

# Selectin Gardenin Equipment

**Garden catalogues and stores are full of gardening tools - some are very useful, others are nice but not necessary, and some are gimmicks.** The gardening equipment you need depends on the size of your garden, your age and strength, and whether you want to get the job done in a hurry or prefer to take your time. The minimum equipment needed by most gardeners includes a shovel or spade, a hoe, a rake, and a trowel.

## Hand tools for cultivating

A round-nosed **shovel** with a curved blade is lighter and smaller than most other shovels and is well suited for use in the garden. Shovels are earth movers with dish-shaped blades mounted to the handle at an angle. **Spades** have flat blades and are designed for cutting rather than lifting or moving soil. Spades are excellent for shaping straight-sided trenches and

A **hoe** is essential in any garden for preparing the seed bed, removing weeds, and breaking up encrusted soil. Several styles are available. The most commonly used is the square-bladed hoe or draw hoe. It is the best one for sculpting the soil into hills or furrows. A pointed hoe with a heart-shaped blade is useful for opening seed furrows and cultivating between plants.



*N . e . h e b a e e d e d g e f . h e d a .  
h e T h e a g e f . h e b a d e a . a  
c h i g a c . i b e f e e a c h d a .  
f . h e h e . S h e C h a i &  
S i a . G i b b D a h , i e*

The **hula hoe**, also called action or stirrup hoe, is a type of square hoe. It is very maneuverable and comes in different sizes. The smaller heads allow weeding in tight spaces. Pushing and pulling it just under the soil surface eliminates newly emerging weeds and breaks up any crust on the soil surface. This type of hoe is most easily used on soil that is not compacted, since the blade is relatively thin and lacks the clod-breaking capabilities of a heavier hoe; it is also less effective in cases where weeds have gotten a good start.



*The . i , h e i , h e d a d  
, e d , . b e . h e i , f a c e  
T h i , d e h a a a d k e  
a . a c h e . . h e b a c k i d e  
, D e i e e J a . D a h , i e*

A **trowel** will be in constant use for those many digging jobs that do not need full-sized tools. The trowel is perfect for transplanting seedlings and bulbs or digging shallow-rooted weeds. Small hand cultivators, often sold in sets with trowels, are good for weeding in small areas and between closely spaced plants. Another useful, small, digging tool is appropriately named a **digger** (a.k.a. weeder). It is useful for digging up weeds with long taproots, such as dandelions or Queen Anne's lace, or for prying out Johnson grass rhizomes. It consists of a long (2 to 3 cm (10 to 12 in)), solid-metal rod with a two-pronged blade at one end and a handle at the other. This tool is practically indestructible and well worth the small investment of its price for people with strong hands and arms or loose, friable soil.

A sturdy **rake** is useful in clearing the garden of rocks and debris. It is also helpful in spreading mulches and smoothing seedbeds. Determining which size of rake is right for you depends on your size and strength and the uses you intend to put it to. As the number of tines increases, the rake weight also increases, so avoid choosing a rake so heavy it will tire you after a short period of use. The length of the rake handle is important too; the tip of the handle should come up to your ear when standing upright. A handle that is too short will cause excess bending and back strain. A level head garden rake has a flat head and is superior for smoothing a seedbed. A bow rake holds the working head farther from the handle, making it easier to rake more deeply.

A **pickaxe** or **mattock** may be useful for certain sites. Pickaxes are used to break up extremely hard-packed or stony soil. Mattocks are used for the same purpose, but are equipped with a cutting blade for areas where larger roots need to be removed. A mattock may also be used to chop up debris for composting or to create a quick drainage trench.

#### AGRICULTURE EXTENDED LEARNING GARDEN BOX

## Power tools for cultivating

The power rotary tiller is probably the power tool most commonly purchased by gardeners. The tiller's engine powers rotating blades, or tines, which can make garden soil loose and fluffy, ready for planting. It can also chop up plant debris and mix it into the soil. Incorporating organic matter and manures into the garden is also easily accomplished with a tiller, reducing the tendency to procrastinate this necessary chore.

The ability of the tiller to do these jobs effectively is a function of its weight, strength, design, and type of tines, as well as the type of soil. A heavy, powerful rear-tine tiller is most effective on stony, clay soils, while in a small garden or one with light soil, a front-tine tiller may be more appropriate. Very lightweight tillers, known as soil blenders, are designed mainly for raised-bed gardening.

Rotary tillers are available with front-mounted or rear-mounted tines. Rear-tined tillers are generally better

plus. Look for excessive dirt around the engine or in the air filter. This may also mean bad maintenance habits. Ask the owner for an operator's manual, and ask where the machine has been serviced in the past.

### Other power tools

There are a few other power tools that can be used in the vegetable garden. Cordless tools come with various cultivating attachments. Most are rechargeable and can make garden chores more pleasurable. These tools are especially useful to those with limited physical strength.

A garden shredder is nice to have for a large garden with a lot of plant wastes. There are hand-operated shredders that are slow but useful if wastes become available in small quantities and are not too coarse. Gasoline shredders are quite expensive and may be disappointing to the gardener who wants to chip branches and other large materials. They are best used for shredding leaves, small branches, and other plant wastes (although sunflower stalks would probably be too much for one.) A chipper, on the other hand, will chip large branches and other coarse material, but the cost of \$1000 or more makes the chipper uneconomical for many gardeners.

### Carts and wheelbarrows

A wheelbarrow or cart is very handy to have for garden work. It should be easy to handle when full, with good maneuverability. Durable construction is well worth paying for as it ensures a long, useful life. Be sure to choose the size appropriate for your physical abilities and garden needs. A wheelbarrow generally requires more strength and control than do most garden carts, but models with two rear wheels are an excellent compromise between a barrow and a cart. If you plan to haul only light straw, leaves, sawdust, and such materials, then one of the small carts may be suitable. For heavier jobs, you may need a wheelbarrow. Some of the newer garden carts,

should be of steel, which will stay sharp, keep its shape, and outlast softer metals. Consumers' magazines and gardening publications frequently have articles explaining what to look for in tools. Local hardware stores and garden centers carry a wide range of tools. Shop around and handle the tool to get a feel for it – you may prefer one brand over another.

Keeping a tool clean and sharp increases its usefulness and lengthens its life. Learn the techniques of sharpening each tool, and practice them frequently. Professional gardeners often carry sharpening stones or files while working and sharpen after every hour or so of use. Clean your tools after each use. One effective method is to keep a 2 L (gallon) bucket filled with sand and used motor oil in the tool shed. At the end of the gardening day, remove clinging dirt from tools by plunging them into the oily sand several times. This will keep the tools cleaned and oiled and will help prevent rusting.

The last and perhaps most important step in tool care is to put tools away in their proper places. If each tool has its own place in a storage area, it is simple to determine if tools are missing before closing up for the day.

Before winter sets in, sharpen tools, then coat metal parts lightly with oil and rub wooden handles with linseed oil. Drain power tools of gasoline, and obtain filters, mufflers, and tune-up parts so a fall or late-winter tune-up can get the machine ready for early spring jobs. Have maintenance done, if needed, in the winter, when demand is lowest and you can afford to let the repairer take his or her time. Some dealers will take your gas-powered equipment in the autumn, store it for the winter and return it in spring serviced and ready to go!

Thoughtfully selected and cared for, your tools will give many years of service. The extra effort will pay for itself in time.

**NOTE:** Watering equipment is discussed in the factsheet on 'Irrigating the vegetable garden' on this website.

#### AGRICULTURE EXTENDED LEARNING GARDEN BOX