

**WHITEVALE GOLF CLUB**  
**COURSE MAINTENANCE STANDARD**  
*In Support of the Strategic Plan*



In support of Whitevale Golf Club’s Strategic Plan, the Turf Department and Green Committee have undertaken the task of producing “conditioning standards” for the course. These standards are a direct response to an action item derived from the Strategic Plan and delegated to the Green Committee from the Board of Directors.

That action was to produce a course in “near championship condition for the majority of the playing season.” Due to the seasonal nature of our environment, certain times of the season do not permit “near tournament conditioning.” However, the intent of this document is to inform the membership of the standards the club is aiming to achieve in satisfying the Strategic Plan.

This document will continue to grow and develop as the committee continues to satisfy the goals outlined in the Strategic Plan.

Key drivers that affect the overall conditioning are:

1. Budget – ensuring sufficient funds for labour, fertilizer, pest control products, capital equipment acquisitions, etc. are available.
2. Rounds of Play – Historically Whitevale experiences approximately 28K rounds a season. This did increase to 31K in 2020 as a result of Covid-19.
3. Existing soil profiles/construction – The vast majority of greens, tees and fairways are highly compacted with no internal drainage below the upper 4 inches and are under sized for the number of rounds. Greens have a variety of different construction methods from “push up” to sand and a combination of both on some.
4. Property Limitations – Delivering certain conditioning expectations need to be weighed against property characteristics such as topography, limited cart paths,

differing sun exposure's, overplanted trees and their impact such as shade and their expansive root systems.

5. Commitment to Environmental Responsibility/Sustainability and the Audubon.
6. Weather and time of season. Standards subject to change due to immediate needs of the turf due to weather and both biotic and abiotic stresses.

## GREENS

- Height of Cut (H.O.C) will be a maximum .150" for opening day, lowering the height by no more than .010 of an inch per week, until a height of .120" is acquired. During special events (such as Club Championship) H.O.C may be lowered for short periods of time to increase green speed. HOC may also be raised to reduce stress on the turf (such as wet conditions, extreme heat, high traffic, or disease pressures) as to protect the turf for optimum health. Frequency of mowing will depend on soil temperature which determines speed of growth of the leaf blade. Generally, in the early and later parts of the golfing season greens will be mowed every other day. During normal parts of the season greens will be mowed everyday, double cutting may be utilized during special events when higher green speed is desired. Walk behind mowers will be utilized for clean-up cuts the majority of the season. Highly precision triplex mowers will be used for mowing greens but will rarely perform "clean-up" cuts. Green speed will also fluctuate with the time of the season, with the goal to keep green speeds in the 10-10.5 range during mid-May to early October golfing season. Green speeds faster than this will have a negative impact on pace of play for most of our members and will limit hole locations. During times of stress this clean-up pass will be set approximately .010" higher than the greens surface and will have a solid front roller to reduce traffic/stress damage. This clean up cut will be performed every 2<sup>nd</sup> or 3<sup>rd</sup> day to reduce traffic again, depending on turf growth. All 4 practice greens will also follow these procedures.
- Holes will be changed daily from late April/early May until end of Oct. A hole changing "map" will be utilized by staff to avoid cutting pins in unfair locations. Holes may be changed opposite days as to the mowing schedule during spring and fall to accommodate or reflect the number of greens staff employed at the time and number of rounds played. Flags will be colour coded to identify if the pin is front, center, or back location. A pin position map will also be made available for players daily. Holes will be painted white daily, weather permitting. Hole changers and mower operators will be trained to repair every ball mark, every day. On highly damaged ball marks, seed and a small sand top dressing will be applied to improve ball roll and speed the healing time, or the damage will be plugged out. All flag sticks will have prisms for distance finding. Clippings dropped by mowers will be blown off daily before play.
- Water will be applied for the health of the turf and never to help "Hold a Shot". Hand watering will be utilized to prevent overwatering of other parts of the green.

## Cultural practices/Greens

- Rolling will be done with a goal of rolling every weekday from early May through to Thanksgiving and may be increased in frequency during special events such as Club Championship.
- Topdressing greens will be carried out minimum every 14 days at very light rates while the turf is actively growing. This will be followed behind with a vibratory roller and/or soft brushing to help knock sand down into the turf canopy. Amount of sand applied during these events will not be noticeable to members.
- Brushing will also be utilized ahead of mowers to help stand the grass up which will help reduce grain and produce a smoother, faster green surface.
- Aerification: Traditional coring will take place twice a season with the goal of removing a minimum of 20% of the green surface (thatch) per season. This will require ½” tines at 2 inch spacing and take place during optimal growing conditions for promoting fast healing. A “Drill and Fill” event will take place in mid-September to all original (push up) greens to improve internal drainage and increase oxygen levels. Bent seed will be interseeded into greens during these events to increase Bentgrass populations. Mini tine aerification (1/4” holes) may be utilized during the season for the health of problematic areas. Vertical mowing (dethatching) may be done in conjunction with aerification. Tri-wave (slit seeder) may be utilized also in conjunction with greens aerification to increase bent grass populations. Course closure may be necessary during aerification/drill and fill.
- Deep tine aerification will take place twice yearly, normally in November with ½ inch solid tines and again with the traditional aerification in late April/early May.
- Spiking (or venting) will be done Bi-weekly during the growing season with ¼” solid (or bayonet) tines. Greens will be cut and rolled immediately following this procedure. This process will not negatively impact ball roll.
- Nutrients will be applied as required which will be determined according to soil and tissue tests. Clipping yield will be measured and recorded also to help determine nitrogen requirements. Fungicide applications will be applied in accordance with threshold limits which were set in accordance with our Audubon program. Use of primo may be utilized at label rates to help moderate growth. The use of wetting agents will be utilized on a regular schedule to improve the infiltration of water into the root zone. Wetting agents help to break the surface tension, removing standing water quicker after rain events and will reduce hydrophobic areas during drought conditions.
- Biological products will be utilized as much as possible to reduce fertilizer and pest control products requirements. Our emphasis will be on healthy soil biology using organic forms of nutrition.
- Collars for the most part will receive the same programs as the greens. HOC will be kept near .300” for the season as research has shown keeping the HOC longer than this is detrimental to the health of the turf on the collars. Width will be approximately 18” (45cm) inches. A solid roller will also be utilized during the summer months and an additional .3 to .5 LBS of actual Nitrogen from an organic

source may be made monthly during the summer. Light vertical mowing or brushing will be done regularly.

#### **MEMBERS RESPONSIBILITIES:**

- i) Repair all ball marks, including on collars and approaches.
- ii) Wear a golf shoe with a minimalist tread/soft spike.
- iii) Take extra care making sure feet are never twisted or dragged.
- iv) Endeavor to putt out with the pin left in, to aid pace of play.
- v) Keep power caddies and pull carts off collars.

#### **TEES**

- H.O.C. will fluctuate with the seasons but be kept at .375” during the bulk of the golfing season. They will be mowed two to three times per week according to rate of growth and calendar.
- Triplex will be used to mow tees with walker mower utilized on small tee decks and for clean-up cut to prevent traffic damage.
- In order to reduce damage to some small tees, blocks may be adjusted forward or back on different tees to provide a break and heal time. We will endeavor to keep over all yardage to the score card as close as possible.
- Blowers will keep tops of tee clear of any debris.
- Hand watering and the use of a “soaker hose” will be utilized on problematic tees.
- Divot filling will correspond to the amount of play, normally done daily during the season. Seed/soil mix will be made available to golfers for filling divots on fairways and tees. Only Bent grass cultivars will be used in the divot mix.
- Members are encouraged to replace all their divots, even on tees. Tee blocks will be adjusted daily during the May through October season, and will utilize perimeter of the tee rather than just down the center. Outside these dates tee block adjustment will be determined by the amount of play. Broken tees and other debris will be removed from all tees and surrounding areas along with tee block adjustment. Yardage markers to indicate distance will be in place on all tees.

#### **Cultural Practices/Tees**

- Topdressing will take place minimum twice a season.
- Vertical mowing will be done on an as needed basis.
- Aerification: Solid/open tine aerification and top dressing will be done minimum once a season, usually in May. And will not require course closure.
  - spiking will be done as needed.
  - over seeding will be done behind aerification.
- Nutrients will be applied as required which will be determined according to soil and tissue tests. Fungicide applications will also be applied once threshold limits have been reached. Biological products will also be used with the goal of reducing Fertilizers and Pest control products.
- Use wetting agents will be utilized on tees at label rates.

## **MEMBERS RESPONSIBILITIES:**

- i) Replace all divots when possible.
- ii) Take divot bottles and fill divots or scars on tee deck.
- iii) Put cigarette/cigar butts and broken tees in the garbage.

## **FAIRWAYS**

- H.O.C. will fluctuate with the season and start at no higher than .480” and be lowered by no more than .020 a week and be kept at .400 during the bulk of the golfing season. They will be mowed two or three times per week according to growth. Striping pattern will be mowed in for aesthetics. Rolling fairways was introduced in the 2019 season with the goal of rolling when not mowing. This may not be possible on days we have a split tee. Mow schedule will be adjusted for lack of growth in spring and fall and for the calendar.
- Blowers will keep fairways clear of any debris.

## **Cultural Practices**

- Topdressing will only be done in special circumstances where special treatment is required.
- Approaches will be top-dressed on a regular basis.
- Vertical mowing will be scheduled a minimum of twice a season.
- Aerification will be done a minimum of once per season with 5/8 to 3/4 inch tines, cores will be broken up and brushed back into the turf. This will not require closure.
- Use of a “soaker hose” may be utilized on highly hydrophobic areas.
- Over seeding will be done to weak areas or areas which have low populations of bent grass during aerification.
- Biological inputs will be used when possible to promote healthy soils.
- Nutrients will be applied as required which will be determined according to soil, tissue tests and clipping yields.
- Fungicide applications will be applied in accordance with threshold limits which were set in accordance with our Audubon program.
- Use of primo may be utilized on fairways at label rates.
- Only Bent grass cultivars will be used in over seeding and divot mix applications.
- The use of wetting agents will be utilized at label rates.
- Staff will fill unrepaired divots regularly.
- The Turf Department will endeavor to have all sprinkler heads on each hole inside of 290 yards marked with yardage tags and 100 & 150 above ground yard markers in par 4 and 5 fairways.
- In the 2019 season brushes were added to Fwy mowers and used regularly to help eliminate grain and improve overall conditioning.
- The addition of a deep tine aerifier in 2019 will also allow us to begin verti-draining wet areas to improve drainage, relieve compaction, help water infiltrate the soil and grow deeper roots.

- Irrigation will be applied for the health of the turf and “brown grass” may be seen during times of drought.

**MEMBERS RESPONSIBILITIES:**

- i) Replace all divots.
- ii) When no divot is recovered fill with seed/soil
- iii) Follow cart directional signs.
- iv) Never drive through puddles or wet areas

**BUNKERS**

Bunkers can be inconsistent due to:

- i) Different levels of contamination of the same sand
  - ii) Different levels of moisture (irrigation, drainage, sun, wind)
  - iii) Amount of play
  - iv) Not raked properly after being played out of
- Sand in all our bunkers is Ohio 535.
  - Sand depth on green side bunkers will be 4-5 inches in the base of the bunkers, shallower in the transition zone, reducing to about 1 inch on the faces. Fairway bunkers will be 3-4 inches in the base, shallower in the transition zone reducing to about 1 inch in the faces.
  - Bunkers will be maintained to the “Ozzy Style” where the faces, or steeper portions are rolled/flattened out to help allow balls to roll down to a leveler spot in the bottom of the bunker.
  - Bases of bunkers will be raked daily during the main season.
  - Drainage will be installed and working in all bunkers.

**Bunker Schedule**

- Rotation of sand depth checking, and adjustments will follow this schedule:

***Week 1:***

- Mon.- 1, 2 fairway/Approach and chipper.
- Tues.- 2 green, all of 3
- Wed.- 5, 7 fairway, and range.
- Thurs.- 7 green all of 8
- Fri.- all of 9

***Week 2:***

- Mon. - all of 10
- Tues. -11 and 12
- Wed. -13 and 15
- Thurs. -16 and 17
- Fri. -all of 18



- Contamination/debris, stones, weeds will be hand-picked daily, and troublesome bunkers will receive extra attention. Light silt or soil that is washed into a bunker due to storm conditions will be scraped off with shovels and removed from the bunkers.
- Rakes for members use will be made available at each bunker, numbers per bunker to be determined by the specific bunkers size. Handles will be placed parallel to the bunker edge on the low side of the bunker.
- Raking equipment utilized by maintenance staff will include hand rake only in the smaller bunkers, with mechanical equipment used in the large bunkers. Bunkers will be raked as level as possible for play daily.
- Bluegrass around bunkers will be mowed/trimmed minimum once per week and grass clippings will be removed before raking.
- Any edging required will be done with hand tool only.
- Deterioration of edges is common on bunkers and repairs to these areas will receive prompt attention.

**MEMBERS RESPONSIBILITIES:**

- i) Take a moment to rake both pitch mark and footprints smooth.
- ii) Only enter/exit the bunker on the lower edge, (tee end) never on the steep face
- iii) Leave rake on the grass, parallel to bunker edge on the same low edge.
- iv) If moving any type of debris, never throw it into the maintained turf.
- v) Never take pull carts or power caddies between bunker and the green, always go around the outside.

**INTERMEDIATE ROUGH (Champ Cut)**

- H.O.C. will be maintained at 1.25 inches and mowed three times per week. The cut will be 80” wide and will circle all bent grass fwys and approaches. This mower will not circle the greens. Mow schedule will be adjusted during slow growth periods and holidays.
- A 30” wide cut will be push mowed immediately up against the collar around all greens three times a week, at 1.25 inches. Clippings will be collected.

## PRIMARY ROUGH

- Will be mowed at 2 inches and will be mowed on a rotational basis. Mowing all rough on the course at least once per week, with the goal of twice per week. Mowing will be adjusted for holidays and during times of slow growth.
- Rough around greens and tees will be maintained at 1.75 inches. Green sites will be mowed three times a week, Mondays Wednesdays, and Fridays. Mowing will be adjusted for holidays and during times of slow growth.
- All rough has less than ideal irrigation coverage, and it is understood it will be watered for the health of the plant, and some “brown grass” will be seen during times of drought.
- Blowers will disperse any clippings.

## OPENING AND CLOSING DATES

- Because weather will always be a big factor in actual dates, we say generally we strive for opening the golf course around the 3<sup>rd</sup> week of April, and close around the second week of November. Each spring and fall, if there is a concern about damaging the golf course due to things such as, but not limited to, excessive moisture, frost or significant rounds causing negative impact on conditioning, dates will be adjusted to protect the golf course from damage. We will endeavor to open the practice facilities a week before the golf course.

For opening day, we will endeavor to have;

- Greens mowed and rolled minimum 3x's.
- Minimum one cut on all other areas.
- All bunkers restored and sand depths checked/adjusted.
- Majority of the golf course raked and tidy.
- Bathrooms open, clean, and fully functioning.

## TREES

- Pruned for the health of the tree, and to promote positive pace of play by allowing members to see under them when looking for a ball, not necessarily to allow a full swing of the golf club.
- Removal if canopy interferes with Sun getting to surface of Greens or Tees.
- Planting of any trees will involve input from the GM, Superintendent, Head Professional, Green Committee Director and from members sitting on the Green Committee. An architect is highly recommended to be involved in planning. Spacing will correspond to the size the tree will be at maturity.
- Dead trees (or branches) will be removed if posing any safety concerns. Some dead trees may be left standing as it may enhance wildlife and supports our Audubon initiative providing they pose no safety concerns. Removal of unwanted, dangerous, weak or weed trees such as Silver Maple, Poplar, Austrian Pine, Norway Maple, and Manitoba Maple will continue on an ongoing basis.
- Not all removals will be replaced.

## PONDS

- Weeds will be removed by hand when they interfere with the view or the playability of the hole. Organic material growing in the ponds such as Bull Rushes will be manually removed as required. Some Bull Rushes will be left as part of our Audubon commitment to support wildlife.
- Algae and Duck weed control will be done within programs that promote all wildlife (fish/frogs/turtles ETC...) Biological treatments will be used to reduce sludge and digest nutrients which cause algae.

## DRIVING RANGE

- The range tee will be mowed twice a week at minimum, at the same H.O.C. as fairways. The ropes marking the hitting area will be adjusted daily.
- Staff will fill divots regularly consisting of Dwarf Bluegrass only.

### **MEMBERS RESPONSIBILITIES:**

- i) Take a moment to rake both pitch mark and footprints smooth.
- ii) Hit in a linear pattern on the tee deck.
- iii) Learn the linear pattern and understand how it promotes better healing.

## PRACTICE GREENS

- Will be treated as are the greens on the golf course.

## IRRIGATION APPLICATIONS

- Many tees with high use will need supplemental water to help sustain the seedlings and therefore will receive water at lighter rates and more frequently than established areas with fewer divots. Some fairways with “funnel areas” will be treated the same way. This irrigation may have to be applied during the day at sometimes of the year.
- Irrigation will be applied to any and all turf areas for the health of the turf. Irrigation will never be applied to soften the golf course to help golfers “Hold a shot”.
- Hand watering will take place as needed and staff will be trained to never water a green while members are putting.
- Some products applied to greens and tees need to be washed off the leaf and into the soil, therefore, some mornings irrigation may be running ahead of the first group.
- We have less than perfect coverage so during times of drought “Brown grass” will be encountered.

### **MEMBERS RESPONSIBILITIES:**

- i) If irrigation is running on greens or tees in the morning, pace your play to a 4-hour round so you do not catch up to running sprinklers.

### **GARDENS**

- Gardens will be maintained and established in different areas on the course to add colour and beauty to the property.
- Gardens will never be placed in locations that will impede the view of a hole or interfere with the normal playability of the hole.
- Whenever possible gardens will include native species, and plants that enhance and attract wildlife that will enhance the golfing experience for our members.
- Planters will be utilized around some hardscape areas.

### **MEMBERS RESPONSIBILITIES:**

- i) Do not put cigarettes or cigar butts in gardens.
- ii) Keep all carts off gardens.
- iii) Enjoy

### **NATURALIZED AREAS**

- Areas on the course that the club does not mow on any regular schedule are naturalized. Members can expect some weeds to grow in these areas which some may think give the areas an unsightly look. These areas will be mowed as needed in a spot treatment to knock down noxious weeds.
- Some areas will be mowed to approx. 3 or 4" to aid pace of play.
- Naturalized areas are not sprayed, watered, or fertilized and not considered in play. Walking through these areas is not detrimental to the health of the area, but power carts must never be driven into them.
- Clusters of Milkweed will be left as it is a food source supporting the Monarch Butterfly.
- We continue to establish & promote native & flowering plants for pollinators.

### **MEMBERS RESPONSIBILITIES:**

- i) Never drive through naturalized areas with carts

## BATHROOMS

- On course bathrooms will be made available to our members and their guests whenever the course is open.
- During the spring and fall if water is not available to make the bathrooms functional, portable toilets will be rented in at least one location on each of the front and back 9's.
- Bathrooms will be cleaned and stocked daily. Every effort will be made to check the bathrooms a second time on days when the club receives substantial rounds. Air fresheners will be placed in each bathroom.

## CART PATHS

- Paths will be blown clear of clipping/debris when required.
- The hills at the 4<sup>th</sup> and 12<sup>th</sup> tees will be checked and blow multiple times a day when debris is falling from trees as debris may cause slipping issues.
- A program of installing curbs near greens and tees and widening to 8 ft. is underway to enhance the cart path appearance and to beautify the course.

## **MEMBERS RESPONSIBILITIES:**

- i) Keep all 4 tires 100% on the path.
- ii) Do not pull cart off the path at greens or tees.
- iii) Never drive on turf under stress
- iv) Never drive through puddles

Updated January 2021