## How will artificial surfaces affect thoroughbred racing and breeding?

Dubai Millennium, Arcangues, Singspiel, Swain, Sakhee, Giant's Causeway and Electrocutionist. What do they have in common? They all transformed high class turf form to dirt. Though the main point is this: They had all proved effective on soft or heavy turf before running well on dirt. If this is a key factor for trainers assessing a turf horse's prospects of running in big dirt events, is it also something to bear in mind for racing on artificial surfaces, like the Polytrack?

Such racing, on the so-called "all-weather" has been limited up to now but times are changing. The prestigious Keeneland fall meeting gets underway this week – with a new Polytrack having replaced the ridiculously speed favoring old dirt track. Woodbine in Canada are also off a and running on the new surface. Soon we will see a great number of races on artificial surfaces in North America, the world's biggest bloodstock market. It will be a third playing filed, alongside turf and dirt racing. How will this affect the breeding industry?

Horses that enjoy give in the ground on turf seem to do better than 'top of the ground performers' when attempting the turf to dirt switch. This may not be the case for races on other 'non-turf-tracks'. In fact, a surface like Polytrack rides more like a turf track, and we are therefore seeing a new ballgame develop – something in between, perhaps. Handicappers have to adapt, some may already have been making this a bit too complicated – but what about the days when reactions by the breeding industry make an impact? Today, we are trying to assess dirt bred and turf bred horses, and their abilities to handle an artificial surface. In a few years time we may see horses that have been bred with this type of racing in mind. Now, that will be interesting. If it happens.

Will these new developments make breeders choose new stallion lines, for example? Will they be aiming for a mix of traditional dirt and turf lines, and will such traditional lines fade away? Horseracing is a conservative business, in particular in Europe, and commercial breeders are seldom willing to take risks. The low risk road to a safe profit is normally chosen.

This is also why the truly outstanding horses, the so-called 'freaks' have been horses with unfashionable pedigrees. Every breeder would love to produce such a freak, like Secretariat, Cigar, Ghostzapper, St Jovite and Dubai Millennium, but the odds are too high – it is better to play safe.

Thus, it will be interesting to see how many, or how few, breeders will be aiming at producing horses more suited to the new artificial surfaces. Americans have little to go on, as yet, but Europeans have more experience with this type of racing.

In England, they have 17 years' of experience with all-weather racing. The first race on an artifical surface was run on the last Monday in October 1989, as Lingfield Park staged a 12-race card. Twelve trainers won on the day, among them were Classic winning handlers Peter Walwyn, Richard Hannon and Ben Hanbury. The 12 winners were sired by 12 stallions, as different as Absalom and Ardross. The best race was a 0-90 handicap. That's as good as most observers thought this form of racing would ever become. All-weather racing had been approved to ensure live British racing on days otherwise lost to weather cancellations.

Today, it offers a lot more. On July 15 this year, Godolphin's Echo Of Light won the Summer Mile Stakes (G3) at Lingfield's all-weather track. He has won two big turf race since, landing the Prix Daniel Wildenstein (G3) at Longchamp's Arc meeting. His sire Dubai Millennium was equally effective on turf and dirt, and won the Dubai World Cup (G1). Echo Of light may be aimed at that race next spring. If he improves on dirt, he could end up running Stateside next year. If not, perhaps he will be racing in England next year. He will have many options there too, as the fixture list includes no fewer than 316 all-weather days. All-weather racing is now playing quite a role. Is this having any influence on the breeding industry? When putting the question to Tony Morris, the world's leading bloodstock writer, his reply is quite brief but nevertheless interesting:

"The main worry is an increasing number of moderate fillies and mares that manage to win a poor race and become broodmares", Morris says, "this makes a negative impact on our breeding industry – much like 'banded racing' here in England, where seriously moderate horses – that should have been culled out – become winners."

Does Morris feel that sales catalogue pages ought to make a distinction between winners on turf and winners on all-weather? "Perhaps it would be a good idea", he says, "but there are some black type races on the all-weather now and it is the quality of the race that matters. I have always been of the opinion that catalogue pages should include official ratings for all winners. That would be a big help for buyers. Especially buyers from overseas. Even in England, we have some Group races that are not up to the desired standard."

Buyers of horses in training, perhaps horses being bought from Europe to join a US trainer based at a track where they have installed an artificial surface, may take note – and look for a particular type of runner.

Jimmy George, Director of Publicity at Tattersalls Sales, calls himself a "great fan of Polytrack racing" and points out that racing on artificial surfaces has opened up new markets, and will do so even more in his opinion;

"The most significant thing is the move towards artificial surfaces in America", he says, "as we all know the Polytrack is a much kinder surface than dirt. It has been hugely successful and the fact that main tracks in the US are moving towards it is wonderful from the horse welfare point of view. Also, it makes horses from Europe even more attractive to buyers from America. As more races in the US will also become legitimate targets, we may see more European trained runners in America. Many horses habitually cross over from turf to Polytrack and vice versa because it rides much more akin to turf than dirt does".

"People are quite quick to react", George explains, "as soon the all-weather scene evolved, people spotted that opportunity and went to the Horses-in-Training Sales specifically for that job. A new circuit was effectively created, and flat racing became all year round. We know some trainers almost specialise in this curcuit, and they rack up a lot of winners. They will undoubtedly be coming to the sales looking for horses that will be suitable. Equally, on the vendor side, our February Sale becomes a good target if you have achieved a good level of form on the all-weather over the winter."

George again points out that more all-weather tracks will offer a much greater scope for cross over to and from turf, and adds another thought on how artificial surfaces will affect US racing; "one of the great things, potentially", he reflects, "is that when races come off the turf to be run on Polytrack, the chances are that you will not see the mass scratching you often see when they come off the turf now. So, from the punting point of view, your handle is not going to be as badly affected by bad weather. Another plus."

This is a fascinating point, as it also means that artificial tracks may well help us in avoiding downgrading of stakes races scheduled for the turf but forced off, and cut in size and quality, by weather conditions.

## TRACKS HAVE NO CHOICE

On a nippy February morning this year, readers of Andrew Beyer's racing column in the Washington Post had these lines to go with their breakfast: "The California Horse Racing Board last week passed a motion that may portend a radical change in American racing, one that could change the nature of the horse-betting game. The board declared that all major tracks in the state "must install a synthetic surface or Polytrack by Dec. 31, 2007" or else have their racing licenses revoked."

Two days after these words were printed, Classical Ryder, a daugther of the Grade One turf winner Brahms, became one of several stakes winners over the new Polytrack surface at Turfway Park in Kentucky. She will not be among the best black type "all-weather" winners in the US. Not by any stretch of the imagination. This is only the beginning.

Byron Rogers, Director of Stallion Operations at Taylormade Farm in Lexington, Kentucky, naturally found the Turfway meet interesting – and he has his views on the developments of artificial surfaces. Rogers has an international background. An Australian, he was stallion nominations manager for Arrowsfield Stud for eight years, and has also worked for Coolmore in Ireland and trainers Paul Cole in England and Ivan Allen in Hong Kong.

"How artificial surfaces will affect our industry, depends on various factors", he says, "by the sound of things, tracks are not going to be uni-formal, and it remains to be seen how widespread all-weather racing is going to be. From the betting point of view, it is probably a good thing to have variety, but it makes it harder to predict the breeding side". Rogers refers to a private study looking at the results at the first two meetings on Polytrack at Turfway Park, where the synthetic track replaced the traditional dirt track last September;

"For a start", he explains, "there does not seem to be a great correlation between running on the all-weather at Lingfield Park in England, and running on the all-weather at Turfway. We have to bear in mind that the Turfway meetings are not about top class racing, but it is an even surface and my own observations tell me that horses have a chance to make a run from anywhere in the race. And I would say it slightly favours a horses with a turn of foot, which is probably more like turf racing. Such runners are sometimes at a disadvantage on dirt tracks, where strong horses hit one steam and are able to maintain it. We will get a better view when places like Keeneland start racing on all-weather, with high class horses in action, but these are my initial thoughts."

"What we do know, is that the Polytrack is a more forgiving surface, and I am sure it will help extend horses' careers, as we will see fewer injuries and fewer breakdowns. Anything we do, in breeding and racing, that makes a horse stay sound longer, can only be good news."

- Will we see new trends among breeders, as a result of these new surfaces?

"Long term, we may see a stronger correlation between turf lines and all-weather racing", Rogers says, "but it is very early days. Until we see high-class horses on artificial surfaces breeders are not going to change their habits much. It is my guess, though, that we will see changes. America has developed some very dirt specific lines of beeding, like the Fappiano line, the Seattle Slew line – and also the In Reality line, with expection to Known Fact. They have been dominant but found it difficult to go across to turf racing. It will be interesting to see whether they can maintain the position they are in when Polytrack and other artificial surfaces play a bigger role."

Perhaps we are going to see more traditional turf lines, some from Europe, do better in the US?

"It is difficult to predict what will happen. It is not too long ago that European breeding dominated North American racing, with all the Lyphards, Blushing Grooms and Nureyevs for example. They made a big impact, and I would not be surprised if those days came back. If they do, we will be having a very competitive stallion market. If it turns out that the turf lines become dominant in racing on artificial surfaces, the European stallions will become very hot very quickly."

## SPEEDY SIRES DO BEST

Looking at sires' results on the all-weather in England is interesting. Up to August 6, 2006 (when this article was first published), these were the leading all-weather sires (by winners): Dansili (14 winners of 15 races), Pivotal (12 winners of 18 races) and Orpen (12 winners of 15 races).

At the same point, they were sitting in 2nd (Pivotal), 5th (Dansili) and 16th (Orpen) on the overall list. Two of the top ten sires overall were in the top three on the separate list for all-weather racing. No hard conclusions can be drawn from these results. It may appear to be coincidental which sires get most winners in all-weather racing – but speed is more important than stamina, and all the leading sires were turf runners. Since the beginning in 1989, Southwell, Wolverhampton and Kempton Park have joined in as all-weather tracks in England, with Great Leighs soon opening as the fifth venue. Most likely, the statitics of stallions with winners on artificial surfaces will be even closer to the overall list in the future. As numbers of races go up, differences even out.

When looking at lists of the ten most successful all-weather stallions in England (by winners) in 2005 and 2006, :

2005	Stallion (sire)	Winners-Runners	Wins-Runs	Tot. earnings /	Avg. per runner	
1	Spectrum (Rainbow Quest)	16-93 (17%)	23-167 (14%)	£104,049	£1,118	(4)
2	Piccolo (Warning)	16-133 (12%)	20-212 (9%)	£97,804	£735	(9)
3	Grand Lodge (Chief's Crown)	15-119 (13%)	19-165 (11%)	£81,722	£686	(10)
4	Green Desert (Danzig)	14-72 (19%)	17-133 (13%)	£100,470	£1,395	(2)
5	Cadeaux Genereux (Young Generation)	14-107 (13%)	18-195 (9%)	£128,730	£1,203	(3)
6	Night Shift (Northern Dancer)	14-119 (12%)	22-204 (11%)	£112,712	£947	(6)
7	Magic Ring (Green Desert)	13-73 (18%)	19-135 (14%)	£68,588	£939	(7)
8	Mujahid (Danzig)	11-57 (19%)	13-77 (17%)	£47,155	£827	(8)
9	Danehill (Danzig)	11-61 (18%)	11-102 (11%)	£85,402	£1,400	(1)
10	Sri Pekan (Red Ransom)	11-81 (13%)	16-152 (10%)	£87,256	£1,077	(5)

Figures in brackets on far right show ranking by average earnings per runner.

2006	Up to August 6	Winners-Runners	Wins-Runs	Tot. earnings /	' Avg. per runner	
1	Dansili (Danehill)	14-76 (18%)	15-124 (12%)	£93.211	£1.226	(6)
2	Pivotal (Polar Falcon)	12-67 (18%)	18-115 (16%)	£119,394	£1,782	(1)
3	Orpen (Lure)	12-72 (17%)	15-145 (10%)	£82.543	£1,146	(7)
7	Cadeaux Generux (Young Generation)	12-81 (15%)	19-174 (11% <sup>°</sup>	£108,354	£1,337	(3)
4	Fasilyev (Nureyev)	11-64 (17%)	16-106 (15%)	£93.494	£1,460	(2)
5	Cape Cross (Green Desert)	11-69 (16%)	12-108 (11%)	£72,974	£1,057	(8)
6	Grand Lodge (Chief's Crown)	11-70 (16%)	13-139 (9%)	£89,285	£1,275	(5)
8	Desert Style (Green Desert)	10-48 (21%)	12-101 (12%)	£62,475	£1,301	(4)
9	Compton Place (Indian Ridge)	10-69 (14%)	13-111 (12%)	£49,783	£721	(9)
10	Piccolo (Warning)	10-80 (13%)	14-143 (10%)	£52,893	£661	(10)

Piccolo, Grand Lodge and Cadeaux Generux are the only stallions in the top ten on both lists.

Piccolo, a son of top class miler Warning (by Known Fact), was a high class sprinter who was at his best on good to firm ground. Grand Lodge, a son of the precocious US dirt performer Chief's Crown (Danzig), was a top class miler with his best form on good to firm ground. Cadeaux Genereux, a son of the top class 8 to 9-furlong performer Young Generation (Balidar), was a top class sprinter whose best performances came on good and good to firm ground.

The only factor these three stallions have in common (apart from the fact that they were turf runners) is that they all had more speed than stamina. It is not surprising to find that the average winning distance for offspring of the 17 sires on our top ten lists is 8 furlongs.

17 names figure on the two lists above. Interestingly, there is not a single son of Sadler's Wells among them. Sadler's Wells has a poor record with dirt runners in North America. Interestingly, his name also means little in all-weather racing in England. Since 1 January 2000, only one of his sons have made the top ten of all-weather sires in the UK. Barathea, with 11 winner on the artifical surface, was sixth on the list in 2002 (by winners). Out of a daughter of Habitat, he possessed less stamina than the average Sadler's Wells – something that has often been the case with produce of the Sadler's Wells / Habitat nick. Barathea was essentially a miler but he had plenty of speed – as seen when he was beaten just a length when fourth behind Owington in the July Cup. Most likely, Barathea would have won this year's July Cup. The fact that he has been able to sire some useful all-weather runners should not lead anyone to believe that other sons of Sadler's Wells can.

Has it become more lucrative to race horses on the all-weather in England? With more valuable races established, the answer may be 'yes' but the valuable all-weather races are often targeted by big yards, meaning that they offer little or no chance for the smaller trainers who contribute to all-weather racing on a weekly basis. Even if you own an AW-runner sired by one of the three most successful stallions, your chances of breaking even are pretty slim.

Last year, the average all-weather runner sired by the top three all-weather sires in England earned £787. Next April, Keeneland will stage the Blue Grass Stakes (G1) on their new Polytrack, a race worth \$465,000 plus a guaranteed stallion value to the winner. These contrasting figures mirror the difference between Britain and the US. Whereas the elite of European racing has yet to fully accept the use of artificial surfaces, North Americans make the change right up to Grade One racing almost 'overnight'. It will be fascinating to follow how breeders, on both sides of the Atlantic, adapt to the changes ahead. Slow thinking is unlikely to pay off.

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