

Welshpool Town Council

Report on Maes Y Dre Recreation Ground

Report date: 28th May 2025

Consultant: Gary Smith

Date of visit: 30th April 2025

Visit objective: To appraise the surface conditioning of the sports pitches and bowls greens.

Present: Paul McGrath - Operations Manager - Welshpool Town Council
Phil Rowlandson – Senior Facilities Manager – Welshpool Town Council
Richard Williams – Town Clerk - Welshpool Town Council (part)
Gary Smith – Senior Consultant Agronomist - STRI Group Ltd

Visit Summary

Bowling Greens

- The weather on the day was dry and sunny with temperatures averaging 20 degrees air temperature and a rootzone temperature of 22 degrees. The bowls greens are managed by volunteers with a local authority staff as an umbrella support network, if required, and the surface quality results are good by any measurements of standards.
- Turf grass plan density across both bowls greens was excellent, with some sections plant health pressured due to high wear or external concerns from woodland, but primarily from a hydrophobicity due to the active basidiomycete fungi (fairy ring) within the rootzone.
- Traffic wear was apparent across both greens, and the rinks are moved regularly, however encouragement to use outer rinks more often should be a priority to secure surface integrity, particularly in the middle rink locations.
- Poa annua (annua meadow grass) seeding was highly active and although not such an issue in bowls from a play point of view, Poa is very susceptible to most pathogens (diseases) and improving the cultivar composition with more desired fine turf species should be a priority.
- Visible Basidiomycete is destructive as it develops the hydrophobic (water repellent) rootzones which are affecting plant health and canopy density outcomes, the regular use of surfactants will help alleviate the pressure from this pernicious family of pathogens and needs to be introduced on a more regular basis.
- Anthracnose (*Colletotrichum cereale*) paths were visible on many grass plants; however, they were inactive at the time of my visit and did not require any remedial inputs from the maintenance team.
- Leaf spot pathogen was on many grass plants and although active were not at a sufficient threshold to cause the need for remedial, physical or chemical inputs.
- Etiolated growth sometimes called ghost grass was also expressing and most likely due to the extremely low activity from a *Microdochium* (fusarium) infection, again as with the other disease activity, the resilience in the turf grasses is excellent and these grasses will return to normal growth patterns without any loss in the coming days. Continue to monitor the greens for any possible increase in *Microdochium* activity.
- Anthocyanin production, a natural process in which sugars produced by the plant are chemically trapped within the plant, due to temperature changes primarily, which is obvious with a red hue across both greens. This phenomena will grow out naturally as the plants return to their normal growth habits as the current challenging weather period ends.
- Moss plants and surface Algae were visible in some of the stressed sections. Remedial maintenance inputs are enough to deal with the current levels of infestation.
- The Greens are in particularly good condition and the teams should continue with the current robust maintenance programme with an eye on combating the basidiomycete activity in the coming seasons.

Sports Pitches

- Weather and temperatures were as above and without contradiction I must highlight the need for the Welshpool Town Council team to be congratulated for the quality of surfaces produced. The low inputs and high play volumes should result in a much different outcome, but with a diligent regularity and patience in inputs the team continue to produce standards well above the results expected. I am not suggesting things are perfect, of course there are obvious surface and plant challenges, but credit must be given for the surface quality outcomes in the extremes that these sports pitches operate within. Very well done all.
- Surface wear resulting in some plant losses are apparent and can be reduced if rotation in training/warm up sections is exercised and the turf doctor on site is reconfigured or a new one purchased to allow transplanting at a depth that supports immediate surface use.
- Moisture was almost non-existent in the upper rootzones, however root growth was incredibly good and although the plants are in drought conditions, they are showing great resilience due to the length of root able to locate trapped capillary water in the lower rootzone sections.
- Firmness will become an issue if water is not applied soon to all of these sports pitches, future planning should include the purchase of a Verti-Drain aerator (or similar) as in-house control of these operations are required to continue to get the best out of the pitches, likewise the annual physical maintenance inputs are low and if they were to be removed, then very quickly the pitches would deteriorate to virtually unplayable conditions
- Anthracnose (*Colletotrichum cereale*) pathogens were visible on many grass plants; however, the acervuli and hyphae noted were inactive at the time of my visit and did not require any remedial inputs from the maintenance team.
- Leaf spot pathogen was also visible on some grass plants and although active were not at a sufficient threshold to cause the need for remedial, physical or chemical inputs.
- Anthocyanin production, a natural process in which sugars produced by the plant are chemically trapped within the plant, due to temperature changes primarily. is obvious with a red hue across many sections of the sports pitches, this phenomena will grow out naturally as the plants return to their normal growth habits as the current challenging weather period ends.
- Goalmouths across all football pitches need releveling and a plan of action with a turf doctor was discussed.
- Marking lines was also discussed as was vertical drainage to the rear of the rugby pitch and with the low-cost inputs, which, if adopted, we can support improved year-round turf performance.

Record of Site Conditions



Photos 1 & 2: Surface density was actually particularly good in the very dry conditions of late.



Photo 3: Dry rootzones are noted with an obvious organic mat, consider testing for organic matter content. However, considering the challenges positive root growth is exhibited across both greens.



Photo 4: Basidiomycete fungi (fairy ring) activity impacting on grass plant health throughout both greens.



Photo 5: Annual meadow grass seeding was active due to several environmental pressures with the primary issue the rootzone hydrophobicity due to fairy ring activity.



Photo 6: Surface wear is exacerbated by the hydrophobic conditions.



Photo 7: External vegetation is also impacting surface quality.



Photo 8: Evidence of pathogenic activity within the sward canopy.

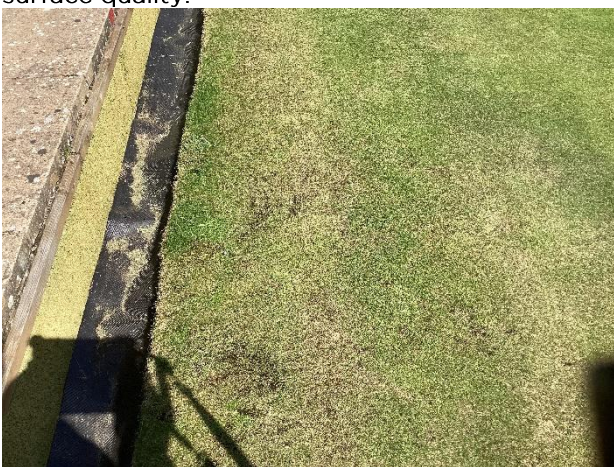


Photo 9: Moss and Algae infestation within the bowls green surfaces.



Photo 10: Collapsed edging will impact both play outcomes and plant health outcomes.



Photo 11: Hydrophobic rootzones despite immediacy of the irrigation system.



Photo 12: Dry and pressured looking plants but an outstanding canopy density in the current conditions.



Photos 13 & 14: Drought conditions with plants close to their wilting point, however, evidence of positive root growth throughout the pitches exists.



Photo 15: The cricket square is of decent standard.



Photos 16, 17 & 18: Pathogenic and algae expressions alongside worm and insect activity.



Photo 17: Ref photo 16.



Photo 18: Ref photo 16.



Photos 19 & 20: Weed control is carried out annually and is minimal throughout the sward on all viewed sports pitch areas.



Photos 21 & 22: Sward density and canopy closure is outstanding across all viewed areas. Some of the best quality outcomes I have seen when judged against similar surfaces and maintenance input regimes.



Photo 23: Goalmouths are a concern. Regain levels using a turf doctor.

Photo 24: Aeration of any type is good aeration, using slit tines, solid tines, hollow tines, air or hydro injection are all positive ways of oxygenating rootzones.

Discussion & Recommendations

Bowling Green

- Regularly brush the surface to stimulate plant growth and remove any potential for knap. Forming an upright growth habit will support better quality grasses and a dense tiller throughout the greens surfaces.
- The year-round use of surfactants (Wetting agents) will reduce the fairy ring activity, promote an improved density, and grass plant resilience in these weakened thinning sections.
- Carry out a loss on ignition organic matter volume test at four times twenty-millimetre horizons on both greens. The results of this test will help guide the maintenance strategy for the coming seasons.
- Aeration should be carried out regularly and the introduction of Sarel rolling considered a necessary part of any maintenance inputs. Carry out Sarel rolling on a bi-weekly inputs strategy, particularly to the heavy used sections such as the rink heads, this will facilitate a surface oxygenation and improve as well as prolong the life of the surface.
- Inter-seeding with suitable fine turf cultivars such as bent and fescue should be diluted when required with an Ultra fine ryegrass on the higher wear sections, at all times introducing a mycorrhizal fungal inoculant to the seeds prior to sowing.
- Continue with your maintenance plans already in place but look to adopt the suggestions above to accelerate the development of the bowls greens surfaces. The adoption of the above practices will improve the quality of your surfaces and bowling experience as well as expanding the lifespan of the surfaces in-situ.

Sports Pitches

- Aeration is required to be carried out more often across all of the sports pitch sections and the increased use of a Verti-Drain (at least quarterly) would be advised. Plan to purchase a Verti-Drain machine at the earliest opportunity.
- The availability of a large bowser in place of an irrigation system would be a help for the surface condition, controlling water inputs in drought conditions will guarantee the surface life and reduce the need for any potential major remedial renovations.
- Organic matter volumes should be a priority and testing of all sports pitch areas should be considered a pre-requisite to any or all future maintenance regime plans. Knowledge of the organic matter accumulations will allow for a more structured approach to gain even greater outcomes with the minimal maintenance inputs.
- Regular brushing of all surfaces will support improved density and tiller as well as remove the build-up of surface algae. Plan to brush weekly, where possible, in the coming seasons
- Inter-seeding with suitable ryegrass cultivars coated with a mycorrhizal inoculant, this will improve surface condition and rootzone condition for many seasons to come and operations should be planned between two and four times per annum where possible.
- Continue with annual maintenance plan in its current state, knowledge of soil chemistry and organic matter volumes will allow for a more concrete plan and even support for potential for delay or increased demand in certain less intrusive inputs if analysis proves favourable.

Signed



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