

# WATER MANAGEMENT IN LAWN CARE

**Technical  
Update**  
July 2009

With the UK seeing recent temperatures soar to over 30°C, water, or lack of it, will be a key concern across large areas of the country.

The influence of global warming weather patterns has resulted in extended periods of dry weather, which has resulted in increasing problems with Dry Patch on lawns.

Dry Patch is caused by a build up of water repellent deposits in the soil. These deposits are formed by the break down of organic matter and by the activity of fairy rings.



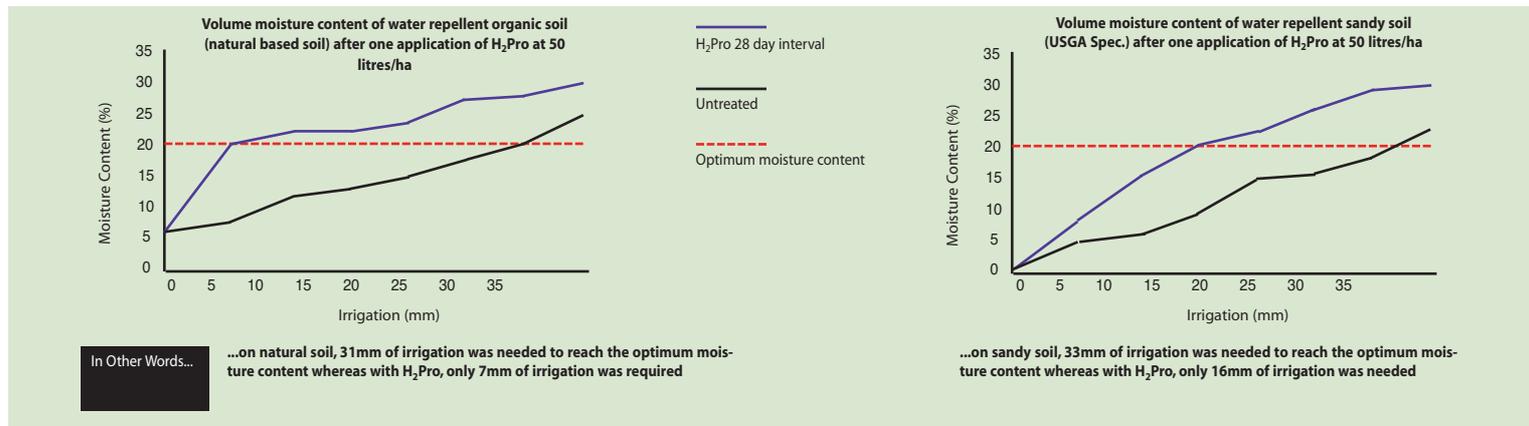
These deposits coat the particles in the top 50mm of the soil and during the process of the soil drying out, they become hard.

Once these deposits have hardened, they become water repellent.

To create a drought tolerant grass sward, use an H<sub>2</sub>Pro wetting agent programme to help maintain the more available moisture in soil and reduce the watering requirement.

H<sub>2</sub>Pro has been trialled and tested at several independent research centres across Europe and the USA as well as at the Scotts Levington Research Station.

Below are typical results from the UK in 2004.



## First Class Greens Without The Water, Thanks to H<sub>2</sub>Pro - The Professionals Choice!

The course manager at Leyland Golf Club in the north west of England has delayed watering his greens by more than a month, following the use of the Scotts wetting agent, H<sub>2</sub>Pro.

Scott Reeves and his staff only began to hand water the greens on the parkland course for five minutes each on 22nd June, whereas watering had begun towards the middle of May in previous years.

He says that his greens have never been in such good shape, and he puts this down to the fact that H<sub>2</sub>Pro has been used exclusively on the course this year.

"I've used pretty much all the wetting agents available over the years but I've had far superior results from H<sub>2</sub>Pro," he enthused. "Dry patch used to be a problem here. We're quite close to the coast between Preston and Chorley and our weather generally comes in from the west. We made our first application in March at a rate of 25 litres per hectare tank mixed with 20 litres of Greenmaster Blade liquid fertilizer to relieve the stress to the plant, as advised by our technical advisor, Ed Carter. We'll continue to apply 10 litres per month of H<sub>2</sub>Pro with 20 litres of Blade throughout the summer, finishing in August dependent on the weather conditions. We have a real mixture of greens here – four or five USGA specification, all on different types of sand and some clay push ups so we don't use a 'one size fits all' maintenance regime here, but they've all been treated in the same way with the H<sub>2</sub>Pro and I'm absolutely delighted with the condition of all of them this summer."

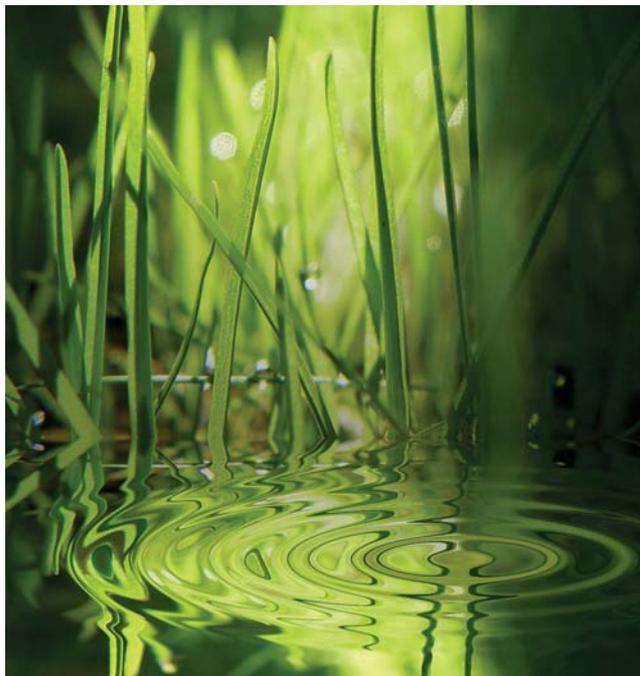
Dry patch can result in areas appearing drought-stressed through lack of available water, due to the presence of water-repellent material in the soil. As soils dry, water repellency increases impacting on infiltration and unsaturated flow, water use efficiency and turf quality which can affect play on close-mown surfaces.



Scotts' Technical Advisor for the area, Ed Carter, said: "The symptoms of dry patch are visible during the summer and autumn but to keep the condition under control, H<sub>2</sub>Pro should be applied earlier in the year. Because we've had two very wet summers in 2007/8, some Course Managers stopped applying wetting agents and a few seem to have been caught out by the warm, dry conditions we've been experiencing this year. Unlike older wetting agent technologies, H<sub>2</sub>Pro contains Multi-Matrix surfactants making it effective through the rootzone, not just on the surface or thatch layers and it significantly reduces the irrigation requirement of soils."

Scott Reeves continued to use wetting agents in the past two years, mainly to flush the moisture through at a higher rate. "I see H<sub>2</sub>Pro as an insurance policy. Given the effort and resources that have been invested in the greens over the past two years it would be poor management if we did not use every tool at our disposal," he added.

# H<sub>2</sub>Pro<sup>®</sup> The new wetting and water conservation agent



- Significantly reduces the irrigation requirement of soils
- Effective relief from the symptoms of Dry Patch
- Effective through the soil profile and not just the surface
- Unique curative action against the cause of Dry Patch
- Flexible application programmes
- Available in several easy to apply formulations
- Low water volume applications
- Environmentally safe

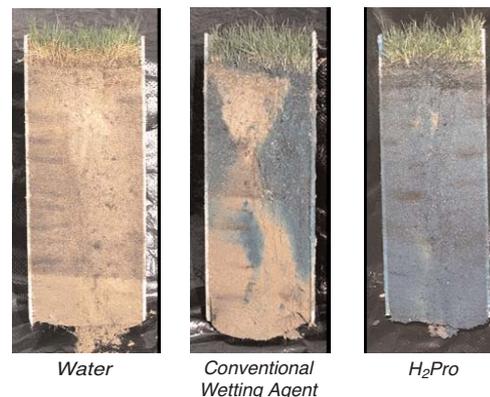
All formulations of H<sub>2</sub>Pro contain two separate surfactant systems - wetting and spreading agents, and long term wetting agents, based on the new Multi-Matrix mode of action.

This innovative surfactant chemistry allows applied water to enter the soil profile in areas previously affected by Dry Patch, allowing the maximum amount of water to enter the soil.

Due to their unique chemistry, the Multi-Matrix surfactants will allow initial wetting of the organic layers but then move down deeper into the soil profile. This ensures that after an application of H<sub>2</sub>Pro, the long-lasting water conservation effects occur throughout the soil profile and not just the surface or thatch layers as with older wetting agent technologies.

Conventional wetting agents attach themselves to surface thatch layers which limits the amount which can penetrate further down the soil profile.

H<sub>2</sub>Pro efficiently by-passes the thatch layer to allow coverage through the hydrophobic layer.



## The H<sub>2</sub>Pro Range

The range consists of four different formulation types to optimise management options:

- H<sub>2</sub>Pro Liquid
- H<sub>2</sub>Pro Tablets
- H<sub>2</sub>Pro Granules
- H<sub>2</sub>Pro Maximise Liquid



*The long-lasting water conservation effects occur throughout the soil profile and not just the surface layers*

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