



Growing fruit in the home landscape can be a daunting proposition for the uninitiated. Don't let your lack of experience stop you from enjoying the pleasure of fresh from the garden, or landscape, munching. How about starting with raspberries - they are such a delight for midsummer or fall harvest. Whether you are a first time fruit grower or an experienced production gardener, raspberries are one of the easiest fruits to place, grow, and manage. If you are thinking about putting in a new bed of raspberries - choosing a hardy variety, carefully preparing the site, and observing basic responsible care practices will ensure good plant health and production for a lot of years to come. With a little bit of thoughtfulness up front, enjoying these can easily be within your grasp. And if you have a planting that has not produced up to expectations, revising your care plan now will help you repair those plantings, encouraging a full and delicious crop.

Don't skimp on choosing the variety that is right for your needs. Yes, we all like to save money by getting free plants, but do yourself a favor - when you have decided on what species and variety fits your needs, buy good quality, disease free plant stock from a quality nursery or garden center to get the best start. Raspberries are self-fertile (no other plants are needed for successful pollination) and will be either summer bearing (most of the black, purple and many of the red) or fall bearing (these are sometimes called ever-bearing – even though are not truly an ever-bearing fruit). The plant structure of raspberries is somewhat unusual in that the roots are perennial with the above ground canes living for two years. Summer bearing raspberries only grow vegetation the first year (these canes are called primocanes) and produce fruit on the two year old canes (floricanes). Fall bearing raspberries will produce fruit late during the first year on the primocanes and will fruit again during the floricane stage the following year - if the canes are allowed to remain for year two of growth. In general, expect a quart or two of fruit per year per healthy plant of either type. Determining the preferred time of harvest, intended use (fresh, frozen or jams), and when you have time to prune and train will help narrow the choices available. Enough emphasis cannot be placed on choosing appropriately hardy and disease resistant varieties for ease in growing and reliable fruit production. Some of the commonly recommended, hardy varieties of disease resistant, summer fruiting reds include Boyne, Haida, Nova, and Latham. The UW-Madison recommendations for fall fruiting red raspberries are Autumn Britten, Caroline, and Ruby. The yellow fall fruiting varieties currently being evaluated in trial gardens are Anne and Honeyqueen - both are showing good disease resistance but fruit yields are

less than their red counterparts. Hybrid black raspberries (not the wild ones) are not especially hardy for the colder parts of the country, but if you want to give them a try - Jewel or Blackhawk are relatively disease resistant and will produce well if the winter weather doesn't take them out. Emerging on the fruit crop market are purple raspberries - which are a hybrid between black and red. The hardiness of the purple hybrids is greater than that of the commercially available black raspberries and have similar fruit characteristics. One variety that has proven hardy in university trials is Brandywine. For those adventurous gardeners looking for that elusive commercially available hardy blackberry stock – there are a couple varieties out there that are looking promising – Darrow and Illini. Keep in mind that choosing a site is more of a challenge for blackberries. We do have some gardeners in the area that provide good winter protection and have consistently received noteworthy crop production over the past few years. If you are up for a challenge – give them a whirl, they do taste rather yummy.

Once you have chosen your species and variety (don't buy them yet!), it's time to look at how to prepare a site and place the plants based on the growing habits and training requirements. (For those of you with an existing planting that is not performing well, this may give you some insight into possible issues needing resolution.) Site selection and preparation are very important to success. Choose a site with well drained, loose soil with a pH around 6.5 (they are fairly pH adaptable except to either extreme), full sun, good air flow, and an adequate moisture supply – allowing for easy access to a water source or hose is a good idea. Word of warning – although raspberries need between one and two inches of moisture per week, they do not tolerate wet feet very well, so check the site drainage carefully. If these conditions can be met by an area on a slope, placing your planting there may help to avoid spring or fall frost damage. Why? Cold air will naturally flow downward (remember science class – warm air rises, cold air falls) across the slope, minimizing the amount of damage caused by the cold settling onto the tender canes, blossoms or late season fruit. (For gardeners who like to play and experiment with plants of marginal hardiness – locating a site on a slope is a way to push that zonal envelope a bit.) Preparing the site at least a year in advance will give you enough time to remove some of the weed or turf pressures, add well composted material, or use live mulches and cover crops to improve the texture of the soil. This also gives you a few seasons to remove any wild patches of black raspberries which may bring diseases into your production area.

Size and shape of your chosen site is really a preference based on species and variety chosen, space availability, training method chosen, and dollars you want to spend. Hills, rows, and/or trellises are all commonly used methods for training. The usual for red and yellow raspberries is a hedge row system. Each row should have adequate length for a plant every two feet allowing about 10 feet between each row for suckering growth and human traffic. If you intend to mow between the rows, allow enough space for the mower to freely pass without ripping your flesh off. Ideally, growth and pruning should result in raspberry rows that are no more than about 18 inches deep. When pruned, this depth will allow light infiltration for fruit development and encourage air circulation to help reduce disease pressures. A hill system of training is most often used for black and purple raspberries, and blackberries, as they all grow from the main crown area with minimal spread. Plants should be spaced about four feet apart with tall posts placed very close – this provides structure for two methods of cane control. The pruned canes can be tied, at about a four foot height, to the posts with twine; or wire, cable or other heavy material can be strung between multiple hill posts to provide a line of support for the canes to rest on. If planning a permanent trellis structure or system, there are many material and style choices available that will fit seamlessly into your landscape design and will do a good job of supporting the plants as they grow and develop. Using decorative structures or T-shaped posts of metal or wood at the ends of rows will provide the structural system for wires, which provide the support for the rows of canes. Canes can either rest loosely on or be tied to any system of support to keep them off of the ground, and to keep the foliage relatively dry and open to light.

Basic care for raspberries involves pruning. Most instructions written on pruning sound harder than it really is. Let's go back to the basics - you have a plant with a perennial root, some produce sucker shoot growth (reds, yellows) which will result in a rapid and pronounced spread if not kept under control. Raspberries that remain relatively confined to the original root crown (black and purple, and blackberries) will result in a slow spread of root mass from the center outward. Pruning on these is mainly to promote branching on the canes for future fruit production. Let's look at the red, and yellow, raspberries first. They sucker freely, all over. If left to their own devices, they would take over the world. So, your job is to maintain control over how much real estate you allow them to inhabit. Pruning should start immediately after fruiting has finished. First step is to remove all of the canes that produced fruit – they are done. Next, remove all of the canes that look unhealthy, have extensive insect or human damage (lawnmoweritis, or weedwackeritis are common problems), or if they are outside of the borders of the planting beds. Be firm with the pruner, it's your land, maintain control. When you are done

thinning, there should be somewhere between five and eight healthy canes per row foot left standing. In the spring, mid-April or sometime in May, cut off the top 25% (only) of the remaining summer fruiting canes to remove dead tissue, and to reduce the height of the canes. This will help reduce damage, disease pressures and improve the cane health. If you are rejuvenating an existing planting area - remember, the summer producing raspberries fruit on two year old canes. Is there a difference in appearance? Sure. First year canes are green and somewhat succulent looking. By year two, the canes have begun to get a woodier looking appearance and will be brownish in color. Year two is production year, so don't remove the two year old canes before they fruit. For fall fruiting raspberries, pruning can be done in the same manner as summer fruiting. This technique will produce two crops – one in the first fall and the second crop the following summer. If ease in pruning is a goal – fall fruiting berries are the way to go. They can be cut to the ground in the late fall or early spring, every year, and will produce one crop in the fall on the new growth. If rabbit damage is a problem, this may be the way to have your raspberries and eat them too.

Problems are relatively minor on healthy raspberry plants, they respond so quickly to some well timed cultural care. They make an edible, and thoroughly enjoyable, addition to your yard. Let the fun begin.