best in fertile loam but will do well in a wide variety of soils

Light needs: moderately shade tolerant but most vigorous and productive in full sun

Water needs: Drought-tolerant once established but grows best with moist soils

Height: 40 to 70 feet

Growth habit: leggy and angular when young but develops into a well-defined canopy with stout, spreading braches

Life span: long-lived

Bur Oak (*Quercus macrocarpa*)



Bur oak is a hardy, native tree that can be an excellent choice when designing a windbreak. (NDSU Extension)



Oak acorns are a valuable food source for many wildlife species. They also can be eaten by people in some recipes. (NDSU Extension)

Pear (*Pyrus spp.*)

Blossom: mid-May to early June

Harvest: late August to October

Pears are not common fruit trees in North Dakota windbreaks or yards, but that does not mean they cannot grow here. Many pears are hardy to zone 4, and others can be hardy to zone 3 if well-protected. Many varieties of pears produce usable fruit and many are more ornamental.

Ussurian, also known as Harbin pear (*Pyrus ussuriensis*), is best suited for use in windbreaks because it is considered the hardiest pear. It produces small, greenish-yellow fruits that wildlife like. The fruits become more palatable following a light freeze. The blossoms attract pollinators and can be planted near tastier, less hardy pears to improve pollination.

Pests and Disease: Fire blight is the most common disease of pears in North Dakota. It usually infects trees following hail damage. Infected or heavily damaged branches and leaves should be pruned and removed quickly to slow the spread of the blight. Deer and rodents can cause extensive damage by eating the inner bark of the tree, typically in the winter. Tree shelters and animal repellents are available if damage is unmanageable.

Characteristics for Windbreak Design

Soil types: prefers clay loam to sandy loam soils; does not tolerate saline soils

Light needs: full sun

Water needs: medium; requires well-drained soils

Height: 15 to 30 feet

Growth habit: small to medium sized with a round canopy and often branching low to the ground

Life span: moderate-lived; will be short-lived on stressful sites with marginal soil

Pear (*Pyrus spp.*)



Pears are not common in windbreaks, but they can provide a very functional and attractive addition to sites with soils that can support them. (NDSU Extension)



Harbin pear is extremely hardy and produces small pears that are perfect for cooking or can be left for wildlife. (NDSU Extension)

Rocky Mountain Juniper and Eastern Red Cedar (*Juniperus spp.*)

Blossom: May to June; not showy

Harvest: almost any time of year but current year's cones harvested in fall are best

Junipers and red cedars produce fleshy cones that most people call juniper "berries." The bluish-green cones stay on the tree year-round and are an important source of winter food for wildlife. The dense canopy covering whole trees also provides excellent winter cover.

Juniper cones are most well-known for flavoring gin. However, the piney flavor of the berries has been used for decades to flavor hot dishes, marinades and stuffings. The cones are said to go especially well with game meats and wild-caught fish.

Junipers and red cedars are some of the most common trees planted for windbreaks. Their dense canopy reaches all the way to the ground. They also do not compete heavily for water or nutrients. These traits make them good additions to almost any windbreak. They can be used in single-row or multiple-row windbreaks, and farmstead or field windbreaks. Their hardiness and ease of growing also make them great choices for landowners who never have cared for a windbreak or those who have planted miles of them.

Pests and Disease: Junipers have few pest and disease problems in North Dakota. Cedar-apple rust and other Gymnosporangium rusts can be a major issue if juniper/cedar species are planted near fruiting plants in the rose family, such as apples and Juneberries. These rusts cause golf ball-sized growths, called galls, on junipers and can damage fruit on other host plants. The easily identified galls on these trees should be pruned to reduce the spread of the fungus.

Do not plant junipers/cedars within a half mile of fruits in the rose family, such as apple and Juneberry.

Characteristics for Windbreak Design

Soil types: prefers deep, well-drained loam but will tolerate sandy soils

Light needs: full sun

Water needs: very drought-tolerant once established but can grow well in well-drained, moist soils

Height: varies; can reach 20 to 40 feet when mature but often is as wide as it is tall

Rocky Mountain Juniper and Eastern Red Cedar (*Juniperus* spp.)



The small, fleshy cones on junipers and red cedars provide visual interest, are food for wildlife and have a surprising number of uses in the kitchen. (NDSU Extension)



Junipers are some of the most common trees planted in windbreaks today – and with good reason. Their dense foliage provides excellent cover for wildlife and excellent protection for you or your property.

(NDSU Extension)

Growth habit: varies; can have branches that stick out horizontally or curve upward; junipers generally are more upright while red cedars generally are wider

Life span: long-lived

Stone Pines (*Pinus spp.*)

Blossom: May to June; not showy

Harvest: varies; check cones in September; ripe cones will float and immature cones will sink in water; cones take two to three years to develop seed once trees are mature enough to make cones

“Stone pine” is a very broad name for pine trees that produce seed that is large enough to eat, called pine nuts. Pine nuts are used on salads, and in pestos and seasonal fall dishes. These pines usually are white pines with needles in bundles of five. The southwestern Pinyon pine is the most commonly used native pine nut in the U.S.; however, pinyon pines are not winter-hardy in most of North Dakota.

Limber pine is the only stone pine native to the state. Limber pines are small to medium sized with an uneven crown. They are native to a very limited area in southwestern North Dakota from seed carried to this site by early Native Americans or as an isolated stand from the last ice age.

Swiss stone pine and Korean pine are two other stone pines that can be grown in North Dakota. They are not grown commonly because few people are aware of them and they are relatively slow-growing, compared with the more popular ponderosa pine and Scotch (Scots) pine.

Pests and Disease: These pines have few pest and disease issues. Although uncommon, currants and gooseberries can spread white pine blister rust if grown near “white pines,” such as limber pine and Swiss stone pine. Rusts and other fungal diseases are more likely if trees are spaced too closely together.

Characteristics for Windbreak Design

Soil types: prefers loams to sands; adapted to planting on rocky slopes

Light needs: full sun

Water needs: moderate drought tolerance once established

Height: varies; can reach 30 to 45 feet when mature but very dependent on planting site and care

Growth habit: varies; usually has a dense, broad, pyramidal shape when young, becoming flat-topped when mature; branches often flexible and tolerate large snow loads

Life span: long-lived

Stone Pines (*Pinus spp.*)



Swiss stone pine has a graceful, pyramidal shape, making it useful in landscaping and windbreak projects.

(NDSU Extension)



Stone pine cones take several years to develop fully. Green, 1-year old cones can be seen next to 2-year-old cones on this native limber pine.

(NDSU North Dakota Forest Service)

Walnut and Butternut

(*Juglans nigra* and *J. cinerea*)

Blossom: late April to mid-June; not showy

Harvest: varies; mature nuts will drop September until November

These trees are highly valued for their edible nuts and rich wood. They can be difficult to grow and only hardy northern seed sources should be planted. They are not commonly planted in windbreaks because they are relatively slow-growing, but they can be a valuable addition to a multiple-row windbreak.

Roots and fallen leaves release a toxic compound (juglone) that inhibits the growth of other plants growing near black walnut trees. This toxin usually does not affect the deeper root systems of native herbaceous plants or mature trees. This can be useful in controlling weeds, but walnuts should not be planted near pines, apples or gardens with annual food crops.

Walnut trees start producing nuts in 10 and 20 years. Waiting until the mature nuts drop from the tree to harvest them is best, but they can be harvested off the tree if wildlife begin eating them or if they are stubborn about coming off. Walnuts can be tapped in the spring like maple trees, and the resulting sap can be drunk or concentrated into syrup.

Pests and Disease: Walnut trees in North Dakota have no serious pest or disease problems because the state has relatively few walnut trees to host and spread these health issues. The walnut husk fly is the most common pest of walnut in the state. These flies lay their eggs on the husk of the walnut “fruit.” The eggs hatch and the larvae eat the flesh around the developing walnuts. This can stain the walnut shell and reduce walnut size, but it does not affect personal use of the nuts once they are shelled. If the fly becomes a problem, special fly traps can be used to monitor fly populations and trap adult flies. The potentially devastating thousand cankers disease has not been found in North Dakota.

Characteristics for Windbreak Design

Soil types: sensitive to soil conditions; does best on deep, well-drained, fertile, loamy soils

Light needs: full sun; tolerates partial shade

Water needs: prefers moist, well-drained soils; does not withstand extended ponding or drought

Walnut and Butternut

(*Juglans nigra* and *J. cinerea*)

Black walnut is a valuable source for food and wood, but competing vegetation needs to be well-controlled for the best production.

(NDSU Extension)



Black walnut and butternut produce nutrient-rich nuts for people and wildlife.

(NDSU Extension)



Height: 30 to 60 feet

Growth habit: dense plantings tend to self-prune lower branches, creating a well-formed umbrella-like canopy; open-grown walnut have many limbs and a more rounded shape

Life span: long-lived

Shrubs



(Photo courtesy of University of Minnesota)



(NDSU Extension)



(NDSU Extension)

American Plum, Canadian Plum and Hybrids (*Prunus americana* and *P. nigra*)

Blossom: May

Harvest: August to September

Several domesticated plum varieties will grow well in North Dakota; however, none are as hardy as wild plum. Local or northern sources for wild American and Canadian plums are hardy in North Dakota. The conservation plum seedlings usually planted in windbreaks may not be as productive as named varieties, but they are often much easier to care for and may be resistant to common diseases or pests in your area. They also still produce beautiful flowers in early spring and tasty fruit for you to enjoy. Most domesticated plums are hardy but bloom too early in the spring, making the blossoms at risk of frost injury. No blossoms means no fruit!

Plums have been planted for decades in windbreaks and wildlife block plantings. They have gotten a reputation for being short-lived because only a few shrubs may be left from rows planted in the 1950s and '60s. However, they can survive indefinitely if competing grasses can be controlled and new suckers are given enough space to grow. Many plums died because smooth brome grass filled in the windbreak understory and choked out many shrubs.

Pests and Disease: Plum curculio, a type of weevil, is the most common pest affecting plums in North Dakota. The most effective way to reduce their impact is to collect damaged fruit on the ground or still on the tree and destroy it. If you have had significant damage from plum curculio in previous years, you can spray an insecticide at petal fall and again seven to 10 days later. Multiple insecticides are labeled for plum curculio. Labels must be followed to limit damage to beneficial insects, such as bees, and damage to the shrubs.

Damage from wildlife is common, but plums are a valuable food source for wildlife and some damage should be expected. Plums are susceptible to black knot fungus but are much less likely to be affected than chokecherry.

Characteristics for Windbreak Design

Soil types: adapted to a wide variety of soil types but does best in loamy soils with adequate organic matter and good drainage

Light needs: full sun to partial shade

American Plum, Canadian Plum and Hybrids (*Prunus americana* and *P. nigra*)



American plum grows well as an outside windbreak row or shade-tolerant inner row. The beautiful spring blossoms mark an end to winter and provide food for native bees.

(NDSU Extension)



Native plums are very diverse and grow in many shapes, sizes and colors. Find out which ones work best in your recipes. (NDSU Extension)

Water needs: fair to good drought tolerance; fruit improves with higher soil moisture but plant does not tolerate waterlogged soils

Height: 8 to 10 feet

Growth habit: usually a multistemmed, thicket-forming shrub with a round canopy when mature

Life span: moderate-lived but regenerates heavily through suckering

Aronia

(*Aronia melanocarpa* or *A. mitschurinii*)

Blossom: mid-May to mid-June

Harvest: late August to mid-September

Aronia, also called chokeberries, are relatively easy to grow and the fruit is easy to process because it does not have pits, like chokecherry. Plants are hardy throughout the whole state, but some protection or extra water may be needed in difficult years. Aronia expand from the plant crown and through nonaggressive suckering. Fruit should develop in the third year and continue from there. As branches age, they become less productive. For maximum yield and plant longevity, remove branches greater than 1 inch in diameter each year. You easily can expect 10 to 15 pounds of fruit per shrub when it gets bigger.

The fruit will swell and turn blue-black in late summer.

Determining when the fruit is ripe can be difficult because it changes color several weeks before fully ripe. Taste the fruit to decide when to harvest. The berries are terrible tasting when unripe but get juicier and better tasting when ready. Although suitable for eating fresh, they usually are preferred cooked. The fruit is not bitter. It is astringent due to the high tannin content; it dries out your mouth. Freeze the fruit and use in quick breads, smoothies, yogurt, ice cream and jelly. Aronia has been cited as having the highest phytonutrient content of any fruit. It truly is a “superfruit.”

Pests and Disease: Possible insect pests for aronia in North Dakota include apple maggot, cherry fruit worm, grasshoppers, spotted winged drosophila and tarnished plant bug. These pests are not active in all regions of aronia production and will not have a significant impact on production. Pear slugs (sawfly larvae) feed on the upper surface of the leaves and lace bugs feed on the lower leaf surfaces. Sometimes Western cherry fruit fly larva can be found in the fruit. Many pests can be dislodged with a spray of water. Commercial organic and conventional pesticides are available for these issues.

Characteristics for Windbreak Design

Soil types: selected varieties can establish in a range of soils; can do well in clay, loam and sandy soils if enough water and organic matter are present

Light needs: full sun for best production but can tolerate some shade

Aronia

(*Aronia melanocarpa* or *A. mitschurinii*)



Kathy Wiederholt, fruit project manager for the Northern Hardy Fruit Evaluation Project, stands next to a row of aronia bushes loaded with fruit. (NDSU Extension)



Aronia berries, also called black chokeberries, do not have pits and can be eaten fresh or cooked into delicious preserves or baked goods. (NDSU Extension)

Water needs: moderate; supplemental watering may be needed on well-drained soils or during periods of drought; can tolerate wet soils

Height: 3 to 8 feet

Growth habit: upright, rounded shrub that is slightly taller than wide; suckering increases a planting's width through time

Life span: moderate-lived but plantings regenerate heavily through suckering

Cherry (*Prunus spp.*)

Blossom: May

Harvest: late July to early August

Many kinds of cherry grow in North Dakota windbreaks. Some cherries are native to North Dakota, but many more have been introduced. In the 1950s or '60s, standard tart cherries were planted and, with vigorous root suckering, became thickets. Some survive today. Small, shorter-lived species such as Nanking and Mongolian cherries often are included in mixes that provide food for wildlife and people. Western sandcherry is a short-lived shrub native to the northern Great Plains. 'Purpleleaf Sandcherry,' a hybrid, is a popular landscape shrub.

Common chokecherry and Canada red chokecherry ('Schubert') are the most commonly planted types of cherries because they are longer-lived, generally taller and often require less special care because they are native to North Dakota. Pin cherry is the northeastern cousin of common chokecherry and can grow well in many parts of the state, but its popularity has decreased for windbreak plantings.

Cherries are high in vitamin C and A, potassium and fiber. They have different antioxidants than purple fruit and are a good part of a balanced diet. After picking, cover cherries in cold water to firm them before pitting; pit before freezing for best results. A water soak also draws out insects.

Pests and Disease: Rodents love cherry bark, and prairie voles often girdle stems. Shelterbelt cherries are quite vigorous, though, and should regrow from suckering roots. Adequate sunlight and ventilation can prevent most of the health problems that affect cherries. The most common disease problem of cherries in North Dakota is black knot fungus, a gall-forming fungus that disfigures branches. These black masses can be pruned out to correct growth habits and restore vigor. In thickets with higher moisture, brown rot and cherry leaf spot may infect fruit. Spotted winged drosophila fruit flies can ruin fruit just as it starts to ripen. In a shelterbelt situation, you probably can't do much about this.

Characteristics for Windbreak Design

Soil types: most prefer loamy soils but can tolerate a wide range of soils

Cherry (*Prunus* spp.)



The Canada red chokecherry 'Schubert' forms as a well-rounded shrub as it matures, changes from bright green to purple during the growing season and produces tasty berries. You may have to fight off birds for the berries. (NDSU Extension)



Nanking cherry is an underused cherry bush that is very adaptable to different windbreak conditions and produces some of the best-tasting cherries that can be grown in North Dakota. (NDSU Extension)

Light needs: varies, but most require full sun; some species can tolerate shade, but vigor and fruit production will decline

Water needs: fair to moderate drought tolerance once established

Height: Varies; 3 to 25 feet

Growth habit: varies but generally oval; open and spreading canopy as wide as the plant is tall

Life span: short- to moderate-lived

Currants and Gooseberries (*Ribes spp.*)

Blossom: May

Harvest: late July to early August

Currants and gooseberries are native shrub species that are easy to grow. Most plants are partly or fully self-fertile so you can grow just the number of plants you need. The biggest drawback is that they leaf out early and their buds might get nipped by frost. Mulching helps delay plant development by keeping the roots cool. Plant rooted cuttings deeply, with the root ball 3 to 5 inches below the soil surface. Prune the top to three or four buds to encourage shrubby growth and expect fruit in the third year. If currants become unproductive, remove a few of the oldest branches at the ground so new shoots can grow.

Black currants contain high levels of vitamin C and are rich in minerals such as calcium, phosphorus and potassium, and phytonutrients and essential fatty acids. These currants have twice the level of antioxidants as blueberries.

Pests and Disease: The most common pest is currant borer, which will burrow into the canes. Infested canes will put out slow, sickly growth in the spring. Remove these in May and burn them to kill the borer in the stem. Aphids and powdery mildew also can be a problem in some parts of the state. Although uncommon, currants and gooseberries can spread white pine blister rust if grown near “white pines,” such as limber pine and Swiss stone pine.

Characteristics for Windbreak Design

Soil types: adapted to a variety of soils and is somewhat tolerant of saline soils

Light needs: full sun to partial shade

Water needs: fairly drought-tolerant but does well in wetter soils

Height: 3 to 6 feet

Growth habit: upright, spreading growth habit that can be very leggy if branches are not pruned back by wildlife or people

Life span: short-lived but can regenerate heavily from seed on suitable sites

Currants and Gooseberries (*Ribes spp.*)



Gooseberries are larger than currants and have thicker skin, but they also are thornier and can be more difficult to harvest.

(Photo courtesy of University of Minnesota)



Golden currant is a hardy, low-growing shrub that is loaded with fragrant, yellow blossoms in the spring and then large, marbled berries in late summer. (NDSU Extension)

Elderberry (*Sambucus canadensis*)

Blossom: June

Harvest: September

Conservation elderberry seedlings grow readily in North Dakota. They do not require special care except to remove canes that are more than 3 years old for best fruit production. Elderberry plants will sucker, with new shoots traveling quite a distance from the mother plant. Control them by mowing.

In central North Dakota, the named varieties available from catalogs may not ripen within the season or may die down to the snow cover in winter. Plants observed and sourced locally will do fine.

Elderberry canes may be cut to the ground every year if desired. They still will achieve great heights and flower but may not ripen. This will allow you to enjoy their tropical-like foliage but not worry about birds spreading seeds. For ripe berries, allow the fruits to turn dark, shiny black and cook them before eating.

Pests and Disease: Elderberry has few health problems. Fungal diseases, such as powdery mildew and leaf spot, can become problematic if the shrub is planted in shady or damp conditions.

Characteristics for Windbreak Design

Soil types: prefers rich, well-drained soils with high organic matter

Light needs: full sun

Water needs: moderate; supplemental water is required for maximizing fruit production

Height: 6 to 10 feet

Growth habit: rapidly forms large, dense clump of foliage

Life span: moderate-lived but plantings regenerate heavily through suckering

Elderberry (*Sambucus canadensis*)



Elderberry is common in ornamental plantings due to its showy white flowers and dark berries, but some varieties are edible and very attractive. (iStock.com)

Hazel (*Corylus spp.*)

Blossom: late April to May

Harvest: October

American Hazel and beaked hazel are native to North Dakota. Native hazels commonly cross with each other in wooded areas, such as on the Turtle Mountain Plateau and in the Pembina Gorge. Nuts can be harvested from either species and can taste as good, if not better, than hazelnuts bought commercially. However, native seed sources produce small nuts, which take a lot of effort to harvest for the small amount of edible flesh. Beaked hazel also has irritating hairs on the papery husk that gives the plant its common name. Hazels are the only nut-producing shrubs available for North Dakota.

Many forms of wildlife eat the nuts of American hazelnut. Rabbits, deer and moose browse the leaves, twigs and catkins. The male flowers (called catkins) are a winter food for turkey and ruffed grouse. The dense, low growth habit provides cover and nesting sites for many wildlife species.

Crosses of American and European hazelnut have had promising results. Despite successes with these crosses, a hardy, commercially productive hazelnut is still not available. Hazels rarely are planted in windbreaks because they can be difficult to manage. They often do too well in a site and dominate it or don't do well and require special attention to survive. Other shrubs do very well on the rich, moist sites where hazel grows and these usually are preferred.

Pests and Disease: Native hazels are resistant to Eastern filbert blight (EFB), a fungal disease that can cause serious damage to European hazels (filberts) grown in the U.S. Hazelnut curculio, a type of weevil, often attacks hazel shrubs in North Dakota. Weevils eat most of the nut inside and leave noticeable holes in the nutshell as they tunnel out. Some insecticides can reduce weevil infestations, but biocontrol using nematodes or specific soil fungi often are more effective in controlling weevil populations.

Characteristics for Windbreak Design

Soil types: grow best on rich, moist, well-drained soils

Light needs: shade-tolerant but nut production is highest in full sun

Water needs: not drought-tolerant; requires consistent moisture

Height: 3 to 8 feet

Hazel (*Corylus spp.*)



American hazelnuts and European hazelnut hybrids can produce high yields of nuts year after year with proper care.

(Photo courtesy of Dan Johnson, Riverbend Hazelnuts)



Hazelnuts are native shrubs that grow very well in natural forests but can be difficult to grow in windbreaks with poor soil. Soil health and weed control are important for them to be productive. (Photo courtesy of Modern Farmer Magazine)

Growth habit: branches are long and upright, with a slight zigzag pattern; quickly forms thickets by suckering

Life span: short-lived but plantings regenerate heavily through suckering

Honeyberries and Haskap (*Lonicera caerulea*)

Blossom: late April to May

Harvest: most Russian—mid to late June; Canadian—late June to early July; Japanese—early July

The extremely hardy, edible blue honeysuckle grows in almost any soil, and the fruit can be used like blueberries. Honeyberry and haskap are two words for almost the same plants. Plants with Russian heritage are called honeyberry while those from Japan are called haskap; they are different varieties, but the fruit is very similar. Varieties of each type are available, and at least two compatible varieties are needed in a planting for the shrubs to produce fruit.

These fruits plants are native to Canada and other polar areas. They are extremely tough and hardy for North Dakota winters. They require an average soil, although they will grow in clay. Their normal habitat is damp forest margins.

As for all dark-colored fruit, these blue berries are “superfruits.” Notably, they are high in fiber and vitamin C and B1. Berries won’t be truly ripe for two to three weeks after they turn blue. You will need to protect them from birds during this period. Taste the berries. Harvest them by plucking or shaking the branches over a sheet.

These tasty shrubs have not been available in the U.S. for very long, and plant nurseries have not been able to keep up with demand. Although these edible honeysuckles do very well in North Dakota, finding affordable sources for the large number of plants needed for a windbreak row is difficult. It could be alternated with other shrubs or planted in only a small portion of the windbreak.

Pests and Disease: If planted in a shelterbelt, haskaps will become food for birds and perhaps raccoons and foxes. These are the first fruit, ripening in mid-June to early July. Their blossoms begin to open soon after the snow melts and a concern is whether bees will be available to pollinate the flowers; some areas of the state have very low populations of early native bees. Powdery mildew and botrytis, as well as young-leaf deformation by thrips, have been reported.

Characteristics for Windbreak Design

Soil types: prefers well-drained, moist loam with high organic matter; can tolerate clay soils

Light needs: full sun to partial shade; fruit production will be much higher in full sun with enough water

Honeyberries and Haskap (*Lonicera caerulea*)



Honeyberries and haskaps are easy to grow and have an excellent form for use in windbreaks. Be sure to plant more than one variety for them to produce fruit.

(Photo courtesy of The Honeyberry Farm)



Honeyberries are a relatively new addition to small fruits on the Great Plains. Breeding programs are developing improved varieties, and these “superfruits” are sure to become a favorite in North Dakota.

(NDSU Extension)

Water needs: consistent moisture to produce large fruit yields but somewhat drought-tolerant once established

Height: 3 to 8 feet

Growth habit: upright, vase-shaped and rounded, mound-shaped shrubs with stiff branches

Life span: long-lived; individual plants can survive for 50 years or more and do not rely on suckering to regenerate

Juneberry (*Amelanchier alnifolia*)

Blossom: May

Harvest: early to mid-July

Juneberries are well loved in North Dakota and are known worldwide. They are native to forest edges, prairie hillsides and woody draws. They have long been a part of native human history and are known by many names in North America: Saskatoons, Juneberries, serviceberries, shadblow and shadbush. On the Plains, Juneberries were an important ingredient in pemmican, a blend of berries, dried meat and fat.

Juneberries are a “superfruit.” They are high in antioxidants and fiber. They also are a good source of vitamin E, magnesium and manganese. Blueberries do not grow well in North Dakota due to the more alkaline soil here, but Juneberries answer the need for tasty and nutritious berries on the northern Great Plains.

Juneberries make excellent windbreak shrubs. Their ability to grow in full sun and partial shade makes them a flexible option in designing a multirow windbreak. However, their susceptibility to a range of health problems when stressed limits their use for producing fruit in windbreaks. To survive, they do not require any extra attention once they are established, but to be productive, they likely will need additional care.

Pests and Disease: Juneberries, like apples, can be bothered by a host of insects and diseases. Thinning the plants regularly is important to allow air movement around them and avoid damp soils. Diseases of importance are: Entomosporium leaf and berry spot, juniper-apple rust, fireblight, brown fruit rot, Cytospora canker, powdery mildew and blackleaf. Insect problems include: wooly elm aphids, flower thrips, mites, bud moths, Saskatoon sawflies that burrow into the fruit and pear slug sawflies that eat leaf surfaces. Growing Juneberries organically is very difficult.

Every year, you will fight hungry animals for the Juneberries. Birds, raccoons, deer and even your dog love them. Birds can be kept away with netting placed over the plants in late June.

Characteristics for Windbreak Design

Soil types: prefers loam to sandy loam soil high in organic matter

Light needs: full sun to partial shade; Berry production is higher and foliar diseases less likely in full sun

Juneberry (*Amelanchier alnifolia*)



Juneberries are the northern Midwest's answer to fresh blueberries. These native berries taste great right off the bush or in your favorite dessert recipes. (NDSU Extension)



Juneberries have an excellent form for windbreaks and can create dense rows that provide shelter year-round. (NDSU Extension)

Water needs: adequate moisture to bear fruit; limited drought-tolerance; does not withstand ponding

Height: 6 to 15 feet

Growth habit: upright, rounded shrub

Life span: moderate-lived; life span highly dependent on site conditions

Seaberry/Sea-buckthorn

(*Hippophae rhamnoides*)

Blossom: late April to May; not showy

Harvest: August to September

Seaberry, also called sea-buckthorn, is an extremely cold-hardy and versatile shrub. It can tolerate alkaline, saline and nutrient-deficient soils. Many of these benefits come, partially, from the beneficial fungi and bacteria that colonize the roots of the plant. The plant can fix nitrogen—meaning pulling it from the air—to use itself and for future plants to use. This improves soil fertility through time.

It suckers well and easily regenerates itself in a row or thicket planting. The shrubs are male or female, so multiple plants will need to be planted to ensure fruit production. Fruit will grow only on female plants. The fruit stays on the shrub through winter, providing winter interest and food for wildlife. Seaberry fruit can be somewhat difficult to harvest because plants are thorny and fruits are well-attached to branches. Thornless varieties that are easier to grow have been developed in Europe and Asia but have not been introduced to the U.S. yet.

Seaberry is similar in appearance, size and shape to the native silver buffaloberry and the introduced Russian olive. Seaberry, like Russian olive, easily can become invasive in areas without sod, such as tilled fields or at the base of other woody plant species. Seaberry should be planted only in areas where suckers and seedlings can be controlled.

Pests and Disease: Seaberry has very few identified pest problems. Grasshoppers and Japanese beetles have been seen eating leaves, but damage is usually not significant. The berries attract wildlife, so the fruit should be picked as soon as it is ripe.

Characteristics for Windbreak Design

Soil types: sandy loam preferred, but it tolerates a wide range of soils, including alkaline, saline and drought-prone soils

Light needs: full sun

Water needs: low once established, but fruit production will be higher with some supplemental watering

Height: varies; usually 6 to 10 feet but can be larger or smaller due to high genetic diversity

Seaberry/Sea-buckthorn

(*Hippophae rhamnoides*)



Seaberry is one of the hardiest small fruits that can be grown in North Dakota. It still can fruit in alkaline and saline soils – something that even most native plants are not well-adapted for doing.

(NDSU Extension)



Seaberry produces small, colorful fruit that tastes almost tropical. Multiple plants must be planted because only female plants produce fruit. (NDSU Extension)

Growth habit: varies; usually has an upright, open canopy with leaves and fruit growing close to the branches

Life span: varies; usually moderate-lived; can be a short- to long-lived depending on site and plant genetics

Silver Buffaloberry (*Shepherdia argentea*)

Blossom: late April to May; not showy

Harvest: July to August for fresh eating but also can be collected later

Silver buffaloberry, sometimes called bull berry, is an important part of prairie ecology. The shrub is excellent browse for deer and provides ideal cover and nesting sites for many prairie birds. The berries are a preferred food source of many songbirds and sharptail grouse. It is especially important for wildlife during harsh winters because it is a good late-winter food source.

The berries are small, but the shrub produces hundreds of them in tight clusters along the previous year's twigs. Buffaloberries can be used fresh in jellies, sauces and baked goods or dried and stored. Its agreeable flavor lends itself well to out-of-hand eating, but harvest can be difficult due to the 1- to 2-inch thorns. A related species, the russet buffaloberry (*Shepherdia canadensis*), is thornless, but the berries do not taste good.

Wild buffaloberries in North and South Dakota have been shown to have high levels of lycopene, an antioxidant that can lower the risk of several types of cancers.

Pests and Disease: Common diseases include stem decay and branch canker; however, these problems are usually on old or cramped branches that no longer are very productive or important for plant survival. Deer commonly browse the twigs and leaves, which causes the shrub to release nitrogen into the surrounding soil, in effect, fertilizing the plants around it. The shrub therefore can maintain its form very easily despite heavy browsing.

Characteristics for Windbreak Design

Soil types: well-adapted to dry, moderately alkaline and saline soils; tolerates infertile soils, in part because of its ability to fix and use atmospheric nitrogen

Light needs: full sun

Water needs: drought-tolerant; not adapted to wet, poorly drained sites

Height: 6 to 15 feet

Growth habit: loosely branched shrub that fills into a rounded canopy

Life span: moderate-lived; age and size vary depending on competition from surrounding vegetation and water availability

Silver Buffaloberry (*Shepherdia argentea*)



Buffaloberry fruit may be small, but it makes unique jams or jellies. The shrubs require almost no care to grow. Just take however much fruit you want and leave the rest as winter food for birds and other wildlife. (Photo courtesy of ndstudies.gov)



Buffaloberry is a native shrub that can be found in open prairies and woody draws. It makes an excellent windbreak row because it does not compete heavily for water or nutrients, and catches snow well. (NDSU Extension)

Sumac (*Rhus spp.*)

Blossom: June-July

Harvest: September-October

Sumac is best known as an easy-to-grow—sometimes too easy—shrub in home landscapes. They have large root systems that allow the plant to survive in many types of soil but also allow them to spread into a dense thicket. This may not be desirable for a shrub in your front yard, but it is very useful for windbreak plantings. Several types of sumac are available, but the ones that can be grown in North Dakota all have bright red fall color and clusters of small red berries at the tips of their branches.

Skunkbush (lemonade) sumac and smooth sumac are native to North Dakota, with skunkbush sumac growing better in the western half of the state and smooth sumac better in the eastern half. Staghorn sumac is taller and has an almost tropical appearance, but it is not as hardy.

The fragrant, lemony-pine smell of the berries works well in refreshing drinks and also as a spice on foods. Native Americans and European settlers used the berries and other parts of the shrub for food and medicine for generations. Sumac is not an obvious choice for use in recipes, but the unique flavor goes well with many types of food, particularly game meats.

Pests and Disease: Sumac have very few pest and disease problems in North Dakota. Defoliating and sap-sucking insects rarely cause damage that affects the shrub for more than one season. Cytospora canker can be an issue if sumacs are grown in damp areas with poor air movement.

Characteristics for Windbreak Design

Soil types: adapted to a wide variety of soils but grows best in well-drained soils with seasonally high soil moisture

Light needs: very adaptable; full sun to partial shade

Water needs: moderately drought-tolerant once established; a common shrub in the Dakota Badlands

Height: varies; species grow different heights and plants grow shorter when water is limited; 3 to 15 feet

Growth habit: rounded, multistemmed and thicket-forming

Life span: moderate-lived but regrow and spread very easily from a large root system

Sumac (*Rhus spp.*)



Lemonade (or skunkbush sumac), as the name suggests, can be used to make a lemonadelike drink. It also can be eaten raw or cooked. The strong smell and flavor pair well with other foraged foods or game meats. (Photo courtesy of U.S. Department of Agriculture Forest Service)



Several sumac species can grow in North Dakota, but all grow rapidly to form dense thickets that work well in windbreaks. (NDSU Extension)

Viburnum (*Viburnum lentago* and *V. trilobum*)

Blossom: May-June

Harvest: varies; check fruit development in September; fruit should be harvested when it is slightly “overripe;” not all berries will ripen at the same time.

Viburnum plants have many common names. One is Pembina, the native Chippewa (Ojibwe) name for the plant and namesake of Pembina, N.D. Although often called “highbush cranberry” or “American cranberrybush,” viburnum plants are not cranberries. They also are not related to grapes, as the name raisin bush suggests, but the ripe fruit does taste and look similar to raisins.

Viburnum are very ornamental and well-known for their showy flowers, red fall color and winter fruit display. Not all viburnums are edible, but the native American cranberrybush and nannyberry are edible. Conservation grade seedlings for windbreak or wildlife plantings are easy to find.

Pests and Disease: Viburnum typically have few pest or disease problems. Eriophyid mites and spider mites can cause stress and defoliation but rarely lasting harm. The larvae and adults of the Viburnum leaf beetle feed on the leaves and may defoliate the plant completely. This can kill the plant if it happens year after year or if the plant already is stressed.

Characteristics for Windbreak Design

Soil types: prefers loamy, well-drained sites with better-than-average moisture

Light needs: partial shade to full sun

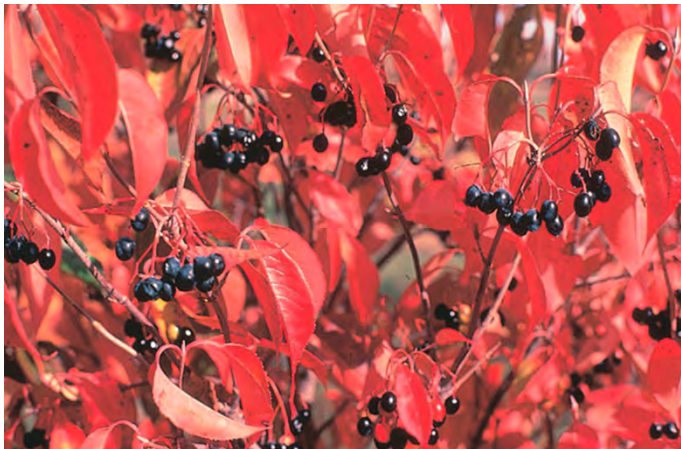
Water needs: limited drought-tolerance; may need supplemental watering in some sites

Height: 8 to 14 feet

Growth habit: round-topped and fairly dense under cultivation, poorly branched and open in native habitat

Life span: moderate-lived

Viburnum (*Viburnum lentago* and *V. trilobum*)



Most viburnum plants are known for their ornamental value, especially their white flowers and bright fall color. However, nannyberry and American cranberrybush produce pounds of berries that are good for preserves and baked goods.

(NDSU Extension)



Native viburnum shrubs can be an excellent inside windbreak row, the leeward row, because of their year-round attractiveness and preference for more protected sites.

(NDSU Extension)

Warning:

Consuming wild-harvested foods, including those taken from windbreaks, can be dangerous. Do not eat or drink anything that you cannot identify positively and judge to be safe. Wash wild-harvested foods thoroughly before consuming. Follow agricultural chemical label directions for application rates, re-entry times and harvesting times.

Just because some parts of a plant are edible does not mean that all parts of the plant are edible. Flowers, leaves, stems, roots and other plant structures can contain different amounts of nutritious or toxic compounds. Only eat parts of the plant that you are positive are safe for human consumption.

Some plants also are safe only if cooked before being eaten.

When in doubt, do not eat!

Recipes

We hope you enjoy this collection of recipes. Special thanks to those who shared their favorite recipes! In particular, NDSU Extension Master Gardeners showed they know not only how to grow good food, they know great ways to cook it. When possible, we provided nutrition information; however, in some cases, nutritional data is not readily available for unusual ingredients.

Key to abbreviations

c. = cup

Tbsp. = tablespoon

tsp. = teaspoon

oz. = ounce

qt. = quart

pkg. = package

lb. = pound

mg = milligram

g = gram

Acknowledgment: Special thanks to Allie Benson and Sallie Yakowicz, program assistants, and Stacy Wang, Extension associate, for their assistance with collecting recipes, nutrition analysis and photography.

Jams, Jellies and Other Spreads



Visit www.ag.ndsu.edu/food/ and click on “Food Preservation,” then “Jams & Jellies” for more information about jellies, jams and spreads.

General Directions

Use only 3 or 4 cups of juice per batch. The amount of sugar varies; 1 cup of juice to 1 cup of sugar is satisfactory, but using $\frac{3}{4}$ cup of sugar to 1 cup of juice may give better-quality jelly and a more natural flavor. The amount of sugar is determined by the amount of pectin present. Juice for jelly making can be stored for about one week in the refrigerator if you aren't able to use it right away. Juice can be frozen several months in containers; leave $1\frac{1}{2}$ inches of head space. Thaw slowly.

Satisfactory jam can be made from many of the fruits if you have enough pulp. One pound of fruit usually yields at least 1 cup of clear juice. See the NDSU Extension publication “Jellies, Jams and Spreads” (FN172) for more information about extracting juice.

1. Wash and remove hulls and stems. Cut firm, larger fruits into small pieces. Crush soft fruits or berries.
2. Add enough water to cover the fruit. Put the fruit and water in a large saucepan and bring to a boil. Simmer, stirring occasionally, for the amount of time listed or until the fruit is soft.
3. Mash the fruit through a sieve.
4. Measure the pulp. Add sugar in a proportion of $1\frac{1}{2}$ pounds of sugar to 2 pounds of pulp. Continue to cook slowly until thick.
5. To strain, place three layers of damp cheesecloth or a jelly bag in a large bowl. Pour prepared fruit into the cheesecloth. Tie the cheesecloth closed; hang it and let it drip into a bowl until the dripping stops. Press gently. Note: The juice can be frozen or canned at this point for later use.
6. Add ingredients as directed and cook.
7. If you plan to store the jelly or jam at room temperature, process it in a water-bath canner to help prevent mold growth.
 - a. Pour the jelly, jam or syrup into hot, sterilized jars, leaving $\frac{1}{4}$ inch of head space.

- b. Remove bubbles with a bubble freer or spatula; clean the rims and jar threads carefully before applying lid and ring.
- c. Use two-piece lids. Do not overtighten the lids, which may lead to buckling and a poor seal. Consult the manufacturer's directions; most recommend "finger tight."
- d. Place the jars in a canner filled with simmering water. The water should be 1 to 2 inches over the top of the jars.
- e. Begin timing when the water is boiling gently. At the end of the recommended processing time, remove the jars carefully with a jar lifter and place on a rack or protected surface away from drafts.
- f. Do not disturb the jars for at least 12 hours. Sealed lids will be concave. You may hear them "pop."
- g. For best quality, use home-preserved jellies within one year.

Note: Using paraffin is not recommended as a way to seal jellies and jams. Turning jars upside down to seal also is not recommended. The U.S. Department of Agriculture recommends processing jams, jellies and syrups in a boiling water-bath canner to inactivate molds that may be present. Unsterilized jars may be used if the jelly or jam is processed for 10 minutes.

Process Times

Table 1. Recommended water bath process time for jams and jellies in a boiling water-bath canner.

Style of Pack	Jar Size	0-1,000 ft.	1,001-6,000 ft.	Above 6,000 ft.
Hot	Half-pints or pints	5 min.	10 min.	15 min.

Nutritional Value of Jelly/Jam

In general, 1 tablespoon of sugar-sweetened jelly or jam has about 40 to 50 calories and 10 to 12 grams of carbohydrate.

Apple Ginger Jam

2 lemons
8 medium tart apples, peeled, cored and sliced (about 7 cups)
2½ c. water
1 tsp. ground ginger
½ c. chipped crystallized ginger

Zest the lemons. Cut the lemons in half and squeeze the juice; reserve the juice. In an 8-quart saucepan, cook the apples, water, lemon zest, lemon juice and ground ginger until the apples are soft. Add the sugar and stir until dissolved. Boil the mixture rapidly for 15 minutes, stirring frequently, until a candy thermometer reaches 220 F. Remove the pan from the heat and stir in the crystallized ginger. Skim off any foam and let it stand for 10 minutes. Pour it into clean jars, leaving ½ inch of head space. Cap and seal. Process for 10 minutes in a boiling water-bath canner.

Yield: about 10 cups jam.

Recipe from: "The Big Book of Preserving the Harvest" by Carol W. Costenbader
Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Chokecherry Apple Butter

4 c. applesauce 5 c. sugar
4 c. chokecherries ½ tsp. almond extract
1 c. water

Combine chokecherries and water in a saucepan. Simmer over low heat until soft. Put cooked fruit through a sieve or food mill. Measure 2 cups chokecherry pulp and combine with 4 cups applesauce. Heat to a boil, stirring carefully. Add sugar. Stir constantly until it just begins to thicken. Add almond extract and blend. Ladle into sterilized, hot jars to within ¼ inch of top of jar. Wipe rims. Adjust lids. Process in a boiling water-bath canner for 10 minutes.

Makes 8 cups.

Makes 64 servings. Each serving has 60 calories, 0 g fat, 0 g protein, 16 g carbohydrate, 2 g fiber and 0 mg sodium.

Recipe from: "Fruits of Your Labor Cookbook" - Colorado State Forest Service
Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Chokecherry Jelly 1 (with liquid pectin)

The optional almond extract gives a stronger cherry taste.

3 c. chokecherry juice

6½ c. sugar

6 fluid oz. liquid fruit pectin

¼ tsp. almond extract (optional)

Extract juice as described on page 48. Pour juice into large kettle. Add sugar and stir to mix. Place over high heat and bring to a boil, stirring constantly. Stir in pectin, bring to a full, rolling boil and boil hard one minute, stirring constantly. Remove from heat; skim. Add almond extract. Pour into sterilized, hot jars to within ⅛ inch of jar top. Wipe jar rim; adjust lids. Cover with two-piece lids and process in a boiling water-bath canner according to Table 1.

Makes about nine half pints.

Recipe from: "Farm Journal Freezing and Canning Cookbook," 1978

Submitted by: Mary Jane Henley, Streeter, N.D.



Chokecherry Jelly 2 (with powdered pectin)

Extract juice as described on page 48.

3½ c. chokecherry juice

4 c. sugar

1 (1¾-oz.) package powdered pectin

Stir pectin into the juice. Bring this mixture to a rolling boil (one that does not stop when stirred) over high heat, stirring constantly. Quickly add sugar to the juice mixture. Bring to a full, rolling boil and boil one minute, stirring constantly. Remove from the heat. Skim off any foam. Pour into hot, sterilized half-pint jars; leave ¼ inch of head space. Cover with two-piece lids and process in a boiling water-bath canner according to Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Gooseberry Jam

4½ lb. fully ripe gooseberries to make 5½ cups gooseberry juice

1 c. water

1 (1¾-oz.) package pectin

½ tsp. butter or margarine

7 c. sugar, measured into separate bowl

Crush gooseberries thoroughly, one layer at a time, or grind them. Place them in a saucepan; add water. Bring to a boil. Reduce the heat to low; cover and simmer 10 minutes. Strain. Measure exactly 5½ cups of juice into a 6- or 8-quart saucepot. Stir pectin into the juice in the saucepot. Add butter to reduce foaming. Bring the mixture to a full, rolling boil (a boil that doesn't stop bubbling when stirred) on high heat, stirring constantly. Stir in the sugar. Return to a full, rolling boil and boil exactly one minute, stirring constantly. Remove from the heat. Skim off any foam with a metal spoon. Pour into hot, sterilized jars, filling to within ⅛ inch of the tops; wipe jar rims and threads and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Highbush Cranberry Juice

To make juice, fill a 6-quart kettle two-thirds full of berries and cover with water. Cut one-half orange into quarters and add to the kettle. The orange and peel improve the aroma while cooking. Simmer the berries about three minutes and crush with a potato masher. Stir to loosen any pulp that has stuck to the bottom and cook two minutes more. Strain through a jelly bag or two thicknesses of cheesecloth. Proceed to making jelly (recipe on page 55) or reheat the juice to just boiling and pour it into sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Highbush Cranberry Jelly

- 4 c. highbush cranberry juice
- 1 (1¾-oz.) package powdered pectin
- 5 c. sugar

Cook berries as directed for juice (recipe on page 54).

Mix the juice and pectin. Bring the mixture to a rolling boil. Add sugar and boil hard for one minute. Pour into sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Pin Cherry and Crabapple Jelly

2 c. pin cherry juice (high in pectin)

2 c. crabapple juice (high in pectin)

Boil three minutes and test for pectin. If the pectin level is adequate, then add 4 cups sugar.

Boil briskly and follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Pin Cherry or Wild Red Cherry Jelly

Extract juice, using 1 cup of water to 1 pound of fruit. Strain the juice through a jelly bag. The pulp may be reboiled and strained two or three times. Use just enough water to make stirring easy.

Use 4 cups of pin cherry juice and 4 cups of sugar. Follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1. (If pectin is very high, use 1¼ cups of sugar to 1 cup of juice.)

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Plum BBQ Sauce

5 lb. plums, washed, pitted, skinned and cut into quarters
4 c. medium-dry red wine
2½ c. chopped onions
2 cloves minced garlic
1 lemon (grated peel, juice and pulp)
2 (8-oz.) cans tomato sauce
1½ c. molasses
1¼ c. brown sugar, firmly packed
2 Tbsp. Worcestershire sauce
2 Tbsp. mustard
½ c. apple cider vinegar
2 tsp. salt
1 tsp. black pepper
1 tsp. ground red pepper
1 tsp. ginger

In a large kettle, combine plums, wine, onions, garlic and lemon peel, juice and pulp. Cook over medium-high heat until mixture begins to thicken, stirring frequently. Cool slightly. Puree mixture in a food processor or blender, or force through a food mill. Return pureed mixture to kettle and add remaining ingredients. Bring to a boil. Simmer about one to 1½ hours or until thickened, stirring frequently. Meanwhile thoroughly wash and scald eight half-pint jars. Keep hot until needed. Prepare lids as manufacturer directs. Remove sauce from heat and ladle into hot jars, leaving ¼ inch head space. Remove air bubbles by running a sanitized table knife inside edge of jar. Wipe jar rims; seal with hot lids and screw bands. Process jars for 20 minutes in a boiling water-bath canner.

Note: This slightly sweet sauce is recommended for use on ribs, chicken or bratwurst.

Makes six to eight jars.

Recipe from: "Blue Ribbon Winners: America's Best State Fair Recipes" by Catherine Hanley
Submitted by: Barbara Keyes, Fargo, N.D.

Rose Hip and Apple Jelly

- 1 c. rose hip juice (about 1 quart hips)
- 1½ c. apple juice (about 3 to 4 ripe medium-tart apples)
- 3 c. sugar
- ½ package powdered pectin (about 0.9 ounce)
- ⅛ to ¼ tsp. mace (optional)
- 5 drops red food coloring (optional)
- 1 drop yellow food coloring (optional)

Measure sugar and set aside. Mix mace and pectin into the juice. Bring to a hard boil, stirring constantly; add coloring and sugar. Boil hard one minute. Remove from the heat, skim foam and pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Rose Hip Jam

Prepare hips by cutting off the stem and the blossom ends. Cut in half and remove seeds and any insect spots. Or slit the hips down one side and knock out the seeds, or use a pin to push out the seeds before cooking the hips for jelly. Rose hips have little or no pectin; therefore, a gel is difficult to achieve without added pectin.

- 1 c. prepared rose hips
- ¾ c. water
- Juice of 1 lemon

Put the above ingredients in a blender and blend until perfectly smooth. Gradually add 3 cups of sugar and blend together about five minutes more so all the sugar is dissolved completely. Stir one package of powdered pectin in ¾ cup of water and bring the mixture to a boil. Boil hard for one minute. Pour the mixture into a blender and blend for one minute more. Pour the mixture into small screw-cap jars immediately and seal. This jam may be kept in your refrigerator one month or otherwise stored in the freezer.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Sand Cherry Jam

Cook the fruit with just enough water to cover until soft. Press through a sieve. Measure. Add an equal quantity of sugar and cook gently until thickened. Follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Sand Cherry Jelly

To extract juice, use 1 pound of fruit and 1 cup of water. Heat and strain in a damp jelly bag.

2 c. cherry juice

1 c. tart apple juice

$\frac{3}{4}$ c. sugar for each cup of juice

Follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



Silver Buffaloberry or Bull Berry Jelly

Wash and stem the berries. Use 3 cups of water for 1 pound of fruit. Boil eight to 10 minutes; mash fruit. Strain the fruit through a damp jelly bag. Note: The juice has a disagreeable aroma. Pectin is high. Use $\frac{3}{4}$ cup of sugar for 1 cup of juice and follow general jelly directions. One tablespoon of lemon juice per cup of juice may be added.

Or use:

$\frac{1}{2}$ c. berry juice

$\frac{1}{2}$ c. crabapple juice

$\frac{3}{4}$ c. sugar

Follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Note: The jelly becomes firmer and color fades on storage.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Silver Buffaloberry and Crabapple Jelly

2 c. buffaloberry juice (rich in pectin)

2 c. crabapple juice (rich in pectin)

3 c. sugar

Follow general directions. Pour into hot, sterilized jars and seal with two-piece, self-sealing lids. Process according to the directions in Table 1.

Makes about eight 7-ounce jars.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Simple Grape-Chokecherry Jelly

- 2 c. grape juice
- 2 c. chokecherry juice
- 5 c. white sugar
- 1 pkg. (1.75-oz.) Sure-Jell

Add juices and Sure-Jell to a medium saucepan and bring to a boil. Add sugar and bring to a rapid boil, stirring constantly. The jelly is ready when it is thick enough to stick to, and fill in, the tines of a fork stuck into the saucepan. Pour into hot, sanitized canning jars and seal with lids and rings. Refrigerate.

Submitted by Garrett Masloski, Pembina, N.D.



Wiping jar rims after filling.

(Photo courtesy National Center for Home Food Preservation)

Universal Jam Recipe

3 lbs. ripe fruit (seaberries, crabapples, chokecherries, Juneberries, plums, etc.)

2½ c. sugar

1 lemon

Clean and cut the fruit as you would for making fruit salad or fruit pie. For example: Remove the caps, any pits and peels, and slice or cut into quarters or chunks. Using a potato masher or your own clean hand, crush the fruit until soupy. Measure this puree, and note the quantity. You'll probably have about 5 cups, but expect some variation depending on the fruit. Put the puree in a wide, heavy-bottomed, nonreactive pot. The puree should be no more than 1 inch deep in the bottom of the pot. For every 2 cups of fruit puree, add to the pot 1 scant cup of sugar and 1 tablespoon freshly squeezed lemon juice. Stir to combine, and taste. Bring the fruit-sugar mixture to a boil over high heat, stirring frequently. After it boils, continue to cook over medium-high heat, stirring constantly, for 12 to 14 minutes, or until thickened. Check the consistency by turning off the heat and putting a spoonful of hot jam on a chilled saucer in the freezer for one minute. When ready, the cold jam will form a light skin that wrinkles when you push your finger through it, and it will cling to the saucer when you tilt the saucer upright. If the cold jam is too runny, bring the pot back to a boil for another minute or two, stirring constantly, then check the set again. When the jam is thickened to your liking, ladle it into clean half-pint jars or other air-tight containers. Allow to cool, then store in the refrigerator for up to a month.

Note: Add more sugar if using very tart fruit or more lemon if using very sweet fruits.

Yields about 2½ pints.

Recipe from: Kevin West, Mother Earth News

Submitted by: Lila Hlebichuk, Fargo, N.D.

Wild Plum Jam

Red wild plums

½ package powdered pectin (about 0.9 oz.)

4 c. sugar

Select firm, ripe plums. Wash and put the plums in a pan; cover with water. Boil until the skins are loose and the flesh is soft. Put the fruit through a fruit press for jam or strain it through a jelly bag for jelly. Measure 3 cups of juice. Add pectin. Cook the juice over high heat, stirring to a boil that cannot be stirred down. Immediately add sugar; let the mixture come to a full, rolling boil. Boil one minute. Skim and pour into sterilized jars and seal with two-piece, self-sealing lids. Process according to Table 1.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



Long boil jam. (Photo courtesy National Center for Home Food Preservation)

Breads and Side Dishes



Acorn Muffins

- 1 c. acorn flour*
- 1 c. cornmeal
- 1 c. all-purpose flour
- 3 tsp. baking powder
- 1 tsp. onion or garlic salt
- 1 egg, slightly beaten
- 1½ c. milk
- 2 Tbsp. bacon drippings, melted

Sift together the acorn flour, cornmeal, all-purpose flour, baking powder and onion or garlic salt. Beat the egg and milk together; stir in bacon drippings. Add the liquid ingredients to the dry ingredients and stir just until moistened; don't overmix. Pour into well-greased muffin tins and bake at 425 F for 15 minutes, or until brown and crusty. Makes about 18 muffins.

*To make acorn flour: Crack acorns out of their shells and boil them for two to four hours, changing the water for fresh boiling water if the water becomes dark. This boiling removes most of the bitter-tasting tannins from the acorns. Taste the acorns periodically to see if bitterness is gone. Some species of oak, such as bur oak, have much lower tannin levels and do not need to be boiled as long. Drain the acorns and spread them out on a shallow pan or cookie sheet. Roast them for about an hour at 300 F. The acorns can be eaten like other nuts or can be ground into a fine powder using a food processor. This powder is the acorn flour. The flour can be stored in airtight containers or frozen for extended shelf-life.

Nutrition information calculated without acorn flour.

Makes 18 servings. Each serving has 140 calories, 6 g fat, 3 g protein, 19 g carbohydrate, 0 g fiber and 90 mg sodium.

Recipe from: "Wild Foods Cookbook & Field Guide" by Billy Joe Tatum, 1976.
Submitted by: Derek Lowstuter, Bismarck, N.D.

Applesauce 1

7 apples, quartered
½ c. water
¼ c. sugar

Wash and then cut apples in quarters. Apples can be peeled, but fiber will be decreased. Combine apples and water in saucepan. Heat mixture to boiling. Turn heat to low as soon as the water is boiling. Simmer over low heat for 15 to 20 minutes or until apples are tender. Stir occasionally to prevent sticking. Stir in sugar and heat until sugar is dissolved. Serving suggestion: Add 1 tablespoon cinnamon and stir before serving. You can adjust the amount to your taste preference.

Note: Additional sugar can be added to increase sweetness. Brown sugar can be used instead of white.

Makes 10 servings. Each serving has 80 calories, 0 g fat, 0 g protein, 21 g carbohydrate, 3 g fiber and 0 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Applesauce 2

12 apples, peeled, cored and sliced
2 c. water
3 cinnamon sticks
1 c. sugar

In large pot, add all ingredients. Cook over medium heat for one hour. Remove cinnamon sticks and mash the cooked apples well with a potato masher. Cool completely. Store in the refrigerator for up to one week.

Makes 18 servings. Each serving has 100 calories, 0 g fat, 0 g protein, 25 g carbohydrate, 2 g fiber and 0 mg sodium.

Submitted by: Tara Heyer, Jamestown, N.D.

Apple Cinnamon Microwave Oatmeal

- 2 c. rolled oats*
- 4 c. low-fat milk
- 1/8 tsp. salt
- 2 unpeeled apples, chopped
- 1 tsp. vanilla
- 1 tsp. ground cinnamon

*Old-fashioned oats will provide a chewier texture, while quick oats will result in a smoother texture.

Mix together all ingredients in a large microwave-safe bowl. Microwave on high for five to six minutes, stirring every two minutes, until oats are soft and most of the liquid has been absorbed. Spoon into bowls and serve while hot. Top with brown sugar if desired.

Makes five servings. Each serving has 240 calories, 4.5 g fat, 11 g protein, 42 g carbohydrate, 5 g fiber and 140 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Apple Pancakes

- 1 medium apple
- 1 1/4 c. pancake mix (use the type that only requires adding water)
- 1/2 tsp. cinnamon
- 1 egg
- 2 tsp. oil
- 1 c. low-fat milk

Lightly coat a griddle or skillet with cooking spray and heat over medium high. Peel, core and thinly slice apple into rings. In a large mixing bowl, combine ingredients for pancake batter. Stir until ingredients are evenly moist. For each pancake, place apple ring on griddle and pour about 1/4 cup batter over apple ring, starting in the center and covering the apple. Cook until bubbles appear. Turn and cook other side until lightly brown.

Makes six servings. Each serving has 150 calories, 4 g fat, 5 g protein, 24 g carbohydrate, 1 g fiber and 230 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



Apple Sandwiches

- 1 medium apple
- 3 Tbsp. nut butter
- 3 Tbsp. granola

Slice the apple into half-inch rounds. Using a knife, spoon or melon baller, remove the apple's core. Spread $\frac{1}{2}$ tablespoon of nut butter onto each apple round. Top with granola and enjoy.

Makes three servings. Each serving has 150 calories, 8 g fat, 5 g protein, 16 g carbohydrate, 3 g fiber and 75 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Apple Slaw

- ¼ c. mayonnaise
- ½ tsp. lemon juice
- 1 Tbsp. sugar
- ¾ c. whipping cream
- 1 c. unpared red apples, diced
- 1 c. unpared Golden Delicious apples, diced
- 1 c. celery, chopped
- ½ c. coconut
- ½ c. walnuts, chopped
- 1 large banana, sliced

Note: You may use 2 c. of your favorite apples. To prevent browning, prepare apples right before combining with mayonnaise and other ingredients.

Blend together dressing ingredients except whipping cream. Whip cream until soft peaks form. Fold into mayonnaise mixture. Wash and cut up apples and celery. Gently combine apples, celery, walnuts and coconut in bowl with dressing. If salad will not be eaten right away, wait to add banana.

Makes 10 servings. Each serving has 190 calories, 17 g fat, 2 g protein, 10 g carbohydrate, 2 g fiber and 50 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



(NDSU Extension)



Apple Smiles

1 Tbsp. smooth peanut butter, SunButter or other nut butter
1 medium apple, cored and sliced into eighths
1 lemon, squeezed (or bottled lemon juice*)
20 miniature marshmallows

Rinse apple and cut as directed. *If you will not be serving the Apple Smiles immediately, dip the apple slices in lemon juice. Spread peanut butter or nut butter on one side of each apple slice. Place four to eight miniature marshmallows on apple slice (for the “teeth”), then top with another apple slice, peanut butter side down. Secure with toothpick.

Makes four servings. Each serving has 60 calories, 2 g fat, 1 g protein, 11 g carbohydrate, 2 g fiber and 20 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Apple Spice Hummus

- 2 (15-oz.) cans chickpeas, rinsed and drained
- 2 medium apples, peeled and chopped
- 1/3 c. freshly squeezed lemon juice
- 1/2 c. creamy peanut butter
- 2 to 3 Tbsp. water
- 1/2 tsp. salt
- 1 tsp. cinnamon
- 1/4 tsp. nutmeg
- 1/2 tsp. all spice
- 1/4 tsp. cayenne pepper, optional

In a food processor bowl or blender container, place the following ingredients: chickpeas, chopped apple, lemon juice, peanut butter, water, salt and spices. Cover and process or blend until smooth; transfer to bowl. Cover and refrigerate up to three days. Serve dip with apple slices, carrot slices and/or whole-wheat crackers.

Makes 28 servings (2 tablespoons each). Each serving has 80 calories, 3 g fat, 3 g protein, 10 g carbohydrate, 1 g fiber and 140 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



(Photo by John Borge)

Aronia Berry Bread

2 c. flour	1/8 c. shortening
1 1/2 tsp. baking powder	3/4 c. orange juice
1 tsp. salt	1 c. sugar
1/2 tsp. baking soda	1 c. aronia berries
1 egg	1 c. nuts

Sift together flour, baking powder, salt and baking soda. In blender, combine egg, shortening, orange juice and sugar. Add aronia berries and nuts and process briefly. Empty into flour mixture. Mix by hand until moistened. Bake in a greased 9- by 5-inch pan at 350 F for 50 to 60 minutes.

Makes 16 servings. Each serving has 170 calories, 7 g fat, 3 g protein, 27 g carbohydrate, 1 g fiber and 240 mg sodium.

Submitted by: Claudette Carlson, Minnewaukan, N.D.

Black Walnut Wild Rice

1 c. uncooked wild rice
4 Tbsp. butter
1 c. black walnuts
1/2 c. chopped green onion
1 c. sliced mushrooms
1/2 c. chopped green pepper
1 tsp. garlic salt

Cook wild rice according to directions. Melt butter in skillet. Sauté black walnuts, green onions, mushrooms and green peppers for about three minutes or until the vegetables soften slightly. Add wild rice and garlic salt and continue cooking, stirring several times, until rice is heated through.

Makes six servings. Each serving has 300 calories, 20 g fat, 9 g protein, 23 g carbohydrate, 3 g fiber and 270 mg sodium.

Recipe from: Hammons Co. (<https://black-walnuts.com/>)

Submitted by: Gerry Ann Dockter, Bismarck, N.D.



Chocolate Berry Smoothie

- 1¼ c. fat-free chocolate milk
- 1 c. frozen mixed berries
- 1 container (5.3-oz.) fat-free berry Greek yogurt

Combine chocolate milk, frozen berries and yogurt in a blender. Blend until creamy and serve immediately.

Makes two servings. Each serving has 200 calories, 0 g fat, 12 g protein, 37 g carbohydrate, 3 g fiber and 150 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Feta Hazelnut Cheese Spread

8 oz. tomato basil feta cheese, crumbled
4 oz. cream cheese, softened
2 tsp. extra virgin olive oil
¼ c. chopped hazelnuts
¼ c. shredded Colby Jack cheese
⅛ tsp. minced garlic

Combine feta and cream cheese until blended. Add remaining ingredients. Stir until well mixed. Serve on crackers or celery. Makes approximately 2 cups.

Makes 16 servings. Each serving has 80 calories, 8 g fat, 4 g protein, 2 g carbohydrate, 0 g fiber and 200 mg sodium.

Recipe from: "The Sacagawea Cookbook" by Terri Evenson, Lauren Lesmeister and Jeff Evenson

Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Fruit Leather

2 c. applesauce
Cinnamon

To dry applesauce, use a food dehydrator as directed or a home oven. To dry fruit leather in an oven, line cookie sheet with plastic wrap, being careful to smooth out all wrinkles. Do not use waxed paper or aluminum foil. Spread applesauce on top of wrap and sprinkle with cinnamon. Bake at 140 degrees for six or more hours. Test for dryness by touching center of leather. No indentations should be apparent. While warm, peel from plastic and roll, allow it to cool and then rewrap the roll in plastic. Fruit leather can be cut into strips if desired. Properly dried fruit leather will keep at room temperature for about one month or it can be frozen in tightly wrapped rolls and kept up to a year.

Makes eight servings. Each serving has 25 calories, 0 g fat, 0 g protein, 7 g carbohydrate, 1 g fiber and 0 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Norwegian Rhubarb-Apple Stew

2 lbs. rhubarb stalks (petioles)
1 lb. large crabapples
1 Tbsp. lemon juice
1/3 c. white sugar
2 c. water
1/3 c. local honey
Fresh whipped cream

Thoroughly wash the rhubarb stalks and apples. Mix lemon juice, sugar and water in a large saucepan. Cut the rhubarb into half-inch cubes and add to saucepan. Slice the crabapples into fourths, remove the seeds and place in the saucepan.

Bring the uncovered saucepan contents to a boil, stirring frequently with a wooden spoon. Then turn the heat to low and let simmer for 10 minutes. Pour the contents into a blender or food processor and mix until few chunks are left. Return the contents to the saucepan and simmer over medium heat. Add the honey and stir contents frequently until they reduce to a jamlike thickness. Allow to cool and serve with a generous dollop of freshly whipped cream.

Makes eight servings. Each serving has 140 calories, 0 g fat, 1 g protein, 36 g carbohydrate and 5 mg sodium.

Submitted by Derek Lowstuter, Bismarck, N.D.



Oatmeal and Apple Muffins

- 1 c. quick-cooking oatmeal
- 1 c. buttermilk
- 1 egg, beaten
- ½ c. brown sugar
- ¼ c. canola oil
- 1 c. all-purpose flour
- 1 tsp. baking powder
- ½ tsp. baking soda
- ½ tsp. salt
- 1 tsp. cinnamon
- ½ c. apple, diced, not peeled (about 1 small apple)
- Optional topping (1 Tbsp. sugar and ¼ tsp. cinnamon)

Preheat oven to 400 F. Mix oatmeal and buttermilk in a large bowl and allow to stand for 15 minutes. Add beaten egg, brown sugar and oil to the oatmeal mixture. In a separate bowl, mix flour, baking powder, soda, salt and cinnamon. Add the dry ingredients to the wet ingredients and mix just until combined (overmixing may result in lower-quality muffins with peaked tops and tunnels). Finally, gently stir in the apple. Spray muffin tins with nonstick spray (or use oil to grease them). Fill the muffin cups about two-thirds full of batter. Sprinkle the tops with cinnamon-sugar mixture. Bake for 15 to 18 minutes, until lightly browned and a toothpick comes out clean.

Makes 12 servings. Each serving has 160 calories, 6 g fat, 4 g protein, 24 g carbohydrate, 1 g fiber and 230 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Pear Salad With Honey-Lime Yogurt Dressing

8 c. fresh spinach, rinsed
1½ c. grapes, halved
1 c. cucumber, sliced
1 large pear, sliced
2 Tbsp. green onion, chopped
½ c. walnuts, chopped

Honey Lime Yogurt Dressing

½ c. nonfat plain yogurt
2 Tbsp. honey
1 Tbsp. lime juice
⅛ tsp. salt
⅛ tsp. ground mustard
Pepper to taste

Toss all salad ingredients in a large bowl. In separate bowl, mix dressing ingredients. Pour dressing over mixture and toss again.

Makes eight servings. Each serving has 110 calories, 5 g fat, 15 g carbohydrate, 3 g protein and 70 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



(NDSU Extension)

Pear Yogurt Crunch

- 1 small pear, chopped and divided
- 1 tsp. honey
- ½ tsp. cinnamon or nutmeg (optional)
- ¾ c. fat-free plain yogurt
- ⅓ c. bran flake cereal
- ½ Tbsp. walnuts, chopped

Stir half of pear and all honey, cinnamon or nutmeg, if desired, into yogurt. Top with cereal, walnuts and remaining half pear.

Makes one serving. Each serving has 250 calories, 3 g fat, 11 g protein, 52 g carbohydrate, 7 g fiber and 240 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



(NDSU Extension)

Beverages



iStock.com



(Photo courtesy of U.S. Department of Agriculture Forest Service)

Elderberry Flower Milk Rob

1 qt. milk

8 clusters of elderberry flowers, snipped from stems, washed and drained

½ lemon, seeded and pulverized in a blender (peel and all)

3 Tbsp. honey

4 Tbsp. Cognac or other brandy

Grated nutmeg to taste

Heat milk to just below a boil; do not boil. Pour milk over elderberry flowers. Add lemon, honey and Cognac. Allow to cool, but do not chill. Serve in glass punch cups and sprinkle each serving with nutmeg.

Note: Nutrition information on elderberry flowers is not available.

Recipe from: "Wild Foods Cookbook & Field Guide" by Billy Joe Tatum, 1976.
Submitted by: Derek Lowstuter, Bismarck, N.D.



Norwegian Gløgg

- 1 c. light brown sugar or white sugar
- 1½ c. water
- 6½ c. black currant juice
- Peel from one orange, avoiding the bitter white pith
- 2 cinnamon sticks snapped in half
- 6 whole cloves
- 6 whole cardamom seeds, crushed
- 1 small piece fresh ginger, peeled and cut in half
- ¾ c. dark raisins soaked in currant juice
- ½ c. blanched almonds

Soak the raisins for 30 minutes before serving. Cover and store at room temperature until ready to use. In a large stock pot over medium-high heat, combine the sugar and water. Stir until the sugar is completely dissolved. Add the remaining ingredients, reduce heat to medium and bring mixture to a gentle boil. Remove from heat, cover and let steep for at least an hour or even overnight for better results. Strain and reheat before serving. Serve hot with a garnish of a sprinkling of soaked raisins and blanched almonds.

Recipe from: Frode Tilden (Sons of Norway, Fargo, N.D.)
Submitted by: Lila Hlebichuk, Fargo, N.D.

Norwegian Gløgg is a mulled wine traditionally made with red wine, orange peel, and spices such as cardamom, cinnamon, whole cloves and ginger. In our nonalcoholic version, we substitute black currant berry concentrate juice for the alcohol. Mulled wine is not unique to Norway. Variations can be found throughout Scandinavian and northern European cultures. Play with the recipe to achieve your desired flavor.

Rose Hip Tea

4 c. rose hips
3 c. water
Honey to taste
Cream or sweetened condensed milk to taste

Grind rose hips into a course pulp in food processor, food mill or herb/coffee grinder. Boil the pulp in the water for roughly 30 minutes. Strain the liquid to remove the pulp. Add honey and cream or sweetened condensed milk, to taste.

Makes four servings.

Note: Nutrition information on rose hips is not available.

Submitted by: Derek Lowstuter, Bismarck, N.D.

Sumac Punch

2 qt. water
1 c. ripe sumac berries
1 Tbsp. whole cloves
4 (1-inch) sticks of cinnamon, broken up
1½ to 2 c. sugar to taste

Bring water to a boil; add sumac berries, cloves and cinnamon. Return to a boil, cover, reduce heat and simmer for 15 minutes. Strain liquid through a strainer lined with damp muslin or cheesecloth. Add sugar to taste and chill.

Makes eight servings. Each serving has 210 calories, 0 g fat, 0 g protein, 53 g carbohydrate, 1 g fiber and 10 mg sodium.

Recipe from: "Wild Foods Cookbook & Field Guide" by Billy Joe Tatum, 1976.
Submitted by: Derek Lowstuter, Bismarck, N.D.

Main Dishes



Apple Bean Bake

1 (28-oz.) can pork and beans
2 apples, cubed
2 Tbsp. brown sugar
¼ tsp. cinnamon

To reduce fat, remove “pork” from beans and discard. Combine all ingredients in casserole dish. Cover. Microwave on high for four minutes. Stir. Microwave on high four minutes longer or until apples are cooked and rise to the surface. Serve hot. Refrigerate leftovers.

Makes eight servings. Each serving has 140 calories, 1.5 g fat, 5 g protein, 29 g carbohydrate, 1 g fiber and 410 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Buffaloberry Spicy Sauce

Grated rind of 1 orange
1 c. water
2 c. sugar
4 c. rinsed buffaloberries
¼ tsp. ground cinnamon
Pinch of ground cloves

Combine the grated rind, water and sugar in a saucepan. Mix and cook over medium heat for 10 minutes. Add buffaloberries and cook until the berries pop. Add the cinnamon and clove, and cook for five minutes, stirring frequently. Spoon the mixture into a bowl and chill in a refrigerator. Serve as a sauce with meat, such as grilled pork loin.

Recipe from: “Fruits of Your Labor Cookbook” - Colorado State Forest Service
Submitted by: Derek Lowstuter, Bismarck, N.D.

Cherry Wild Rice Side Dish

- 1 (16-oz.) can dark sweet cherries, pitted (or cooked fresh sweet cherries)
- 3 Tbsp. lemon juice
- 3 Tbsp. cider vinegar
- 2 Tbsp. reserved cherry juice
- 2 Tbsp. olive oil
- 1 tsp. grated lemon peel
- ½ tsp. salt
- ½ tsp. sugar
- ½ tsp. ground ginger
- ⅛ tsp. bottled hot pepper sauce
- 1 (4-oz.) pkg. brown and wild rice mix
- ½ c. each cucumber (peeled, seeded, diced), diced red pepper and chopped water chestnuts
- ¼ c. each chopped celery, chopped parsley and slivered almonds, toasted
- 1 Tbsp. minced green onion

Drain cherries, reserving liquid for dressing. Place on paper towels to remove excess liquid and refrigerate until serving time. To make cherry-lemon dressing, combine lemon juice, cider vinegar, cherry juice, olive oil, lemon peel, salt, sugar, ginger and hot pepper sauce. Prepare rice mix according to package directions in a 1½-quart saucepan. Add ¼ cup cherry-lemon dressing to cooked rice, mix and cool. Toss cooled rice mixture with remaining ingredients, including cherries. Adjust seasoning and consistency with remaining dressing and allow to stand at room temperature for 15 to 20 minutes before serving. Makes a nice accompaniment to roast pork ham or poultry.

Makes six servings. Each serving has 230 calories, 8 g fat, 4 g protein, 37 g carbohydrate, 3 g fiber and 210 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Hearty Breakfast Porridge

- 3 c. water
- 1 c. Scottish oatmeal
- 1 c. currants or Juneberries (can substitute other shelterbelt fruit or berries)
- 16 shelled walnut halves or to taste

Bring water to a boil and slowly add Scottish oatmeal. Reduce heat to medium-low and stir occasionally. Simmer for eight minutes, then add currants or Juneberries and turn off heat. Cover and leave for two minutes. Remove from heat and wait two more minutes. Spoon the oatmeal into individual serving bowls and top with walnuts. Optional: Add milk or cream and a little salt. Serve with a cup of Earl Grey or Chamomile tea.

In the Scottish tradition, sprinkle the oats on top of the boiling water and then stir with a wooden spurtle (spurtle) or wooden spoon, clockwise and with your right hand. Porridge traditionally is served in wooden bowls and eaten standing up. Each spoonful should be dipped in a bowl of cream that is shared by everyone at the table.

Makes four servings. Each serving has 210 calories, 8 g fat, 8 g protein, 28 g carbohydrate, 3 g fiber and 5 mg sodium.

Recipe from: www.scottish-at-heart.com/porridge-recipe.html
Submitted by: Lila Hlebichuk, Fargo, N.D.

Rosemary Apple Pecan Chicken Salad

Salad

- 1 lb. boneless, skinless chicken breast, cooked, cooled and diced into small cubes
- 1¼ c. apples, chopped
- ⅓ c. chopped pecans
- ⅓ c. dried cranberries, roughly chopped
- Lettuce or whole-grain bread for serving

Dressing

- 1 (5.3-oz.) container fat-free plain Greek yogurt
- 2 Tbsp. mayonnaise
- 1 Tbsp. red wine vinegar
- 2½ tsp. fresh rosemary, finely chopped
- 1 tsp. Dijon mustard
- ½ tsp. honey
- ½ tsp. onion powder
- Salt and fresh ground black pepper to taste

Combine chicken, apples, pecans and cranberries in a large mixing bowl. In a separate small mixing bowl, stir together dressing ingredients. Season with salt and pepper to taste. Pour dressing over chicken mixture and toss to coat evenly. Serve on lettuce leaves or whole-grain bread.

Makes four servings. Each serving has 310 calories, 15 g fat, 28 g protein, 18 g carbohydrate, 2 g fiber and 125 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



(NDSU Extension)

Slow Cooker Pork Roast With Haskaps

3 lb. pork shoulder roast
½ c. unsweetened cranberry juice
½ c. maple syrup
½ tsp. dried sage
Salt and pepper to taste
2 c. fresh or frozen haskap berries
1 c. fresh garlic scapes, chopped
6 strips of bacon

Place pork roast in a slow cooker. Pour in the cranberry juice and maple syrup. Add fresh or dried sage and salt and pepper to taste. Sprinkle haskap berries and garlic scapes over pork roast. Top with bacon strips. Cover and cook on low for eight hours.

Makes 12 servings. Each serving has 230 calories, 8 g fat, 25 g protein, 10 g carbohydrate, 0 g fiber and 130 mg sodium.

Recipe from: Ontario Haskap Association
Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Walleye With Buffaloberries and Red Wine

1 large or two small walleye fillets (1-2 lb.)

Salt and pepper to taste

Extra-virgin olive oil

1 c. vegetable broth

½ c. buffaloberries

2 Tbsp. red wine

1 Tbsp. lemon juice

Preheat oven to 400 F. Rinse walleye under running water, then place in sprayed or oiled baking dish. Drizzle walleye with olive oil. Sprinkle with salt and pepper to taste. Bring the vegetable broth to a boil. Remove from heat. Add buffaloberries, red wine and lemon juice. Pour over walleye. Bake until filets are opaque and flake easily with a fork.

Makes approximately three to four 4-ounce servings per 1 pound of fish.

Adapted from: recipe in "Lingonberries: An aromatic, tart fruit" - Washington State University Cooperative Extension

Submitted by: Derek Lowstuter, Bismarck, N.D.

Desserts



Apple Chunk Cake

- 1 ¼ c. sugar
- ¼ c. vegetable oil
- 2 eggs
- 2 c. flour
- 1 tsp. salt
- 1 tsp. cinnamon
- 1 tsp. baking soda
- 4 c. apple, diced
- ¼ c. applesauce (unsweetened)
- Sliced apples (optional garnish)

Preheat oven to 350 F. In a large bowl, mix sugar, oil and eggs together. Beat well. In a separate bowl, combine flour, salt, cinnamon and baking soda. Add to egg batter and mix well. Add apple chunks and applesauce to the batter. Stir to combine. Coat a baking pan with vegetable oil spray and pour in batter. Bake for one hour or until done.

Makes nine servings. Each serving has 270 calories, 8 g fat, 4 g protein, 50 g carbohydrate, 2 g fiber and 420 mg sodium.

Recipe from: U.S. Department of Agriculture
Submitted by: Gerry Ann Dockter, Bismarck, N.D.



(NDSU Extension)



Apple Cranberry Crisp

- ½ c. all-purpose flour
- ½ c. old-fashioned oatmeal
- ½ c. granulated sugar
- ½ c. brown sugar
- ½ tsp. cinnamon
- ½ tsp. nutmeg
- ½ stick (¼ c.) chilled butter or margarine cut into small pieces
- 7 c. peeled diced apples (about 3 pounds)
- 3 Tbsp. apple juice or cider
- ½ c. dried cranberries

Preheat oven to 375 F. Lightly coat 8-inch baking dish with cooking spray or oil and set aside. In a bowl, combine flour, oatmeal, brown sugar, granulated sugar, cinnamon and nutmeg until well blended. Cut in chilled butter using a pastry blender or clean fingers until the mixture is crumbly. In another bowl, combine apples, apples juice and cranberries. Spoon the apple mixture into prepared pan. Sprinkle with crumb mixture. Cover with foil and bake for 30 minutes. Uncover and bake an additional 20 minutes or until golden brown. Serve warm topped with vanilla ice cream or whipped cream.

Makes nine servings. Each serving has 260 calories, 6 g fat, 2 g protein, 53 g carbohydrate, 3 g fiber and 40 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Apple Pie Filling

- 6 qt. fresh tart apples
- 1 tsp. ascorbic acid in 1 gallon water
- 5½ c. sugar
- 1½ c. Clearjel*
- 1 Tbsp. cinnamon
- 1 tsp. nutmeg
- 5 c. apple juice
- 2½ c. cold water
- ¾ c. bottled lemon juice (or juice of 6 medium lemons)

Wash, peel and core apples. Cut slices ½ inch thick. Bring to a boil 1 gallon of water containing the ascorbic acid to prevent browning. Place 6 cups of fruit at a time in the boiling water. Cook each batch one minute after the water returns to a boil. Drain, but keep fruit heated in a covered bowl or pot.

Combine the sugar, Clearjel, cinnamon and nutmeg in a large kettle; stir in the apple juice and water. Stir and cook over medium heat until the mixture thickens and begins to bubble. Add the lemon juice and boil for one minute, stirring constantly. Fold in the drained apple slices and fill the jars immediately, leaving 1 inch of head space. Cap and seal jars. Process in a boiling water-bath canner for 25 minutes or a pressure cooker at 5 pounds for 13 minutes.

*Clearjel is available online and in the canning section of some grocery stores. Do not substitute flour or cornstarch.

Yield: 7 quarts

Recipe from: "The Big Book of Preserving the Harvest" by Carol W. Costenbader
Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Berry Good Cheesecake

Crust

- 1 pkg. graham crackers crushed (or use 1 cup of crushed crisp cookies)
- ¼ c. sugar
- 1 tsp. cinnamon (optional)
- ½ c. melted butter

Mix and pat into 9-inch springform pan, a deep pie plate or square 9- by 9-inch pan.

Filling

- 2 eggs, slightly beaten
- 1 (8-oz.) cream cheese block at room temperature
- 1½ c. sour cream
- ½ c. sugar
- 1 tsp. vanilla or 1 Tbsp. lemon juice

Beat until smooth with mixer and pour over the crust. Bake at 350 for 55 minutes.

Berry Topping

- 2 c. clean fresh or frozen berries (Juneberry, raspberry – those without pits)
- ½ c. sugar
- 4 tsp. corn starch
- 1 Tbsp. lemon juice
- 1 Tbsp. water

Cook until thick in a heavy kettle, stir often. Cool. Pour over baked pie. Keep in fridge.

Makes eight servings. Each serving has 620 calories, 35 g fat, 9 g protein, 70 g carbohydrate, 0 g fiber and 600 mg sodium.

Recipe from: Dorothy Granger of Nesbitt, Manitoba, Canada
Submitted by: Glenda Fauske, Bottineau, N.D.

Black Walnut Refrigerator Cookies

- 1 c. brown sugar
- 1 c. sugar
- 1½ c. shortening
- 3 eggs
- 1 tsp. vanilla
- 5 c. flour
- ½ tsp. salt
- 1 tsp. baking soda
- 2 tsp. cinnamon
- 2 c. finely chopped black walnuts

Cream sugars and shortening. Add eggs and vanilla. Mix well. Sift together dry ingredients and stir into the creamed mixture until well blended. Fold in black walnuts. Form dough into 2-inch diameter logs, wrap tightly in plastic wrap and refrigerate overnight. Cut into ¼-inch slices. Bake at 350 F for seven to eight minutes.

Makes 64 servings. Each serving has 130 calories, 7 g fat, 2 g protein, 14 g carbohydrate, 0 g fiber and 40 mg sodium.

Submitted by: Gerry Ann Dockter, Bismarck, N.D.





Butterscotch Plum Oat Bars

- 4 c. old-fashioned oats
- 1 c. (about 6 oz.) chopped dried plums
- 1 c. chopped walnuts
- 2 tsp. cinnamon
- ½ c. packed brown sugar
- ¾ c. butter

Preheat oven to 350 F. Generously spray 15- by 10-inch baking pan with cooking spray; set aside. In large bowl, combine oats, dried plums, walnuts and cinnamon; set aside. In medium saucepan, combine brown sugar and butter. Heat mixture to melt butter and dissolve sugar, stirring to blend well. Pour mixture over oat mixture, stirring to coat all ingredients. Press firmly into baking pan. Bake 20 to 25 minutes or until golden around edges. Cut bars into 24 pieces with sharp knife while still hot. Cool completely in pan, then remove with spatula. Wrap bars individually in plastic wrap.

Makes 24 servings. Each serving has 120 calories, 9 g fat, 1 g protein, 10 g carbohydrate, 1 g fiber and 45 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Cream Cheese-Sea Buckthorn (Seaberry) Snow Cookies

- ½ c. butter
- 4 oz. cream cheese
- 1 c. cane sugar
- 4 Tbsp. sea buckthorn juice
- 2 c. unbleached white flour
- 1 tsp. baking powder
- ½ tsp. salt
- ½ c. powdered sugar

Cream together the butter and cream cheese. Add the sugar and cream until smooth. Blend in the sea buckthorn juice until it is fully incorporated. In a separate bowl, combine the flour, baking powder and salt. Add the dry ingredients into the wet and blend until just combined; be careful not to overmix. Place by 1-inch round balls onto a greased cookie sheet. Flatten the dough and scrape the top with a fork to make etchings on the top of the cookie. Bake at 375 F for 10 minutes. Allow to cool a few minutes. Pour powdered sugar in a small bowl. Take a cookie and place it top down into the powdered sugar. Make sure the sugar covers the top of the cookie with a light layer. Repeat this step with the rest of the cookies. If you have a sifter, you can simply sift the powdered sugar onto the cookies. Add a couple extra tablespoons of juice to the leftover powdered sugar to make a glaze that will add tons of delicious sea buckthorn flavor.

Makes about 20 cookies. Nutritional information not available for all ingredients.

Recipe from: <http://nami-nami.blogspot.com/>
Submitted by: Derek Lowstuter, Bismarck, N.D.

Dakota Juneberry Pie

Pastry for a single-crust pie

½ + ⅓ c. sugar, divided

¾ c. all-purpose flour, divided

2 c. fresh Juneberries

2 c. halved fresh strawberries

1 c. fresh or frozen raspberries

2 tsp. finely shredded lemon peel

3 Tbsp. butter

⅓ c. sliced almonds, coarsely chopped hazelnuts or flaked coconut

Prepare pastry for a single-crust pie. On a lightly floured surface, use your hands to slightly flatten dough. Roll dough from center to edge into a 12-inch circle. Wrap pastry circle around rolling pin; unroll into a 9-inch pie plate. Ease pastry into pie plate without stretching it. Trim pastry to ½ inch beyond edge of pie plate. Fold under extra pastry even with edge of plate. Crimp edge as desired. Do not prick pastry.

For filling: In a large bowl, stir together ½ cup sugar and ¼ cup flour. Add berries and lemon peel; toss gently to coat. (If using frozen berries, let mixture stand about 45 minutes or until berries are partially thawed but still icy.) Transfer mixture to the pastry-lined pie plate.

For crumb topping: In a medium bowl, stir together ½ cup flour and ⅓ cup sugar.

Using a pastry blender, cut in butter until mixture resembles coarse crumbs. Stir in almonds. Sprinkle evenly over filling.

To prevent overbrowning, cover edge of pie with foil. Bake at 375 for 25 minutes (or 50 minutes for frozen berries). Remove foil. Bake for 30 to 35 minutes more or until filling is bubbly and topping is golden brown. Cool on a wire rack.

Makes eight servings. Each serving has 320 calories, 13 g fat, 4 g protein, 52 g carbohydrate, 1 g fiber and 125 mg sodium.

Recipe from: Midwest Living Magazine

Submitted by: Gerry Ann Dockter, Bismarck, N.D.

Estonian Seaberry Amaretto Cheesecake

4½ oz. graham crackers
3½ Tbsp. or 50 g butter, melted
(You can use a store-bought pre-formed graham cracker crust.)

Cheesecake layer

20 oz. (2½ pkgs.) or 600 g full-fat cream cheese, at room temperature
3 large eggs
½ c. caster sugar (100 milliliters)
1 tsp. vanilla extract
Amaretto-Seaberry jelly
¾ c. seaberries, fresh or frozen
3 Tbsp. caster or soft brown sugar
3 to 4 Tbsp. Amaretto
3 to 4 Tbsp. hot water
1 (¼-oz.) pkg.

Preheat oven to 350 F. Grease a 10- inch round springform/loose-bottomed cake tin with butter; line the base with parchment paper. Process crackers into fine crumbs, add melted butter and combine. Press the crust mixture over the base and sides of the prepared tin. Refrigerate for 15 minutes.

To make the cheesecake: Beat the cream cheese, sugar and vanilla together until smooth. Add eggs, one at a time, beating until combined. Pour over the prepared crust and bake in the middle of a preheated 350 F/180 C oven for 30 minutes, until the filling is more or less set (it shouldn't wobble too much when you lightly shake the cake tin). Remove from the oven and cool completely.

To make the jelly layer: Place the (defrosted, if necessary) berries into a blender and process until smooth. Press through a fine sieve to remove the seeds. Season to taste with sugar and Amaretto. Stir gelatin into hot water (about 4 Tbsp.) until dissolved. Stir into the seabuckthorn purée. Pour the mixture carefully over cooled cheesecake. The jelly should not be too firm. Whisk or heat jelly slightly in microwave to make it a thick spreadable jelly. Place the cheesecake into the fridge for at least four hours to set.

Makes eight servings. Nutritional information not available for all ingredients.

Recipe from: <http://nami-nami.blogspot.com/>
Submitted by: Derek Lowstuter, Bismarck, N.D.

Honey Baked Apples

- 6 medium baking apples
- 1½ Tbsp. melted butter
- ¼ c. honey
- ¼ c. granola-type cereal
- ¼ c. raisins

Wash and core apples. Peel top half or slit peel horizontally around each apple about an inch from the top to allow steam to escape. Place in baking dish lined with aluminum foil. Bake at 400 F for 40 minutes. Combine butter, honey, cereal and raisins. Fill apples with mixture and bake 10 additional minutes.

Makes six servings. Each serving has 200 calories, 3.5 g fat, 1 g protein, 45 g carbohydrate, 5 g fiber and 0 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Juneberry Pie

1 double-crust pie dough recipe (or store-bought is fine)

Filling

- | | |
|-----------------------------------|--------------------------------|
| 4½ c. fresh or frozen Juneberries | ¼ tsp. ground allspice |
| ¾ c. sugar | ⅛ tsp. ground pepper |
| 3½ Tbsp. cornstarch | ⅛ tsp. salt |
| 1 Tbsp. lemon juice | 1 Tbsp. unsalted butter, cubed |

Roll dough for bottom crust and place in an 8-inch pie pan. Combine all filling ingredients in a separate bowl. Let sit for 15 minutes. Preheat oven to 425 F. Spoon filling into pie crust. Dot the top with cubed butter. Cover with second crust or create a lattice design and crimp edges to seal. Bake 30 minutes. Remove from oven and cover crust edges with foil. Return to oven for 30 more minutes. Remove from oven and cool/rest for at least 45 minutes to one hour. Slice and serve with whipped topping or ice cream.

Makes eight servings. Each serving has 250 calories, 8 g fat, 2 g protein, 46 g carbohydrate, 0 g fiber and 130 mg sodium.

Submitted by: Tara Heyer, Jamestown, N.D.

Norwegian Juneberry Pie

- 1 double-crust pie dough recipe (or store-bought is fine)
- 6 c. Juneberries (or 4 c. Juneberries + 2 c. blueberries)
- $\frac{1}{3}$ c. flour
- 1 c. sugar, plus enough to sprinkle on top crust
- $\frac{1}{8}$ tsp. salt
- $\frac{1}{2}$ tsp. cinnamon
- $\frac{1}{4}$ tsp. nutmeg
- 1 Tbsp. lemon juice (fresh is best)
- $1\frac{1}{2}$ Tbsp. cold butter

Wash berries thoroughly; drain well. Mix flour, sugar, salt and spices. Fold the mixture into the berries, taking care not to crush the berries. Add lemon juice. Spoon mixture into pie crust. Dot with butter. Cover with top crust; slit or make lattice design if desired. Brush lightly with egg wash or cream and dust with sugar. Bake at 375 F for 45 to 60 minutes or until crust is browned and juice bubbles up through the slits. Cool and serve.

Makes eight servings. Each serving has 300 calories, 9 g fat, 3 g protein, 57 g carbohydrate, 0 g fiber and 135 mg sodium.

Recipe source: Sons of Norway, Fargo, N.D.

Submitted by: Lila Hlebichuk, Fargo, N.D.





(NDSU Extension)

Pear Crisp

¼ c. all-purpose flour + 1 Tbsp.	6 medium pears, cored and sliced
¼ c. old-fashioned oats	¼ c. raisins
¼ c. sugar	1 Tbsp. lemon juice
¼ c. brown sugar	2 Tbsp. sugar
½ tsp. cinnamon	⅛ tsp. nutmeg
½ tsp. nutmeg	1 pinch of cloves
2 Tbsp. butter	

In a bowl, combine ¼ c. flour, oats, sugars, cinnamon and nutmeg. Cut in chilled butter using a pastry blender until crumbly. In a separate bowl, toss pears with raisins, lemon juice, sugar, 1 Tbsp. flour, nutmeg and cloves. Spoon pear mixture into one 8- or 9-inch round cake pan sprayed with nonstick cooking spray. Cover pear mixture with the oat mixture and press down gently. Bake at 375 F for 45 to 50 minutes. Crisp is done when topping has browned and pear juice bubbles to the top.

Makes nine servings. Each serving has 190 calories, 3 g fat, 1 g protein, 35 g carbohydrate, 4 g fiber and 10 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food

Plum Kolaches

3 to 3½ c. all-purpose flour
1 pkg. instant dry yeast
¼ c. sugar
1 tsp. salt
¾ c. milk
¼ c. water
¼ c. butter
1 egg
1 Tbsp. butter or margarine

Plum Filling

Wash, peel, pit and quarter plums to make 2 cups. In small saucepan, cover plums with water. Cook until tender, stirring frequently. Add 1 tsp. vanilla.

Directions

In large mixer bowl, combine 1½ cups flour, yeast, sugar and salt; mix well. In saucepan, heat milk, water and butter until warm. Add to flour mixture. Add egg. Blend at low speed until moistened; beat three minutes at medium speed. By hand, gradually stir in enough remaining flour to make a soft dough. Knead on floured surface until smooth and elastic, about three minutes. Place in greased bowl, turning to grease top. Cover; let rise in warm place until light and doubled, about one hour.

Punch dough down. Divide into two parts. On lightly floured surface, roll each half into a 12-inch square. Cut each square into nine 4-inch squares. Spoon filling into center of each square. Fold one corner to center. Moisten corner of dough with water. Fold opposite corner over and seal. Place on greased cookie sheets. Cover. Let rise in warm place until almost double, about 30 to 45 minutes. Brush with butter. Bake at 375 for 12 to 15 minutes, until golden brown.

Makes 18 servings. Each serving has 120 calories, 3.5 g fat, 3 g protein, 19 g carbohydrate, 0 g fiber and 140 mg sodium.

Submitted by: Brenda Langerud, Devils Lake, N.D.

Plum Kuchen

½ c. warm water (100-110 F)
1 pkg. dry yeast
½ c. lukewarm milk
⅓ c. sugar
1 tsp. salt
⅓ c. shortening
1 egg, beaten
3 to 3½ c. sifted flour
2 to 3 c. peeled and pitted plums, depending on personal preference
4 Tbsp. butter or margarine
2 greased round pie plates

Custard

2 eggs, beaten
⅔ c. heavy cream
¼ c. sugar
1 tsp. vanilla

In mixing bowl, dissolve yeast in warm water. Add milk and 2 cups flour to make a very soft dough. Beat with spoon until smooth. Set aside to rise until frothy, approximately 30 minutes. Cream shortening and sugar, add beaten egg and salt; add to yeast mixture and add the remaining flour. Batter should not be too stiff. Pat dough into pie plates about ½ inch deep and up sides. Let rise about one hour. When ready, place peeled, pitted plums cut into halves in overlapping circles on dough. Melt butter or margarine and drizzle over plums. Bake at 350 F for 30 minutes. While this is baking, in a bowl, combine heavy cream, sugar, egg and vanilla, using a whisk to beat together well. Pour custard over plums and bake 10 minutes more until custard is set.

Makes 16 servings. Each serving has 220 calories, 12 g fat, 4 g protein, 25 g carbohydrate, 0 g fiber and 170 mg sodium.

Submitted by: Brenda Langerud, Devils Lake, N.D.

Poached Pears

- 4 firm ripe pears
- 1½ c. orange juice
- 3 Tbsp. brown sugar
- 1 tsp. cinnamon

Slice pears in half lengthwise and remove seeds with a spoon. Place pears, sliced side up, in a large nonstick skillet. Add orange juice and brown sugar. Bring to medium-high heat. Cover pan with lid or aluminum foil and simmer for five minutes or until pears begin to soften. Heat broiler and position rack about 6 inches from heat. Line a baking sheet with foil. Transfer pears, sliced side up, to baking sheet and broil one to two minutes until caramelized (light brown). Continue to simmer juice in skillet, scraping sides as needed. Cook sauce until just thickened, then top the pears with the sauce. Sprinkle with cinnamon.

Makes four servings. Each serving has 180 calories, 0 g fat, 1 g protein, 47 g carbohydrate, 6 g fiber and 0 mg sodium.

Recipe source: NDSU Extension, www.ag.ndsu.edu/food



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Tennessee Banana-Black Walnut Cake With Caramel Frosting

Cake

2 c. all-purpose flour
½ tsp. baking soda
½ c. solid vegetable shortening
1½ c. sugar
2 eggs
2 ripe bananas, mashed
¼ c. buttermilk
1 tsp. pure vanilla extract
1 c. chopped black walnuts

Frosting

½ c. (1 stick) butter, softened
1 c. packed dark brown sugar
⅓ c. heavy cream, plus more as
necessary
1 Tbsp. pure vanilla extract
1 (16-oz.) box confectioners'
sugar
2 c. finely chopped black walnuts,
for garnish (optional)

Preheat oven to 350 F. Grease and flour two 9-inch cake pans.

For the cake: In a medium bowl, stir together flour and baking soda; set aside. Using an electric mixer, cream together shortening and sugar in a bowl until light and fluffy, about two to three minutes. Add eggs one at a time, mixing well after each addition. Mix in mashed bananas, buttermilk and vanilla. Add flour mixture; mix until just combined. Stir in black walnuts. Pour into prepared pans. Bake until a toothpick inserted in the center of the cake comes out clean, about 35 minutes. Cool in pans on a cooling rack for 10 minutes. Remove from pans and cool completely.

Meanwhile, prepare frosting. Melt butter in small saucepan. Add brown sugar and ⅓ cup cream. Cook over medium-low heat until the sugar is dissolved, about two minutes. Remove from heat and add vanilla. Transfer to a large bowl. Using a hand-held electric mixer, beat in confectioners' sugar a little at a time until smooth. If frosting is too thick, add 1 tablespoon heavy cream at a time until consistency is right. Sandwich two layers of cake with frosting. Frost the outside of the cake. Press chopped black walnuts on the sides of the cake, if desired.

Makes 16 servings. Each serving has 530 calories, 23 g fat, 7 g protein, 77 g carbohydrate, 1 g fiber and 60 mg sodium.

Recipe from: Paula Deen

Submitted by: Gerry Ann Dockter, Bismarck, N.D.



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