



Best Tools for BIG GARDENS

Learn the pros and cons of the garden tools you need to successfully—and affordably—manage a large-scale food garden.

By Joel Dufour

Illustrations by Keith Ward

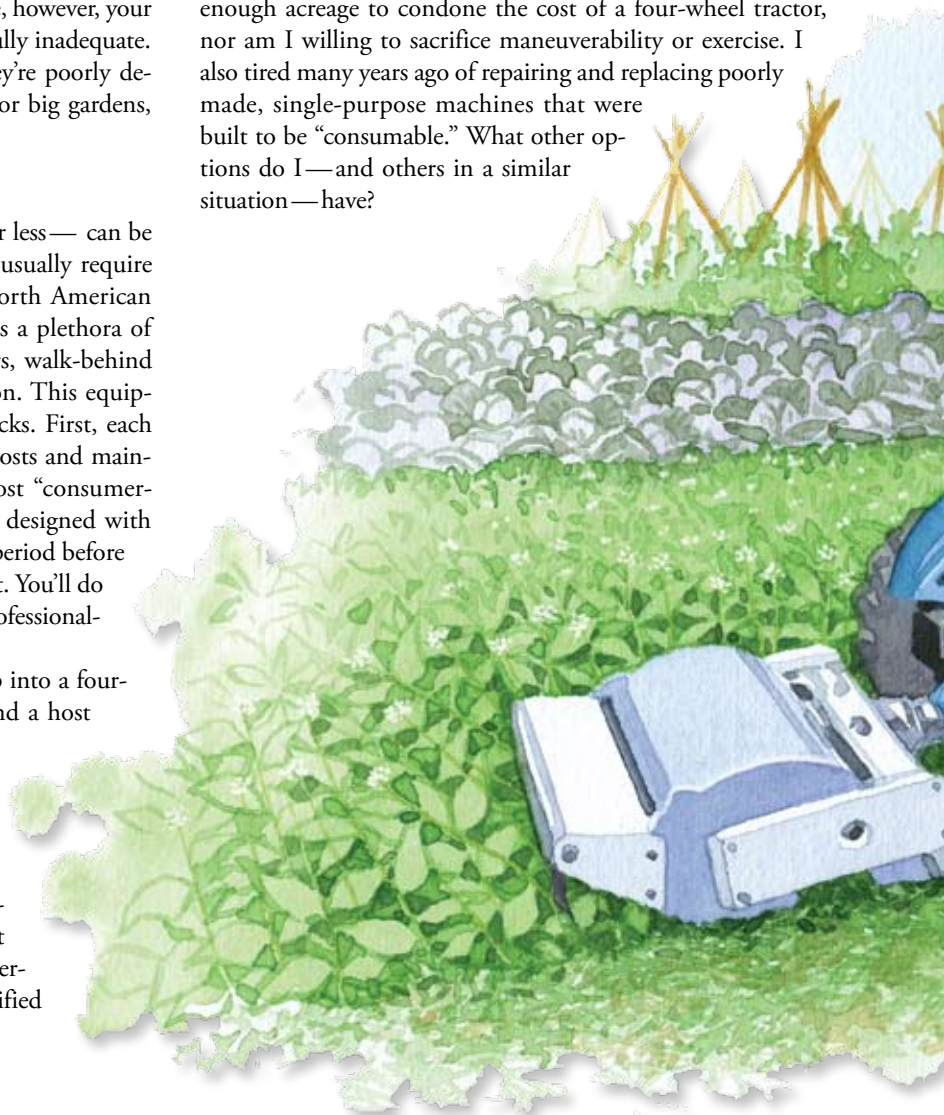
Imagine you finally have some land and you're going to start gardening in earnest. I'm talking serious food production here: growing a significant portion of your own food, and possibly even selling surplus produce at the local farmers market. After your garden grows to a certain size, however, your generic hardware-store tools will become woefully inadequate. These tools will wear out too quickly and they're poorly designed, so they'll wear you out quickly, too. For big gardens, you need serious tools!

Mechanized Equipment

While smaller gardens—5,000 square feet or less—can be managed by hand tools alone, larger gardens usually require some level of mechanical aid. The typical North American “Lawn and Garden Equipment” market offers a plethora of single-purpose machines, such as garden tillers, walk-behind or riding mowers, chipper-shredders and so on. This equipment works, but there are two major drawbacks. First, each machine has its own engine, which increases costs and maintenance issues. Second, in my experience, most “consumer-grade” equipment offered at big-box stores is designed with just enough durability to outlast the warranty period before it needs major service or is completely worn out. You'll do better if you spend a little more money for “professional-grade” models.

Another option is to go for broke and jump into a four-wheel tractor with a power take-off (PTO) and a host of implements. This option overcomes the problem of needing a different small engine for each task, and, if you purchase reputable brand equipment, durability won't be an issue because any tractor with a PTO is usually built well enough for agricultural service. The downsides of a four-wheel tractor are greater upfront costs, less maneuverability, and even lack of exercise for the user. These downsides could be justified if you have enough land to cultivate.

My own homestead is a good example of this quandary. In addition to managing a quarter-acre organic garden, we mow an acre of lawn and 5 acres of brush, maintain a quarter-mile gravel driveway, chip and shred as needed, and haul stuff (firewood, compost, rocks—you name it) around the property. The work on my land could easily justify either of the two equipment scenarios previously mentioned. I don't feel I have enough acreage to condone the cost of a four-wheel tractor, nor am I willing to sacrifice maneuverability or exercise. I also tired many years ago of repairing and replacing poorly made, single-purpose machines that were built to be “consumable.” What other options do I—and others in a similar situation—have?

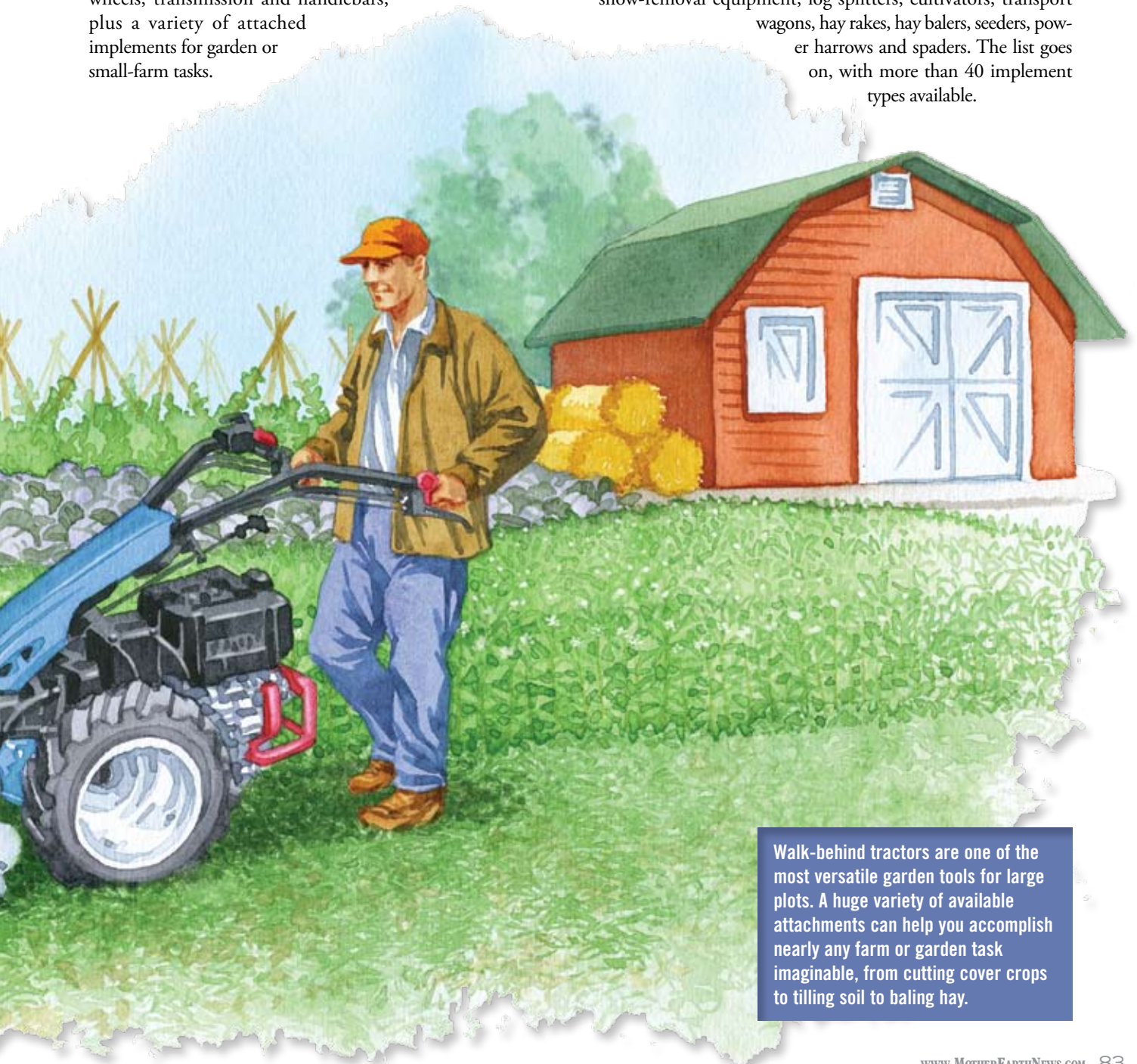


Walk-Behind Tractors: The Best of Both Worlds

Unlike North America, many European countries have the tools to support large-scale gardening. These countries have a class of large-garden tools that effectively fills the void between four-wheel tractors and single-purpose machines: walk-behind agricultural equipment.

The idea of walk-behind farm equipment is not new to North America; it has just been largely forgotten. From the 1920s to the 1960s, scores of walk-behind tractors (also called “walking tractors,” “two-wheel tractors” and “hand tractors”) were produced in the United States. These machines comprised an engine, two wheels, transmission and handlebars, plus a variety of attached implements for garden or small-farm tasks.

While this equipment concept has dwindled in North America, Europeans have recognized that walk-behind agricultural equipment has the durability and versatility of a tractor, but in a walk-behind configuration that takes less space to maneuver and less money to purchase. European countries have continued to improve their walk-behind tractors (and accompanying attachments) over the past 70 years. One brilliant breakthrough was the design of a reversible handlebar system, so the implement mounting can change from the rear of the tractor to the front. Italy currently produces more walk-behind tractors than any other European country (16 brands) and available attachments include tillers, plows, a variety of mowers, chipper-shredders, snow-removal equipment, log splitters, cultivators, transport wagons, hay rakes, hay balers, seeders, power harrows and spaders. The list goes on, with more than 40 implement types available.



Walk-behind tractors are one of the most versatile garden tools for large plots. A huge variety of available attachments can help you accomplish nearly any farm or garden task imaginable, from cutting cover crops to tilling soil to baling hay.

Asian countries have developed walk-behind farming equipment as well, but it tends to be less versatile than the European equipment and there are fewer implements available. Also, the Asian brands don't currently have any stocking importers established in North America, so even though a Chinese walk-behind tractor might cost less, spare parts and after-the-sale support do not currently exist in this country. Buyer beware!

What's the Cost?

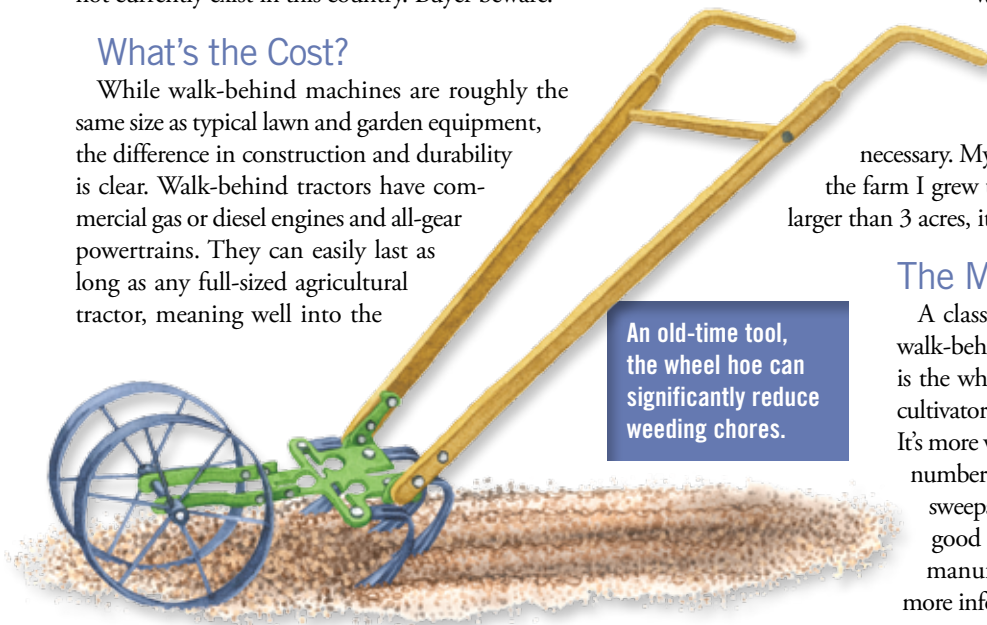
While walk-behind machines are roughly the same size as typical lawn and garden equipment, the difference in construction and durability is clear. Walk-behind tractors have commercial gas or diesel engines and all-gear powertrains. They can easily last as long as any full-sized agricultural tractor, meaning well into the

next generation of gardeners. A walk-behind tractor with attachments for general lawn and garden tasks will run in the range of \$4,000 to \$7,000. This is a far cry from what you'd pay for the four-wheel equivalent, and not much more than you would spend on several single-purpose machines — actually less, when you take into account the longer life expectancy of a quality walk-behind model.

At a certain point, you may be working more acreage than is practical for a walk-behind tractor, and a four-wheel farm tractor will become necessary. My family experimented with this limit on the farm I grew up on, and I'd say that if your garden is larger than 3 acres, it's time to look into buying four wheels.

The Modern Wheel Hoe

A classic tool that straddles the gap between walk-behind, motorized tractors and hand tools is the wheel hoe. This human-powered, wheeled cultivator has made a reappearance in recent years. It's more versatile than ever because of an increased number of accessories now available (cultivators, sweeps, stirrup hoes, hilling plows and even a good seeder). Hoss Tools is the leading U.S. manufacturer; go to www.HossTools.com for more information.



An old-time tool, the wheel hoe can significantly reduce weeding chores.

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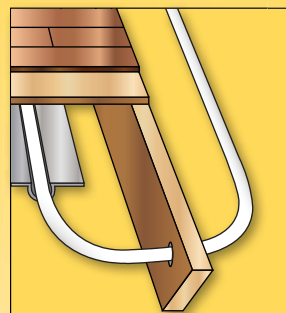
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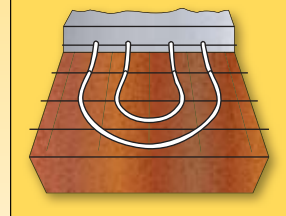
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Hand Tools

Some may ask, “If I have excellent mechanized equipment, do I still need to fool with hand-held gardening tools?” As an organic gardener for more than 35 years, my answer is a resounding, “Yes.” I apply a lot of mulch in my garden to cut down on weeds, but still find plenty to do with hand tools. In fact, cultivating and weeding with hand tools are my favorite parts of gardening, except for eating the food. The work is quiet and reflective. To make it an enjoyable experience, however, you have to find top-notch hand tools. If the hoe you’re wielding strains your back, if the garden fork keeps bending or the spade won’t stay sharp, then frustration can easily overtake pleasure. Unfortunately, most of the tools that are typically available in big-box stores (and even, for the most part, smaller hardware stores) are poorly made, mass-produced consumables that don’t even glance in the direction of ergonomics. Once again, we have to look at alternative sources.

In this genre as well, the Europeans really dominate the market. A gardening culture and an old-world durability mindset have

The swan-neck weeding hoe is designed to be used like a broom.



paired to produce some of the best hand tools available.

Because European tools are made to last longer, producers usually put more thought into the ergonomics of tool design. If a hoe that will last 50 years is poorly designed, who would work with it? The only weeding hoes I’ve found with long enough handles to suit my tall height come from Holland, and the ergonomics of German chopping hoes (also called “eye hoes” or “grubbing hoes”) are the best I’ve discovered.

Durable Steel: Solid Designs

Steel tools are stronger and they stay sharp much longer than tools made from other materials. Steel isn’t just steel, of course, and Europeans have known this for the many generations they’ve been producing quality garden tools. Steel can be stamped, rolled, cast, forged or hardened, all with different durability results.

The best garden tools are made of forged steel because it’s denser and more resilient. Forging is an expensive process (some European

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manufacturers forge by hand), but the result is impressive.

I haven't found any North American manufacturers that are doing anything directly comparable with the forged tools from abroad, although some good manufacturers in the United States produce broadforks, ergonomic shovels, pruners/loppers, swan-neck hoes, and hoes made from recycled disk blades (called Rogue Hoes), which aren't quite as durable as forged, but are less expensive. I have also found fine tools in some Asian countries (Japan and Korea). Okatsune pruners, shears and loppers are top notch, and Hida Tool in California carries

excellent Japanese tools. To locate these companies online, see "Garden Tool Sources."

Where to Look

The good news is that you don't have to take a trip to Europe to acquire this kind of equipment or tools. Several brands of Italian walk-behind tractors have been imported over the last 40 years, and while they are certainly not available in mainstream stores, certain dealers will have them in stock. At least two brands—BCS and Grillo—currently have U.S.-based importers that stock a full supply of parts and offer customer support.

While you probably won't find the best wheel hoes or hand tools at your local hardware store, you can acquire them online. Top-notch, durable tools cost more, but in my experience, the investment is well worth it. Whether buying hand tools or motorized equipment, by investing in superior garden tools, you'll get more done, you'll feel better doing it—and you'll have more fun! 🌳

GARDEN TOOL SOURCES

Broadforks

www.GullandForge.com
www.MeadowCreature.com
www.ValleyOakTool.com

Pruners/loppers

www.Barnel.com
www.HidaTool.com

Rogue hoes

www.RogueHoe.com

European hoes

www.EarthTools.com

Shovels

www.GreenHeronTools.com
www.SpearHeadSpade.com

Stainless-steel trowels

www.WilcoxAllPro.com

Walk-behind tractors

www.BCSAmerica.com
www.EarthTools.com

Wheel hoes and seeders

www.HossTools.com

Joel Dufour has owned his garden-equipment business, Earth Tools (www.EarthTools.com), since 1993. He lives near Frankfort, Ky., with his wife and two daughters in an off-grid, 900-square-foot home they built by hand.

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