Appendix 2 Table 1

Plants for Temporary Cover and Companion Plants

Species	PLS Broadcast Seeding Rates[1/] Per Acre	Per 1,000 sq. ft.	Resource Area	Optimum[2/] Planting Dates	Permissible[3/] Planting Dates
Barley *(Hordeum vulgare)*			M-L[4/]	9/1-10/31	8/15-11/15
			P[5/]	9/15-11/15	8/15-12/15
			C[6/]	10/1-12/1	9/1-1/1
Alone	3 bu. (144 lb.)	3.3 lb.			
In mixtures	½ Bu. (24 lb.)	0.6 lb.			
Remarks: Winter hardy. Use on productive soils. 14,000 seed per pound					
Lespedeza, Annual *(Lespedeza striata)*			M-L	3/1-3/31	2/15-5/1
			P	3/1-3/31	2/15-5/1
			C	2/1-2/28	1/15-3/15
Alone	40 lb.	0.9 lb.			
In mixtures	10 lb.	0.2 lb.			
Remarks: Use inoculant EL. May volunteer for many years. 200,000 seed per pound.					
Millet, Browntop *(Panicum fasciculatum)*			M-L	4/15-6/15	4/1-7/1
			P	4/15-7/1	4/1-7/15
			C	4/15-7/1	4/1-7/15
Alone	40 lb.	0.9 lb.			
In mixtures	10 lb.	0.2 lb.			
Remarks: Provides quick dense cover. Will provide too much competition if seeded at high rates in seeding mixtures. 137,000 seed per pound.					
Millet, Pearl *(Pennesetum glaucum)*			M-L	5/15-7/15	5/1-7/31
			P	5/1-8/1	4/15-9/1
			C	4/15-8/15	4/1-9/1
Alone	50 lb.	1.1 lb.			

Remarks: Provides quick dense cover. May grow to a height of 5 feet. Do not use in seeding mixtures. 88,000 seed per pound.

Oats			M-L	9/15-11/15	9/1-12/1
(Avena sativa)			P	9/15-11/15	9/1-12/1
			C	9/15-11/15	9/1-12/1
Alone	4 Bu. (128 lb.)	2.9 lb.			
In mixtures	1 Bu. (32 lb.)	0.7 lb.			

Remarks: Use on productive soils. Not as winter hardy as rye or wheat. 13,000 seed per pound.

Rye			M-L	8/15-11/1	7/15-12/1
(Secale cereale)			P	9/15-12/1	8/15-1/1
			C	10/1-1/1	9/1-3/1
Alone	3 Bu. (168 lb.)	3.9 lb.			
In mixtures	½ Bu. (28 lb.)	0.3 lb.			

Quick cover. Drought tolerant and the most winterhardy small grain. 18,000 seed per pound.

Sudangrass			M-L	5/1-8/1	4/1-9/1
(Sorghum sudanese)			P	5/1-8/1	4/1-9/1
			C	4/1-8/1	3/1-8/1
Alone	60 lb.	1.4 lb.			

Do <u>not</u> use in mixtures. Good on droughty sites. 55,000 seed per pound.

Triticale			C	10/15-12/15	9/15-1/15
(X-Triticosecale)					
Alone	3 Bu. (144 lb.)	3.3 lb.			
In mixtures	½ Bu. (24 lb.)	0.6 lb.			

Use in lower part of the Southern Coastal Plain and in the Atlantic Coast Flatwoods areas only.

Wheat *(Triticum aestivum)*			M-L	9/15-12/1	9/1-1/1
			P	10/1-12/15	9/1-1/1
			C	10/15-1/1	9/15-2/1
Alone	3 Bu. (180 lb.)	4.1 lb.			
In mixtures	½ Bu. (30 lb.)	0.7 lb.			

Winterhardy. 15,000 seed per pound.

1/ Pure live seed **broadcast** seeding rates. Reduce seeding rates by 50% when **drilled**.

PLS represents Pure Live Seed. To calculate PLS, multiply the purity % times the germination %. Then divide the recommended seeding rate by the PLS to get the actual seeding rate.

For example: Rye seed has a purity of 90% and germination of 85%.

Step 1: The PLS = 0.90 X 0.85 = 0.77. (Only 77% of the material in the sack of seed is seed that will germinate.)

Step 2: Divide the recommended seeding rate (60 lb. in this example) by 0.77 to get the actual seeding rate of 78 pounds per acre that is needed in order to be planting 60 pounds of good seed.
Note: The use of seed with a low PLS usually has low vigor and will not grow well.

2/ These dates are the recommended seeding dates.
3/ These dates are permissible, but marginal seeding dates.
4/ M-L represents the Mountain; Blue Ridge; and Ridges and Valleys Major Land Resource Areas.
5/ P represents the Southern Piedmont Major Land Resource Area.
6/ C represents the Southern Coastal Plain; Black Lands; and Atlantic Coast Flatwoods Major Land Resource Areas.

Table 2

Perennial Grasses and Legumes for Long Term Cover

Species	PLS Broadcast Seeding Rates Per Acre	PLS Broadcast Seeding Rates Per 1,000 sq. ft.	Resource Area	Optimum Planting Dates	Permissible Planting Dates
Bahia, Pensacola			P	4/1-6/1	1/1-12/31
(Paspalum notatum)			C	3/1-6/1	1/1-12/31
Alone or with temporary veg.	60 lb.	1.4 lb.			
In mixtures with perennials	30 lb.	0.7 lb.			

Remarks: A low growing, sod forming perennial grass. It is slow to establish. Plant with another perennial or a companion crop. It will spread into bermuda pastures and lawns. It works well in mixtures with other plants. 166,000 seed per pound.

Bahia, Wilmington			M-L	3/1-6/1	1/1-12/31
(Paspalum notatum)			P	3/1-6/1	1/1-12/31
Alone or with temporary veg.	60 lb.	1.4 lb.			
In mixtures with perennials	30 lb.	0.7 lb.			

Remarks: Same as for Pensacola bahia.

Bermuda, Common (Hulled seed)			P	4/1-6/1	3/1-7/1
(Cynodon dactylon)			C	3/15-6/1	2/15-7/1
Alone or with temporary veg.	10 lb.	0.2 lb.			
In mixtures with perennials	6 lb.	0.1 lb.			

Remarks: Provides quick cover. Low growing and sod forming. Needs full sun. Good for athletic fields. 1,787,000 seed per pound.

Bermuda, Common (Unhulled seed) *(Cynodon dactylon)*			P C	10/15-2/28 11/1-1/31	10/1-2/28 11/1-1/31
With temporary vegetation	10 lb.	0.2 lb.			
In mixtures with perennials	6 lb.	0.1 lb.			

Remarks: Plant with winter annuals or with tall fescue.

Bermuda Sprigs	40 cu. ft. or sod plugs 3' by 3'	0.9 cu. ft.			
Coastal, Common, Midland, or Tift 44			M-L	4/15-6/15	3/15-7/15
Coastal, Common, or Tift 44			P C	4/1-6/15 4/1-6/1	3/1-8/1 1/1-12/31
Tift 78			C	4/1-6/1	1/1-12/31

Remarks: A cubic foot contains approximately 650 sprigs. A bushel contains 1.25 cubic feet or approximately 800 sprigs. Plant only freshly dug sprigs.

Centipede (Block sod only) *(Eremochloa ophiuroides)*	P C	11/1-7/1 11/1-7/1	11/1-7/1 11/1-7/1

Remarks: Centipede is drought tolerant and needs full sun. Will stand partial shade. It is effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until it is fully established. Do not plant near pastures. It is winter hardy as far North as Athens and Atlanta.

Fescue, Tall *(Festuca arundinacea)*			M-L	8/15-10/15 & 3/1-4/15	8/1-11/1
			P	9/1-10/15	8/15-11/1
Alone or with temporary veg.	50 lb.	1.1 lb.			
In mixtures with Perennials	30 lb.	0.7 lb.			

Remarks: Use alone only on better sites. Not recommended for droughty soils. Mix with perennial lespedezas or crownvetch. It should not be used on athletic fields since it is a bunch grass. 227,000 seed per pound.

Sunflower, 'Aztec' Maximillian *(Helianthus maximiliani)*			M-L	4/15-6/1	4/1-6/1
			P	4/15-6/1	4/1-6/1
			C	4/1-6/1	
	10 lb.	0.2 lb.			

Remarks: Mix with low growing grasses or legumes. 272,000 seed per pound.

Table 3

Durable Perennial Shrubs and Ground Covers

These ground covers will not be used unless proper maintenance is planned. Maintain mulch material at least at a three-inch thickness until plants provide adequate cover. Fall planting is encouraged because the need for supplemental watering is reduced and the plants have time to establish new roots before hot weather.

Common Name	Scientific Name	Mature Height	Plant Spacing	Comments
Albelia	*Albelia grandiflora*	3-8’	5’	Also a prostrate form 2’ high. Sun to semi-shade. Semi-evergreen.
Carolina Yellow Jessamine	*Gelsemium sempervirens*	low	3’	Vine. Yellow, trumpet-like flowers. Hardy. One of the best vines. Evergreen. Native.
Bearberry Cotoneaster	*Cottoneaster dammeri*	2-4’	5’	Sun. White flowers and red fruit. Evergreen.
Ground Cover Cotoneaster	*Cotoneaster salicifoluis* ‘Repens’	1-2’	5’	Sun. White flowers and red fruit. Evergreen.
Rock Cotoneaster	*Cotoneaster horizontalis*	1-2’	5’	Sun. Semi-evergreen.
Virginia Creeper	*Parthenocissue quinquefolia*	low	3’	Vine. Deciduous. Red in fall. Native.
Everbloom-ing Honeysuckle	*Lonecera heckrottii*	low	3’	Semi-evergreen. Climbs. Coral red flowers in summer.
Compacta Holly	*Ilex crenata* ‘Compacta’	3-4’	5’	Sun to semi-shade.
Chinese Holly	*Ilex cornuta* ‘Rotunda’	3-4’	5’	Sun to semi-shade. Very hardy.

Dwarf Burford Holly	*Ilex burfordii* 'Nana'	5-8'	8'	
Dwarf Yaupon Holly	*Ilex vomitoria* 'Nana'	3-4'	5'	Sun to semi-shade. Very hardy.
Repandens Holly	*Ilex crenata* 'Repandens'	2-3'	5'	Sun to semi-shade.
Andora Juniper	*Juniperus horizontalis* 'Plumosa'	2-3'	5'	Sun. Excellent for steep slopes.
Andorra Compacta Juniper	*Juniperus horizontalis* 'Plumosa compacta'	1-2'	5'	More compact than andora.
Blue Chip Juniper	*Juniperus horizontalis* 'Blue Chip'	8-10"	4'	
Blue Rug Juniper	*Juniperus horizontalis* 'Wiltonii'	4-6"	3'	Sun. Very low.
Parsons Juniper	*Juniperus davurica* 'Expansa' (Squamata 'Parsonii')	18-24"	5'	One of the best. Good winter cover.
Pfitzer Juniper	*Juniperus chinensis* 'Pfitzerana'	6-8'	6'	Needs room to grow.
Prince of Wales Juniper	*Juniperus horizontalis* 'Prince of Wales'	8-10"	4'	Feathery appearance.
Sargent Juniper	*Juniperus chinensis* 'Sargentii'	1-2'	5'	Full sun and good drainage. Good winter color.
Shore	*Juniperus conferta*	2-3'	5'	Emerald Sea or Blue Pacific

Juniper				cultivars are good.for back dune seashore
Creeping Liriope	*Liriope spicata*	10-12”	3’	Spreads by runners.
Memoria Rose	*Rosa weuchuriana*	2’	5’	Rampant grower.
Anthony Waterer Spirea	*Spirea bumalda*	3-4’	5’	Sun.
Thunberg Spirea	*Spirea thinbergii*	3-4’	5’	Sun.

Table 4

Tree Species for Erosion Control

TABLE 4. Trees for dryland and streambank critical area planting. Adopted from Alabama NRCS Critical Area Standard (Code 342) http://efotg.sc.egov.usda.gov/references/public/AL/al342.pdf

Soil Type	Species	Spacing	Remarks	pH Range
Acid	Loblolly pine	6 ft x 8 ft	Adapted to sandy, loamy, and clayey soils.	4.5 - 6
	Longleaf pine		Plant on a variety of soils.	
	Slash pine		Plant only in South Alabama. Well suited to wet, sandy soil.	
	Black Alder		Best adapted to mine spoil. Adapted to chalky Black Belt soils.	4-7
	Yellow Poplar			
	Black Cherry			
	Hickory			
	Black Walnut			
	Eastern red cedar			
Alkaline	Cottonwood	6 ft x 8 ft	Adapted to mine spoil & wet sites.	6 – 7.5
	Sycamore		Suited for mine spoil & wet sites.	
	Green Ash		Suited for low rich moist soils	
	Black alder		Best adapted to mine spoil.	
				4-7

NOTES:

1. Planting dates are December 1 to March 15. These dates may be extended if in trees are in containers or seedlings have been kept in cold storage. See Georgia NRCS Tree and Shrub Establishment (Code 612) for specific planting dates and soil pH for tree species (http://efotg.sc.egov.usda.gov/toc.aspx?CatID=2918).
2. Other trees and shrubs with wildlife value may be interplanted to enhance wildlife.
3. The 6 ft. x 8 ft. spacing will result in about 900 trees per acre.
4. Plant willows (Salix) to control streambank erosion (2 ft x 2 ft) throughout the state 11/15-3/15.

Table 5

Commercially Available Plants Beneficial to Wildlife species

Type of Plant	Remarks
1. Mast Producing Trees:	
Beech, Black Cherry, Blackgum, Chestnut, Chinkapin, Hackberry, Hickory, Honey Locust, Native Oak, Persimmon, Pine, Sawtooth Oak, and Sweetgum	All produce nuts or fruits favored by many species, except hickory which provides nuts used mainly by squirrels and bear.
2. Shrubs and Small Trees:	
Bayberry, Wax Myrtle, Wild Plum Crabapple, Dogwood, Huckleberry or Native Blueberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac and Blackberry . .	Plant in patches without tall trees to develop stable shrub communities. All produce fruits used by many kinds of wildlife
3. Grasses, Legumes, Vines, and Temporary Cover:	
Grape, Partridge Pea, Honeysuckle. Temporary Cover, such as Browntop Millet	Provide herbaceous cover in clearings for game bird brood-rearing habitat. Appropriate legumes includes clovers and vetches

Seed bluestem, indiangrass, switchgrass, fall Panicum, big bluestem or purpletop drilled at 15-60 PLS seed ft^2 or broadcast 10-20 bulk seed/acre.

Table 6

Coastal Marshland Vegetation

The following species are recommendations for tidal marshland re-vegetation in coastal Georgia.

False willow	*Baccharis angustifolia*
Silverling or Groundsel Bush	*Baccharis halomifolia*
Saltwort	*Batis maritima*
Saltmarsh Ox-Eye	*Borrichia frutescens*
Saltgrass	*Distichlis spicata*
Marsh Elder or High Tide Bush	*Iva frutescens*
Needle Rush	*Juncus roemerianus*
Sea Lavender	*Limonium nashii*
Annual Glasswort	*Salicornia bigelovii*
Perennial Glasswort	*Salicornia virginica*
Coastal Dropseed	*Sporobolus virginicus*
Smooth Cordgrass	*Spartina alterniflora*
Big Cordgrass	*Spartina cynosuroides*
Saltmeadow Cordgrass	*Spartina patens*