



## AWARDING BODIES

Nick Bisset, the Chairman of the GTC's technical committeee, explains how basic knowledge of soils is included in the vocational qualifications and where it can be identified within the N/SVQ Levels 2 and 3

"Greenkeeping qualifications are not what they used to be" – a statement often heard from course managers who completed college courses some 20-25 years ago. The fact is they are not the same. The emphasis is now on work-based learning with registration with a provider necessary to obtain the qualification - no exams to fail at the end of two years!

However, there are some elements of the old syllabus which may have appeared to slip under the net, namely the soil science (for want of a better phrase) part of the programme.

If the Level 2 and Level 3 standards are looked at carefully, the subject does appear and it's written into the GTC learning materials at these levels.

Why should this be an issue then? Previously with the examination system, this science part was included as part of the exam and it was assumed those who passed the exam knew all about soil science. Under the work-based system and the emphasis on producing a comprehensive portfolio of work, evidence of knowledge of soils is harder to identify. The previous exam based system had elements the candidate needed to know with added elements that were nice to know. The NVQ system trimmed the knowledge to what candidates need to know. However at Level 3, an understanding of practical soil science is needed as decisions have to be made.

Aside from the learning materials produced by the GTC at levels 2 and 3 there is also a reference in the actual standards at level 2 and 3 to knowledge of soils. The standards are available on the GTC website at both levels and learning materials available to purchase.

As with many issues raised about the work-based N/SVQ system, 'soil science' can often be put down to a lack of familiarity. Perhaps this could be down to insufficient information being available at this level or a failure of candidates, assessors and verifiers to interpret the standards correctly.

In order to rectify these points attention is drawn to Level 2 unit L2 'Establish Plants Outdoors' and to knowledge items e, f and g in L2.1 which state that:

## Candidates need to know and understand

- "How to achieve correct tilth, consolidation, pH and nutrient levels"
- "How to ensure preparation is suitable to the plants, soil type, ground conditions and the type of site"
- "The effect of soil type and condition, climate, weather and ground conditions, previous treatments and existing services and structures on clearance and preparation methods"

So at Level 2 there is a need to prove tilth, consolidation, pH and nutrients are understood and how they may vary according to soil type, weather and ground conditions and the site.

Attention is also drawn to Level 3 Unit L19.2 'Evaluate Ground and Environmental Conditions' which states that it covers:

(i)Substrate structure (ii) Substrate texture and conditions (iii) Drainage characteristics (iv) Ph (v) Pest, disease and weed problems (vi) Nutrient deficiencies (vii) Ground and air pollutant (viii) Microclimate...

And that the following must be known and understood

- The principles and methods of measurement of ground & environmental conditions
- The range of methods available to evaluate the implications of measurements taken & to which situations they may be appropriate
- Effects of varying ground & environmental conditions on plant establishment & growth
- The importance of keeping accurate records
- What environmental pollution may occur & how to avoid it
- The maintenance of equipment typically used in this work
- What contingencies may occur & how to handle these effectively
- The sources of information & analysis relating to ground & environmental assessment
- The principles and application of risk assessment
- The statutory health and safety requirements & codes of practice
- The methods of monitoring health & safety requirements

These being 'need to know' they have to be evidenced in some form or another. So how can evidence be provided?

At L2, an understanding of why certain tasks are undertaken or certain materials are used is likely to come out in a well-produced task (job) sheet. At this level the knowledge is directly related to performing the appropriate task at the appropriate time and appropriate conditions. All of which may be influenced by soil type.

At L3 knowledge of soils is important in order that correct decisions can be made when planning tee or green reconstruction or even when planning maintenance. At this level, it is important to be able to justify decisions and this is where the science comes in. The answer to the question 'why is this being done' needs to be more than 'because I say so'.

This information is unlikely to come out in a task sheet as these are inappropriate at this level- it is more likely to come out in a well-documented work-based project.

There is no need to need to worry about the term 'Soil Science' as it does not mean you have to become a geologist, soil scientist, meteorologist or botanist all you need to be is a knowledgeable greenkeeper.

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