

✓ A new idea for lawnmowers

Air Cushion Mowing

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Air cushion mower glides forwards, backwards, and sideways easily if terrain is level and grass is not too rough. In this rather tall Kentucky bluegrass note there is just a tinge of wind-rowing with the clippings.



TORO'S Flymo introduces an intriguing new idea for lawn mowers. The machine operates on a cushion of air, much like the "hover vehicles" widely publicized in recent years. This new concept won't supplant the conventional wheeled units, but the mower is a surprisingly better mowing device than one might suppose from mere description.

No matter how clever as a piece of machinery, a mower must above all fit its grass and the practicalities of turf care. Kentucky bluegrass, and the fine fescues from Oregon, constituents of most northern lawns, cut well with this air cushion mower. But in many cases they should receive a taller cut than is possible with this new machine.

At high elevations, and in more northerly regions, Kentucky bluegrass survives reasonably well mowed only about 1¼ inches tall. But for middle latitudes, it is questionable whether the new mower would be as advantageous as one which cuts 2 inches or taller. The Flymo blade is not recessed sufficiently for mowing higher than about 1¼ inches, though spacers lower it easily for even shorter cut. And the fact that the machine oper-

ates on a cushion of air, with a "down draft" around the periphery, rather than sucking the air (and grass) up into the cutting area, suggests that this machine is suitable primarily for low-cut turf.

Among the other fine turf-grass species used in more northerly areas, the bentgrasses are outstanding. No rotary, the Flymo included, does as neat a mowing job with closely clipped bent grass as the reel machines do. However, we have been able to achieve satisfactory mowing with the air cushion machine on the more erect Highland type of Colonial bentgrass. Fortunately, Highland is the most used bentgrass in this country, and often a constituent of seed mixtures for areas where bentgrass is adapted.

Light Weight Is Feature

One of the plus features of this new mower is its light weight. The housing of fiberglass is shaped so that a rotor-fan blows a curtain of air down against the ground around the edge, holding the mower consistently level just above the soil. There is scant danger of one's toe slipping into the cutting blade, so close to the ground does the housing ride. Pebbles and other detritus are unlikely to be hurled from the machine, a hazard with some rotaries.

The small two-cycle motor is also light weight. It is designed with a gas tank shutoff nipple, so that the mower can be carried tipped sidewise without gasoline



Design of air cushion mower is simplicity itself. Note the rotor, that throws out a curtain of air, is deflected downward by housing. In the calm center is the rotary cutting blade, activated by the same driveshaft.

drip. The machine is easy to glide from place to place when operating, and is almost as easily lifted for carrying, weighing as it does only 30 lbs.

The mower is best suited to level terrain. We find it more difficult to push than a wheeled mower in tall grass or over uneven soil, for the outer flange of the housing catches on irregularities. Because the air curtain that lifts the mower is out beyond the cutting blade, this mower will not approach as closely to obstructions (for trimming) as will most wheeled rotaries.

One can argue either way about the "reverse" air flow of the Flymo as compared to the "sucking action" of most rotaries.

It does raise dust where the turf is not tight, and it won't cross loose gravel well. On the other hand, it does not blow a jet of grass clippings out of the side, but retains them for rechopping within the housing.

For tidying up around the yard, I would suggest that chemical edging accompany use of this air cushion mower. Cacodylic acid (or some other general vegetation killer that is inactivated by the soil) sprayed around the base of trees and along extremities creates "mulch" that needs no mowing. The wheelless mower can then approach closely enough so that hand trimming is not necessary.

The air cushion mower represents the first revolutionary departure in lawn mowers in years. Toro is to be congratulated on willingness to risk such an extreme product to provide a radically new choice for the public. It should stimulate new ideas in a field where progress has been confined mainly to refinement of existing principles. So far as our experience extends with this air cushion mower, we are pleased with its simplicity, the ease with which it starts and handles, even if not being entirely satisfied with its inflexibility in mowing height and inability to approach obstructions closely.

Dr. Schery's frank appraisal of Toro's new wheelless mower reveals both its advantages and limitations. Suitability, he says, depends upon grass species, cut height required, and kind of terrain.
