

Nebraska Statewide Arboretum. Inc. Sustainable Landscapes for Healthy Homes and Communities

Winter 2011

Creating an Edible Landscape

In our increasingly urbanized environment, our conthey receive at least six hours of full sunlight daily. Inection to the outdoors, wildlife and the sources of Most also like well-

food that sustain us can grow more distant. One fruitful and fun way to strengthen that connection to the outdoors is to create an "edible landscape" by adding food-producing plants to conventional residential or acreage landscapes. Edible landscapes can be just as attractive as ornamental landscapes, combining fruit and nut trees, vegetables, herbs, edible flowers or berry bushes in aesthetically pleasing designs.

Edible landscapes offer an opportunity for homeowners to convert typical landscape plantings that are of little use to wildlife or people into beautiful gardens that provide food for both. They also provide the freshness and flavor of home-grown fruits and vegetables and allow homeowners to control the quantity and types of

chemicals used on their food. A bonus is an increased opportunity for wildlife feeding, watching and photography by creating habitat that attracts many species of animals (especially birds).

Like ornamentals, edible plants grow best in certain conditions. Many fruits and vegetables do best where



'Black Pearl' peppers and Vinca 'Pacifica Burgundy blooms' create a striking combination in this garden on UNL's East Campus.

drained soil. To start simply, consider a one-for-one substitution. Where you would have planted a shade tree, plant a fruit tree. Edible plants come in all sizes and shapes, and can perform the same landscape functions as decorative ornamentals.

Most edible plants require a certain amount of attention to produce well. They may require watering, pruning, fertilizing or pest management. The time required, however, need not be exorbitant. Caring for a fruit tree may take only a few hours a year, for example, and the yield could be enormous.

Benefits of Edible Landscapes Whether you have a large piece of property or a back yard, there are

many benefits to adding edibles to your landscape.

Improved Environment

Strategically placed, edible landscapes produce valuable foods and improve the environment by protecting water quality, preventing soil erosion, conserving energy,



Hazelnut shrubs provide beautiful fall color as well as flavorful, heart-healthy nuts for sweet and savory dishes.

enhancing wildlife habitat, controlling pests naturally and increasing the natural diversity around your home.

Attract Wildlife

Animals require food, cover, water and space in close proximity to live and reproduce. Some wildlife species only need a back yard to thrive, others require many acres. Habitat requirements for wildlife also change dur-

If you're concerned about upkeep of an edible landscape, start small:

- Put pots of herbs on the patio.
- Include cherry tomatoes in a window box or hanging basket.
- Build a grape arbor.
- Grow nasturtium, violas or calendula; use the flowers in salads.
- Plant a fruit tree in the corner of your yard.
- Grow Red-Jewel cabbage.
- Tuck lettuce, radishes or other short-lived greens into a flower bed.
- Replace a hedge with gooseberries.
- Plant basil and coleus together in a pot.
- Grow chives around the mailbox.
- Train raspberries up your fence.

ing the year. Winter food and cover requirements may be completely different than summer food and cover, so select plants that bear fruit and nuts at different times of the year. Summer foods are provided by American plum, chokecherry, sandcherry, gooseberry, currants, elderberry and riverbank grape. Good fall food-producing plants are buffaloberry and most nut-producing trees and shrubs. Plants that have persistent fruit through the winter include prairie rose, chokeberry, crab apple and highbush cranberry. Knowing which wildlife species occur in your area, and their life requirements, will help determine which species you're likely to attract with your edible landscape.

Conserve Energy

Plantings on the north and west side of your property will block harsh winter winds, reducing heating energy costs up to 30% while providing cover for wildlife so they can conserve energy as well. Planting taller nut trees on the south, west and east sides of your property can shade your house during the summer, considerably reducing cooling costs.

Conserve Soil

Trees and shrubs can reduce the amount of soil lost during heavy rains, especially in erosion-prone areas.

Protect Air and Water Quality

Do you hate mowing the lawn? Convert some of that turfgrass around your home to a mulched edible land-scape that requires little maintenance. Less lawn means fewer chemical and fertilizer applications, which means fewer nutrients and chemicals ending up in our surface and groundwater. And edibles planted along water-courses or swales intercept and absorb pollutants before they reach the water. Well-placed edible landscapes around the home also reduce dust, odors and noise.

Control Pests Naturally

Edible landscapes attract many species of wildlife, especially birds. Insects make up a large portion of many birds' diets, such as the downy woodpecker, northern cardinal, American robin and eastern bluebird. These species can help keep insect problems in check, naturally.

Sources: "Edible Woody Landscapes for People and Wildlife" by Scott Josiah, Nebraska Forest Service, and Jeanne Lackey, Arbor Day Foundation; "Edible Landscaping," Ohio State University Extension factsheet HYG-1255-02.

10 Tips for Designing Edible Woody Landscapes

Scott Josiah, Director, Nebraska Forest Service, & Kim Todd, University of Nebraska-Lincoln Extension Horticulture Specialist

To design an edible landscape that functions well and is aesthetically pleasing, consider:

- **1. Planting Objectives.** Will you harvest and/or process some or all of the fruits and nuts for your own use or for sale, or will you leave them for wildlife? What types of fruits and nuts do you like?
- **2. Space.** How much space do you have available? Think about horizontal space across the yard or acreage, and also vertical space, combining tall trees, short trees, shrubs, herbaceous plantings or climbing vines within the same area to create a "multistory" garden.
- **3. Time.** How soon do you want to begin producing fruits or nuts? Some fruit-bearing shrubs begin to bear the second year, while grafted nut trees often take a decade or more before nut production begins.
- **4. Wildlife.** Do you want to attract animals to your area? Consider songbirds, squirrels, small reptiles, and even deer and turkeys on larger acreage properties. By knowing the requirements for the desired wildlife species, you can intentionally design an edible landscape to attract these animals by choosing the right species and cultivars.
- **5. Viewability.** Be sure your design allows you to see wildlife from your favorite viewing points—a patio, terrace, window or special place in your landscape.
- **6. Diversity.** Choose a variety of species of trees and shrubs that provide food for both you and many species of wildlife. Select species that produce foods at different times of the year, and pay special attention to the end of each season when other food sources may be scarce. Deliberately combine plants of various sizes, shapes, density (to provide cover) and color.
- **7. Management.** Do you want to create a landscape with relatively low requirements for management or one that is more intensely cultivated and needs a higher level of care? Many improved selections require little attention once established. If you're interested in organic management or using very few non-natural products, check the requirements of each plant you're considering.
- **8. Beauty.** The form and texture of plants and the colors found in flowers, fruits, stems and leaves are important to the overall "look" and beauty of a landscape. Selecting plants that will create a long succession of blooming and fruiting will increase the amount of time wildlife species spend in your yard and create a longer, less intense period of harvest.
- **9. Plant Suitability.** Even if all other considerations are met, final plant selections must be based on the suitability of these edibles for your particular site, soils and climate. Are the species/cultivars you've selected suitable for the zone in which you live? Are they cold hardy and disease and insect resistant? How much sunlight and water will they need? Are they long-lived? How much management will they require to produce the desired quality of edible fruits and nuts?
- **10. Availability & Price.** Many edible woody plants are available from garden catalogs and stores. Others are harder to find and may be found through specialty suppliers or the Internet. Pay particular attention to how the plants you want are sold. Bare-root plants have a limited shipping window to ensure that they arrive in healthy condition. Be wary of late-fall sales and prices that are too good to be true.

Adding Edibles to an Ornamental Landscape

Terri James, University of Nebraska-Lincoln Extension Assistant-Urban Gardening

Perusing plant and seed catalogs is a favorite pursuit for gardeners during these long winter months. It's a time to reflect on how our gardens grew last summer, what we liked and didn't like and what we're going to do differently with our gardens next year. As you contemplate these and many more gardening notions, consider adding something a little different to your planting beds and containers next year.

We're seeing more and more trees and shrubs added to the land-scape for their fruit production, but have you thought of combining your vegetable garden with your flowerbed? For the past two years, the Backyard Farmer Garden has been experimenting with combining edible plants and ornamentals. Edible

plants are a great way to add to or expand your landscape beds. Combining edibles and ornamentals in your landscape produces endless possibilities for mixing fruit colors, leaf textures and flowers. With some simple planning you'll experience your landscape beds through both sight and taste.

In the spring as the perennials in the landscape are waking up, add a few spring edibles like lettuces. There are many mixes available; we've been using the muslin mix with wonderful leaf textures and colorful leaves of greens, reds and purples. You might also add a trellis and plant a few peas. With the light green stems and tendrils and the yellow of the flowers, the peas and the mix of greens will add that color

we all crave in the early spring! As the weather warms up and plants start to fill in, remove the trellis after the last pea is harvested and you've had your fill of the fresh lettuce.

In the summer, move to some even more ornamental edibles. Try the 'Black Krim' tomatoes with black fruit or 'Italian Ice' with white fruit. If you like eggplant, check the seed catalogs for 'Hansel' and 'Gretel.' The fruit is purple and white respectively, or try the purple-and-white-striped combination of 'Fairy Tale.' For those of us who want to push things over the top, look for 'Baby Bubba' okra, a short okra that will produce yellow flowers and spiky pods, or artichoke (it has a long growing season, so start it indoors).

For the best pop of color and texture in landscape beds, try some ornamental peppers. 'Flash,' 'Black Pearl,' 'Jigsaw' and 'Piñata Mix' are just a few of our favorities in the Backyard Farmer Garden. Many of these plants have colorful foliage

Left: The height and colors of 'Black Pearl' peppers, tomatoes and vinca work well together.

Below: 'Zinnia Double Zahara Fire' and 'Holy Mole' peppers are a pleasing mix in the Backyard Farmer Garden on UNL's East Campus.







and abundant fruit all season long.

For that last burst of color, and to help hide the bare spots that start to appear in the fall garden, try direct seeding some Swiss chard. Many newer varieties with brightly colored stems are available. 'Bright Lights' has red, pink, yellow and orange stems; 'Lucullus White' has white stems; or for stir-fry try 'Joi choi,' a bok choy with dark green leaves and white stalks.

One last fall crop to consider is Brussels sprouts. Plant them in the summer, but the cooler the weather when they're harvested, the better tasting they are, and the tall plants holding all of those tiny balls make an ornamental statement.

The Backyard Farmer Garden has been combining these ornamental edibles with flowers for the past couple of years, and the more we add, the better the garden looks. Try a few of these ideas this summer and stop by the garden on UNL's East Campus, just east of Keim Hall, for some inspiration.



Top and left: The vibrant hues of 'Bright Lights' Swiss chard perk up the fall garden.

Above: 'Fairy Tale' eggplant adds a pop of color to ornamentals. The dwarf eggplants are sweeter than larger varieties and less seedy. Below: Dill and fennel complement Echinacea PowWow Wild Berry in the Backyard Farmer Garden.



Bow Tie Pasta with Roasted Garlic & Eggplant

1 package (12 oz.) dried large bow tie pasta

2 T. fresh parsley

¼ c. freshly grated Parmesan cheese

1 garlic bulb, roasted

6 c. eggplant, peeled and cut into 1-inch cubes

½ c. balsamic vinegar

4 T. olive oil

¼ tsp. oregano

½ tsp. black pepper

3 c. (about 3 medium) chopped tomatoes

Separate roasted garlic cloves, peel and set aside. In a medium bowl, combine eggplant, vinegar, 3 T. of the olive oil, oregano and pepper. Mix thoroughly and marinate in the refrigerator for 1 hour. Place eggplant mixture, with liquid, on a baking pan. Bake at 425° for 25 mins. Stir every 5-6 mins. About 10 mins. before eggplant is completely cooked, heat remaining 1 T. olive oil in a skillet. Add tomatoes and garlic. Sauté for 5 mins. At the same time, cook pasta in a pot of boiling water according to package instructions. Drain and divide cooked pasta on 4 serving plates. Cover pasta with roasted eggplant. Cover with equal portions of tomato-garlic mixture and top with parsley. Serve immediately sprinkled with Parmesan cheese. fruitsandveggiesmatter.gov

Southwestern Cantaloupe Salad

4 oz. ripe cantaloupe, thinly sliced

4 oz. jicama, peeled and thinly sliced

3 oz. red bell pepper, roasted, sliced

3 oz. yellow bell pepper, roasted, sliced

1 T. chopped fresh basil

2 T. fat-free Italian dressing

Combine cantaloupe, jicama, peppers and basil. Add salad dressing and mix well. Serve on an attractively cut cantaloupe base, if desired. Makes 4 servings. fruitsandveggies matter.gov

Nature's Bounty of Edible Plants

Bob Henrickson, Horticulture Program Coordinator, Nebraska Forest Service

Pall is truly a season for the senses. For some gardeners, it's time to harvest the last of the tomatoes, squash and peppers before the season's end. For others, fall signals the time of year for gathering and preparing edible wild plants from fields and prairies and along Nebraska's roadsides and wooded bluffs.

Not only are certain wild plants nutritious and tasty, but gathering them offers a chance for exploration and discovery. It's a great way to get more connected with the natural world. Make plans to visit some wild places to collect nature's bounty. Better yet, try growing some edible wild plants in your home landscape.

Below are plants native to the Great Plains that offer a delicious bounty that perhaps will inspire you to convert some of your landscape plantings into edible plantings.

Edible Shrubs for the Landscape

Leadplant, *Amorpha canescens*. Among settlers, leadplant was known as "prairie tea." The leaflets, harvested in late summer to early autumn, can be dried and brewed into a tea with a pleasant, mellow flavor.

Leadplant is a small native shrub found in scattered, high-quality prairie remnants throughout much of Nebraska. The small leaflets are covered with fine hairs, giving them a silvery or lead-like appearance. Blue-purple flower spikes bloom on the tips of branches in early summer. Although found in the wild, leadplant

Leadplant Tea

1 T. dried leaflets
1 c. water
Place leaflets and water
in a pot over high heat
and stir until water
reaches the boiling
point. Reduce the heat
to its lowest setting
and cover the strainer,
but save the leaflets to
use again. Tea may be
served hot or iced and, if
desired, sweetened with
honey or sugar. Wild
Seasons, Kay Young.



makes a wonderful easy-to-harvest garden plant, and the leaflets are usually good for up to three brewings.

American Plum, *Prunus americana*. Wild plum is a small native tree or large shrub that forms dense thickets with sharp-tipped twigs. The abundant ripe one-inch plums in late summer or early autumn make this a favorite of wild food buffs. When ripe, the sweet yellow, red or purple fruits are fleshy and juicy.

Plums can be eaten fresh in season, processed into a sauce for meats or used as a dessert. Plum jelly and jam are great for bread or toast, and spiced plum jelly makes a great baste for roasted meats, especially wild game. The Omaha dried the fruit for winter use

Wild Plum Jelly

4 c. plum juice 3 c. granulated sugar

Put juice and sugar into a large kettle and stir well. Place over high heat and bring to a boil, then reduce the heat and allow the liquid to boil gently until it reaches the jelling point. Typically, the boiling time will be 20-25 mins. When done, remove the kettle from the heat and quickly skim off the foam, then pour the jelly into hot, sterile, 1-cup jars, leaving ½-inch headspace. Cap the jars with two-piece screwband lids and process for 5 mins. in a boiling water bath. Makes about 5 cups of jelly.

To extract juice from plums: Use 4 cups of water for each gallon of plums. Put plums and water in a kettle, bring to a



boil, reduce heat to low, cover, and simmer for 25 mins. Remove kettle from heat and cool slightly. Arrange a jelly cloth in a cone-shaped colander with the center of the cloth at the bottom of the cone and the edges hanging over the rim. Pour plums into the cloth and allow juice to drip through; squeeze to extract more juice. If the plums yielded less than 4 cups, add water. Wild Seasons, Kay Young.

and planted corn, beans and squash when the fragrant spring flowers came into bloom. (Note: Contain this aggressive, thicket-forming shrub by surrounding the planting bed with a mowed area like turfgrass, or plant other thicket-forming shrubs adjacent to it as competition.)

Chokecherry, Prunus virginiana. This durable large shrub forms dense thickets, making it useful for a quick screen. It produces the most fruit when grown in full sun, but also grows well in shade. The fragrant pendulous flowers are beautiful in early spring, followed by showy red fruit clusters that change to black when ripe.

One of the months in the Dakota calendar honors the chokecherry, called "black-cherrymoon." The cherries were pounded to a pulp, pits and all, shaped into small cakes and laid out to dry in the sun. The dried cherries were mixed with dried meat as a sort of mincemeat or pemmican.

The fruit makes one of the most delicious jellies in the world. Prepared chokecherry juice can be used for syrups or jellies, or mixed with yogurt, honey and gelatin for a delicious molded dessert. Try Kay Young's colorful and delicious chokecherry fizz using chokecherry syrup, ginger ale and lime juice.

Chokecherry Fizz

For each serving:
3-4 T. of chokecherry syrup (or ¼ c. chokecherry juice plus
2 tsp. granulated sugar)
¾ c. tonic water or ginger ale
Squeeze of orange or lime
Ice

Put the chokecherry syrup (or sweetened juice) into a tall glass, add cracked ice about halfway up, fill with tonic water or ginger ale, add the orange or lime, and stir well. *Wild Seasons*, Kay Young.

Chokecherry



Buffalo Currant



Chunky Currant Topping

2 c. granulated sugar

1 c. water

4 c. buffalo currants Honey, to be added later

Combine the sugar and water in a large kettle over high heat and bring mixture to boiling. Boil for 2 mins., then add currants, 1 cup at a time, stirring after each addition. Reduce the heat to medium, bring to a gentle boil, and allow to boil for 7 mins. Remove from the heat and quickly skim off the foam. Pour the topping into hot, sterile jars, leaving ½-inch headspace. Cap jars with two-piece screwband lids and process for 5 mins. in a boiling water bath. Makes about 4 cups of topping. To serve, add ¼ c. honey to each cup of topping; stir well. This is especially good on hot oatmeal or yogurt. Wild Seasons, Kay Young.

Clove or Buffalo Currant, *Ribes odoratum*. This native shrub grows to around 5 feet high with clusters of spicy-scented yellow flowers in spring, followed by clusters of fruit that turn black when fully ripe. The selection 'Crandall' has large, juicy fruits that make excellent jam, jelly, syrup, and pie and are good as a chunky topping on hot oatmeal. They make attractive landscape plants in sunny locations.

Juneberry or Serviceberry, Amelanchier spp. This is an excellent landscape plant for part shade with the added benefit of producing delicious fruit for our enjoyment. Juneberries can be planted as a shrub, or some grow as small trees. The fruits occur in clusters and change from wine red to deep blue-black when fully ripe and look like blueberries. Juneberries are very nutritious, with reportedly 10 times more vitamin C than blueberries! The fruit is delicious right off the tree or made into pie, jam, syrup, sauce or wine.

Juneberry-Rhubarb Sauce

5 c. juneberries 10 c. diced rhubarb

7 c. water

4 c. sugar

Put berries, rhubarb and water into a large kettle over high heat and bring to a boil. Do not cover. Reduce heat and boil

gently for about 10 mins. or until juneberries and rhubarb are tender-stir several times while mixture is cooking. Add sugar; continue to stir and cook until sugar has dissolved and the sauce is bubbly and thick. Remove from heat. Pour sauce hot or cooled into containers with tight-fitting lids. Refrigerate or freeze to store. Makes 8 pints. Wild Seasons, Kay Young.



The juneberry is one of the easiest wild fruits to collect. It was prized by Native Americans and early settlers, commonly used in pemmican, a mixture of dried fruit, dried meat and fat.

American Hazelnut, Corylus americana. This thicket-forming shrub is native to borders of woods and stream banks in southeastern Nebraska. At one time hazelnuts were so numerous on the bluffs of the Missouri and Platte rivers that families would go "nutting" each autumn. Today few hazelnuts can be found in the wild, but they make an attractive large shrub worthy of planting in your back yard. Nutritious, heart-healthy hazelnuts can be used for baked goods, but they are also delicious in salads or cooked with vegetables or meat. (For more information on growing hazelnuts, see "Enjoying the Benefits of Growing Nut Trees" on page 11.)

Edible Trees for the Landscape

Pawpaw, Asimina triloba. The pawpaw is a small native tree growing in the open woods and ravines of the Missouri River bluffs in southeastern Nebraska. A ripe

Hazelnut Chicken with Orange Cream Sauce

Chicken

½ c. Italian breadcrumbs with salt and pepper

½ c. diced hazelnuts

1 egg + 1 tsp. water

2 chicken breasts, skin removed, boned is best

Sauce

1 large orange, peeled and chopped

½ c. orange juice

1 c. heavy cream

1 T. vermouth or brandy

Pinch of thyme and marjoram

Sauce: Combine the sauce ingredients in a saucepan and

simmer to thicken.



Combine the breadcrumbs and nuts in a bowl; beat egg with the water in a bowl. Dip the chicken into the egg mixture first and then in the nut mixture. Sauté chicken 3 mins. on each side, then place chicken in a casserole pan. Cover with the sauce and bake for 40 mins. at 350°. Serve with wild rice. freddyguys. com/about-us/recipes.html

Pawpaw Bread

2 c. flour 1 tsp. baking soda ½ tsp. salt ½ c. butter 1 c. sugar 2 eggs 1 c. mashed pawpaw ½ c. nuts

pulp

Grease a $9 \times 5 \times 3$ -inch loaf pan. Sift together flour, soda and salt. Cream butter with mixer; add sugar; continue beating until thick and light. Add eggs, one at a time, and beat well. Add half of the dry ingredients and stir gently, add remaining



dry ingredients and pulp. Fold in nuts. Bake 1 hour at 350°. Remove from oven and cool 10 mins.; turn out onto a plate. Cover and allow to cool completely before slicing. Wild Seasons, Kay Young.

pawpaw looks like a short, stubby banana and has a rich flavor that's a mix of banana, vanilla custard, pineapple and mango. Pawpaw fruit is very nutritious, being high in potassium, iron and calcium. Pawpaw trees are also beautiful, with large, robust leaves that turn lemon-yellow in fall. They will tolerate dense shade and usually grow in colonies, forming an attractive grove. The yellow flesh of ripe fruit can be eaten fresh from the tree or scooped out and used in quick breads, cookies or muffins.

Persimmon, Diospyros virginiana. The orange fruit of persimmon hang like ornaments from bare branches in fall after the leaves have fallen. The fruit is one of the last wild fruits to gather of the season, often after a few light frosts in fall. For the sweetest flavor, harvest them when the fruits are soft and wrinkled. Persimmon often is used in



Wild Persimmon Pudding

½ stick butter

2/3 c. flour

1 tsp. baking powder

1 tsp. cinnamon

1 c. persimmon pulp*

1 c. granulated sugar

1 egg, beaten

½ c. buttermilk

½ c. light cream or evaporated milk

1 tsp. vanilla extract

Grease a 9 x 9 x 2-inch baking pan; melt butter in a saucepan and set aside. Sift flour, baking powder and cinnamon together in a large bowl. Add remaining ingredients and mix well. Pour into the baking pan and bake for 1 hour at 350°. The pudding will puff up while baking, then fall back as it cools. Cool pudding in the pan on a rack. Serve cold with whipped cream or vanilla ice cream.

*To extract pulp: Seeds can be removed from the persimmons by hand, but for larger amounts it's easier to use a food mill or cone-shaped colander and pestle. One quart of persimmons makes 1 cup of pulp. Wild Seasons, Kay Young.

breads, cookies and fruitcakes. One of its best uses, however, is in bread pudding, where its rich flavor stands out. Persimmons are small forest-edge trees and grow best in groupings in the shadow of tall trees.

Black Walnut, Juglans nigra. No other nut can compare to the delicious flavor of our native black walnut. The nuts can be used in candies and baked goods, but they also complement baked squash and yams. Black walnut caramels and toffee are outstanding, with a flavor all their own.

Harvest the nuts while the husks are still green. The strong juice of walnut husks can stain almost anything, so wear rubber boots (rolling each nut back and forth under your foot will loosen the husk) and rubber gloves to remove the husks. Clean the nuts in water, draining when the water becomes black. The nutmeats will be ready to use after curing for about a month. (To learn more about growing black walnut trees, see "Enjoying the Benefits of Growing Nut Trees" on page 11.)



Black Walnut Caramels

1 2/3 c. heavy cream

2 c. granulated sugar

1 c. light corn syrup

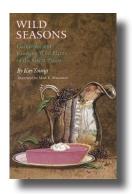
2 sticks butter

1 tsp. vanilla extract

½ c. black walnut meats

Grease a 9 x 13-inch pan and set aside. Combine ½ cup of the cream with the sugar, syrup and butter. Cook uncovered over low heat for 30 mins., then stir in the remaining cream. Cook over medium-low heat until the mixture reaches 248° on a candy thermometer (about 45 mins.). Remove from heat and cool for about 10 mins., then stir in vanilla and nuts and pour the candy into the greased pan. While still slightly warm, cut the caramel into bite-size pieces, or shape it with your hands into a long rope about 1 inch thick and cut off ¼-inch slices. Wrap each piece, twisting the ends of the wrapper securely. Makes about 90 pieces of caramel. To store, freeze or refrigerate in a tightly closed container. Wild Seasons, Kay Young.

Book Serves Up Botanical Information, Recipes



Information on wild plants and the leadplant tea, wild plum jelly, chokecherry fizz, chunky currant topping, juneberry-rhubarb sauce, pawpaw bread, wild persimmon pudding and black walnut caramel recipes in this issue of *The Seed* are from *Wild Seasons: Gathering and Cooking Wild Plants of the Great Plains* by Kay Young, (University of Nebraska Press, 1993). The book has easy directions for identifying and gathering edible wild plants and nearly 250 recipes. Trained in botany and folklore, Kay Young has worked as a naturalist for the Chet Ager Nature Center in Lincoln. Below are two passages from the book about the important connections she sees between people and the earth followed by 10 points she says to keep in mind when gathering wild plants.

Not only are certain wild plants nutritious and tasty, the gathering of them involves the important processes of exploration, discovery, and learning. Persons who explore and come to know the natural world around them develop a sense of how the earth works and a feeling of being connected to it. Even if the natural world that they explore and gather from is as limited as a backyard, what happens there each season is important in their learning. An even if they leave that particular place and never return, they carry with them an abiding concern for the earth and its many forms of life.

Perhaps because wild plants live and reproduce without the intentional aid of humans, they reveal more about the natural order and innate characteristics of an area than do domestic plants. Although we need domestic plants to feed the human populations of the world, we need an awareness and understanding of wild things in order to make choices that sustain, rather than impede, the natural systems of the earth. And just as we can never go back to subsisting wholly on wild things, neither can we wholly exclude wild things from our lives. The key is to integrate domestic and wild things wisely. In keeping with that concept, the recipes in this book combine wild plants with ordinary grocery store products, and readers are encouraged to grow wild plants in their yards along with domestic ones.

I have come to believe that it is important for us to know both the social and natural history of the area where we live. Just as the stories about persons who shaped our social and political history are important, so are the stories about the plants, animals, rivers, rocks, and soil that came before us. It is important to know the players and their roles, whether they are people or the animate and inanimate things of nature. Otherwise, it is like coming in at the middle of a play or film—if you don't know what has already taken place, you are less apt to get involved in what is currently happening or to care about how things turn out.

. . . Perhaps with a world view where natural cycles are a vital part of eveyday living, people develop a framework in which to place their own lives. When a great loss or setback happens, they are still connected to something stable, a scheme or system that continues to work as it should. Certainly, garnering part of one's living from wild things creates a keen awareness and appreciation of the natural world and its cycles.

• • • • • • • • • • • • • •

Before getting started with wild plants, Kay recommends understanding that it is extremely important to know that although many wild plants are delicious and safe to eat, others are poisonous. She suggests: 1) Checking information about wild plants with more than one good authority; 2) Be certain that you have the right plant; common names can be misleading so learn the botanical names of the plants you use; 3) Be certain you have the right part of the *right* plant; 4) Use plants and plant parts at the right stage of maturity; 5) Never sample a plant to see if it is safe to eat; 6) Don't overeat of any plant; 7) Collect from areas that have not been sprayed—better yet, grow the plants in your own yard and don't use sprays; 8) Be careful when you pick or cut. Do not gather large amounts of any plant that is not common in your area; 9) In years when wild fruits and nuts are scarce, pass them by so that birds and other wild animals will have sufficient food; 10) Respect the rights of other persons; always obtain permission to gather from someone's property or from the adjacent roadside.

Enjoying the Benefits of Growing Nut Trees

John Knorr, President, Nebraska Nut Growers Association

Growing a nut tree that produces high-quality nuts for your family to enjoy sounds great, but there are several things to consider when planting nut trees to ensure healthy trees and optimal yield.

When planting a nut tree, the first thing to do is look at the size of a mature tree of your choice to see how it will fit into your landscape. Tree spacing is important. Trees need three basic building blocks to survive: sun, water and oxygen. On average, a nut tree will require a 20-30-foot radius for full sunlight to produce lots of nuts. A young tree may look lonely initially, but you're planning for its future and your enjoyment. For good results, soils should be well-drained and a clay loam to sandy loam texture.

Four types of nut trees that grow well in Nebraska are northern pecan, black walnut, hickory and Chinese chestnut.

The University of Nebraska and the Nebraska Nut Growers Association (NeNGA) teamed up more than 30 years ago in the cultivation of northern pecan, walnut and hickory to produce nuts that are superior to native nuts that grow in the Nebraska area. They now have been propagated throughout the United States

and in several foreign countries.

Black walnuts, northern pecans and hickory nuts have excellent health benefits and will add great flavor to foods. Most tree nuts are a



The bark of the Shagbark Hickory separates into strips, giving it a shaggy appearance. The nuts have a sweet, mellow flavor that is similar to pecans.

delicious source of unsaturated fatty acids, protein, fiber and antioxidants like vitamin E. Every nut offers a little different nutrient value, but in general they are a good source of Omega-3 fatty acid which is linked

to several important health benefits including lowering cholesterol, regulating heartbeat and reducing inflammation. A 1998 Harvard study found that 35% fewer heart attacks

were reported among women who consumed an ounce of nuts five times per week compared to those who didn't consume nuts regularly (*Environmental Nutrition*, 11/1/2000).

If you decide to plant a nut tree, visit a nursery and acquire one that has been cultivated for quality fruit. (A tree planted from seed will take many years to produce nuts, and they're likely to be an inferior quality.) Some regional nurseries to consider are Henry Fields, Gurney's and Forrest Keeling. Local nurseries also are a great source of plants and advicecheck that what you're planting is suitable for your area and will produce quality nuts. Be sure to ask the length of time from planting to nut production.

The grafted cultivar black walnut has a larger edible kernel and the nutshell is bigger and thinner, which means it's easier to crack. Because of the volume of cultivar nuts produced by Nebraska growers, NeNGA in Valparaiso formed a co-op, Heartland Nuts

The Nebraska Nut Growers Association promotes the growing of high-quality nuts through the propagation of high-quality cultivars and education. The group provides field demonstrations, seminars, newsletters, nut evaluations, meetings, field tours and detailed information for hobbyist and commercial growers. To learn more about NeNGA, visit its website at nebraskanutgrowers.org.

'N More (heartlandnutsnmore.com). Heartland Nuts processes black walnut, northern pecan and hickory nuts, and markets the finished products. The co-op has been able to ensure high-quality black walnut nutmeats from cultivars, and the improved nutmeat has a sweeter taste. The leaves, hulls and nut shells from black walnut trees are used in many byproducts. [Ed.

Black walnut trees often grow more than 100 feet high. Each nut is covered with a light-green husk that eventually becomes black.



note: Although it hasn't been found in Nebraska, thousand cankers disease has killed thousands of black walnut trees in the western U.S. and eventually could pose a threat here.]

Northern pecan cultivar nuts are a little smaller than southern pecans, but the taste is better because of the higher content of monounsaturated and polyunsaturated oils. The nutmeat has a richer, more buttery flavor.

The hickory nut is special. Different cultivars have different growing characteristics just as with the black walnut and northern pecan. Hickory wood is hard, heavy, strong and flexible. The hardness and beauty of the grain makes it a very desirable wood for furniture.

One of the byproducts of the hickory nut is the hull, which is excellent for generating a hickory-flavor smoke taste. It can be used in place of charcoal and is easy to start. Hickory trees are generally self-fertile, but it's a good idea to have several cultivars present.

There are two basic species of hickory: shagbark and shellbark. Shagbark has loose, shaggy bark and a yellow to bronze color in the fall.

Great Ways to Serve Nuts

- Add to tossed salads
- Stir-fry with vegetables or chicken
- · Blend into fruit shakes
- Use in stuffings
- Mix into pancake or waffle batter
- Add to rice dishes
- Add to cake or cookie batter
- Encrust fish with nuts and bake

nebraskanutgrowers.org

The shellbark produces a larger nut of the two, but the yield of the nutmeat is a little less. The shellbark is about 40% nut to nutmeat while the shagbark is 50-60% nutmeat. Other than the nut size, you can tell the difference by looking at the number of leaflets. Shellbark has seven leaflets and shagbark has five.

The taste of the shellbark and shagbark nutmeats is sweet, and some say it's the best-tasting nut you will eat. Finding hickory nuts in the marketplace is difficult, however. On the Internet you can find it between \$35 and \$60 a pound. More and more commercial growers are grafting hickory cultivars onto pecan root stock because they are of the same family and it provides a better root system for tree and nut growth.

The Chinese chestnut is also of interest to some nut growers as an edible food. The Chinese chestnut tree is medium size (40 feet) and is cold hardy and basically blight resistant. It thrives in well-drained sandy loam soil with a low pH of 5.5-6.5. The nuts are borne inside spiny burs that split open when nuts are ripe. Each bur contains one to three shiny, dark-brown nuts. Chestnuts are a healthy, low-fat food that can be incorporated into a wide range of dishes from soups to poultry stuffing, salads, muffins and pastries. With the demand for novel and healthy food products, chestnuts are becoming more widely accepted.

Chestnut trees can be grown from seed or seedling. To learn more about growing chestnut trees, visit extension.missouri.edu/publications/DisplayPub. aspx?P=AF1007.



Hazelnuts Are Tasty, Nutritious



Mature hazelnut shrubs are about 15 feet high and 10 feet wide.

• • • • • • • • • • • • • •

Hazelnuts (*Corylus* sp.), the sweet, tasty nuts also known as filberts, are used in confections, for oils and in a wide range of food products.

Hazelnuts are a rich source of protein, vitamin E, folate, B vitamins

and arginine. Hazelnut oil is a heart-healthy cooking oil with a long shelf life.

While hazelnuts are not yet commercially viable in Nebraska, they are suitable for home landscapes. Two different, compatible layered cultivars planted together are necessary to produce nuts.

The most commercially successful hazelnut species has been the European hazel (Corylus avellana) which produces nuts of higher quality, larger size and thinner shells than the two North American native species, the American hazel (Corylus Americana) and the Beaked hazel (Corylus cornuta). However, the European hazel is less tolerant of cold weather and is susceptible to Eastern Filbert Blight (EFB). The American species are cold hardy, tolerate varying soils and are EFB resistant.

To combine the best characteristics of several hazelnut species, the Nebraska Forest Service is working with researchers at Oregon State University, Rutgers University, the University of Nebraska–Lincoln and Arbor Day Foundation. The group received a \$1.3 million USDA grant to breed, propagate, plant and evaluate a range of hybrid hazelnuts. Field trials at Horning Farm near Plattsmouth are testing thousands of crosses for cold hardiness, heat tolerance and disease and insect resistance. To learn more about the Hybrid Hazelnut Consortium, visit arborday.org/programs/hazelnuts/consortium.

Left: These hybrid hazelnuts will be planted at the Nebraska Forest Service's Horning Farm to test for disease resistance and cold hardiness.

Fruit Trees Offer Backyard Bounty

Vaughn Hammond, University of Nebraska–Lincoln Extension Educator-Specialty Crops

Nebraska—the fruit production hub of the Midwest? Today Nebraska is famous for its bountiful production of grain and livestock, but in the late 1800s and early 1900s Nebraska was a nationally recognized fruit-producing state.

Tebraska's move toward fruit production began in the mid-1850s as pioneers crossed the Missouri River at Brownville on the Brownville Ferry. Many settlers homesteaded near the crossing in Nemaha County located in southeast Nebraska.

Publications from the Nebraska Horticultural Society, which began publishing its yearly proceedings in the 1850s, tell us that during this period Judge J.W. Hall of Brownville planted the first apple tree in what was to be the state of Nebraska. The variety was unknown, but reportedly the tree bore yellow fruit claimed to be as sweet as honey and exhibited amazing vigor, resulting in production 17 months after planting. The vigor and fruit quality were attributed to the rich soil of the region, and a fruit production industry was born.

A full complement of both trees and small fruits were produced throughout Nebraska in both commercial and smaller plantings. The majority of commercial production took place in eastern Nebraska with the greatest concentration found in the southeast area of the state. Commercial orchards with hundreds of acres were planted. Most homesteads had groves of fruit trees to supply their needs. Apples, peaches, plums, apricots, pears and tart cherries were planted throughout the region. Small fruits such as raspberries, blackberries, gooseberries and grapes also were produced.

The face of Nebraska's fruit industry began to change with Prohibition, the Great Depression and, most notably, the Armistice Day freeze on Nov. 11, 1940. During the late 1930s into 1940 Nebraska experienced a prolonged drought. The growing season of 1940 was very warm and dry, and the first freeze normally experienced in October never came. Light rain began to fall, nourishing the full-canopied trees, the rain fell heavier and the fruit trees pulled in the moisture. Temperatures dropped overnight from the 60s to below zero causing the trunks of the trees to rupture as the water inside them froze. Hundreds of acres of commercial orchards as well as countless smaller plantings of fruit crops were destroyed. Between cleanup costs and the economic times, few trees were replaced and orchards were converted to row crops.

Today, Nebraskans are showing renewed interest in planting a few fruit trees in their yards or on acreages. Many remember the day when their grandparents grew the fruit that they ate directly off the tree or canned for later use.

Planting Fruit Trees

There are many considerations to make when preparing to plant fruit trees. One of the most important tasks lies in the planning. Fruit trees are long-term endeavors, and it's important to fully understand the growing requirements for them to produce at their fullest. Start the planning process with a site analysis. Factors to consider include soil characteristics, the amount of sunlight the area receives, soil and air drainage, competition from other plants and available space.

Performing a soil test is a critical step that needs to take place early in the planning process. A soil test will determine the pH, fertility levels and amount of § organic matter present in the soil. Guidelines for taking a soil sample to be used for testing can be found 2 in the University of Nebraska-Lincoln publication NebGuide G1740 (ianrpubs.unl.edu). Since fruit crops are deeper rooted than many agronomic crops, the soil

sample should be taken to the depth of 12 inches rather than the more commonly recommended 8 inches. It's important to do this early in the planning to make any amendments that may be needed.

Most fruit crops require full sun for optimum production. Full sun is classified as at least six hours of direct sunlight daily, preferably during midday for most fruit crops. Both soil drainage and air drainage also are important factors to consider. Heavy clay soils that retain water can lead to reduced vigor and death. Reduced air flow can lead to a buildup of cold air which can result in bud loss and, in extreme cases, even plant death.

Once it has been determined that the site is suitable for growing fruit, it's time to begin the fun part, which is choosing what to plant. The options are almost too many because of all the types of fruit and the varieties found within each type that can be grown in Nebras-ka. Apples, peaches, pears, Asian pears, plums, apricots and tart cherries all are tree fruits that can be grown.

Several factors must be taken into account when choosing what to plant. Is the variety adapted to our growing zones? (Nebraska falls into zones 4 and 5.) Will the mature size fit into the site? Is the variety self-fruitful or is a pollinator required?

Mature size may be the most important factor to consider. Mature fruit tree size is classified as standard, semidwarf or dwarf. Tree size can be dictated by either genetics or by grafting. Grafting is essentially splicing two types of trees together—two types of apple, for example. The rootstock is the portion of the tree that contains the roots and the scion wood is the portion that is "spliced" onto the rootstock and becomes the upper portion of the tree. The scion takes on certain characteristics of the rootstock. The rootstock can dictate the mature size of the tree.

A standard tree will have no size modification and may reach a size that is inappropriate for the site. Semidwarf trees reach a height of 8 to 15 feet. Dwarf trees range from 5 to 8 feet tall and ultradwarfs grow no larger than 3 to 4 feet tall. Both the semidwarf and dwarf types need to be supported because they are capable of producing a crop that will be too heavy for the tree to physically support without the help of a stake or specially designed trellis for multiple trees.

Fruit trees are classified as either self-fruitful and not requiring a pollinator, or self-unfruitful and requiring a pollinator. Even if a variety is classified as

self-pollinating, it's a good practice to plant a second genetically different variety that will act as a pollinator. Using a pollinator on a selfpollinating variety will maximize the pollination and result in a superior yield. Fruit trees are classified as either early, mid- or late-season bloomers. Be sure to match the blooming period of the pollinator and the tree that is to be pollinated. Ideally, the bloom period should be the same. A mid-season blooming pollinator can be used to pollinate either an early or late season variety with varying success. An early and a late season pairing would generally not result in successful cross pollination.

Resistance to disease and insect pests is another characteristic to consider when choosing what to plant. Most fruit trees are susceptible to a variety of diseases and insects, but some are more susceptible than others. Choosing resistant varieties

will reduce the amount of work needed to control disease and pests.



Apples, peaches, pears, plums, apricots and tart cherries all are tree fruits that can be grown in Nebraska.



More than 2,500 apple varieties currently are grown in the United States with Red Delicious being the most frequently planted variety. Apples tend to bloom later than many fruit trees so the likelihood that a crop will escape a normal frost and produce fruit is good. Apples can be either self-unfruitful or self-fruitful, with the majority being self-unfruitful and requiring a pollinator. Two commonly planted varieties, Jonathan and Golden Delicious, are considered self-fruitful and also work well as pollinators. Two other commonly planted varieties, Jonagold and Winesap, are poor pollinators and should not be used for the purpose.

Here are three disease-resistant apple varieties suitable for Nebraska:

Liberty is classified as a high-quality "dessert apple." It's resistant to apple scab, cedar apple rust,

fire blight and mildew. Liberty is an annual producer ripening in mid-September; zones 3-7.

- Freedom is a multipurpose apple suitable for both eating and cooking. It is resistant to apple scab and moderately resistant to mildew, fire blight and cedar apple rust. Freedom ripens in late September; it is an excellent keeper and will store until January under proper conditions; zones 3-9.
- Enterprise has excellent fruit quality and shows immunity to apple scab with high resistance to fire blight and cedar apple rust, as well as moderate resistance to powdery mildew. It ripens mid-October and is a good keeper; zones 4-8.

Apple & Squash Bake

2 lbs. butternut squash

1 T. flour

2-3 tart baking apples ½ c. brown sugar

¼ c. melted margarine

½ tsp. mace or cinnamon

Peel squash and apples and cut into in %-inch slices. Arrange squash in a 9 x 9-inch ungreased baking dish. Place apple slices over squash. Mix remaining ingredients and sprinkle over top. Cover with foil. Bake at 350° 50-60 mins. or until cooked through. The squash and apples will remain in slices. wasemfruitfarm.com

Peaches

Peaches are a wonderful fruit and many people aspire to grow them. They come with one major drawback: many varieties bloom early in the spring and their flower buds tend to be susceptible to spring frost and the loss of crop.

Peaches can be grown successfully in zone 5 with a few varieties available for zone 4 production. Choose a variety with a later bloom period, which will reduce the chances of being hit by a late frost common to Nebraska. Most commonly available varieties of peaches are classified as self-fruitful and do not require a pollinator, but as with apples, yields can be increased by using a second pollinating variety.

- Reliance is very cold hardy and produces medium to large yellow-fleshed fruit. It's classified as "freestone" meaning that the flesh readily separates from the pit. It's not as flavorful as hardier varieties, and ripens late July to early August; zones 4-8.
- Red Haven is a freestone peach that produces medium to large yellow fruit. It's a good producer of

firm fruit and is resistant to leaf spot; zones 5-8.

• Loring produces medium-size fruit with yellow flesh. It's a freestone, vigorous grower that usually doesn't require thinning. It has excellent fruit quality; zones 5-8.



Plums are classified as European, Damson or Japanese. All three types can be grown successfully in Nebraska, depending on the variety. European varieties are good fresh and for canning while Damson are more tart and therefore more suitable for cooking. Japanese varieties are susceptible to Nebraska spring frosts and will not produce fruit consistently, but are of very good quality and worth a try. The majority of plums require a second variety for pollination.

- Stanley is European and produces blue-skinned fruit suitable for eating and cooking. It's late blooming and is a heavy producer. The oblong fruit ripens in mid-September; zones 4-9.
- Castleton is European with blue-skinned fruit that is classified as a dessert plum. It's a good producer, ripening in late August to early September; zones 5-9.
- Shiro is a Japanese type with yellow skin and white flesh. Very sweet, it ripens in late July to early August; zones 5-8.

Bruschetta with Plums & Fresh Basil

1 sourdough baguette (24 in.) 4 oz. fat-free cream cheese, whipped 6 c. sliced fresh plums 1 c. fresh basil

Slice baguette into 1-inch-thick pieces. Toast in a 350° oven until brown. Spread each slice with cream cheese. Cut plums into thin slices. Place several slices of plum on each piece of bread. Garnish with basil leaf. fruitsandveggiesmatter.gov



Pears do very well in Nebraska's climate and may be the easiest tree fruit to grow. Most varieties are considered self-unfruitful, and require a pollinator. Although some varieties are classified as self-pollinating, they respond favorably to a second variety acting as a pollinator. Most

pear varieties are excellent pollinators with the exception of Seckel pear pollinating Bartlett. Pear flowers are small compared to other fruiting trees and require more pollinating insects to complete the job.

- **Bartlett** is considered the standard for pears. Very productive with large, juicy fruit suitable for eating or canning, it ripens in late August and is best if picked mature but green, and ripened off the tree. It's somewhat self-fertile but yields better using a separate pollinating variety; zones 4-9.
- Anjou is a green pear with a slightly yellow tinge when ripe. This tree bears large fruit that stores well. It will cross pollinate with Bartlett; zones 4-9.
- Comice is a dessert pear, with large fruit that ripens yellow with a tinge of red. It can be self-fruitful but yields better with cross pollination; zones 4-9.

Pear Brown Rice

3 T. lemon juice 2 tsp. chopped garlic ¼ tsp. ground ginger

3½ c. cooked brown rice ½ c. chopped green onions

¼ tsp. black pepper

½ c. diced celery 3 T. vegetable oil

2 pears, diced

In a small bowl, combine lemon juice, garlic, ginger and black pepper. Add pears to the mixture and set aside. In a large bowl, combine rice and remaining ingredients. Gently fold in pears. Serve immediately or chill in the refrigerator. fruitsandveggiesmatter.gov



Apricots tend to be one of the most frost-susceptible tree fruits grown in Nebraska. Site location plays a large role in the fruiting success of apricots. Sites with good air drainage that allow cold air to flow out and away from the trees have the greatest success. Good air drainage coupled with choosing the proper variety helps increase the chances of harvesting a crop, although it's unlikely a tree will produce a crop on a yearly basis.

- Hargrand is very hardy and blooms mid- to late April, this variety produces large freestone fruit with good flavor. It has very good disease resistance and is self-fruitful; zones 4-7.
- Sungold also is very hardy and blooms mid- to late April. It produces medium-size freestone fruit and is self-unfruitful with limited disease resistance; zones 4-8.

Savory Fresh Apricot Bites

4 oz. fat-free cream cheese, softened 12 fresh apricots, halved ¼ c. pistachios, finely chopped

Stir cream cheese until smooth; pipe or spoon into apricot halves. Top with pistachios. Serve as appetizer, snack or dessert. fruitsandveggiesmatter.gov



Tart cherries tend to be very good producers. Flowering takes place later in the spring, allowing crops to be produced most years. Trees are less than 15 feet tall with some varieties such as North Star only growing to 5 feet. The major problem with tart cherries is that birds love them! As soon as they are ripe the birds move in, so be prepared to harvest when you start to see that the birds are interested in them.

Tart cherries are considered self-fruitful, so a second variety is not needed for pollination, although a second variety can be beneficial. If a pollinator is used, it's important to know that a tart cherry and a sweet cherry will not cross pollinate.

Producing sweet cherries in Nebraska is difficult. Growing conditions are unfavorable and the fruit tends to be small. It's also susceptible to fruit rot.

- Montmorency is considered the standard for tart cherries. It is very productive, bearing firm mediumsize, bright red fruit. The tree blooms in early May and fruit ripens in July; zones 4-9.
- Balaton blooms and yields 7 to 10 days after Montmorency. It is less susceptible to bacterial leaf spot than Montmorency; zones 5-8.
- Northstar is a very cold hardy, semidwarf to dwarf tree, 6-10 feet tall. It has small, deep red fruit with red flesh; zones 3-8.

Cherry Banana Bread

¾ c. sugar ½ stick margarine 1½ c. mashed bananas

½ tsp. salt 2 tsp. baking soda

1 c. drained, pitted & cut-up sour cherries

wasemfruitfarm.com

2 c. flour

Cream sugar and margarine. Add eggs, cherries and bananas. Mix dry ingredients together and add to first mixture. Bake in two 9 x 4-inch greased bread pans at 350° for 45 mins. or until toothpick comes out clean.

Species for Edible Landscapes

This table lists woody plants that produce fruits and nuts with superior qualities (larger fruit, sweeter taste, smaller seeds, thinner shells, etc.) for humans and wildlife alike.

Most of the fruits listed can be eaten fresh, or processed for jellies, jams, syrups, juices or wine. Nuts also can be eaten fresh or used in cooked dishes and baked goods.

Species Cultivars NUTS 'Kenworthy' 'Mitchell' **Butternut** Chestnut, Chinese Ginkgo 'Salem Dandy' 'Salem Lady' 'Skinner' 'Grand Traverse' Hazelnut, Hybrid Hickory, Shagbark 'Felger' 'Grainger/Heisey' 'Porter' 'Sinerling' 'Silvis 303' 'J. Yoder No. 1' Hickory, Shellbark 'Eureka' 'Keystone' 'Nieman' Pecan. Northern Many Walnut, Black Many **FRUIT** 'Moongold' 'Sungold' 'Manchu' **Apricot** Buffaloberry 'Gold-eye' 'Sakakawea' Cherry, Nanking 'White' standard red variety Cherry, Sand 'Hansen' 'Sioux' Cherry, Black None Chokeberry 'Nero' 'Viking' 'Boughens Chokeless' 'Robert' Chokecherry 'Pickup's Pride' 'Goertz' 'Garrington' 'Schubert' or 'Canada Red' Cranberry, Highbush 'Wentworth' 'Hahs' Currant, Black (Buffalo) 'Crandall' 'Gwen's Buffalo' 'Jostaberry' Currant, Red 'Red Lake' 'Rovada' Currant, White 'White Imperial' 'White Versailles' 'Elegant' 'Redstar' 'Yellow' 'Redstone' Dogwood, Corneliancherry Elderberry 'York' 'Adams' 'Pixwell' 'Welcome' 'Clark' Gooseberry Grape, Riverbank (Wild) None Jostaberry 'Jostagranda' 'Jostina' 'Red Josta' Kiwi, Hardy Many 'Johnson' 'Weisman' Mulberry Jersey Tea None **Pawpaw** Many 'Hicks' 'Meader' 'Pieper' 'Runkwitz' Persimmon Plum, American (Wild) None Raspberry, Black or Red Many Rose, Wild Some 'Smoky' 'Northline' 'Pembine' 'Nelson' Saskatoon (Juneberry) 'Thiessen' 'Martin' Honeywood'

*C=Cover F=Food B=Browse U=Unknown

Form	Mature Width	Mature Height	H. Zone	# Wildlife Species Benefit	Wildlife Use*	Other Characteristics
Tree	40'	40'-70'	3 to 7	21	F,C	Susceptible to canker disease
Tree	50′	40'-60'	4 to 8	7	F,C	Prickly husk
Tree	40'	60'	4 to 5	U	U	Fruit has offensive odor, male & female required
Shrub	10'	15'	4 to 5	24	F,C,B	May spread by suckers
Tree	25′	60'-80'	5 to 8	34	F,C	Unique, mellow flavor
Tree	40'	60'-80'	5 to 8	34	F,C	Unique, mellow flavor
Tree	55′	70'-100'	4 to 9	U	F	Smaller than southern pecans but sweeter
Tree	60'-120'	100'-150'	4 to 9	24	F,C	Inhibits growth of some plants
Shrub	20'-25'	20'-35'	4 to 6	U	F	Male and female plants required
Shrub	16'	12'-18'	3 to 5	7	F,C	Grows along prairies, pastures
Shrub	10'-15'	6'-10'	2 to 7	49	F	Prone to rabbit damage
Shrub	4'-6'	4' -6'	3 to 6	U	F,C	Needs to be stressed to fruit well
Small Tree	60'	15'	3 to 5	81	F,C	Also known as Rum Cherry
Shrub	5′-8′	4'-10'	5 to 8	7	F,C	Persistent winter fruit
Small Tree	15'-18'	20'-30'	3 to 5	81	F,C,B	Wild variety widely distributed
					.,,,,	Most named cultivars only available in Canada
Small Tree	15'-35'	20'	3 to 5	81	F,C,B	
Shrub	12'	12'	3 to 5	34	F	Offensive odor when first processed
Shrub	2'- 4'	4' -7'	3 to 5	31	F,C	Wild buffalo currant sweeter than wild black currant
Shrub	5′	5'	2 to 7	U	F,C	
Shrub	5′	5'	2 to 7	U	F	
Small Tree	15'- 25'	20'-25'	4 to 9	F	F	Makes excellent jam
Shrub	6'-12'	6'-10'	3 to 6	79	F,C	Spreads by suckers, flowers used for tea
Shrub	3′	5'	3 to 5	31	F,C,B	Some varieties of gooseberry have spiny stems
Vine	30'	NA	3 to 5	75	F,C	Easily started from seed
Shrub	6'	6'	3 to 8	U	F	Cross between gooseberry and currant
Vine	20'-25'	15-20'	4 to 9	U	F	Male and female plants required
Tree	35'-50'	35' - 50'	4 to 8	44	F,C	Invasive seedlings, male and female plants required
Shrub	3.5'	3'	4 to 8	10	F	Fixes nitrogen, used for tea
Small Tree	15'-20'	15'-20'	5 to 8	U	F	Fruits having yellow flesh are usually more rounded
Small Tree	20'-35'	35' - 60'	4 to 9	U	F	Fruits ripen from September to November
Small Tree	20'-35'	15' - 25'	3 to 8	16	F,C	Invasive, suckers
Shrub	4'-6'	1.5-8'	4 to 5	91	F,C	Fruit from early to midsummer
Shrub	4'	7'	4 to 5	24	F	Winter persistent fruit
Shrub	8-10'	5'-15'	2 to 5	58	F,B	Sensitive to foliar diseases, insects

Source: "Edible Woody Landscapes for People and Wildlife" by Scott Josiah, Nebraska Forest Service, and Jeanne Lackey, Arbor Day Foundation

Nebraska Statewide Arboretum, Inc. University of Nebraska–Lincoln 102 Keim Hall P.O. Box 830964 Lincoln, NE 68583-0964 Non Profit U.S. Postage PAID UNL



Lots of Ways to Connect!

To receive our monthly e-newsletter filled with garden-related articles, ideas and photos, send an email to klarsen 1@unl.edu. Visit us on the Web at arboretum.unl.edu, where you'll find plant and landscape information and recommendations, public gardens to visit and other events and resources for Great Plains gardeners.

For information on how to become an Arboretum member, call (402) 472-2971, email cpaxton1@ unl.edu or visit us on the Web at arboretum.unl.edu.

This newsletter is a benefit of membership and published by the Nebraska Statewide Arboretum Inc., with a portion of the printing generously donated by Jacob North.





Become a fan on Facebook & Twitter!
facebook.com/NEArb
twitter.com/NEarboretum



Selected Resources

- Cornucopia II: A Source Book of Edible Plants. 1998. Steven Facciola. Kampong Publications, Vista, Calif.
- Designing and Maintaining Your Edible Landscape Naturally. 1986. Robert Kourik. Metamorphic Press, Santa Rosa, Calif.
- Discovering Profits in Unlikely Places: Agroforestry Opportunities for Added Income. 2000. Scott Josiah. University of Minnesota Extension Service, St. Paul, Minn. www.extension.umn.edu/distribution/naturalresources/DD7407.html Edible Landscape Plants and Trees. 2000. Fern J. Ritchie. Ritchie Unlimited Publications, Springfield, Ore.
- Fruit, Berry and Nut Inventory, 4th Edition. 2009. Kent Whealy. Seed Savers Exchange Publications, Decorah, Iowa.
- Landscaping for Wildlife. 1987. Carol L. Henderson. Minnesota Dept. of Natural Resources, St. Paul, Minn.
- The Backyard Berry Book. 1995. Stella Otto. Chelsea Green Publishing Company, White River Junction, Vermont.
- Edible Landscaping, 2nd Edition. 2010. Rosalind Creasy. Sierra Club Books, San Francisco, Calif. Rosalind Creasy also wrote the Edible Garden Series, including *The Edible Flower Garden*. 1999. Periplus Editions Berkeley, Calif. For a complete listing of the Edible Garden Series, search on Rosalind Creasy at www.amazon.com and click on Amazon's Rosalind Creasy Page. Her newest book is *Recipes from the Garden*. 2010. Tuttle Publishing, North Clarendon, Vermont.
- Uncommon Fruits Worthy of Attention. 1991. Lee Reich. Addison-Wesley Publishing Co., Inc. Reading, Mass.

Front cover photos (l. to r.): 'Fairy Tale' eggplant: earthmother-intheraw.blogspot.com; Persimmon: Kim Starr, U.S. Geological Survey, Bugwood.org; Serviceberry: Chris Evans, River to River CWMA, Bugwood.org; 'Bright Lights' Swiss chard: Terroir Seeds