Site Preparation Guidelines

Seedlings

Establishing seedlings successfully is all about good site preparation. Site preparation is all about storing soil moisture. If we can store as much soil moisture as possible, we have a very high chance of establishing seedlings successfully. The two most important factors for storing moisture are:

1. **Controlling competition** – weeds and in particular grasses are the biggest reason why seedlings do not establish properly. Weeds directly compete with seedlings for available moisture. By spraying weeds and grasses, we allow soil moisture to accumulate prior to planting. Preparation for tree planting should be considered the same as for any other agricultural crop.

   - Control weeds and grasses by spraying with Glyphosate 2 metres wide along each row. This should be completed as soon as possible so that moisture can start accumulating. It can take between 6 – 12 months to store enough moisture in some circumstances. Over the months, the rows will need to be sprayed several times to ensure that competition is always under control (the image to the right shows a well prepared site that is fenced, competition controlled, ripped and mounded)

2. **Ripping** – ripping will ensure that any rainfall is immediately stored in the soil profile. It also provides a good environment for seedling roots by aerating the soil. Ripping is an absolute necessity when planting seedlings.

   - Ripping should be done to a depth of at least 500mm and after the chemical has killed all the competition. Each row should be ripped on 3 separate passes, each 20cm apart. The end result should be a soil that is well broken apart without any large clods. Ripping should be done at least 6 months before the seedlings are planted.

3. **Mounding** – using a mounder allows moisture to easily enter the soil and is also a good environment for seedling roots to penetrate. A mounder is available to borrow from the LLS (contact details over page). Mounding is done after the ripping.

   - Black cracking clay soils such as those around Moree do not require ripping. Instead, these soils need to be cultivated and mounded. *Do not rip black cracking clay soils.*
Direct Seeding

Direct seeding is about using purpose built machinery to sow seed instead of planting pre-grown seedlings. Site preparation for direct seeding is not as intensive as for seedlings. Listed below are the most important aspects of site preparation for direct seeding:

1. Competition needs to be controlled by spraying 1 metre of Glyphosate along each row before the seeder arrives.

2. Large grass tussocks along each row will need to be slashed so the direct seeder can operate effectively.

3. The rows will need to be marked if they are not able to be easily seen.

A ripper mounder (pictured left) can be borrowed from the Local Land Services. Using the details below, contact Reegan Walker for further information on the availability of the ripper mounder.

Additional Considerations

Sites that are to be planted or seeded need to have livestock removed both during site preparation and as plants are establishing and growing. Sometimes ripping wet clay soils creates a smearing/polishing of the soil. If this occurs wait until the soil dries.

For more information please contact North West Local Land Services:

Reegan Walker  
Senior Land Services Officer  
Gunnedah NSW  
T: (02) 6742 9216  
M: 0429 048 867

Emily Doolan  
Senior Land Services Officer  
Moree NSW  
T: (02) 6750 9012  
M: 0428 657 083