	Α	В	С	D	E	F	G	Н	l	J	K	L	M	N	0
Ī	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1 2	ZONE							(FS)			Tolerance				
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
_	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown		Shade	Dry	Depth	Some				
6	A	Southern Sugar Maple, Florida Maple, Hammock Maple	Acer barbatum	Deciduous	P,C	Tolerant	15'	FS,P	Moist, Dry	S, 6'	Low	60' - 2'	Rounded crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist soils, can live on dryer uplands, understory species, shade tolerant. Seeds eaten by many species of songbird.
7	A	Boxelder	Acer negundo L.	Deciduous	M,P,C	Tolerant	12'	FS,P	Wet, Moist	S-1-2'	Some	24" to 48 "	Rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings are successful)	Understory species, shade tolerant, used in erosion control-fiberous root system, drought resistant also. Seeds eaten by many species of songbird.
8	A	Red Maple, Scarlet or Swamp Maple	Acer rubrum	Deciduous	M, P, C	Tolerant	30'	FS	Wet, Moist	T, S-1-2'	High	60' to 90' - 2 1/2'	Rounded, compact crown	Seeds, seedlings, containers 3 to 15 gal.	Shade tolerent, cuttings in June from lower branches treated. Ornamental due to spectular fall leaf color. Seeds eaten by many species of songbird.
9	A	Silver Maple	Acer saccharinum	Deciduous	P	No-Ozone	12'	FS,P	Wet, Moist, Dry	S, 1-2'	Some	50' to 80' - 3'	Rounded crown	Seeds, seedlings, containers 3 to 15 gal. Softwood cuttings in July & Oct., hardwood cuttings in winter	Floodplain & bottomland species, younger trees cuttings root easily-horizontial branches used. Seeds eaten by many species of songbird. Not recommended as a stand alone specimen, easily windthrown. Seeds reproduce rapidly, can be invasive in horticulture uses.
10	В	Yellow Buckeye	Aesculus flava (A. octandra)	Deciduous	M,P	Tolerant	12'	Shade	Wet, Moist	S, 1-4'-Strong laterals	Some	25'-8"	Rounded shrub, small tree	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, understory species, prefers lowlands, stream borders, floodplains. Hummingbird food.
11	В	Red Buckeye	Aesculus pavia	Deciduous	M,P	Tolerant	12'	Shade	Wet, Moist	S, 1-4'-Strong laterals	Some	25'-8"	Rounded shrub, small tree	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, understory species, prefers lowlands, stream borders, floodplains. Hummingbird food.
12	В	Painted Buckeye, Dwarf Buckeye	Aesculus sylvatica	Deciduous	M,P	Tolerant	12'	Shade	Wet, Moist	S, 1-4'-Strong laterals	Some	25'-8"	Rounded shrub, small tree	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, understory species, prefers lowlands, stream borders, floodplains. Hummingbird food.
13	D	Black Alder	Alnus glutinosa	Deciduous	M,P,C	Tolerant	5'	FS	Wet, Moist	T, S 1-3' Laterial roots	High	20' -4"	Several trunks, spreading	Seeds, seedlings, containers 3 to 15 gal. (Cuttings are successful).	Forms thickets, prefers wet soil, borders streams, bottomlands, floodplains, swamps.
14		Alder	Alnus serrulata	Deciduous	M,P,C	Tolerant	5'	FS	Wet, Moist	T, S 1-3' Laterial roots	High	20' -4"	Several trunks, spreading	Seeds, seedlings, containers 3 to 15 gal. (Cuttings are successful).	Forms thickets, prefers wet soil, borders streams, bottomlands, floodplains, swamps.
15		Downy Serviceberry, Shadbush, Juneberry, Shadblow, Sarvis	Amelanchier arborea	Deciduous	M,P	Tolerant	20'	FS, P	Moist	T, S 1-3	Low Some	40' -1'	Narrow, rounded crown or irregularly shaped shrub.	Seeds, Seedlings, containers 3 to 15 gal.	Understory species, prefers moist soils in hardwood forests, streambanks, etc. Star shaped white flowers, many species of songbirds eat the fruit.

П	Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				·
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE							, ,				Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
16	В	Serviceberry	Amelanchier canadensis	Deciduous	M,P	Tolerant	20'	FS, P	Moist	T, S 1-3	Some	40' -1'	Narrow, rounded crown or irregularly shaped shrub.	Seeds, Seedlings, containers 3 to 15 gal.	Understory species, prefers moist soils in hardwood forests, streambanks, etc. Star shaped white flowers, many species of songbirds eat the fruit.
17	В	Pawpaw, Pawpaw Apple, False Banana	Asimina triloba	Deciduous	M,P,C	Tolerant	20'	FS, P, Shade	Moist	T, S 1-6'	Some	30' -8"	Shrub or small tree that forms colonies from root sprouts, pyramidal to rounded crown	Seeds, seedlings, containers 3 to 15 gal.	Moist soils, especially floodplains, in understory of hardwood forests, can grow in full sun as ornamental. Purple flowers, mid spring, fruit ripe in fall. Fruit edible, desired by humans, several mammals and many species of birds.
18	В	Sweet Birch	Betula lenta	Deciduous	М	Tolerant	10'	FS	Dry, Moist	T, S 1-6'	Low	30' -1'	Irregular spreading crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Mountain coves and rich slopes, near streams. Aromatic oils and flavorings (wintergreen) are obtained from tree.
19	В	River Birch	Betula nigra var. Heritage	Deciduous	M,P,C	Tolerant	10'	FS	Wet, Moist	T, S 1-6'	High	40' to 80'- 1' to 2'	Irregular spreading crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Floodplain & bottomland species, can grow in dry areas but cannot tolerate fire, used for erosion control, can tolerate flooding, very attractive bark.
20	В	American Hornbeam, Ironwood	Carpinus caroliniana	Deciduous	M,P,C	Tolerant	15'	P, Shade	Wet, Moist	S, 1-6' Strong laterial	Some	30' -1'	Broad, rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Strong root system, understory species, prefers lowlands, stream borders, floodplains.
21	A	Mockernut Hickory, White, Whiteheart, Hognut, Bullnut	Carya alba (C. tomentosa)	Deciduous	M,P,C	Tolerant	30'	FS	Moist, Dry	Pronounced Tap Root, S 1-6'	Low	50' to 80' - 1 to 2'	Rounded Crown	Seeds, seedlings, containers 3 to 15 gal.	Dry rocky or sandy uplands, ridges. Many mammals and birds eat the nuts.
22	D	Water Hickory, Bitter Pecan	Carya aquatica	Deciduous	P,C	Tolerant	30'	FS	Wet, Moist	Pronounced Tap Root, S 1-6'	High		Slender, upright branches, narrow crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Prefers bottomlands, lowlands, swamps, and floodplains, especially clay soils, transplants easily, seeds are waterborne. Many mammals and birds eat the nuts.
23	В	Bitternut Hickory	Carya cordiformis	Deciduous	M,P,C	Tolerant	30'	FS	Wet, Moist	Pronounced Tap Root, S 1-6'	High	60' to 80' - 1 to 2'	Broad, rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Prefers bottomlands, lowlands, swamps, and floodplains, especially clay soils, transplants easily, seeds are waterborne. Many mammals and birds eat the nuts.
24	Α	Pignut Hickory	Carya glabra	Deciduous	M,P,C	Tolerant	30'	FS	Moist, Dry	Pronounced Tap Root, S 1-6'	Low		Irregular , spreading crown	Seeds, seedlings, containers 3 to 15 gal.	Dry and moist uplands with hardwoods, bright yellow/gold fall color. Many mammals and birds eat the nuts.
25	A	Red Hickory	Carya ovalis	Deciduous	M,P,C	Tolerant	30'	FS	Dry	Pronounced Tap Root, S 1-6'	Low	70' to 100' 2 1/2'	Narrow rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings lappear_favorable)	Dry uplands with hardwoods, bright yellow/gold fall color. Many mammals and birds eat the nuts.

	Α	В	С	D	Е	F	G	Н		J	K	L	M	N	0
T	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance			·	·
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE			· ·	1		' "	` '	, ,			Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
	4	Shagbark Hickory, Shellbark,	Carya ovata	Deciduous	M,P	Tolerant	30'	FS	Wet, Moist	Pronounced Tap	High	70' to 100'	Narrow rounded	Seeds, seedlings,	Prefers bottomlands, lowlands, floodplains,
		Scaleybark, Kingnut, &								Root, S 1-6'		2 1/2'	crown	containers 3 to 15	especially clay soils, transplants easily, can
		Upland Hickory												gal. (Cuttings	grow well in hardwood stands on ridges too.
														appear favorable)	Many mammals and birds eat the nuts.
26		0 1111 0 1 0	0 11: 1	D		-	0.01			D 1-	 .	0014 001	D 1 10	0 1 11:	
	4	Sand Hickory, Pale, Pignut	Carya pallida	Deciduous	M,P	Tolerant	30'	FS	Moist, Dry	Pronounced Tap	Low		Rounded Crown	Seeds, seedlings,	Dry rocky or sandy uplands, ridges. Many
										Root, S 1-6'		1 to 2'		containers 3 to 15	mammals and birds eat the nuts.
27	Δ	Chinkapin	Castanea pumila	Deciduous	M,P,C	Tolerant	20'	P, Shade	Dry, Moist,	Dominant tap	Some	15' to 30' -	Irregular , spreading	Seeds, seedlings,	Strong root system, Can be found from
	4	Спіпкаріп	Castanea purnila	Deciduous	IVI,P,C	Tolerani	20	P, Shade	Dry, Moist,	root, S-2-4'	Some		crown	containers 3 to 15	sand ridges to swamp edges, streambanks,
										1001, 3-2-4		1 10 1 1/2	CIOWII	gal.	valleys, understory of hardwood forest.
														yaı.	Resistant to American Chestnut tree blight.
															Nuts are a valuable food source.
28															Trate are a variable rood course.
20		Catalpa, Indian Cigar Tree	Catalpa speciosa	Deciduous	P.C	Tolerant	20'	FS. P	Moist, Wet	Dominant tap	High	15' to 30' -	Irregular, spreading	Seeds seedlings	Prefers bottomlands, lowlands, floodplains,
		January Maran Organ 1100	outuipa opoolooa	200.44040	. ,0	. 0.0.0		. 5, .		root, S-2-4'	g		crown	containers 3 to 15	especially clay soils, transplants easily, can
														gal.	grow well in hardwood stands on ridges too.
															Specific worm lives on tree, beneficial to
29															fish.
		Sugarberry, Hackberry,	Celtis laevigata	Deciduous	P,C	Tolerant	20'	FS,P	Wet, Moist	S-2 to 6'	High		Broad, rounded,	Seeds, seedlings,	Prefers streambanks or bottomlands,
		Southern Hackberry, Sugar										1 1/2'	open crown	containers 3 to 15	transplants easily, can grow in upland sites
		Hackberry, Lowland												gal. (Cuttings	also. Many mammals and birds eat the fruit.
30		Hackberry Sugarbarry	Celtis ???	Deciduous	M.P	Tolerant	20'	FS.P	Moist, Dry	Doon ton root. T	Como	50' to 90' -	Broad, rounded,	appear favorable)	Prefers streambanks or bottomlands.
	5	Hackberry, Sugarberry, Nettletree, Beaverwood,	Ceills ???	Deciduous	IVI, P	Tolerani	20	F5,P	IVIOISI, DIY	Deep tap root, T 10 to 20'	Some	1 to 3'	open crown	Seeds, seedlings, containers 3 to 15	transplants easily, can grow in upland sites
		Northern Hackberry, American								10 10 20		1 10 3	open crown	gal. (Cuttings	also. Many mammals and birds eat the fruit.
31		Hackberry												appear favorable)	also. Many mammais and birds eat the mult.
Ŭ.	3	Eastern Redbud. Judas Tree	Cercis canadensis	Deciduous	M.P.C	Tolerant	12'	P. Shade	Moist	Dominant tap	Low	40' -8"	Short trunk.	Seeds, seedlings,	Legume; Prefers well drained soil, strong
					,,,,,			,		root, S-2-4'			irregular rounded	containers 3 to 15	root system in uncompacted soil, understory
										, ,			crown	gal.	species, as maturing becomes less shade
															tolerant. Beautiful spring flowers,
32															ornamental.
	4	Atlantic White Cedar,	Chamaecyparis	Evergreen	P,C	Tolerant	40'	FS,P	Wet, Moist	S 1-3'	Some		Narrow pointed	Seeds, seedlings,	Wet, peaty acid soils, fresh water swamps
		Southern White Cedar, White	thyoides									1 1/2' to 2'	spire like crown	containers 3 to 15	and bogs, poor root system, wind thrown
		Cedar, Swamp Cedar												gal.	easily, avoid clay soils, roots stop at
33	^	Friendstone Old Marsla District	Chiananthus	Danidora	MDC	Talamani	001	FS.	Moist	T.S 1-6	1	201 01	Ob and dravely in a control	Canala annallia	hardpan.
	A	Fringetree, Old Man's Beard, White Fringetree	Chionanthus	Deciduous	M,P,C	Tolerant	20'	P.Shade	IVIOIST	1,5 1-6	Low	30' -6"	,	Seeds, seedlings,	Strong root system, prefers moist soils, streambanks, valleys, understory of
ا ہو ا		write Filingetree	virginicus					r,Snade	1				oblong crown,	container 3 to 15	hardwood forest. Ornamental.
34	Δ	Yellowwood	Cladrastis kentuckea	Deciduous	M.P	Unknown	30'	FS.P	Moist	Deep tap root, S	Low	50' - 1 1/2'	Short trunk, broad	Seeds, seedlings,	Prefers moist soils: streambanks, valleys, in
	٦	I GIIOWWOOU	Ciaurastis KerituCKea	Deciduous	IVI,F	OHKHOWN	30	JI 3,F	IVIOISI	1-6'	LOW	50 - 1 1/2	rounded head	containers 3 to 15	hardwood forests. Beautiful flowering
35										1-0			Touriueu Heau	gal.	ornamental.
JJ		ı	l .	1	1	1	1	1	1	l	1	1	l .	laci.	omamonal.

	A	В	С	D	E	F	G	Н	l I	J	К	L	M	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE				· ·			(FS)			Tolerance			·	·
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
36	Α	Alternate Leafed Dogwood, Pagoda Dogwood, Blue Dogwood	Cornus alternifolia	Deciduous	M,P	Tolerant	20'	FS, P, Shade	Moist, Dry	S- 1-3'	Some	30' -8"	Shrub or small tree, short trunk, broad, flattened spreading crown	Seeds, seedlings, containers 3 to 15 gal. (Softwood cuttings in June, hardwood cuttings in winter).	Shallow root system, survival higher when planted in marginal light conditions, rootball transplants more successful, berries blue colored.
37	A	Flowering Dogwood, Boxwood, Cornel	Cornus florida	Deciduous	M,P,C	Tolerant	20'	FS, P, Shade	Moist, Dry	S- 1-3'	Low	30' -8"	Short trunk, spreading crown	Seeds, seedlings, containers 3 to 15 gal. (Softwood cuttings in June, hardwood cuttings in winter, layering or grafting).	Shallow root system, survival higher when planted in marginal light conditions, rootball transplants more successful, red berries have high calcium and fat content and consumed by migrating birds.
38	В	May Hawthorn, Apple Hawthorn	Crateagus aestivalis	Deciduous	P,C	Tolerant	20'	FS	Wet, Moist	T,S -1-3'	Some	30' -6"	Small, spiny, thicket forming with short stout trunk & broad dense crown	Seeds, seedlings,	Strong root system, prefers wet or moist soil: streambanks, riverbanks, borders of swamps. Fruit eaten by many species of birds.
39	A	Cockspur Hawthorn, Hog- Apple, Newcastle Thorn	Crateagus crus-galli	Deciduous	M,P,C	Tolerant	20'	FS	Moist	T,S -1-3'	Some	30' -1'	Small, spiny, thicket forming with short stout trunk & broad dense crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, prefers moist soil: streambanks, pastures, woodlines, thickets, etc. Fruit eaten by many species of birds.
40	A	Yellow Hawthorn, October Haw, Summer Haw	Crateagus flava	Deciduous	P,C	Tolerant	20'	FS	Moist, Dry	T,S, 1-3'	Low	20' -8"	Small, short stout trunk & broad dense crown.	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, prefers dry soil: sandy or rocky woodlands and thickets. Spiny, thicket forming.
41	A	Pear Hawthorn	Crateagus calpodendron	Deciduous	M,P	Tolerant	20'	FS	Moist	T,S -1-3'	Some	20' -6"	Small, spiny, thicket forming with short stout trunk & broad dense crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, prefers moist soil of valleys, especially rocky streambanks and uplands. Fruit eaten by many species of birds.
42	A	Fanleaf Hawthorn	Crateagus flabellata	Deciduous	M,P	Tolerant	20'	FS	Moist, Dry	T,S, 1-3'	Low	20' -6"	Small, spiny, thicket forming with short stout trunk & broad dense crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, prefers moist soil: streambanks, borders of forests, pastures, fields, and thickets. Fruit eaten by many species of birds.
43	A	Biltmore Hawthorn	Crateagus intricata	Deciduous	M,P	Tolerant	20'	FS	Moist, Dry	T,S, 1-3'	Low	20' -6"	Small, spiny, thicket forming with short stout trunk & broad dense crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, prefers moist soil: streambanks, borders of forests, pastures, fields, and thickets. Fruit eaten by many species of birds.
44	A	Washington Hawthorn	Crateagus phaenopyrum	Deciduous	M,P	Tolerant	20'	FS	Moist	T,S, 1-3'	Low	30' -8"	Small, spiny, thicket forming with short stout trunk & broad dense crown		Strong root system, prefers moist soil: streambanks, borders of forests, pastures, fields, and thickets. Fruit eaten by many species of birds.

	Α	В	С	D	E	F	G	Н	ı	J	K	L	M	N	0
l i	RIPARIAN	Common Tree Name	-		Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form		Benefits- Growth Habits- Special Notes
1 2	ZONE							(FS)		·	Tolerance				·
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
45	A	Possumwood	Diospyros virginiana L.	Deciduous	M,P,C	Tolerant	30'	FS, P, Shade	Moist, Dry	Deep tap root	Some	1 to 2'	Cylindrical or rounded head	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Understory species, used for erosion control because of deep roots, found in floodplains, old fields, roadsides, almost anywhere, male & female plants, fruit drops in late fall, fruit edible by humans and highly desired by wildlife.
46	A	American Beech	Fagus grandifolia	Deciduous	M,P,C	Tolerant	30'	FS, P, Shade	Moist, Dry	T, S 1 to 6'	Low	70' -2 1/2'	Stout trunk, dense rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Understory species, shade tolerant, favorite food for many wildlife species.
47	A	White Ash, Biltmore Ash,	Fraxinus americana	Deciduous	M,P,C	No-Ozone	30'	FS, P, Shade	Moist, Dry	Dominant tap root	Low	80' -2'	Straight trunk, conical or rounded crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Understory and overstory species, shade tolerant when younger, sensitive to ozone pollution, ornamental due to leaf color in fall, wildlife food for many species.
,	A	Carolina Ash, Water Ash, Pop Ash	Fraxinus caroliniana	Deciduous	P,C	Tolerant	30'	FS, P, Shade	Wet, Moist	T, S 1-6'	High	30' to 50' - 1'	1 or more trunks, rounded or narrow crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings	Understory species, shade tolerant when younger, floodplain, lowland, swamp.
48														annear favorable)	
40	В	Green Ash, Swamp Ash, Water Ash, Red Ash	Fraxinus pennsylvanica	Deciduous	M,P,C	Tolerant	30'	FS, P	Wet, Moist	T, S 1-6'	High	60' -1 1/2'	Straight trunk, rounded or irregular crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Prefers streambanks or bottomlands, transplants easily.
49	В	Pumpkin Ash, Red Ash	Fraxinus tomentosa	Deciduous	M,P,C	Tolerant	30'	FS, P	Wet, Moist	T, S 1-6'	High	80' -2'	Buttressed base, irregular crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings	Prefers streambanks, floodplains, bottomlands, transplants easily.
50			a											appear favorable)	
51	U	Water Locust	Gleditsia aquatica	Deciduous	M,P,C	Tolerant	12'	FS, P	Wet, Moist	Strong Taproot, S1-15'	High	50' -2'	Spiny trunk, open, flattened crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Prefers wet areas: streambanks, floodplains, bottomlands, transplants easily.
52	В	Honey Locust, Sweet locust	Gleditsia triacanthos L.	Deciduous	M,P,C	Tolerant	12'	FS	Wet, Moist	Strong Taproot, S1-15'	Low Some	80' -2 1/2'	Spiny trunk, open, flattened crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable)	Legume; Prefers moist, well drained soils:streambanks, can grow well almost anwhere, used for erosion control, transplants easily. Pods/Seeds eaten by wildlife.
53	D	Loblolly Bay, Holly Bay, Gordonia, Bay	Gordonia lasianthus	Evergreen	P,C	Tolerant	15'	FS,P, Shade	Wet, Moist	S 1-6, Strong laterials	High	60' -1 1/2'	Compact crown, upright branches	Seeds, seedlings, containers 3 to 15 gal. (Softwood cuttings, stake is successful)	Prefers acidic, swampy soils, lowlands, stream borders, floodplains, can grow in water, strong root system, understory or topstory species. 3 to 4" white flowers.

П	A	В	С	D	Е	F	G	Н	l I	J	К	L	М	N	0
	RIPARIAN	Common Tree Name	-		Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				
	A - UPLAND BUFFER ZONE		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk Diameter			All species provide specific food and habitat for wildlife.
	B - UPPER			Deciduous	Coastal	Unknown	Min	Shade	Dry	Depth	Some	Diameter			nabitat for wilding.
54	A	Carolina Silverbell, Common Silverbell, Boxelder, Tisswood, Bellwood	Halesia tetraptera (H. carolina)	Deciduous	M,P		15'	P,Shade	Moist	Dominant tap root, S-2-4'	Low Some	80' -1 to 2'	Shrub or small tree with pyramidal crown	Seeds, seedlings, containers 3 to 15 gal. Softwood cuttings & layering.	Prefers moist soil, along streambanks, riverbottoms, understory species in hardwood forests. Spring flowers-white to pinkish, fruit in fall. Beautiful ornamental.
55	A	American Holly	llex opaca	Evergreen	M,P,C	Tolerant	15'	FS/Pt. Shade	Moist, Dry	Strong taproot, S1-10'	Low Some	40' to 70' - 1 to 2'	Narrow rounded dense crown, upright branches	Seeds, seedlings, containers 3 to 15 gal.	Moist or wet, well drained soils, floodplains, mixed hardwood forests. Bright red berries, high calorie, eaten by many species of birds.
56	A	Butternut, White Walnut, Oilnut	Juglans cinerea L.	Deciduous	M,P	Tolerant	20'	FS	Moist	Strong Taproot, S1-15'	Low	40' to 70' - 1 to 2'	Short straight trunk, broad open crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist, well drained soils: streambanks, can grow well almost anwhere. Nuts are a valuable source of food for wildlife.
57	В	Black Walnut, American Walnut, Eastern Black Walnut	Juglans nigra L.	Deciduous	M,P,C	Tolerant	30'	FS	Moist	Deep Tap Root- 10 to 20', Strong laterials	Low	70' to 90' - 2' to 4'	Open, rounded crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist, well drained soils, streambanks, bottomland if drained, up to sides of ridges, open fields, etc.; use 3 yr old for transplanting due to weed competition, other plants will not grow under.
58	A	Eastern Red Cedar, Red Juniper	Juniperus virginiana	Evergreen	M,P,C	Tolerant	30'	FS	Wet, Moist, Dry	Strong deep laterials	Low	40' to 60' - 1' to 2'	Narrow, compact, columnar crown	Seeds, seedlings, containers 3 to 15 gal.	Perfers moist, well drained soils, will grow almost anywhere. Songbirds eat fruit.
59	В	Sweetgum, Redgum, Sapgum, Starleaf Gum, Bilsted	Liquidambar styraciflua	Deciduous	M,P,C	Tolerant	30'	FS	Moist	Deep Tap Root- 10 to 20', Strong laterials	Low Some		Straight trunk, Conical Crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist soils:streambanks, floodplains, bottomlands, dry sites, can grow almost anywhere, transplants easily. No fruit in var. "roundiloba".
60	В	Yellow Poplar, Tulip Poplar, White Poplar, Whitewood	Liriodendron tulipifera L.	Deciduous	M,P,C	Tolerant	30'	FS	Moist	Deep Tap Root- 10 to 20', Strong laterials	High Some	80' to 120'- 2 to 3'	Straight trunk, narrow crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist soils: streambanks, well drained bottomlands, transplants easily, used for soil toxicity remediation. Spring flowers important source of necter for bees.
61	A	Osage Orange, Bodark, Hedge Apple, Bois d' arc	Maclura pomifera	Deciduous	M,P, C	Tolerant	30'	FS	Moist or Dry	Very Deep Tap Root, Strong laterials	Low Some	30' to 70' - 2'	Spiney tree, broad rounded or irregular crown	Seeds, seedlings, containers 3 to 15 gal. & root cuttings.	Prefers moist soils: streambanks, well drained bottomlands, transplants easily, used for windbreaks, soil reclamation, resistant to drought & cold. Pick locations wisely due to fruit falling
62	A	Cucumbertree, Cucumber Magnolia, Yellow Cucumber Tree, Mountain Magnolia	Magnolia acuminata	Deciduous	M,P		20'	FS,P	Moist	Deep rooted-10 to 20'	Some	2'	Straight trunk, narrow crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers moist soils: streambanks, well drained bottomlands, slopes, transplants easily.
63	A	Southern Magnolia, Evergreen Magnolia, Bull-Bay, Big Laurel	Magnolia grandiflora	Deciduous	M,P,C	Tolerant	30'	FS	Moist	Dominant deep tap, strong laterials	Some	60' to 80' - 2 to 3'	Straight trunk, conical crown	Seeds, seedlings, containers 3 to 15 gal. (Cuttings appear favorable).	Prefers moist soils: streambanks, well drained bottomlands, slopes, can grow well in dry areas also, transplants easily.

	Α	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
_	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown		Shade	Dry	Depth	Some		-		
64	A	Fraser Magnolia, Mountain Magnolia, Earleaf Cucumber Tree, Umbrella Tree, Mountain-Oread	Magnolia fraseri	Deciduous	M.P	Tolerant	20'	FS,Pt. Shade	Moist	Dominant tap, strong laterials	Low	1' to 2'	Open crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, some shade tolerance, large showy white flowers.
65	A	Umbrella Magnolia, Umbrella Tree	Magnolia tripetala	Deciduous	M.P	Tolerant	20'	FS,Pt. Shade	Moist	Dominant tap, strong laterials	Low	30' to 40' - 1'	Open crown	Seeds, seedlings, containers 3 to 15 gal.	Strong root system, some shade tolerance, very large showy white flowers.
66	D	Sweetbay, Swamp Bay, Swamp Magnolia, White Bay, Laurel, Swamp Laurel	Magnolia virginiana	Evergreen	P,C	Tolerant	15'	FS,Pt. Shade	Wet, moist	T, S 1-3' Laterial roots	High	20' to 60' - 1 1/2'	Narrow, rounded crown		Prefers acidic, swampy soils, lowlands, stream borders, floodplains, can survive poor to very poor drainage, strong root system.
67	A	Southern Crab Apple	Malus angustifolia	Deciduous	M,P,C	Tolerant	25'	FS	Dry, Moist	T, S1-2' Laterial roots	Low	30' -10"	Wide, rounded crowns	ŭ	Prefers low woodland borders, fencerows, old fields. Ornamental due to fragrant spring flowers-white to pink. Many hybrids- for wildlife & birds choose small fruited varieties.
68	A	Sweet Crab Apple	Malus coronaria	Deciduous	M,P	Tolerant	25'	FS	Dry, Moist	T, S 1-2' Laterial roots/roots sprout easily	Low	30' -10"	Wide, rounded crowns		Prefers low woodland borders, fencerows, old fields. Ornamental due to fragrant spring flowers-white to pink. Many hybrids- for wildlife & birds choose small fruited varieties.
69	A	Red Mulberry, Moral	Morus rubra	Deciduous	M,P,C	Tolerant	20"	FS,P	Moist	T, S 1-6'	Low Some	60' -2'	Short trunk, broad rounded head		Prefers streambank, understory & topstory species. Can be found in dry areas. Fruit eaten by many species of birds.
70	D	Water Tupelo, Swamp tupelo, Sourgum, Cottongum	Nyssa aquatica	Deciduous	P,C	Tolerant	30'	FS,P	Wet	S 1-6, Strong laterials	High	100' -3'	Straight trunk, buttressed base, narrow open crown	Seeds, seedlings, stump suckering	Prefers wet, saturated soil, swamps, floodplains, close to water where can be submerged a few months per yr.
71	D		Nyssa sylvatica Marsh. Var. sylvatica	Deciduous	M,P,C	Tolerant	30'	FS	Wet, moist	Dominant tap,S 1- 6, Strong laterials		2 to 3'	Straight trunk, conical or flat topped crown	Seeds, seedlings, layering or stump suckering	Prefers light textured soils of uplands and stream bottoms.
72	D	Swamp Black Gum, Swamp Tupelo	Nyssa sylvatica var. biflora	Deciduous	P,C		30'	FS	Wet, moist	Dominant tap, S 1 6, Strong laterials	J	2 to 3'	Straight trunk, conical or flat topped crown	Seeds, seedlings, layering or stump suckering	Prefers heavy organic or clay soils of wet bottom lands.
73	A	Sourwood, Sorrel Tree, Lily of the Valley Tree	Oxydendrum arboreum	Deciduous	M,P,C	Tolerant	20'	P, Shade	Moist	Dominant tap, S 1 6, Strong laterials	Some	50' -1'	Conical or rounded crown		Ornamental; Prefers moist soils in valleys and uplands, streambanks, understory species. Important source of necter for bees.
74	Α	Wild Olive, Devilwood	Osmanthus americana	Evergreen	P,C	Tolerant	20'	SF,P,Shade	Moist	Dominant tap, S 1 6'	-Some	30' -1'	Narrow oblong crown	Seeds, seedlings, containers 3 to 15 gal.	Prefers miost soils in valleys & streambanks to sandy uplands, understory species.

	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0
l i	RIPARIAN	Common Tree Name			Mountain.	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1 2	ZONE				,			(FS)			Tolerance				
_	4 - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing		Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE							` '				Diameter			habitat for wildlife.
3	3 - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
\Box	A	Eastern Hophornbeam,	Ostrya virginiana	Deciduous	M,P	Unknown	15'	FS,P,	Moist	T, S 1-6'	Some	20' to 50' -	Rounded crown		Prefers moist soil, streambanks, understory
		Hornbeam, Leverwood,						Shade				1'		containers 3 to 15	of upland hardwood forest. Nutlet beneficial
75		Ironwood											_	gal.	to wildlife.
)	Red Bay, Shorebay	Persea borbonia	Evergreen	P,C	Tolerant	15'	FS,P, Shade	Wet, Moist	T, S 1-6'	High	60' -2'	Dense crown		Prefers wet soil, standing water, borders streams, bottomlands, floodplains, swamps.
								Snade						gal.	streams, bottomiands, floodplains, swamps.
76 E	.	Shortleaf Pine. Yellow Slash	Pinus echinata	Evergreen	M,P,C	Tolerant	40'	FS	Dry	Dominant tap	Low	60' to 100'	Narrow, pyramidal	Seeds, seedlings,	Prefers uplands, old fields; acidic ph
l l'	5	Pine, Swamp Pine	Pinus echinata	Evergreen	IVI,P,C	Tolerani	40	го	Diy	Dominant tap	Low	2' to 2 1/2'	7.1.7	containers 3 to 15	preferred; dominent tap root.
77		ine, owamp i me										2 10 2 1/2	Clowii	gal.	preferred, dominient tap root.
Н,	A	Longleaf Pine, Yellow Pine,	Pinus palustris	Evergreen	P,C	Tolerant	40'	FS	Moist, Dry	Dominant tap,	Low	80' to 100'	Open irregular	9	Prefers well drained sandy soils of flatlands
		Longstraw, Swamp Pine,			, -				, ,	extensive laterial		2' to 2 1/2'	crown	containers 3 to 15	and sandhills.
		Georgia Pine, Heart Pine,								roots				gal.	
78		Pitch Pine													
E	3	Pond Pine	Pinus serotina	Evergreen	P,C	Tolerant	40'	FS	Wet, Moist	Dominant tap &	High		Open round topped	, , ,	Prefers wet soil, wet, flat woods and bogs,
										laterials		2' to 2 1/2'	crown	containers 3 to 15	standing water, borders streams,
70														gal.	bottomlands, floodplains, swamps.
1,3	A	White Pine, Eastern White	Pinus strobus	Evergreen	M,P	Tolerant	40'	FS	Drv. Moist	Dominant laterials	Low	100' to	Crown of horizontal	Seeds, seedlings,	Prefers well drained soils of any kind.
		Pine, Northern White Pine			,							150' -3' to			Susceptable to drought stress. Grows better
												4'		gal.	in mountains, can grow in upper peidmont.
80															
	•	Loblolly Pine, Old Field Pine,	Pinus taeda	Evergreen	P,C	Tolerant	40'	FS,P	Dry, Moist	Tap, dominant	Low		Rounded crown or	Seeds, seedlings,	Will grow from deep, poorly drained
		North Carolina Pine								laterials		2' to 3'	spreading branches	containers 3 to 15	floodplains to well drained slopes of rolling
81	•	Visiting Disast Language	D'	=	MD	T.1	051	F0	Day Maint	D	Laure	0011-001	0	gal.	uplands. 80 yr. Lifespan.
Ιľ	4	Virginia Pine, Jersey Pine,	Pinus virginiana	Evergreen	M,P	Tolerant	25'	FS	Dry, Moist	Dominant laterals	Low		Open broad	Seeds, seedlings,	Prefers clay, loam and sandy loam on well
اما		Spruce Pine										1 to 1 1/2	irregular crown	containers 3 to 15 gal.	drained sites. Prone to wind throw.
62 F	3	Sycamore, American	Platanus occidentalis	Deciduous	M,P,C	Tolerant	30'	FS	Moist, Dry	Strong Taproot,	High	60' to 100'	Enlarged base,	Seeds, seedlings,	Prefers streambanks, floodplains,
l ľ	•	Sycamore, American	i latarias occidentalis	Decidadas	IVI,I ,O	Tolorant	00	. 0	Wolst, Dry	S1-15'	i ligii	2' to 4'	straight trunk, broad		bottomlands, can grow in dryer areas,
		Planetree												gal. (Cuttings are	transplants easily, can grow 6-8' per year,
															quick shade tree. Pick location wisely due to
														,	fruit dropping. Streambank reforestation
83	•	A	D	D	M D	T.1	4.01	F0	NA-1-1	0.4.0		001 41	This is to contain	0 1 11'	recommended
ľ	4	American Plum, Red Plum, River Plum	Prunus americana	Deciduous	M,P	Tolerant	10'	FS	Moist	S 1-6'	Low	30' -1'	Thicket forming shrub or small tree,	Seed, seedlings, containers, 1 to 10	Grown for erosion control, moist soils of valleys, low upland slopes, fast grower. Fruit
		Kivei Pluiii											spreading branches		leaten by mammals and birds.
84													Spreading Drancies	gai.	caton by mammais and bilds.
 	A	Chickasaw Plum, Sand Plum	Prunus angustifolia	Deciduous	M,P,C	Tolerant	5'	FS	Moist, Dry	S 1-6'	Low	5' to 15' -	Thicket forming	Seed, seedlings,	Grown for erosion control, moist soils of
		·	Ĭ										shrub or small tree,	containers, 1 to 10	abondoned places, fast grower. Fruit eaten
													spreading branches	gal.	by mammals and birds.
85															

	А	В	С	D	Е	F	G	Н	1	J	K	L	M	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
	В	Carolina Laurelcherry, Cherry	Prunus caroliniana	Deciduous	P,C	Tolerant	20'	FS	Moist	S 1-6'	Low	40' -10"	Thicket forming	Seed, seedlings,	Grown for erosion control, moist soils of
		Laurel, Carolina Cherry											shrub or small tree,	containers, 1 to 10	valleys & lowlands, forests and borders, fast
													spreading branches	gal.	grower, often forms dense thickets. Fruit
86															eaten by many species of birds.
	A	Pin Cherry, Bird Cherry, Fire	Prunus pensylvanica	Deciduous	M	Tolerant	15'	FS	Moist, Dry	S 1-6, Good	Low	30' -1'	Narrow, open	Seeds, seedlings,	Moist soil, opened areas, after fires, used as
		Cherry								laterials	Some		rounded crown	container 1 to 15	nurse tree providing shade for second
														gal. (Cuttings are	generation hardwoods, fast grower. Fruit
														successful)	eaten by many species of birds.
87	•	DI I OI DI OI		n		-	001			0.4.0.0	4.	501 4 4 (0)		0 1 11:	
	А	Black Cherry, Rum Cherry,	Prunus serotina	Deciduous	M,P,C	Tolerant	20'	FS	Moist, Dry	S 1-6, Good	Low	50' -1 1/2'	Narrow, open	Seeds, seedlings,	Moist soil, opened areas, fast grower;
00		Mountain Black Cherry								laterials			rounded crown	container 3 to 15	susceptable to black knot disease. Fruit
00	R	Eastern Cottonwood, Carolina	Populus deltoides	Deciduous	P.C	Tolerant	30'	FS	Wet, moist	T. S 1-6'	Some	100' -3 to	Massive trunk, open	Seeds, seedlings,	eaten by many species of birds. Prefers streambanks, floodplains,
	Ь	Poplar, Southern Cottonwood	opulus delitoides	Deciduous	,,,	Tolerant	30	0	Wet, moist	1, 5 1-0	Some	// -3 to	spreading crown	containers 3 to 15	bottomlands, transplants easily, good shade
		opiai, council contonwood										ľ	Spreading crown	gal. (Cuttings are	tree, grows very fast.
89														successful)	aroo, growe very race.
	С	Swamp Cottonwood, Black	Populus heterophylla	Deciduous	P,C	Tolerant	30'	FS	Wet, moist	T, S 1-6'	High	80' -2'	Straight trunk,	Seeds, seedlings,	Prefers streambanks, floodplains,
		Cottonwood											narrow rounded	containers 3 to 15	bottomlands, transplants easily, grows very
													crown	gal. (Cuttings are	fast, grows where too wet for Eastern
90												1		successful)	Cottonwood.
	A	White Oak	Quercus alba	Deciduous	M,P,C	Tolerant	50'	FS,P	Moist, Dry	S 2-5'	Low	80' to100'	Broad head, thick	Seedlings,	Slow growing, may have crown spread of
												-3 to 4'	trunk	container (3-15 gal)	150', transplants easily. Acorns eaten by
														or Dipple acorns	many species of wildlife.
91	D	Common Mileita Cali	Ourana bisalan	Danidorom	Ь	Talamant	30'	FS.P	Wet or Moist	T.S 2-5'	I I ala	60'-70'	\/	over area	Desfera la clarada flandala la companya
	В	Swamp White Oak	Quercus bicolor	Deciduous	l P	Tolerant	30	F3,P	Wet of Moist	1,5 2-5	High	60-70	Vase, narrow open rounded crown	Seedlings, container (3-15 gal)	Prefers lowlands, floodplains, swamps, mixed forests subject to periodic inundated.
													rounded crown	or Dipple acorns	Acorns eaten by many species of wildlife.
92														over area	Acoms eaten by many species of wildlife.
32	A	Scarlet Oak, Black Oak, Red	Quercus coccinea	Deciduous	M, P	Tolerant	30'	FS	Moist, Dry	Dominant Tap	Low	60' to 80' -	Rounded open	Seedlings,	Slow growing, transplants easily, brilliant red
		Oak, Spanish Oak			,				,,	Root		1 to 2 1/2'		container (3-15 gal)	color in fall. Acorns eaten by many species
														or Dipple acorns	of wildlife.
93														over area	
	A	Southern Red Oak, Spanish	Quercus falcata var.	Deciduous	M,P,C	Tolerant	40'	FS	Moist, Dry	T,S 2-5'	Low	50' to 80' -	Rounded open	Seedlings,	Slow growing, transplants easily, dry, sandy
		Oak, Water Oak, Red Oak	falcata		, , , -				, ,			1 to 2 1/2'		container (3-15 gal)	& clay soils of uplands, in mixed forests.
														or Dipple acorns	Acorns eaten by many species of wildlife.
94														over area	, , ,
	Α	Cherrybark Oak, Swamp Red	Quercus falcata var.	Deciduous	P,C	Tolerant	40'	FS	Moist	T, S 1-6'	Low	100' to	Rounded open	Seedlings,	Slow growing, transplants easily, moist soil,
		Oak, Bottomland Red Oak,	pagodaefolia									130' -36 to	crown	container (3-15 gal)	next to streambanks, well drained terraces,
		Elliott Oak, Red Oak, Swamp										60"		or Dipple acorns	ph acid to med. acid. Acorns eaten by many
95		Spanish Oak												over area	species of wildlife.
	Α	Turkey Oak, Catesby Oak,	Quercus laevis	Deciduous	P,C	Tolerant	30'	FS	Moist, Dry	Dominant Tap	Low	20' to 40' -	Irregular open	Seedlings,	Slow growing, transplants easily, dry, sandy
		Scrub Oak								Root		1'	crown of crooked	container (3-15 gal)	ridges. Acorns eaten by many species of
													branches	or Dipple acorns	wildlife.
96												1		over area	

Mecklenburg County Solid Waste Mgt. 700 N. Tryon St. Charlotte, NC 28202

	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				-
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
2	BUFFER ZONE											Diameter			habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
97	A	Laurel Oak, Darlington Oak, Diamond Leaf Oak, Swamp Laurel Oak, Obtusa Oak	Quercus laurifolia	Evergreen	P,C	Tolerant	40'	FS	Wet, Moist	Dominant Tap Root	Low Some	60' to 80' - 1 to 2 1/1'	Dense, broad, rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing, transplants easily, moist to wet well drained soil, along streambanks, rivers and swamps. Acorns eaten by many species of wildlife.
98	A	Overcup Oak, Swamp Post Oak, Swamp White Oak, Water White Oak	Quercus lyrata	Deciduous	P,C	Tolerant	40'	FS	Wet, Moist	T, S 1-6'	High	60' to 80' - 2 to 3'	Rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing , transplants easily, moist to wet clay, silty clay soil, along streambanks, rivers and swamps. Acorns eaten by many species of wildlife.
99	A	Black Jack Oak, Blackjack, Jack Oak	Quercus marilandica	Deciduous	M,P,C		40'	FS	Dry	Dominant Tap Root	Low	1'	open, irregular crown	or Dipple acorns	Slow growing, transplants easily, dry, sandy & clay soils of uplands, in mixed forests. Acorns eaten by many species of wildlife.
100	В	Swamp Chestnut Oak, Basket Oak, Cow Oak	Quercus michauxii	Deciduous	P,C	Tolerant	40'	FS	Moist	T, S 1-6'	Some	60' to 80' - 2 to 3'	Compact, rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Slow growing, transplants easily, moist soil, next to streambanks, ph acid to med. acid. Acorns eaten by many species of wildlife.
101	A	Chinkapin Oak, Yellow Chestnut Oak, Rock Oak, Yellow Oak	Quercus muehlenbergii	Deciduous	M,P	Tolerant	40'	FS	Moist, Dry	T,S 2-5'	Low	50' to 80' - 2 to 3'	Narrow rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Slow growing, transplants easily, dry, sandy & clay soils of uplands and rocky riverbanks, in mixed forests. Acorns eaten by many species of wildlife.
102	В	Pin Oak, Swamp Oak, Water Oak, Swamp Spanish Oak	Quercus palustris	Deciduous	Р	Tolerant	40'	FS	Wet, Moist	T, S 1-6'	Some	50' to 90' - 1 to 2 1/2'	Broadly conical crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing, transplants easily, moist soil, next to streambanks, poorly drained clay soils, ph acid to med. acid. Acorns eaten by many species of wildlife.
103	В	Willow Oak, Swamp Chestnut Oak, Peach Oak, Pin Oak	Quercus phellos	Deciduous	P,C	Tolerant	40'	FS	Wet, Moist	T, S 1-6'	High	50' to 90' - 1 to 2 1/2'	Conical or rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing, transplants easily, moist soil, next to streambanks, floodplains or bottomlands of streams, poorly drained clay soils, ph acid to med. acid. Commonly occur in upland now, due to lack of fire. Acorns eaten by many species of wildlife.
103	В	Water Oak, Spotted Oak, Possum Oak	Quercus nigra	Deciduous	P, C	Tolerant	40'	FS	Wet, Moist	S 1-6'	Some	50' to 100' 1 to 2 1/2'	Conical or rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Slow growing, transplants easily, moist soil, next to streambanks, floodplains, bottomlands of streams and borders of swamp, ph acid to med. acid. Commonly occur in upland now, due to lack of fire. Acorns eaten by many species of wildlife.
105	A	Chestnut Oak, Rock Oak, Tanbark Oak, Rock Chestnut Oak	Quercus prinus (Q. montana)	Deciduous	M,P	Tolerant	40'	FS	Moist, Dry	T, S 1-6'	Low	60' to 80' - 2 to 3'	Broad, open irregular crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Slow growing, transplants easily, moist soil on well drained bottomlands to dry uplands soils. Acorns eaten by many species of wildlife.

	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0
	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
1	ZONE							(FS)			Tolerance				
	A - UPLAND BUFFER ZONE		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk Diameter			All species provide specific food and habitat for wildlife.
3	B - UPPER			Deciduous	Coastal	Unknown	Min.	Shade	Dry	Depth	Some				
106	Α	Northern Red Oak, Common Red Oak, Eastern Red Oak, Gray Oak, Mountain Red Oak	Quercus rubra	Deciduous	M,P	Tolerant	40'	FS	Moist	T, S 1-6'	Low	60' to 90' - 1 to 2 1/2'	Rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing, shade & street tree, transplants easily, moist clay or rocky soils. Acorns eaten by many species of wildlife.
107	А	Shumard Oak, Spotted Oak, Schneck Oak, Swamp Red Oak, Southern Red Oak	Quercus shumardii	Deciduous	P,C	Tolerant	40'	FS	Wet, Moist	T, S 1-6'	Some		Broad, rounded, open crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing, transplants easily, moist well drained soils including floodplains along streams. Acorns eaten by many species of wildlife.
108	В	Post Oak, Iron Oak, Sand Post Oak	Quercus stellata	Deciduous	M,P,C	Tolerant	30'	FS	Moist, Dry	Dominant Tap Root, S-1-6'	Low	30' to 70' - 1' to 2'	Dense Rounded crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Fast growing , transplants easily, moist well drained soil, along streambanks, rivers and swamps and on ridges in dry conditions. Acorns eaten by many species of wildlife.
109	А	Black Oak, Yellow Oak, Quercitron, Smoothbark Oak, Yellowbark Oak	Quercus velutina	Deciduous	M,P,C	Tolerant	40'	FS	Moist, Dry	T, S 1-6'	Low	50' to 80' - 1 to 2 1/2'	Open Spreading Crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Slow growing, transplants easily, dry, sandy & clay soils of uplands and rocky riverbanks, in mixed forests. Acorns eaten by many species of wildlife.
110	Α	Live Oak, Virginia Live Oak	Quercus virginiana	Evergreen	P,C	Tolerant	50'	FS	Moist, Dry	T, S 1-6'	Low Some	40' to 50' - 2 to4'	Very broad, spreading , dense crown	Seedlings, container (3-15 gal) or Dipple acorns over area	Evergreen, large spreading branches, mostly coastal; dry, sandy woods, moist rich woods, & wet woods. Acorns eaten by many species of wildlife.
111	A	Black Locust, Yellow Locust	Robinia pseudo- acacia	Deciduous	M,P	Tolerant	30'	FS	Moist, Dry	Dominant Tap Root, S 1-6'	Low	40' to 80' - 1 to 2'	Open crown, spiney tree	Seeds, seedlings, containers (3-15 gal)	Legume; Fast growing, used in erosion control, deep rooting habit, moist to dry soils, streambanks & uplands.
112	А	Shining Sumac, Winged Sumac, Dwarf Sumac	Rhus copallina	Deciduous	M,P,C	Tolerant	5'	FS	Moist, Dry	Dominant Tap Root	Low	25' -6"	Open flattened crown of a few stout, spreading branches	Seeds, seedlings, containers	Fast growing, erosion control, almost any soil. Berries eaten by many birds.
113	А	Smooth Sumac, Scarlet Sumac, Common Sumac	Rhus glabra	Deciduous	M,P,C	Tolerant	5'	FS	Moist, Dry	Dominant Tap Root	Low	20' -4"	Open flattened crown of a few stout, spreading branches	Seeds, seedlings, containers	Fast growing, erosion control, almost any soil. Berries eaten by many birds.
114	А	Staghorn Sumac, Velvet Sumac	Rhus hirta (Rhus typhina)	Deciduous	M,P	Tolerant	5"	FS	Moist, Dry	Dominant Tap Root	Low	30' -8"	Open flattened crown of a few stout, spreading branches	Seeds, seedlings, containers	Fast growing, erosion control, almost any soil. Berries eaten by many birds.
115	С	Coastal Plain Willow, Swamp Willow, Southern Willow, Ward Willow	Salix caroliniana	Deciduous	P,C	Tolerant	10'	FS	Wet, Moist	S 1-2' Dense	High	30' -1'	Spreading or drooping branches	Seeds, seedlings, containers (Cuttings are successful)	Fast growing, wet, moist soil, streambank, lowlands, bottomland; used for erosion
	С	Black Willow, Swamp Willow, Godding Willow, Dudley Willow	Salix nigra	Deciduous	M,P,C	Tolerant	30'	FS	Wet, Moist	S 1-2' Dense	High		Spreading or drooping branches	Seeds, seedlings, containers (Cuttings are successful)	Fast growing, wet, moist soil, streambank, lowlands, bottomland; used for erosion control.

	Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0
П	RIPARIAN	Common Tree Name			Mountain,	Stress	Rate or	Full Sun,	Soil Moisture:	Root-Tap	Flooding	Height	Form	Seed production	Benefits- Growth Habits- Special Notes
	ZONE							(FS)			Tolerance				
	A - UPLAND		Botanical Name	Evergreen	Piedmont,	Tolerant	Spacing	Partial (P)	Wet, Moist,	Surface	Low	Trunk			All species provide specific food and
	BUFFER ZONE											Diameter			habitat for wildlife.
	B - UPPER			Deciduous	Coastal	Unknown		Shade	Dry	Depth	Some				
	A	Sassafras, White Sassafras	Sassafras albidum	Deciduous	M,P,C	Tolerant	20'	FS	Moist, Dry	S 1-3' Strong	Low		Narrow spreading	Seeds, seedlings,	Fast growing, streambank, old fields,
										laterials		1 1/2'	crown or thicket	container- Root	transplants easily.
117	Λ	Diaddamant Amarican	Ctambulas trifalis	Danishnanna	D	I lales acces	4.01	EC D	Maiat	T C 4 C	1	001 411	forming schrub	suckers	Hadantan anasiaa af bandura difanata
		Bladdernut, American Bladdernut	Staphylea trifolia	Deciduous	P	Unknown	10	FS,P, Shade	Moist	T, S 1-6'	Low	20' -4"	Shrub or small tree	Seeds, seedlings, containers	Understory species of hardwood forests.
118	۸	Sweetleaf, Horse Sugar,	Symplocos tinctoria	Deciduous	M.P.C	Tolerant	10'	FS,P,	Moist	T. S 1-6'	Low	35' -6"	Shrub or small tree	Seeds, seedlings,	Understory species of hardwood forests.
	Α	Yellowwood	Sympiocos linciona	Deciduous	IVI,F,C	TOIETAITI	10	Shade	MOIST	1, 3 1-0	Some	33 -0	Siliub di Siliali liee	containers	Sandy thickets, upland or alluval woods,
		T Chowwood						Oriado			Come			containers	stream margins. Flowers-yellow fragrant.
119															Ornamental value.
	D	Bald Cypress, Cypress,	Taxodium distichum	Deciduous	P,C	Tolerant	30'	FS	Wet or Moist	Major root system	High	100' to	Crown has widely	Seeds, seedlings,	Slow growing, water tolerant tree-growing in
		Swamp Cypress								for water		120' -3 to	spreading branches	container 3 to 15	slow moving or poorly drained areas,
												6'	flattened at top	gal.	swamps, lowlands, etc.
120			·				401	F0 D				0011 1001	D 0	0 1 111	
		Basswood, American Linden, Bee Tree	Tilia americana var. heterophylla	Deciduous	M,P	Tolerant	40'	FS,P	Moist	Major tap root, S 1-6	Low Some	2 to 3'	Dense Crown	Seeds, seedlings, containers 3 to 15	Fast growing, streambank, moist soils of valleys and uplands.
121		bee free	neteropriyila							1-0	Some	2103		gal.	valleys and uplands.
121	A	Eastern Hemlock, Hemlock	Tsuga canadensis	Evergreen	M.P	Tolerant	20'	FS.P.	Moist	Major tap root, S	Low	60' to 70' -	Conical Crown	Seeds, seedlings,	Slow growing, long lived, understory or
		Spuce,	. ouga canadonois		,.	. 0.0.0		Shade		1-6		2 to 3'	Comoa Cromi	containers 3 to 15	topstory species, moist soil needed.
122														gal.	, , , , , , , , , , , , , , , , , , , ,
122	A	Carolina Hemlock	Tsuga caroliniana	Evergreen	M.P	Tolerant	20'	FS.P	Moist, Dry	Major tap root, S	Low	40' to 60' -	Conical Crown	Seeds, seedlings,	Slow growing, long lived, topstory species,
			l caga caramana		,,.			,.		1-6		2'		containers 3 to 15	dry slopes, rocky ridges, mixed forests.
123														gal.	
	A	Winged Elm, Cork Elm,	Ulmus alata	Deciduous	M,P,C	Tolerant	30'	FS,P	Moist, Dry	T, S 1-6'	Low	40' to 80' -	Open Rounded	Seeds, seedlings,	Fast growing in open, dry uplands or moist
		Wahoo										1 to 2'	Crown	containers 3 to 15	valleys in hardwood forest.
124														gal.	·
	A	American Elm, White Elm,	Ulmus americana	Deciduous	M,P,C	Tolerant	30'	FS,P	Moist, Dry	T, S 1-6'	Low		Broad, rounded,	Seeds, seedlings,	Prone to Dutch Elm Disease, moist soils,
		Water Elm, Soft Elm, Florida									Some		flattopped or vase	containers 3 to 15	valleys and floodplains, in mixed
125		Elm		<u> </u>									crown	gal.	hardwoods.
		Slippery Elm, Red Elm, Soft	Ulmus rubra	Deciduous	M,P,C	Tolerant	30'	FS,P	Moist, Dry	T, S 1-6'	Low		Broad open flat	Seeds, seedlings,	Fast growing, moist soils on lower slopes,
1		Elm, Gray Elm									Some		topped crown	containers 3 to 15 gal.	floodplains but can grow on dry uplands.
126					1							l		yaı.	