LM Protocol LOCATING AND MARKING THE SITES

Aim To locate the position of and to mark the Target Sampling Site (TSS) and the Sampling Site (SS)

Rationale At each ECN site an area of 1 ha, preferably a square 100 m x 100 m, is required for sampling, which for practical reasons cannot be more widely dispersed. This is the Target Sampling Site (TSS) and destructive sampling within it should be kept to a minimum. The TSS is the central hectare in a square block designated as the Sampling Site (SS). Where space permits, the SS should cover 9 ha and have soil, vegetation and management similar to the TSS. The SS is used for destructive sampling and for research related to ECN monitoring. Dispersed monitoring, eg of vegetation, should include the TSS.

Method Location

The TSS is intended to be representative of the major or predominant vegetation type, soil and management of the ECN site and it should be subjected to consistent management over the life of the ECN programme. It should, where possible, have uniform soil and vegetation. The proximity of outside influences such as high hedgerows, which may affect the uniformity of the TSS, should be avoided. It is recognised that, at some ECN sites where management is intensive, there are severe restrictions on the choice of an area for use as a TSS.

Procedure

It is recommended that the axes of the TSS should be aligned with the axes of the Ordnance Survey National Grid, and should preferably correspond with the 100 m grid. In any case the National Grid references of the TSS corners should be recorded with the greatest possible precision. Thereafter a local six-figure numeric co-ordinate system should be used to reference points or areas within the SS and TSS, using the system shown in Figure 3. The origin of the local system is in the south-west corner of the SS. This system allows points or quadrats to be referenced with a resolution of 1 m; where quadrats are to be referenced, the local co-ordinates of the south-west corner of the quadrat should be used and the dimensions of the quadrat stated.

Permanent marking of the SS and TSS is essential and can take various forms, such as concrete or stone blocks sunk into the ground and either flush with the ground surface or raised above it. Subject to avoiding the use of materials likely to affect soil and vegetation, the material chosen should be that most appropriate to the particular site. It may be helpful to mark permanently each corner of the TSS, and preferably the SS, with the six-figure reference of the local numeric co-ordinate system.

Within the SS or TSS it may be convenient to have other markers arranged in a systematic fashion which help to locate points or areas at which sampling has occurred. These should be marked with a plate carrying the local numeric co-ordinates.

Detailed records must be kept of the location of all scientific work undertaken on the TSS and SS or any form of disturbance, such as wind damage or erosion.

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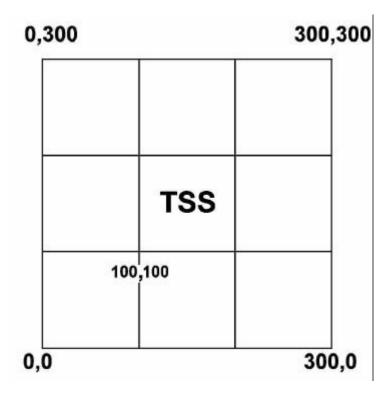


Figure 3. System for referencing points or areas within the SS