

# THE RIGHT TOOL

Because the landscape manager must mow different types of grass in different landscape situations, selection of the most efficient mower is paramount. Most of the green industry relies on those old dependables, reels and rotaries. But there are others.

**R**eel, rotary, flail or sickle bar? Which is the right mower for the job at hand?

Each of the four different types of mowers is best adapted for certain landscape jobs. Here is a run down on what mower is best for what situation.

## Reel mowers

The reel mower is the preferred instrument for all quality (fine) turf. This includes golf course greens, tees and fairways, and the finer home lawns.

Reel mowers feature a scissor cutting action with blade slicing the turfgrass leaf off against a bedknife. Reel mowers do not rip the turfgrass plant, as do the other types of mowers listed here.

Reels do not, however, cut taller grasses. Heights of cut generally range from two inches down to 0.2 inches. The number of blades should increase from five to nine as the cutting height is lowered, say most manufacturers.



Walk-behind rotaries are popular among landscape maintenance contractors. This is one of the Gravely Pro Series mowers.

Though only about one to one-and-a-half horsepower is needed per foot of cut, a relatively smooth soil surface is needed. Caster-type wheels are preferred for better cuts.

Reel mowers can be driven from power applied directly to the reel, or by gearing from wheels set outside the reel, or from a roller behind the wheel. Heavier mowers are preferred for dense grasses such as zoysiagrass and certain Bermudagrasses.

One of the nicer features of reel mowers is that gangs can be coupled in 3- to 11-gang combinations to provide a cut of up to 26 feet wide.

Reel mowers for the professional market are basically either riding (e.g. triplex) or pull-behind. Owners of small lawns sometimes prefer the motorized walk-behinds.

## Rotary mowers

The rotary mower is more versatile than the reel, mostly because it is *continued on page 26*



Walk-behind reel mowers, like this John Deere 22R, are used for many golf course greens.



Riding reels, like this Toro, are also used on greens.



**Reel mowers, like this Jacobsen five-ganger, are perfect for golf course fairways.**

more adaptable to rougher conditions. Unfortunately, though, the rotary mower does not make as good a cut on the turfgrass plant.

Rotary blades, travelling at high speeds horizontal to the soil surface and vertical to the leaf blade, cut when their impact upon the leaves split them with a tearing action. Thus, the rotary increases the degree of mutilation and injury to leaf blades.

This type of mower, however, has its many disadvantages—not the least of which is its economy. The popular rotary can reduce tall grass, fallen leaves and weeds to mulch. It does not jam on small twigs, though it will scalp on uneven surfaces.

Cutting heights range from two to 12 inches. This mower does not perform well at cutting heights below one inch, but cutting height adjustment is far easier than that for reel mowers. Cutting widths generally begin at 21 inches for single-bladed units and go up to 27½ feet for multiple-spindle units.

The rotary is preferred with grasses which readily form seed-heads, like bahiagrass, St. Augustinegrass or carpetgrass.

One final thing to remember about rotary mowers: because of the high lateral speed of the blades, there are attendant dangers involved with high-speed debris, though mower manufacturers have provided every safety feature to deal with this problem.

### **Flail mowers**

Flail mowers are not used in quite as many landscaping situations as reels

or rotaries, though they may be responsible for more acres cut per year in this country.

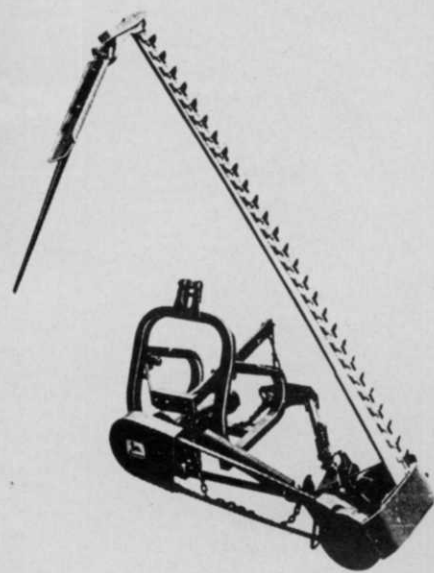
Flail mowers are, by and large, used in big-scale situations such as parks and rights-of-way. They involve individual vertical blades hooked loosely onto a rotating (more than 500 rpm) horizontal shaft. Like rotary blades, flail blades cut on impact.

Unlike rotary blades, however,

since the flail blades are loosely hinged, they will not throw objects from the deck with any force, giving this type of mower a high safety factor.

Thin blades are preferred for a finer cut, but thicker blades are also available. One of the drawbacks to a flail mower is that, because of their number, blade-sharpening is often a time-consuming process.

Flails, usually mounted to the rear or side of tractors, are for use in stony



**Sickle bar mowers are attached to the side of tractors.**



**This Hustler riding rotary can fit through narrow openings.**



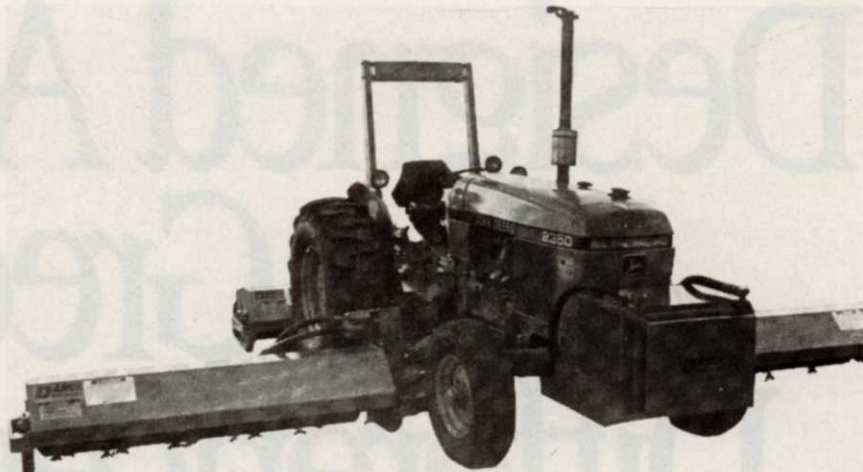


Grasshopper mowers provide ease of operation with zero turning radius.

or irregularly-contoured areas. They can handle leaves and tall weeds, and reduce them to a ground-up mulch. They are also well-adapted where vegetation control is of prime concern rather than turfgrass quality.

#### Sickle bar mowers

Sickle bar mowers are for occasionally mowing grass and weeds of hay height. They operate with less power



Flail mowers, like this Dandl Triple D, are capable of handling the toughest jobs.

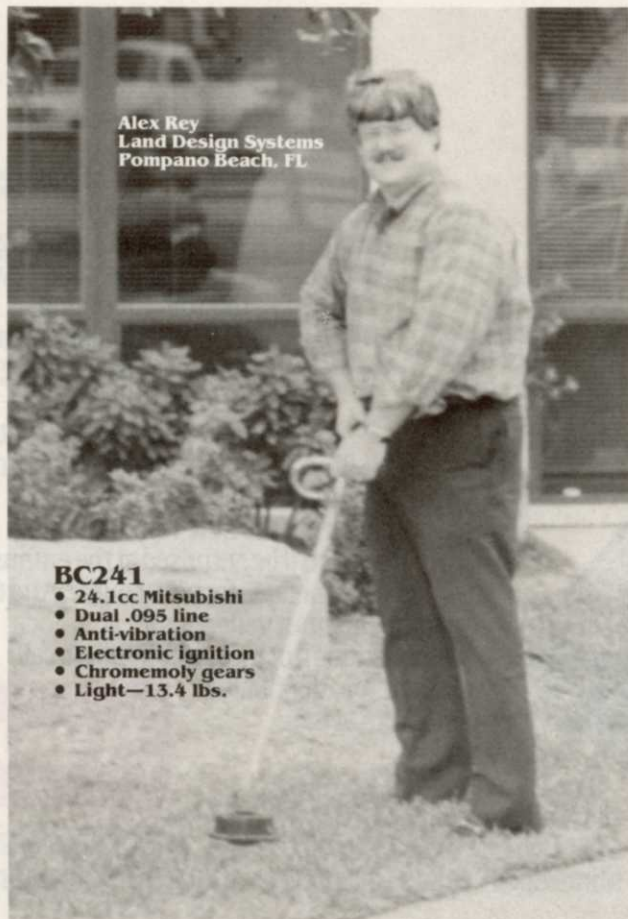
than flails, but they do not mulch what has been cut down.

Sickle bar mowers consist of small arms containing many blades which scissor-cut any grass in their way.

In a landscape context, sickle bar mowers are for roadside banks, slopes, terraces and so on. Their most common use is on coarse, bunch-type grasses. Small units available for lawns are effective, but rather hard to

use because of their weight and size compared with other types of mowers.

In landscaping large areas, sickle bar mowers are flexible and maneuverable, though slow compared to other types of mowers. The movements of the cutting unit, which is mounted on the side of a tractor, can frequently shake the machine into disrepair. **LM**



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