

Not just a load of....



Several greens at Quail Hollow Resort in Ohio benefitted from the application of an all-natural, non-burning vegetative product containing poultry manure. The material added consistency to soil nutrition levels.

Natural products are gaining popularity constantly. Though it is unlikely they will ever replace pesticides and fertilizer, there is little doubt natural materials have a place in the market.

Last fall, Jim Loke, superintendent at Quail Hollow Resort in Painesville, Ohio, was in the market for a natural material to add to the topdressing on course greens. His need for a good natural additive resulted from a lack of Pennsylvania peat and the questionable quality of northern Ohio peat.

What he found was an all-natural, non-burning vegetative product containing poultry manure that is distributed by a Painesville-based company called Bio-Ganics. Chemical analysis of the product showed approximately a 3-2-2 percentage-by-weight N-P-K mix.

In November 1987, Loke applied the product to 11 of his greens and the practice green. Holes 3, 4 and 5 received the equivalent of 1.5 lb. N per 1,000; 1, 6, 9 and 11 received 3.0 lb. N. The double green of holes 2 and 7 served as the test green. Two received the 3 lb. rate, 7 got 1.5 lb., with the area between serving as the check plot.

The results were stunning, reports Loke, who adds that the density and color of the greens were excellent.

Application rates

Greens that received 3.0 lbs. showed no aerifier holes coming out of dormancy, the 1.5 rate showed some and the check plot showed all the aerifier holes.

"What's been real positive," Loke says, "is the public relations aspect. The golf pro, the members and the business customers were overwhelmed at the mid-season quality of the greens at the end of April."

Loke adds that the nitrogen amount put on with the natural was in addition to his regular N totals for the year. "It is a supplementary fertilizer amendment," he states.

Part of the benefit of adding this and other natural products as a source of peat is their cation exchange capacity (CEC), which measures a soil's ability to hold nutrients. Straight sand has a low CEC. In addition to raising the CEC, the natural product acts as a soil buffering agent, making the soil nutrition levels a bit more consistent

over time. This means there are fewer peaks and valleys associated with mostly sand greens. "High quality topdressing material holds nutrients," Loke says, emphasizing the "high quality" aspect.

"At the time of application, the turf was not lush, there was no excess top growth," Loke explains. "We just had a dense, thick, healthy green turf." Greens remained mostly disease-free throughout most of the summer of 1988. However, it is quite possible this was a result of the dry, low humidity conditions the Midwest experienced well into July.

Loke points out that this and other natural topdressing and fertilizer products are not a panacea. They are another tool. "It looks like a viable source of natural material to add to the sand," he notes. "We had it chemically analyzed and it looks like it will satisfy most of our needs."

The product Loke used, because of its very coarse texture, is not one to be used in season. It is ideal for a late fall feeding, though. If budget is not a factor, he recommends a 3.0 lb. application rate in the fall. If cash flow is tight, try the 1.5 lb. rate. Then wait until April.