

## Quarterly PTRC Update: April-June 2025

As we begin 2025, we're happy to announce our 2025/2026 Board of Directors:



- **President:** Travis Matijevich, Canal at Delacour, Golf Sector
- **Past President:** Travis Unger, Brett Young, Corporate
- **Treasurer:** John Faber, City of Calgary - Municipal Golf Sector
- **Director:** Jordan Joye, Oak Island GC, Manitoba Representative
- **Director:** David Misfeldt, City Planning & Landscape
- **Director:** Peter Boss, Boss Sod
- **Director:** Kyle Redfern, Eagle Lake Landscape
- **Director:** Lance Wakefield, Royal Regina GC, Saskatchewan Representative
- **Director:** Ben Tymchyshyn, Stantec, Landscape Architects
- **Director:** Leanne Nadwidny, City of Edmonton, Municipal Parks

Acknowledging our provincial golf superintendents associations who belong to the ATRF membership: Manitoba Golf Superintendents Association, Saskatchewan Turf Association, Alberta Golf Superintendents Association, and British Columbia Golf Superintendents Association, Western Canada Turfgrass Association. We thank all of you for your ongoing support. Our YE financial statements can be found here: [LINK](#)

### Spring Start-up and Summer Projects:

The PTRC, like many other courses in AB, benefited from the late fall and thankfully, gradually dropping temperatures. Ongoing snow mold trials saw good pressure. (*"image right" here: showing clean treatment plots alongside the control/check which receive no fungicide.*)

This reaffirms the importance of our fall applications and constant effort to test new products and combinations.



### Ongoing Research: City of Calgary, Sod Growers Commodity Group, A-List



This year, our headliner project enters its second phase, focusing on drought avoidance. We are testing the City of Calgary's "Yard Smart" perennials and 8 sod varieties from Alberta Sod Growers. Initial data shows that to establish sod on typical Alberta clay loam soils (300mm depth), 34.2L/m<sup>2</sup> of water is needed in the first 10 days. After establishment, maintaining acceptable turf quality requires 12L/m<sup>2</sup>/week (or 1/2"/week). Without this, turf may enter dormancy within 25 days. To reverse dormancy, 12L/m<sup>2</sup>/week (40% ET replacement) is needed; full dormancy recovery requires re-irrigating to field capacity, similar to the initial establishment volumes.

Image below: Yard-Smart perennials, 16 plots, 4 reps



Image below: Sod: 24 plots, 8 sod entries



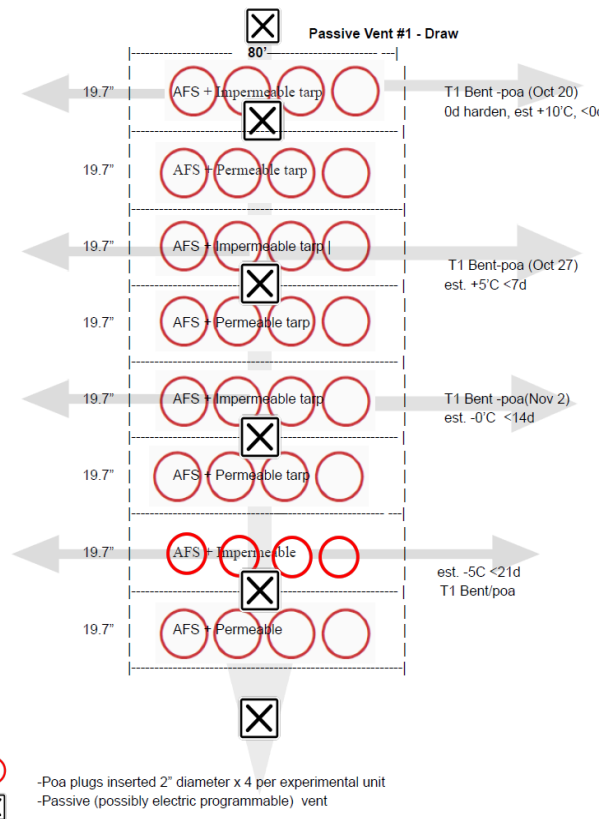
The many variables in a study such as this have produced its share of challenges. We look forward to sharing the analysis in 2026.

**New Research: 2025-2026**

Assessment of turfgrass survivability of poa annua subjected to forced/reduced hardening period(s).

Unpredictable fall weather has always been a challenge for golf course operators in northern climates. Extensive research into the “sandwich” system of insulating and venting golf greens has been widely adopted but still does not guarantee overwintering success. Evidence of increasingly warm fall weather +20°C followed by dramatic drops in temperature to lethal <-15°C has forced operators to tarp with fewer than 7 days of hardening. Reports collected under these conditions have illustrated unacceptable turf loss. The following proposal asks questions relating to *poa annua* and bentgrasses' ability to transition under forced or limited hardening periods.

We hypothesize that the plant’s transition from photosynthesis to respiration requires a minimum transition period. Continuing the research into winter covers, we will include relationships of light, temperature, and gases during the hardening process. Data collected may provide golf superintendents additional tools to weigh the comparative risks and improve tarping protocols and/or alternatives for rapidly changing environmental condition(s). Donated IRIT sensors will collect temperature, moisture/humidity, O2 & CO2, and ultraviolet light



**PORTABLE SENSORS KIT**





400-750mW/cm<sup>2</sup>. Complete tarping materials including insulators, permeable and impermeable tarps were donated by Brett Young.

**Contributors:** Alberta Turf Research Foundation, Brett Young, GreenJacket, IRIT Canada, Ontario Turfgrass Research Foundation, Olds College.

**New Technology Underway: Robotics, Drones & Sensors**

The ATRF is utilizing some new technology to enhance site evaluations and data collection. We now utilize ARM data recording software, a cloud-based system to share information and protocols instantly with our partners. We are also demoing soon to be released sensor technology, secured through Syngenta, with the use of wireless **SPIIO soil sensors** and supported by their **GreenCast Connect (GCX)** platform. More information on **SPIIO soil sensors** and GCX can be found at [GreenCastConnect.com](http://GreenCastConnect.com)



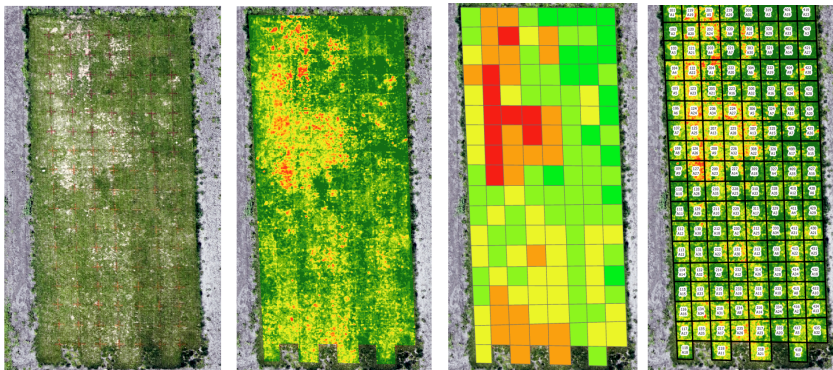
**Robots:** The PTRC has purchased its first robotic mower, the Husqvarna 580EPOS L. Cutting width of 26cm, the GPS boundary-mapped unit is an affordable option handling and a perfect addition to the PTRC whose bluegrass and fairway plots are just 20,00m<sup>2</sup>.

**Drone Imaging:**

With help from our drone and mapping specialist and turf instructor Bob Hoffos, data collection at PTRC is taking a leap into the future. Improving ability to collect NDVI (Normalized



the



Difference Vegetation Index) from box light cameras to high-definition drone imaging, we can significantly reduce any rating subjectivity and/or operator inconsistencies.

*(examples "left" here: illustrating the imaging and overlays to accurately determine the density of test plots)*

**Diseases & Diagnostics:**

The diagnostics lab at the PTRC is going strong. Just a few early-season diseases have been diagnosed, suggesting good growing conditions right across the country. The expected spring *poa* "shock" is behind us. Recording June temperatures in the back to mid-20s, we will soon focus on increasing pressure of the patch diseases. Keep a watchful eye for *Rhizoctonia* and *Anthraco*se in the months ahead.



*(Rhizoctonia image “left” here - notably the 90° hyphae branching and clamp connections)*



*(Anthracnose image “right” - black “hair like” setae fruiting bodies sprout in clusters - visible with 10x hand lens.)*

### **Membership:**

Our April renewal invoicing has seen another strong start to the year. Thank you to all who have renewed their membership, individual clubs, and associations. All western provinces' superintendents' associations now belong to the research foundation. Building representation by our municipal centers, your ATRF is stronger than ever. Thank you all for your ongoing support.

### **Announcing August 21st, Alberta Turfgrass Research Foundation Biennial Field Day**

Welcome ATRF members and guests for a day of learning, as we present pesticide continuing education credits and project presentations including herbicide trials, thatch reduction (biostimulant), a drought avoidance experiment, and more. The afternoon welcomes several equipment and product demonstrations and displays.

Lunch and refreshments will be provided throughout the day. We are expecting between 150-200 attendees, and lecture theaters have limited space - so please sign up, first come first serve! We take this opportunity to thank our premier sponsor of the field day, A-List Sustainable Turf.



### **Register here:**

<https://www.eventbrite.ca/e/671189585117>

See you soon,

Alberta Turfgrass Research Foundation

