Superintendents making clippings 'a positive'

From staff reports

LAS VEGAS, Nev. — Golf course superintendents around the country are turning the grass clippings disposal problem into a valuable resource.

Bob Tracinski of Deere & Co. and Golf Course Management technical editor David Bishop told an audience at the International Golf Course Conference and Show that onsite composting programs have been a godsend to many superintendents as more landfills have closed to lawn waste.

Tracinski said more than half the country's 16,200 landfills will be closed by the year 2000. Eleven states have legislated yard waste out of landfills by 1993, while 32 states are developing such laws, he said.

At the same time, Bishop said increased lightweight mowing has meant more clippings at golf courses. Bishop said lightweight cutting helps weed control and is particularly effective when a course is overseeding with bentgrass plus, anecdotal data indicates there is more disease when clippings are left on turf. But the problem is what to do with the clippings, he said.

"We have a tremendous resource (in clippings)," Bishop said. "We just have to find a way to deal with it."

He said a vast majority of clippings is water. Once dried, it is organic matter, principally carbon, hydrogen and oxygen.

He cited a Michigan State study of creeping bentgrass, fine fescue and bluegrass that found clippings had primary nutrients of 3.2-4.6 percent nitrogen; 43.66 percent phosphorus; and 2.02-5.5 percent potassium.

That does not equal a 6-1-4 fertilizer, because of complications in breakdown and availability, he said. But it does include significant amounts of nutrients like calcium and magnesium, and micro-nutrients copper, iron, zinc, manganese, boron and aluminum.

Tracinski related three case studies where superintendents have instituted composting programs that have proven to be practical, cost-effective, healthier for fairways and good for the environment.

"It involves some start-up costs but is an economic alternative, and there will be fewer alternatives," he said. "We can be clean and less expensive than paying a hauling service."

Al Pierce, superintendent at Oak Park (Mass.) Country Club, began his composting program to encourage bentgrass growth.

He spreads clippings thinly over an area, spreads lime on them once a week, and uses a tractor with disc to put the lime and clippings into the soil.

Whenever he needs to take soil from the course, it's taken to the recycling area, which is in a continual state of decomposition.

Pierce reports savings of $4,000 a year by not paying a company to haul away the clippings.

Gerry Cooper, superintendent at Ravisole Country Club, uses two types of piles instead of one large recycling area. One pile is for clippings, leaves and small branches, while the second is for dirt and sod.

Every six weeks, an operator on a tractor with a bucket turns the piles to help the composting process. The piles are shaped like volcanoes so rain runs off them.

Cooper reports that it takes one of his crew two to three days every six weeks to turn the piles. He has one, two and three-year piles. In its third year a pile is fully composted earth that can be used for landscaping projects, or even with sand for top dressing.

Charles Passios of Hyannisport (Mass.) Country Club began his program in 1988 after a period of rough weather in which a drought was followed by heavy rains, which meant too many clippings.

Extremely hot weather struck and turf was lost, so he instituted a program in which clippings were stored in two piles beside a fairway.

Passios has the clippings spread out, dried a few days, then tilled into the soil. Lime is spread on the area, and sand is later added as eventual use as top dressing.

Tracinski suggested that superintendents first find out about the state and local laws regarding landscape waste and onsite composting. Then they should decide the type of operation that best fits their need, and select a recycling area.

Although odors are not usually a problem, they should select an area downwind of any populated or play areas, he said.

"Composting can be a safe, cost-effective and clean way to dispose of clippings and organic debris," Tracinski said. "Plus it helps provides a rich soil that can be used... But perhaps the most important thing it accomplishes is help conserve much-needed landfill space for our future. With the right recycling problem, we can turn a growing problem into a valuable resource."