



Preparing to Plant a Site

WHEN?

In seasonally dry tropical forest areas plant trees early in the rainy season. In northern Thailand, this is mid-June to mid-July.



With bamboo poles mark sources of natural forest regeneration, including seedlings, saplings and live tree stumps. Weed around them and apply mulch. Then slash the weeds down to ground level, to prepare for herbicide application.

SITE PREPARATION

Before planting clear the weeds, being careful of erosion risks. Clear a circle of 1m diameter around each planting hole.

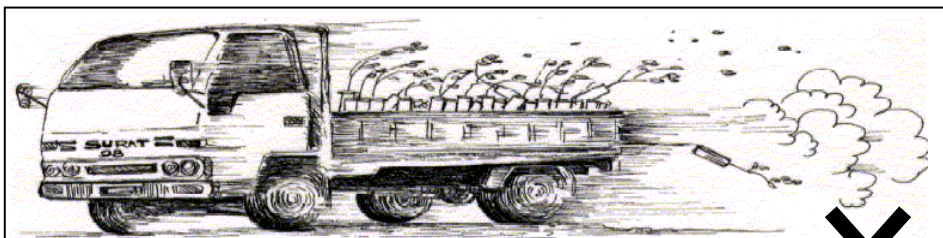
If using a slow-acting, systemic herbicide, such as glyphosate (Round-up), apply it at least 6 weeks before planting.

If weeding entirely by hand tools, clear 1-2 weeks before planting and make sure the roots are dug out. Weeds should be slashed and resprouting before using herbicide.

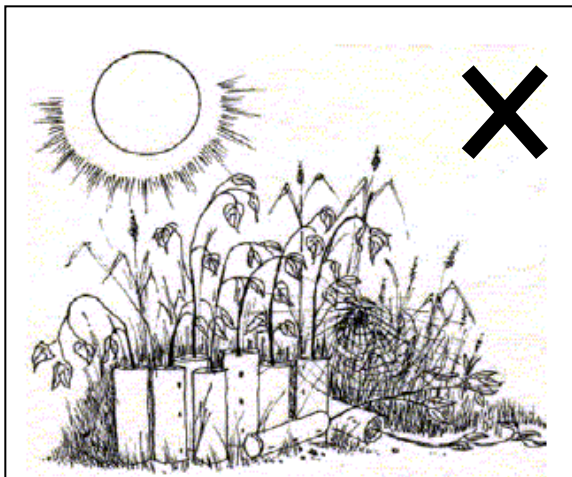
NOTE: Refer to the 'How To Plant A Forest' manual p115-116 for detailed instructions on glyphosate handling and application.

USING GLYPHOSATE?

Glyphosate rapidly breaks down in the soil and gives planted trees 6-8 weeks of protection from weed competition before weeds regrow from germinating seeds. Use glyphosate before planting trees, but not afterwards.



Drive with care. Protect seedlings beneath shade netting and don't stack them on top of each other. Select the most vigorous saplings that have been graded and hardened-off, and water them before loading. Pack them upright and minimise disturbance to the bags to avoid root damage. Use baskets if you can. Transport them from the nursery the day before planting.



DO NOT leave saplings exposed to the sun. Find some natural shade or make a temporary shelter with shade netting. Keep them upright and lightly water them again.

HOW MANY PLANTS AND SPECIES?

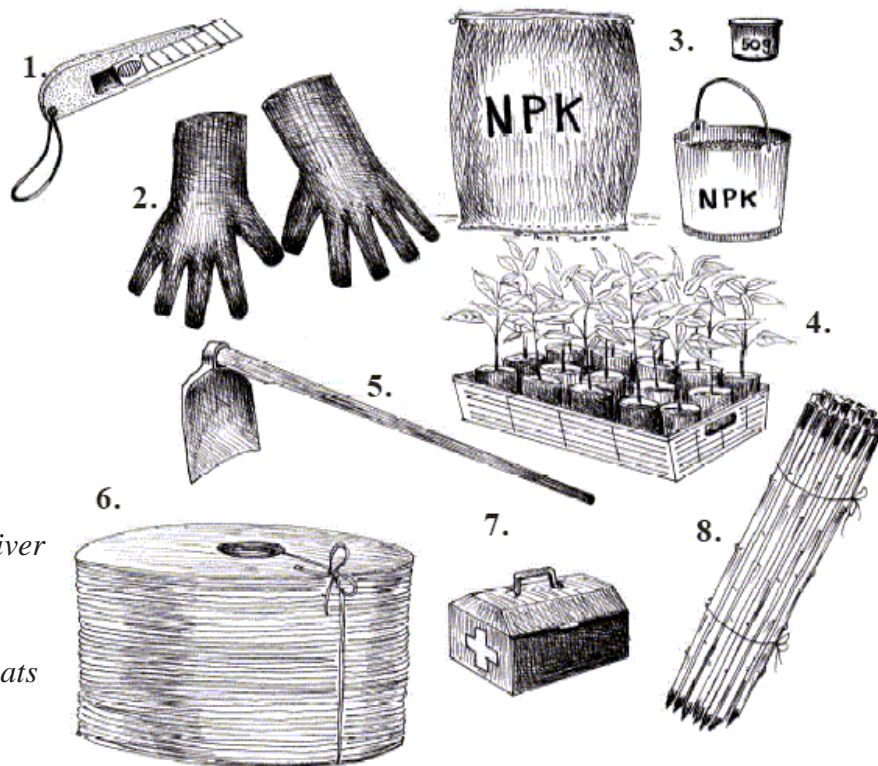
The density of trees (planted and naturally established) should be 500 trees per rai (3,125 per ha), spaced at 1.8 m. The close spacing will help to close the canopy, shade out weeds and eliminate the costs of weeding as quickly as possible. Higher densities will create too much competition. There should be 20-30 locally native species suitable to the vegetation type used in the planting.



OTHER MATERIALS

The day before the planting transport the saplings, a bamboo stake and cardboard mulch mat for each sapling, and 25kg of fertilizer per rai (162kg per ha) to the site. Protect them from rain by covering them with a tarpaulin.

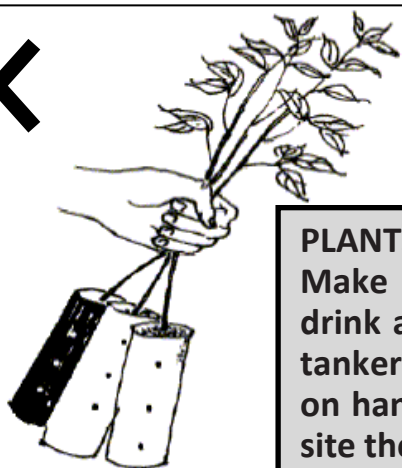
Polymer gels or similar local products may be useful for mixing in with soil in planting holes in deciduous forest tree types growing in dry areas on poor soils.



1. Knife
2. Gloves
3. Fertilizer, bucket and pre-measured cups to deliver correct dose
4. Baskets to distribute saplings
5. Hoes for hole-digging
6. Cardboard mulch mats
7. First aid kit
8. Bamboo poles.

OTHER THINGS TO DO BEFORE THE PLANTING DAY

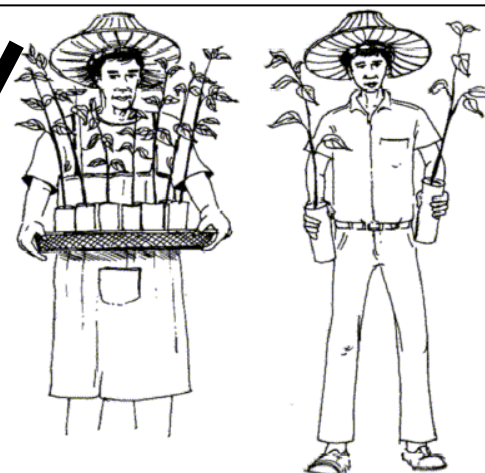
- Appoint planting group leaders and make sure they know the planting techniques to train the planters.
- Make sure you have enough planters: 10 planters per rai per day (50 per Ha).
- Make sure the planters have the right equipment and know what to bring. Provide them with the “Being Prepared and How to Plant” worksheet ahead of the planting day to be prepared.
- Make sure there are enough vehicles to transport planters to the site, and arrange refreshments.
- Be aware of site safety dangers and have a wet weather contingency plan.
- Give planters an introduction to the site’s history and the aims of the planting. Promote their education as much as possible.
- Consider media coverage of the event, involve the local community, and take plenty of photos.



Make sure that everyone knows how to carry the plants correctly, to avoid stem and root damage!

PLANTS ARE THIRSTY TOO!

Make sure that you give the trees a drink after planting: 2-3L each. Hire a tanker if necessary, and have buckets on hand. If you can't get water to the site then plant when rain is forecast.



AFTER THE PLANTING - make sure:

- all equipment and rubbish has been collected.
- trees have been planted correctly - correct errors. Trees need to be upright and firmed down properly, with monitoring labels visible. Refill spare holes and return spare trees to the nursery.
- **follow up monitoring and maintenance (weeding, fertilizer application and fire prevention) responsibilities have been organised and assigned.**

This sheet was summarised from 'How to Plant a Forest' Part 7, Section 2. Site coordinators should have access to the book for more detailed information on site preparation, particularly herbicide handling and use. The book can be downloaded at www.forru.org

