Accelerating the growth of trees in the school woodlot

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The usefulness of trees in the school grounds

Planting the trees

Many trees respond well to the application of diluted urine. These include a range of fruit and indigenous trees. The gum tree is particularly responsive to the application of urine. Gums are useful for fuel and for construction. Two species of gum have been chosen: Eucalyptus grandis and Eucalyptus tereticornis.
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Drilling the holes for the trees

The area chosen by the headmaster and staff is first cleared and levelled and then holes are drilled using a large earth auger to drill the holes down to about 0.75m depth. These are filled with compost and soil from the school garden.
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Collecting the compost

The drilled holes are filled with a mix of the garden compost and soil. And area is dug around the tree over which a mulch of grass and leaves will be placed.
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Planting the seedlings

The seedling trees are carefully removed from their plastic jackets (the seedlings were purchased in the Forestry Commission Nursery) and planted carefully within the soil/compost mix.
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Planting the seedlings and initial watering

After planting and adding a leaf mulch, the young tree seedlings are watered thoroughly.
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Apply diluted urine to the trees

The diluted urine is not applied immediately. A period of about a month elapses first so the young tree can become established in the tube of compost and soil. It is important that the plant is stabilised before urine application begins.

Urine is pumped out of the urine tank into a bucket (for hygienic reasons it is wise to for the pupils to wear rubber gloves when handling urine.)
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Application of urine

The urine is diluted with water: 2 litres of urine to 8 litres of water mixed in a ten litre bucket (which holds about 12 litres). The 10 litres of 4:1 mix is enough to treat 2 trees. That is each tree gets 1 litre of urine. This diluted urine is followed up by 5 litres of water (mainly in the dry season).
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Fertilising gum trees with diluted urine

This application is given once per week. During the dry season extra water is required to maintain the health of the tree until they are fully established. Any trees that die are replaced by new seedlings.
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Community participation

The exercise can be community based with elders or parents of the children participating. The tree on the right is being watered in March 2010.
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The woodlot in August 2010

The trees had grown considerably in a period of 5 months. The main growth period comes during the following rains – November to March.
The woodlot in October 2010

With weekly watering and the application of diluted urine, the growth of trees is very fast. During the next rains, starting around November, the growth will accelerate more.
The woodlot in November 2010

Now the early rains help