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Newcastle Racecourse

A course for all seasons

Newcastle Racecourse has successfully launched its new all-weather track at its biggest flat race meeting of the year, but it is just part of a substantial workload that requires the ultimate in teamwork, reports Jane Carley



Estate Manager Jon Newton

Embracing change and moving forward with one of the most ambitious developments in racing is a challenge that has brought the grounds team at High Gosforth Park even closer together.

Working to manage an 800 acre estate with Newcastle Racecourse at its heart, Clerk of the Course James Armstrong, Estate Manager Jon Watson and Head of Grounds Mark Ryan also have responsibility for the public Parklands Golf Club, plus large areas of woodland and park.

The last twelve months has seen the development of a new all-weather Tapeta race track at Newcastle, an impressive £12 million project which marks a step change in all-weather racing in Britain.

Rather than installing a standard flat oval track on which to stage run-of-the-mill racing, the team at Newcastle, and its owners Arena Racing Company (ARC), have retained the natural undulations of the turf track that it replaced, following the full 1m 6f circuit and including a straight mile - the only one on the all-weather anywhere in the world.

The new track would also have a baptism of fire when hosting Newcastle's iconic Northumberland Plate just a month after opening. This two mile heritage handicap, offering a prize fund of £150,000, attracts runners from across the UK and Ireland and traces its history back to 1833 when it was run on Newcastle's Town Moor, before being transferred to High Gosforth Park in 1882.

"There was some negative feeling when we announced our plans," admits James Armstrong, "but the 2016 Northumberland Plate featured runners who are regulars in turf races, not just 'all-weather' horses, and



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Head of Grounds Mark Ryan (left) and Clerk of the Course James Armstrong in front of one of the new Claas tractors

we have seen large field sizes since we opened on 17th May, with up to 100 runners per meeting. At the Plate meeting, we have had to add a 'reserve race', the Northumberland Vase, with a £75,000 prize fund for horses that didn't get an opportunity to run in the main race, such is the demand."

The course also features a National Hunt jumps track, located inside the all-weather, hosting the Fighting Fifth Hurdle and Rehearsal Chase in November, and Grand National trial, the Eider Chase, in February.

Traditionally flat and national hunt seasons bookended each other, with twelve jumps fixtures from November to April, but from this autumn all-weather racing will run alongside 'the winter game'.

Given High Gosforth Park's location in the north of England, battling with the elements has always been an issue.

"The National Hunt track has been comprehensively drained over the years. At present, contractors Souters Sports are working to address any areas that have caused concern over the previous season," comments James.

The increasingly unpredictable summer weather frequently led to the loss of flat fixtures and threatened the Northumberland Plate in 2012 during Newcastle's infamous 'Thunder Thursday', when severe storms hit the area.

"We had 40mm of rain in twenty minutes on the Thursday of the meeting and, as well as flooding the buildings, the track became unraceable. We abandoned that day's racing and cancelled the Friday to try and prepare for the main card on the Saturday. We only just managed it and the Northumberland Plate was run on heavy going," he recalls.

By 2014, the odds were increasingly stacked in favour of a switch to all-weather flat racing. Whilst there are long term commercial benefits for Newcastle, there are wider advantages for the racing in the north which needed an all-weather track to maximise opportunities for the horse population.

"There is a huge equine population in the area, with many Scottish trainers also within easy reach. Trainers don't want to travel too far and, with no all-weather track north of Southwell, there's a lot of interest in the opportunity to race regularly on a consistent, reliable surface."

"All-weather racing is also seeing a resurgence in popularity with an annual championship culminating in a £1 million meeting at Lingfield Park, and there's no reason that we couldn't hold qualifiers for


The all-weather course retains the bends and natural undulations of its turf predecessor

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Tapeta is a sand, fibre and wax mixture

that, or even host the championship itself in the future," says James.

Climatic conditions also influenced the choice of all-weather surface, and keen to see how materials performed in wet, cold conditions, James visited a trainer in the Borders who regularly uses his Tapeta gallops in sub-zero temperatures.

Tapeta is a sand, wax and fibre mixture pioneered by former British trainer Michael Dickinson. It has proved highly successful in the USA, where racecourse surfaces must withstand not only racing but also daily training for the hundreds of horses based on site. Tapeta is also the surface of choice for sister course Wolverhampton.

"Bearing in mind our low temperatures, the mixture specified for us has slightly more wax than that used at Wolverhampton."

Construction by contractor Stobart Rail began in September 2015, with eighteen inches of topsoil removed and stockpiled, before lime was added to stabilise the base, rotavated in and rolled flat. Type 1 stone was added as a drainage layer, topped with 60mm of porous tarmac, and then 18,000 tonnes of Tapeta laid.

"It was an exacting process - we had to lay a lorry load of Tapeta, and then use it to drive on to add the next load to avoid making ripples in the Tarmac," James recalls.

Design of the all-weather track had to take into account not only its neighbouring national hunt course and the golf course, but also an SSSI on the far side of the estate, managed by Newcastle's Natural History Society. Three attenuation ponds have been installed to treat run off, using gabion baskets with breeze blocks and bricks as filters; reed beds are being planted to offer additional filtration. Deep ditches surround the track to carry water away.

Northumberland Golf Club, located in the centre course, plays over the track in several places so crossing points have also been incorporated.

Extensive re-railing with Duralock rail has used 9,230 metres of running rail and 1,015 metres of crowd barrier - as well as all-weather, the entire horsewalk from the

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Three attenuation ponds have been built to capture and treat run-off from the all-weather track


The parade ring is one of the areas that has been completely re-railed with Duralock fencing


Racing on the all-weather in the summer frees up ground staff for other tasks such as rebuilding fences

stable yard to the parade ring has been re-railed - whilst horsewalk surfaces, and those in the revamped saddling boxes, have been upgraded with Quattro rubberised material.

A significant change in the maintenance regime has been required to accommodate the new surface and, along with it, considerable investment in equipment.

Four Claas Arion tractors have been supplied by local dealer Rickerbys, three 120hp and one 180hp model, providing the muscle to pull a pair of Amazone power harrows, a Kongskilde 'ripper' spring tine harrow and a trio of Martin Collins Gallopmaster harrows.

"It's a steep learning curve for the groundstaff to handle such large tractors - even manoeuvring the wide harrows onto the course can be a challenge," comments James. "But they have thoroughly embraced it and I think the variety is good for them. Traditionally, each groundsman has been assigned to mowing, strimming etc.; now they do a bit of everything."

Head of Grounds Mark Ryan admits that the team are still getting to grips with the new surface.

"We're working out how to use the equipment to the best advantage; it can take a day to maintain the all-weather track,





Centre course, looking over to the new grandstand development

> **Preparation of Tapeta takes place a few days before and on the morning of a meeting, with power harrows working the top three inches before it is rolled with the tractor wheels and followed by two passes with the Gallopmasters**

compared to a morning for mowing, so we are also rejigging the workload. The ripper should be useful if the surface gets wet or compacted, as well as to loosen the surface before the Gallopmasters go on."

"The ideal is to have a 'pan' underneath to provide grip with the top three inches of surface loose and fluffy, but maintenance also needs to be tweaked according to the weather conditions. It was very warm on the first day of the Plate meeting, so the surface was quite soft with a bit of kickback, but then it rained and the temperature dropped so it became firmer and rode better."

Whilst ground conditions for all-weather racing are generally announced as 'standard' and the aim is for consistency between courses and surfaces, James has taken to adding a little more detail to his reports, making it clear if the track is riding firmer or softer to give trainers a more precise idea of how well it will suit their horses.

"But, at the end of the day, we still expect the best horses to win. It is an easy galloping track so presents a similar test to flat racing on the turf."

He adds that the development of the all-weather track has also added flexibility to the overall workload. "It has taken away the constant routine of mowing and fertilising on a turf flat track - preparation of Tapeta takes place a few days before and on the morning of a meeting, with power harrows working the top three inches before it is rolled with the tractor wheels and followed by two passes with the Gallopmasters. We also run the Gallopmasters over once during the card, usually after the fourth race."

"Thus, the team are freed up in the summer to attend to other tasks such as rebuilding the steeplechase fences or caring for trees on the golf course."

To cater for the popular 'twilight' meetings, fifty-four floodlights have been installed by Musco Lighting, stretching from the end of the straight mile to the pull-up area. "We'll rejig the racecard in winter so that the longer races which go round the back of the course take place before dark," James explains.



Golf and racing co-exist happily at Newcastle; Northumberland Golf Club's course even plays across the racetrack on race days

Golf and racing working together

On racedays, the six full-time groundstaff are backed up by the five-strong greenkeeping team from Parklands who do duty manning crossings and driving tractors. Estate Manager Jon Watson joined the team three years ago using his golf expertise to help upgrade the 18-hole course, which also offers a 28-bay driving range, American-style mini golf complete with waterfall and a seven hole pitch and putt but, since the beginning of this year, has taken on additional responsibilities for turfcare on the racecourse and estate.

"We have reconstructed bunkers and teeboxes, as well as upgrading drainage, as part of a general refit to improve standards," he explains. "The course runs smoothly alongside the racecourse with a growing membership and is largely unaffected by activities on the racecourse, except on the busiest days."

"The estate is part of a conservation area and every tree has a preservation order so that always has to be taken into considerations. Taking into account non-racing functions, which all require a high standard of grounds presentation, this park never sleeps, but we are a good team and everything that we achieve is down to teamwork."



Significant investment has been made in specialist machinery to maintain the all-weather surface; the Gallopmaster harrows the surface and produces a 'fluffy' top layer finish

From November, the team will work between all-weather and National Hunt courses, where the usual challenges apply - moving rail to present the best possible ground, covering the course against severe frosts and putting back the track after pounding by hundreds of hooves.

"The track is not that wide, so we have to make the best of the ground we have - we'll also move the hurdles after every meeting. We try not to put divot mix on too early as it is more likely to freeze but, after January, it becomes an essential task," says James. "We plan to sand and topdress more this year to help flow to the older drains, and we are looking at moving to a slow release fertiliser to maintain the grass growth through the autumn."

Mowing equipment is also up for review - currently, a front mounted Votex and rear blower is used, with a small Kubota ride-on to cut fence surrounds to minimise compaction but, with less turf area to mow, James comments that a wide area ride-on might be an option, further minimising weight on the track.

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