Collect grass clippings only when your lawn starts looking like a hay field (above). Meanwhile, contrary to popular opinion, thatch (the layer of material on top of the soil, at right) isn't made up of grass clippings but rather dead grass stems, crowns and roots. Mowing too short, mowing infrequently and applying too much fertilizer are leading causes of thatch buildup.

Of course, there will always be times when your lawn "gets away from you" during extended periods of wet spring weather, when you're on vacation, etc. When this happens, you will need to collect the clippings to keep them from smothering the grass plants in your lawn! It doesn't mean, however, that you need to dump them out on the street!

Instead, spread them out on your driveway for at least a couple of hours to dry them out a little - remember, more than 80% of their weight is just water! Drying the clippings will reduce the chance that, as they settle in the compost bin, they'll pack together and start decomposing in the absence of oxygen. If this happens they'll quickly turn into a stinky, slimy mess. It's not a pretty sight - or smell!

Next, in a temporary wire compost bin(s) (see the previous page) thoroughly mix one part dry clippings with three parts high carbon materials such as wood chips, bark mulch or straw. The high carbon materials will prevent the grass clippings from packing together and their carbon content will counteract the high nitrogen content of the clippings. If you keep this mixture moist – but not wet – and mix it up a little bit once or twice each week, you'll create some nice, crumbly compost in about three weeks.

And, if the benefits to not bagging grass clippings outlined above aren't enough to convince you to break this bad habit, just think of all the time and backaches you'll save by not carrying water from one end of your property to the other all summer long!

Neatness Counts

Try as they might, researchers at the University of Florida, Penn State, the University of Wisconsin and other institutions haven't been able to flush large amounts of fertilizer from sloped research plots. The more than one thousand grass plants per square foot of lawn simply pose too great of an obstacle for fertilizer granules to overcome.

It's almost impossible to flush fertilizers directly from lawn areas. Fertilizer granules on paved surfaces (above), however, are easily washed into storm sewers.

It's a different story, however, on paved surfaces. With no obstacles in their way, granules of lawn fertilizer are easily washed from driveways and sidewalks into streetside gutters. And, from there it's a short distance to a catch basin and connecting storm sewers!

To prevent lawn fertilizers from making their way into your community's storm sewers always fill your spreader on top of a plastic drop cloth or tarp. That way, if some spills or you forget to close the hopper – which happens more often than you might think – it's easy to collect the wayward fertilizer. Then, when you're finished, make sure to sweep up any fertilizer that ends up on your driveway, sidewalk, or even in the street.

Summary

When we think of water pollution, the image that often comes to mind is of a brown, sudsy liquid gushing from the pipes of an enormous factory. The scale of this type of pollution was far beyond what any one individual could address. Fortunately, the Clean Water Act has made that scene part of the distant past in most communities. Now, however, this landmark legislation is quite literally knocking on your front door!

Fortunately, it's incredibly easy to help improve the quality of surface waters in your community - simply stop working so hard! There is absolutely no need to haul grass clippings and leaves all over the place. And, in fact, by taking it a little bit easier you'll gradually improve the health and appearance of your lawn, landscape and gardens!

For a brief overview of federal and state stormwater management legislation and regulations, visit the following Central New York Regional Planning Board web page: www.cnyrpdb.org/stormwater.asp. And, if you think that I'm making up my references to university "research," give me a call or send me an e-mail. I'll be more than happy to send you a list of the references I've used in preparing this issue of ***"Central New York Lawns, Landscapes & Gardens Facts."***

Central New York Lawns, Landscapes & Gardens Facts

Central New York Lawns, Landscapes & Gardens Facts are a series of fact sheets that address a wide range of lawn, landscape, garden and houseplant concerns published by *Terry L. Ettinger Horticulture Consulting Services*. The purpose of this series is to provide readers with timely, practical and unbiased information specific to Central New York conditions and is based on Ettinger's popular *"Let's Get Growing"* column that's appeared from March through November in the Eagle Group of community newspapers every year since 1993.

Individual copies of each fact sheet in the series are free upon request. Quantity discounts for educational and commercial purposes are available upon request.

Opinions, questions, concerns and subscription requests are always welcome. Please write to Terry Ettinger, 119 Concord Place, Syracuse, New York 13210-2649. You may also send your comments and questions via e-mail to: Terry@tlehcs.com, or call 315-471-5854.

All do-it-yourself activities involve a degree of risk. Skills, materials, tools, and site conditions vary widely. While every effort has made to ensure accuracy, the reader remains responsible for the selection and use of tools, materials, and methods. Always obey local codes and laws, follow manufacturers' operating instructions, and observe safety precautions at all times. Please read all labels carefully before purchasing, applying and storing any pesticide.

Watch . . . . .

"Garden Journeys" on Time Warner Cable channel 13 Wednesday evenings at 7:00 and 10:00, Thursday afternoons at 4:00, Friday afternoons at 5:00 and Saturday evenings at 9:00.

"Dave's Garden" on News Channel 9 every Friday evening during the 5:00 p.m. newscast.

Listen . . . . .

"The Weeder's Digest" on A.M. 570 WSYR Saturday mornings at 11:00.

Read . . . . .

"Let's Get Growing" in the Eagle Group of Community Newspapers.

Central New York Lawns, Landscapes & Gardens Facts

Every Curb is a Shoreline In Central New York

Having grown up in Illinois where natural lakes are nonexistent and the streams, creeks and rivers are slow-moving and brown with mud and algae, the crystal-clear waters of many streams and lakes in Central New York take my breath away! Keeping them crystal-clear is squarely upon our shoulders as individual property owners.

The Clean Water Act of 1972 has been very successful in improving the quality of surface waters across the country. The rules and regulations of the act have resulted in enormous strides in the quality of water discharged from sewage treatment plants and industrial complexes. Further amendments to the act in late 1980's forced municipalities to improve the quality of water entering our streams, rivers and lakes from their storm sewers. Large-scale property developers and industrial complexes were forced to address the quality of water running off of their properties, too.

Most recently, Phase II of the storm water amendments to the act are requiring cities, towns and villages in designated urban areas with populations of greater than 10,000 people to develop and implement stormwater management programs that prevent polluted stormwater runoff from roofs, streets, parking lots, driveways, sidewalks and lawns from entering storm sewers and drainageways.

Keeping grass clippings and leaves out of our storm sewers will lead to huge improvements in the quality of our surface waters. The great thing is that by helping out, you can save time and money!

So, are you bored yet? After all, this has nothing to do with you. Rather it's something that the bureaucrats, politicians and high-priced lawyers paid for with your tax dollars should be dealing with, right?

Wrong! In fact, if your home has a roof, if there's a driveway leading to your garage, if there's a sidewalk leading to your front door and/or if you have trees, shrubs and a lawn as part of your landscape, then you are personally part of your community's implementation of the Storm Water Phase II Final Rule!

Now, before you start rolling your eyes or worse, start to panic, let me offer several painless ways that you can help your community

Nature intended for leaves to cover the forest floor where they return organic matter and nutrients to the soil as they decompose. The same thing happens among hostas, liriope and other perennials beneath a large tree in our front yard (at left).

comply with this phase of the Clean Water Act. Your efforts will improve the environment for your children and grandchildren for decades to come!

Leave'm Where They Fall

My wife and I occasionally go for walks at Green Lakes State Park. In all of the times that we've walked the trails of this spectacular park, I've never once seen an elf raking leaves up off the forest floor! Hopefully, you haven't either?

My thinking is that if nature doesn't mind leaves piling up over the roots of trees, shrubs and perennials in the forest, maybe it's not such a bad thing in our landscapes, either?

Before your eyes roll out of your head - again, let me explain.

Many of your landscape plantings are already enclosed in large planting beds, right? And, the lawn under many of your shade trees probably isn't looking very good, either. Instead of spending hours of your time or paying a landscape crew to "clean up" the leaves (I've never really understood this phrase as leaves aren't "dirty") in your landscape beds and under your shade trees, just leave them alone! After all, you're not going to see them under several feet of snow all winter long.

Drape fruit tree netting over groundcovers before your trees start dropping leaves. Then, after all of the leaves have dropped, simply drag the leaf-covered netting to your compost pile!

Next spring, gently break them apart with a rake then cover them with an inch or two of fresh mulch. As they decompose under the mulch they'll return nutrients and organic matter to the soil, just like on the forest floor! And, instead of struggling to grow grass among the roots and dry shade under your large trees, you'll have created landscape beds into which you can plant drifts of spring–flowering bulbs and masses of shade-tolerant perennials.

Mow'em, Don't Rake'm

Many municipalities encourage residents to rake leaves to the curb for collection each autumn. This process involves specialized vacuum equipment and/or payloaders and convoys of dump trucks to collect and haul hundreds to thousands of loads of leaves - at a cost that's been estimated at well over one hundred dollars per truckload! In many municipalities, this may be just about the only thing that entire public works departments do for the better part of a month each year?

So, what does this have to do with the Clean Water Act?

Well, if you've ever raked leaves to the curb for collection, you know that it's often days or weeks before collection crews make it to your street. Before they arrive, it's not at all unusual for it to rain several times, washing many of your leaves down the street and into a catch basin. Once in the catch basin the next stop for your leaves and those of all of your neighbors is the stream, creek or river that flows through your city, town or village.

Leaves aren't garbage, so why rake them to the curb? Research has shown that mowing them into your lawn will improve its health!

As these leaves decompose they'll release nitrogen, phosphorus, potassium and more than a dozen other elements that accumulated in each leaf during the growing season. While they're "natural," the nutrients released from leaves is every bit as harmful to our surface waters as the same nutrients pouring out of a sewage treatment plant!

Fortunately, it's easy to keep leaves from entering storm sewers - don't rake them to the curb!

Research at Cornell, Purdue, Rutgers, Michigan State and other universities have concurred for more than a decade that more than 400 pounds of dry leaves can be shredded and left on each thousand square feet of lawn each fall with no harmful effects. In fact, shredded leaves will improve lawn quality over time as organic matter and nutrients in the leaves is returned to the soil. It's absolutely amazing! You can save time, improve the quality of surface waters that run through your community and improve your lawn by never raking again! As an added bonus, your community's public works crews can devote their attention to more important matters, like fixing potholes?

By the way, it's rare that more than a hundred pounds of dry leaves will cover a thousand square feet of lawn at any one time.

Compost'em

You probably knew this was coming, right? That being the case, your response should be, "are you nuts, there isn't a compost bin in the world big enough to hold all of the leaves that drop from the trees in my landscape."

Well, instead of raking or carrying every leaf in your lawn to the curb, rake them to wire bins hidden among the shrubbery in landscape beds throughout your property? Mix the leaves with a couple of shovelfuls of mulch, a couple of handfuls of garden fertilizer, twenty gallons of water and relax. Next spring dismantle the bins, spread the decaying leaves throughout the landscape beds and cover them with a thin layer of fresh mulch just like in the "leave'm where they fall" scenario outlined above.

Oh, I almost forgot! Another easy composting option you may want to consider is what's called "sheet" composting?

This technique simply involves spreading your leaves to a depth of one to two feet over your vegetable and/or annual flower garden. Next, sprinkle a one pound coffee can full of 5-10-5 garden fertilizer per 100 square feet of leaf-covered garden and dig or rototill to turn the leaves into the ground. By next spring, most of the leaves will have started to decompose. Turn the garden again and plant right through whatever clumps of leaves remain.

It takes ten minutes to set up a temporary woven wire compost bin in your landscape or garden. The black plastic drainpipe allows oxygen to reach the center of the pile, speeding the decomposition process. Simply pull the bin apart in the spring, level the decomposing leaves and cover them with a thin layer of mulch.

Don't Bag'em

Grass clippings are more than eighty percent water, so it doesn't make sense to carry them to the street - especially since research has shown for many years that the best place for them is on your lawn!

If you're dumping your grass clippings at the curb, STOP IT!

If your lawn covers 8,000 square feet, it will produce about 3,000 pounds (one and one-half tons) of fresh, wet grass clippings over the course of a growing season. About 2,400 pounds of that total is just water. More importantly, thirty pounds of that total is nitrogen, three pounds is phosphorus and fifteen pounds is potassium – the same essential elements you buy in a bag of lawn fertilizer!

In other words, if you dump your grass clippings at the curb you're quite literally buying one average-sized bag of lawn fertilizer each year, setting it at the curb and paying your municipality (with your tax dollars) to haul it away!

Of course, not all of your grass clippings are hauled away. Some always find their way down a catch basin, into the storm sewer and out into the surface waters of your community where they'll increase the nutrient loading of our streams, rivers and lakes as they decompose right along with the leaves from your property.

Not to sound like a broken record but once again research has shown repeatedly for decades that the best place for grass clippings is on your lawn. Simply set your mower to cut at a height of three inches and mow whenever your lawn reaches four inches in height (that may mean twice each week in May, June and September).

The resulting clippings are basically a slow-release, organic lawn fertilizer. As they decompose over the course of three or four days they'll return the nutrients that they'd accumulated back to the soil. In fact, by returning grass clippings to your lawn, you can eliminate at least one application of lawn fertilizer each year!