

Mulching mowers: saving the environment?

Critics of mulching mowers have been too harsh, says this University of Georgia expert. They are here to stay—with good reason.

■ Does the ultimate mulching mower exist? Probably not at this time, according to Dr. Bob Black, extension specialist in consumer horticulture for the University of Florida.

"But mulching mowers are here to stay," Black told an audience at the Florida Turfgrass Conference. "We need to educate the customer as to their use."

According to Black, the advantages of returning clippings to the lawn include:

1) Landfills no longer accept yard waste. Studies have shown that ½ acre of maintained grass yields 465 bushels of clippings per year.

Other possible solutions to the yard waste/landfill problem might be using slower-growing grasses, having less grass in the design, backyard composting, and using mulches. However, Black says, "returning the clippings to the

lawn is the best solution."

2) Returning clippings saves time, money, energy, fertilizer and water. A study in Texas showed that returning clippings cuts the average mowing time by 38 percent. It saves money spent on fertilizer, plastic bags and hauling of clippings. It saves physical and chemical energy, and can save "as much as two pounds of fertilizer per 1000 square feet per year," Black notes. Clippings also provide a shading medium so the turf uses less water.

Types of mowers—The two types of mulching mowers are multi-use (convertible) and dedicated.

Consumer Reports magazine found mulching-only mowers were better than convertible. Bolens 8628, TroyBilt 8628R, John Deere Tricycler and Honda were the best one-inch units; Toro Recycler, Honda and Rally convertible models were best two-inch.

Conversion kits include:

- discharge chute or plug plate
- special mulching blades
- belts and fans that chip and broadcast the clippings
- a deflector (Toro only)

Questions—Here are some common concerns with using mulching mowers, and their answers, as provided by Black:



Mulching mowers have been the subject of many mowing trials.

- Will they promote disease? A Texas A&M study showed not.
- Will they promote weeds? Yes.
- Will they promote thatch? No, according to a University of Illinois study.
- Will they increase mowing frequency? No.
- Can you mow wet grass? No.
- Do you have to mow slower? Yes.
- Do you have to adjust your fertilizer program? A University of Illinois study showed that turf quality is better at low N levels.

Tips—Black told the audience that these rules should be followed when using mulching mowers:

- 1) Keep blades sharp.
- 2) Cut off no more than one inch of leaf blade.
- 3) Don't mow wet turf.
- 4) Buy a high-quality machine.

"Are mulching mowers a salvation or a curse?" Black concluded. "Neither. But they give the industry an opportunity to provide quality lawn care while saving energy and protecting the environment."

—Jerry Roche



Mulchers come with a variety of decks.

Description of mulching mowers

BOLENS	BUNTON (ELIMINATOR)	EXCEL	GARDENWAY/ BOLENS	TORO RECYCLER	VERSADECK BY BOBCAT
donut-shaped deck; blade has several cutting angles; two-step blade has short cutting edge down low and longer edge ½ to 1 inch above first edge	three distinct cutting chambers, six-edged fanlike blades	"post-processor" system of high-speed chopping wheels in discharge chutes	"post-processor" system of high-speed chopping wheels in discharge chutes	deflectors that guide clippings back into blade and into turf	three two-stepped blades

Source: Dr. Bob Black