



## RIPARIAN FOREST BUFFER

### Conservation Practice Job Sheet

391

Landowner \_\_\_\_\_ Field number \_\_\_\_\_

Purpose (check all that apply)	
<input type="checkbox"/> Create shade to lower water temperature/improve aquatic habitat	<input type="checkbox"/> Provide a harvestable crop of timber, fiber, forage, fruit, or other tree-related crops consistent with other purposes
<input type="checkbox"/> Provide detritus/large woody debris for aquatic/terrestrial organisms	<input type="checkbox"/> Provide protection against scour erosion within the floodplain
<input type="checkbox"/> Create wildlife habitat and establish wildlife corridors	<input type="checkbox"/> Restore natural riparian plant communities
<input type="checkbox"/> Reduce excess sediment, organic material, nutrients, pesticides in surface runoff and excess nutrients/chemicals in shallow groundwater flow	<input type="checkbox"/> Moderate winter temperatures to reduce freezing of aquatic over-wintering habitats
	<input type="checkbox"/> Increase carbon storage

Layout					
Water body/course type and name, other:					
Minimum buffer zone widths (ft) – specify left and right of stream [facing upstream/downstream (circle appropriate one)] for a two-side buffer; use left only for water bodies, such as lakes and ponds; include herbaceous species in zone 3 notes or refer to other jobs sheets.					
<b>Zone 1</b>		<b>Zone 2</b>		<b>Zone3</b>	
Left Width:	Right Width:	Left Width:	Right Width:	Left Width:	Right Width:
Left Acres:	Right Acres:	Left Acres:	Right Acres:	Left Acres:	Right Acres:
Notes:		Notes:		Notes (or refer to other job sheets):	
Buffer zone length (ft):					
Additional location and layout requirements:					

Woody Plant Materials Information					
Species/cultivars:	Kind of stock <sup>1</sup> :	Avg. Spacing <sup>2</sup> :	Plants/acre:	# Plants needed:	Planting dates:
<i>Zone # 1</i>					
1					
2					
3					
4					
<i>Zone # 2</i>					
1					
2					
3					
4					

<sup>1</sup>Bareroot, Container, Cutting, Seed; include size, caliper, height, and age as applicable. <sup>2</sup>Spacing between plants to achieve plants/acre.

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Site Preparation Information				
Activities :	Zone #1, #2, or Both	Planned Date:	Order of Occurrence	
<b>First Herbicide Application:</b> <sup>1</sup>				
1. Band Spray				
2. Ground Broadcast				
3. Aerial Broadcast				
<b>Second Herbicide Application:</b> <sup>1</sup>				
4. Band Spray				
5. Ground Broadcast				
6. Aerial Broadcast				
<b>Mowing:</b>				
<b>Prescribed Burning:</b> <sup>2</sup>				
<b>Ripping (Light)</b>				
<b>Ripping (Medium)</b>				
<sup>1</sup> Herbicide rates and application shall follow Arkansas Coop Extension – MP44 and product label instructions				
<sup>2</sup> Prescribed Burning shall follow a "Prescribed Burn Plan"				

Seedling Handling & Planting Instructions
<p><b>Seedling Specifications:</b></p> <ul style="list-style-type: none"> <li>• A minimum root collar diameter of <math>\frac{1}{4}</math> inch above the swell is required for all oak species and desired for all other hardwood species. Non-oak species may be smaller so long as all other specifications are met.</li> <li>• A minimum tap root length of 6 inches below the root collar.</li> <li>• Ratio of the length of the shoot to the length of the tap root should be 1.5 to 2.5 unless top pruned at the seedling nursery. Seedlings top pruned at the seedling nursery are acceptable. No top pruning should be done at the planting site. Tops should be proportional to the tap root length (9 to 15 inches above the root collar for 6 inch root).</li> <li>• Healthy first order laterals and fibrous roots must be present.</li> <li>• Roots must be moist, not moldy, with NO over abundance of lenticels, and not discolored (inside or out). The outside of the roots should not be black, the cambium cannot be discolored, and the internal part should be white or creamy in color.</li> <li>• Root pruning at the planting site is strongly discouraged.</li> </ul> <p><b>Storage:</b></p> <ul style="list-style-type: none"> <li>• Protect planting stock from desiccation and freezing during temporary storage and delivery to the planting site. Seedlings will be kept moist during the planting process. Opened bundles of trees will be re-closed while on the planting site. Best to not transport partially used bundles between planting sites.</li> <li>• Store all planting stock in a cool environment (preferably &lt; 50 degrees F) out of direct sunlight and wind. Internal bag or box temperatures will not exceed 60 degrees F.</li> <li>• Seedlings should be stored in a working cold storage facility until they are delivered to the planting site. Ideally, only a one day supply of seedlings should be removed from the cold storage facility at a time. Seedlings should be stored between 34 and 40 degrees F. Seedlings must not be stored above 50 degrees for more than a day.</li> </ul> <p><b>Planting :</b></p> <ul style="list-style-type: none"> <li>• No planting will be done when air or soil temperatures fall below 32 degrees F or rise above 70 degrees F.</li> <li>• The soil must be packed firmly around planted seedlings with no air pockets left in planting holes.</li> <li>• Minimal lateral roots may be exposed after planting. No part of the taproot will be exposed</li> <li>• Hardwood seedlings must be planted so as the swelling at the root collar is below ground the ground line. Seedlings must not be planted with root collar above the ground line.</li> </ul> <p><b>See Tree &amp; Shrub Establishment specifications for practice 612 for more details.</b></p> <p><b>Additional requirements:</b></p>

**Site Preparation**

- *Site preparation (mechanical, chemical, prescribed fire, or a combination) shall be sufficient for establishment and growth of the selected species and type of planting stock.*
- *Proper site preparation will improve survival by reducing vegetation which competes with the seedlings for both sunlight and soil moisture.*
- *The type and intensity of site preparation will vary according to ground cover, soils, and the species to be planted.*
- *Herbaceous control is recommended and should be enough to allow seedlings to be free to grow till they are above the competition. Proper site preparation will allow good enough planter access to allow seedlings to be planted properly at the designated spacing.*
- *Subsoiling to a depth of 12 to 18 inches (the deeper the better) is optional but recommended in all areas. Subsoiling aids seedling survival and growth as well as planter access.*
- *No subsoiling should be done in Zone 1.*
- *To protect water quality, no disking should be done in Zones 1 or 2.*

*See Tree/Shrub Site Preparation, Code 490 for more details.*

***Additional requirements:***

**Operation and Maintenance**

*The buffer must be inspected periodically and protected from damage so proper function is maintained. Replace dead or dying tree/shrub stock and continue control of competing vegetation to allow planting stock to be free to grow. Periodic harvesting of trees and shrubs in zones 1 and 2 may be necessary to maintain the health and vigor of mature stands. Keep large dead and dying trees for cavity nesting birds and a source of large wood in aquatic habitats.*

***Additional requirements:***

**Additional Specifications and Notes:**
