Old World Fruits in New World Gardens Stacy Ryerson UCCE Master Gardener and Master Food Preserver of Amador County

Years ago, as a moderator for an online food/cooking discussion group, most questions posed to the group were familiar topics. However, one day we were all thrown a real food mystery curve ball, "Does anyone have a recipe for Hedgerow Jelly?" Sparks flew from our keyboards as we all messaged each other asking, "What is Hedgerow Jelly? And what does a hedge have to do with jelly?"

Little did I know that finding answers to these questions would lead me on a great adventure in horticulture and its intersection with ancestral cuisines from long before the birth of this nation. First, to define hedgerow, a term from before the 12th century:

Hedgerow, fence or boundary formed by a dense row of shrubs or low trees. Hedgerows enclose or separate fields, protect the soil from wind erosion, and serve to keep cattle and other livestock enclosed. To lay a hedge, the trunks of closely planted saplings of species suitable for hedgerows (e.g., hawthorn) are cut a good portion of the way through and the sapling laid down on the ground. New growth rises vertically, forming an impenetrable mesh of branches. In Britain, hedgerows have been a feature of the countryside since the enclosure movement and provide a habitat for numerous songbirds and small animals. As large-scale mechanized farming has become dominant, hedgerows are being removed to combine small fields into larger ones. (1)

For those who love history, "The Fine and Bloody Art of Hedgerows" and "Battle for Britain's Iconic Hedgerows" were lovely reads about hedgerows by Richard Conniff. (24) (25)

Moving on to locate Hedgerow Jam recipes, I quickly discovered that many, if not most, of the various ingredient fruits were completely alien names to me. How could someone make this, as we didn't have these fruits available, or did we? I couldn't help but wonder why the knowledge of these Old World fruits, which were once considered standard fare in ancestral diets, had somehow failed to make the crossing on immigrant ships. Today, even avid gardeners and foodies alike are unfamiliar with the identification and uses of most of these Old World fruits. Hedgerow Jelly/Jam/Sorbet/Cobbler/Pie recipes can be found on the internet, and their ingredient lists contain various combinations of rosehips, blackberries, bullaces, haws, quinces, bilberries, elderberries, sloes, hazelnuts, rowans, damsons, crabapples, and bramleys.

The rosehips, blackberries, quinces, elderberries, hazelnuts, damsons, and crabapples were familiar fruits, but the bullaces, haws, bilberries, sloes, rowans, and bramleys had me completely stumped. What were these things? After some research, and a little experimentation, here's what I've learned about hedgerow fruits, and many other obscure edible fruits that you've probably never heard of nor seen in your neighborhood garden center:

Rose Hips: All rose hips are edible, but not all rose hips taste good. According to Liz Druitt, The Organic Rose Garden, "The roses with the best tasting hips are: *Rosa canina* and *Rosa rugosa*

rubra, Hansa, Old Blush, and Dortmund." *Eglantine* rose hips are the ones used to make "tea" in Europe, with foliage the fragrance of apples. Isn't that delicious in itself? *Rosa villosa* (The Apple Rose) has a wonderful flavor and hips that are very easy to clean, ripen in July, are the deepest red, and are as large as the end of one's thumb making them dual purpose for easy harvest and a real conversation piece in the garden. *Rosa canina* was used in England during World War II as a source of vitamin C - made into a syrup and used medicinally. After my experimentation with rose hips I've learned don't wait until fall; the flesh of the hips will have dried out too much because the developing seeds take up the moisture. I harvest hips as soon as they fully color, but long before the plant defoliates. I cut each hip in half, then using a tiny 1/8 tsp metal measuring spoon, scoop out the seeds and ALL the hairy fibers from the center. Prepare the cleaned flesh according to your recipe. (21)

<u>Haws</u>: *Crataegus monogyna* Hawthorn is a species native to Europe, northwest Africa and western Asia. It has been introduced in many other parts of the world where it has become invasive. Other common names include May, Mayblossom, Maythorn, Quickthorn, Whitethorn, Motherdie, and Haw. (2) September and October are the height of Haws picking season, dwindling in November, and disappearing by the end of December. (3) (23)

Elderberries: Sambucus spp. In case you are unfamiliar, elderberries taste terrible raw, but the addition of heat and sugar transforms them into a lovely jelly. Mix them with other fruits for unique jellies, or equal parts with dry red wine. Consider adding herbs such as fine chopped rosemary, and you've got a savory jelly that is delightful served with roasted poultry or especially lovely with roasted wild duck. We have wild elderberries growing everywhere here in the foothills, but there are many more flavorful and higher yield hybrids available through nurseries, most often found online. One can now find various species with dark foliage, fine leaved foliage, and pink flowers that will enhance the ornamental landscape, such as Sambucus nigra 'Eva' BLACK LACE. (4) (22)

Sloes: Prunus spinosa "Blackthorn" or "Sloe" is a species of Prunus native to Europe, western Asia, and northwest Africa. It is also naturalized in New Zealand and eastern North America. (5) The Sloe has many uses: juice of the berries dye linen a reddish color that washes out to a durable pale blue; the wood takes a fine polish and is used for tool handles and canes; straight blackthorn stems have traditionally been made into walking sticks or clubs (known in Ireland as a shillelagh); thorny, shrubby trees make a great fence; sloe fruit are used for jams and liqueurs; and lastly the sloe tree is a ready food source for many varieties of butterflies. In spring it is completely covered with white flowers (happy native pollinators!), very similar to the wild yellow cherry plums seen growing on roadsides, although the sloe tree is somewhat shorter, bushier, and the flowers are a little creamier.

<u>Damsons</u>: *Prunus domestica* ssp *insititi*. "The main characteristic of the damson is its distinctive rich flavour; unlike other plums it is both high in sugars and highly astringent. The tree blossoms with small, white flowers in early April in the Northern hemisphere and fruit is harvested from late August to September or October, depending on the cultivar." (28)

<u>Bullaces</u>: *Prunus domestica* ssp *insititia* var *nigra*. "Unlike nearly all damsons, bullaces may be either "white" (i.e. yellow or green) or "black" (i.e. blue or purple) in colour, and ripen up to six

weeks later in the year. Though smaller than most damsons, bullaces are much larger than the closely related sloe. Their flavour is usually rather acid until fully ripe." (27)

<u>Hazelnuts</u>: Hazelnut is the nut of the hazel and therefore includes any of the nuts deriving from species of the genus *Corylus*, especially the nuts of the species *Corylus avellana*. It is also known as cobnut or filbert. (6) Growing hazelnuts is an opportunity grow and harvest nuts at home without having to plant trees that will grow huge, or will take years before they produce. Hazelnuts can be grown from USDA zones 9 up into sheltered areas of zone 3. The cooler regions should stick to the American filbert variety as the European type is less cold-tolerant. Hazelnuts or American filberts are native to the American Midwest, and grow in fertile, well drained soil. Once established they will produce heavily, consistently, on an attractive hedgerow that grows about 10 feet tall and wide.

Rowans: Sorbus spp. The Rowans or Mountain Ashes are shrubs/trees in genus Sorbus of the Rosaceae Family. They are native throughout the cool temperate regions of the Northern Hemisphere, with the highest species diversity in the mountains of western China and the Himalayas. The name Rowan was originally applied to the species Sorbus aucuparia, and is also used for other species in Sorbus subgenus Sorbus. Rowans are unrelated to the true ash trees, which belong to the genus Fraxinus, family Oleaceae, though their leaves bear superficial similarity. (7) American and European Sorbus ashes look very similar and live to around 25 or 30 years. The American has red stems near the end of branches, the European has yellowish stems, however they are used the same way. The American Mountain Ash, Sorbus americana, is found in the wilds of eastern North America, Newfoundland, Nova Scotia, south to New Jersey, Pennsylvania, the mountains to South Carolina and Georgia, west to Minnesota and eastern North and South Dakota. Elevation seems to be the key, seen rarely below 2000 feet. (8)

<u>Crabapples</u>: *Malus spp*. "As cooperative extension specialists and researchers based in Ohio, we're often asked to recommend small (under 25 feet), low-maintenance trees that provide landscape interest for three or four seasons. Our advice is always unanimous: crabapples! Among the showiest of spring bloomers, crabapples are also wonderful foliage plants in summer and fall, and they provide beautiful fruit displays late in the season. Furthermore, they come in a range of sizes and forms, many of which create interesting silhouettes in the winter landscape. Early apple planting in America wasn't to obtain an apple for eating, but rather an apple for drinking ... hard cider, that is. Crabapples have other uses too, of course. They often contain high amounts of pectin, which helps to firm up jellies, jams, and apple butter. They are also valuable to wildlife. True to their rugged, mountainous origin, crabapples are tough and adaptable. Most are hardy from USDA zones 4 to 7." (9) Crab apples are not without their problems, so choosing a variety suited to your zone is important. (10)

Malus hupehensis, is a scab-resistant tree that forms masses of white flowers opening from pink buds. The fruits are red, cherry-sized, coinciding with spectacular autumn/fall leaf color. For a sheer gorgeous golden glow in the garden, look no further than *Malus x zumi* 'Golden Hornet', whose fruits often hang on right through the winter to provide an invaluable food source for hungry birds. The fruits almost glow in the low light of autumn/fall. One of the best crabs for culinary use is *Malus* 'Pink Glow', a smaller, well-behaved tree that follows its white blooms

with large, dark pink, almost plum-sized fruits that are ideal for cooking. This tree is also a great choice if you don't have much space to spare but still want a reliable, usable crop.

Bramleys: *Malus domestica*. This is a very large, sour, cooking apple. "The tree is resistant to apple scab and mildew and does best when grown as a standard in somewhat heavy clay soil." (26)

<u>Bilberries</u>: *Vaccinium myrtillus L*. "Bilberry has been used for centuries, both medicinally and as a food in jams and pies. It is related to the blueberry and is native to Northern Europe. Bilberry fruit contains chemicals known as anthocyanosides, plant pigments that have excellent antioxidant properties. They scavenge damaging particles in the body known as free radicals, helping prevent or reverse damage to cells. Antioxidants have been shown to help prevent a number of long term illnesses, such as heart disease, cancer, and an eye disorder called macular degeneration. Bilberry also contains vitamin C, which is another antioxidant." (11) (12) USDA zones 3-7 (13)

Serviceberries: A North American native fruit that is almost unknown to most people. Amelanchier spp. "Amelanchier, also known as shadbush, shadwood or shadblow, serviceberry or sarvisberry, or just sarvis, wild pear, juneberry, saskatoon, sugarplum or wild-plum, and chuckley pear is a genus of about 20 species of deciduous-leaved shrubs and small trees in the Rosaceae Family. Amelanchier is native to temperate regions of the Northern Hemisphere, growing primarily in early successional habitats. It is most diverse taxonomically in North America, especially in the northeastern United States and adjacent southeastern Canada, and at least one species is native to every U.S. state except Hawaii." (14) Serviceberry is hardy in USDA zones 4-9. Serviceberry has a number of applications in the landscape as a screening plant, blending into shrub borders, group plantings, specimen plantings, and used in naturalized settings such as woodland edges. Serviceberry also provides a food source for wildlife. (15)

<u>Medlar</u>: *Mespilus germanica*. Although a little known fruit in the U.S., medlars have been grown in Europe for thousands of years. They are attractive, small, self-fertile trees that grow to 10' with healthy foliage, white flowers and unusual 1 inch diameter round fruits that are collected in the fall, after the first frosts. When picked, the fruits are much too hard to eat immediately. If allowed to ripen for a few weeks in a cool lighted place they undergo a process called 'bletting' and become soft, spicy and very rich, with a cinnamon-apple sauce flavor. Fruit is eaten raw or made into jelly. USDA zone 5-9. Medlars have mixed reviews by those who have tasted them. Some love them, some think they taste of fruit gone 'off'. The tree is lovely in the landscape nonetheless. (16)

<u>Mulberry</u>: *Morus spp.* The Mulberry is a great ornamental tree for the backyard that also produces delicious fruit, lovely heart shaped leaves, and is a fast grower. Trees that are barely 4 feet tall will yield fruit, which is rare in the tree fruit world. Mulberry trees are fast growing trees, which is a bonus if you want shade, and are growing a fruitless variety. If fruit is your goal then plant a fruiting variety, and while it is a messy tree if allowed to get tall, or planted near a patio or sidewalk, there is nothing to say you can't prune a fruiting mulberry to stay 6'-8' tall so it can be easily hand picked. Trees are self fertile, and yield wonderful, sweet, black cherry flavored fruit that is as good raw in fruit salad as it is made into pies or jams. Depending on the

variety, fruits range in color from white, pale pink, red, and black. Some varieties are smallish, about the size of wild blackberries, however newer hybrids can bear fruit up to 2" long. The Illinois Everbearing and the White Mulberry are hardy in USDA zones 4-9. The *Morus nigra* is less hardy, preferring USDA zones 8-10. (17)

Pawpaw: Asimina triloba. Another North American native fruit tree that tastes so good you will think it came from Hawaii. It remains relatively unknown to those who haven't lived in its native range from "New York west to southeastern Nebraska, and south to northern Florida and eastern Texas. The pawpaw is a patch-forming (clonal) understory tree found in well-drained, deep, fertile bottom-land and hilly upland habitat, with large, simple leaves and large fruits. The paw paw is the largest edible fruit indigenous to the United States." (29) It grows to 10' tall in the cooler northwest, in warmer humid summer locations can grow to 25' tall, with long, tropical looking leaves. If you decide to grow your own pawpaws, choose a planting site with a slightly acidic (pH 5.5 to 7.0) soil that is well-drained as trees do not survive heavy soils that become easily waterlogged. Trees require shade for the first year, but grow best in full sun thereafter. Pawpaws can be grown from seed, however seedling growth is slow and trees usually do not bear fruit until 5-8 years old. The better option is to buy grafted trees from nurseries that will bear fruit in 3 years. Two different cultivars are needed to ensure cross pollination and fruit set. Some of the commonly available cultivars include 'Sunflower', 'Shenandoah', 'Overleese', 'PA-Golden', 'Wells', and 'NC-1'. Plant trees eight feet apart and water them during dry periods throughout the growing season. Fruit ripens in late September and October. They produce greenish, mango looking, oblong fruit 3 to 6 inches long with a pulp that tastes like vanilla custard. The pulp has a few big seeds that are easy to spoon out and discard or plant to grow additional trees. The tree has a tap root and grows slowly at first but soon makes a great exotic backyard fruit producer. USDA zones 5-9. The reason we never see pawpaws in the markets is that they ripen very quickly and will not survive shipping in satisfactory condition. Some say a pawpaw tastes like a ripe papaya crossed with a cherimoya. I would have to agree. They are that good! There are a few online sites where one can order them fresh. I've done it and was blown away at how close to tropical fruit loveliness can be had off a native North American tree. (18) (19)

Aronia: Another relatively unknown North American native fruit. "Photinia melanocarpa, formerly Aronia melanocarpa. A deciduous woody shrub in the Rosaceae Family that is gaining popularity in the home garden. It is native to the eastern United States and is hardy to USDA zone 3. Its popularity stems from increased interest in phytonutrients or plant compounds that have beneficial effects on human health. Aronia is rich in antioxidants, a chemical known to block free radicals that may damage cells and lead to cancer. Aronia can be grown in full sun to partial shade. However, full sun is recommended for best crop yields and uniform fruit ripening. Aronia is adapted to a wide range of soils. Plants perform best in well-drained soils. However, plants tolerate poorly drained or excessively drained soils. They do not require overly fertile soils. Slightly acidic soils with an organic matter content of two to three percent are preferred. Aronia has few major pest problems. Because of the plant's adaptability and lack of serious pests, aronia is relatively easy to grow for beginning gardeners or for those with poor growing conditions. Charming white spring flowers develop into clusters of glossy, round, violet-black berries with a strong, tart flavor. In fall, the foliage changes to striking red. Although Aronia is native to the eastern U.S, the best varieties were bred in Europe. Plants are self-fertile." (20)

When considering adding to your ornamental landscape, or your edible landscape, give some thought to these unique fruits that will add interest to your garden and some new tastes in your kitchen. As with anything, be mindful that you have the accurate botanical identification before eating anything new and unknown. I've tried to include as many good photo links to help you envision how these fruits might fit into your home landscape. Make a jam, jelly, sorbet, cobbler, or a pie. Whatever you choose, bon appetit!

UCCE Master Gardeners and Master Food Preservers of Amador County are located at the UC Cooperative Extension Office in the Amador County GSA building, 12200-B Airport Road in Martell. For gardening questions, contact the UCCE Master Gardeners from 10am to noon, Tuesday through Thursday, 209-223-6838; or e-mail us at mgamador@ucanr.edu. For food preservation questions, contact the UCCE Master Food Preservers at 209-223-6857; email us at acmfp@ucdavis.edu; or visit us at http://ucanr.edu/mfpcs.

- (1) "hedgerow". *Encyclopædia Britannica. Encyclopædia Britannica Online.* Encyclopædia Britannica Inc., 2015. Web. 14 May. 2015 < http://www.britannica.com/EBchecked/topic/1057034/hedgerow>.
- (2) http://en.wikipedia.org/wiki/Crataegus monogyna
- (3) http://www.foodgeeks.com/encyclopedia/669
- (4) http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=c596
- (5) http://en.wikipedia.org/wiki/Prunus spinosa
- (6) http://en.wikipedia.org/wiki/Hazelnut
- (7) http://en.wikipedia.org/wiki/Rowan
- (8) http://www.eattheweeds.com/mountain-ash-rowan/
- (9) http://www.bbg.org/gardening/article/marvelous malus
- (10) http://www.clemson.edu/extension/hgic/plants/landscape/trees/hgic1007.html
- (11) http://umm.edu/health/medical/altmed/herb/bilberry
- (12) http://extension.uidaho.edu/bonner/files/2013/09/NIFRC HuckleberriesandBilberries.pdf
- (13) http://www.pfaf.org/user/Plant.aspx?LatinName=Vaccinium+myrtillus
- (14) http://en.wikipedia.org/wiki/Amelanchier
- (15) http://www.clemson.edu/extension/hgic/plants/landscape/trees/hgic1026.html
- (16) http://www.ipmimages.org/browse/subthumb.cfm?sub=40177
- (17) http://www.ipm.ucdavis.edu/PMG/GARDEN/PLANTS/mulberry.html
- (18) http://ipm.missouri.edu/meg/2010/9/Pawpaws-A-Taste-of-the-Tropics/
- (19) http://www.ipm.iastate.edu/ipm/hortnews/2014/11-14/pawpaw.html
- (20) http://www.ipm.iastate.edu/ipm/hortnews/2015/02-13/aronia.htm
- (21) http://www.ipm.iastate.edu/ipm/hortnews/2010/2-3/rosehips.html
- (22) http://www.ipm.ucdavis.edu/PMG/GARDEN/PLANTS/elderberry.html
- (23) http://www.ipm.ucdavis.edu/PMG/GARDEN/PLANTS/hawthorn.html
- (24) https://www.goodreads.com/author_blog_posts/3615970-the-fine-and-bloody-art-of-hedgerows
- (25) http://www.smh.com.au/environment/conservation/battle-for-britains-iconic-hedgerows-20100903-14uc6.html
- (26) https://en.wikipedia.org/wiki/Bramley_apple
- (27) https://en.wikipedia.org/wiki/Bullace
- (28) https://en.wikipedia.org/wiki/Damson
- (29) https://en.wikipedia.org/wiki/Asimina triloba