

Agronomic Plan for Miami Valley Golf Club

Mission statement: To provide the members of Miami Valley Golf Club the best turf and playing conditions possible given weather and budgetary constraints.

Greens

The goal for greens is to provide a smooth, firm and consistent playing surface that is agronomically healthy while providing putting smoothness and speeds that are enjoyable to the majority of golfers at MVGC. In order to reach this goal we must:

1. Provide for a deep root system.
 - a. Aerify early spring, late spring, late summer and early fall, utilizing both solid and hollow tines of varying sizes.
 - b. Hydroject on at least a monthly basis during the summer.
2. Water as little as root health and depth permits.
 - a. Use wetting agents as needed
 - b. Hand water when and where needed.
 - c. Syringe during the summer months as needed.
 - d. Check for proper operation and distribution of irrigation heads
3. Utilize a balanced fertilizer program for nutritional health.
 - a. Soil testing will be done annually to establish the needs of the turf plant and identify any deficiencies that might exist.
 - b. Based on soil tests a program will be put in place utilizing both organic and inorganic sources of fertilizer.
 - c. Both normal rates, ranging from .25 to 1 lb. of N/1000ft², and very light spoon feeding rates, from .05 to .1 lb of N/1000ft², will be used depending on the time of season to provide a steady release of nutrients to the turf.
4. Utilize a plant protectant program to prevent insect and disease problems.
5. Use growth regulators at proper times to help control growth and Poa annua seed heads.
6. Utilize various cultural methods to help provide smooth, true putting surfaces.
 - a. Lightly verticutting or grooming as weather permits, being more aggressive in spring and fall.
 - b. Brushing before mowing to get a better cut.
 - c. Topdressing as needed. Rates to be determined by the operation, for example heavy when aerifying and light following grooming, and time of year.
 - d. Roll when conditions permit, but no more than 3 times per week.
 - e. Keep all mowers sharp and well adjusted, ensuring proper height is being maintained
 - f. Walk behind mowers will be set at .130" and triplex mowers will be set at .115" to compensate for weight differences. This gives us a field height of approximately .125".
 - g. Greens will be mowed daily if weather conditions permit. Double cutting will be done on an as needed basis.
7. Allow for proper light and air movement to reach greens.
 - a. Assess plantings around green complexes and prune or remove to favor healthy turf growth.
 - b. Root prune where needed to decrease competition for water.

Tees

The goal for tees is to provide a smooth, firm and level playing surface with a healthy, weed free stand of turfgrass. In order to reach this goal we must:

1. Provide for a deep root system.
 - a. Aerify at least 2 times per year. These aerifications will take place in the spring and fall
 - b. Aggressive aerification will help control thatch levels.
2. Limit water use as much as possible.
 - a. Use wetting agents as needed.
 - b. Hand water when and where needed.
 - c. Check for correct operation and distribution of irrigation system.
3. Based on soil tests, utilize a balanced fertilizer program that will rejuvenate the turf and help it recover from wear and divot damage.
4. Spray plant protectants when needed to prevent damage from insects, weeds and diseases.
5. Tees will be mowed on average 3 times per week at a height of between 3/8" and 7/16".
6. Teeing areas will be serviced daily.
 - a. Divots filled.
 - b. Trash containers emptied.
 - c. Ballwashers fill with water.
 - d. Tee markers checked and moved as needed.
7. Check mowers after each mowing for proper operation, height, and sharpness.

Fairways

The goal for fairways is to provide a firm, healthy playing surface with a healthy, weed free stand of turfgrass. In order to reach this goal we must:

1. Provide for a deep root system and good water movement.
 - a. Aerify aggressively in the fall.
 - b. Aerify some problem fairways in the spring as time and ground conditions permit.
 - c. Aerify with solid tines in mid to late spring to open soil.
 - d. Utilize all our aerification resources to address problem areas throughout the season.
(esp. fairway edges)
2. Use good water management practices.
 - a. Use wetting agents as needed, concentrating on fairway edges.
 - b. Use growth regulators to help control growth and water use.
 - c. Install drainage as needed and as time permits.
 - d. Check irrigation heads for correct operation and distribution.
 - e. Use roller base sprinklers if needed to water edges.
3. Plant protectants will be sprayed as needed to prevent damage from insects, weeds, and diseases.
4. Based on the latest soil tests, utilize a balanced fertilizer program for nutritional health.
5. Overseed with newer varieties bentgrass during late summer.
6. Mow fairways on average of 3 times/week at 1/2".
 - a. Make sure mowers are properly adjusted and operating correctly.
7. As time and manpower permits, fill divots with sand seed mix.

Rough

The goal for the rough is to provide a healthy, weed free, well-manicured stand of turf. In order to reach this goal we must:

1. Use fertilizer as needed for healthy turf growth.
2. Spray to prevent and eliminate weed growth.
 - a. Make application of pre-emergents to prevent crabgrass.
 - b. Treat broadleaf weeds on an as needed basis.
3. Spray plant protectants only when needed to clear up problem areas of disease or insect damage.
 - a. Treat only areas adjacent to areas of play.
 - b. Apply preventative grub treatments to areas adjacent to greens, fairways and tees.
4. Aerify areas of heavy cart traffic both spring and fall.
5. Mow with sharp, well maintained equipment for the best cut possible.
 - a. Mow and maintain an area of intermediate rough adjacent to the fairway at a height of 1-1.25". This area will be mowed 2-3 times per week.
 - b. The remaining rough will be mowed between 1.75-2.25" as needed.
6. Prune trees in problem areas to allow for better turf growth.
7. Seed as needed with improved varieties of turf grass.
8. Protect turf areas from concentrated cart traffic.
 - a. Use signs and ropes where needed to disperse or discourage cart traffic. Use mostly at cart path entrance/exit points and around green complexes.

Bunkers

The goal for the bunkers is to provide manicured, firm, consistent surfaces. In order to reach these goals, we must:

1. Add new sand where needed and redistribute the existing sand to ensure adequate sand (4") throughout.
2. Rake on a regular basis to maintain smoothness and texture.
 - a. Hand rake whenever possible to preserve edge, maintain firmness, and keep the sand distributed properly.
 - b. Mechanically rake traps to loosen compacted surfaces as needed.
3. Maintain a well defined edge.
 - a. Mechanically edge as needed.
 - b. Use growth regulators around edge.
 - c. Use hand rakes to rake edges.
4. Add drainage to traps that are in need of it.
5. Apply fertilizer, seed, and plant protectants as needed to maintain a healthy stand of turf surrounding the bunkers.

Miscellaneous Areas

1. All grass areas around the clubhouse, tennis courts and swimming pool will be mowed as needed, paying particular attention to high traffic and visibility areas. Fertilizer, insect and weed control will be applied where and when needed to provide a healthy turf stand.
2. All landscape beds will be edged and mulched as needed. Plants and flowers will be installed and cared for by the grounds staff, paying particular attention to the clubhouse area and entrances to the club and golf course.
3. Parking lots, sidewalks, and clubhouse grounds will be checked for trash and debris. Snow and ice removal is done as needed.
4. Shelter houses will be maintained and check for supplies and cleanliness as part of our daily set up. Other painting and building maintenance will be done on an as needed basis.
5. Trees will be maintained in as healthy a condition as possible. Trees will be monitored for health and any dangerous trees will be removed. Pruning of dead and low branches, spraying to prevent damage from insects, and some limited fertilization will be done. Ash trees will be monitored closely for any sign of Emerald Ash Borer infestation.
6. The driving range and driving range tee will be mowed twice a week. The driving range tee will be fertilized monthly to provide for vigorous growth. Every effort, through the use of pre and post-emergent herbicides, will be made to keep crabgrass populations down. As time and manpower permits, we will fill divots. The target green and practice trap are maintained as part of our daily maintenance.