Getting Started in Asparagus Production Part 3: Harvest
Carl Cantaluppi, Horticulture Agent North Carolina Cooperative Extension Granville and Person Counties

Research shows that asparagus can be harvested for 2 weeks the year after planting with no harm. In fact, this stimulates more buds (spears) to be produced on the crown that gives rise to greater yields in future years as compared with not harvesting them until the second or third year after planting.

Thus you can safely harvest for 2 weeks during the second year, then 4 weeks during the third year, 6 weeks during the fourth year, and 8 weeks during the fifth year and beyond. Judge when to stop harvesting by looking at the spear diameter. Stop harvesting when 75% of your spears are pencil sized in diameter, or less than 3/8 inch in diameter. This will take some experience in growing the crop to determine this.

Under cool air temperatures (<70 degrees) you might be picking once every 2-3 days, harvesting a 7-9 inch spear with tight tips. Air temperatures greater than 70 degrees air temperature will cause you to harvest a 5-7 inch spear before ferning out and you will be picking in the morning and again during the evening, the same day.

Asparagus can be harvested with a knife, below the soil, resulting in a tough and fibrous butt that has to be trimmed off and is not usable. Asparagus grown in western states are harvested with a knife so that the white butt serves as a plug to help prevent moisture loss through the tip of the spear as they are shipped east. Cutting below the soil with a knife increases the chances of cutting into other buds on the crown that would normally produce more spears.

Snapped asparagus contains no fibrous butt since the spear snaps off at the point where it starts to become tough. It is all usable, with no waste. Snapped asparagus should command a higher price than cut asparagus.

Do not allow any small spindly spears that are not marketable grow into ferns while you harvesting. If this is allowed to happen, this provides an excellent site for asparagus beetles to lay their eggs, change into larvae, and into adult beetles. The field should look absolutely clean during harvest, except for new spears coming up or ones ready to be harvested.

You can harvest asparagus by walking and stooping, but this is hard on the back. You can build a harvest-aid, which is nothing more than a low-hung cart that people can ride on, leaning forward, snapping asparagus, and placing them in trays on the unit. These can be made by taking a steering mechanism off of a wagon, welding some pieces of iron to form a frame, and building it wide enough to hold 3 people to straddle 3 rows of asparagus. The person in the middle steers with his feet while he picks at the same time, so you don't waste his time on driving only.

Two person hours/acre are needed to pick asparagus by walking and stopping. Using a harvest-aid will reduce the time by about 15-20% and workers are usually content to ride a harvest-aid rather than walk and stoop to pick asparagus.
Harvest asparagus in the morning when the temperatures are cool. It has a very high respiration rate, just like a fresh cut flower. If you harvest into plastic containers that have holes in them to let water pass through, plunge them into ice-cold water and leave for about 5 minutes. This will take the field heat out of the spears. Then pull them out of the water, let drain, and put them into refrigeration at about 36 degrees F.

Asparagus will keep for a few weeks at 36 degrees F. and 95% relative humidity. At warmer temperatures (around 40 degrees F.), the moist, warm storage will encourage soft rotting fungi to grow that will spoil it quickly.

Most growers sell asparagus unsorted as field-run asparagus and put them in plastic bags. Others will sort them by spear diameter. Some will place one-pound bundles of asparagus in a tray of standing water to keep them fresh, if selling retail to the public.

Can asparagus work as a pick-your-own crop? Yes, if you have plenty of field supervision showing customers how and where to pick. One grower uses a 12 quart plastic bucket to pick into that is about 7" tall. He instructs customers to put the bucket down next to the spear. If the spear is at least as tall as the bucket or taller, it can be picked.

White asparagus is another marketing option. White asparagus, spears grown in the absence of sunlight, can bring 3-4 times the price of green asparagus, especially when selling to upscale grocery stores or to specialty restaurant chefs. White asparagus is not as nutritious as green asparagus, and is sweeter. It's more of a delicacy. Many Europeans prefer white asparagus over green.

Opaque, 55 gallon black plastic drums can be cut in half lengthwise, and placed over the row of asparagus, with each half drum butted up against each other. You just lift off the half drum, and harvest white asparagus and put the drum back when finished. At the end of the season, take off the drums and let the spears turn green and fern-out normally.

Originally printed in Virginia Vegetable, Small Fruit and Specialty Crops – May 2002.