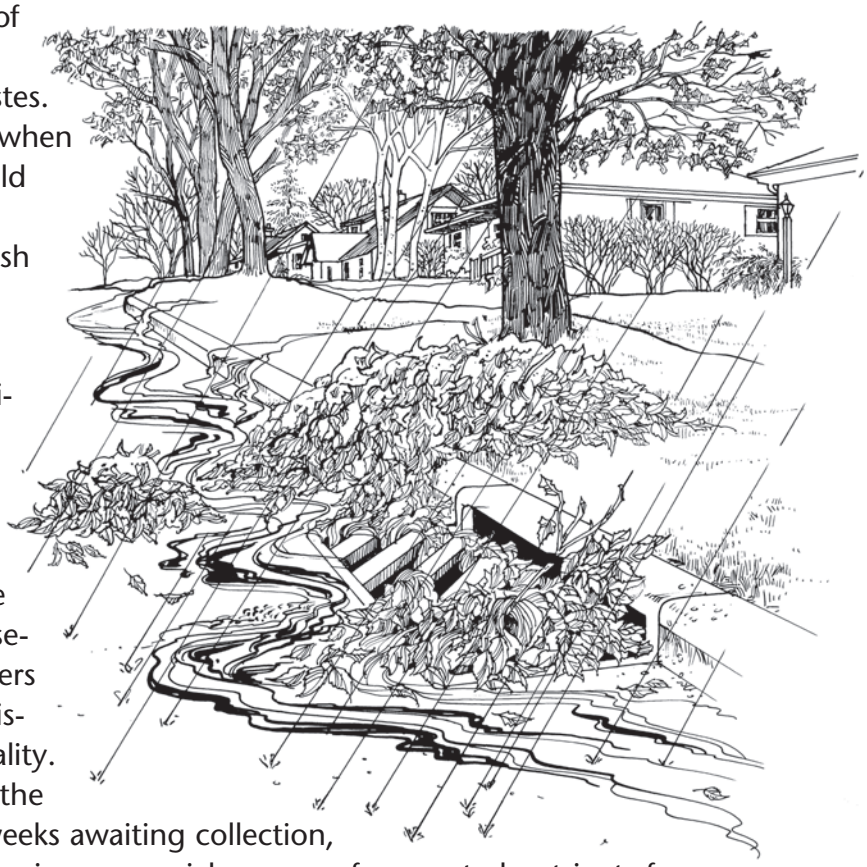
Yard Care and the Environment

Managing Leaves and Yard Trimmings

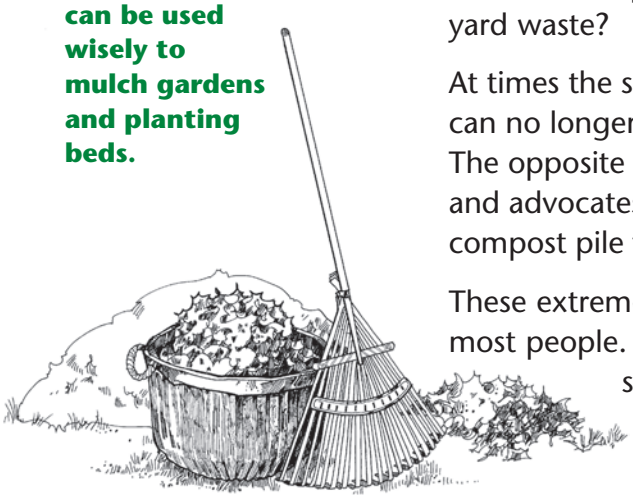
A SERIES OF WATER QUALITY FACT SHEETS FOR RESIDENTIAL AREAS

Anyone who has a yard knows that leaves, grass clippings, twigs and branches can present a challenge. This has been especially true since 1993, when state law banned yard waste from landfills, some of which were seeing a fifth of their capacity consumed by yard wastes. Gone are the days when these materials could be set out in bags with the weekly trash and buried in the town dump.



While many municipalities offer periodic collections of leaves and trimmings in spring and fall, this service has significant consequences for taxpayers and, perhaps surprisingly, for water quality. Carelessly piled by the street for days or weeks awaiting collection, leaves and grass clippings are a rich source of unwanted nutrients for streams and lakes when rain washes them into storm sewers.

Leaves and yard trimmings can be harmful to lakes and streams after washing into storm sewers, or they can be used wisely to mulch gardens and planting beds.



Is there a simple, economical, environmentally sound approach to reducing yard waste?

At times the subject seems polarized. Some people complain because they can no longer put grass clippings, leaves and twigs out with the weekly trash. The opposite camp accepts no compromise with environmental correctness, and advocates fence-to-fence prairie or woodland plantings with a backyard compost pile for every leaflet, grass blade, or eggshell.

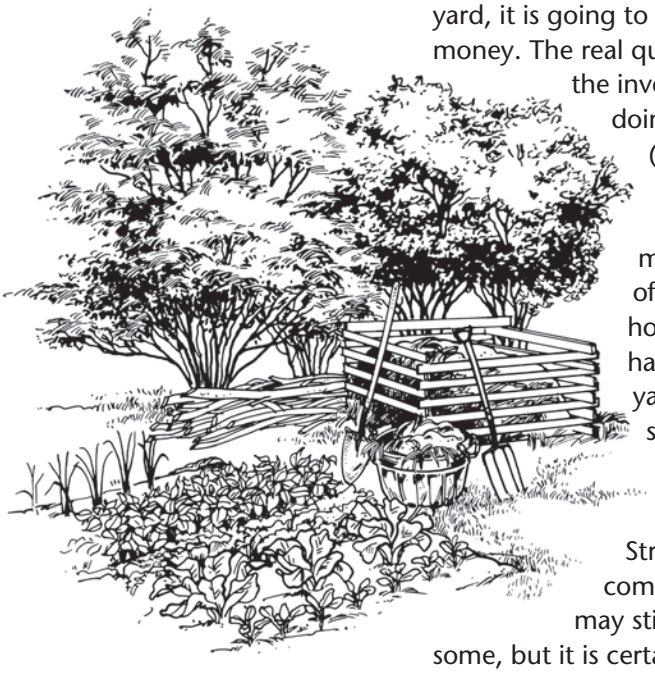
These extremes might be right for a few, but neither will be practical for most people. Fortunately, there are other choices. This fact sheet takes a straightforward look at the subject of yard waste reduction. Not everyone will adopt every one of the ideas presented. But most people will find at least a few of the ideas useful.

IT CAN BE DONE

Some yard wastes may seem difficult to deal with. So, it's not uncommon to hear people ask questions like "Where are people supposed to go with that stuff?" or "What are our taxes being used for?"

But the "problem" of "yard waste" can be looked at from a different perspective. For example, where does the time or money come from to mow and possibly bag grass clippings twice a week in June, because the lawn is too large and has been fertilized too much? Compare the time spent dealing with yard wastes to the time and costs of maintaining a lawn: time mowing, watering, trimming and treating with fertilizers and pesticides along with the costs of power mowers and trimmers and the gas to run them.

No matter what you do or grow in your yard, it is going to require some time and money. The real question is the nature of the investment. Short of doing what is now illegal (slipping yard waste into the regular trash), yard management remains a matter of choice. Generally, however, it is becoming harder to maintain a yard that fails to address some measure of yard waste reduction at home.



Streetside pick-up for community composting may still be an option for some, but it is certainly not a service that uniformly benefits citizens. The same can be said of yard waste drop-off sites, because public employees, machinery, and lands must still be committed.

Leaves and yard trimmings thus invariably create some costs for the individual, the community, and the environment. However, these can be managed in ways that achieve greater overall benefits than was true in the past.

COPING WITH LEAVES AND TRIMMINGS

People have different strategies for dealing with leaves and trimmings. Some choose simply to pay the expenses by using large bagging mowers and power chippers or hauling clippings away. Others choose to expend more effort than money, by mowing frequently in fall to shred leaves, or managing compost bins. Still others chooses to avoid practices known to create yard waste – excess fertilizing that produces excess lawn growth, for example, or landscaping with large or disease-prone trees and shrubs. Finally, some may philosophically shift and regard former "wastes" as resources. Letting clippings lie on the lawn, for example, or replacing lawns with natural planting beds will generate little waste and hide a lot. In reality, most people will probably opt to do a little of each.

THE INCREDIBLE, VANISHING YARD WASTE

Yard trimmings do not magically disappear, but natural processes reduce much of the waste pretty quickly. Hence the wisdom of banning yard wastes from landfills. When just cut or raked, grass clippings, leaves and branches do indeed occupy a surprising volume. But if homeowners mow their lawns properly for example, so as not to remove more than ⅓ of the blade length, then grass clippings will disappear in a couple of days as they dry and filter down to the soil surface for decomposition.

Take that same grass and rake or bag it, however, and it will be around for a while – even with properly managed composting. Putting clippings in the street constitutes a nuisance . . . piling them up in one location kills the grass . . . moving a pile means extra work . . . keeping bags in the garage leads to odor as clippings "ferment" away . . . and placing bags in the driveway means an unsightly obstacle until collection day.

MAKING CHOICES

One misguided response to the problem of yard wastes would be to have a lawn devoid of "waste-producing" trees, shrubs, and flower beds. If grass clippings from the all-lawn yard were left in place, that would mean no more leaves and trimmings to contend with, right? Wrong.

Weeds will invariably spring up between cracks, adjacent to buildings, and in small groups where they should be pulled or dug rather than poisoned. With only a lawn border-to-border there is no place to go with pulled weeds.

There is also the matter of leaves blowing in from elsewhere, or being dropped from neighbors' trees along with twigs, petals, cones, pods, nuts, crabapples, and other seeds or fruit. Is it really worth the frustration when perimeter planting beds would recycle some of these materials naturally?

Vacations or prolonged rains can also be problematic for those seeking a "waste-free" expanse of lawn. When the grass gets too long, clippings will simply have to be collected. Then what does one do with them? Driving grass clippings away consumes time and gas, and can make a mess inside the car. Even if a community picks them up, bad timing could dictate prolonged storage in plastic bags.

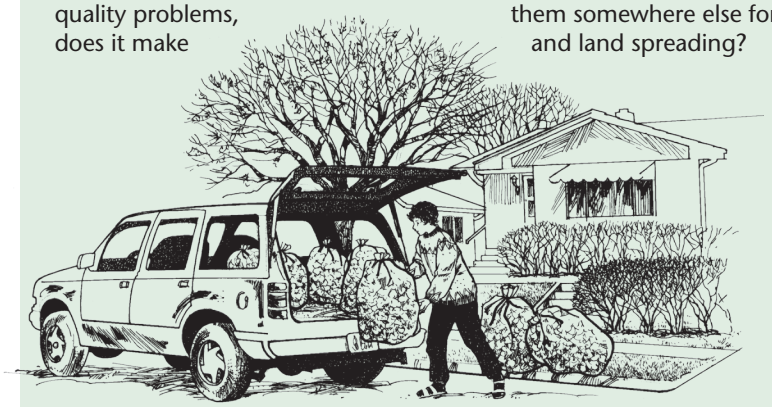
Having spaces in the yard to recycle leaves and grass clippings as mulch can quickly begin to look better, figuratively, when the above are considered – and, literally, when colorful flowering plants adorn the landscape.

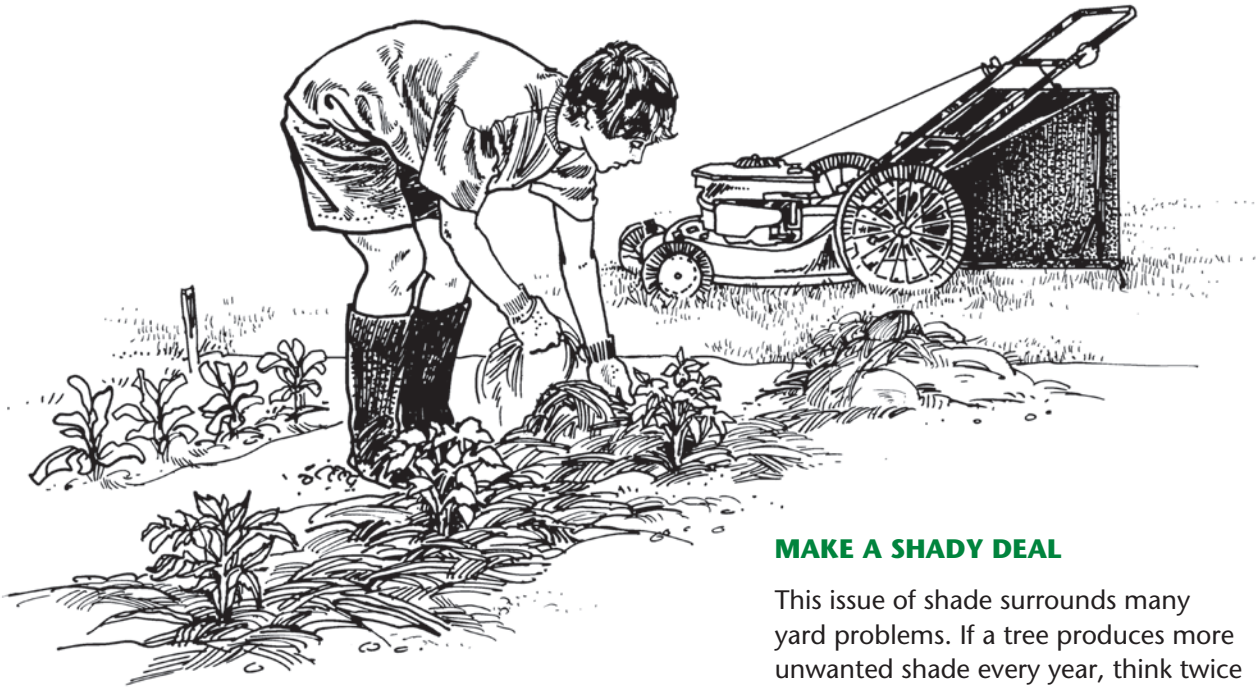
Transportation and yard waste

Some communities collect and compost yard "wastes" for the convenience of their residents. But somehow this practice has inappropriately come to be viewed in certain circles as "environmentally friendly." In reality, it is a compromise between collection for landfilling and at-home recycling.

Consider this: In urban areas with air quality problems, does it make good sense environmentally to place yard wastes at the edge of the street for municipal pick-up…then truck them away to a community compost site… only to have citizens make subsequent trips in private vehicles to pick up the compost and bring it back home? Similarly, does it make sense to drive leaves, clippings and brush to a central collection point, where large trucks take them somewhere else for shredding and land spreading?

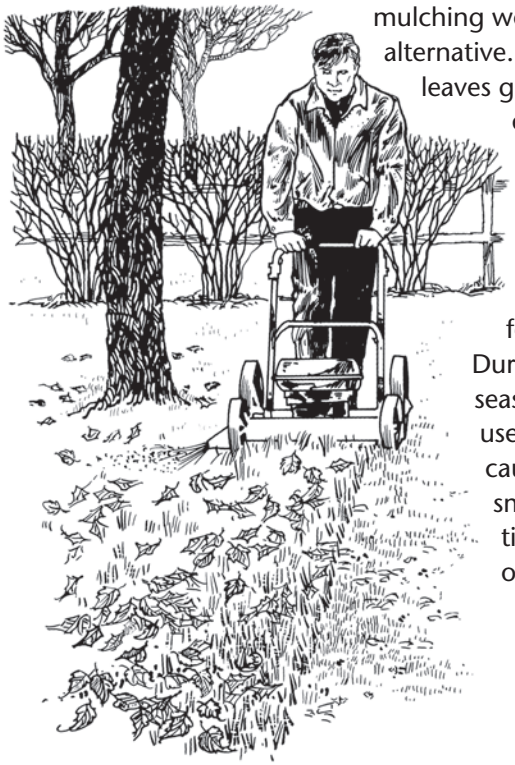
The time, vehicle trips, air pollutant emissions, and consumption of fossil-fuels stack up as do the costs, merely to recycle and reuse a renewable natural resource (compost). And, unless collection is timely, streetside placement of leaves and grass clippings also concentrates these materials where they are more subject to washing into storm sewers. Even if picked up, soluble nutrients within them may first wash away with rainwater to degrade lakes and streams.





USE THOSE MARVELOUS MULCHES

If you bag grass clippings, use them as mulch in vegetable gardens to retain moisture and keep weeds down. Leaves can also be an excellent mulch. Use them to protect roses and other plants over winter. An abundance of fall leaves is a factor that prompts many people to consider formal composting, but simple mulching would be an easier first alternative. Using a mower to shred leaves greatly reduces volume and exposes more leaf surfaces to speed up decomposition. Shredded leaves knifed (lightly dug) into annual flower or vegetable gardens make a good organic fertilizer and soil conditioner. During the spring planting season, leftover leaves can be used to lessen seedling injury caused by late freezes and to smother emerging weeds. In time, you may develop your own favored alternatives.



MAKE A SHADY DEAL

This issue of shade surrounds many yard problems. If a tree produces more unwanted shade every year, think twice about the constant pruning (and the waste it produces). Consider instead more shade-tolerant ground layer plants as alternatives to your thinning lawn. If sun-loving plants are a real priority, perhaps you can find a place for them in another part of your yard, or, as a last resort, you might consider removing the trees. Consider, too, that the north side of many houses has too much shade for a healthy lawn. Landscaping that works beneath trees could also be effective there.

LEAVE 'EM

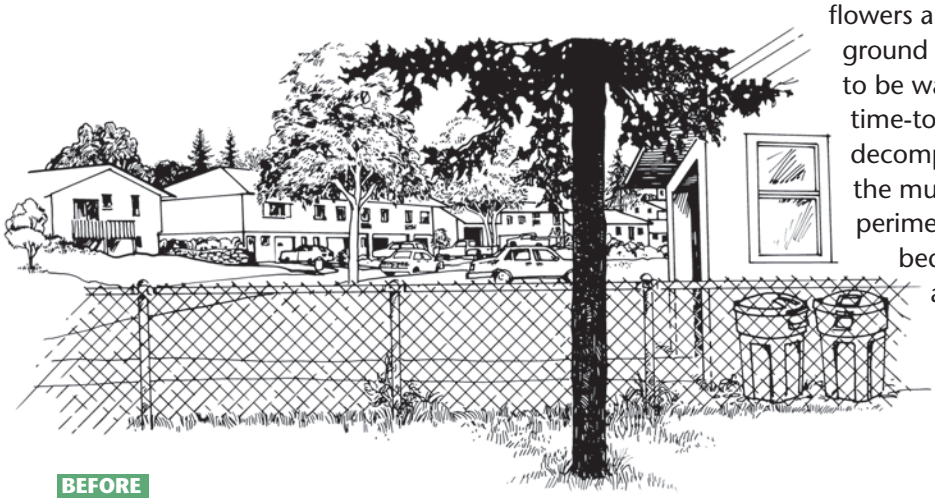
Natural decomposition will usually take care of grass clippings if they are simply left in place. Planting beds around tree bases and woodland landscaping are especially good at allowing most materials that fall from within them to simply be left there. *"Leave 'em"* is also practical advice when it comes to the chore of fall raking. Periodic mowing to chop up modest amounts of leaves reduces lawn raking and provides a good source of organic fertilizer. Just don't allow the leaves to mat and make sure that ample grass shows through them.

SEND THEM TO BED

The benefits of planting beds quickly become evident. Such areas not only recycle their own leaves and twigs, but can accept material from other areas as well. Leaves, twigs, pulled weeds, clippings from lawn areas that occasionally get too long, and even an apple core or banana peel produced while working can be recycled there. Alternative ground layer plants (ground covers, flowers, native spring ephemerals) allow yard wastes to disappear quickly. The decomposing "wastes," in turn, benefit plantings because of their organic fertilizer value, enhancement of soil moisture and potential to keep weeds down.

FOSTER LIFE ON THE EDGE

Perimeter planting allows leaves and trimmings to be spread out and around so they do not accumulate to problem levels. Certain plantings will also enhance privacy, landscape variety, and songbird habitat. Because they routinely contain flowers and other ground covers likely to be watered from time-to-time, decomposition of the mulches with-perimeter planting beds is often accelerated.



BEFORE

A lawn that extends to the edge of a property often ends up as wasted space and sometimes exposes less-than-attractive views.

AFTER

Perimeter plantings screen undesirable views, enhance privacy, and provide space for recycling leaves and yard trimmings.

DON'T GET CARRIED AWAY

Now, more than ever, composting seems so environmentally conscious . . . so earthy . . . so responsible. It certainly is positive to create a resource on your own property from something that in the past was often hauled away as a waste. Plus, composting can be captivating, becoming a hobby for certain people.

That's fine, but think about it. Deciding to rake or bag grass clippings is (again) a personal choice. However, grass clippings are best left on the lawn. Collecting them solely for the sake of composting is environmentally unsound. First, it means the need to fertilize more, since grass clippings left in place provide half the lawn's nitrogen needs during the growing season. Second, the organic, slow release fertilizer in the clippings will likely be replaced by more soluble chemical fertilizers that could reach surface waters or groundwater from lawns more readily. Finally, though generally positive, composting concentrates waste in a specific area, requiring more careful management.

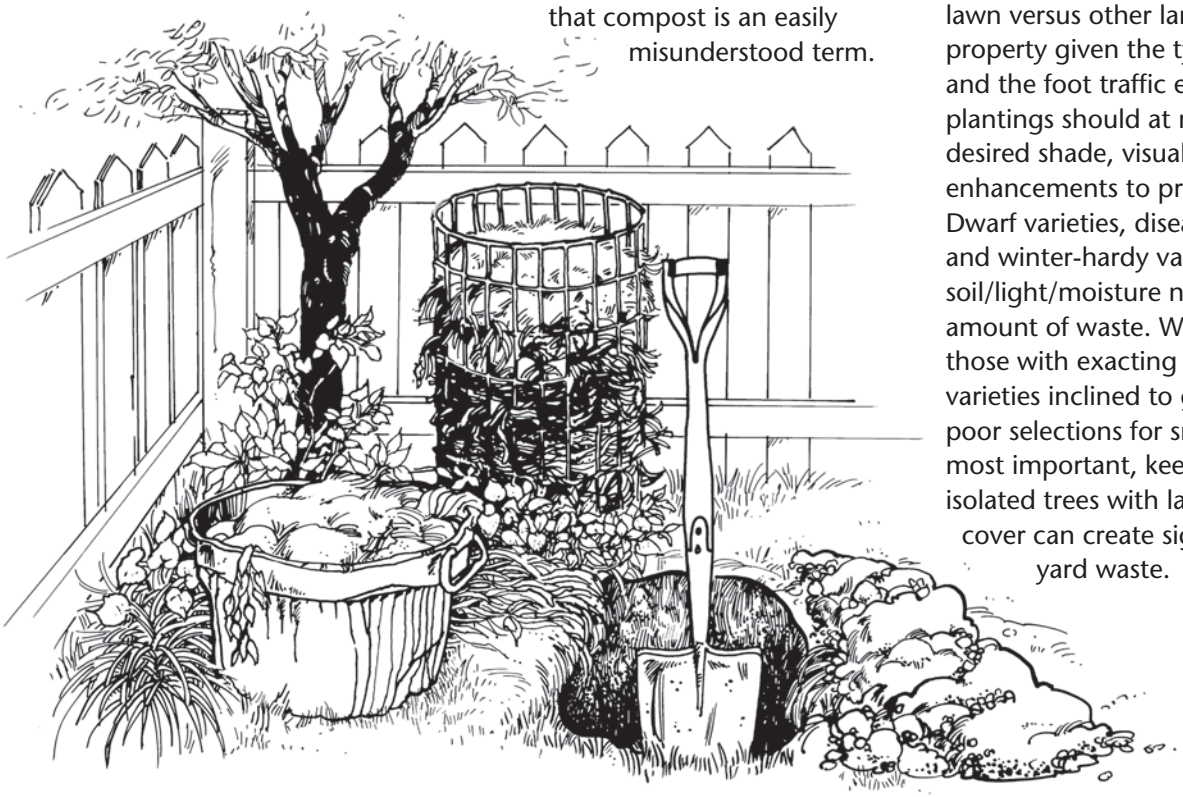
This is not to discourage formal composting. But it is important to recognize that compost is an easily misunderstood term.

Compost, the noun, simply means a mixture of decayed organic matter. *Compost*, the verb, refers to its production. The term was not meant to be narrowly constrained. Yet many people think of composting as taking place only in bins or piles established for that purpose and conducted by highly dedicated or knowledgeable people.

In reality, composting does not have to be a time-consuming chore or a leisure-time hobby to be successful. The decomposition involved is a natural process that takes place not just in bins, but also in planting beds, lawns and gardens.

(Note: Formal composting generally requires a 4'x4'x4' bin (or a similar-sized pile) that is managed by layering, watering, and turning materials to speed decomposition and avoid odor. Contact your county UW-Extension office or local DNR office for more information.)

Backyard corners, wire enclosures and trench composting can handle leaves and trimmings, but landscape planning with an eye to recycling these materials can be a simpler solution.



PLAN ON IT

Leaves and yard trimmings are inevitable. Only you can plan the right amount of lawn versus other landscaping for your property given the types of family uses and the foot traffic expected. Woody plantings should at maturity provide for desired shade, visual screening, and enhancements to property appearance. Dwarf varieties, disease resistant varieties, and winter-hardy varieties with suitable soil/light/moisture needs can reduce the amount of waste. Weak-wooded plants, those with exacting requirements, and varieties inclined to grow very large are poor selections for smaller yards. Perhaps most important, keep in mind that isolated trees with lawn for a ground cover can create significant work and yard waste.

GO FOR THE GOLD

Native landscaping enthusiasts often cite the richness and diversity of fall prairie and woodland colors – gold, copper, and bronze – while other parts of the landscape turn dull brown. From the perspective of managing leaves and trimmings, alternative plantings have value whether they are native or simply more natural than lawns. Wooded residential lots, especially, are usually the most expensive and sought-after. Fortunately, such lots can be created over time as opposed to being cleared and converted to traditional landscaping. In terms of wildlife, water quality and even economics, converting golden landscapes to ordinary lawns is unwise.

LOOK TO THE FUTURE

Things may be going fine now in your conventionally managed yard, which is mostly lawn. But what if something happened and you could no longer provide the time, energy, or investment necessary for that spotless carpet of green?

What if you wished to sell? Do prospective buyers view a lawn as an asset, or as commonplace? Comparatively, how would they view flowing beds of perimeter plantings adrift with varying colors and textures, shady groupings of mature trees, and vegetatively screened privacy for the backyard? Which would songbirds prefer?

Planning for the yard does not have to involve complex or expensive renderings by a landscape expert, though doing things well from the beginning should be viewed as an investment. Sometimes decisions can be governed by common sense as much as anything else.

Simple is better

In many respects, *"the simpler the better"* is a truism that applies well to managing leaves and yard trimmings.

- Grass clippings left in place generally require no further attention and fertilizer applications can be reduced to mid-October (and maybe early June). Raked or bagged clippings make excellent mulch for gardens.
- Short of full-scale composting, a small wire enclosure can accept a surprising amount of vegetation for recycling throughout the growing season. Materials seem to "shrink back" between additions as simple, low effort composting works away.
- Landscaping that incorporates planting beds is a key to dealing with leaves and trimmings, which can be spread out over or rotated among planting beds. If chopped into smaller pieces, they will decompose even faster.
- Unwieldy-looking branches can quickly become neat little piles or handfuls of twigs when cut up. The time taken may be less than managing the lawn replaced by woody borders.

As with all forms of solid waste, reduction should be the underlying objective. It is both inefficient and uneconomical to have municipalities handle leaves and yard trimmings when this "garbage" can easily be *reduced, re-used* and *recycled* right where it is produced – in your own back yard. As you change attitudes and form a few simple good habits, some things will start looking less like wastes and more like resources. Here's how yard waste can become yard wealth:

1) ***Use Organic Mulches:*** *Re-use* leaves, wood chips, grass clippings, and other yard trimmings as mulch to retain soil moisture, *reduce* weed growth, moderate daily and seasonal soil temperatures, and *reduce* soil erosion.

2) ***Plant Ground Covers:*** *Reduce* impractical lawn areas (steep slopes, shady areas, low spots) and keep tree roots moist and cool. Less lawn means fewer grass clippings. It also can *reduce* the amount of pesticide and fertilizer use.

3) ***Direct Downspouts into Planting Beds or Lawns:*** *Reduce* runoff from downspouts directed onto paved surfaces which can contribute pollutants to lakes and streams. *Re-use* the water on your yard rather that letting it run off.

4) ***Collect and Store Rainwater:*** *Reduce* stormwater flowing into lakes and streams and *re-use* it during dry periods. This time-tested idea works especially if you collect from a limited roof area and provide an overflow barrel.

5) ***Try Natural Landscaping Concepts:*** "Naturalize" at least a portion of your yard to *reduce* maintenance, grass clippings, and pesticide and fertilizer usage. Enjoy the attractive alternatives as your property becomes conducive to *re-using* and *recycling.*

6) ***Landscape the Border of Your Yard:*** Perimeter plantings provide a convenient place to *recycle* tree trimmings, leaves, and garden debris. Decomposition is speeded by cutting twigs and other materials into smaller pieces.

7) ***Select Plants for Proper Size and Vigor:*** *Reduce* trimmings by selecting dwarf varieties and always planning for the mature height of trees and shrubs before planting. Pest resistant varieties *reduce* both chemical usage and the dead wood from diseased plants. Avoid weak-wooded plants or those poorly suited to your climate, soil, light conditions, or topography.

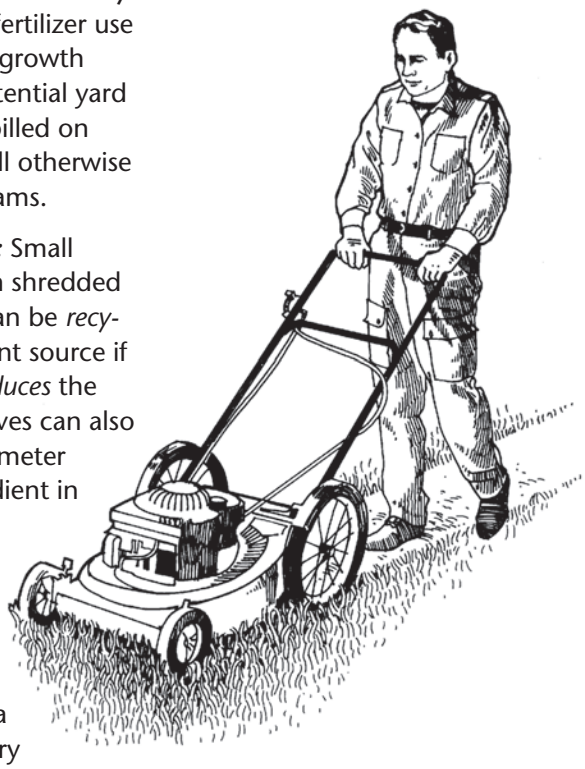
8) ***Put Downed Branches to Good Use:*** For landowners with a fireplace, a key option to *reduce* the volume of trimmings will be apparent. Ashes can be *recycled* in compost or planting beds. Creative people may find that plant stakes, vegetable or vine supports, or related *re-uses* of branches are possible.

9) ***Establish a Holding Area for Brush:*** Use landscaping or a fence to visually screen an area which holds tree and shrub trimmings, until you can cut them and *recycle* them in planting beds or *re-use* them for other purposes.

10) ***Manage Lawn Areas Wisely:*** *Recycle* nutrients by leaving clippings on the lawn where they belong. If you must collect them, *re-use* the grass clippings as mulch or compost. Proper care keeps lawns growing vigorously, which greatly *reduces* diseases and pesticide use.

11) ***Fertilize Conservatively and Carefully:*** Test the soil and *reduce* fertilizer use to avoid excessive plant growth which contributes to potential yard waste. *Re-use* fertilizer spilled on paved surfaces which will otherwise wash into lakes and streams.

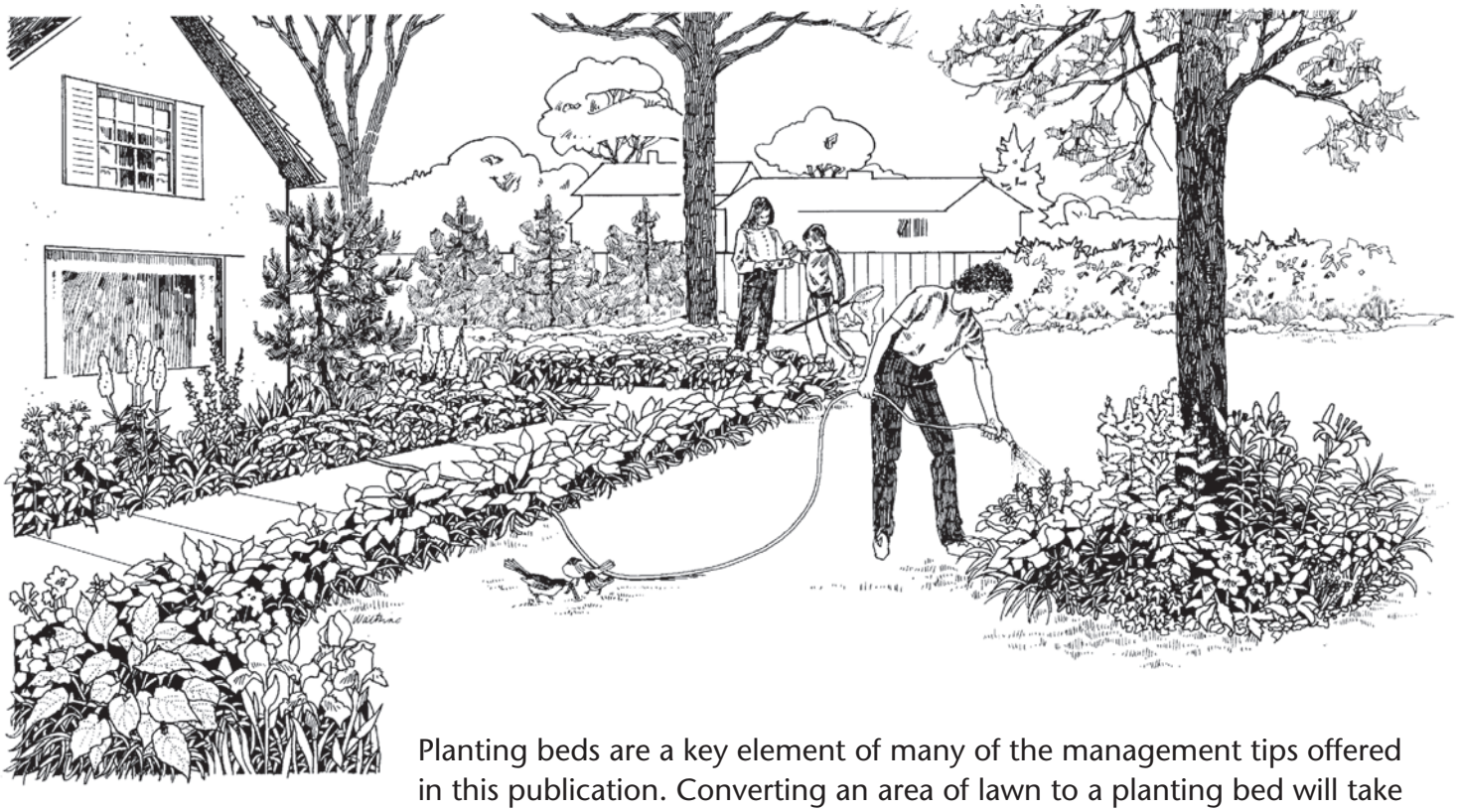
12) ***Use leaves as a Resource:*** Small amounts of leaves, when shredded with the lawn mower, can be *recycled* as an organic nutrient source if left on the lawn. This *reduces* the frequency of raking. Leaves can also be *re-used* to mulch perimeter plantings or as an ingredient in compost.



13) ***Leave Space in Flower Beds or Gardens to Trench Compost:*** *Recycle* nutrients back into the soil by digging a small pit or trench to bury and compost pulled weeds and garden or kitchen wastes. Composted organic matter improves the soil for next year's plantings, which *reduces* fertilizer needs.

14) ***Create a Compost Pile or Bin:*** This is a means to speed up the natural process of decomposition. It focuses formal composting in one area of your yard where it can be screened from view.

15) ***Plan and Evaluate Your Yard:*** Reconsidering your routines may require a little time and discipline – as opposed to proceeding as usual. But good, environmentally friendly ideas should emerge. The key is to lessen the waste problem in some way by reducing, reusing, recycling, and *rethinking*.



Planting beds are a key element of many of the management tips offered in this publication. Converting an area of lawn to a planting bed will take some planning and work, but the effort will more than pay for itself. Here's how to get started:

1) Get ready for some work, because "maintenance-free" landscaping just doesn't exist. However, future work with the planting bed should be less than that for the replaced lawn.

2) After deciding where the planting bed will go, place a rope, heavy string, or garden hose on the ground to define the area. This will also help you visualize the changes about to occur.

3) Calculate how much shredded bark you need to cover the area to an average of 6-inches deep. Though your border probably flows along some curves, try to approximate the area within it by measuring off a series of rectangles and calculating the square footage (length x width). When the surface area has been totaled, divide the number by two, which will give you cubic feet of bark required (at half-a-foot deep).

4) Buy the hardwood bark or arrange for its timely delivery. Bark in bags will usually be sold by the cubic foot. More likely, your project will require bulk-ordering the bark from a landscaping company. This will save you money and in most cases, offer the only practical means of getting large quantities on-site. You must generally know the number of "yards" needed, meaning cubic yards. This is easily obtained by dividing the number of cubic feet by 27.

5) Begin site preparation. Scalp a thin layer of sod from the area, or mow the grass as close as possible to the ground. Since it may be difficult to revise plans beginning with this step, keep in mind that you can always start a bit smaller and widen a planting bed over time. Future widening is common as plantings grow.

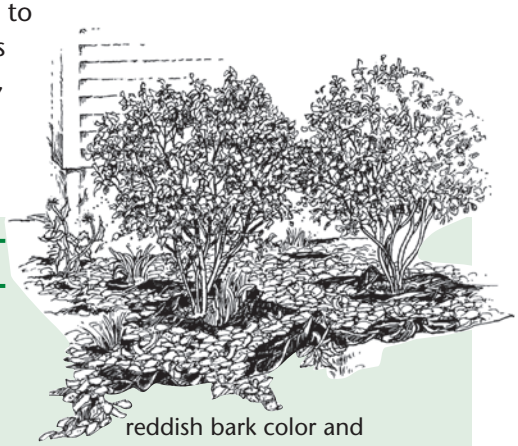
6) *If you have scalped the sod,* place it in a compost pile/bin or turn it upside down and leave it in place. The former requires more work; the latter perhaps a little more weeding in the short-term. *If you have mown closely,* cut a small trench into the sod (several inches deep and wide) along the rope border. Dig this long, winding "plug" out of the trench, flipping it upside-down and into the very edge of the planting bed. This method requires the least work initially, but sometimes more weeding of re-emerging grass.

7) Transplant your desired trees, shrubs, and ground layer plants, placing excess soil over the adjacent and soon-to-be-covered area of former lawn. Remember to consult planting guidelines for site suitability. Allow space for spreading ground-layer plants and mature tree- or shrub-size plants. If the bed is established in the fall, this is also a good time to plant bulbs for spring flowers.

8) Spread a thick layer of shredded bark mulch (6" or so) over the top of the planting bed, making sure that it hugs the transplants, but does not cover the leaves. Pull bark away from tree trunks and shrub stems and avoid letting large pieces weigh upon any fragile ground-layer plants. Less bark can be used where the sod is scalped and removed/turned upside down; more may be required over closely mown turf. The trade-off is between the cost of additional bark thickness and the short-term maintenance to pull and re-smother emerging grass.

9) Water plantings as needed and eliminate grass or weeds. Once killed back, the weed and grass problem should diminish. Grass will sometimes start to spread into bark beds. Plastic or other edging can lessen this problem, but it does so at additional cost. Edging also prevents easily changing the size or shape of the bed over time.

10) Begin a routine of weekly watering and regular weeding, mulching, fertilizing, and transplanting flowers and ground covers. (Note that the bark's relatively high carbon content will require the addition of fertilizer, particularly nitrogen, for many plantings). Mulching will help keep weeds down and conserve moisture, while providing organic fertilizer and recycling leaves and trimmings. Extra bark could be purchased to help with some of these things and to maintain a certain look, but isn't necessary.



Caution: bark beds

One landscaping trend, which partially mirrors some yard waste reduction concepts, involves plantings within bark beds. Bark mulch can be attractive and possesses some excellent properties for establishing planting beds. However, because of maintenance requirements, problems can arise if bark is used as an end unto itself, rather than as an interim step toward planting beds that include ground layer plants.

Formal bark beds can be a legitimate choice for introducing trees and shrubs into a sea of lawn. Shredded bark placed around freestanding trees can help conserve moisture and keep the weeds down. The bark also helps protect trees, especially young ones, from damage by lawnmowers or weed trimmers.

At times, however, a homeowner will emphasize the distinction between a bark bed and the lawn, with the bark bed figuratively becoming a brown throw rug within a carpet of green. Herbicides are sometimes used to kill invading weeds and grass, while other chemicals are used to maintain the reddish bark color and prevent its natural weathering.

Poorly maintained bark beds, with the bark washing off, scraggly weed growth and black plastic exposed beneath the bark, can easily look like a neglected landscape island in a parking lot. Rather than being a means of reducing yard waste, bark beds can then become a source of extra weeds and extra work.

MAKE SPACE, NOT WASTE

The general rule "Make Space, Not Waste" unifies the concepts governing yard waste reduction. Making space for leaves and trimmings in our yards seems unavoidable. We can no longer place these materials in landfills, but why did we ever want to, given the full costs? It just makes sense to minimize transportation and other tax-supported expenses tied to making wastes of potential resources.

Everyone wants to minimize frustration and unnecessary work. So, simply make space. Many yards have odd corners, often fenced in, that trap leaves every spring and fall. These corners require frequent cleaning up, and often are hard to reach with the lawn mower. Why not establish a corner planting bed that will hide and recycle the leaves while sprucing up a little-used area of lawn? There are many other options for the yard: perimeter and other planting beds, flower and vegetable gardens, holding areas, compost piles or bins, and "hiding places" under evergreens.

Hiding leaves and yard trimmings where they can decompose out of view is one creative way to reuse and recycle resources that otherwise would become yard "waste."

So, look through this publication, think creatively about what will work for your yard, and make space while avoiding waste.

Fact sheets in the *Yard Care and the Environment* series are designed to illustrate principles of environmentally sound yard care. They provide specific information about pesticides, fertilizers, landscaping, watering and related topics. These and other publications can be obtained from your county UW-Extension office. Help is also available there regarding soil testing, pest identification, plant selection and other important items related to yard care and water quality.

This publication is available from county UW-Extension offices, Cooperative Extension Publications – 1-877-947-7827, and from DNR Service Centers.

A publication of the University of Wisconsin–Extension in cooperation with the Wisconsin Department of Natural Resources.

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Editing and design by the Environmental Resources Center, University of Wisconsin–Extension.

Printed on recycled paper

GWQ022 Managing Leaves & Yard Trimmings

DNR WT-490-97

R-09-99-10M-30-S