

Table D-2. Birds of Savannah River Site streams, reservoirs, wetlands, and adjacent forests.^a

Group	Common name	Species
Ducks and duck-like birds	Canada goose mallard black duck gadwall green-winged teal blue-winged teal American widgeon northern shoveler common merganser ring-necked duck lesser scaup bufflehead ruddy duck hooded merganser pied-billed grebe wood duck purple gallinule common gallinule sora American coot	<i>Branta canadensis</i> <i>Anas platyrhynchos</i> <i>Anas rubripes</i> <i>Anas strepera</i> <i>Anas crecca</i> <i>Anas discors</i> <i>Anas americana</i> <i>Anas clypeata</i> <i>Mergus merganser</i> <i>Aythya collaris</i> <i>Aythya affinis</i> <i>Bucephala albeola</i> <i>Oxyura jamaicensis</i> <i>Lophodytes cucullatus</i> <i>Podilymbus podiceps</i> <i>Aix sponsa</i> <i>Porphyrrula martinica</i> <i>Gallinula chloropus</i> <i>Porzana carolina</i> <i>Fulica americana</i>
Seabirds/gulls	black tern	<i>Chlidonias niger</i>
Wading birds	black-crowned night heron great blue heron little blue heron tricolored heron green heron white ibis great egret snowy egret killdeer long-billed dowitcher northern phalarope American anhinga least bittern American bittern wood stork	<i>Nycticorax nycticorax</i> <i>Ardea herodias</i> <i>Egretta caerulea</i> <i>Egretta tricolor</i> <i>Butorides striatus</i> <i>Eudocimus albus</i> <i>Casmerodius albus</i> <i>Egretta thula</i> <i>Charadrius vociferus</i> <i>Limnodromus scolopaceus</i> <i>Lobipes lobatus</i> <i>Anhinga anhinga</i> <i>Ixobrychus exilis</i> <i>Botaurus lentiginosus</i> <i>Mycteria americana</i>
Fowl-like birds	wild turkey bobwhite quail American woodcock	<i>Meleagris gallopavo</i> <i>Colinus virginianus</i> <i>Philohela minor</i>
Pigeons and doves	mourning dove rock dove	<i>Zenaida macroura</i> <i>Columba livia</i>
Birds of prey	black vulture turkey vulture great horned owl common nighthawk red-tailed hawk red-shouldered hawk bald eagle	<i>Coragyps atratus</i> <i>Cathartes aura</i> <i>Bubo virginianus</i> <i>Chordeiles minor</i> <i>Buteo jamaicensis</i> <i>Buteo lineatus</i> <i>Haliaeetus leucocephalus</i>

Table D-2. (continued).

Group	Common name	Species
Birds of prey (continued)	osprey sharp-shinned hawk broad-winged hawk Cooper's hawk marsh hawk American kestrel barred owl screech owl	<i>Pandion haliaetus</i> <i>Accipiter striatus</i> <i>Buteo platypterus</i> <i>Accipiter cooperii</i> <i>Circus cyaneus</i> <i>Falco sparverius</i> <i>Strix varia</i> <i>Otus asio</i>
Non-passerine land birds	Chuck-will's widow ruby-throated hummingbird belted kingfisher red-bellied woodpecker hairy woodpecker red-headed woodpecker downy woodpecker pileated woodpecker red-cockaded woodpecker yellow-shafted flicker yellow-bellied sapsucker yellow-billed cuckoo	<i>Caprimulgus carolinensis</i> <i>Archilochus colubris</i> <i>Megaceryle alcyon</i> <i>Melanerpes carolinus</i> <i>Picoides villosus</i> <i>Melanerpes erythrocephalus</i> <i>Picoides pubescens</i> <i>Dryocopus pileatus</i> <i>Picoides borealis</i> <i>Colaptes auratus</i> <i>Sphyrapicus varius</i> <i>Coccyzus americanus</i>
Passerines (perching birds)	eastern kingbird great crested flycatcher Acadian flycatcher eastern phoebe eastern peewee water pipit house wren Carolina wren long-billed marsh wren winter wren golden-crowned kinglet ruby-crowned kinglet blue-gray gnatcatcher chimney swift bank swallow barn swallow fish crow American crow blue jay Carolina chickadee tufted titmouse white-breasted nuthatch brown-headed nuthatch mockingbird gray catbird brown thrasher American robin wood thrush hermit thrush	<i>Tyrannus tyrannus</i> <i>Myiarchus crinitus</i> <i>Empidonax virescens</i> <i>Sayornis phoebe</i> <i>Contopus virens</i> <i>Anthus spinosus</i> <i>Troglodyte aedon</i> <i>Thryothorus ludovicianus</i> <i>Cistothorus palustris</i> <i>Troglodytes troglodytes</i> <i>Regulus satrapa</i> <i>Regulus calendula</i> <i>Polioptila caerulea</i> <i>Chaetura pelasgica</i> <i>Riparia riparia</i> <i>Hirundo rustica</i> <i>Corvus ossifragus</i> <i>Corvus brachyrhynchos</i> <i>Cyanocitta cristata</i> <i>Parus carolinensis</i> <i>Parus bicolor</i> <i>Sitta carolinensis</i> <i>Sitta pusilla</i> <i>Mimus polyglottos</i> <i>Dumetella carolinensis</i> <i>Toxostoma rufum</i> <i>Turdus migratorius</i> <i>Hylocichla mustelina</i> <i>Catharus guttatus</i>

Table D-2. (continued).

Group	Common name	Species
Passerines (perching birds) (continued)		
	eastern bluebird	<i>Sialia sialis</i>
	orchard oriole	<i>Icterus spurius</i>
	summer tanager	<i>Piranga rubra</i>
	solitary vireo	<i>Vireo solitarius</i>
	white-eyed vireo	<i>Vireo griseus</i>
	red-eyed vireo	<i>Vireo olivaceus</i>
	yellow-throated vireo	<i>Vireo flavifrons</i>
	prothonotary warbler	<i>Protonotaria citrea</i>
	yellow-throated warbler	<i>Dendroica dominica</i>
	northern parula warbler	<i>Parula americana</i>
	pine warbler	<i>Dendroica pinus</i>
	black-and-white warbler	<i>Mniotilla varia</i>
	yellow-rumped warbler	<i>Dendroica coronata</i>
	prairie warbler	<i>Dendroica discolor</i>
	Kentucky warbler	<i>Oporornis formosus</i>
	hooded warbler	<i>Wilsonia citrina</i>
	orange-crowned warbler	<i>Vermivora celata</i>
	northern waterthrush	<i>Seiurus novaboracensis</i>
	common yellowthroat	<i>Geothlypis trichas</i>
	yellow-breasted chat	<i>Icteria virens</i>
	eastern meadowlark	<i>Sturnella magna</i>
	common grackle	<i>Quiscalus quiscula</i>
	American redstart	<i>Setophaga ruticilla</i>
	ovenbird	<i>Seiurus aurocapillus</i>
	cardinal	<i>Cardinalis cardinalis</i>
	blue grosbeak	<i>Guiraca caerulea</i>
	indigo bunting	<i>Passerina cyanea</i>
	painted bunting	<i>Passerina ciris</i>
	rufous-sided towhee	<i>Pipilo erythrophthalmus</i>
	starling	<i>Sturnus vulgaris</i>
	red-winged blackbird	<i>Agelaius phoeniceus</i>
	brown-headed cowbird	<i>Molothrus ater</i>
	rusty blackbird	<i>Euphagus carolinus</i>
	LeConte's sparrow	<i>Ammospiza leconteii</i>
	field sparrow	<i>Spizella pusilla</i>
	chipping sparrow	<i>Spizella passerina</i>
	Savannah sparrow	<i>Passerculus sandwichensis</i>
Tropical introductions	yellowthroat	<i>Geothlypis rostrata</i>

a. Sources: Smith, Sharitz, and Gladden (1981); Bildstein et al. (1994); Scott, Patterson, and Giffin (1990).

Table D-3. Mammals of Savannah River Site stream corridors and wetlands.^a

Family	Group	Species	Common name
Didelphidae	New World Opossums	<i>Didelphis virginiana</i>	opossum
Soricidae	Shrews	<i>Blarina carolinensis</i> <i>Cryptotis parva</i> <i>Sorex longirostris</i>	short-tailed shrew least shrew southeastern shrew
Talpidae	Moles	<i>Condylura cristata</i> <i>Scalopus aquaticus</i>	star-nosed mole eastern mole
Cricetidae	New World Rats and Mice	<i>Oryzomys palustris</i> <i>Microtus pinetorum</i> <i>Ochrotomys nuttalli</i> <i>Peromyscus spp.^b</i> <i>Neotoma floridana</i> <i>Sigmodon hispidus</i> <i>Ondatra zibethicus</i>	marsh rice rat pine vole golden mouse white-footed deer mouse eastern wood rat hispid cotton rat muskrat
Sciuridae	Tree Squirrels	<i>Sciurus carolinensis</i> <i>Sciurus niger</i> <i>Glaucomys volans</i>	gray squirrel fox squirrel flying squirrel
Cervidae	Deer	<i>Odocoileus virginianus</i>	white-tailed deer
Suidae	Old World Swine	<i>Sus scrofa</i>	feral swine
Ursidae	Bears	<i>Ursus americana</i>	black bear
Procyonidae	Raccoons	<i>Procyon lotor</i>	raccoon
Canidae	Coyotes and Foxes	<i>Urocyon cinereoargenteus</i>	gray fox
Castoridae	Beaver	<i>Castor canadensis</i>	beaver
Mustelidae	Weasels and Skunks	<i>Lutra canadensis</i> <i>Mustela frenata</i> <i>Spilogale putorius</i> <i>Mustela vison</i> <i>Mephitis mephitis</i>	otter long-tailed weasel spotted skunk mink striped skunk
Leporidae	Rabbits	<i>Sylvilagus floridanus</i> <i>Sylvilagus palustris</i>	eastern cottontail marsh rabbit
Felidae	Bobcat	<i>Felix rufus</i>	bobcat
Vespertilionidae	Bats	<i>Lasiosycteris noctivagans</i> <i>Pipistrellus subflavus</i> <i>Lasiurus borealis</i> <i>L. intermedius</i> <i>L. seminolus</i> <i>Plocotus rafinesquii</i>	silver-haired bat eastern pipistrelle red bat northern yellow bat Seminole bat Rafinesque's big-eared bat

a. Sources: Smith, Sharitz, and Gladden (1982); Wike et al. (1994).

b. spp. = species (plural).

Table D-4. Wetland types of the Steel Creek Corridor.^a

Wetland types	Description
Aquatic bed - open water	The outfall canal of L-Reactor contains open water bordered by persistent herbaceous species and occasional shrubs.
Emergent - persistent	Although the dominant herbaceous species vary with water depth and location on the deltaic fan, scattered shrubs [buttonbush (<i>Cephalanthus occidentalis</i>) and black willow (<i>Salix nigra</i>)] are usually present. Cut grass (<i>Leersia</i> spp. ^b) is dominant with abundant redtop panicgrass (<i>Panicum agrostoides</i>) as ground cover except under dense woody vegetation and in the deeper stream channels. TE
Emergent - nonpersistent	These grasses are usually overtopped by knot grass (<i>Scirpus cyperinus</i> , approximately 2.5 meters tall) which is the aspect dominant on aerial photos as well as on the ground. There are also several, nearly monotypic, stands of cattail (<i>Typha latifolia</i>).
Scrub-shrub wetlands - broad-leaved deciduous (<i>Alnus serrulata</i>)	This mapping unit is dominated by <i>Polygonum lapathifolium</i> with a border of persistent herbs including cattail, burreed (<i>Sparganium americanum</i>), Canada rush (<i>Juncus canadensis</i>), and sugarcane beard grass (<i>Erianthus giganteus</i>).
Scrub-shrub wetlands - broad-leaved deciduous (<i>Cephalanthus occidentalis</i> - <i>Salix nigra</i>)	Alder (<i>Alnus serrulata</i>) is the dominant species in the corridor on Steel Creek C orridor with locally abundant wax myrtle (<i>Myrica Cerifera</i>) and willow (<i>Salix</i> sp. ^c). Beneath these shrubs, blackberry (<i>Rubus</i> spp.) is abundant over a diverse herbaceous flora of <i>Hypericum</i> spp., false nettle (<i>Boehmeria cylindrica</i>), goldenrod (<i>Solidago canadensis</i>), wapato (<i>Sagittaria latifolia</i>), jewelweed (<i>Impatiens capensis</i>), <i>Polygonum</i> spp., <i>Aneilema keisak</i> , cut grass, knot grass, and <i>Ludwigia virgata</i> . These herbs also covered open areas along stream channels within this vegetation type and are the dominant ground covers in some of the other woody mapping units. TE
Forested wetlands - broad-leaved deciduous (<i>Salix</i> sp.)	This mapping unit generally borders the stream channels and, throughout most of the length of Steel Creek, extends nearly across the width of the floodplain. Narrow strips of young hardwood trees bordering the upland are included in the boundary of this unit. The height of the shrubs decreases upstream from approximately 5 meters near the mouth of Steel Creek to 3 meters near the L-Reactor outfall. Density is also variable with nearly impenetrable thickets between transects 60 and 70 and between transects 20 and 40 but lower density between 40 and 60. TE
Scrub-shrub wetlands - broad-leaved deciduous (<i>Cephalanthus occidentalis</i> - <i>Salix nigra</i>)	A dense shrub canopy composed of buttonbush and black willow dominates this mapping unit near the mouth of Steel Creek. TE
Forested wetlands - broad-leaved deciduous (<i>Salix</i> sp.)	Willows exceeding 5 meters in height are dominant near the mouth of Steel Creek and in a few locations near bridges and power lines further upstream. Occasionally hardwood species [e.g., sweetgum (<i>Liquidambar styraciflua</i>), red maple (<i>Acer rubrum</i>)] join the willow in the canopy. Beneath the willow is a shrub layer of alder, wax myrtle, and blackberry with sparse herb cover which includes some of the plants listed in the alder-dominated scrub-shrub wetlands. TE

Table D-4. (continued).

Wetland types	Description
Forested wetlands - broad-leaved deciduous (<i>Alnus serrulata</i> - <i>Myrica cerifera</i>) TE	Wax myrtle and alder (up to 7 meters tall) are codominant, growing in dense stands on most of the floodplain between transects 70 and 100. Willow is also abundant. This shrub canopy is broken by occasional hardwood trees [sycamore (<i>Platanus occidentalis</i>), sweetgum, red maple] on some of the more stable sandbars. Beneath the alder-wax myrtle canopy is dense blackberry and a sparse covering of the herbs listed in the alder-dominated scrub-shrub wetland description. These herbs are also dominant in old stream beds which lack abundant woody vegetation.
Forested wetlands - broad-leaved deciduous (<i>Liquidamber styraciflua</i> - <i>Acer rubrum</i> - <i>Salix</i> sp.) TE	Tree species common on the upland adjacent to Steel Creek have become established on some of the more stable sandbars, at stream obstructions such as bridges and dikes, and along the Steel Creek upland border, especially upstream from L-Reactor. The most frequent canopy species include tulip tree (<i>Liriodendron tulipifera</i>), sycamore, red maple and sweetgum. Saplings of these trees, wax myrtle, alder, blackberry, and groundsel-tree (<i>Baccharis halimifolia</i>) are abundant in the understory. Although nearly half of the substrate surface is covered by leaf-litter, numerous herb and vine species grow beneath the trees. Chief among the herbs are: sensitive fern (<i>Onoclea sensibilis</i>), false nettle, <i>Hypericum</i> spp., sericea (<i>Lespedeza cuneata</i>), and goldenrod. The most frequent vines include pepper vine (<i>Ampelopsis arborea</i>), and honeysuckle (<i>Lonicera japonica</i>).
Forested wetlands - mixed deciduous (<i>Taxodium distichum</i> - <i>Nyssa sylvatica</i> var. <i>biflora</i>) TE	This vegetation type is dominated by cypress (<i>Taxodium distichum</i>) on some portions of Steel Creek corridor with some water gum (<i>Nyssa sylvatica</i> var. <i>biflora</i>). In the Savannah River swamp system, cypress and water typeo (<i>N. aquatica</i>) dominate this mapping unit.
a. Source: Smith, Sharitz, and Gladden (1981). b. spp. = species (plural). c. sp. = species (singular).	

Table D-5. Species and quantities planted at L-Lake by Southern Tier Consulting between January and August 1987.^a

Scientific name	Common name	Quantity planted
Submersed/floating-leaved zone		
<i>Brasenia schreberi</i>	Water shield	<1,000
<i>Eleocharis acicularis</i>	Spike rush	<2,000
<i>Najas gracillima</i>	Bushy pondweed	<100
<i>Nelumbo lutea</i>	American lotus	<1,000
<i>Nymphaea odorata</i>	White waterlily	>2,000
<i>Nymphoides aquatica</i>	Floating heart	<100
<i>Potamogeton pulcher</i>	Pondweed	<1,000
<i>Potamogeton vaseyi</i>	Pondweed	<100
<i>Vallisneria americana</i>	Water celery	>2,000
Emergent zone		
<i>Axonopus</i> sp. ^b	Carpet grass	10 lbs ^c
<i>Bacopa caroliniana</i>	Bacopa	>2,000
<i>Carex comosa</i>	Sedge	<2,000
<i>Carex glaucescens</i>	Sedge	<100
<i>Dulichium arundinaceum</i>	Three-way sedge	<100
<i>Echinochloa crusgalli</i>	Wild millet	25 lbs ^c
<i>Echinodorus cordifolius</i>	Burhead	<100
<i>Eleocharis equisetoides</i>	Spike rush	<2,000
<i>Eleocharis quadrangulata</i>	Spike rush	<2,000
<i>Erianthus giganteus</i>	Beard grass	<100
<i>Glyceria striata</i>	Manna grass	<100
<i>Hydrochloa caroliniensis</i>	Grass	<1,000
<i>Hydrocotyle umbellata</i>	Water pennywort	<100
<i>Juncus acuminatus</i>	Rush	<100
<i>Juncus brachycarpus</i>	Rush	<100
<i>Juncus effusus</i>	Soft rush	>2,000
<i>Juncus diffusissimus</i>	Rush	<100
<i>Leersia oryzoides</i>	Rice cutgrass	>2,000
<i>Lycopus rubellus</i>	Water horehound	<1,000
<i>Panicum hemitomon</i>	Panic grass	>2000
<i>Panicum virgatum</i>	Switchgrass	10 lbs ^c

Table D-5. (continued).

Scientific name	Common name	Quantity planted
Emergent zone (continued)		
<i>Paspalum distichum</i>	Knot grass	<1,000
<i>Polygonum sp.</i>	Smartweed	<2,000
<i>Pontederia cordata</i>	Pickeralweed	<1,000
<i>Sagittaria latifolia</i>	Arrowhead	2,000
<i>Scirpus cyperinus</i>	Bulrush	<2,000
<i>Sparganium americanum</i>	Bur reed	<100
<i>Typha domingensis</i>	Cattail	<1,000
<i>Typha latifolia</i>	Cattail	>2,000
Upper emergent/shrub zone		
<i>Acer rubrum</i>	Red maple	>2,000
<i>Cephalanthus occidentalis</i>	Buttonbush	>2,000
<i>Mikania scandens</i>	Climbing hempweed	<100
<i>Nyssa sylvatica</i>	Blackgum	>2,000
<i>Salix nigra</i>	Black willow	>2,000
<i>Taxodium distichum</i>	Cypress	>2,000

a. Source: Kroeger (1990).
b. sp. = species (singular).
c. Planted as a seed.

Table D-6. Annual mean whole lake species specific areal cover (square meters per hectare) and frequency, January-December 1992.^a

Taxon	Mean cover (m ² /ha) ^b	Frequency
<i>Vallisneria americana</i>	926.09	12
<i>Potamogeton diversifolius</i>	610.05	11
<i>Typha latifolia</i>	221.65	10
<i>Hydrocotyle umbellata</i>	76.75	16
<i>Panicum hemitomon</i>	70.95	15
<i>Myrica cerifera</i>	70.50	8
<i>Leersia oryzoides</i>	29.17	8
<i>Alternanthera philoxeroides</i>	28.09	14
<i>Nelumbo lutea</i>	25.21	2
<i>Paspalum distichum</i>	23.87	9
<i>Baccharis halimifolia</i>	20.66	8
<i>Eleocharis quadrangulata</i>	20.35	5
<i>Juncus effusus</i>	20.31	16
<i>Paspalum notatum</i>	17.83	4
<i>Salix</i> spp. ^c	12.60	16
<i>Scirpus cyperinus</i>	9.86	15
<i>Sacciolepis striata</i>	7.31	8
<i>Alnus serrulata</i>	6.74	4
<i>Boehmeria cylindrica</i>	6.07	10
<i>Juncus dichotomus</i>	5.36	11
<i>Andropogon virginicus</i>	4.72	9
<i>Rubus</i> spp.	3.58	9
<i>Acer rubrum</i>	3.30	12
<i>Panicum scoparium</i>	2.64	1
<i>Lycopus</i> spp.	2.55	8
<i>Mikania scandens</i>	2.38	8
<i>Erechtites hieracifolia</i>	2.36	6
<i>Triadnum walteri</i>	2.31	9
<i>Chara</i> sp. ^d	1.99	1
<i>Sagittaria latifolia</i>	1.60	3
<i>Cephalanthus occidentalis</i>	1.36	8
<i>Habenaria repens</i>	1.25	4
<i>Juncus validus</i>	1.22	7
<i>Cyperus</i> spp.	1.20	5
<i>Eupatorium</i> spp.	1.05	8
<i>Paspalum</i> spp.	1.03	1
<i>Aster</i> spp.	0.86	9
<i>Pontederia cordata</i>	0.75	4
<i>Galium</i> spp.	0.70	7
<i>Paspalum urvillei</i>	0.63	1
<i>Panicum</i> sp.	0.39	4
<i>Ludwigia leptocarpa</i>	0.37	5
<i>Ludwigia alternifolia</i>	0.36	4
<i>Geranium carolinianum</i>	0.36	4
<i>Rubus trivialis</i>	0.35	2
<i>Myriophyllum aquaticum</i>	0.33	3

Table D-6. (continued).

Taxon	Mean cover (m ² /ha)	Frequency
<i>Polygonum densiflorum</i>	0.31	4
<i>Lonicera japonica</i>	0.28	3
<i>Platanus occidentalis</i>	0.26	4
<i>Polygonum</i> sp.	0.26	5
<i>Solidago</i> sp.	0.26	9
<i>Lemna</i> spp.	0.24	1
<i>Micranthemum umbrosum</i>	0.22	1
<i>Bidens</i> sp.	0.21	3
<i>Murdannia keisak</i>	0.20	4
<i>Juncus</i> sp.	0.19	1
<i>Lespedeza</i> sp.	0.18	1
<i>Hypericum hypericoides</i>	0.17	1
<i>Lactuca</i> sp.	0.15	1
<i>Polygonum punctatum</i>	0.13	3
<i>Cyperaceae</i>	0.12	6
<i>Populus deltoides</i>	0.12	1
<i>Chenopodium</i> sp.	0.10	1
<i>Erianthus giganteus</i>	0.10	1
<i>Carex</i> spp.	0.08	2
<i>Toxicodendron radicans</i>	0.08	1
<i>Hypericum</i> sp.	0.07	4
<i>Polygonum sagittatum</i>	0.07	2
<i>Digitaria</i> sp.	0.07	1
<i>Juncus marginatus</i>	0.07	1
<i>Campsis radicans</i>	0.06	3
<i>Ludwigia decurrens</i>	0.04	2
<i>Hibiscus</i> sp.	0.04	2
<i>Furiena</i> sp.	0.03	1
<i>Pyrrhopappus carolinianus</i>	0.03	2
<i>Gelsemium sempervirens</i>	0.03	1
<i>Ptilimnium</i> sp.	0.02	3
<i>Rumex hastatulus</i>	0.02	2
<i>Gnaphalium purpureum</i>	0.02	1
<i>Ampelopsis arborea</i>	0.02	1
<i>Ceratophyllum demersum</i>	0.02	1
<i>Rubus argutus</i>	0.01	1
<i>Ludwigia palustris</i>	0.01	3
<i>Pluchea</i> sp.	0.01	1
<i>Taraxacum officinale</i>	0.01	1
<i>Acalypha gracilens</i>	0.01	1
<i>Desmodium</i> sp.	0.01	1

- a. Source: Westbury (1993).
- b. To convert square meters per hectare to square feet per acre, multiply by 4.355.
- c. spp. = species (plural).
- d. sp. = species (singular).

Table D-7. Taxa present (greater than 2 percent abundance) in the vegetation and seed bank.

Species	Depths
<i>Acer rubrum</i> L.	A, W
<i>Acer negundo</i> L.	A
<i>Alternanthera philoxeroides</i> Grisebach	A, W, 33 (A, W, 33, 66, 1)
<i>Ambrosia artemisiifolia</i> L.	(W)
<i>Ammannia coccinea</i> Rottboell	(W)
<i>Andropogon</i> spp.	A, W (A, W)
<i>Aneilema keisak</i> Hasskarl.	A, W (A, W, 33, 66, 1)
<i>Aster pilosus</i> Willd	(W)
<i>Azolla</i> spp.	W (W)
<i>Baccharis halimifolia</i> L.	A (A, W, 33, 1)
<i>Bacopa caroliniana</i> Robinson ^a	A, W
<i>Bidens</i> spp.	A
<i>Boehmeria cylindrica</i> Swartz	A, W (A, W, 33, 66)
<i>Cephaelanthus occidentalis</i> L.	A
<i>Carex</i> spp. ^b	A, W (A)
<i>Carex albolutescens</i> Schweinitz	(A, W, 33, 66, 1)
<i>Cenchrus longispinus</i> Fernald	A
<i>Cyperus</i> spp.	(A, W, 33, 66, 1)
<i>Cyperus ovularis</i> Torrey	(A, W, 33, 66, 1)
<i>Cyperus strigosus</i> L.	(A, W, 33, 66, 1)
<i>Digitaria</i> spp.	(A, W, 33, 1)
<i>Digitaria ischaemum</i> Schreber	(A, 66)
<i>Echinochloa crusgalli</i> Beauvois ^a	A (A, W, 33, 66)
<i>Eclipta alba</i> Hasskarl	(A, W, 33, 1)
<i>Eleocharis accicularis</i> Roemer, Schultes	W
<i>Eleocharis quadrangulata</i> Schultes ^a	A, W, 33 (A, W, 33)
<i>Erechtites hieracifolia</i> Raf.	A, W (A, W, 66, 1)

Table D-7. (continued)

Species	Depths
<i>Erigeron</i> spp.	A (A, W, 33, 66, 1)
<i>Eupatorium capillifolium</i> Small	A (A, W, 33, 66, 1)
<i>Fuirena squarrosa</i> Michaux	(A, W, 1)
<i>Galium</i> spp.	A (A)
<i>Gelsemium sempervirens</i> W. T. Aiton	W
<i>Gnaphalium</i> spp.	(A, W, 33, 1)
<i>Gratiola virginiana</i> L.	(A)
<i>Habenaria repens</i> Nuttall	A (A)
<i>Hydrocotyle umbellata</i> L. ^a	A, W, 33, 66, 1 (A, W, 33, 66, 1)
<i>Hypericum</i> spp.	A (A, 1)
<i>Juncus</i> spp.	A (A, W, 33, 66, 1)
<i>Juncus debilis</i> Gray	(A, W, 33, 66)
<i>Juncus dichotomus</i> Ell.	(A, W, 33, 66)
<i>Juncus diffusissimus</i> Buckley ^a	A (A, W, 33, 66, 1)
<i>Juncus effusus</i> L. ^a	A, W (A, W, 1)
<i>Juncus tenuous</i> Willd.	A
<i>Leersia</i> spp.	A, W
<i>Leersia hexandra</i> Swartz ^a	A, W (A, W)
<i>Lemna</i> spp.	W
<i>Lespedeza cuneata</i> G. Don	(A)
<i>Linaria canadensis</i> Dumont	(A, W, 33, 66, 1)
<i>Ludwigia</i> spp.	A, W
<i>Ludwigia alternifolia</i> L.	(A, W, 33)
<i>Ludwigia decurrens</i> Walter	(A, W, 33, 1)
<i>Ludwigia leptocarpa</i> Hara	A (A, W, 33, 66, 1)
<i>Ludwigia palustris</i> Ell.	(A, W, 33, 1)
<i>Lycopus</i> spp.	(W)

Table D-7. (continued)

Species	Depths
<i>Lycopus americanus</i> Muhl.	A (A)
<i>Lycopus rubellus</i> Moench ^a	(A)
<i>Mikania scandens</i> Willd. ^a	A, W (A, W)
<i>Mollugo verticillata</i> L.	(A, I)
<i>Myrica cerifera</i> L.	A, W (A)
<i>Myriophyllum</i> spp.	W (A)
<i>Nelumbo lutea</i> Persoon ^a	33, 66, 1
<i>Panicum</i> spp.	(A, W, 33, 66, 1)
<i>Panicum anceps</i> Michaux	(A, W, 66, 1)
<i>Panicum hemitomon</i> Schultes ^a	A, W (A, W, 33, 66)
<i>Parthenocissus quinquefolia</i> Planchon	W
<i>Paspalum</i> spp.	(I)
<i>Paspalum notatum</i> Parodi	A, W (W)
<i>Paspalum urvillei</i> Steudel	A (A)
<i>Phytolacca americana</i> L.	W (W)
<i>Pluchea foetida</i> de Candolle	(W, 1)
<i>Polygonum</i> spp.	W (W, 33, 1)
<i>Polygonum densiflorum</i> Meissner ^b	(A, W)
<i>Polygonum hydropiperoides</i> Michaux ^b	A, W, 1 (A, W, 33, 66)
<i>Polygonum sagittatum</i> L. ^b	A (A, W, 1)
<i>Polypremum procumbens</i> L.	(A, W, 33, 66, 1)
<i>Pontederia cordata</i> L.	A
<i>Potamogeton diversifolius</i> Raf.	A, W, 33, 66, 1
<i>Ptilimnium capillaceum</i> Raf.	A, W (A, W)
<i>Raphanus raphanistrum</i> L.	A (A)

Table D-7. (continued)

Species	Depths
<i>Rorippa islandica</i> Borbas	(1)
<i>Rubus</i> spp.	A, W
	(A, W, 66, 1)
<i>Rumex acetosella</i> L.	A
<i>Sacciolepis striata</i> Nash ^a	A, W
	(A, W, 33, 66, 1)
<i>Sagittaria latifolia</i> L. ^a	A, W
	(A, W)
<i>Salix nigra</i> Marshall	A, W
<i>Scirpus cyperinus</i> Kunth	A, W
	(A, W, 33, 66, 1)
<i>Setaria geniculata</i> Beauvois	(W)
<i>Solidago</i> spp.	(A, W, 33, 66)
<i>Solidago rugosa</i> Miller	A
	(A, W)
<i>Specularia perfoliata</i> de Candolle	(A, W)
<i>Sphenopholis obtusata</i> Scribnier	(A, W, 33)
<i>Typha latifolia</i> L. ^a	A, W, 33, 66
	(A, W, 33, 66, 1)
<i>Ulmus</i> spp.	W
<i>Vallisneria americana</i> Michaux ^a	A, W, 33, 66, 1

a. Planted species.

b. Multiple or mixed species planted.

Note: Seed bank taxa in parentheses; at each depth 1 above waterline A; at the waterline W; and at 33 cm, 66 cm, and 1 m below waterline.

Table D-8. Species present in Steel Creek area 1956-1957.^a

Species surviving in Steel Creek	Common name	Summer 1956 stations			Summer 1957 stations		
		3	4	5	3	4	5
<i>Cephalanthus occidentalis</i>	Common buttonbush	X	X	X	-	X	X
<i>Bignonia radicans</i>	Cow itch	X	X	X	-	X	-
<i>Rhus radicans</i>	Poison ivy	-	X	X	X	X	-
<i>Taxodium distichum</i>	Baldcypress	-	X	X	-	X	X
<i>Ampelopsis arborea</i>	Pepper vine	-	X	X	-	X	X
<i>Fraxinus caroliniana</i>	Water ash	-	X	X	-	X	X
<i>Acer rubrum</i>	Red maple	-	X	X	-	X	X
<i>Nyssa sylvatica</i>	Black gum	-	X	X	-	X	X
<i>Boehmeria cylindrica</i>	False nettle	-	X	X	-	X	X
<i>Quercus nigra</i>	Water oak	-	X	X	-	X	X
<i>Smilax rotundifolia</i>	Greenbrier	-	X	X	-	X	-
<i>Triadenum walteri</i>	St. John's-wort	-	X	X	-	-	X
<i>Ulmus americana</i>	American elm	-	X	X	-	-	X
<i>Carpinus caroliniana</i>	Bluebeech	-	-	X	-	X	X
<i>Salix nigra</i>	Black willow	-	-	X	-	X	X
<i>Nyssa aquatica</i>	Water tupelo	-	-	X	-	X	X
<i>Liquidambar styraciflua</i>	Sweetgum	-	X	X	-	X	-
<i>Mikania scandens</i>	Climbing hempvine	-	X	X	-	-	-
<i>Itea virginica</i>	Virginia willow	-	X	X	-	-	-
<i>Ludwigia palustris</i>	Water purslane	-	X	X	-	-	-
<i>Smilax laurifolia</i>	Laurelleaf smilax	-	-	X	-	X	-
<i>Smilax smallii</i>	Greenbrier	-	-	X	-	X	-
<i>Osmunda regalis</i>	Royal fern	-	-	X	-	X	-
<i>Polygonum hydropiperoides</i>	Water pepper	-	-	-	-	X	X
<i>Robinia</i>	Locust	-	-	X	-	-	X
<i>Platanus occidentalis</i>	Sycamore	-	-	X	-	-	X
<i>Decumaria barbara</i>	Wood vamp	X	-	X	-	-	-
<i>Sambucus canadensis</i>	Common elder	-	X	-	-	-	X
<i>Quercus phellos</i>	Willow oak	X	X	-	-	-	-
<i>Vitis rotundifolia</i>	Muscadine grape	-	X	-	-	X	-
<i>Tilia heterophylla</i>	Basswood	-	-	X	-	-	X
<i>Berchemia scandens</i>	Supple jack	-	X	-	-	-	-
<i>Lonicera japonica</i>	Japanese honeysuckle	X	-	-	-	-	-
<i>Alnus serrulata</i>	Smooth alder	-	-	X	-	-	-
<i>Liriodendron tulipifera</i>	Tulip tree	-	-	X	-	-	-
<i>Gelsemium sempervirens</i>	Yellow jessamine	-	-	X	-	-	-
<i>Rhus toxicodendron</i>	Poison oak	-	-	X	-	-	-
<i>Sabal minor</i>	Dwarf palmetto	-	X	-	-	-	-
<i>Lobelia cardinalis</i>	Cardinal flower	-	X	-	-	-	-

Table D-8. (continued).

Species surviving in Steel Creek		Summer 1956 stations			Summer 1957 stations		
Scientific name	Common name	3	4	5	3	4	5
<i>Wisteria frutescens</i>	Wisteria	-	X	-	-	-	-
<i>Quercus lyrata</i>	Overcup oak	-	X	-	-	-	-
<i>Smilax bona-nox</i>	Greenbrier	-	-	X	-	-	-
<i>Quercus laurifolia</i>	Laurel oak	-	-	X	-	-	-
<i>Carya aquatica</i>	Water hickory	-	-	-	-	-	X
<i>Arundinaria tecta</i>	Switch cane	-	-	-	X	-	-
<i>Saururus cernuus</i>	Lizard's tail	-	-	-	-	-	X

a. Source: Welbourne (1958).

Table D-9. Species typically growing along Steel Creek which have not been able to survive flooding.^a

Scientific name	Common name
<i>Pinus taeda</i>	Loblolly pine
<i>Cornus florida</i>	Flowering dogwood
<i>Ilex glabra</i>	Inkberry
<i>Ilex opaca</i>	American holly
<i>Lyonia lucida</i>	Fetterbush
<i>Magnolia virginiana</i>	Sweetbay
<i>Myrica cerifera</i>	Southern waxmyrtle
<i>Osmunda cinnamomea</i>	Cinnamon fern
<i>Persea palustris</i>	Swampbay
<i>Quercus falcata</i>	Southern red oak
<i>Quercus michauxii</i>	Swamp chestnut oak

a. Source: Welbourne (1958).

Table D-10. Plant species in the Steel Creek Corridor, Summer 1981.^a

Scientific name	Common name
Aspleniaceae	
<i>Athyrium asplenoides</i>	Southern lady fern
<i>Onoclea sensibilis</i>	Sensitive fern
Blechnaceae	
<i>Woodwardia areolata</i>	Netted chain-fern
Pinaceae	
<i>Pinus taeda</i>	Loblolly pine
Taxodiaceae	
<i>Taxodium distichum</i>	Bald cypress
Typhaceae	
<i>Typha latifolia</i>	Common cattail
Sparganiaceae	
<i>Sparganium americanum</i>	Bur reed
Alismataceae	
<i>Sagittaria latifolia</i>	Wapato, duck-potato
Poaceae	
<i>Uniola latifolia</i>	River oats
<i>Elymus virginicus</i>	Wild rye grass
<i>Leersia</i>	Cut grass
<i>Panicum agrostoides</i>	Redtop panicgrass
<i>Panicum dichotomum</i>	Spreading witchgrass
<i>Erianthus giganteus</i>	Sugarcane beard grass
Cyperaceae	
<i>Scirpus cyperinus</i>	Knot grass
<i>Rhynchospora corniculata</i>	
<i>Carex glaucescens</i>	
Araceae	
<i>Peltandra virginica</i>	Arrow arum
Commelinaceae	
<i>Commelina virginica</i>	Dayflower
<i>Aneileme keisak</i>	

Table D-10. (continued).

	Scientific name	Common name
Juncaceae		
<i>Juncus effusus</i>	Common rush	
<i>Juncus canadensis</i>	Canada rush	
Liliaceae		
<i>Smilax rotundifolia</i>	Greenbrier	
<i>Smilax glauca</i>	Sawbrier	
Saururaceae		
<i>Saururus cernuus</i>	Lizard's tail	
Salicaceae		
<i>Salix</i>	Willow	
Myricaceae		
<i>Myrica cerifera</i>	Wax myrtle	
Betulaceae		
<i>Alnus serrulata</i>	Tag alder	
Fagaceae		
<i>Quercus laurifolia</i>	Laurel oak	
Ulmaceae		
<i>Celtis laevigata</i>	Sugarberry	
Urticaceae		
<i>Boehmeria cylindrica</i>	False nettle	
Polygonaceae		
<i>Polygonum pensylvanicum</i>	Pinkweed	
<i>Polygonum hirsutum</i>	Hairy knotweed	
<i>Polygonum persicaria</i>		
<i>Polygonum hydropiperoides</i>	Waterpepper	
<i>Polygonum sagittatum</i>	Arrow-leaved tearthumb	
<i>Polygonum lapathifolium</i>		
Magnoliaceae		
<i>Liriodendron tulipifera</i>	Tulip tree	
<i>Magnolia virginiana</i>	Sweet bay	
Saxifragaceae		
<i>Itea virginica</i>	Virginia willow	

Table D-10. (continued).

Scientific name	Common name
Hamamelidaceae	
<i>Liquidambar styraciflua</i>	Sweetgum
Platanaceae	
<i>Platanus occidentalis</i>	Sycamore
Rosaceae	
<i>Rubus</i>	Blackberry
<i>Prunus serotina</i>	Black cherry
<i>Amelanchier</i>	Serviceberry
Fabaceae (Leguminosae)	
<i>Lespedeza cuneata</i>	Sericea
<i>Apis americana</i>	Groundnut
Anacardiaceae	
<i>Rhus copallina</i>	Winged sumac
Aquifoliaceae	
<i>Ilex opaca</i>	Holly
Aceraceae	
<i>Acer rubrum</i>	Red maple
Balsaminaceae	
<i>Impatiens capensis</i>	Jewelweed
Rhamnaceae	
<i>Berchemia scandens</i>	Supple jack
Vitaceae	
<i>Parthenocissus quinquefolia</i>	Virginia creeper
<i>Vitis rotundifolia</i>	Muscadine
<i>Ampelopsis arborea</i>	Pepper vine
Hypericaceae	
<i>Hypericum hypericoides</i>	St. Andrew's cross
<i>Hypericum mutilum</i>	Dwarf St. John's-wort
<i>Hypericum walteri</i>	Marsh St. John's-wort
Onagraceae	
<i>Ludwigia decurrens</i>	Primrose willow
<i>Ludwigia leptocarpa</i>	
<i>Ludwigia virgata</i>	

Table D-10. (continued).

Scientific name	Common name
Apiaceae (Umbelliferae)	
<i>Cicuta maculata</i>	Water hemlock
Nyssaceae	
<i>Nyssa sylvatica var. biflora</i>	Water gum
Cornaceae	
<i>Cornus florida</i>	Flowering dogwood
Ebenaceae	
<i>Diospyros virginiana</i>	Persimmon
Oleaceae	
<i>Ligustrum</i>	Privet
Loganiaceae	
<i>Gelsemium sempervirens</i>	Yellow jessamine
<i>Polypremum procumbens</i>	
Convolvulaceae	
<i>Cuscuta compacta</i>	Compact dodder
<i>Cuscuta gronovii</i>	Dodder
Hydrophyllaccae	
<i>Hydrolea quadrivalvis</i>	
Verbenaceae	
<i>Callicarpa americana</i>	French mulberry
Lamiaceae (Labiatae)	
<i>Scutellaria lateriflora</i>	Skullcap
<i>Lycopus americanus</i>	Bugleweed
<i>Lycopus rebellus</i>	Water horehound
Scrophulariaceae	
<i>Mimulus alatus</i>	Monkey flower
Bignoniaceae	
<i>Campsis radicans</i>	Trumpet vine, cow-itch vine
Rubiaceae	
<i>Cephaelanthus occidentalis</i>	Button bush
<i>Galium tinctorium</i>	

Table D-10. (continued).

Scientific name	Common name
Caprifoliaceae	
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Sambucus canadensis</i>	Elderberry
Asteraceae (compositae)	
<i>Eupatorium capillifolium</i>	Dog-fennel
<i>Mikania scandens</i>	Climbing hempweed
<i>Baccharis halimifolia</i>	Groundsel-tree
<i>Aster</i>	Aster
<i>Solidago canadensis</i>	Goldenrod
<i>Solidago gigantea</i>	Goldenrod
<i>Solidago rugosa</i>	Goldenrod

a. Source: Smith, Sharitz, and Gladden (1981).

Table D-11. Plant species found in Steel Creek Delta, Summer 1981.^a

Scientific name	Common name
Ophioglossaceae	
<i>Botrychium</i>	Grapefern
Osmundaceae	
<i>Osmunda regalis spectabilis</i>	Royal fern
Asplidiaceae	
<i>Onoclea sensibilis</i>	Sensitive fern
Aspleniaceae	
<i>Asplenium platyneuron</i>	Ebony spleenwort
Azollaceae	
<i>Azolla caroliniana</i>	Mosquito fern
Taxodiaceae	
<i>Taxodium distichum</i>	Bald cypress
Typhaceae	
<i>Typha latifolia</i>	Common cattail
Sparganiaceae	
<i>Sparganium americanum</i>	Bur reed
Potamogetonaceae	
<i>Potamogeton berchtoldii</i>	Pondweed
Alismataceae	
<i>Echinodorus cordifolius</i>	Burhead
<i>Sagittaria graminea</i>	
<i>Sagittaria latifolia</i>	Wapato, duck-potato
Poaceae	
<i>Arundinaria gigantea</i>	Giant cane
<i>Leersia</i>	Cut grass
<i>Paspalum urvillei</i>	Vasey grass
<i>Paspalum fluitans</i>	
<i>Panicum agrostoides</i>	
<i>Panicum gymnocarpon</i>	Redtop panicgrass
<i>Panicum</i>	

Table D-11. (continued).

Scientific name	Common name
Cyperaceae	
<i>Cyperus haspan</i>	Sheathed cyperus
<i>Cyperus</i>	
<i>Eleocharis</i>	
<i>Eleocharis quadrangulata</i>	
<i>Scirpus cyperinus</i>	Knot grass
<i>Rhynchospora corniculata</i>	
<i>Carex joorii</i>	
<i>Carex</i>	
Aracaceae	
<i>Sabal minor</i>	Palmetto
Lemnaceae	
<i>Spirodela oligorrhiza</i>	
<i>Lemna perpusilla</i>	Duckweed
<i>Wolffia papulifera</i>	Water-meal
Bromeliaceae	
<i>Tillandsia usneoides</i>	Spanish moss
Commelinaceae	
<i>Commelina virginica</i>	Dayflower
<i>Aneilema keisak</i>	
Juncaceae	
<i>Juncus effusus</i>	Common rush
Liliaceae	
<i>Smilax rotundifolia</i>	Greenbrier
<i>Smilax bona-nox</i>	Catbrier
<i>Smilax walteri</i>	Coral greenbrier
<i>Smilax tamnoides</i>	Bristly greenbrier
<i>Medeola virginiana</i>	Indian cucumber-root
Orchidaceae	
<i>Spiranthes</i>	Ladies' tresses
Saururaceae	
<i>Saururus cernuus</i>	Lizard's tail

Table D-11. (continued).

	Scientific name	Common name
Salicaceae		
<i>Salix nigra</i>	Black willow	
<i>Populus deltoides</i>	Cottonwood	
<i>Populus heterophylla</i>	Swamp cottonwood	
Myricaceae		
<i>Myrica cerifera</i>	Wax myrtle	
Juglandaceae		
<i>Carya aquatica</i>	Water hickory	
Betulaceae		
<i>Carpinus caroliniana</i>	Ironwood	
Fagaceae		
<i>Quercus lyrata</i>	Overcup oak	
<i>Quercus michauxii</i>	Swamp chestnut oak	
<i>Quercus laurifolia</i>	Laurel oak	
<i>Quercus nigra</i>	Water oak	
Ulmaceae		
<i>Ulmus americana</i>	American elm	
<i>Ulmus alata</i>	Winged elm	
<i>Planera aquatica</i>	Water elm	
<i>Celtis laevigata</i>	Sugarberry	
Urticaceae		
<i>Boehmeria cylindrica</i>	False nettle	
Polygonaceae		
<i>Polygonum hydropiperoides</i>	Waterpepper	
<i>Polygonum lapathifolium</i>		
<i>Polygonum sagittatum</i>	Arrow-leaved tearthumb	
Phytolaccaceae		
<i>Phytolacca americana</i>	Poke	
Ceratophyllaceae		
<i>Ceratophyllum demersum</i>	Hornwort	

Table D-11. (continued).

Scientific name	Common name
Nymphaeaceae	
<i>Nuphar luteum</i>	Cow-lily
Saxifragaceae	
<i>Itea virginica</i>	Virginia willow
<i>Decumaria barbara</i>	Climbing hydrangea
Hamamelidaceae	
<i>Liquidambar styraciflua</i>	Sweetgum
Platanaceae	
<i>Platanus occidentalis</i>	Sycamore
Rosaceae	
<i>Rubus</i>	Blackberry
<i>Crataegus</i>	Hawthorn
Fabaceae	
<i>Gleditsia aquatica</i>	Water locust
<i>Wisteria frutescens</i>	Wisteria
<i>Apios americana</i>	Groundnut
Meliaceae	
<i>Melia azedarach</i>	China-berry
Callitrichaceae	
<i>Callitricha heterophylla</i>	Water starwort
Anacardiaceae	
<i>Rhus radicans</i>	Poison ivy
Aquifoliaceae	
<i>Ilex opaca</i>	Holly
<i>Ilex decidua</i>	Possom haw
Acaraceae	
<i>Acer rubrum</i>	Red maple
Hippocastanaceae	
<i>Aesculus pavia</i>	Red buckeye
<i>Aesculus sylvatica</i>	Buckeye

Table D-11. (continued).

	Scientific name	Common name
Balsaminaceae		
<i>Impatiens capensis</i>	Jewel-weed	
Rhamnaceae		
<i>Berchemia scandens</i>	Rattan vine	
Vitaceae		
<i>Vitis rotundifolia</i>	Muscadine	
<i>Vitis aestivalis</i>	Summer grape	
<i>Ampelopsis arborea</i>	Pepper vine	
Malvaceae		
<i>Hibiscus militaris</i>	Halbard-leaved marsh mallow	
Hypericaceae		
<i>Hypericum walteri</i>	Marsh St. John's-wort	
<i>Hypericum mutilum</i>	Dwarf St. John's-wort	
Violaceae		
<i>Viola</i>	Violet	
Onagraceae		
<i>Ludwigia decurrens</i>	Primrose willow	
<i>Ludwigia leptocarpa</i>		
<i>Ludwigia palustris</i>	Water purslane	
Haloragaceae		
<i>Myriophyllum brasiliense</i>	Parrot-feather	
Apiaceae (Umbelliferae)		
<i>Hydrocotyle ranunculoides</i>	Marsh pennywort	
<i>Hydrocotyle</i>	Marsh pennywort	
<i>Cicuta maculata</i>	Water hemlock	
Nyssaceae		
<i>Nyssa aquatica</i>	Tupelo gum, water tupelo	
Oleaceae		
<i>Fraxinus caroliniana</i>	Water ash	
<i>Fraxinus americana</i>	White ash	
<i>Forestiera acuminata</i>	Swamp privet	

Table D-11. (continued).

Scientific name	Common name
Asclepiadaceae	
<i>Asclepias</i>	Milkweed
Convolvulaceae	
<i>Cuscuta</i>	Dodder
Hydrophyllaceae	
<i>Hydrolea quadrivalvis</i>	Hydrolea
Lamiaceae (Labiatae)	
<i>Scutellaria lateriflora</i>	Skullcap
<i>Lycopus virginicus</i>	Bugleweed
<i>Lycopus rubellus</i>	Water horehound
Serophulariaceae	
<i>Mimulus alatus</i>	Monkey flower
<i>Mimulus ringens</i>	Monkey flower
Bignoniaceae	
<i>Campsis radicans</i>	Trumpet vine, cow-itch vine
Lentibulariaceae	
<i>Utricularia subulata</i>	Bladderwort
Acanthaceae	
<i>Justicia ovata</i>	Water-willow
Rubiaceae	
<i>Cephaelanthus occidentalis</i>	Button bush
<i>Diodia virginiana</i>	Larger buttonweed
<i>Galium obtusum</i>	Bedstraw
<i>Galium tinctorium</i>	
Caprifoliaceae	
<i>Lonicera japonica</i>	Japanese honeysuckle
Campanulaceae	
<i>Sphenoclea zeylandica</i>	
<i>Lobelia cardinalis</i>	Cardinal flower

Table D-11. (continued).

Scientific name	Common name
Loganiaceae	
<i>Gelsemium sempervirens</i>	Yellow jessamine
Asteraceae (Compositae)	
<i>Mikania scandens</i>	Climbing hempweed
<i>Pluchea rosea</i>	Marsh-fleabane
<i>Aster</i>	Aster
<i>Solidago gigantea</i>	Goldenrod
<i>Bidens frondosa</i>	Beggar ticks

a. Source: Smith, Sharitz, and Gladden (1981).

Table D-12. Wetland types of the Steel Creek Delta.^a

Wetland types	Description
Aquatic bed - rooted vascular (<i>Myriophyllum brasiliense</i>)	In the canopy-reduced-deepwater zone, where the main flow of Steel Creek courses northeasterly, the ground aspect is one of open water, approximately 2 meters deep beneath scattered live bald cypress (<i>Taxodium distichum</i>) trees which are remnants from the pre-Savannah River Site swamp. Scattered stumps of dead trees occur bearing shrubs [e.g., buttonbush (<i>Cephalanthus occidentalis</i>), Virginia willow (<i>Itea virginica</i>)], young trees [e.g., water ash (<i>Fraxinus caroliniana</i>), water elm (<i>Planera aquatica</i>)], and herbs [e.g., false nettle (<i>Boehmeria cylindrica</i>), marsh St. John's-wort (<i>Hypericum walteri</i>)]. Patches of duckweed (<i>Lemna perpusilla</i>) collect on mats of submerged vascular plants such as hornwort (<i>Ceratophyllum demersum</i>) and parrot-feather (<i>Myriophyllum brasiliense</i>) which root on subsurface logs, tree and stump bases. Where the water flow is slow, <i>Polygonum lapathifolium</i> forms dense colonies.
Emergent wetland - persistent (<i>Leersia</i> spp.)	Persistent emergent monocots dominate a large area (17.7 percent of the delta) of the deltaic fan. Except during extreme drought periods, the water level during the growing season is 10 to 50 centimeters deep, excluding old stream channels which are as much as 1 meter deep.
Emergent - nonpersistent (<i>Hydrolea quadrivalvis</i>)	Although the dominant herbaceous species vary with water depth and location on the deltaic fan, scattered shrubs [buttonbush and black willow (<i>Salix nigra</i>)] are usually present. Cut grass (<i>Leersia</i> spp.) is dominant with abundant redtop panicgrass (<i>Panicum agrostoides</i>) as ground cover except under dense woody vegetation and in the deeper stream channels. These grasses are usually overtopped by knot grass (<i>Scirpus cyperinus</i> , approximately 2.5 meters tall) which is the aspect dominant on aerial photos as well as on the ground. There are also several, nearly monotypic, stands of cattail (<i>Typha latifolia</i>). The numerous old stream channels which cross the deltaic fan are dominated by the herbaceous species characteristic of the Nonpersistent emergent wetland (see below).
Scrub-shrub wetland - broad-leaved deciduous (<i>Cephalanthus occidentalis</i> - <i>Salix nigra</i>)	This mapping unit is characterized by emergent vascular plants that die back to the ground during the winter. Relatively monospecific, as well as mixed, colonies of hydrolea (<i>Hydrolea quadrivalvis</i>), <i>Aneilema keisak</i> , waterpepper (<i>Polygonum hydropiperoides</i>), water purslane (<i>Ludwigia palustris</i>), and wapato (<i>Sagittaria latifolia</i>) dominate. These characteristic, nonpersistent species are also common in old stream beds throughout the deltaic fan in the Persistent emergent and Scrub-shrub wetland types. Standing dead trees and stumps are numerous and bear characteristic stump community vegetation including buttonbush, water ash, water elm, false nettle, and marsh St. John's-wort. On the deltaic fan, where the water is less than 50 centimeters deep (deeper in stream channels), buttonbush or black willow dominate the uppermost layer. Buttonbush dominates the canopy in some areas and composes the understory of sites dominated by willow (<i>Salix</i> sp.). Knot grass joins the woody species in the upper stratum while cut grass covers most of the ground. Redtop panicgrass, beggar ticks (<i>Bidens frondosa</i>), false nettle, and marsh St. John's-wort are common in many places. Climbing hemp (<i>Mikania scandens</i>) and pepper vine (<i>Ampelopsis arborea</i>) are vines which are frequently found in the shrubland. Within the Scrub-shrub wetland there are also open areas of Persistent emergent wetland and old stream channels dominated by herbs.

Table D-12. (continued).

Wetland types	Description
Mixed scrub-shrub/nonpersistent emergent wetland (<i>Cephalanthus occidentalis/Polygonum lapathifolium</i>)	In the delta, shrubs and young trees (buttonbush, Virginia willow, water elm, water ash) are restricted to the many stumps remaining from the original forest. Numerous live bald cypress (20 meters tall) are scattered about. The stump bases have the characteristic stump-community herbs (false nettle and marsh St. John's-wort) as well as several vines including poison ivy (<i>Rhus radicans</i>), pepper vine, and wisteria (<i>Wisteria frutescens</i>).
Forested wetlands - broad-leaved deciduous (<i>Salix nigra</i>)	Black willow trees over 5 meters tall dominate the more elevated portions of the deltaic fan with buttonbush as an understory. The ground is dry or flooded by less than 15 centimeters of water. The herbaceous vegetation under the willow is relatively sparse due to the density of canopy closure. Small patches of herbs include: redtop panicgrass, waterpepper, false nettle, marsh St. John's-wort, and sensitive fern (<i>Onoclea sensibilis</i>).
Forested wetlands - broad-leaved deciduous (<i>Quercus lyrata</i> - <i>Carya aquatica</i> - <i>Nyssa aquatica</i>)	Adjacent to, and slightly higher in substance elevation than the cypress-tupelo (<i>Nyssa aquatica</i>) swamp, is an area of broad-leaved deciduous trees. Although dry during most of the growing season, this area is subject to seasonal flooding of longer duration than areas on the deltaic fan. Several of the more common species in this vegetation type leaf-out late in the season and can withstand flooding that lasts even as late as July.
Forested wetlands - broad-leaved deciduous (<i>Quercus laurifolia</i>)	This mapping unit is found only on islands in the swamp which are slightly higher in elevation than the surrounding swamp and therefore inundated for shorter periods. The canopy (over 20 meters tall) contains laurel oak (<i>Quercus laurifolia</i>), overcup oak (<i>Quercus lyrata</i>), swamp chestnut oak (<i>Queras michauxii</i>), red maple (<i>Acer rubrum</i>), and water hickory (<i>Carya aquatica</i>).
Forested wetlands - mixed deciduous (<i>Taxodium distichum</i> - <i>Nyssa aquatica</i>)	The natural cypress-tupelo swamp typifying the pre-Savannah River Plant swamp composition extends beyond the delta to the Savannah River. Water to 2 meters deep flows slowly over a shallow substrate (less than 0.5 meter deep) of organic and fine particulate material. Flooding is maintained during the growing season by regulation of reservoir levels upstream on the Savannah River and by flow from Fourmile Creek and Pen Branch.
Forested wetland - mixed forested/scrub-shrub wetland (<i>Taxodium distichum</i> / <i>Cephalanthus occidentalis</i>)	This mapping unit occupies a portion of the delta to the west of the deltaic fan. A patchy canopy of bald cypress (greater than 20 meters tall) covers about 50 percent of the zone. The understory is a mixture of buttonbush, water ash, and water elm. Cut grass dominates the ground cover with abundant marsh St. John's-wort and beggar ticks. Open areas where the cypress canopy is very sparse are dominated by species of the Nonpersistent emergent wetland intermixed with many stumps bearing woody growth.
a. Source: Smith, Sharitz, and Gladden (1981). b. spp. = species (plural).	The water varies from 50 to 80 centimeters deep (except in channels) over a deep (more than 50 centimeters) substrate of organic and fine inorganic sediment.

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