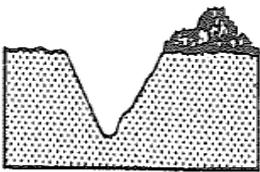


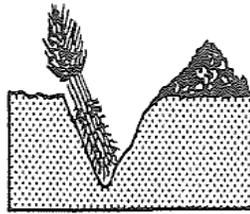
Seedling Care and Planting Tips

Care on Arrival

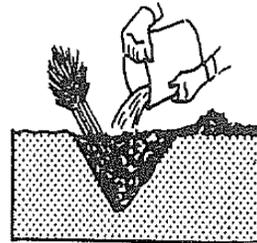
- Tree seedlings require water and cool temperatures to survive until planted.
- If you intend to plant the trees within a week (recommended), keep them in the shipping package in a cool or shaded location, such as a cooler (above freezing), basement, outbuilding, or on the north side of a building.
- If planting will be delayed longer than a week, open the package, make sure the roots and packing materials are damp, reseal, and store the package in a cool place, periodically checking the condition of the trees roots. Or, dig a trench deep enough to accommodate the roots and plant the seedlings, packing soil around their roots.



1. Dig v-shaped trench in moist shady place.



2. Break bundles and spread out evenly.



3. Fill in loose soil and water well.



4. Complete filling in soil and pack with feet.

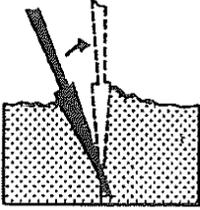
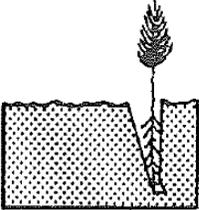
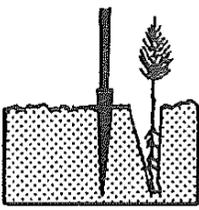
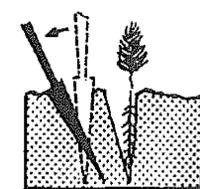
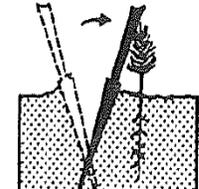
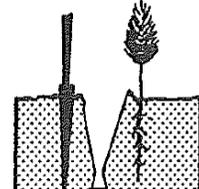
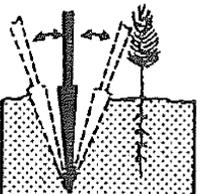
- Do not allow the roots to dry out. Roots should be kept **MOIST**, not **WET**. Do not store seedling roots submerged in water.

Care After Planting

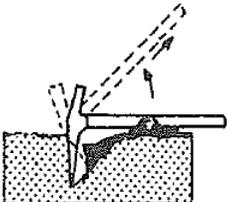
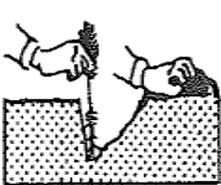
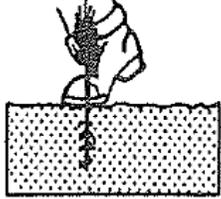
- Occasional watering of trees, especially during dry periods, may be beneficial.
- Keep vegetation around trees clipped to reduce competition for water and nutrients. In large plantations, shallow cultivation can be done to keep weeds and sod from competing with the trees for moisture and from smothering the young seedlings.
- In small plantings a mulch of straw, peat, wood chips, or smaller material may be placed around the tree for a distance of four feet and to a depth of about three inches. This, if replaced as needed, will keep weeds down until the lower branches of the trees cover the area.
- Grazing livestock can be very detrimental to the success of newly planted seedlings, therefore, protect tree plantings from livestock including poultry.
- Monitor plantings for insect or disease injury and take appropriate measures against them. (Seek assistance from Athens SWCD, ODNR Division of Forestry or OSU Extension if assistance is needed to determine cause and treatment.)
- Tree shelters can be very beneficial in protecting new hardwood (deciduous) seedlings. They create a mini greenhouse for the seedling, maintaining moisture and a more stable temperature. Tree shelters also protect the seedling from animal browse, herbicides, and mowing.
- Due to their growth patterns, tree shelters should not be used on conifers. Netting or other appropriate physical barriers or repellent should be chosen to protect against animal browse for these species.

Planting with a dibble bar

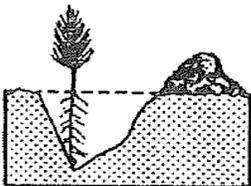


<p>1. Insert dibble at angle shown and push forward to upright position.</p> 	<p>2. Remove dibble and place seedling at correct depth.</p> 	<p>3. Insert dibble 2 inches toward planter from seeding.</p> 
<p>4. Pull handle of dibble toward planter packing soil at bottom of roots.</p> 	<p>5. Push handle of dibble forward from planter packing soil at top of roots.</p> 	<p>6. Insert dibble 2 inches from last hole.</p> 
<p>7. Push forward then pull backward, filling hole.</p> 	<p>8. Fill in last hole by stamping with heel.</p> 	<p>9. Pack soil around seedling with feet.</p> 

Planting with a mattock

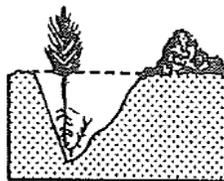
<p>1. Insert mattock—lift handle and pull.</p> 	<p>2. Place seedling along straight side at correct depth.</p> 	<p>3. Fill in and pack soil to bottom of roots.</p> 
<p>4. Finish filling in soil and pack with heel.</p> 	<p>5. Pack around seedling with feet.</p> 	

Correct and Incorrect Depths



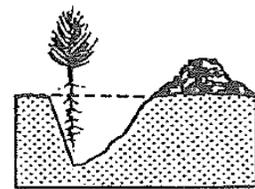
Correct

At same depth or 1/2" deeper than seedling



Incorrect

Too deep and roots bent.



Incorrect

Too shallow and roots exposed.

Spacing considerations

When planting seedlings, consider the height and spread to which they will eventually grow and the major use for the planting.

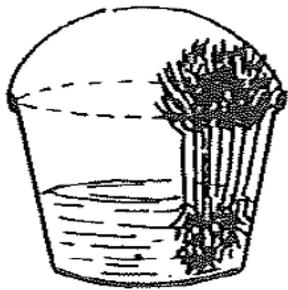
As a general rule, seedlings can be spaced as follows:

<u>Purpose</u>	<u>Spacing</u>
Reclamation	4-6 ft
Timber	8-12 ft
Wildlife	3-6 ft
Windbreaks	5-10 ft

Or for plantings by the acre:

TREATMENT PLANNED AFTER PLANTING	CONIFERS				HARDWOODS			
	WHITE PINE		OTHER CONIFERS		WALNUT		OTHER HARDWOODS	
	SPACING	#TREES/AC	SPACING	#TREES/AC	SPACING	#TREES/AC	SPACING	#TREES/AC
Good management including thinnings for intermediate products, and control of competing vegetation.	7 X 7	889	8 X 8	681	10 X 10	436	6 X 12	605
	to	to	to	to	to	to	to	to
	8 X 8	681	9 X 9	538	12 X 12	302	10 X 10	436
No management planned. Let trees grow to maturity.	9 x 9	538	10 x 10	436	Contact the office for recommendations.		8 x 12	454
	to	to	to	to			to	to
	10 x 10	436	12 x 12	302			12 x 12	302
EROSION CONTROL - 4 X 4 TO 7 X 7								

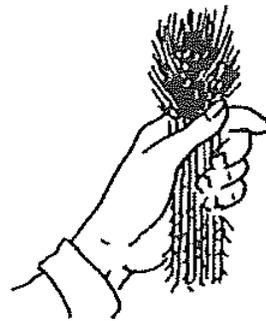
Handling seedlings in field



Correct

Carried in bucket with sufficient muddy water to cover roots.

(Do NOT store seedlings submerged in water...this method is only to be used while planting!)



Incorrect

Carried in hand—roots will likely become too dry.