**STRAWBERRIES:**

**TYPES:**
- June bearing – produce one crop in early summer
  - ‘Honeoye’
- Fall bearing (aka Ever bearing) – produces fruit in the fall, not during the entire season
  - ‘Fort Laramie’, ‘Ozark Beauty’

**Planting:** Choose a site that has a moderate slope – avoid low spots where water stands. A sandy loam soil is ideal combining good drainage with adequate water holding capacity. Avoid heavy clay soil. Raised beds also work well.

On average, work in a green manure crop (yea sweet clover, soybeans, etc.) or liberal amounts of well-composted stable manure.

Early spring through mid-June is the best time to plant. Bare root plants should be kept cool and moist (not wet) until planted. Set the plants at soil level – only the base of the crown should be covered. Spread the roots out in the hole for maximum soil contact. Space plants 15” apart in rows 36” apart.

**Watering:** Water is a key ingredient for successful strawberry growing. Apply water as needed for runner development and plant growth during the growing season. Strawberries require about one inch of water every 10 days if rainfall is inadequate. Frequent irrigation of lesser amounts are best.

**Care:** Cultivate often, but shallowly to keep weeds down and the soil in good condition. Mulch will keep weeds out and soil moisture in. 2-4” of winter mulch applied in late November will protect the strawberries from severe damage. Pinch all blossoms the first year from JUNE BEARING strawberries to make the plants strong and vigorous.

**Fertilizing:** Vigorous growth is important in the first growing season to produce maximum fruiting in the next season.
  - First growing season – For JUNE BEARERS, use 1 – 2’ of Sustane (8-2-4) per 100’ ft row to stimulate strong runner production. If using the hill system, apply 1 tsp / plant in early spring and again in early August. This will help produce many flower buds for the next season.
  - First growing season – For EVER BEARING strawberries, apply 2 tsp.Sustane (8-2-4) around each plant about 3 weeks after planting and again in mid-July. DON’T OVER FERTILIZE.

- Bearing Year – Do NOT apply fertilizer during the spring of the fruiting year unless plants lack vigor – otherwise poor fruit color and fruit rot may occur. If plants lack vigor, apply 1 − 2 # of Sustane (8-2-4) per 100’ of row immediately after blooming.

**BLUEBERRIES:**

**TYPES:**
- **Small:** 1’ – 2’ tall
  - ‘Jelly Bean’, ‘Peach Sorbet’
- **Medium:** 3’ – 4’ tall
  - ‘Blueberry Glaze’, ‘Chippewa’, ‘Northblue’
- **Tall:** 4’ - 6’ tall

**Planting:** Blueberries need full sun and a well-drained, moist, organic, acidic soil. Soil pH in the 4.8 to 5 range is ideal, although they will tolerate a pH range of 4.2 – 5.8. A lab test can provide information on both organic content and pH of your soil. Adding soil sulfur or iron sulfate can lower soil pH. Follow label directions.

Spring planting is best in northern WI. Spacing depends on the variety, but generally spreading of 4’-6” is sufficient. Set your plants at the same depth they are growing in the ground. Fill the hole with equal parts loamy soil and peat. Tamp firmly and water thoroughly.

**Watering and Weed Control:** Blueberries need about 1” of water per week. Drip irrigation works best since sprinkling can lead to blossom blight and cracked fruit. A 2’-3’ layer of organic mulch controls weeds and keeps in moisture. Mulch also eliminates the need for cultivation, which can easily damage the shallow roots. Aged sawdust, wood chips, pine straw or shredded leaves are excellent mulches.

**Fertilizing:** Blueberries need periodic fertilizing. An inorganic fertilizer like Start N Grow (19 – 6 – 12) is good. Apply 1 oz per plant in spring when growth starts. Spreading evenly around the plant to about 12” out. If the amount annually – in about 7 years you should be using about 1’ for each plant. Azalea and Rhododendron food can also be used. This fertilizer contains micro nutrients. Apply this product in fall after the first hard frost. If you choose to use an organic fertilizer, apply in spring and use only well composted manure or a product like Sustane (8-2 – 4).

- Pruning: To improve the quality of your fruit, prune your blueberries any time they are dormant, usually in early spring. Follow 4 simple rules:
  - Remove all dead and / or diseased wood
  - Cut back or remove old, unproductive wood
  - Remove low, drooping branches
  - Thin out and shorten the remaining branches to remove some of the flower buds

Blueberries have few insect and disease problems so only minimal spraying per year should be needed. The biggest problem is birds. Bird netting is very effective – cover the plants as the berries begin to ripen and remove the netting to harvest. Blueberries continue to enlarge and swell up to a week after the fruit turns blue. The fruits are fully ripe when the pink ring at the base of the fruit has also turned blue.

**HONEYBERRIES / YEZBERRIES:**

**VARIETIES:**
- Borealis & 'Tundra' cross-pollinate each other.
- 'Sugar Mountain Blue' and 'Sugar Mountain Kalinka' cross-pollinate each other.
- ‘Yezberry’ Solo’ and ‘Maxie’ cross-pollinate each other.
- (Japanese honeyberries)

Yezberries and honeyberries may / will not cross-pollinate each other due to different flowering times. All are Zone 3 hardy (hardy to −40°F)

**Planting:** Honeyberries and Yezberries are soil and pH tolerant. They prefer full sun, but are tolerant of light shade.

Planting and spacing are the same as for blueberries, although both types can be planted slightly deeper than they were growing in the container – this will help them establish a deeper root system. Honeyberries and Yezberries can grow 3-5’ tall.

**Fertilizing:** Generally Honeyberries and Yezberries do not need much fertilizing, as most soils are adequate to sustain them. Your plants will benefit from a feeding of well composted manure applied in spring as a 1 – 2” top dress.

**Pruning:** Follow the same rules as for blueberries.

Keep the plants thinned to allow air movement through the plant to help alleviate potential disease pathogens. Remove flower buds for the first two years following planting is also recommended.

**GRAPES:**

**TYPES:**
- **Beta** – blue-black fruit; good all purpose grape
  - Zone 3
- **Bluebell** – medium blue-black fruit; good quality
  - Zone 4
- **Somerset Seedless** – deep red fruit; very productive
  - Zone 4
- **St. Theresa** – seedless table grape; vigorous
  - Zone 4
- **Valiant** – medium blue fruits; very productive
  - Zone 3

**Planting:** Grapes need full sun (6-8 hrs) and heat to fully ripen. Preferred sites are on southern slopes and south sides of buildings. Plantings in an open area need a slight slope to increase cold and air drainage of the grapes. Remove the vine about 6’-8’ long. Container grown vines should be set at the level at which they were growing in the container.

**Watering:** Keep newly planted vines moist the first year after planting. Thereafter, about 1” of water per week is sufficient. Drip irrigation is best as overhead irrigation may lead to foliar diseases.

**Fertilizing:** Apply 8 oz of Ture and Shrub Food (19 – 8 – 10) or Sustane (8 – 2 – 2) per plant every 7 days after planting a container grown plant (or after shoots are 12” long on bare root plants). The third year and subsequent years, apply 1-1/2# of Ture and Shrub Food (19 – 8 – 10) in spring about 30 days before new growth begins. Keep the fertilizer about 6-12” away from the trunk and spread evenly under the spread of the vine.

**Mulching:** For best performance, avoid using thick organic mulches as heat is needed for growth.
Instead use tillage, herbicides or black plastic mulch to control weeds.

**Pruning:** There is a myriad of training systems for grapevines, but there are a few important principles to consider. Grape clusters are potentially produced opposite the third to fifth leaves on the current year’s shoots, which in turn is produced from an over-wintered bud on the previous season’s wood. Also, a mature grapevine will produce an over-abundance of buds, which if left on the vine, will give rise to a lot of leaves and little fruit. The solution is to remove the excess buds by pruning in the dormant season, leaving about 40 buds per vine. A popular method is to leave four eight-bud canes. The next year’s fruit crop will originate from the eight bud canes and the following year’s canes will originate from the two-bud spurs.

**Winter Protection:** Unfortunately many grape varieties are not fully hardy n WI. However, these winter tender vines can be grown successfully if the vines are pinned to the ground and covered with soil or plant material (straw, etc.). Plant the vine at 45 degrees and train the young shoot horizontally (by pinning it) for a foot or more and then curving it gradually upward.

**Rhubarb:**

**Planting:** Rhubarb is very easy to grow. Select a site in full sun with rich, well-drained soil high in organic matter. Raised beds work well and will help prevent crown rot. Prepare the planting site in fall by eliminating perennial weeds and working in manure, compost or other organic matter. Incorporate fertilizer (Start-N-Grow, 19-6-12 or Sustane 8-2-2) in spring just before planting. Plant the crowns of the plant about 3 feet apart so that the tuds are about 2” below the soil surface. Don’t harvest any stalks the first year – wait 2 or 3 years so the plants can establish themselves. Fertilize established plants in spring after growth starts and again in summer after harvest. Remove flower stalks when they first appear to keep leaves growing strongly. Keep grass and weeds away from rhubarb. Mulch plants in winter after the ground freezes to prevent frost heaving. Divide plants every 4 or 5 years to keep them vigorous.

**Raspberries:**

**Types:**

- **Summer Bearing –** Current year’s canes will produce fruit the following year. Fruit ripens in early summer.

- **Fall Bearing (Everbearing) –** Produce fruit on current year’s canes. Fruit ripens in late summer and early fall.

**Planting:** Raspberries prefer full sun and a soil that is slightly moist with good organic content, well drained and a slightly acidic to neutral pH. Deep sandy loam is best. Orient rows in a north-south direction to maximize light to all sides of the plant. Plant in an area with good air circulation, but avoid overly windy sites. Plant in early to mid spring amending the soil with compost or aged manure. Set plants 12-18” apart in the row; 6 feet between rows. Trellising should be used to keep fruit from touching the ground and to prevent cane breakage from wind or heavy fruit load.

**Watering:** Raspberries need 1-2” of water per week especially during the most active growing time – flowering through harvest.

**Care:** Weed control is a must for the first few years. Mulch summer bearers with 8 good organic mulch; raking fall bearers may delay the crop and is not recommended for northern areas. In spring, splay with fungicide just before the buds open to minimize fungal disease.

**Pruning:** All fall bearers should, each year in late winter or early spring, be cut completely to the ground. Prune summer bearers by removing the 2-year old canes at ground level after harvest. Cut off all but three canes of the green, succulent new canes. Remove all debris as insect pests and diseases can over winter.

**Fertilizing:**

- **Organic:** 25# compost or aged manure per 100’ of row is a 2” top dress applied early winter. Alternatively, use 1-2# of Sustane (8-24) per 100’ of row. Keep organic fertilizers from piling up around stems.

- **Inorganic:** 5# of Tree and Shrub Food (19 – 8 – 10) per 100’ of row spread on top of soil in late winter or early spring.

**Additionally, for fall bearers, at bloom time, apply 2# of Sustane (8-24) per 100’ of row in addition to the fertilizer schedule above.**

**Blackberries:**

**Zone 5 hardy (Zone 4 with protection)**

**Types:** both may require trellising

- **Erect – Darrow**
- **Semi – erect: ‘Chester Thornless’**

**Culture:** Similar to raspberries. Blackberries produce primocanes (vegetative) the first year; floricanes (fruiting) the second year. Prune (tip) primocanes midsummer to promote branching and increased fruit production on 2nd year canes. Remove dead floricanes in winter. Fertilize as you would summer bearing raspberries.

**Asparagus:**

**Planting:** Work the soil to a foot or more deep and mix in large amounts of aged manure, compost, or similar organic matter, plus 4-5 ½ of Tree and Shrub Food (19 – 8 – 10) per 100 sq ft. Use 1 or 2 year old plants and dig trenches 8” deep and 4-5’ apart. Spread some compost or manure in the bottom of the trench and cover with an inch of garden soil. Set the crowns 18” apart in a row and cover with 2” of soil. As the new shoots come up, gradually fill the trench.

**Fertilizing:** Follow a twice a year feeding program – one in spring before growth starts and the second as soon as harvest is finished. Sustane fertilizer (8-2-4) works well. Don’t skimp on water when the top growth is developing.

**Harvesting:** Cut or snap off spears when they are 6 – 8” high. Bend the spears over sharply until it breaks – this avoids injury to other shoots below ground. Allow the plants to establish themselves for 1 year – begin harvesting the second year.