



Fruits of the Humboldt Bay

A Community Sourced Planting Guide

Edited by Sean Armstrong





This book is intended to help plant:

Permaculture Food Oases **Fruit Privacy Hedge**
Public Park Plantings **Edible Native Forest**
Wedding Arbor **Back-Yard Orchard**
Fruits for the Grandkids **Mushrooms**
Citrus Grove **Hot Weather Crops**

In Our Coldest of Climes

How was this guide written?

This booklet was written by **interviewing more than 40 experts**: local farmers, lifelong gardeners, professional orchardists, nursery owners, indigenous wildcrafters, and permaculture practitioners, all following organic or better practices to produce the results they report. Here is their hard won wisdom intended to help you grow organic, unfussy fruits and vegetables outdoors—greenhouse plants are not discussed yet in this guide. For those of you who feared it was impossible to grow on the Bay ripe oranges, mulberries, seven(!) types of grapes, sweet corn and tomatoes, plums with no leaf curl, please join me in thanking the following community members for their knowledge:

The inspiring Roberts Way urban food forest of **Bradley Thompson** and **Karen Shepherd**, **Shail Pec-Crouse's** tireless experimentation with deep sustainability, **Jacques and Amy Neukom's** Edenic organic CSA fruit farm and heirloom preservation efforts, **Rita Jacinto & Laurie Levey's** of **Flying Blue Dog Nursery** for their coastal heirloom annuals expertise and seed saving leadership, **Sam Polly** two generations of fruit farming family and arborist work, **Richard Engel's** photos of his and **Basilias** lovely Sunset garden on Western, **Kevin Johnson and Lisa Brown** solutions-oriented fruit and nuts orchard, **Kathy Marshall and Rocky Drill's** deep straw-mulched raised beds with anti-slug copper strips and glued-down pennies, Wiyot Cultural Liaison and Founding Tribal Chair **Cheryl Seidner** for her childhood recollections, the beautiful and inspiring **Potowat Health Village** restored native landscape and CSA farm, **Eric Johnson** of **Samara Nursery** for his comprehensive native plants knowledge, **Isaiah Webb's** healing food farming at the Mad River Hospital, **Eddie Tanner's** first class strawberries at **DeepSeeded Community Farm**, the inspiring and educational food forest of **CCAT**, **Marsh Commons'** fragrant citrus and blueberry hedge, **Karen Davidson's** berry vines for the grandchildren, **Fawn Scheer and Erin Derden-Little** creations in the **Greenway Gardens** and **Redwood Roots**, **Tyler John Waterman's** healthy hops at his Farmhouse homestead, **Heather Plaza and Johnny Gary's** dedication to doing it right at **Organic Matters**, **Marc Robbi's** pioneering work at **Rolling River Nursery**, **Marianne Cipolla and Craig Knox's** urban orchard, **Kelly Barrett's** historic orchard and blueberries, **Don Nielsen's** dedication to local heritage in the Bottoms, the inspiration of the gardens at the **Garden House**, **Wayne Hawkins** tending HSU's many landscaping fruit trees, **Richard Hansis'** patient success with practicing sustainability, **Kashi Albertsen's** luscious berry gardens, **Mark DuPont's** mastery in the heirloom tree nursery at permaculture paradise of **Sandy Bar Ranch**, **Marnin Robbins and T Griffin** beautiful backyard orchard in Windsong, **Ino Riley's** second generation local fruit growing wisdom and sweet strawberries, **Paul Guintoli's** fourth generation local farming wisdom, **Susan Ornelas'** spectacular green tree grape and leadership at **Bayside Community Park**, **Xandy Grube** for revering native trees, **Dick LaForge** for inspiring generations of students, **Lisa Zierer** for gorgeous tomatoes, **Xandi Manns** for her commitment to public plantings, and **Michael Winkler** sidewalk peaches and generosity to the community.

Editor: Sean Armstrong is the Board President of the **Humboldt Bay Center for Sustainable Living** (HBCSL), a happy 17 year volunteer with CCAT, Partner in the Net Zero Energy residential design firm Redwood Energy, co-owner of Tule Fog Farm and part of a family of passionate fruit eaters. **Please contribute your own experiences to the next edition of this local growers guide to sean@redwoodenergy.net.**

Humboldt Bay's Exceptionally Cold Weather

At 65 degrees Fahrenheit, the Humboldt Bay Bottoms has the nation's coldest average summertime temperature. "Summer" is a fleeting few hours of warmish sun that can happen any day of the year on the Humboldt Bay, although usually not in June or July. Summer's chilly winds smell like the 50 F cold California Current flowing just a few miles from the Humboldt Bay. Sunny weather to ripen fruits arrives more dependably in August, but huge plumes of fog evaporate off the ocean surf and the shallow and chilly Humboldt Bay and can swallow a clear day. Even clear nights soon bring Tule fog, moisture condensing close to the ground as the soil loses its heat to the clear night sky with no mirror of silvered clouds to bounce infrared heat back to the ground. The air is 70-100% humid at the Bay year round, so at night the chilled air precipitates on your plants, all the while looking like a ghostly-silvered blanket of fog wrapping the night in romance and magic.

Winters on the beautiful Bay average 45 degrees with cold sunshiny days punctuated by Pacific storms or thick wet clouds that dump their rain and snow upland and inland. The clearest cold nights bottom out on the Bay at 27 Fahrenheit, while the warm winter days heat up to 65 Fahrenheit. Winters are too warm even for snow, but squall and drizzle 40-45" inches of rain from October to July. Many Mediterranean plants like oranges and avocados thrive all over California but just wither and die in the ground here, excepting a few rare hardy varieties or those treated to a greenhouse. Our region is home to one of our nation's largest flower farms, Sun Valley, because bulbs dependable flower where the weather is like the Spring year round.

Unfortunately the Bay Bottoms' wet weather is taxing on most sugary fruit crops. The moisture partially dissolves the thin tissues and can swell a fruit, then setting the tale for parasitic fungal rusts, molds, smuts, and insect infestations feasting on wetness weakened fruits. Luckily we have access to excellent disease resistant varieties from other cool, moist places like Patagonia, the Mediterranean, New Zealand, Japan, Australia, Scandinavia, the highland of Peru, Russia, and England.

Trees



'Avalon Pride' and 'Frost' Peaches
(*Prunus persica*)

"**Avalon Pride**," a flavorful semi-freestone fruited on a hillside on Old Arcata Road at the same elevation as Founders Hall at HSU (~180') in mid-July, as promised by the catalog. This is a new peach to add to the prove "**Frost**" variety juicy, sweet, somewhat fibrous peaches. "Frost" peaches do well in relatively wet soils and even when only getting sunshine half the day. Avoid dwarf rootstock to grow healthier peach trees. Large, productive "Frost" variety trees are growing in Arcata at 11th and K St., Roberts Way, Western Ave, Marsh Commons and Foster Ave.



Trovita Orange
(*Citrus sinensis*)

There is an orange that fruits around the Humboldt Bay! **Kumquats, Satsumas and Clementines** are notably unsuccessful unless inside a greenhouse, but the **Trovita** is a hardy, thick skinned orange that ripens and fruits in San Francisco, and a local pruner ate a Trovita orange from a container-grown tree in the University Heights area of Arcata. Plant it on the sunny side of the house on a small hill of black, well drained soil. Cover with a sheet or plastic on the coldest, clear winter nights to prevent frost burnt leaves. Citrus are "heavy feeders" that rely on their roots, so cold winter soil, overwatered soil or low-quality soil can decrease nutrient uptake, which commonly shows itself as yellow leaves.



Meyer Lemon
(*Citrus x meyeri*)

Meyer lemons are perhaps the hardiest citrus and do ripen small, thick skinned lemons if given a protected south facing wall. It does well in a pot, and if your outdoor conditions are highly favorable over the years it can grow to 10' tall with frequent flowerings of the sweetest smelling blooms and lemons at various stages of ripeness. Nice examples are at the Marsh Commons and the lovely courtyard garden at the former Trinity Hospital at B and 14th (Arcata), near the Eureka High School and also in Loleta.



Eastern Persimmon
(*Diospyros virginiana*)

The Eastern Persimmon is native to the Northeast and does fairly well on the Bay. It is astringent like a green banana until ripe, but then tastes like cinnamon custard. The "Saijo" variety of *Diospyros kaki* is promising and under trial at the Roberts Way food forest. The Eastern Persimmon example is found on Old Arcata Road.



Fig "Desert King"
(*Ficus carica*)

Desert King figs are dependable in most sunny spots protected from harsh winds, with mature trees dropping wet, sweet figs with honey notes. Fig trees may need wind protection or extra summer watering to put on juicy fruits. A successful giant on Bay St, Eureka demonstrates its hardiness. Examples in Arcata abound, including one behind Los Bagles, a fig orchard on 17th and Union near campus, and a huge tree on Eastern off Sunset.



Persian/Tahitian/Bearss Lime
(*Citrus latifolia*)

This lime was bred in central California by T.J. Bearss in 1895. It is the cold-hardest lime and does ripen small, yellowish limes if given time, a protected, south facing wall and some cover on freezing nights (a blanket, plastic sheeting, etc.). Marsh Commons has a small but healthy example on South G St.



Cornelian Cherry (*Cornus mas*)

Cornelian Cherry is actually a dogwood species from Greece, although the small tree doesn't look or smell like familiar dogwoods. The fruit is tart unless it ripens to the point of falling from a gently shaken tree. Tart fruit is perfect for pies and sauces. The species is partially self-fertile and will do better when planted in pairs. "Red Javin" is an excellent fruiter, "Pioneer" is almost as good, but the "Yellow" variety is not as hardy or productive. All three get a purplish leaf discoloration, but it is only a problem with the "Yellow" variety. Roberts Way, Arcata



Sour Cherries: "Morello," "Montmercy," and "North Star" (*Prunus cerasus*)

These varieties of the S. Europe and SW Asia **sour** cherries are self-fertile and have dark red flesh that makes for a classic cherry pie or dried and sweetened treat. Sour cherries are rarely grown for sale, but Montmercy is the most popular in the U.S., Morellos are uncommon, and North Star is popular for its naturally small size. Wyatt Lane and Foster Ave, Arcata.



Sweet Cherries: "Lapin," "Stella" and "Bing" (*Prunus avium*)

Sweet cherries do well on the Bay. The "Lapin" is a self-fertile **sweet** cherry that grows well on Roberts Way, Arcata. There was an 80 year old "Bing" at HSU near CCAT that produced dependably for years. The "Stella" variety also produces sweet cherries in Arcata on Foster Ave. The recent invasion the Two Spotted Fruit Fly has sometimes meant perforated, leaky cherries that the birds are welcome to, so pick them a day early. The "cherry slug" that nibbles leaves is actually a sawfly larvae and their damage is generally tolerable.



Choke Cherries (*Prunus virginiana*)

Wild chokecherries are **native** to Humboldt County and most of the U.S. The small fruits make an exotic, strong flavored cherry jam from heavy bearing branches. The jam is popular among fanciers for its intense cherry essence. Myrtle Avenue.



Eastern Mulberry (*Morus rubra*)

Mulberries may not do well on the coast, but there is a large example of the native East Coast variety that fruits tart berries on Indianola Cut-off, and another at the Garden House on Iverson in the Arcata Bottoms. The Garden House on Iverson had a light set of small fruit for the first time when the tree was 7 years old in 2012. The **Pakistan Mulberry** is looking promising on Spear Ave, Arcata. Deep Seeded Community Farm and Tule Fog Farm have had three failures with the **Illinois Everbearing Mulberry**.



"Gold Nugget" Loquat (*Eriobotrya japonica*)

Loquats are soft, complex, sweet-sour fruit from Southeast Asia that tastes "tropical" and are a popular fruit among the 2000 Portuguese families around the Bay that know them as "nêspersa." In Portugal they have two varieties of yellow loquat—sweet and sour. Loquats are unusual in that they flower in the fall. They are sensitive to frosts, so you may have 1-3 years in between good harvests. The Gold Nugget variety is the only local variety known by name, but there are local unnamed "sour" Portuguese specimens with yellow flesh. White fleshed loquats are even less cold hardy than yellow fleshed loquats, so it is unlikely they will produce on the Bay. Anina Way, Los Bagles and the parking lot opposite the Jacoby Storehouse.

Dry Gardening Established fruit trees want, but do not need to be watered during the summer. There are many solutions to retaining soil moisture—six inches of loose straw or wool bedded 2-3 feet out from the stem base will save you watering and weeding all summer. The Neukoms dry farm peaches in Willow Creek using a "dust mulch" from dragging a 6" deep tiller. Straw is cheap, water is expensive, and fruits taste better and more intensely when they have not been watered down with irrigation.

Food Oasis and Food Forests Orchards and gardens can be mixed to make highly productive dense plantings of trees, shrubs, vines, canes, mushrooms and root crops that are managed like an eco-system rather than a traditional orchard. Recently re-popularized by Permaculture proponents, the oldest food forests still in use are 3000+ year old desert oases of interplanted figs, dates, citrus, etc. The indigenous people (e.g. Wiyot, Hoopa) in our region grew food forests with controlled burning to select for nut trees, edible bulbs and young branches for weaving.



"Greengage" Plum

(*Prunus domestica* ssp. *italica* var. *claudiana*)

The "Greengage" is an ancient heirloom developed in France from Turkish wild types and grown throughout Europe as a choice desert plum, frequently cooked in syrup to make a plum compote. The greenish colored flesh seems to confuse birds and the Greengage escapes being pecked. Richmond Road.



"Beauty" Plum (*Prunus domestica*)

The "Beauty" is smaller, less interesting tasting and much more successful here than the **Santa Rosa** or the darker and richer **Satsuma** plum, both of which rarely fruit successfully on the Bay. At three years of age the tree starts to put out significant amounts of fruit. Potowat Health Village, 12th Street, Buttermilk and Roberts Way, Arcata.



"Damson" Plum (*Prunus institia*)

The small, heavy-bearing Damson plums have traditionally been used for making wine, brandy jam and jellies. This heirloom subspecies is from the Damascus area of modern-day Syria, and were introduced to England by the Romans two millennia ago. The "spicy" yellow flesh is sweet, but the tart skin is what makes for a complex, interesting wine or jelly.



"Golden Nectar" and "Shiro" Plums (*Prunus salicina*)

The "**Golden Nectar**" is perhaps the best dessert plum that grows locally, although our local examples may actually be an improved variety of "**Shiro**," another early-bearing, bright yellow, famously sweet plum. A healthy, mature Golden was loaded in 2013 on 6th and G St, Arcata.



"French," "Italian" and "Stanley" Prune Plums (*Prunus* sp)

Disagreements are rife among prune fans as to which is best, but all three similar varieties are self-fertile, do well around the Bay and their fruit ripens all at once, requiring the gardener to quickly dry, eat, or give away the plums. Thin heavily loaded branches so they don't break! Roberts Way



Ornamental Cherry Plums (*Prunus cerasifera*)

Yellow or Red Cherry Plums are common in the older neighborhoods around the Bay, planted as ornamentals or in unmanaged flowering hedges that drop loads of small sweet-tart plums in late summer. They make an intense jelly and an easy snack on a summer walk.



Strawberry Tree (*Arbutus unedo*)

The relative to madrone is mildly to fairly sweet, mushy and rather seedy. The peeling bark and sinuous shapes are reason enough to plant one, but the fruit is pleasant enough. Founders Hall at HSU, parking lots at Eureka Natural Foods and the Arcata Co-op.



Pepperwood/California Bay Laurel (*Umbellularia californica*)

This highly aromatic **native** tree has nuts that can be roasted to a dark chocolate brown color to reduce their pungency, then eaten whole or ground up in a drink. They're a delicacy to those who know about them. Arcata's Redwood Community Forest

There are a few fruit tree varieties that are notably not successful on the Humboldt Bay:

- **Pawpaw** have ripened in Weitchepok, but the tree doesn't flower or fruit on the Bay.
- **Seabuckthorn/Seaberry** grows well on the coast near Crescent City, but it does not flower or fruit on the Bay.
- **Apricots** and **Avacados** have not been successfully grown on the Humboldt Coast.



Hazelnut/Filbert
(*Corylus species*)

Former Wiyot Tribal Chair Cheryl Seidner remembers eating native hazelnuts when she was 12, but not since—the plantings have all but disappeared. Natives hazelnuts are lightly productive, while some cultivars will produce moderate numbers of nuts on large shrubs/small trees. Hazelnut trees are excellent for hedges, native plantings, and can handle wind and partial shade. Roberts Way, Arcata



American Chestnut
(*Castanea dentata*)

California outside of the region of the U.S. that is afflicted by Chestnut Blight, so our Chestnut trees can grow large and old, while most U.S. trees are killed before they can ever fruit. The only American Chestnut we know of in the area is a very large, old tree in a yard on Old Arcata Road.



English Walnuts “Pedro” and “Carmelo”
(*Juglans regia*)

It is commonly said that the Bay’s cool climate doesn’t grow walnuts. Not true! “Carmelo” is a tall walnut tree with large nuts, almost double the size of most walnuts. Carmelos are also grown in commercial California orchards. “Pedro” is a 30’ tall semi dwarf walnut variety that grows a relatively small walnut. Both grow and fruit on Old Arcata Road



“Centennial” Crabapple
(*Malus domestica*)

This personal favorite fruits early, by September 1st in 2012, and flowers on the late side, thus avoiding the rainy shoulders of our dry summer. The Centennial fruits with a lovely blushed set of apples but nary a rubbing scar, so they’re ornamental as well as juicy, bright, complex, sweet and aromatic. You may want to thin the fruits some years because the Centennial can fruit so heavily it breaks its branches. The 2” long, oblong apples are at the very largest that can still be called a crab apple, perfect for school lunches and snacking on a walk. A specimen next to the old Stewart School in the Arcata Heights neighborhood puts on a heavy load of sweet crabapples even in its semi-shaded location. At a Foster Ave site a sunny tree was loaded with sweet heavy fruit the first year it was planted. This is my favorite apple variety I’ve ever tasted grown in Arcata.



**“Golden Delicious ‘var. Supreme’”
Apple** (*Malus domestica*)

The “Golden Delicious” is among the most successful varieties around the Bay, and the ‘Supreme’ may be the best type. Our Golden Delicious apples are sweet, crisp, and profuse, best eaten fresh, juiced or sauced. They do not serve well for pies because the Golden Delicious variety gets wet and sloppy without much tartness or complexity, but consider mixing them with the Red Gravenstein. The fruit ripens in September and is best picked in October and November. It grows sweeter as it hangs on the tree until the flesh becomes translucent with sugars. Foster Ave



“Red Gravenstein”
(*Malus domestica*)

The popular and successful Red Gravenstein is a firm apple that bursts with complex flavors and perfumes, tart and sweet, so this terrific apple has can be used for eating fresh, pies, sauces and drying. It is also the earliest ripening of coast apples, so consider planting it in a row of apples trees. The Old Arcata Road



“Fuji” and “Granny Smith”
(*Malus domestica*)

Fujis grow smaller and greener close to the Bay. Granny Smiths fruits heavily, store well and can be left to sweeten on the tree until February. Loleta and Redmond Rd





“Akane” Apple (*Malus domestica*)

Pronounced Ah-Ka-Nay, this is an early season apple with a balance of sweet and sharp flavors that was developed in Japan in the 1930s from the “Jonathan” and “Worcester Pearmain.” Sam Polly’s is a second generation local fruit farmer and his favorite apple is the Akane. It is a slow grower and never gets very tall.



“Macintosh” Apple (*Malus domestica*)

A classic summertime apple, the Macintosh has done well in both Arcata and McKinleyville back yards, producing sweet, crisp apples early in the season. Windsong neighborhood.



“Melrose” Apple (*Malus domestica*)

The Melrose is a local favorite: “Good in all ways, medium-late fruits, stores well, no disease and tasty.” —Dick LaForge



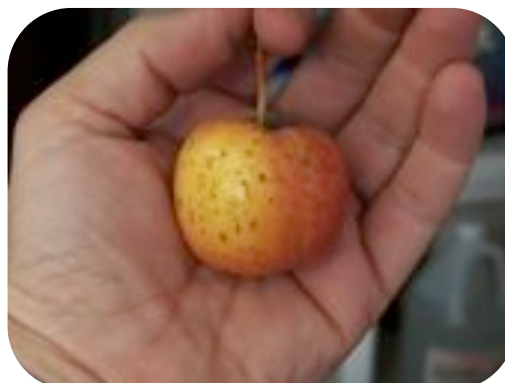
“Hudson’s Golden Gem” Apple (*Malus*)

This unique and sweet dessert apple was discovered in a thicket in Oregon in 1831. The fruits are large and cone-shaped but the tree itself stays small. Apples should ripen all the way on the tree September. Western Ave and Redmond Rd.



“Mutsu” Apple (*Malus domestica*)

The Mutsu is grown commercially at Clendennon Cider works in Fortuna and has done well in Arcata. It’s fruit is similar to a Golden Delicious, but larger and tarter.



“Wickson” Crabapple (*Malus domestica*)

This eating variety of crabapple was developed by Southern Humboldt apple breeder Albert Etters and named after his mentor Edward Wickson. They can be eaten out of hand but are a choice addition to cider, adding depth and sweetness.



“King” Apple (*Malus domestica*)

The “King” Apple is one of the easiest apples to ripen around the Bay. It’s a large apple with sweet flavor and a local favorite in commercial orchards. The tree grows vigorously and large. The fruit ripens in August. Old Arcata Road



“Jonathan” Apple (*Malus domestica*)

The Jonathan is similar to a Spitzenburg: medium sized and sweet-tart. It has done well in Arcata, although it is known to be susceptible to scab.



“Honeycrisp” Apple (*Malus domestica*)

A relatively recent and popular variety that is a proven success in the blustery Windsong neighborhood. Famed for its exceptional sweet-tart flavor for eating out of hand, it also stores fairly well.



“Sir Prize” Apple (*Malus domestica*)

A less well known golden delicious type apple with thin skin that makes delicious as a garden variety but unsuitable for commercial production. Stores well.



“Dolgo” Crabapple (*Malus Dolgo*)

This sweet-tart Siberian variety of crabapple produces crispy small apples good for eating fresh or making into jelly, cider, etc.. The heavy showing of white flowers helps pollinate other apple trees.



“Bartlett” and “Delicious” Pears (*Pyrus communis*)

Few pears ripen without cracking around the Bay, but a green Bartlett pear has thrived and produced nearly scab-free pears for 30 years on 11th St in Arcata, and the related “Beauty” variety is productive on Redmond Road. They need well drained soil with cross-pollination for maximum production.



“Bosc” and “Comice” Pears (*Pyrus communis*)

A Bosc pear is crunchy and sugary, a favorite for frugivores who love a crisp bite. There is an example thriving and fruiting in a Windsong back yard and another on Eye St, Arcata. The Comice is just the opposite, firm to the touch but soft and buttery inside when ripe, which you tell by pushing where the stem attaches to see if it gives. Consider either as a cross-pollinator with a Shipova.



Medlar (*Mespilus germanica*)

Medlars are like dates, hachiya persimmons or jujube berries that shrivel on the tree until soft, or “bletted”, but they can be picked earlier and ripened sepals down on paper. When finished bletting, medlars are brown, soft and taste like caramel, applesauce or cinnamon custard. Medlars produce fruit in just two years and grow so thickly they can be used for topiaries. Plant in full sun and somewhat wind protected. Roberts Way



“Shinseiki,” “20th Century,” “Hamese,” “Atago” Asian Pear (*Pyrus pyrifolia*)

These four yellow fleshed varieties of Asian Pear that have proven themselves consistent but relatively light bearers. Leave them on the tree until they are swollen and yellowed for best flavor. The trees are vigorous growers and the pears are sweet, juicy, and medium-large if thinned early in the season to allow the remaining pears to grow larger.

Apples That Have a Mixed Record of Success

Gala: Performed well in a sheltered back yard on 11th and O St, but scabby and really bad results on Old Arcata Road in a very exposed location.

Liberty: Most people recommend it, but has had scab in one exposed yard but not in another. Small, excellent flavor.

Pink Pearl: Blood red in flesh and tastes like a raspberry. A neat apple, but needs a hot summer. Developed by Etter in Southern Humboldt.

There are many other local varieties developed by Albert Etter, of Ettersberg, CA between the late 1800s and his death in 1950. His Southern Humboldt nursery produced patented varieties that may be worth trying in our colder, wetter microclimate, such as the Waltana, Jonwin, Humboldt Crab, and Crimson Gold Crab.



Shipova (*X Sorbopyrus auricularis*)

This cross of European Pear and a Mountain Ash fruited after growing for seven years, and was worth the wait. It tastes like Asian Pear and is wet and meaty. It may fruit better if planted with a pear for cross-pollination. Roberts Way



Quince (*Cydonia oblonga*)

Quince grow well on the Bay, although they may take five years to fruit. Their hard, aromatic fruit is usually indigestible unless cooked, but mixed and cooked with apples, pears or plums it makes lovely sauces and pies, a cheese-like custard and even a fruity liqueur. A productive example can be found at C St & 12th near HSU. The rare “Kaunching” variety can be eaten fresh and uncooked, but is still { under trial on Foster Ave.

Shrubs



“Patriot” and “Blue Crop” Blueberries
(*Vaccinium ssp*)

All blueberry varieties listed below thrive around Humboldt Bay and fruit well, but the overall best are probably the Patriot and Blue Crop for robust and sweet flavor and heavy fruiting. There are many species of plants called blueberries from all over the world, some of which are evergreen, some deciduous. Foster Ave and Spear

- | | | | |
|-------------|----------------|-------------|----------|
| -Blue Crop* | -Patriot* | -Burgundy | -Elliot |
| -Brigitta | -Chandler | -Duke | -Darrow |
| -Blue Gold | -Blue Ray | -Hardy Blue | -Reka |
| -Rubel | -Sunshine Blue | -Legacy | -Misty |
| -Brunswick | -Powder Blue | -Climax | -Top Hat |

*Overall favorites

Notable Failures: Pink Lemonade, Camellia and Spartan



Huckleberries (*Vaccinium parvifolium, V. ovatum, others*)

Tart-sweet, slightly astringent black and red huckleberries are native to Humboldt Bay and perfect for native gardens. Natives and cultivars of the closely related species do very well in 3/4ths sun with abundant, small, intensely flavored berries. Black/blue species bear more heavily than the milder tasting red huckleberries. Ma-le'l Dunes, Western Ave, former CCAT native gardens and Roberts Way



Aronia (*Aronia melanocarpa*)

Aronia is a productive fruiter, with fruits that can be astringent or rich and sweet-tart, depending on ripeness. The pulp has a complex flavor, having been described as pomegranate-like with hints of blueberry. The dark purple skin has extremely high levels of antioxidants, especially anthocyanins, known to help reduce cellular damage from free radicals. Very hardy. Foster Ave.



“Sweet Scarlet” Goumi Berry
(*Eleagnus multiflora*)

Goumis are one of the earliest fruits of the season in July and hugely popular with little children. They are from coastal China, Korea and Japan, and are vigorous relatives to Russian olives, with cherry-like and sweet-tart berries that can be enjoyed fresh, and are excellent cooked. Sweet Scarlet puts on a heavy fruiting in the Bay Bottoms. The shrub fixes nitrogen for your garden with actinomycete bacteria living in symbiosis within its roots. Goumi berries and seeds are a rich source of Lycopene, essential fatty acids, proteins and fats. Astringent until ripe, more fertile in pairs. Do not buy non-varietal seedlings, which are very invasive and weedy with tiny astringent berries. Foster Ave & Roberts Way



Chilean Guava
(*Myrtus ugni molinae*)

The Chilean Guava is very popular in South America, and they are the only species of guava that is known to fruit in Arcata. They are ripe when the red berries lighten to pink and the taste is pleasantly piney and guava-ey. Species of the famous Pineapple Guava (*Feijoa sellowiana*) produce sweet edible petals but no fruits on the coast. Chilean Guava is evergreen, attractive, easy to propagate and can handle fog, while also providing some of the last fruits of the fall. Roberts Way and Foster Ave.



Jostaberry

(Ribes nigra x R. divaricatum x R. uva-crispa)

The Jostaberry is a highly recommended sweet-tart cross of black currant and two types of gooseberries. It's a large shrub with early July berries and no thorns, perfect for small children. It is also somewhat resistant to the currant worm. Foster Ave, Roberts Way, Arcata



Red Currant

(Ribes rubrum)

The juicy red berries are sour but tasty in a syrup or jelly. Unfortunately a "recurrent" problem is sawfly larvae called "currant worm", which usually arrives to eat your bush to the stem midribs within 2-3 years after planting. Nicotine has worked to control the currant worm, as do pyrethrins, but *Bacillus thuringiensis* does not work on sawflies. CCAT, Roberts Way and Western Ave.



"Pixwell" and "Hinnomaki Yellow" Gooseberries *(Ribes uva-crispa)*

Gooseberries are an old European fruit, but perhaps nowhere as successful as the cool, moist islands of Great Britain and the Scandanavian coast. "Pixwell" is the best, followed by "Hinnomaki Yellow" which may prefer more heat to sugar up. Foster Ave, Roberts Way.



Service Berry/Saskatoon/Juneberry *(Amelanchier alnifolia)*

Although this native tart, soft berry looks like a blueberry, it tastes like the delicate pear it is more closely related to. The shrub is called the uneberry because the fruit ripens in June. It's also called serviceberry because it blooms in mid-April, when long-delayed religious services were held throughout 19th century New England. Berries have twice the anti-oxidants as blueberries. Roberts Way



Clove Currant

(Ribes odoratum)

Around the Bay the best tasting currant that is also resistant to the sawfly larvae is the black Clove Currant, which has bright red and green foliage, is modestly productive and best eaten when almost overripe. It grows large without pruning and has fragrant. The related Jostaberry is somewhat resistant to the currant worm, and the Pixwell currant has a little resistance. Roberts Way, Foster Ave.

July 17, 1858 "Lewis K. Wood, an ex-county clerk, appears to be as apt at farming as he was at keeping correct records. He is the owner & occupant of the Kiwalettah Ranch [now 1387 Janes Road] & has some of the finest fruits in this vicinity. He sent us some currants & gooseberries yesterday, which are the largest we have seen on this Bay. Receive our thanks, friend Lewis." From the Fountain Papers



Red Flowering Current *(Ribes sanguineum)*

The native red flowering current is popular with our native hummingbirds and is a gorgeous landscaping plant, but the marginally edible fruit will likely stay on the bush to support native wildlife. Marsh Commons, Foster Ave.



Lingonberry

(Vaccinium vitis-idaea)

These tart red berries grow on low, evergreen shrubs throughout Scandinavia's forests and are smaller and juicier than their similar relative, the cranberry. No fruits in a McKinleyville garden, but more success on Roberts Way, Arcata

May 12 -1855 - Kiwellattah "The person, who when passing through this farm, has been in the habit of jerking the latches off the gates and otherwise leaving them open, will have the moral courage to let his name be known and give his reasons for so doing unless too low flung and cowardly to do so, in which case I only want to catch him at it." LK Wood's public posting from the Fountain Papers



Fuschia berries
(*Fuschia splendens* and others)

Fuschia species have surprisingly sweet juicy berries, although sometimes peppery. Roberts Way, Foster Ave



Chilean Wintergreen (*Gaultheria mucronata*)

This species grows throughout South America and is highly variable, with pleasant, juicy and wintergreen-tasting purple to pink to snow white berries on bushes 1-5' tall.



Wintergreen
(*Gaultheria procumbens*)

This lovely evergreen groundcover fruits in late fall and winter. The small red foamy berries and evergreen leaves can be used to make a minty tea. Good for sinus and respiratory health. Foster Ave and Luscious Gardens, McKinleyville



"Adams" Elderberry
(*Sambuccus canadensis*)

"Adams" is a prize elderberry varietal, also popular with the birds and lovely in a sauce or your hand. This elderberry is also sweet enough for Humboldt Bay vinters. Two varieties are best for pollination, and "Black Lace" is a great cross-pollinator because it has gorgeous purple foliage, although less fruit than "Adams." Roberts Way, Greenway Building Gardens



Saltspray Rose
(*Rosa Rugosa*)

Extremely hardy, vigorous, disease-free rose will form a thicket if left unchecked. Huge sweet/tart and mushy rosehips form after fragrant blooms on young canes, good for eating fresh or making into jam, wine, etc. Rose petals are edible.



Cranberries (*Vaccinium macrocarpon*)

Cranberries grow successfully in sunny Blue Lake, but there are no known examples closer to the Bay. Almost every genus of *Vaccinium* does well in our climate (blueberries, huckleberries, lingonberries), so they are a likely bet in a sunny spot with proper irrigation.

Vines and Canes

* Notable Shrub Failures

*

-**Goji berries** grow inland but will not flower or fruit in the cold summers on the Bay

-**Pawpaw** does not flower or fruit on the Bay.

-**Highbush Cranberries** will fruit terribly "butyric" tasting berries

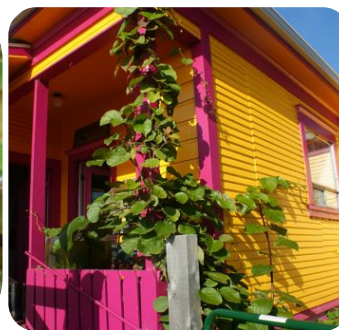
-**Mayhaw "Texas Superberry Hawthorne"** does not produce

-**Bush cherries** get confused by false spring weather and consistently suffer from brown rot



"Blake" Fuzzy Kiwi
(*Actinidia deliciosa*)

An unnamed old and vigorous fuzzy kiwi at CCAT's pre-2004 gardens would produce small kiwis after warm summers, and the "Blake" variety at Roberts Way performs similarly. While these sweet kiwis can grow vines big enough to swallow a house, the fruits are pretty small. CCAT, Foster Ave, Roberts Way



"Blue Pacific" Honeyberry
(*Lonicera caerulea*)

Honeyberries are a type of honeysuckle shrub that has been bred into different edible varieties. Around the Bay they are juicy and tart, not "honey", and the leaves can be afflicted with caterpillars. "Blue Pacific" is a later blooming variety that avoids most of our late spring rains. Roberts Way



“Muscat Alexandria”
(*Vitis vinifera*)

Muscats are a choice sweet wine grape, as well as an exotic tasting seedless table grape. Tule Fog Farm



“Einset”
(*Vitis labrusca*)

A medium sized seedless table grapes famous for tasting like strawberries. Prefers to grow on longer canes. Near Wildberries



“Interlaken”
(*Vitis labrusca*)

A seedless green table grape. Good fresh or as raisins. Vigorous, disease resistant vines. Developed from the same parents as Himrod, although Interlaken may have higher yields and ripen earlier. Near Wildberries



“Vanessa”
(*Vitis labrusca*)

A sweet, firm and extremely cold hardy seedless grape that stores well. The flavor is bright and mild. Near Wildberries



“Himrod”
(*Vitis labrusca*)

A seedless green grape known for excellent flavor and ripening early. It has a fast growth rate and is known as one of the hardiest green grapes. Near Wildberries



“Venus”
(*Vitis labrusca*)

Venus has unusually large grapes for a seedless variety. The skin may be somewhat astringent, but it is well known for being a table grape and sweet wine grape. Near Wildberries



“Marechal Foch”
(*Vitis riparia x Vitis rupestris*)

An early ripening small red wine grape that is disease resistant, very cold-hardy and has a semi-trailing growth habit. It is grown in Southern Ontario, Minnesota and much of the NE and NW of the U.S. Near Wildberries



Hardy Kiwi
(*Actinidia arguta*)

Hardy kiwi are woody vines with moderate numbers of grape-sized fruits with soft and juicy interiors, but no fur. Hardy kiwis are grown commercially in California and come by their name honestly. Hardy kiwis in Arcata can do well on wind-exposed walls and sun/partial shade. Two hardy kiwis plants of opposite sexes are required for pollination. Roberts Way



“Barbera” Grapes
(*Vitis vinifera*)

It seems nearly impossible to ripen grapes in the blustery Bottoms next to the Humboldt Bay, but the 800 year old Italian varietal called Barbera makes occasional bumper crops on the Bottoms. It was the third most planted variety in 2000 because in Italy it produces flavorful, young red wines. Roberts Way.



Arctic Beauty Kiwi
(*Actinidia kolomikta*)

Similar in size, shape and hairlessness to Hardy Kiwis, but even more cold-hardy. The Arctic Beauty Kiwi prefers some shade for its tender leaves. Females will produce grape-sized sweet, tangy berries and the required male plants will produce outstanding pink and white foliage as they mature. Roberts Way.



Akebia quinata

This beautiful, healthy vine produces lovely and unusual fragrant flowers that result in bizarre purple fruit. Very little of the fruit is edible—just the goo around the seeds tastes custardy and mildly sweet, while the rest of the fruit is bitter. But the plant is such a vigorous trellis-vine, even in partial shade, and regrows after hard frosts so it is also a reasonable ornamental choice. Roberts Way



“Maypop” Passionflower fruit
(*Passiflora incarnata*)

Tart apricot-flavored gelatinous flesh around the seeds in a yellow-green ball shaped fruit. The purple passionflowers are gorgeous and need cross-pollination for high fruit productivity. The Maypop evolved to die back with winter frosts and does well here. The Other Place on K St and Zehdner.



Tasmania Vine
(*Billardiera longiflora*)

The Tasmania Vine (var. fracto alba) is marginally edible—the berries taste more like raw eggplant or a dry pepper than a fruit. The vines do well in windy environments and climb well on trellises. Roberts Way

Common Fruit Pests



-“Cherry slugs” are actually sawfly larvae covered in slime. They are not affected by Bt bacteria, but die if sprayed with NEEM or “Safer Soap” mixed with pyrethrins.



-“Currant worms” are also sawfly larvae and have no response to Bt. Manual removal is very difficult, but NEEM or “Safer Soap” mixed with pyrethrins works.



-The Spotted Fruit Fly arrived in CA in 2008, and is a serious pest to all soft fleshed fruits. Eat fruit punctually or it will turn into goop with fruit fly larvae.



**“Cascade”, “Willamete”
and “Shasta” Hops**
(*Humulus lupulus*)

Cascades and Shasta provide medium-sized buds and heavier yields, while Willamete has a lighter yield of very large buds. This beloved bud of beer brewers goes surprisingly well around the Bay. The dried flowers, “hops,” are used to flavor beer and some teas, and the vine does double-duty as decorative greenery. The Arcata Farmhouse/Kiwelattah Ranch and Kiwelatta Grange #88, CCAT gardens and Roberts Way



“707 Headband” Cannabis
(*Cannabis indica x C. sativa*)

This cross of Sour Diesel, OG Kush and Master Kush put on small buds **outside**, without rain cover and with just Arcata sunshine in the warm, dry summer of 2013. An outdoor greenhouse **without** energy-wasting grow lights grew very large, well flowered 707 Headband plants. Stewart Ave.



Blackcap Blackberry
(*Rubus leucodermis*)





California Blackberry
(*Rubus ursinus*)

Our native California Blackberries fruit in the Dunes in July, a month or more before the invasive Himalaya blackberries. The native berry is distinctly more flavorful, making a fruitier jam and a more enjoyable handful. Unfortunately they can be light bearers for the amount of thicket they create, and they require direct sun to sweeten up. Natural thickets with enough berries to make it worth your while are found on the North Jetty near the airport/drag strip. It's good fun and sticky sweet/tart tasting handfuls if you pick them in the dunes during the season.



Marionberry
(*Rubus L. subgenus Rubus*)

The marionberry is our most productive berry on long, heavily fruit laden canes. They are perfect for trellises and training on fences or the side of your house. The berries are sour until almost overripe—they're best in smoothies or cooked in pies and preserves. Foster Ave and Roberts Way



Boysenberry
"Rubus spp x"

Boysenberries were developed accidentally in California through multiple crosses, but became a national best-seller for their plump, juicy, complex flavor. They are very tart on the Bay and less productive than Marionberries. They have a trailing form that works for trellises and are sweetest when nearly overripe. Foster Ave



Raspberries
(*Rubus ideaus*)

Many varieties of raspberries canes are generally extremely successful around the Bay, and most varieties are moderately or very successful. They can even be too successful, requiring the margins to be mowed regularly, but their fruits are wonderful and their leaves make an excellent tea. Do not mulch with pine or you will introduce a deadly virus to your raspberries.



'Seascape,' 'Chandler' and 'Albion' Strawberries
(*Fragaria x ananassa*)

Many different varieties of garden strawberries will grow around the Bay, but local strawberry farmers say they have the best success with Seascape, followed by Chandler and Albion. They do very well with straw bedding to keep down weeds, prevent berry rot and deter slugs. Rice straw is high in silica and resists rot best in our climate.



Loganberry
(*Rubus x loganobaccus*)

Loganberries are a hybrid of particularly flavorful blackberries and raspberries accidentally created in 1883 by a Santa Cruz lawyer. They ripen early and set large numbers of berries that are not ripe until purple. Loganberries are sweet enough to enjoy off the bush and can replace blackberries and raspberries in jam and pie recipes.



Tayberry
(*Rubus fruticosus x ideaus*)

Many local gardeners think Tayberries are the very best kind of Rubus berry (blackberry, raspberry, etc.) that grows on the Bay, although others argue for the Marionberry. Tayberries are a boysenberry/raspberry cross, highly productive, disease resistant, lovely tasting, and easily trained to trellises or propped up with 14 wires. The canes can grow 9' long, so give them space. Foster Ave & Tilley Court



Beach Strawberry
(*Fragaria chiloensis*)

The native beach strawberry of the Humboldt Bay is one of the two species of strawberry that were hybridized to make domesticated strawberries. The fruit is small and sweet, while the plant spreads vigorously with runners that can make a thick and attractive ground cover.



Panther Lily (*Lilium pardilinum*)
and
Columbia Lily (*Lilium Columbiana*)

The Panther Lily likes moist soil and is found only in California. Its edible bulbs have been harvested by indigenous people for millennia, and it was much more common in years past. The orange Columbia Lily can be harvested for both its delicate petals and edible bulbs, which are peppery and somewhat bitter.



Soap Root
(*Chlorogalum pomeridianum*)

This fibrous native has numerous medicinal uses and was traditionally used as soap, with the outside fibers bundled to make a scrubby brush—supper, soap and scrubber all in one. It is unpalatable unless roasted like a potato, but it is still very fibrous. The flowers are fragrant in the evening to attract moths.

Brodiaea californica leptandra
and
Tritelia laxa

The natives Brodiaea at left and Tritelia at right are small lily-like flowers with abundant and edible bulbs that were a main ingredient in pre-Settlement indigenous meals, and now a valued but rare ingredient in traditional meals.



Fungus and Bulbs: Fruits of the Earth



Blewits (*Clitocybe nuda*)

Blewits are delicious, colorful and like to eat fresh lawn clippings. They were planted in a garden bed heavily mulched with wood chips, but popped up in the lawn 20' away. Tasty and fragrant. Local culinary mushroom expert Bradley Thompson has a 20% success rate of "planting" mushrooms in his garden. Foster Ave



Wavy Caps
(*Psilocybe cyanescens*)

These edible hallucinogenic mushrooms have purple spore prints and bruise blue after a minute when the stem or cap is squished. There are many look-alikes that do not have purple spore prints and blue bruising. They can be grown in the pathway and mulching around fruit trees on fresh wood chips, except redwood which does not support their growth.



King Stropharia
(*Stropharia rugosoannulata*)

Stropharia were historically grown with corn in Europe because they supported corn health with their habit of eating nematodes (microscopic worms). They can grow large and meaty, and like most mushrooms they taste delicious fried in butter and garlic. Roberts Way

Tomatoes (*Solanum lycopersicum*)

The essential thing to know about growing tomatoes around the Bay is that they should ripen in less than 70 days, and give them space to get air movement to dry off after fog or rare summer rain. Sadly, extended wet and cold growing conditions will kill the entire tomato plant.

All tomatoes that ripen fruits within 55-70 days are good candidates around the Bay. Some smaller and cold-hardy varieties that have done well include:

San Francisco Fog*- firm, **best tasting** saladette
Mountain Princess*- **fastest ripening** slicer, little taste
Green Zebra*- saladette
Mountain Magic*--saladette
Stupice* - saladette
Cherry Tomatoes*—all varieties
Moscovich* - a big slicer with little taste
Early Girl* (DNA patented by Monsanto)--slicer
Oregon Spring - slicer
Principe Borghese-small tomatoes for drying
Siberian - saladette
Siletz - slicer
Sub Arctic Plenty - saladette
Thessaloniki - saladette
Willamette - slicer
Alaskan Fancy - paste
Crimson Sprinter - saladette
Glacier - saladette
Legend - slicer
Marmande - saladette
Matina - saladette

***Most successful varieties**

Hot Weather Annuals



Red Rocoto Pepper (*Capsicum pubescens*)

This rare Peruvian heirloom is the only pepper that will turn red and gain heat on the Bay. It's also called the Tree Pepper. It's lovely, with hairy purple leaves that can cause blisters(!) and 1" hot peppers. This variety is from the cool Andes mountains and likes a long, cool growing season like ours. Unfortunately hot weather is required for colored **Bell** peppers. Around the cool Humboldt Bay you can grow green peppers, just green peppers, regardless of what the seed package promises. Red Rocotto is on Mad River Road, Foster Ave



"San Francisco Fog"



"Georgia Jet"

"Georgia Jet" and "Beauregard" Sweet Potatoes (*Ipomoea batatas*)

These two varieties of sweet potatoes are highly productive and among the fastest to harvest with 80-90 days of "normal" summer in the Northeast, but on the Bay we have less than 70 days of growing time so they produce light harvests. They are also especially favored by gophers. Mad River Hospital

"Golden Bantam," "Spring Treat" and "Sugar Dot" (*Zea mays*)

The three varieties of sweet corn that produce at all still have modest harvests on a good year due to lack of spring ground heat and summer ripening heat. The Golden Bantam at left is a genuine heirloom, the corn that started the yellow sweet corn craze in 1902 when it came out in the Burpee catalogue. Spring Treat (not pictured) looks like Golden Bantam, but is a hybrid seed. The bicolor hybrid Sugar Dots at right is noted for starting "vigorously" in cool soils like ours. A few varieties of feed corn and decorative corn will grow small ears, but according to Paul Guintoli, a 4th generation Bottoms farmer, "the others just give a pretty stalk." Bottoms farms and the Mad River Hospital farm

