

## COMPOST UTILISATION - CASE STUDY

# TURF TOP DRESSING OF SPORTS PITCHES

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Loading topdressing at Greenfaulds High School.

Applying the topdressing.

Ravenswood Pitch, prior to the renovation procedure.

Ravenswood Pitch, seven weeks after the renovation procedure.

**T**he North Lanarkshire Council Community Services, Grounds Management & Estates Department (Community Services Department) has been composting the garden waste it generates during its on-going maintenance practices for the past 4 years. At its Auchenkilns composting site, the Community Services Department processes 800-1,000 cubic metres of parks and garden waste per quarter, using windrow composting process, producing approximately 600-1,200 cubic metres of compost a year.

The garden waste is composted for up to 24 months, then oversized material is screened out using a 511 Powerscreen Trommel Screener, creating a dark, peat-like product possessing a pH of approximately 7.5. Using front-end loaders, the compost is then blended with sharp sand at a 50:50 or 70:30 ratio, in order to produce a topdressing appropriate for sport pitches.

On an annual basis, the Community Services Department would typically apply a blend of sand and topsoil over the worn areas of their pitches in order to level the playing surface and prepare the area for reseeding. The Community Services Department has 185 pitches to manage, many of which have 140 games played on them each year. In 2002, after receiving technical input from Remade Scotland staff, the Community Services Department began replacing the topsoil in their topdressing mix with their 'home-made' compost. Since then, they have topdressed 22 sports pitches with this new topdressing, including Greenfaulds and Cumbernauld High Schools, and St. Patrick's and St. Michael's Primary Schools.

The topdressing is applied at an application rate of 20 - 40 m<sup>3</sup>

per hectare, depending on the condition of the pitch, concentrating the application on the worn areas of the pitches. Once topdressed, the areas are verti-drained, using solid tines, to a depth of approximately 25cm. Badly worn areas of the pitches are also core aerified, using an aerifier equipped with hollow core tines. The topdressing is then incorporated into the aeration holes using a rake harrow creating a clean and even surface, and which is then re-seeded with primarily perennial ryegrass.

The Community Services Department has noticed that in seeded areas, where compost was applied, the seed establishes very quickly; especially during periods of wet weather. They further believe that the topdressing containing compost provides the added advantages of providing nitrogen, and other nutrients, to the grass, as well as organic matter to the soil. These characteristics encourage turf establishment and growth, which help to improve soil structure and moisture holding capacity. These factors assist in the production and maintenance of a dense and healthy turf stand, in a shorter period of time. The Community Services Department has been pleased with the results of using the garden waste compost, and have noticed that grass establishment has been quicker and more uniform than in previous years.

The Community Services Department estimated that it would have cost £3,000 to purchase the topsoil they would have needed to topdress the 22 pitches it treated with compost. The compost not only cost less than that to produce and screen, but the Community Services Department also makes savings by composting its garden waste instead of landfilling it.

For additional information, contact:

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