

Berries

Renovating Strawberries in the Home Garden

David W. Lockwood, Professor, Plant Sciences

David W. Sams, Professor (retired), Plant and Soil Science

Originally developed by Alvin Rutledge, Professor (retired), Plant and Soil Science

The one production practice that Tennessee home gardeners most often neglect with their strawberry planting is renovation. Strawberry plantings are usually allowed to develop new runners with no effort to control weeds or to renew existing plantings. Many home gardeners feel mechanically removing weeds may disturb new strawberry plants and is a damaging practice. Unfortunately, failure to renovate is a more damaging practice when long-term production is desired.

What Is Renovation?

Renovation is removal of a large percentage of old strawberry plants in an established planting to allow their natural replacement with newer, heavier-fruiting daughter plants. Renovation is never conducted on new plantings until after they have first fruited.

Why Renovate?

Long-term strawberry production is best maintained when a large percentage of plants that have fruited at least once are removed from

the planting. Once a strawberry plant has fruited, its further fruiting capability is reduced considerably. Therefore, when old plants are removed and replaced by newer, heavier-fruiting ones, higher yields can be maintained over a longer period of time. Renewal is possible because old plants develop new runners annually. Runners, in turn, develop new plants.

Renovation initiates new plant development and establishment, thins out old plants and provides more space for new ones, keeps plants in rows rather than in beds for easier picking, helps control weeds and enables sidedressing fertilizer applications to be worked into the root zone.

When Should Renovation Be Done?

Renovation should be done every year after harvest. Strawberries usually go into a semi-dormant stage of growth for a period of four to six weeks after harvest. This period usually begins about the first of June and lasts through mid-July. If the weather is dry during this period, plants may not come out of



dormancy until mid-August or until suitable rainfall or irrigation occurs. Renovation is best if it is done annually during this period.

How Is Renovation Done?

The steps to renovation in order of priority include:

- **Clipping the foliage:** This is an optional practice and is not necessary, but may be beneficial. Clipping is advised when plants have heavy foliage disease problems and are growing thickly on a relatively fertile, high moisture-supplying soil. It may not be advantageous if the plant stand is thin; plants are growing on a droughty soil; there is no means of irrigation; or there is no serious infestation of foliage diseases. If the foliage is clipped, it should be clipped low enough to remove the leaves, but high enough to avoid damaging the crown.
- **Applying a complete fertilizer:** A complete fertilizer is one that contains nitrogen, phosphorus and potassium rather than only one element. Examples include 15-15-15, 10-10-10, 6-12-12 or 12-24-24.

The complete fertilizer is broadcast usually at the rate of 10 to 20 pounds per 1,000 square feet. Higher analysis fertilizers, such as 12-24-24, are usually applied at the lower rates. Lower analysis materials, such as 6-12-12, are applied at the higher rates.

If the foliage is clipped, fertilizer is applied after clipping. If the foliage is not clipped, plants will need to be brushed to remove fertilizer that may collect on the leaves and result in foliar burn. Fertilizer should be applied before proceeding with the next step in a renovation program to work it into the plant root zone.

- **Narrowing rows or beds, thinning and removing weeds:** Usually all of these steps occur in one operation, which can be accomplished with a roto-tiller or by hand. Most gardeners would prefer to use a roto-tiller,

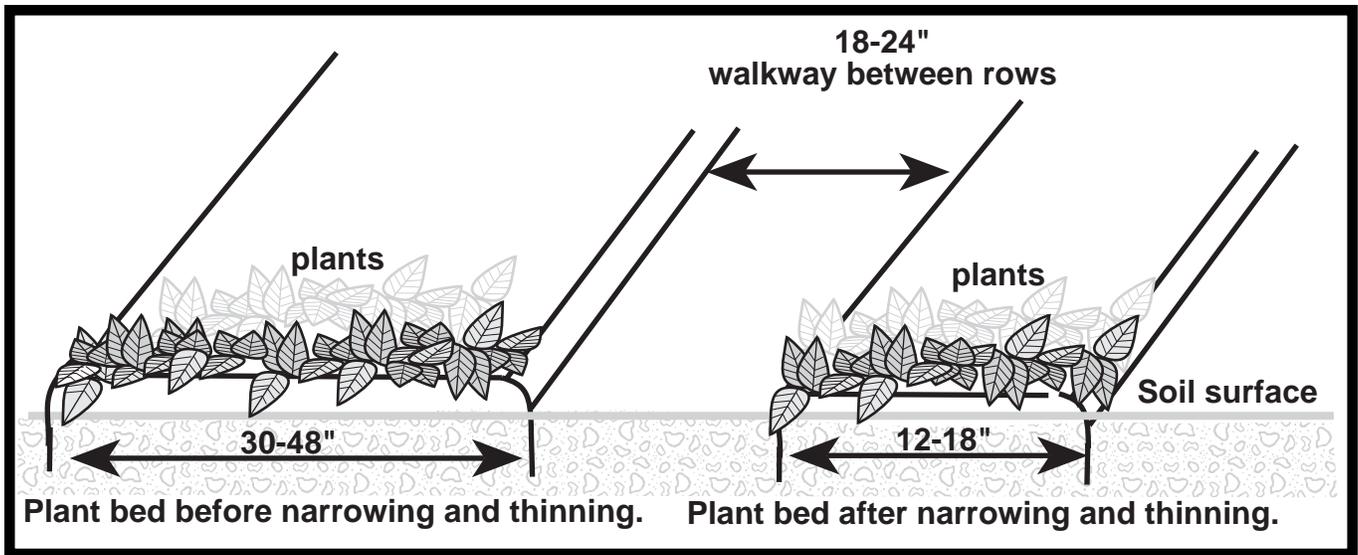
which allows narrowing of the row to about 12 inches, removing old plants, thinning, incorporating the fertilizer and removing weeds, all at the same time.

The severity of the thinning operation depends greatly upon the variety of berries being grown. Varieties such as Cardinal, which produce a high number of new plants, can usually be renovated more severely than low plant producers such as Titan. An illustration of the technique is given in the diagram on the next page.

- **Watering or irrigation:** Do not neglect this step. If water is not readily available, try to time renovation so it occurs just prior to good rainfall. Watering assures that crown re-growth occurs rapidly if the foliage has been clipped. It also dissolves fertilizers, activates herbicides and stimulates new runner growth. Apply sufficient water at one time to wet the soil 8 to 12 inches deep, but avoid excessive runoff.
- **Nitrogen sidedressing in late August or September:** Apply nitrogen fertilizers as a side or top dressing in late August or early September to provide sufficient nutrition for the newly developing fruit buds. New fruit buds begin development in the late summer, and they must have adequate nutrition to assure adequate size of new fruit for the coming year.

How Long Does a Planting Bear Fruit?

This is a difficult question to answer. Strawberries are considered a perennial plant. In theory, it is possible for them to produce fruit for several years. However, crown diseases, insects, weeds or plant winter kill may result in a poor plant stand anytime during the growth cycle. In general, most good growers consider three or four fruiting years as about all that can be expected. On the other hand, some growers who have good renovation programs have fruited their crops as long as eight years. In general, when the existing planting is no longer performing acceptably, it is time to establish a new planting.



SP284B-4M-4/98(Rev) E12-2015-00-047-98

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, disability, veteran status or religion and is an Equal Opportunity Employer. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture, and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service
 Billy G. Hicks, Dean