

Sustainable Hardscaping *for an* Earth-Wise Garden

When it comes to environmental responsibility, many gardeners are aware of the need to make wise plant selections and practice gardening techniques that conserve water and don't harm the ecosystem. But to be truly earth-friendly, it makes sense to think the same way about the other parts of a garden, such as pathways, fences, and outdoor furniture.

BY BETH O'DONNELL YOUNG

THE CHOICES you make about materials for your hardscape (the structural, usually nonliving, elements of the landscape) have an impact on this world, for better or for worse. It takes an awareness of the consequences of your decisions as well as a willingness to go beyond the norm (that is, traditional landscaping materials) to make earth-wise choices.

To be conscientious about landscape materials, you must question everything about traditional landscape materials, the things that you can purchase at your garden center, your local big-box store's gardening department, your lumberyard, even your stoneyard. Because, as with a lot of current landscape practices, the status quo is damaging our earth.

What follows are the things to think about before you buy something new. These are guidelines, not hard-and-fast rules. Your best bet is to consider the full range of options, throw out what doesn't work for you, and weigh the rest. Making conscious choices—rather than buying what the commercials tell us to buy—is the best we can do.

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TO PURCHASE OR NOT TO PURCHASE

Do you really need to buy it? Or can you beg, borrow, or share it? Perhaps you could rethink purchasing that fancy play structure—after all, all the kids in the neighborhood need only one. Does every home need a patio set big enough for parties? What if all the neighbors chipped in for an extra patio set that anyone could borrow? Rethinking our natural tendency as Americans to be independent might lead to some good neighborly relations (or at least you might meet the neighbors).

INDIGENOUS, INGENIOUS

If you decide you need it, you can still stretch your thinking process to go beyond the standard materials. Think back to the time when folks could not go out

and buy prefabricated landscape materials and install them in a weekend. What did they do?

They used what was at hand. Boards, yes, but also branches, grasses, bamboo canes, straw, dried manure, crushed rock, chalk dust, hide, hair, and hay. Twigs were soaked to make them pliable and then bent and tied or glued into trellises, arbors, and furniture. Thin branches were woven between stakes to make fences or daubed with gypsum to make durable walls. Bamboo canes were used for fences as well as paving and ornamentation. Mud and straw were combined to make bricks and roof tiles. Stains were created from berries and vegetable extracts. Structures were weatherproofed with gypsum, mud, and/or straw. Stone was broken and carried to make paving, walls, and water features that stand centuries after being built.

To find out what techniques were used in your region, you may have to do some sleuthing. Your local historical museum would be a good place to start; it may have information on how local people lived before industrialization, what materials were abundant, and how they were used. Another source of ideas is to look toward ancient (or just preindustrial) cultures with similar climates to yours: if you live in the coastal Northeast, you could borrow ideas from England and Japan; in the arid West, you could look toward the Middle East and North Africa, and so on. Researching the old ways of making paths, fences, walls, and overhead structures around the world might inspire you to start an entirely “new” way of hardscaping in your area—one that is gentle on the land as well as your wallet.

BY-PRODUCTS, NOT PRODUCTS TO BUY

Thinking in terms of using materials at hand, particularly free materials that are the by-product of some form of local production, can save you a lot of money. Find out what the local farms grow and what their by-products are. Here in Oregon we

This fence was built using scrap lumber and branches cut from juniper trees on the property. It serves the purpose of creating a boundary between a densely planted area of the garden and a more open, casual area, and it adds texture and local character to the scene. Design by Betsy Arriola.

GIVE OLD STUFF NEW LIFE

Here are some ideas for jump-starting your own creative musings about how to repurpose rather than purchase.

- Urbanite is an increasingly popular material for making steps, retaining walls, raised beds, and patios. It's simply broken-up concrete, repurposed. It's free and can usually be had for the asking if you see a pile of it at a construction site. You haul and it's yours.
- Wire can be used to string together cans, bottles, or found objects such as beads or keys from a secondhand store to create rain chains or partitions to divide outdoor rooms.
- Old toolboxes make intriguing planters.
- Old toilet tank lids can be painted and used as stepping-stones. Just be sure to put strips of nonskid tape across lengthwise to prevent slipping and sliding on a rainy day.
- Wire cages picked up at a home salvage or used-building-material store can be filled with objects like cut branches or glass bottles to create gabions, which can be used as tables or walls.
- Old sheets can be transformed into flags or canopies.

have hazelnut groves, and the cracked shells make a lovely path material that is long-lasting and that ties in visually with nearby trunks and branches; walking on this material generates a sharp crunch that is somehow restful. Farms are usually eager to give you by-products that are useless to them, but you will have to haul these gifts away yourself. You'd be surprised what you might glean—anything from aged manure to mint hay to used tools.

Don't forget local manufacturers. Asking friends what their company's (or department's) waste products are might get you thinking: maybe I can make a fence of that, or stack it into a wall, or lash it together to make a trellis. Shipping pallets, for instance, can easily be recycled into compost bins. Stone scrap from the manufacture of kitchen counters can be turned rough side up to serve as stepping-stones.

Another source of materials is our public lands. If you ask the appropriate local



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Reused bricks are a good choice for a nativescape path because they hint of the area's history and save resources. Design by Betsy Arriola.

authority for permission, you might be surprised to find that you can help yourself to (a small amount of) an abundant natural resource, such as beach sand, river gravel or cobble, or fall leaves. Before asking for permission, be sure to have in mind what you want, how much you want, when you would like to remove it, and how you propose to haul it.

REIMAGINE AND REPURPOSE

Every culture since the dawn of time has used what is abundant to make shelter and landscape structures. Our 21st-century world also has things in abundance. Sadly, our abundance can be found in our landfills, where we have discarded household goods that have outlived their usefulness or stylishness, or simply don't work anymore. Enter repurposing, which takes a usually discarded item, say an old door, and fixes it up so it can have a new life as something else, say a picnic table.

I've seen great repurposed items in gardens: an old desk fitted with a secondhand sink to make a handy potting bench with a built-in soil funnel; cut-off sneaker soles placed in a concrete path to look like footsteps; and even a string-and-yogurt-cup rain chain. House salvage shops and secondhand stores are great places to start. Walk around these places with new eyes; don't see what it was but what it could be.

One caveat, though: to avoid tackiness, the repurposed part should not be easily identifiable as its former self. Better to make beautiful, useful garden pieces and elements that look vaguely familiar but can't quite be placed. It will add a touch of intrigue to your yard, and humor as your visitors solve the riddle.

IF YOU MUST BUY NEW...

In some cases, buying new is your only alternative. Purchasing new can be guilt-

free if you choose products that are non-toxic, have high recycled content, are locally produced, are durable, and are modular. It would be difficult to find one product with all of these attributes, but thinking in these terms will help you make informed decisions.

Toxic substances to avoid include paints and coatings with volatile organic compounds or VOCs, which contribute to smog and groundwater pollution. Also avoid arsenic and creosote, often used as wood preservatives in the past and found in old railroad ties, which have been sold as landscape timbers for many years. Stay away from any treated wood; perhaps even rethink wood if it decays quickly where you live.

More and more new products have high recycled content. Recycled content is high in some plastic landscape items such as rain barrels, composters, hoses, composite decking, and furniture. There is



Old stuff can have a new life in your garden—and bring your garden to life. This rose-themed path makes creative use of old tiles and manhole covers gleaned from an urban renewal project in Portland, Oregon (the Rose City).

even recycled wood mulch, made from old pallets rather than virgin wood.

Taking a cue from locavores, who make a good effort to eat only locally grown food, you can make a good effort to purchase only locally manufactured landscape materials. You might find that this is harder than it sounds. But it can be done with a bit of sleuthing. Start at your garden center—ask where the item was made. If they don't know, ask for the name of the distributor, who can tell you where it was manufactured. You may find that the product is not made nearby at all, but by asking around you are raising retailers' awareness that this is im-

portant to consumers. When given a choice, choose durable. For example, if you have decided on plastic lawn edging (to keep the grass roots from spreading to the adjacent flower beds), choose the more durable plastic. But also consider the bigger picture: What else can keep the roots at bay? Perhaps the answer is deep-set concrete blocks or natural stone.

And last, when buying new, choose modular over built-in. For example, if you want a patio, consider setting concrete blocks or natural stone in tamped sand rather than poured concrete (but do it accurately so it lasts for years without becoming uneven). That way, as the tides

PLANT YOUR HARDSCAPE


Although hardscape is conventionally understood to be nonliving, there's no reason why plants can't serve as structures that are incorporated into the landscape. Here are a few ideas:

- For a security wall, try planting a hedge of spiny plants such as cactus or holly.
- For a fence, why not use a thin hedge of upright shrubs or trees like hornbeam or arborvitae, or a cordon (a freestanding tree or shrub that has been trained to grow flat)?
- For latticework, an espaliered tree or shrub (one trained to grow flat against a structure) will work just fine.
- For a patio, let an organic lawn or a walk-on groundcover be the pavement.
- Instead of building an arbor, plant a tree to provide shade and something for your clematis to twine on.

of landscape fashion change (they do, but slowly) you can give away, resell, or reset the pieces as you please—with no waste generated in the process.

THE AFTERLIFE

Regardless of whether your landscape materials are shared, natural, by-products, repurposed, or new, there's one last (and lasting) thing to think about: what happens when they are no longer needed? Will they take a lot of energy to break up and remove? Will they fall apart, leaving an unsightly, even toxic, mess?

The best choice, in respect to the afterlife, are the biodegradable items. Nature knows what it is doing. Natural materials do not need to be removed; when they are done, they revert to their elements and regroup into something cool like food for a termite or mealybug. And rather than requiring energy to break down, they generate energy for the garden as they all but magically disappear. Espaliered trees, walkable ground cover, even cacti can make excellent hardscape stand-ins; we just need to expand our definition of hardscape. 

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