

# Turf Advisory Service ON-SITE VISIT REPORT



## HANNASTOWN GOLF CLUB Greensburg, Pennsylvania

Visit Date: June 27, 2013

Present: Bill Ruffner, Green Committee Chairman  
Judd Pittner, Golf Course Superintendent  
Keith A. Happ, Director, North-Central USGA Green Section

### United States Golf Association

Keith Happ, Director | Green Section | North Central Region  
1910 Cochran Road, Manor Oak One, Ste. 410 | Pittsburgh, PA 15102 | P: 412-341-5922 | F: 412-341-5954  
E-mail: [khapp@usga.org](mailto:khapp@usga.org)

---

*USGA Green Section Mission: The USGA Green Section are leaders in developing and disseminating agronomically, environmentally, and economically sustainable management practices. We help golf facilities maintain better playing conditions for better golf through science-based and practical solutions.*

Despite the precipitation prior to our visit the golf course was toured. It was impressive to see how the course had taken such a large volume of rain. While the fairways were somewhat saturated, the greens presented reasonably good playing quality despite the nearly 4 inches of rain experienced over a 48-hour period. The new sand greens in particular, were firm and uniformly turfed. The soil greens were also uniformly turfed but were not accepting the water as well as the new sand construction.

Upon examination, it is clear that the roots within the soil structure were reasonably healthy. The sand greens as well as the soil greens were in need of some venting relief and as we understand it, this is performed fairly regularly throughout the season. The venting treatments simply allow you to maintain the surface in a consistent manner. Several comments will be offered later in this report regarding aeration needs for both the soil (old) and the sand (new) greens.

The fairway turf was uniformly dominated by bentgrass. This presents the opportunity to push even further to promote more bentgrass in these areas of the course. Later in this report several comments will be offered regarding growth regulating alternatives.

A major portion of our time was also spent discussing the potential development of naturalized grassing schemes throughout the property. Comments will be offered regarding selective control materials and methods by which to manage these areas in a more user friendly manner.

After touring the entire course, the following is offered for your consideration.

## **GREENS**

### Aeration

1. Do not back-off of the use of proactive aeration techniques. It was good to hear you will be core cultivating your greens in mid-August. This will provide every opportunity to strengthen the grass prior to the onset of late summer, early fall golf. The greens should heal quite rapidly simply due to the fact that the soil temperatures will be favorable for grass growth and more importantly, the nights will be cooler, allowing for root development in the soil profile.
2. Consider performing an additional aeration treatment on the sand greens sometime in early October. In fact, you could use solid tine aeration treatment supplemented by sand injection aeration techniques. The DryJect will provide the desired effect. Request that the tool be adjusted to provide the tightest possible aeration spacing, creating as many holes in the profile as possible. This will introduce more sand, helping to penetrate the organic layer within the profile. The solid tine aeration conducted prior to the Dry-Ject will provide greater aeration relief allowing the sand to penetrate deeper into the profile.

3. In each of the soil greens, the remnants of deep tine aeration were present. As was discussed, the last time the greens were deep tine aerated was two years ago. Still, the effects of the treatment were present and roots were penetrating deeper into the profile. Consider re-instituting this program. At the very least, some form of deep tine aeration relief should be performed on the soil greens each and every year. Penetrate to a minimum of 8-10 inches depth of the profile to shatter the zone of compaction for greater root mass development.



*Successful surface management is a function of soil management efforts. Fracturing the subsoil is an essential to the health of the turf. At least every other year use some form of deep aeration relief.*

### Surface Management

1. Exercise caution when implementing any additional grooming or vertical mowing treatments. What has been conducted already this year has provided marvelous positive effects. The treatments have helped to culture the surface, presenting what appeared to be excellent ball roll. Any additional treatments may be somewhat detrimental due to the bruising effects and the environmental conditions experienced during the late summer. The days are longer and the soil temperature is increasing. Control mechanical stress to minimize any potential for damage.

2. A portion of our time was spent discussing the use of growth regulating tactics to control *Poa annua* seed development. For the older greens, significant populations of perennial biotypes of *Poa annua* were present. These *Poa annua* varieties do not seed profusely and as such, do not demand that treatments be performed. The *Poa annua* bio types present on the new greens however are dominated by annual biotypes which seed very aggressively in the spring and this disrupts play.

Next spring, consider using the 32F Growing Degree Day (GDD) model. This provides a mechanism by which to monitor *Poa annua* seed development and is a trigger to initiate application of growth regulating product to gain maximum control over seed bloom. Using a 32 degree F. model, an accumulation of 235 days is the target number for an application of Primo/Proxy. Approximately 2-3 weeks later a second application will be necessary. The initial treatment can be conducted using 3-5 oz. of actual Proxy per 1,000 sq. ft., combined with 5 oz. of Primo per acre. You may even want to consider using Macro-Sorb foliar as a safener to minimize any potential for discoloration from the growth regulating application. Controlling seedhead development will help to maximize the health of the turf and more importantly, maximize the health of the roots in the soil structure.

#### The Sixteenth Green.

A portion of our time was spent discussing the potential for expanding the back right portion of the Sixteenth green. This type of project can be conducted but there are many preliminary stages that must be completed before the actual work is performed. Soils must be matched and new turf must be developed.

This summer, when core cultivation is performed on the older greens, collect all of the aeration plugs and establish a nursery. One cubic yard of plug material is needed to establish 1000 sq. ft. of nursery turf. This will allow turf to be developed to match the turf on the green.

Additionally, it is important to match the soil for the expansion of this putting surface. Samples can be submitted to a laboratory and a combination of sand, soil and peat can be blended to create a mix that will perform similar to the rest of the green. Do not use a construction mix. Construction mix consists of high content sand and this could result in a somewhat droughty condition resulting in a very labor intensive maintenance situation.

Once the preliminary phases are completed, the construction of this section of the green can begin. Soil can be added to create a base and the peripheral surface drainage patterns will need to be adjusted. The final mix can be added and then the area could be sodded to create more usable hole locations along the back right side of this green.

It must be stated, if in-house labor is used to conduct this project it must be performed at a time of year when it does not interfere with the regular maintenance of the course. Beginning this project sometime in late fall should work quite well. It will take time to establish new sod. This may be a project for the fall of 2014.

This work can also be outsourced.

## **FAIRWAYS**

1. Establish a rotation that provides every opportunity to at least core cultivate nine fairways each and every year. This will help to manage thatch, manage disease and more importantly, maintain bentgrass dominance.
2. It was good to hear slice aeration was being performed on a regular basis on all fairway turf. Slice aerating helps to stimulate root growth and development which in itself allows for sustained development of bentgrass. Greater root mass allows for judicious water management practices that discourage the development of *Poa annua*.
3. Consider experimenting with soil-active growth regulating products such as paclobutrazol or Cutless. These materials will place greater selective pressure on *Poa annua*, allowing the bentgrass to further encroach on these important-to-play areas. If paclobutrazol is utilized, do so at a maximum rate of 6-8 oz. of actual product per acre. If Cutless is used (the 50W product), treat at a maximum rate of 4-6 oz. of actual product per acre. This combined with your growth regulating product Primo should achieve the desired effect.
4. Minor dollar spot was exhibited in several areas of the fairways. Next spring, consider treating in a proactive manner using Tebuconazole at a maximum rate of 0.6 oz. of actual product per 1,000 sq. ft. Drench the product into the soil sometime in late April or early May. This will control dollar spot inoculum, helping to minimize infection later in the season.

Another strategy to supplement the DMI treatment is to also apply the fungicide, Emerald. This can be conducted in a very site-specific manner wherever dollar spot activity has been somewhat problematic. Emerald provides marvelous preventative control of dollar spot infection. It does not work as well when used as a curative treatment.

## **GENERAL**

1. I was very impressed with tree management that has been completed since our last visit. The Locust trees along the Seventeenth hole are the example that comes to mind. The interiors of the trees have been pruned quite well and all dead wood has been removed. Tree management is an ongoing project and more importantly, is an important component of your turfgrass management program. It is essential to maintain a balance between the trees and the turf throughout the property.
2. I could not agree more with your plans to harvest the Locust tree in front and slightly to the right of the Seventeenth green. The tree overhangs the approach area and tree roots severely contaminate the soil structure. Eliminating the tree would eliminate a

labor intensive maintenance issue but removing the tree would not compromise the architectural design of the hole.

3. Continue to expand any areas of the course to a naturalized grassing scheme if possible. Several areas were in a transition phase. There are selective materials that can be used to control woody plant material as well as dicot weeds in the naturalized grasses. On the older nine holes, it may be necessary to use sod to transition from the current blend of bentgrass/bluegrass/ryegrass/turf-type tall fescue and *Poa annua* to a uniform stand of fine fescue.

The product ForeFront can be used in the naturalized areas to selectively remove woody plant material. You may want to acquire this Dow product and test it in a portion of your course. The naturalized area to the left of the Fifteenth green is the example that comes to mind. The single treatment could remove a great deal of unwanted vegetation, allowing for a much more uniform stand of the fine fescue. ForeFront can be tankmixed with many 3-way broadleaf herbicides. Crossbow or Millennium would work quite well.

4. There were several stages of development of Hyperodes weevil activity in bordering areas of fairways as well as in approaches. It will be important to continuously scout to determine the best course of action for this pest problem. Adults will have to be controlled with either a pyrethroid or Dursban application. The larvae, depending upon depth, will have to be controlled with Dylox or Provaunt. For Provaunt to be effective the larvae must be within the upper 3/8ths of an inch of the soil profile. Fortunately, damage has been contained and site-specific control applications should deliver the desired effect.

5. Gabion baskets or other stabilizing material could be utilized on the creek bank near the Black Walnut tree in front and slightly to the right of the Third green. The Gabion baskets for example, could be loaded with flat rock to provide a deflection of the current flowing in the creek. This should help to eliminate and control erosion thus slow the deterioration of the bank underneath the Black Walnut tree. The tree itself was quite healthy and can be protected if the shore erosion is controlled.

## **CONCLUSION**

This concludes our summary of the major topics of discussion during our visit and tour of your golf course. If any questions arise concerning this visit, our report, or any other area, please feel free to call our office. We are here to help. We look forward to working with you again in the future and seeing how things progress.

Hannastown Golf Club

June 28, 2013

Sincerely,

A handwritten signature in black ink, appearing to read "Keith Happ". The signature is written in a cursive style with a large, stylized initial "K".

Keith Happ  
Director, North-Central Region

KH: m

Judd Pittler, Golf Course Superintendent  
Bill Ruffner, Green Committee Chairman