

A BAY-FRIENDLY LANDSCAPING GUIDE TO **GRASSCYCLING**

*Save Time, Save Money and
Grow Beautiful Lawns*



Grasscycling...

means leaving the grass clippings on the lawn after mowing, so they decompose and release their nutrients into the soil.

Many successful landscapers and turf professionals have made grasscycling a central part of their operations. Grasscycling can be important to your business, too. And grasscycling is an easy way to begin offering Bay-Friendly Landscaping services to your clients.

Bay-Friendly Landscaping...

means working in harmony with the natural ecosystems of the San Francisco Bay Area to foster soil health, reduce runoff and pollution, prevent and reuse plant waste, and conserve water and other natural resources.



Grasscycling is a 1st Step in Bay-Friendly Landscaping

By grasscycling, you protect the environment by helping:

- Conserve landfill space – and the fuel to haul it there
- Reduce fertilizer and pesticide runoff
- Preserve natural resources

Save Time and Money

Grasscycling is a faster, cheaper and easier way to maintain a healthy lawn. Grasscycling:

- Reduces mowing time by as much as 20 minutes per hour
- Decreases hauling time
- Cuts disposal fees
- Lowers fertilizer costs

Grasscycling may also reduce injuries, absences, and related costs. A 2,000-square-foot lawn in California generates about 15 pounds of clippings per mowing. Over the course of a day, grasscycling eliminates a lot of lifting for you or your crew.



“As long as the lawn looks good, our customers are happy. The main reason we grasscycle is cost savings. We don’t have to bag the clippings and take them to the dump.”

— Andy LaVelle, Branch Manager
TruGreen LandCare, Pleasanton



“We’ve been grasscycling for 15 years because we get a healthier lawn with fewer weeds.”

— Richard Applebaum, President/General Mgr.
East Bay Landscaping Co., Inc., San Leandro

Grasscycling Builds Healthy Turf and Soil

Grasscycling returns nitrogen and other nutrients to the soil, releasing them slowly. The slow release makes the nutrients available to the plants when the plants need them. On most turf, you can use substantially less fertilizer. In addition, because clippings add organic matter, they build soil that retains more nutrients and water, plus resists erosion and disease.

Grasscycling Won't Cause Thatch

It's a widespread myth that grasscycling causes thatch. Research has shown that thatch is primarily dead grass roots and fibrous material created at the base of the plant, not leaf clippings. Excess fertilizer and irrigating only the top few inches of soil leads to shallow roots and increases thatch problems. Soil compaction also increases thatch.

The factor that most determines thatch is the species of grass. Certain species — Kentucky bluegrass, kikuyu, Bermuda and the bentgrasses used on golf greens and tees — are prone to thatch because they send out creeping stems above ground. Starting with the right species of grass, such as tall fescue for Alameda County, is the best way to prevent thatch.

A small half-inch layer of thatch is actually beneficial to the lawn as it insulates the roots, minimizes water evaporation and helps prevent soil compaction. However, if the lawn has a thick layer of thatch, clippings won't decompose as efficiently. It's best to deal with any thatch problems before you start to grasscycle.



“On athletic fields, grasscycling improves overall turf density and health leading to a safer playing surface.”

— Bob Milano, Jr., Sports Turf Manager

Dept. of Intercollegiate Athletics and Recreational Sports
University of California, Berkeley



“If we were to stop grasscycling, and instead pick up our grass clippings and haul them away, it would double our turf maintenance costs.”

— Ray Dawson, Park Unit Manager

East Bay Regional Park District and Three-time past President,
Northern California Turf Grass Council

It's the Law... Disposal of Plant Debris in Alameda County Landfills is now Banned



Most professional landscapers have been separating plant debris and placing it in their clients' green carts or delivering it to the “clean green” area at a transfer station or landfill. By doing so, the plant debris is kept from being added to landfill. Occasionally, however, plant debris is contaminated with trash, or plant trimmings are thrown into a large garbage bin along with other, non-recyclable materials, and the whole load then becomes “garbage.” This new law bans this mixing of plant debris with trash. Everyone must now keep all plant debris “garbage-free.”

Materials banned from landfilling in Alameda County include grass, leaves, shrubbery, vines, tree branches and trimmings (excluding palm trees). Beginning January 1, 2010, those who do not keep plant debris garbage free will be subject to citations and fines.

Grasscycling not only saves time, money and helps you grow beautiful lawns, it also helps you meet the requirements of this new law – leaving grass clippings on the lawn keeps them out of the waste stream altogether.

Tips from the Pros...

Many picturesque local parks and golf courses — including the East Bay Regional Parks and Hayward Area Parks — have grasscycled for years.



“If there are a lot of clippings on the lawn, we mow twice, then turn on the water for two minutes. That knocks the clippings down between the blades.”

— Bill Gardner, Supervisor
Hayward Area Recreation and Park Department

“When we get rapid growth, we raise our mower height to three inches.”

— Richard Applebaum, President/General Manager
East Bay Landscaping Co., Inc., San Leandro

“If you fail, don’t get frustrated. It takes a while to get used to the process.”

— Richard Applebaum, President/General Manager
East Bay Landscaping Co., Inc., San Leandro

Three Simple Steps to Grasscycling

1 Mow often and mow dry.

Make your crews aware of the optimal conditions for grasscycling. Grasscycling works best when the grass is dry and the clippings are short. Mowing no more than 1/3 the leaf blade minimizes the stress on the lawn and produces shorter clippings. However, most professionals find it difficult to follow the 1/3 guideline since they mow according to a schedule, not grass height. Try to schedule mowing on days the lawn is not watered or later in the day when the grass tends to be dry.

2 Maintain and adjust your equipment.

Sharpen your blades often — at least once a week — and keep them clean and balanced. A clean cut limits water stress, lowers the chance of disease entry and minimizes brown tips. And a clean mower deck helps keep clippings from forming clumps.

3 Leave the clippings on the lawn!



Here’s how professionals get beautiful, healthy turf— even in less than ideal conditions:

Grass Too Tall?

- Mow more than once. When the costs of time, landfill fees, soil and turf health are considered, mowing two or more times can still be less expensive than bagging and disposal.

- Raise the blade height to 3 inches and gradually lower it over future mowings.
- Be flexible with your fertilization schedule. Keeping grass green while minimizing growth may mean little or no spring fertilizers and the use of slow release fertilizers in the fall.

Grass Too Wet?

- Schedule irrigation to be done 2 days before you mow for maximum dryness. Or, time your irrigation for the days you are not mowing.
- If you have a choice, mow later in the day, after the grass has had a chance to dry.
- If you must mow early in the day and the lawn is damp, drag a hose across the lawn to knock water down to root zone before mowing.

Clippings Forming Windrows?

- Mow again with a crosscut to chop and disperse clippings.

Clippings Clumping Up?

- Clean under the mower deck. Keep blades sharp and balanced.
- Mow when the lawn is not wet.
- Try operating the mower at a slower speed.

Leaves on the Lawn?

- Often you can shred leaves with your mower and leave them on the lawn. This works well with a light layer of dry, brittle leaves which will be finely chopped and forced between the grass blades to the soil surface.
- A thin layer of chopped leaves — no thicker than 1/2 the height of the grass blade — is not noticeable and adds nutrients when the recycled leaves decompose.

And When You Just Can't Grasscycle . . .

- Compost the clippings on site. They are a natural source of nitrogen and readily decompose, especially when mixed with carbon-rich materials such as dried leaves.
- Spread over the surface of the soil as mulch. Don't apply too thick as they can form a mat. Mow before weeds have gone to seed and avoid using clippings from invasive turf species. And don't use pesticides that make clippings undesirable in compost or as mulch. Picloram and clopyrid are especially resistant to decomposition and are no longer available for use on turf.
- Use your client's green waste container, if available.
- Separate clippings for recycling at a transfer station or landfill and receive a discount for clean green loads.

Choosing Your Equipment

Turf professionals have varying opinions on which equipment works best. Some get good results with mulching mowers.

Others say standard mowers work better, and some use standard mowers with mulching retrofit kits.

To find the best mowers for grasscycling the lawns you maintain, get information from professional contacts.



Be sure to test out several types of equipment before buying.

Keep in mind:

- A mulching mower needs about 20% more power than bagging mowers operated at the same speed.
- Mulching mowers perform better at slower speeds.
- Examine clipping discharge, especially for multiple blade mowers. Baffles between the blades under the mower deck help ensure clippings are evenly distributed.
- Mulching mowers may be heavier than standard mowers. Wide tires can help keep mower from sinking or causing ruts in the lawn.

Keep in mind also, gas mowers emit 10 times the pollution of late-model cars, per hour of use. This pollution is in the operator's breathing zone. To cut down pollution:

- Upgrade your two-stroke to a four-stroke cycle engine, which has lower emissions and better fuel efficiency.
- Keep gas mowers well-tuned and in good repair, so they run cleaner.
- Consider electric mowers. Riding electric mowers are now used at putting greens on golf courses.

Convincing Your Client...

“I try to catch my customers when they’re at the site, then mow right in front of them. They can see right there that there’s no difference if I leave the clippings. Then, it’s OK with them.”

— James Long, Owner/President
American Lawn Maintenance, Fremont

“We give our customers some literature about grasscycling. And we make a strong commitment to making the lawn look good, so the customers are usually willing to try it. Once they see the results, they say, ‘Keep doing it.’”

— Richard Applebaum, President/General Manager
East Bay Landscaping Co., Inc., San Leandro

Providing an environmentally friendly service such as grasscycling is attractive to many clients in the Bay Area. A phone survey, conducted in late 2002, found that almost 50% of Alameda County single-family households that employ a professional landscaper would pay more for a service that uses environmentally friendly practices. It may not take much convincing, but to encourage your clients to try grasscycling you can:

- Ask about grasscycling during the pre-bid walk-through.
- Emphasize that the grasscycled lawn will look beautiful.
- Describe the environmental benefits, plus the benefits to the lawn and soil.
- Request a trial period.

To help you persuade your customers, the Alameda County Waste Management Authority provides free grasscycling brochures for your clients. Model contract language is also available.



Local Grasscycled Lawns:

- Central Park, Fremont
- Chabot Community College, Hayward
- Cull Canyon Park, Castro Valley
- Crown Beach, Alameda
- Harbor Bay Island, Alameda
- Kennedy Park, Hayward
- Martin Luther King Park, Oakland

Bay-Friendly Lawn Care

In our Mediterranean climate, a lawn can be costly to maintain, wasteful of precious resources and a source of pollution. Eliminating large expanses of non-functional turf and designing only small lawns that are used for play and relaxation is essential to landscaping in an environmentally friendly manner — a Bay-Friendly manner. So is managing all turf to conserve resources while minimizing environmental impacts. The following set of Bay-Friendly lawn care practices will help build fertile soils and vigorous, deep-rooted grasses that resist disease and drought:

- **Rethink the lawn.** Lawns continue to be a part of our culture. But maybe it is time to rethink what we mean by a lawn. Install something besides grass, particularly on narrow strips, steep slopes, in shady areas or near creeks and the bay. Alternatives include native grass and wildflower meadows or groundcovers.



- **Grasscycle as often as possible.**
- **Aerate, then topdress with compost.** Overseed to fill in thin spots and crowd out weeds. Topdress with 1/4 inch of fine compost up to four times per year.
- **Phase out the scheduled application of synthetic fertilizers and pesticides.** Fertilize lightly with an organic fertilizer or slow-release synthetic fertilizer after a soil analysis or demonstrated need. Natural or slow-release fertilizers, such as sulfur or polymer-coated urea, release nutrients slowly.



- **Prevent overwatering by employing state of the art irrigation management** that includes:
 - Watering deeply to encourage deeper root growth.
 - Using a soil probe to check how deeply you've watered.
 - Upgrading to new 'smart' irrigation controllers that weather and soil or rain sensors to adjust irrigation schedules. Select controllers with multiple programs to irrigate different hydrozones separately and the ability to detect problems like a broken sprinkler head.
 - Installing a rain shut off device. Adjust watering schedule to match existing weather conditions as often as possible.
 - Checking the system regularly for leaks, overspray, malfunctioning nozzles, and repairing them immediately.
- **Control pests through integrated pest management** that includes:
 - Tolerating some weeds and hand pulling others
 - Clearing identifying pests and their life cycles
 - Discontinuing the use of weed and feed formulations
 - Using non-toxic herbicides and beneficial nematodes
 - Spraying compost dist for disease management and nutrient cycling
 - Using pesticides as needed only and not on a calendar basis
 - Watering carefully



“I used to use a lot more fertilizer. Now I judge by eye if the lawn needs it. I’ve cut back by at least one-half.”

— James Long, Owner/President
American Lawn Maintenance, Fremont

The Bay-Friendly Landscaping Program...

...was developed by StopWaste.Org, which is the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board acting as one public agency. Its mission is to plan and implement the most environmentally sound waste management program for the residents, businesses and institutions of Alameda County.

The Bay-Friendly Landscaping Program offers resources to landscape professionals in the public and private sector, model policies and technical assistance for local governments, as well as sustainable gardening education for the home gardener in Alameda County. The Bay-Friendly Landscaping Program has produced this guide as a public service to aid landscape professionals in the implementation of grasscycling. The information in this guide is strictly for use on a voluntary basis. It is not a substitute for the exercise of sound judgment and not intended as a recommendation for a particular product or service.

For information about Bay-Friendly landscaping or to find out about the Bay-Friendly training and qualification programs, please visit www.BayFriendly.Org.

Other Free Bay-Friendly Resources for Landscape Professionals

Available online at www.Bay-Friendly.Org or by calling (510) 444-SOIL:

- *Bay-Friendly Landscape Guidelines: Sustainable Practices for the Landscape Professional*
- A Spanish translation of this guide: *Una guía de Bay-Friendly Landscaping sobre El reciclaje del pasto*
- *A Bay-Friendly Landscaping Guide to Mulch: Save Money, Control Weeds, and Create Healthy Landscapes* (English and Spanish versions available)
- *A Case Study: Grasscycling*
- *A Bay-Friendly Landscaping Guide to Recycled-Content and Salvaged Materials: Add Value, Reduce Greenhouse Gas Emissions and Create Attractive Landscapes*
- **For your clients:**
 - *Ask Your Lawn Care Professional about Grasscycling for Beautiful, Lush, Healthy Lawns*
 - *Bay-Friendly Gardening Guide*

Other Recycled Materials Resources

- The California Integrated Waste Management Board has demonstrated grasscycling at the state capitol:
<http://www.ciwmb.ca.gov/Organics/GrassCycling/>
- The Alameda Countywide Clean Water Program offers: *Less Toxic Pest Management Tips for A Healthy, Beautiful Lawn* in English & Spanish: www.ourwaterourworld.org
UC Guide to Healthy Lawns:
<http://www.ipm.ucdavis.edu/TOOLS/TURF/>

Visit our website
www.BayFriendly.org

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