

Organic Golf Maintenance & Design, Inc.'s 2005 Strategy

Strategic Approach

It is our intent to eliminate the use of type 1 and type 2 pesticides at our golf courses. In 2004, less than 5 percent of the pesticides used were in the type 1 or 2 category. In 2004, we fertilized our fairways with NH₄SO₂. In 2005, we will use natural fertilizers and eliminate chemical fertilizers in our maintenance program. We will expand our compost tea spraying program to include fairways in addition to greens, tees, driving range, practice areas, etc.

Progress on 2004 Activity 1

Eliminating Type 1 and Type 2 Pesticides

In 2004, we have significantly reduced the use of types 1 & 2 pesticides. Chlorothalonil (type 1 pesticide) was mixed with a systemic fungicide to control anthracnose basal rot (ABR). In 2005 we will eliminate the use of all type 1 and 2 pesticides.

Progress on 2004 Activity 2

Chemical Fertilizer Reduction Program

In 2004, we significantly reduced the use of chemical fertilizers. All tees and greens were fertilized with natural fertilizers supplemented with compost tea applications. In 2005, we will phase out the use of chemical fertilizers.

Progress on 2004 Activity 3

Fertilizer Reduction Program

In 2004, with the use of compost tea applications we significantly reduced the need for additional fertilization to maintain healthy turfgrass. The application of compost tea amounted to spoon feeding of N to the turfgrass thereby eliminating potential nitrate leaching to underground water.

Progress on 2004 Activity 4

Compost Tea Program

In 2004, we continued to improve our compost tea delivery system by installing heated water holding tanks that heated the water to 90 degrees prior to entering the compost brewer. We found that by using preheated water, microorganism replication was faster, producing higher counts in the final brew. In 2005, we will continue to fine tune the compost tea to get higher microorganisms in the finished tea.

Activities for the Coming Year

Activity 1

Elimination of Type 1 and Type 2 Pesticides

How does this activity reduce pesticide risk?

Type 1 and type 2 pesticides carry the danger and warning labels signifying their potential health risks and their LD50 ratings. In 2005, we do not plan to use any type 1 or 2 pesticides but rather continue to use antimicrobial pesticides with label ratings no higher than caution, to maintain healthy plants.

How will you measure the risk reduction gained from this activity?

With the elimination of type 1 and type 2 pesticides we will eliminate the risk of exposure to these pesticides. The antimicrobial products we will use pose no health risk to the environment, wildlife or our golfers.

Activity 2

Maintain acceptable weed threshold levels throughout the golf course

How does this activity reduce pesticide risk?

We apply preemergent herbicides to prevent significant weed germination on our tees and greens and hand weed those weeds that germinate. We will use CGM to control crabgrass and broadleaf weeds on our fairways coupled with verticutting to shred broadleaf weed leaf tissue.

Our herbicide program is based on acceptable threshold levels. If the acceptable threshold level is exceeded, remediation is implemented to get the problem and reestablish the threshold level. We do not try to totally eliminate weeds, but rather we reduce weeds to levels that do not interfere with playing the game of golf.

How will you measure the risk reduction gained from this activity?

We measure the risk reduction by eliminating the use of type 1 and 2 herbicides and reducing type 3 and 4 herbicide usage.

Activity 3

Use of natural fertilizers

How does this activity reduce pesticide risk?

By eliminating chemical fertilizers we reduce the risk of nitrates leaching into the groundwater supply due to excess use and incorrect application rates. With the use of natural fertilizers we can better control the rate of fertilization (spoon feed), thereby better controlling possible nitrate leaching.

How will you measure the risk reduction gained from this activity?

With the use of natural fertilizers we have a better control of potential nitrate leaching and eliminate excessive fertilizer use; thereby protecting our groundwater.

Activity 4

Compost Tea Program

How does this activity reduce pesticide risk?

Applications of compost tea coat the foliar portions of the plant with microorganisms that out-compete pathogenic organisms for available food, such as gutation, etc.

How will you measure the risk reduction gained from this activity?

We will continue our compost tea program, spraying greens and tees and include the fairways, in 2005, to reduce the amount of granular fertilizers we apply. Granular fertilizers have a greater risk of uptake by wildlife and potential runoff during periods of inclement weather.