

# 2015 Conservation Stewardship Program

## ADDITIONAL REQUIREMENTS for NORTH CAROLINA

Items checked below are required conditions of enhancement activities you selected for your CSP enrollment.

### Soil Erosion Enhancements

<input type="checkbox"/>	<b>SOE05</b>	<p><b><i>Intensive No-Till</i></b></p> <p><i>-Continuous no-till, strip-till, or direct seeding for all crops/cover crops in the rotation</i>  <i>-Critical residue amount must be achieved to maintain a positive SCI; in general for the high residue crops listed below this will equate to &gt;70% residue cover after harvest.</i>  <i>*For crops not listed, please contact State Agronomist.</i></p> <p style="text-align: center;"><u>High Residue Crops</u></p> <ul style="list-style-type: none"> <li>• Corn (grain)</li> <li>• Wheat (grain)</li> <li>• Rye (grain)</li> <li>• Barley (grain)</li> <li>• Oats (grain)</li> <li>• All winter small grain cover crops (wheat, rye, triticale, barley, oats)</li> </ul> <p style="text-align: center;"><u>Low Residue Crops</u></p> <ul style="list-style-type: none"> <li>• Soybeans</li> <li>• Potatoes</li> <li>• Tobacco</li> <li>• Vegetable Crops</li> <li>• Cotton</li> <li>• Peanuts</li> <li>• Corn (silage)</li> </ul>
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## Soil Quality Enhancements

<input type="checkbox"/>	<b>SQL04</b>	<i>Use of Cover Crop Mixes</i>	<b>Winter Cover Crop Mixes</b>		
			<b>Cover Crop Species</b>	<b>Planting Rates</b> <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	<b>Latest Planting Date by Physiographic Region</b>
			Cereal Rye Daikon Radish	55 4	<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b> 1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
			Cereal Rye Crimson Clover	50 15	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
			Cereal Rye Crimson Clover Daikon Radish	35 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
			Cereal Rye Triticale Oats Crimson Clover Daikon Radish	30 15 10 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
			Cereal Rye Annual Ryegrass Austrian Winter Pea Crimson Clover Hairy Vetch Radish Turnip	15 3 10 2 3 1 1	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
			<b>Summer Cover Crop Mixes</b>		
			<b>Cover Crop Species</b>	<b>Planting Rates</b> <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	<b>Latest Planting Date by Physiographic Region</b>
			Sorghum-Sudan Buckwheat Cowpea	25 15 35	<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b> 1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)
Pearl Millet Buckwheat Cowpea	15 15 35	1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)			
<p>*All seeding rate recommendations are for pure live seed (PLS)</p> <p>*If broadcast, rates should be increased at least 15%. If aerially seeded, increase rates at least 30%.</p> <p>*Fertilize as indicated in soil test results.</p> <p>*Earliest Kill Date for all cover crops is 2 weeks prior to planting of next crop to maximize biomass production.</p> <p>*Additional species/mixtures may be approved by State Agronomist or Water Quality Specialist.</p>					

# 2015 Conservation Stewardship Program

<input type="checkbox"/>	<b>SQL05</b>	<b>Use of Deep Rooted Crops to Break up Soil Compaction</b> <b>Recommended Deep Rooted Crops for NC</b>		
		<b>Cover Crop Species</b>	<b>Planting Rates</b> <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	<b>Latest Planting Date by</b> <b>Physiographic Region</b> <b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
		Cereal Rye (annual)	70	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
		Forage Radish (annual)	8	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
		Sweet Clover (biennial)	15	1. Oct 15(drill) 2. Oct 1(drill)/Mar 31 (drill) 3. Sept 15(drill)
		Alfalfa (perennial)	20	1. Oct 30(drill) 2. Oct 15(drill)/Mar 31 (drill) 3. Oct 1(drill)/Apr 15 (drill)
		Red Clover (perennial)	10	1. Oct 30(drill) 2. Oct 15(drill)/Mar 31 (drill) 3. Oct 1(drill)/Apr 15 (drill)
		Lupine (perennial)	120	1. Oct 30(drill) 2. Oct 15(drill) 3. Oct 1(drill)
		<p>*All seeding rate recommendations are for pure live seed (PLS)            *If broadcast, rates should be increased at least 15%. If aerially seeded, increase rates at least 30%.            *Fertilize as indicated in soil test results.            *Earliest Kill Date for all cover crops is 2 weeks prior to planting of next crop to maximize biomass production.            *Additional species may be approved by State Agronomist or Water Quality Specialist.</p>		

## 2015 Conservation Stewardship Program

<input type="checkbox"/>	<b>SQL08</b>	<b><i>Intercropping to improve soil quality and increase biodiversity</i></b> <ul style="list-style-type: none"><li>• When producers are interested in this enhancement, it is recommended to provide State Agronomist or Water Quality Specialist with proposed intercropping management techniques and crop rotations for further assessment.</li><li>• State Agronomist or Water Quality Specialist will consult with USDA Risk Management Agency (RMA) to ensure proposed management techniques and rotation do not conflict with RMA crop insurance eligibility policies.</li><li>• Producers are responsible for final decisions on crop rotations and impact on crop insurance eligibility.</li></ul>
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# 2015 Conservation Stewardship Program

Species	Planting Rate (lbs/ac)		Depth to Plant (Inch)	Recommended Planting Dates by MLRA		
	Broadcast	Drill		130 (Mountains)	136 (Piedmont)	137,133A, 153A, 153B (C. Plain)
	<b>Mixtures</b>					
Kentucky Bluegrass + White Dutch Clover	10 + 5	8 + 5	¼	07/25 – 08/10	Not Adapted.	Not Adapted.
Orchardgrass + Alfalfa (Fall Planted)	5 + 20	3 + 15	¼	07/25 – 08/10	08/25-09/15	Not Adapted.
Orchardgrass + Alfalfa (Spring Planted)	5 + 20	3 + 15	¼	03/20 – 04/20	Not Recommended	Not Adapted.
Orchardgrass + Clover, Ladino (Fall Planted)	12 + 4	9 + 3	¼	07/25 – 08/10	08/25-09/15	Not Adapted.
Orchardgrass + Clover, Ladino (Spring Planted)	12 + 4	9 + 3	¼	03/20 – 04/20	02/15-03/31	Not Adapted.
Orchardgrass + Clover, Red (Fall Planted)	12 + 10	9 + 8	¼	07/25 – 08/10	08/25-09/15	Not Adapted.
Orchardgrass + Clover, Red (Spring Planted)	12 + 10	9 + 8	¼	03/20 – 04/20	02/15-03/31	Not Adapted.
Orchardgrass + Clover, Tall Fescue (Fall Planted)	12 + 15	10 + 12	¼	07/15 – 08/10	08/15-09/15	Not Adapted.
Orchardgrass + Clover, Tall Fescue (Spring Planted)	12 + 15	10 + 12	¼	03/01 – 04/20	02/01-03/31	Not Adapted.
Orchardgrass + Clover, Ladino + Tall Fescue (Fall Planted)	12 + 5 + 15	10 + 3 + 12	½	07/25 – 08/10	08/25-09/15	Not Adapted.
Orchardgrass + Clover, Ladino + Tall Fescue (Spring Planted)	12 + 5 + 15	10 + 3 + 12	¼	03/20 – 04/20	03/01-03/31	Not Adapted.
Orchardgrass + Clover, Red + Tall Fescue (Fall Planted)	12 + 10 + 15	10 + 8 + 12	¼	07/25 – 08/10	07/25-08/10	Not Adapted.

## 2015 Conservation Stewardship Program

	Orchardgrass + Clover, Red + Tall Fescue (Spring Planted)	12 + 10 + 15	10 + 8 + 12	¼	03/01 – 04/20	03/31-03/31	Not Adapted.
	Rye + Ryegrass, Annual	100 + 25	10 + 3 + 12	¼	08/01 – 08/10	08/25-09/15	09/05-09/30
	Tall Fescue + Clover, Ladino (Fall Planted)	15 + 4	12 + 3	¼	07/25 – 08/10	08/25-09/15	09/01-09/30
	Tall Fescue + Clover, Ladino (Spring Planted)	15 + 4	12 + 3	¼	03/20 – 04/20	02/15-03/31	02/15-03/20
	Tall Fescue + Clover, Red (Fall Planted)	12 + 8	10 + 7	¼	07/25-08/10	07/25-08/10	09/01-09/30
	Tall Fescue + Clover, Red (Spring Planted)	12 + 8	10 + 7	¼	03/20 – 04/20	02/15-03/31	02/15-03/20
	Timothy + Clover, Red (Fall Planted)	5-8 + 8-12	4-7 + 7-11	¼-½	08/01 – 09/30	Not Adapted.	Not Adapted.
	Timothy + Clover, Red (Spring Planted)	5-8 + 8-12	4-7 + 7-11	¼-½	03/01 – 09/15	Not Adapted.	Not Adapted.

\*Other mixtures may be approved by State Grazing Lands Specialist.

# 2015 Conservation Stewardship Program

**SQL10**

***Crop management system where cropland acres were recently converted from CRP grass/legume cover or similar perennial vegetation***

### Single Species Cover Crops

Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Dates by Physiographic Region
		<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
Oats	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cereal Rye	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Buckwheat	50 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Sorghum-Sudan	25 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Crimson Clover	15 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cowpeas	30 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Forage Radish	10 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)

### Winter Cover Crop Mixes

Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Date by Physiographic Region
		<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
Cereal Rye Daikon Radish	55 4	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
Cereal Rye Crimson Clover	50 15	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
Cereal Rye Crimson Clover Daikon Radish	35 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)
Cereal Rye Triticale Oats Crimson Clover Daikon Radish	30 15 10 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)

# 2015 Conservation Stewardship Program

Cereal Rye	15	1. Oct 15(drill)
Annual Ryegrass	3	2. Oct 1(drill)
Austrian Winter Pea	10	3. Sept 15(drill)
Crimson Clover	2	
Hairy Vetch	3	
Radish	1	
Turnip	1	

### Summer Cover Crop Mixes

Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Date by Physiographic Region
		<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
Sorghum-Sudan	25	1. June 15 (drill)
Buckwheat	15	2. July 1 (drill)
Cowpea	35	3. July 15 (drill)
Pearl Millet	15	1. June 15 (drill)
Buckwheat	15	2. July 1 (drill)
Cowpea	35	3. July 15 (drill)

\*All seeding rate recommendations are for pure live seed (PLS)

\*If broadcast, rates should be increased at least 15%. If aerially seeded, increase rates at least 30%.

\*Fertilize as indicated in soil test results.

\*Earliest Kill Date for all cover crops is 2 weeks prior to planting of next crop to maximize biomass production.

\*Additional species/mixtures may be approved by State Agronomist or Water Quality Specialist.

# 2015 Conservation Stewardship Program

<input type="checkbox"/>	<b>SQL11</b>	<p><b>Cover cropping in orchards, vineyards and other woody perennial horticultural crops</b></p> <p style="text-align: center;"><b>Winter Cover Crop Mixes</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Cover Crop Species</th> <th style="width: 30%;">Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i></th> <th style="width: 35%;">Latest Planting Date by Physiographic Region</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td><b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b></td> </tr> <tr> <td>Cereal Rye Daikon Radish</td> <td style="text-align: center;">55 4</td> <td>1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)</td> </tr> <tr> <td>Cereal Rye Crimson Clover</td> <td style="text-align: center;">50 15</td> <td>1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)</td> </tr> <tr> <td>Cereal Rye Crimson Clover Daikon Radish</td> <td style="text-align: center;">35 10 2</td> <td>1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)</td> </tr> <tr> <td>Cereal Rye Triticale Oats Crimson Clover Daikon Radish</td> <td style="text-align: center;">30 15 10 10 2</td> <td>1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)</td> </tr> <tr> <td>Cereal Rye Annual Ryegrass Austrian Winter Pea Crimson Clover Hairy Vetch Radish Turnip</td> <td style="text-align: center;">15 3 10 2 3 1 1</td> <td>1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Summer Cover Crop Mixes</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Cover Crop Species</th> <th style="width: 30%;">Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i></th> <th style="width: 35%;">Latest Planting Date by Physiographic Region</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td><b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b></td> </tr> <tr> <td>Sorghum-Sudan Buckwheat Cowpea</td> <td style="text-align: center;">25 15 35</td> <td>1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)</td> </tr> <tr> <td>Pearl Millet Buckwheat Cowpea</td> <td style="text-align: center;">15 15 35</td> <td>1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)</td> </tr> </tbody> </table> <p>*Work with the State Agronomist or Water Quality Specialist to develop farm specific cover crop mixes that will work best with the crop type (vineyard, orchard, etc) and to meet the Objectives in Criteria #4. *For perennial species mixtures, please refer to SQL09 Planting Guidelines for Mixtures.</p>	Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Date by Physiographic Region			<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>	Cereal Rye Daikon Radish	55 4	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)	Cereal Rye Crimson Clover	50 15	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)	Cereal Rye Crimson Clover Daikon Radish	35 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)	Cereal Rye Triticale Oats Crimson Clover Daikon Radish	30 15 10 10 2	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)	Cereal Rye Annual Ryegrass Austrian Winter Pea Crimson Clover Hairy Vetch Radish Turnip	15 3 10 2 3 1 1	1. Oct 15(drill) 2. Oct 1(drill) 3. Sept 15(drill)	Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Date by Physiographic Region			<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>	Sorghum-Sudan Buckwheat Cowpea	25 15 35	1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)	Pearl Millet Buckwheat Cowpea	15 15 35	1. June 15 (drill) 2. July 1 (drill) 3. July 15 (drill)
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# 2015 Conservation Stewardship Program

**SQL12**

***Intensive cover cropping in annual crops***

Criteria 1: Select a small grain/grass cover crop.

Criteria 2: Select a legume cover crop.

Criteria 3: Select a cover crop from the list provided for Enhancement WQL10.

Criteria 4: Select a cover crop/mix from the list provided for PLT20.

Criteria 5: Work with the State Agronomist to select a cover crop or cover crop mix that will meet the purpose of biodiversity improvement.

**Small Grain/Grasses Cover Crops**

Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Dates by Physiographic Region
		1. Coastal Plains 2. Piedmont 3. Mountains
Oats	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cereal Rye	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Triticale	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Wheat	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Barley	60 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Pearl Millet	15 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Sorghum-Sudan	25 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)

**Legume Cover Crops**

Cover Crop Species	Planting Rates <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	Latest Planting Dates by Physiographic Region
		1. Coastal Plains 2. Piedmont 3. Mountains
Crimson Clover	15 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cowpeas	30 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Austrian Winter Pea	35 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)

**Additional Cover Crops**

# 2015 Conservation Stewardship Program

			Cover Crop Species	Planting Rates <i>Drill Minimum Rate in lbs/ac</i>	Latest Planting Dates by Physiographic Region									
			Buckwheat	50 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)									
			Sunflower	10 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)									
			Sunn Hemp	15 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)									
			Radish (forage, oilseed, Daikon)	8 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)									
			Mustards	8 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)									
			Phacelia	7 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)									
			<p>*All seeding rate recommendations are for pure live seed (PLS)            *If broadcast, rates should be increased at least 15%. If aerially seeded, increase rates at least 30%.            *Fertilize as indicated in soil test results.            *Additional species/mixtures may be approved by State Agronomist or Water Quality Specialist.</p>											
<input type="checkbox"/>	<b>SQL13</b>	<p><b><i>Forest Stand Improvement for Soil Health</i></b>  <b><i>NC supplement for Jobsheet 5b criteria – Retention of Debris, Snags, Et al</i></b></p> <table border="1"> <thead> <tr> <th>Dominate Forest Type</th> <th>Target Coarse Woody Debris (&gt;3" dia.)</th> <th>Target Retained Standing Snags</th> </tr> </thead> <tbody> <tr> <td>Piedmont and Coastal Plain Pinelands</td> <td>&gt;2 ton/ac</td> <td>&gt; 4 snags/ac ≥4" DBH</td> </tr> <tr> <td>Bottomland Hardwood</td> <td>&gt;4 ton/ac</td> <td>&gt; 4 snags/ac ≥4" DBH &gt;6 trees/ac ≥ 10" DBH &gt;1 tree/ac ≥ 20" DBH</td> </tr> <tr> <td>All other Forest lands</td> <td>&gt;4 ton/ac</td> <td>&gt; 12 snags/ac ≥4" DBH</td> </tr> </tbody> </table>	Dominate Forest Type	Target Coarse Woody Debris (>3" dia.)	Target Retained Standing Snags	Piedmont and Coastal Plain Pinelands	>2 ton/ac	> 4 snags/ac ≥4" DBH	Bottomland Hardwood	>4 ton/ac	> 4 snags/ac ≥4" DBH >6 trees/ac ≥ 10" DBH >1 tree/ac ≥ 20" DBH	All other Forest lands	>4 ton/ac	> 12 snags/ac ≥4" DBH
Dominate Forest Type	Target Coarse Woody Debris (>3" dia.)	Target Retained Standing Snags												
Piedmont and Coastal Plain Pinelands	>2 ton/ac	> 4 snags/ac ≥4" DBH												
Bottomland Hardwood	>4 ton/ac	> 4 snags/ac ≥4" DBH >6 trees/ac ≥ 10" DBH >1 tree/ac ≥ 20" DBH												
All other Forest lands	>4 ton/ac	> 12 snags/ac ≥4" DBH												

# 2015 Conservation Stewardship Program

	<p><b>SQL14</b></p>	<p><b><i>Integrate grazing into crop and forest systems.</i></b></p> <p>Integrating grazing into cropland:</p> <ol style="list-style-type: none"> <li>1. Planting brassicas for winter growth: swedes, kale, turnips, rape <ul style="list-style-type: none"> <li>- Seed with 75 – 80 #N/ac.</li> <li>- Strip graze for most efficient use, leave 2” stubble for regrowth</li> <li>- Brassicas should not comprise more than 2/3 diet of cattle because of their low dry matter content</li> </ul> </li> <li>2. Using small grains: cereal rye, wheat, triticale, oats, barley <ul style="list-style-type: none"> <li>- Plant 3 to 4 weeks earlier than for grain production</li> <li>- Apply 60 – 100 # N/ac. at planting</li> <li>- Graze from October – December &amp; then again in early Spring</li> <li>- If to be harvested for grain: keep grazing moderate and stop before jointing growth stage when plant grows erect</li> </ul> </li> <li>3. Annual ryegrass for winter growth <ul style="list-style-type: none"> <li>- Check variety for winter hardiness</li> <li>- Wait to graze until at least 8 inches of growth</li> </ul> </li> <li>4. Graze crop residues: corn residues are acceptable <ul style="list-style-type: none"> <li>- Corn residues can augment, but not replace feeding hay or other forage</li> </ul> </li> <li>5. Directly graze a row crop: forage corn, forage soybeans, forage sorghum</li> </ol> <p>Integrating grazing into forest systems:</p> <ul style="list-style-type: none"> <li>➤ Please contact the State Grazing Lands Specialist for guidance.</li> </ul>
<input type="checkbox"/>	<p><b>SQL15</b></p>	<p><b><i>Utilize the Soil Health Nutrient Tool (SHNT) to assess soil nutrient pools.</i></b></p> <p>See pdf provided with list of labs providing the test and additional information about the test.</p>

# 2015 Conservation Stewardship Program

**SQL16**

***High species diversity grazing lands.***

Six species must be chosen for mixes, with 3 functional groups represented (cool-season grasses, warm-season grasses, and legumes/ forbs).

The forage species adapted to North Carolina climates can broadly be characterized as:

	GRASSES		LEGUMES	
	PERENNIAL	ANNUAL	PERENNIAL	ANNUAL
COOL-SEASON	Tall fescue	Ryegrass	White clover	Crimson clover
	Orchardgrass	Small grains	Alfalfa	Hairy vetch
	Kentucky bluegrass		Red clover	Arrowleaf clover
	Redtop		Birdsfoot trefoil	Hop clovers
	Timothy		Crown vetch	Subterranean clover
	Perennial ryegrass			Berseem clover
	Rescuegrass			
WARM-SEASON	Bermudagrass	Pearl millet	Sericia lespedeza	Kobe lespedeza
	Switchgrass	Sorghum		
	Flaccidgrass	Sudangrass		
	Dallisgrass	Sorghum-sudan hybrids		
	Bahiagrass	Crabgrass		
	Carpetgrass			
	Gamagrass			
	Caucasian bluestem			
	Big bluestem			

Brassicas (swedes, turnips, kale, rape) are also cool-season forages adapted to NC, but would fall in the “other forb” category. Cow pea is another warm-season legume that is adapted to NC. Refer to the *Forage Planting Guide*, found under PC 512 – Forage and Biomass Planting in Section IV of the FOTG (<http://efotg.sc.egov.usda.gov/>) for information on planting dates and seeding rates. When creating a mix, it is best to ensure that all species in the mix have similar establishment dates. For assistance with developing mixes from the list of species above, please contact the State Grazing Lands Specialist.

Using perennial warm-season grasses in mixtures is a bit more difficult than other groups because they cannot be seeded in mixtures and still be effectively established. In order to successfully establish a perennial warm-season grass, it must be planted on its own, without competition from other forages that are desired in the mix. Overseeding of other plant species can take place in the following fall or spring once the perennial warm season grass is established in order to create the 6-species mix with 3 functional groups. Effective overseed species include, but are not limited to, red clover, crimson clover, ryegrass, small grains, and brassicas.

# 2015 Conservation Stewardship Program

<input type="checkbox"/>	<b>SQL18</b>	<b>Soil Health Crop Rotation</b>
<b>Small Grain/Grasses Cover Crops</b>		
<b>Cover Crop Species</b>	<b>Planting Rates</b> <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	<b>Latest Planting Dates by Physiographic Region</b> <b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
Oats	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cereal Rye	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Triticale	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Wheat	70 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Barley	60 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Pearl Millet	15 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Sorghum-Sudan	25 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
<b>Legume Cover Crops</b>		
<b>Cover Crop Species</b>	<b>Planting Rates</b> <i>Drill Minimum Rate</i> <i>in lbs/ac</i>	<b>Latest Planting Dates by Physiographic Region</b> <b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b>
Crimson Clover	15 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Cowpeas	30 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Austrian Winter Pea	35 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)

# 2015 Conservation Stewardship Program

<b>Additional Cover Crops</b>		
<b>Cover Crop Species</b>	<b>Planting Rates <i>Drill Minimum Rate in lbs/ac</i></b>	<b>Latest Planting Dates by Physiographic Region</b>
Buckwheat	50 lbs/ac	<b>1. Coastal Plains</b> <b>2. Piedmont</b> <b>3. Mountains</b> 1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Sunflower	10 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Sunn Hemp	15 lbs/ac	1. June 1 (bcast) June 15 (drill) 2. June 15 (bcast) July 1 (drill) 3. July 1 (bcast) July 15 (drill)
Radish (forage, oilseed, Daikon)	8 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Mustards	8 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
Phacelia	7 lbs/ac	1. Sept 15(bcast) Oct 15(drill) 2. Sept 1(bcast) Oct 1(drill) 3. Aug 15(bcast) Sept 15(drill)
<p>*All seeding rate recommendations are for pure live seed (PLS)            *If broadcast, rates should be increased at least 15%. If aerially seeded, increase rates at least 30%.            *Fertilize as indicated in soil test results.            *For perennial species/mixtures, please refer to SQL09 Planting Guidelines.            *Additional species/mixtures may be approved by State Agronomist or Water Quality Specialist.</p>		
<input type="checkbox"/>	<b>CCR98</b>	<p><b><i>Improved Resource Conserving Crop Rotation (IRCCR)</i></b></p> <p>For perennial grass and grass/legume mixtures please see</p> <ul style="list-style-type: none"> <li>• NC Supplement to Conservation Practice Standard Forage and Biomass Planting (512), Forage Planting Guide for Perennial Grasses</li> <li>• SQL09 Grass/Legume Mixtures</li> </ul> <p>*Additional species/mixtures may be approved by State Agronomist, State Grazing Specialist, or Water Quality Specialist.</p>

# 2015 Conservation Stewardship Program

<input type="checkbox"/>	<b>CCR99</b>	<p><b><i>Resource Conserving Crop Rotation (RCCR)</i></b></p> <p>Examples of Resource Conserving Crops (Additional species/mixtures may be approved by State Agronomist, State Grazing Specialist, or Water Quality Specialist)</p> <p><b>Perennial Grass (grown for at least 2 years from time of planting)</b></p> <ul style="list-style-type: none"> <li>• NC Supplement to Conservation Practice Standard Forage and Biomass Planting (512), Forage Planting Guide for Perennial Grasses</li> </ul> <p><b>Perennial Legumes (grown for at least 2 years from time of planting)</b></p> <ul style="list-style-type: none"> <li>• NC Supplement to Conservation Practice Standard Forage and Biomass Planting (512), Forage Planting Guide for Perennial Grasses</li> </ul> <p><b>Perennial Grass-forb or Perennial Grass-legume-forb (grass will be grown for at least 2 years from time of planting)</b></p> <ul style="list-style-type: none"> <li>• NC Supplement to Conservation Practice Standard Forage and Biomass Planting (512), Forage Planting Guide for Perennial Grasses</li> </ul> <p><b>Small grain-grass, legume, forb mixture used as a green manure</b></p> <ul style="list-style-type: none"> <li>• Mixtures can be found in the NC Supplemental information for Enhancement SQL04</li> </ul>
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