

# Duncan Hector

## Turf Care and Irrigation

Paddock House, Castle Acre Road, Great Dunham, Norfolk, PE32 2LL  
Tel No 01328 700 537 - Mob 07710 601 584 - E mail: Duncan@duncanhectorturfcare.co.uk  
www.DuncanHectorTurfCare.co.uk  
Moat House Media Ltd T/A Duncan Hector Turf Care and Irrigation



UK Irrigation  
Association



Helping to create great croquet lawns

### How the nutrition programme works

#### Tailor-made fertilisers

These fertilisers are not "off the shelf". They are made specifically to my analysis for you and the quantities of nutrient in the bag can be changed to suit your lawns. For example, a bag of the Spring fertiliser (shown above) has 6% Nitrogen and the summer has 12%. No Change is the default option but both these can be adjusted up or down by 1%. This means that you can control the nutrition levels very easily and there is no difference in cost.

#### How the fertiliser works

The granular fertilisers are all 1mm-2mm mini granules. The Spring/Autumn Biogran fertiliser contains a broad spectrum of bacteria and mycorrhizal fungi which encourage the breakdown of thatch into usable nutrients within the root zone. Results across many croquet clubs show that thatch is reduced by about 30% per annum until an ideal level of 5 to 8mm is reached. At this point, the breakdown of thatch equals the production of thatch and therefore stays in balance. This system is in line with the Sports Turf Research Institute article "Do Not Disturb" and eliminates the need to remove thatch mechanically by scarification which is damaging to fine grasses.

Magnesium oxide is also included in the fertiliser to promote photosynthesis and plant health. The Mycorrhizae attach to the grassroots and grow long invisible hyphae into the surrounding soil. As a result of photosynthesis, the grass provides a constant supply of carbohydrates to the fungi. In exchange, the fungi provide minerals and moisture to the grass. It is a partnership made in heaven because the fungal hyphae are much longer and finer than the roots and have a much higher absorptive capacity.

The Summer fertiliser has an organic base and releases nutrients over an eight week period. The fertiliser is converted into usable nutrition for the plants by bacterial action. When favourable growing conditions exist (warm and moist), the bacteria are more active thus providing increased nutrients in sympathy with plant demand. The slow-release is accomplished by incorporating longer, more complex molecules which take bacteria longer to break down.

I prefer to apply fertiliser late in the day as morning dew will help to dissipate the granules. If possible apply before rain is expected. Do not apply fertiliser if the grass

is stressed (drought). The fertiliser is not toxic to humans, pets or wildlife and the croquet lawn can be used immediately after application.

### **Optional winter feeds.**

If your lawns are used during the winter, it is a good idea to fertilise with a low input of Nitrogen in November and February. Using too much nitrogen will damage the grass. The reason is that the plant cells are like balloons. Nitrogen causes the cell to expand but the cell wall requires photosynthesis to thicken. When daylight is in short supply, too much nitrogen will cause the cells to burst thus damaging the plant and inviting disease and fungal attack. The granular winter feed that I recommend has low nitrogen but 8% iron which hardens the grass and helps to control moss.

### **Soil conditioner**

Soil Conditioner is essential on some alkaline lawns to clean the soil and help produce a superb, smooth playing surface. If you would like to know more about the beneficial effects of this product, please phone me.

### **Moss**

Moss produces spores twice a year so should be treated in Spring and Autumn to kill the moss and prevent new spores from ripening. Moss doesn't have a vascular system and the roots have no function except to hold onto the ground, so re-growth is caused by spores in the soil, not from roots. The winter feed mentioned above will reduce the moss to some extent but is not as strong as soluble Iron. The grade of iron that I supply dissolves well even in very cold water, is widely used by professionals and works really well. One bag is enough to treat the whole lawn five times so is very cost-effective, there are cheaper alternatives but Iron comes in many grades and some can be hard to dissolve and very damaging to sprayers. At the dilution that I recommend, it will blacken moss and I usually leave it and let the grass grow through, that way the surface isn't disrupted. However, you can rake lightly but try not to disturb the root zone.

Be careful to wash your sprayer out very thoroughly so that no iron is left in the pipes or pump as it will re-crystallise and potentially ruin the sprayer. For spot treatment, a watering can and fine rose can be used.

## **Duncan Hector**