



Alternatives to Outdoor Burning

MULCHING MOWER

Benton Clean Air Authority, 650 George Washington Way, Richland, WA 99352 509/943-3396

What does this mean?

Use of a mulching mower can serve a number of related purposes. This type of mower chops grass clippings into fine particles and blows them down through the standing grass to the soil surface. Leaves and other easily chopped vegetative matter can also be finely chopped. Treating these vegetative residues in this manner has a number of benefits, which includes water use efficiency, plant nutrient recycling, and generally improved lawn health. Mulching with a mower also decreases time and labor of handling grass clippings and disposal in landfills.

WHY ALTERNATIVES

After December 31, 2000 residential and land clearing burning will not be allowed within the urban growth areas of cities or where there are reasonable alternatives. Except for residential burning, which is exempt from a permit, outside the urban growth areas it will be necessary to obtain a written permit from the Benton Clean Air Authority for other types of burning. Vegetative residue cannot be hauled from an area where burning is prohibited to an area where burning is allowed.

This information is intended to briefly explain who, how, and why mulching mowers could be used as an alternative to burning. Use of alternatives to burning is encouraged even in areas where burning is not prohibited.

WHO COULD USE MULCHING MOWERS?

- Individuals at private residences.

- Public and private entities that generate lawn clippings, leaf fall, and other vegetative growth that can be treated with a mulching mower.



HOW DO MULCHING MOWERS WORK?

- Mulching mowers are especially designed to cut, suspend, and re-cut vegetative material until it is finely divided. This finely divided material is then blown down onto the soil surface.
- A mulching mower can chop leaves and other easily chopped vegetative materials. In some cases these materials, especially leaves, can be spread on a lawn and mulched into the standing grass. Such an operation does require extra steps but it essentially is in-place composting. Bagging this mixture can produce excellent material for a compost pile, which eliminates placing both grass and leaves in landfill.
- Small batches of mulch can be produced with a mulching mower instead of using a chipper.
- "Green" and "brown" materials for a compost pile can be produced using a mulching mower. The fine chopping is desirable for more rapid composting as long as good aeration is maintained.
- Many currently available mulching mowers are convertible among side-discharge, bagging, and mulching modes, which allows flexibility.
- Mulching mowers work best when well maintained with sharp blades, well-running motors, and clean under decks.
- Mulching mowers also work better with dry materials including grass with a minimum of

dew or surface water on the grass from recent irrigation.

- Excessively tall grass can also be a problem with mulching mowers. More frequent mowing or double mowing at two different cutting heights may be necessary in some cases.

WHY SHOULD I USE A MULCHING MOWER?

- Uses materials that would otherwise be discarded or burned.
- Produces, in-place, a useful soil amendment that makes a more healthy soil, which will take in, store, and supply water and plant nutrients more efficiently and inexpensively.
- Water use is decreased and fertilizer use efficiency is significantly improved both of which have beneficial effects on water quality. Fertilizer use can be reduced by 25-40%.
- Mulching effect helps suppress weed growth and in some cases can have a curative effect on certain lawn diseases by decreasing lawn water stress and promoting a generally healthier lawn.
- A mulching mower decreases the time and effort for lawn mowing by eliminating handling of clippings, which benefits you, the landfills, and air quality.
- Contrary to common belief use of a mulching mower does not contribute significantly to "thatch" build up in lawns. Power raking and de-thatching can offset adverse effects, if any.
- Proper management of timely mowing, mower maintenance, irrigation, fertilizer use, weed, and pest control will assure good performance from use of mulching mowers.

DOWNSIDE AND PROBLEMS

- May conflict with other uses of the materials. For instance, use of a mulching mower recycles grass clipping directly in the lawn that uses probably the best source of green material for composting. Use of a convertible mower that can also bag clippings can partially offset this problem as the user can

decide to collect grass clippings for the express purpose of composting or removing excess growth.

- Requires more timely or frequent mowing, which can be a problem in fast growing spring season for many grasses.
- Performs better with dry grass, which also means more careful planning.
- Requires more diligent maintenance of mower with blade sharpening, well-running motor, and clean under-deck.
- Initial expense of new mower in converting from a non-mulching mower. Mulching mowers have become more commonly available and less expensive as supply of and demand for them has increased.

MORE INFORMATION

Weed Control

- Yellow Pages: *Weed Control, Lawn & Grounds Maintenance*
- WA State Weed Association 509/547-5538
- Benton Co. Noxious Weed Control 509/786-6988
- Franklin Co. Noxious Weed Control 509/545-3847

Landscaping

- Yellow Pages: *Tree Service, Lawn & Grounds Maintenance*
- WA State University Master Gardeners 509/735-3551 or 509/786-2226 or <http://gardening.wsu.edu/eastside>
- Internet
 - Search Term: *xeriscape, low water use landscaping*

Chipping and Mulching

- Yellow Pages: *Tree Service, Lawn & Grounds Maintenance, Landscape Equipment & Supplies, Hardware – Retail*
- WA State University Master Gardeners 509/735-3551 or 509/786-2226 or <http://gardening.wsu.edu/eastside>

Landfill and Transfer Information

- Waste Management of Kennewick 509/582-5121
- Kennewick Transfer Station Kennewick 509/586-7555
- Richland Landfill 509/942-7498
- Richland Solid Waste Collection 509/942-7497
- Basin Disposal Inc. (Prosser, Benton City, and Benton County) 509/547-2476
- Ed's Disposal (W Richland and Benton City) 509/547-2476

On-Site Burial

- No restrictions in cities. Call if burying large amounts.
- No restrictions in Benton County on small amounts, larger amounts may need to be permitted 509/736-3086 or 509/786-5621