# More precise apps with new spreader?

## by BILL KNOOP, Ph.D.

very turf maintenance program includes periodic fertilizer and pesticide applications. Now, more than ever, it's vital that these materials be applied at correct rates, and on target.

Most pesticides are applied as liquids. Assuming that the sprayer is properly calibrated, the greatest environmental concern is probably the threat of spray drift. Spraying equipment must be designed to completely control drift.

It is fair to say that a cyclone spreader can't produce an absolutely accurate application of some fertilizer or seed mixes. Also, if a cyclone seeder is used on a windy day, the wind could seriously distort the application pattern. Again, environmental concerns may dictate that materials not go beyond the target areas.

## The ideal applicator

If we were designing an ideal liquid and dry material applicator, it might have the following characteristics:  Able to apply liquids in any concentration, including low-volume liquids; able to apply dry materials at rates from a few pounds per acre to several hundred pounds per acre.

2) It would produce an even application from one tip of the spray boom to the other of a dry material, with no 'ballistic separation' of particles.

**3)** It would permit liquid or dry applications in wind or rain.

4) It would have a folding, self-leveling boom, so the spreader can get through gates and still offer a reasonably wide application pattern.

5) It would prevent any spray drift.

#### Air-controlled spreader

The Course Air, is an original product that uses a technology new to turf, but that has been used in agriculture.

Robert Wicker of Southeastern Turfgrass Supply, Inc., Jacksonville, Fla., is using a Course Air for custom applications of seed and fertilizer on golf courses and athletic fields. According to Wicker, the



The Course Air has reportedly reduced labor costs and material waste.

## ACCURACY OF DROP AND CYCLONE SPREADERS

#### **Drop spreaders**

- Fairly precise application pattern.
  Width of application limited by width of gates; distance between trees, other objects.
- Agitation might harm coatings of some nitrogen products.

#### **Cyclone spreaders**

 Wider, perhaps less precise pattern cause 'ballistic segregation' of materials.
 Nutrient particles or seed are thrown different distances, based on weight; uneven applications may result.

Course Air is more precise and accurate than other spreaders, says Wicker.

John Mills, superintendent of Dancing Rabbit Golf Club, Philadelphia, Miss., says the spreader has reduced labor costs, reduced material waste, and has provided more accurate applications of materials.

Most important, says Mills, environmentally sensitive areas can be avoided.

Robert Mange, assistant golf course superintendent at The Bridges Golf Resort, St. Louis, says the Course Air is easier on turns, stays set at a steady seed output, is easy to calibrate, and can be pulled by any vehicle.

This machine may well present a new level in spreader technology. We need spreaders like this, that help us protect the environment while we make the necessary fertilizer and pesticide applications.

If you want to know more about this new technology, call Harold Clark at (817) 795-8853.

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