

APPENDIX A. High Priority Species and Habitat Summary Data

The summary tables on the following pages provide detailed information on the distribution and habitat associations for high priority animal species and high priority plant species identified in the current assessment.

Distribution by Ecoregion

In the following lists, high priority animal species are listed alphabetically within the following groups:

AA = aquatic arthropods
AM = amphibians
BI = birds
FI = fishes
MA = mammals
MO = mollusks
RE = reptiles
TA = terrestrial arthropods

Ecoregions are indicated by the following abbreviations:

SA/RV = Southwestern Appalachians/Ridge & Valley
BR = Blue Ridge
PD = Piedmont
SP = Southeastern Plains
SCP = Southern Coastal Plain

Distribution of High Priority Animals by Ecoregion

A-2

Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
AA	<i>Callinectes sapidus</i>	Blue Crab					X
AA	<i>Cambarus coosawattae</i>	Coosawattee Crayfish		X			
AA	<i>Cambarus cryptodytes</i>	Dougherty Plain Cave Crayfish				X	
AA	<i>Cambarus cymatilis</i>	Conasauga Blue Burrower	X				
AA	<i>Cambarus distans</i>	Boxclaw Crayfish	X				
AA	<i>Cambarus doughertyensis</i>	Dougherty Burrowing Crayfish				X	
AA	<i>Cambarus englishi</i>	Tallapoosa Crayfish			X		
AA	<i>Cambarus extraneus</i>	Chickamauga Crayfish	X				
AA	<i>Cambarus fasciatus</i>	Etowah Crayfish	X	X	X		
AA	<i>Cambarus georgiae</i>	Little Tennessee Crayfish		X			
AA	<i>Cambarus harti</i>	Piedmont Blue Burrower			X		
AA	<i>Cambarus howardi</i>	Chattahoochee Crayfish			X		
AA	<i>Cambarus manningi</i>	Greensaddle Crayfish	X				
AA	<i>Cambarus parrishi</i>	Hiwassee Headwaters Crayfish		X			
AA	<i>Cambarus scotti</i>	Chattooga River Crayfish	X				
AA	<i>Cambarus speciosus</i>	Beautiful Crayfish		X			
AA	<i>Cambarus strigosus</i>	Lean Crayfish			X		
AA	<i>Cambarus truncatus</i>	Oconee Burrowing Crayfish				X	X
AA	<i>Cambarus unestami</i>	Blackbarred Crayfish	X				
AA	<i>Cordulegaster sayi</i>	Say's Spiketail				X	X
AA	<i>Distocambarus devexus</i>	Broad River Burrowing Crayfish			X		
AA	<i>Gomphus consanguis</i>	Cherokee Clubtail	X				
AA	<i>Macromia margarita</i>	Mountain River Cruiser		X			
AA	<i>Ophiogomphus australis</i>	Southern Snaketail				X	
AA	<i>Ophiogomphus edmundo</i>	Edmund's Snaketail		X			
AA	<i>Ophiogomphus incurvatus</i>	Appalachian Snaketail	X	X	X		
AA	<i>Procambarus acutissimus</i>	Sharpnose Crayfish			X	X	
AA	<i>Procambarus gibbus</i>	Muckalee Crayfish				X	
AA	<i>Procambarus petersi</i>	Ogeechee Crayfish					X
AA	<i>Procambarus verrucosus</i>	Grainy Crayfish				X	
AA	<i>Procambarus versutus</i>	Sly Crayfish				X	
AM	<i>Ambystoma bishopi</i>	Reticulated Flatwoods Salamander				X	
AM	<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander				X	X
AM	<i>Ambystoma tigrinum tigrinum</i>	Eastern Tiger Salamander	X			X	X
AM	<i>Amphiuma pholeter</i>	One-toed Amphiuma				X	
AM	<i>Aneides aeneus</i>	Green Salamander	X	X			
AM	<i>Cryptobranchus alleganiensis</i>	Hellbender	X	X			
AM	<i>Desmognathus auriculatus</i>	Southern Dusky Salamander				X	X
AM	<i>Eurycea aquatica</i>	Brown-backed Salamander	X				

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Distribution of High Priority Animals by Ecoregion

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Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
AM	<i>Eurycea chamberlaini</i>	Chamberlain's Dwarf Salamander			X	X	
AM	<i>Gyrinophilus palleucus</i>	Tennessee Cave Salamander	X				
AM	<i>Haideotriton wallacei</i>	Georgia Blind Salamander				X	
AM	<i>Lithobates capito</i>	Gopher Frog				X	X
AM	<i>Necturus punctatus</i>	Dwarf Waterdog			X	X	X
AM	<i>Notophthalmus perstriatus</i>	Striped Newt				X	X
AM	<i>Plethodon petraeus</i>	Pigeon Mountain Salamander	X				
AM	<i>Plethodon savannah</i>	Savannah Slimy Salamander					X
AM	<i>Urspelerpes brucei</i>	Patch-nosed Salamander		X	X		
BI	<i>Ammodramus caudacutus</i>	Saltmarsh Sparrow					X
BI	<i>Ammodramus henslowii</i>	Henslow's Sparrow				X	X
BI	<i>Ammodramus maritimus macgillivraii</i>	Seaside Sparrow (Macgillivray's)					X
BI	<i>Ammodramus nelsoni</i>	Nelson's Sparrow					X
BI	<i>Ammodramus savannarum pratensis</i>	Grasshopper Sparrow	X		X	X	
BI	<i>Calidris canutus</i>	Red Knot					X
BI	<i>Charadrius melodus</i>	Piping Plover					X
BI	<i>Charadrius wilsonia</i>	Wilson's Plover					X
BI	<i>Colinus virginianus</i>	Northern Bobwhite	X	X	X	X	X
BI	<i>Coturnicops noveboracensis</i>	Yellow Rail				X	X
BI	<i>Egretta caerulea</i>	Little Blue Heron				X	X
BI	<i>Egretta tricolor</i>	Tricolored Heron				X	X
BI	<i>Elanoides forficatus</i>	Swallow-tailed Kite			X	X	X
BI	<i>Euphagus carolinus</i>	Rusty Blackbird	X	X	X	X	X
BI	<i>Falco peregrinus</i>	Peregrine Falcon			X		X
BI	<i>Falco sparverius paulus</i>	Southeastern American Kestrel				X	X
BI	<i>Gelochelidon nilotica</i>	Gull-billed Tern					X
BI	<i>Grus americana</i>	Whooping Crane	X		X	X	
BI	<i>Grus canadensis pratensis</i>	Florida Sandhill Crane					X
BI	<i>Haematopus palliatus</i>	American Oystercatcher					X
BI	<i>Haliaeetus leucocephalus</i>	Bald Eagle	X	X	X	X	X
BI	<i>Himantopus mexicanus</i>	Black-necked Stilt					X
BI	<i>Ixobrychus exilis</i>	Least Bittern	X		X	X	X
BI	<i>Lanius ludovicianus</i>	Loggerhead Shrike	X		X	X	X
BI	<i>Laterallus jamaicensis</i>	Black Rail			X	X	X
BI	<i>Limnothlypis swainsonii</i>	Swainson's Warbler	X	X	X	X	X
BI	<i>Mycteria americana</i>	Wood Stork				X	X
BI	<i>Numenius phaeopus</i>	Whimbrel					X
BI	<i>Passerina ciris</i>	Painted Bunting				X	X
BI	<i>Peucaea aestivalis</i>	Bachman's Sparrow	X		X	X	X

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Distribution of High Priority Animals by Ecoregion

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Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
BI	<i>Picoides borealis</i>	Red-cockaded Woodpecker			X	X	X
BI	<i>Protonotaria citrea</i>	Prothonotary Warbler	X		X	X	X
BI	<i>Rallus elegans</i>	King Rail			X	X	X
BI	<i>Rynchops niger</i>	Black Skimmer					X
BI	<i>Setophaga cerulea</i>	Cerulean Warbler		X			
BI	<i>Setophaga kirtlandii</i>	Kirtland's Warbler		X	X		X
BI	<i>Sphyrapicus varius appalachiensis</i>	Appalachian Yellow-bellied Sapsucker		X			
BI	<i>Sternula antillarum</i>	Least Tern					X
BI	<i>Tyto alba</i>	Barn Owl	X	X	X	X	X
BI	<i>Vermivora chrysoptera</i>	Golden-winged Warbler		X			
FI	<i>Acipenser brevirostrum</i>	Shortnose Sturgeon				X	X
FI	<i>Acipenser fulvescens</i>	Lake Sturgeon	X	X			
FI	<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon				X	
FI	<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic Sturgeon			X	X	X
FI	<i>Alosa alabamae</i>	Alabama Shad				X	
FI	<i>Alosa sapidissima</i>	American Shad			X	X	X
FI	<i>Ameiurus serracanthus</i>	Spotted Bullhead			X	X	
FI	<i>Carpoides velifer</i>	Highfin Carpsucker			X	X	X
FI	<i>Chologaster cornuta</i>	Swampfish				X	X
FI	<i>Cynoscion nebulosus</i>	Spotted Seatrout					X
FI	<i>Cyprinella caerulea</i>	Blue Shiner	X	X			
FI	<i>Cyprinella callitaenia</i>	Bluestripe Shiner		X	X	X	
FI	<i>Cyprinella gibbsi</i>	Tallapoosa Shiner			X		
FI	<i>Cyprinella xaenura</i>	Altamaha Shiner			X		
FI	<i>Elassoma gilberti</i>	Gulf Coast Pygmy Sunfish				X	
FI	<i>Elassoma okatie</i>	Bluebarred Pygmy Sunfish				X	X
FI	<i>Enneacanthus chaetodon</i>	Blackbanded Sunfish				X	X
FI	<i>Erimonax monachus</i>	Spotfin Chub	X				
FI	<i>Erimystax insignis</i>	Blotched Chub		X			
FI	<i>Etheostoma brevirostrum</i>	Holiday Darter		X	X		
FI	<i>Etheostoma chlorobranchium</i>	Greenfin Darter		X			
FI	<i>Etheostoma chuckwachatte</i>	Lipstick Darter			X		
FI	<i>Etheostoma cinereum</i>	Ashy Darter	X				
FI	<i>Etheostoma ditrema</i>	Coldwater Darter	X				
FI	<i>Etheostoma duryi</i>	Blackside Snubnose Darter	X				
FI	<i>Etheostoma etowahae</i>	Etowah Darter	X	X	X		
FI	<i>Etheostoma gutselli</i>	Tuckasegee Darter		X			
FI	<i>Etheostoma parvipinne</i>	Goldstripe Darter			X	X	
FI	<i>Etheostoma rufilineatum</i>	Redline Darter	X	X			
FI	<i>Etheostoma rupestre</i>	Rock Darter	X	X	X		
FI	<i>Etheostoma scotti</i>	Cherokee Darter	X	X	X		
FI	<i>Etheostoma trisella</i>	Trispot Darter	X				
FI	<i>Etheostoma vulneratum</i>	Wounded Darter		X			

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Distribution of High Priority Animals by Ecoregion

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Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
FI	<i>Fundulus bifax</i>	Stippled Studfish			X		
FI	<i>Fundulus catenatus</i>	Northern Studfish	X				
FI	<i>Hemitremia flammea</i>	Flame Chub	X				
FI	<i>Hiodon tergisus</i>	Mooneye	X				
FI	<i>Hybopsis lineapunctata</i>	Lined Chub	X	X	X		
FI	<i>Hybopsis</i> sp. 9	Etowah Chub	X		X		
FI	<i>Ichthyomyzon bdellium</i>	Ohio Lamprey	X				
FI	<i>Lampetra aepyptera</i>	Least Brook Lamprey	X	X			
FI	<i>Lucania goodei</i>	Bluefin Killifish				X	X
FI	<i>Lythrurus lirus</i>	Mountain Shiner	X	X			
FI	<i>Macrhybopsis</i> sp. 1	Coosa Chub	X	X	X		
FI	<i>Micropterus cataractae</i>	Shoal Bass			X		X
FI	<i>Micropterus chattahoochee</i>	Chattahoochee Bass		X	X		
FI	<i>Micropterus notius</i>	Suwannee Bass				X	
FI	<i>Micropterus</i> sp. cf <i>coosae</i> "Altamaha/Ogeechee"	Undescribed Redeye Bass			X	X	
FI	<i>Micropterus</i> sp. cf <i>coosae</i> "Savannah"	Bartrams Bass		X	X	X	
FI	<i>Moxostoma carinatum</i>	River Redhorse	X	X			
FI	<i>Moxostoma robustum</i>	Robust Redhorse			X	X	X
FI	<i>Moxostoma</i> sp. 2	Sicklefin Redhorse		X			
FI	<i>Notropis ariommus</i>	Popeye Shiner	X				
FI	<i>Notropis asperifrons</i>	Burrhead Shiner	X	X			
FI	<i>Notropis hypsilepis</i>	Highscale Shiner		X	X	X	
FI	<i>Notropis photogenis</i>	Silver Shiner		X			
FI	<i>Notropis scepticus</i>	Sandbar Shiner		X	X		
FI	<i>Noturus eleutherus</i>	Mountain Madtom	X				
FI	<i>Noturus flavipinnis</i>	Yellowfin Madtom	X				
FI	<i>Noturus munitus</i>	Frecklebelly Madtom	X	X	X		
FI	<i>Percina antesella</i>	Amber Darter	X	X	X		
FI	<i>Percina aurantiaca</i>	Tangerine Darter		X			
FI	<i>Percina aurolineata</i>	Goldline Darter		X			
FI	<i>Percina crypta</i>	Halloween Darter		X	X	X	
FI	<i>Percina jenkinsi</i>	Conasauga Logperch	X	X			
FI	<i>Percina kusha</i>	Bridled Darter	X	X	X		
FI	<i>Percina lenticula</i>	Freckled Darter	X	X			
FI	<i>Percina sciera</i>	Dusky Darter	X	X			
FI	<i>Percina smithvanizi</i>	Muscadine Darter			X		
FI	<i>Percina squamata</i>	Olive Darter		X			
FI	<i>Percina tanasi</i>	Snail Darter	X				
FI	<i>Phenacobius crassilabrum</i>	Fatlips Minnow		X			
FI	<i>Phenacobius uranops</i>	Stargazing Minnow	X				
FI	<i>Phoxinus tennesseensis</i>	Tennessee Dace	X				
FI	<i>Pteronotropis euryzonus</i>	Broadstripe Shiner				X	

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Distribution of High Priority Animals by Ecoregion

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Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
FI	<i>Pteronotropsis welaka</i>	Bluenose Shiner				X	
FI	<i>Sphryna lewini</i>	Scalloped Hammerhead					X
FI	<i>Typhlichthys subterraneus</i>	Southern Cavefish	X				
MA	<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	X	X		X	X
MA	<i>Eubalaena glacialis</i>	Northern Atlantic Right Whale					X
MA	<i>Geomys pinetis</i>	Southeastern Pocket Gopher				X	X
MA	<i>Lasiurus intermedius</i>	Northern Yellow Bat				X	X
MA	<i>Megaptera novaeangliae</i>	Humpback Whale					X
MA	<i>Mustela nivalis</i>	Least Weasel		X			
MA	<i>Myotis austroriparius</i>	Southeastern Myotis			X	X	X
MA	<i>Myotis grisescens</i>	Gray Myotis	X		X		
MA	<i>Myotis leibii</i>	Eastern Small-footed Myotis	X	X			
MA	<i>Myotis lucifugus</i>	Little Brown Myotis	X	X			
MA	<i>Myotis septentrionalis</i>	Northern Myotis	X	X	X		
MA	<i>Myotis sodalis</i>	Indiana Myotis	X	X			
MA	<i>Neofiber alleni</i>	Round-tailed Muskrat				X	X
MA	<i>Parascalops breweri</i>	Hairy-tailed Mole		X			
MA	<i>Perimyotis subflavus</i>	Tri-colored Bat	X	X	X	X	X
MA	<i>Puma concolor coryi</i>	Florida Panther					
MA	<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel					X
MA	<i>Sorex dispar</i>	Long-tailed or Rock Shrew		X			
MA	<i>Sorex palustris</i>	Water Shrew		X			
MA	<i>Spilogale putorius</i>	Eastern Spotted Skunk	X	X	X	X	
MA	<i>Sylvilagus obscurus</i>	Appalachian Cottontail		X			
MA	<i>Synaptomys cooperi</i>	Southern Bog Lemming		X			
MA	<i>Tamiasciurus hudsonicus</i>	Red Squirrel		X			
MA	<i>Trichechus manatus</i>	Manatee					X
MA	<i>Tursiops truncatus</i>	Atlantic Bottle-nose Dolphin					X
MO	<i>Alasmidonta arcuata</i>	Altamaha Arcmussel			X		X
MO	<i>Alasmidonta triangulata</i>	Southern Elktoe				X	
MO	<i>Amblema neislerii</i>	Fat Threeridge					X
MO	<i>Anodontoides radiatus</i>	Rayed Creekshell			X	X	
MO	<i>Campeloma regulare</i>	Cylinder campeloma	X				
MO	<i>Crassostrea virginica</i>	American Oyster					X
MO	<i>Elimia darwini</i>	Pup Elimia				X	
MO	<i>Elimia inclinans</i>	Slanted Elimia				X	
MO	<i>Elimia induta</i>	Gem Elimia				X	
MO	<i>Elimia mutabilis</i>	Oak Elimia			X		
MO	<i>Elimia ornata</i>	Ornate Elimia	X				
MO	<i>Elimia striatula</i>	File Elimia	X	X			
MO	<i>Elimia timida</i>	Timid Elimia				X	
MO	<i>Elliptio arca</i>	Alabama Spike	X				
MO	<i>Elliptio arcata</i>	Delicate Spike	X				

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Distribution of High Priority Animals by Ecoregion

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Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
MO	<i>Elliptio fraterna</i>	Brother Spike					X
MO	<i>Elliptio nigella</i>	Winged Spike			X		X
MO	<i>Elliptio purpurella</i>	Inflated Spike					X
MO	<i>Elliptio spinosa</i>	Altamaha Spiny mussel				X	
MO	<i>Elliptoideus sloatianus</i>	Purple Bankclimber					X
MO	<i>Fusconaia masoni</i>	Atlantic Pigtoe				X	
MO	<i>Hamiota altilis</i>	Finelined Pocketbook	X		X		
MO	<i>Hamiota subangulata</i>	Shinyrayed Pocketbook			X		X
MO	<i>Lampsilis cariosa</i>	Yellow Lampmussel					X
MO	<i>Lampsilis straminea</i>	Southern Fatmucket	X		X	X	
MO	<i>Lasmigona holstonia</i>	Tennessee Heelsplitter	X				
MO	<i>Leptoxis foremani</i>	Interrupted Rocksnail	X				
MO	<i>Leptoxis praerosa</i>	Onyx Rocksnail	X				
MO	<i>Marstonia agarhecta</i>	Ocmulgee Marstonia				X	
MO	<i>Marstonia castor</i>	Beaverpond Marstonia					X
MO	<i>Marstonia gaddisorum</i>	Emily's Marstonia				X	
MO	<i>Medionidus acutissimus</i>	Alabama Moccasinshell	X				
MO	<i>Medionidus conradicus</i>	Cumberland Moccasinshell	X				
MO	<i>Medionidus parvulus</i>	Coosa Moccasinshell	X				
MO	<i>Medionidus penicillatus</i>	Gulf Moccasinshell			X		X
MO	<i>Medionidus simpsonianus</i>	Ochlockonee Moccasinshell					X
MO	<i>Medionidus walkeri</i>	Suwannee Moccasinshell					X
MO	<i>Pleurobema decisum</i>	Southern Clubshell	X				
MO	<i>Pleurobema georgianum</i>	Southern Pigtoe	X				
MO	<i>Pleurobema hanleyianum</i>	Georgia Pigtoe	X				
MO	<i>Pleurobema hartmanianum</i>	Cherokee Pigtoe	X				
MO	<i>Pleurobema pyriforme</i>	Oval Pigtoe			X		X
MO	<i>Pleurocera pyrenella</i>	Skirted Hornsnail	X				
MO	<i>Pleurocera showalteri</i>	Upland Hornsnail	X				
MO	<i>Pleurocera vestita</i>	Brook hornsnail	X				
MO	<i>Pleuronaia barnesiana</i>	Tennessee Pigtoe	X				
MO	<i>Ptychobranthus fasciolaris</i>	Kidneyshell	X				
MO	<i>Ptychobranthus foremanianus</i>	Rayed Kidneyshell	X				
MO	<i>Quadrula kleiniana</i>	Suwannee Pigtoe				X	
MO	<i>Somatogyrys alcoviensis</i>	Reverse Pebblesnail			X		
MO	<i>Somatogyrys rheophilus</i>	Flint Pebblesnail				X	
MO	<i>Somatogyrys tenax</i>	Savannah Pebblesnail			X		
MO	<i>Strophitus connasaugaensis</i>	Alabama Creekmussel	X	X			
MO	<i>Toxolasma corvunculus</i>	Southern Purple Lilliput	X				
MO	<i>Toxolasma pullus</i>	Savannah Lilliput					X
MO	<i>Villosa nebulosa</i>	Alabama Rainbow	X	X			
MO	<i>Villosa umbrans</i>	Coosa Creekshell	X				
RE	<i>Caretta caretta</i>	Loggerhead Sea Turtle					X

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Distribution of High Priority Animals by Ecoregion

A-8

Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
RE	<i>Chelonia mydas</i>	Green Sea Turtle					X
RE	<i>Clemmys guttata</i>	Spotted Turtle				X	X
RE	<i>Crotalus adamanteus</i>	Eastern Diamond-backed Rattlesnake				X	X
RE	<i>Dermochelys coriacea</i>	Leatherback Sea Turtle					X
RE	<i>Drymarchon couperi</i>	Eastern Indigo Snake				X	X
RE	<i>Eumeces anthracinus</i>	Coal Skink				X	
RE	<i>Glyptemys muhlenbergii</i>	Bog Turtle		X			
RE	<i>Gopherus polyphemus</i>	Gopher Tortoise				X	X
RE	<i>Graptemys barbouri</i>	Barbour's Map Turtle			X	X	
RE	<i>Graptemys pulchra</i>	Alabama Map Turtle	X				
RE	<i>Heterodon simus</i>	Southern Hognose Snake				X	X
RE	<i>Lepidochelys kempii</i>	Kemp's or Atlantic Ridley					X
RE	<i>Macrochelys temminckii</i>	Alligator Snapping Turtle			X	X	X
RE	<i>Malaclemys terrapin</i>	Diamondback Terrapin					X
RE	<i>Ophisaurus compressus</i>	Island Glass Lizard				X	X
RE	<i>Ophisaurus mimicus</i>	Mimic Glass Lizard				X	X
RE	<i>Pituophis melanoleucus melanoleucus</i>	Northern Pine Snake	X	X	X		
RE	<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake				X	X
TA	<i>Acronicta albarufa</i>	Albarufan dagger moth				X	
TA	<i>Alloblackburneus troglodytes</i>	Little gopher tortoise scarab beetle				X	X
TA	<i>Amblyomma tuberculatum</i>	Gopher tortoise tick				X	X
TA	<i>Amblyscirtes alternata</i>	Dusky roadside-skipper			X	X	
TA	<i>Amblyscirtes belli</i>	Bell's Roadside-skipper	X		X		
TA	<i>Amblyscirtes carolina</i>	Carolina roadside-skipper	X	X	X		
TA	<i>Amblyscirtes reversa</i>	Reversed roadside-skipper	X	X			
TA	<i>Aphodius aegrotus</i>	A dung beetle				X	X
TA	<i>Aphodius alabama</i>	A dung beetle				X	
TA	<i>Aphodius baileyi</i>	A dung beetle				X	
TA	<i>Aphodius bakeri</i>	A dung beetle				X	
TA	<i>Aphodius dyspistus</i>	A dung beetle				X	X
TA	<i>Aphodius gambrinus</i>	Amber pocket gopher Aphodius beetle				X	
TA	<i>Aphodius hubbelli</i>	A dung beetle				X	X
TA	<i>Aphodius laevigatus</i>	Large pocket gopher Aphodius beetle				X	X
TA	<i>Aphodius pholetus</i>	Rare pocket gopher Aphodius beetle				X	
TA	<i>Aphodius platypleurus</i>	Broad-sided pocket gopher Aphodius beetle				X	
TA	<i>Aphodius tanytarsus</i>	Long-clawed pocket gopher Aphodius beetle				X	

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Distribution of High Priority Animals by Ecoregion

A-9

Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
TA	<i>Aptenopedes apalachee</i>	Apalachee linear-winged grasshopper				X	
TA	<i>Atrytone arogos arogos</i>	Eastern Aragos Skipper				X	
TA	<i>Autochton cellus</i>	Golden-banded skipper	X	X			
TA	<i>Bombus affinis</i>	Rusty-patched bumblebee	X	X	X	X	X
TA	<i>Bombus borealis</i>	Northern amber bumble		X			
TA	<i>Bryophaenocladus chrissichuckorum</i>	Midge (Heggie's Rock)			X		
TA	<i>Callophrys hesselli</i>	Hessell's hairstreak				X	
TA	<i>Callophrys irus</i>	Frosted elfin				X	X
TA	<i>Catocala grisatra</i>	Grisatra underwing moth				X	
TA	<i>Caupolicana electa</i>	Plasterer bee				X	X
TA	<i>Chelyoxenus xerobatis</i>	Gopher tortoise hister beetle				X	X
TA	<i>Chlosyne gorgone gorgone</i>	Gorgone checkerspot				X	
TA	<i>Cicindela nigrior</i>	Autumn tiger beetle				X	
TA	<i>Crossidius grahami</i>	Ohoopie dunes Crossidius beetle				X	
TA	<i>Cyclocosmia torreya</i>	Torreya trap-door spider				X	
TA	<i>Danaus plexippus</i>	Monarch butterfly	X	X	X	X	X
TA	<i>Dorymyrmex bossutus</i>	Sandhills cone ant				X	
TA	<i>Eotettix palustris</i>	Longleaf spur-throated grasshopper				X	
TA	<i>Erora laeta</i>	Early hairstreak	X	X			
TA	<i>Erynnis martialis</i>	Mottled duskywing		X		X	
TA	<i>Euphoria aeusutosa</i>	Pocket gopher flower beetle				X	
TA	<i>Euphydryas phaeton</i>	Baltimore checkerspot	X	X	X		
TA	<i>Euphyes berryi</i>	Berry's Skipper					X
TA	<i>Euphyes bimacula arbogastii</i>	Two-spotted Skipper					X
TA	<i>Euphyes dukesi</i>	Duke's Skipper					X
TA	<i>Euphyes pilatka</i>	Palatka Skipper					X
TA	<i>Fernaldella georgiana</i>	Ohoopie Geometer				X	
TA	<i>Floritettix borealis</i>	A grasshopper				X	
TA	<i>Geopsammodius ohoopie</i>	Ohoopie dunes scarab beetle				X	
TA	<i>Habronattus sabulosus</i>	Jumping spider (Heggie's Rock)			X		
TA	<i>Hesperia attalus slossonae</i>	Dotted skipper				X	
TA	<i>Hesperia meskei</i>	Meske's skipper				X	
TA	<i>Hesperotettix floridensis</i>	A grasshopper				X	
TA	<i>Hypothyce osburni</i>	Osburn's hypothyce				X	
TA	<i>Idia gopheri</i>	Gopher tortoise burrow noctuid moth				X	
TA	<i>Machimus polyphemi</i>	Gopher tortoise robber fly				X	X
TA	<i>Melanoplus acidocercus</i>	A spur-throat grasshopper				X	

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Distribution of High Priority Animals by Ecoregion

A-10

Group	Scientific Name	Common Name	SA_RV	BR	PD	SP	SCP
TA	Melanoplus clypeatus	Shield-tailed spur-throat Grasshopper				X	
TA	Melanoplus longicornis	A spur-throat grasshopper			X		
TA	Melanoplus nossi	Noss' spur-throat grasshopper				X	
TA	Melanoplus sp nov 1	A spur-throat grasshopper				X	
TA	Melanoplus sp nov 2	A spur-throat grasshopper				X	
TA	Melanoplus stegocercus	A spur-throat grasshopper				X	
TA	Melanoplus tumidicercus	A spur-throat grasshopper				X	
TA	Mycotrupes cartwrighti	Cartwright's burrowing beetle				X	
TA	Mycotrupes lethroides	Large Mycotrupes				X	
TA	Neonympha areolatus	Georgia Satyr					X
TA	Neonympha helicta	Helicta satyr			X		
TA	Onthophagus polyphemi polyphemi	Onthophagus tortoise commensal scarab beetle				X	X
TA	Pheidole davisii	Pine barrens Pheidole				X	
TA	Phyciodes batesii maconensis	Tawny crescent		X			
TA	Pieris virginianensis	West Virginia White	X	X	X		
TA	Poanes aaroni howardi	Aaron's skipper					X
TA	Polites baracoa	Baracoa skipper				X	
TA	Polygonia faunus	Green comma		X			
TA	Polyphylla donaldsoni	Donaldson's lined june beetle				X	
TA	Problema bulenta	Rare Skipper					X
TA	Satyrium edwardsii	Edwards hairstreak	X	X	X	X	
TA	Satyrium kingi	King's hairstreak					X
TA	Speyeria diana	Diana fritillary	X	X	X		
TA	Sphodros abbotii	Purse-web spider				X	X
TA	Temnothorax_GA_01	Temnothorax new species		X			
TA	Temnothorax_GA_01	Temnothorax new species	X				
TA	Trimerotropis saxatalis	Lichen or rock grasshopper			X		
TA	Zale perculata	Okefenokee zale moth				X	
		Totals	110	89	90	151	120

Distribution of High Priority Plants by Ecoregion

A-11

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Acmispon helleri</i>	Carolina Trefoil			X		
<i>Aesculus glabra</i>	Ohio Buckeye	X		X		
<i>Agalinis decemloba</i>	Ten-lobed Purple Foxglove	X	X			
<i>Agalinis georgiana</i>	Georgia Purple Foxglove				X	
<i>Agastache nepetoides</i>	Yellow Giant Hyssop	X				
<i>Agastache scrophulariifolia</i>	Purple Giant Hyssop		X			
<i>Allium speculae</i>	Flatrock Onion			X		
<i>Alnus maritima</i> ssp. <i>georgiensis</i>	Georgia Alder	X				
<i>Amelanchier sanguinea</i>	Roundleaf Serviceberry	X	X			
<i>Amorpha georgiana</i>	Georgia Indigo-Bush					X
<i>Amorpha herbacea</i> var. <i>floridana</i>	Florida Leadbush					X
<i>Amorpha nitens</i>	Shining Indigo-Bush			X		
<i>Amorpha schwerinii</i>	Schwerin's Indigo-Bush			X		
<i>Amphianthus pusillus</i>	Pool Sprite, Snorkelwort			X		
<i>Amsonia ludoviciana</i>	Louisiana Blue Star			X		
<i>Anemone berlandieri</i>	Glade Windflower	X		X		
<i>Anemone caroliniana</i>	Carolina Windflower			X		
<i>Arabis georgiana</i>	Georgia Rockcress	X		X		X
<i>Arnoglossum diversifolium</i>	Variable-Leaf Indian-Plantain					X
<i>Arnoglossum sulcatum</i>	Grooved-Stem Indian-Plantain				X	X
<i>Asclepias purpurascens</i>	Purple Milkweed	X				
<i>Asclepias rubra</i>	Red Milkweed				X	
<i>Asplenium heteroresiliens</i>	Morzenti's Spleenwort				X	X
<i>Astragalus michauxii</i>	Sandhill Milkvetch				X	X
<i>Aureolaria patula</i>	Spreading Yellow Foxglove	X				
<i>Balduina atropurpurea</i>	Purple Honeycomb Head				X	X
<i>Baptisia arachnifera</i>	Hairy Rattleweed					X
<i>Baptisia australis</i> var. <i>aberrans</i>	Glade Blue Wild Indigo	X				
<i>Baptisia megacarpa</i>	Bigpod Wild Indigo			X	X	
<i>Berberis canadensis</i>	American Barberry	X	X	X		
<i>Boechera missouriensis</i>	Missouri Rockcress			X		
<i>Brickellia cordifolia</i>	Heartleaf Brickellia				X	X
<i>Buchnera americana</i>	American Bluehearts	X	X			
<i>Calamintha ashei</i>	Ashe's Wild Savory					
<i>Calamintha</i> sp. nov. (undescribed)	Indian Grave Mountain Wild Savory			X		
<i>Calamovilfa arcuata</i>	Cumberland Sandreed	X				
<i>Calliphysalis carpenteri</i>	Carpenter's Ground-Cherry					
<i>Calystegia catesbiana</i> ssp. <i>Sericata</i>	Catesby's Bindweed				X	
<i>Carex acidicola</i>	Acid-Loving Sedge		X			
<i>Carex baltzellii</i>	Baltzell's Sedge				X	
<i>Carex biltmoreana</i>	Biltmore Sedge		X	X		
<i>Carex calcifugens</i>	Lime-Fleeing Sedge					X
<i>Carex decomposita</i>	Cypress-Knee Sedge				X	X

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Distribution of High Priority Plants by Ecoregion

A-12

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Carex exilis</i>	Meager Sedge				X	
<i>Carex radfordii</i>	Radford's Sedge			X		
<i>Carex thornei</i>	Thorne's Sedge				X	
<i>Carya laciniosa</i>	Shellbark Hickory	X				
<i>Carya myristiciformis</i>	Nutmeg Hickory	X				
<i>Ceratiola ericoides</i>	Rosemary				X	
<i>Chamaecrista deeringiana</i>	Florida Senna				X	
<i>Chamaecyparis thyoides</i>	Atlantic White-Cedar				X	
<i>Chelone cuthbertii</i>	Cuthbert's Turtlehead		X			
<i>Chelone lyonii</i>	Appalachian Turtlehead	X				
<i>Cirsium virginianum</i>	Virginia Thistle			X		
<i>Clematis fremontii</i>	Fremont's Leatherflower	X				
<i>Clematis socialis</i>	Alabama Leather Flower	X				
<i>Coreopsis integrifolia</i>	Ciliate-Leaf Tickseed				X	X
<i>Coreopsis rosea</i>	Pink Tickseed		X			X
<i>Crataegus aemula</i>	Rome Hawthorn	X		X		
<i>Crataegus aprica</i>	Sunny Hawthorn			X	X	
<i>Crataegus mendosa</i>	Albertville Hawthorn	X			X	
<i>Crataegus mollis</i>	Downy Hawthorn	X				
<i>Crataegus triflora</i>	Three-Flower Hawthorn	X			X	
<i>Crocantemum nashii</i>	Florida Scrub Sunrose					X
<i>Croomia pauciflora</i>	Croomia			X	X	
<i>Croton elliotii</i>	Pondshore Croton				X	
<i>Ctenium floridanum</i>	Florida Orange-Grass					X
<i>Cuscuta harperi</i>	Harper's Dodder			X	X	
<i>Cymophyllus fraserianus</i>	Fraser's Sedge		X			
<i>Cypripedium kentuckiense</i>	Kentucky Ladyslipper				X	
<i>Danthonia epilis</i>	Bog Oat-Grass		X	X		
<i>Delphinium alabamicum</i>	Alabama Larkspur	X				
<i>Desmodium ochroleucum</i>	Cream-Flowered Tick-Trefoil	X			X	
<i>Dicerandra radfordiana</i>	Radford's Dicerandra					X
<i>Dichanthelium hirstii</i>	Hirst Brothers' Panic Grass					
<i>Diplophyllum andrewsii</i>	Andrews' Diplophyllum (Liverwort)		X			
<i>Draba aprica</i>	Open-Ground Whitlow-Grass			X		
<i>Dulichium</i> sp. nov. (unpublished)	Coosa Prairie Threeway Sedge	X				
<i>Ecchremidium floridanum</i>	Florida Pygmy Moss					X
<i>Echinacea laevigata</i>	Smooth Purple Coneflower			X		
<i>Echinacea simulata</i>	Prairie Purple Coneflower	X				
<i>Eleocharis wolfii</i>	Spikerush			X		
<i>Elliottia racemosa</i>	Georgia Plume				X	X
<i>Eriocaulon koernickianum</i>	Dwarf Pipewort			X		
<i>Eriochloa michauxii</i> var. <i>michauxii</i>	Michaux's Longleaf Cupgrass					X
<i>Eriophorum virginicum</i>	Tawny Cottongrass				X	X

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Distribution of High Priority Plants by Ecoregion

A-13

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Euphorbia purpurea</i>	Glade Spurge		X			
<i>Eurybia avita</i>	Alexander's Rock Aster					
<i>Eurybia jonesiae</i>	Piedmont Bigleaf Aster			X		
<i>Eustachys floridana</i>	Florida Finger Grass				X	
<i>Evolvulus sericeus</i> var. <i>sericeus</i>	Creeping Morning-Glory					X
<i>Fimbristylis brevivaginata</i>	Flatrock Fimbry			X		
<i>Fimbristylis perpusilla</i>	Harper's Fimbry				X	
<i>Forestiera godfreyi</i>	Godfrey's Wild Privet					X
<i>Forestiera segregata</i> var. <i>segregata</i>	Florida Wild Privet					X
<i>Fothergilla gardenii</i>	Dwarf Witch-Alder			X	X	X
<i>Fothergilla major</i>	Large Witch-Alder		X			
<i>Frullania appalachiana</i>	Appalachian Frullania		X			
<i>Gentianopsis crinita</i>	Fringed Gentian		X			
<i>Glandularia bipinnatifida</i> var. <i>bipinnatifida</i>	Dakota Vervain				X	
<i>Gymnoderma lineare</i>	Rock Gnome Lichen		X			
<i>Habenaria quinqueseta</i>	Michaux's Orchid				X	X
<i>Hamamelis ovalis</i>	Bigleaf Witch-Hazel				X	
<i>Hartwrightia floridana</i>	Hartwrightia					X
<i>Helenium brevifolium</i>	Bog Sneezeweed				X	
<i>Helianthus glaucophyllus</i>	Whiteleaf Sunflower		X			
<i>Helianthus smithii</i>	Smith's Sunflower		X	X		
<i>Helianthus verticillatus</i>	Whorled Sunflower	X				
<i>Helodium blandowii</i>	Blandow's Feather Moss		X			
<i>Helonias bullata</i>	Swamp-Pink		X			
<i>Hydrastis canadensis</i>	Goldenseal	X	X	X		
<i>Hymenocallis coronaria</i>	Shoals Spiderlily			X		
<i>Hymenophyllum tayloriae</i>	Taylor's Filmy Fern					
<i>Hypericum adpressum</i>	Bog St. Johnswort				X	
<i>Hypericum erythraeae</i>	Georgia St.-John's-Wort				X	X
<i>Hypnum cupressiforme</i> var. <i>filiforme</i>	Filiform Cypress-Moss		X			
<i>Illicium floridanum</i>	Florida Anise-Tree				X	
<i>Isoetes boomii</i>	Boom's Quillwort				X	
<i>Isoetes flaccida</i>	Florida Quillwort				X	
<i>Isoetes hyemalis</i>	Winter Quillwort				X	
<i>Isoetes junciformis</i>	Rush Quillwort				X	
<i>Isoetes melanospora</i>	Black-Spored Quillwort			X		
<i>Isoetes tegetiformans</i>	Mat-Forming Quillwort			X		
<i>Isotria medeoloides</i>	Small Whorled Pogonia		X			
<i>Jamesianthus alabamensis</i>	Jamesianthus	X				
<i>Juglans cinerea</i>	Butternut	X	X	X		
<i>Juniperus communis</i> var. <i>depressa</i>	Ground Juniper			X		
<i>Justicia angusta</i>	Narrowleaf Water-Willow				X	X
<i>Kalmia carolina</i>	Carolina Bog Myrtle		X		X	

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Distribution of High Priority Plants by Ecoregion

A-14

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Lachnocaulon beyrichianum</i>	Southern Bog-Button				X	X
<i>Leavenworthia exigua</i> var. <i>exigua</i>	Least Gladecress	X				
<i>Leiophyllum buxifolium</i>	Sand-Myrtle		X			
<i>Leitneria floridana</i>	Corkwood				X	X
<i>Lejeunea blomquistii</i>	Blomquist's Lejeunea		X			
<i>Liatris tenuifolia</i> var. <i>quadriflora</i>	Florida Narrowleaf Blazing Star				X	
<i>Lilium canadense</i>	Canada Lily	X	X	X		
<i>Lilium michiganense</i>	Michigan Lily	X				
<i>Lilium philadelphicum</i>	Wood Lily	X				
<i>Lilium pyrophilum</i>	Pineland Lily				X	
<i>Lindera melissifolia</i>	Pondberry				X	X
<i>Lindera subcoriacea</i>	Bog Spicebush				X	
<i>Liparis loeselii</i>	Fen Orchid		X			
<i>Litsea aestivalis</i>	Pondspice				X	X
<i>Lobelia boykinii</i>	Boykin's Lobelia					
<i>Ludwigia spathulata</i>	Creeping Smallflower Seedbox					
<i>Lycium carolinianum</i>	Carolina Wolfberry					X
<i>Lysimachia fraseri</i>	Fraser's Loosestrife	X	X	X		
<i>Lythrum curtissii</i>	Curtiss' Loosestrife				X	
<i>Macbridea caroliniana</i>	Carolina Bogmint				X	
<i>Macranthera flammea</i>	Bog Flameflower				X	
<i>Malaxis spicata</i>	Florida Adders-Mouth Orchid				X	X
<i>Marshallia mohrii</i>	Coosa Barbara's-Buttons	X				
<i>Marshallia trinervia</i>	Broadleaf Barbara's-Buttons	X				
<i>Matelea alabamensis</i>	Alabama Milkvine				X	X
<i>Matelea floridana</i>	Florida Milkvine				X	
<i>Megaceros aenigmaticus</i>	Headwaters Hornwort		X			
<i>Monotropsis odorata</i>	Sweet Pinesap		X	X		
<i>Morella inodora</i>	Odorless Bayberry				X	
<i>Najas filifolia</i>	Narrowleaf Naiad				X	
<i>Nestronia umbellula</i>	Indian Olive			X	X	
<i>Nevusia alabamensis</i>	Alabama Snow-Wreath	X				
<i>Oncophorus raii</i>	Rau's Oncophorus Moss		X			
<i>Onosmodium molle</i> ssp. <i>occidentale</i>	Western Marble-Seed	X				
<i>Oxypolis canbyi</i>	Canby's Dropwort				X	
<i>Oxypolis ternata</i>	Savanna Cowbane				X	X
<i>Packera millefolia</i>	Blue Ridge Golden Ragwort		X			
<i>Panax quinquefolius</i>	American Ginseng	X	X	X	X	
<i>Panax trifolius</i>	Dwarf Ginseng		X			
<i>Paronychia virginica</i>	Yellow Nailwort			X		
<i>Pedicularis lanceolata</i>	Swamp Lousewort		X			
<i>Pediomelum piedmontanum</i>	Dixie Mountain Breadroot			X		
<i>Philadelphus pubescens</i>	Hairy Mockorange	X				

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Distribution of High Priority Plants by Ecoregion

A-15

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Pinguicula primuliflora</i>	Clearwater Butterwort				X	
<i>Pityopsis oligantha</i>	Few-Flowered Golden-Aster				X	
<i>Plagiochila caduciloba</i>	Brittle-Lobed Leafy Liverwort		X			
<i>Plagiochila floridana</i>	Florida Leafy Liverwort				X	
<i>Plagiochila sharpii</i>	Sharp's Leafy Liverwort		X			
<i>Plagiomnium carolinianum</i>	Carolina Wavy-Leaf Moss		X			
<i>Plantago sparsiflora</i>	Pineland Plantain				X	X
<i>Platanthera blephariglottis</i>	Small White Fringed Orchid					X
<i>Platanthera chapmanii</i>	Chapman's Fringed Orchid					X
<i>Platanthera conspicua</i>	Large White Fringed Orchid				X	X
<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchid		X			
<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid		X			
<i>Platanthera integra</i>	Yellow Fringeless Orchid				X	X
<i>Platanthera integrilabia</i>	Monkeyface Orchid	X	X	X		
<i>Platanthera peramoena</i>	Purple Fringeless Orchid		X			
<i>Platyhypnidium pringlei</i>	Pringle's Platyhypnidium		X			
<i>Pohlia rabunbaldensis</i>	Rabun Bald Feather-Moss		X			
<i>Polymnia laevigata</i>	Tennessee Leafcup	X				
<i>Portulaca biloba</i>	Grit Portulaca				X	X
<i>Portulaca umbraticola</i> ssp. <i>coronata</i>	Wingpod Purslane			X		
<i>Pteroglossaspis ecristata</i>	Wild Coco				X	X
<i>Ptilimnium ahlesii</i>	Coastal Bishopweed					X
<i>Ptilimnium nodosum</i>	Harperella			X	X	
<i>Quercus oglethorpensis</i>	Oglethorpe Oak			X		
<i>Quercus similis</i>	Swamp Post Oak	X	X			X
<i>Rhexia aristosa</i>	Awned Meadowbeauty				X	
<i>Rhexia salicifolia</i>	Willowleaf Meadowbeauty				X	
<i>Rhododendron eastmanii</i>	May Pink Azalea				X	
<i>Rhododendron prunifolium</i>	Plumleaf Azalea				X	
<i>Rhus michauxii</i>	Dwarf Sumac			X		
<i>Rhynchospora breviseta</i>	Short-Bristle Beakrush				X	X
<i>Rhynchospora crinipes</i>	Bearded Beakrush				X	
<i>Rhynchospora culixa</i>	Georgia Beakrush				X	
<i>Rhynchospora decurrens</i>	Decurrent Beakrush				X	X
<i>Rhynchospora fernaldii</i>	Fernald's Beakrush					X
<i>Rhynchospora harperi</i>	Harper's Beakrush					
<i>Rhynchospora macra</i>	Many-Bristled Beakrush					X
<i>Rhynchospora pleiantha</i>	Clonal Thread-Leaved Beakrush				X	X
<i>Rhynchospora punctata</i>	Spotted Beakrush				X	X
<i>Rhynchospora solitaria</i>	Solitary Beakrush				X	
<i>Rhynchospora thornei</i>	Thorne's Beakrush	X			X	
<i>Rudbeckia auriculata</i>	Swamp Black-Eyed Susan					
<i>Rudbeckia heliopsisidis</i>	Little River Black-Eyed Susan	X				

SA/RV = SW Appalachians/Ridge & Valley, BR = Blue Ridge, PD = Piedmont, SP = Southeastern Plains, SCP = Southern Coastal Plain

Distribution of High Priority Plants by Ecoregion

A-16

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Ruellia noctiflora</i>	Night-Blooming Wild Petunia					X
<i>Sabatia capitata</i>	Cumberland Rose Gentian	X		X		
<i>Sageretia minutiflora</i>	Climbing Buckthorn				X	X
<i>Sagittaria secundifolia</i>	Little River Water-Plantain	X				
<i>Salix floridana</i>	Florida Willow				X	
<i>Sanguisorba canadensis</i>	Canada Burnet		X			
<i>Sapindus saponaria</i> var. <i>marginatus</i>	Soapberry					X
<i>Sarracenia leucophylla</i>	Whitetop Pitcherplant				X	
<i>Sarracenia oreophila</i>	Green Pitcherplant		X			
<i>Sarracenia psittacina</i>	Parrot Pitcherplant				X	X
<i>Sarracenia purpurea</i> var. <i>montana</i>	Mountain Purple Pitcherplant		X			
<i>Sarracenia purpurea</i> var. <i>venosa</i>	Lowland Purple Pitcherplant				X	
<i>Sarracenia rubra</i> aff. <i>gulfensis</i>	Sweet Pitcherplant				X	
<i>Sarracenia rubra</i> ssp. <i>rubra</i>	Sweet Pitcherplant					X
<i>Schisandra glabra</i>	Bay Starvine			X	X	
<i>Schoenolirion albiflorum</i>	White Sunnysbell					X
<i>Schoenoplectus erectus</i> ssp. <i>raynalii</i>	Raynal's Bulrush				X	
<i>Schoenoplectus etuberculatus</i>	Clearwater Bulrush				X	
<i>Schwalbea americana</i>	Chaffseed			X	X	
<i>Scutellaria altamaha</i>	Altamaha Skullcap				X	X
<i>Scutellaria mellichampii</i>	Mellichamp's Skullcap				X	X
<i>Scutellaria montana</i>	Large-Flower Skullcap	X				
<i>Scutellaria ocmulgee</i>	Ocmulgee Skullcap					
<i>Sedum nevii</i>	Nevius' Stonecrop			X		
<i>Sedum pusillum</i>	Granite Stonecrop, Puck's Orpine			X		
<i>Shortia galacifolia</i>	Oconee Bells		X			
<i>Sibbaldiopsis tridentata</i>	Three-Toothed Cinquefoil		X			
<i>Sideroxylon macrocarpum</i>	Ohoopce Bumelia				X	X
<i>Sideroxylon thornei</i>	Swamp Buckthorn					X
<i>Silene ovata</i>	Mountain Catchfly		X		X	
<i>Silene polypetala</i>	Fringed Campion			X	X	
<i>Silene regia</i>	Royal Catchfly	X				
<i>Silphium mohrii</i>	Cumberland Rosinweed	X				
<i>Sium floridanum</i>	Florida Water-Parsnip				X	
<i>Solidago arenicola</i>	Black Warrior Goldenrod	X				
<i>Solidago simulans</i>	Cliffside Goldenrod		X			
<i>Spiraea latifolia</i>	Broadleaf Bog Meadowsweet		X			
<i>Spiraea virginiana</i>	Virginia Spirea	X				
<i>Spiranthes floridana</i>	Florida Ladies-Tresses					X
<i>Spiranthes longilabris</i>	Giant Spiral Ladies-Tresses				X	
<i>Spiranthes magnicamporum</i>	Great Plains Ladies-Tresses	X				
<i>Sporobolus pinetorum</i>	Pineland Dropseed					X
<i>Sporobolus teretifolius</i>	Wire-Leaf Dropseed				X	X

SA/RV = SW Appalachians/Ridge & Valley, BR = Blue Ridge, PD = Piedmont, SP = Southeastern Plains, SCP = Southern Coastal Plain

Distribution of High Priority Plants by Ecoregion

A-17

Name	Common Name	SA_RV	BR	PD	SP	SCP
<i>Stachys hysopifolia</i> var. <i>lythroides</i>	Tallahassee Hedge-Nettle				X	
<i>Stewartia malacodendron</i>	Silky Camellia			X	X	X
<i>Stokesia laevis</i>	Stokes Aster				X	
<i>Streptopus lanceolatus</i> var. <i>lanceolatus</i>	Rosy Twisted-Stalk		X			
<i>Symphyotrichum georgianum</i>	Georgia Aster	X	X	X	X	
<i>Teloschistes exilis</i>	Slender Orange Bush Lichen				X	
<i>Tephrosia mohrii</i>	Dwarf Goat's-Rue				X	
<i>Thalictrum cooleyi</i>	Cooley's Meadowrue				X	
<i>Thalictrum coriaceum</i>	Appalachian Meadowrue		X			
<i>Thalictrum debile</i>	Trailing Meadowrue	X				
<i>Thaspium pinnatifidum</i>	Cutleaf Meadow-Parsnip	X				
<i>Thermopsis fraxinifolia</i>	Ash-Leaved Bush-Pea	X	X			
<i>Thermopsis villosa</i>	Carolina Golden Banner	X	X			
<i>Torreya taxifolia</i>	Florida Torreya				X	
<i>Tridens carolinianus</i>	Carolina Redtop				X	
<i>Trillium decipiens</i>	Mimic Trillium				X	
<i>Trillium persistens</i>	Persistent Trillium		X	X		
<i>Trillium pusillum</i>	Least Trillium	X				
<i>Trillium reliquum</i>	Relict Trillium			X	X	
<i>Trillium</i> sp. nov. (unpublished)	Amicalola Trillium		X			
<i>Trillium</i> sp. nov. (unpublished)	Lookout Mountain Toadshade	X				
<i>Trillium</i> sp. nov. (unpublished)	Southern Decumbent Trillium			X	X	
<i>Triphora trianthophora</i>	Three-Birds Orchid		X	X		
<i>Tsuga caroliniana</i>	Carolina Hemlock		X			
<i>Veratrum woodii</i>	Ozark Bunchflower	X		X	X	
<i>Verbesina walteri</i>	Carolina Crownbeard				X	
<i>Viburnum bracteatum</i>	Limerock Arrowwood	X				
<i>Viburnum rafinesquianum</i> var. <i>affine</i>	Downy Arrowwood			X		
<i>Waldsteinia lobata</i>	Piedmont Barren Strawberry		X	X	X	
<i>Xerophyllum asphodeloides</i>	Eastern Turkeybeard	X		X		
<i>Xyris drummondii</i>	Drummond's Yellow-Eyed Grass				X	X
<i>Xyris scabrifolia</i>	Harper's Yellow-Eyed Grass			X	X	X
<i>Xyris tennesseensis</i>	Tennessee Yellow-Eyed Grass	X		X		
	Totals	65	66	66	118	68

HIGH PRIORITY HABITATS BY ECOREGION

The following definitions are based on input from the habitat restoration & historic vegetation technical teams, members of the ecosystem and species technical teams, and information from Wharton (1978) and Mirarchi et al. (2004).

SOUTHWESTERN APPALACHIANS/RIDGE & VALLEY ECOREGIONS

Acidic Meadows Over Sandstone or Shale

Open, grassy habitats over shallow acidic soils; edaphic factors control species composition and diversity. May be moist or dry, depending on topographic setting. These small patch habitats are relatively rare in Georgia.

Calcareous Flatwoods (Hardwood Flats)

Relatively open, flat, shallowly and seasonally wet forested habitats dominated by hardwoods and including rare or uncommon species such as nutmeg hickory and Alabama leatherflower. Shrub and herb diversity is high. A small patch habitat restricted to low-lying areas with clayey calcareous soils.

Calcareous Prairies (Coosa Valley Prairies)

Open grass- and forb-dominated communities over clayey calcareous soils that inhibit growth of woody species. Groundlayer plant species diversity is high, and includes disjunct from midwestern prairies. Includes wet and dry prairie subtypes. These habitats require periodic fire for maintenance.

Canebrakes

Thickets of native river cane found along rivers and creeks under sparse to full tree cover. Canebrakes represent important wildlife habitat for a variety of neotropical birds and insects. These habitats require periodic fire or other form of disturbance for maintenance.

Caves, Rock Shelters, Talus Slopes

These habitats share certain structural characteristics, such as a bedrock component with a variety of microhabitats that provide cover for priority animal species. They are typically embedded in a larger matrix of forest habitats. Caves are unique in their lack of sunlight and vegetation and dependence on outside materials for energy flows. Rock shelters can be found under cliffs (vertical exposures of rock). Talus slopes are accumulations of rock beneath cliffs and steep slopes.

Forested Limestone Slopes and Terraces

This forest type is found at middle elevations along Lookout and Pigeon Mountain. Characterized by submesic hardwood forest, with species composition dependent on aspect and slope position. Includes partially forested limestone ledges along streams.

High Gradient First- and Second-Order Streams

Small, clear, cold, tumbling streams with bedrock riffles and sandy pools. Found at higher elevations and upper ends of steep ravines and slopes. These streams typically experience wide seasonal variations in flow; some receive substantial input from groundwater.

Limestone Glades and Barrens (Cedar Glades)

Open habitats dominated by grasses or forbs, with scattered eastern redcedars and other trees. These habitats contain a large number of endemic plant species. Glades occur on thin, rocky soils, and are

typically dominated by forbs; barrens are in areas with deeper soils and are dominated by grasses. The largest and most important area of cedar glades/barrens in Georgia is centered on Chickamauga-Chattanooga National Military Park.

Mesic Hardwood Forests

Mesic forests of bluffs, ravines, and colluvial flats, characterized by a diverse canopy of hardwood species such as yellow poplar, black cherry, white oak, shagbark hickory, northern red oak, bigleaf magnolia, sugar maple, and American beech. Hemlock and loblolly pine may be minor components in some areas. Mature examples are characterized by a rich understory of shrubs and herbaceous plants. This large patch habitat includes a rich mesic hardwood forest subtype found on calcareous soils.

Medium to Large Rivers

Lower gradient streams of valley bottoms, characterized by sandy, silty, or gravelly substrates. Typically surrounded by agricultural lands on the broad, fertile floodplains. Nearly all examples of large river floodplain forest in the Ridge & Valley region have been converted to other types of land cover.

Montane Longleaf Pine-Hardwood Forests

Dry forests composed of longleaf pine and mixed hardwood species, including mountain chestnut oak, southern red oak, and various scrub oaks. Significant examples occur in the Ridge & Valley region near Rome. Many Georgia examples are fire-suppressed and exhibit depressed species diversity relative to more frequently burned sites.

Oak Woodlands

An uncommon subxeric vegetation type found at higher elevations, oak woodlands are usually surrounded by xeric pine or pine-oak forest. Canopy dominants may include southern red oak, scarlet oak, post oak, and blackjack oak, with persimmon, blackgum, and other hardwood species. Probably maintained by a combination of infrequent fire and edaphic factors. Pigeon and Lookout Mountain contain good but narrow ecotonal examples.

Pine-Oak Woodlands and Forest

Relatively open subxeric to xeric forest or woodland, typically dominated by shortleaf pine, Virginia pine, and post and blackjack oaks, often with a diverse grass and shrub layer. May also include chestnut oak, scarlet oak, and other dry-site hardwood species. Includes typical shortleaf pine-post oak woodlands as well as mixed pine-oak scrub and dry pine-oak forest.

Red Maple/Blackgum Swamps

Nonalluvial or small stream swamp forests dominated by red maple and swamp blackgum. Often found along small low-gradient streams, in shallow depressions, or on wet flats. Often boggy, with a layer of peat, these wetlands have been impacted by construction of drainage ditches.

Sagponds (Isolated Depressional Wetlands)

Depressions formed by subsidence of soil due to groundwater percolation in the underlying rock. Contain a variety of vegetation types from freshwater emergents to swamp forest, depending on hydroperiod and other factors. Forested types are usually dominated by willow oak, swamp blackgum, and red maple. May include disjunct coastal plain species.

Sandstone Barrens and Outcrops

This edaphic habitat type includes sandstone boulders and outcrops of the Appalachian (Cumberland) Plateau as well as scoured sandstone ledges near streams. These open, rocky habitats are typically bordered by Virginia and shortleaf pine, chestnut oak, and a variety of shrubs.

Springs and Spring Runs; Gravelly Seeps

Springs are highly localized points of groundwater discharge that typically feed spring runs, while seeps may be broader or less defined areas of perennial or seasonal flows. The Ridge & Valley region contains a number of high-discharge springs. The waters of springs and associated habitats can be highly variable, depending on hydrology. These perennially cool and clear waters provide important habitat to a number of animal species, particularly salamanders and fish such as the coldwater darter.

Streams

Moderate to low gradient streams running through lower coves and valleys. Riffle, pool, and shoal habitats may be present. Substrates include gravel, pebbles, boulders, and bedrock. Aquatic plants may also be present. Pools are often silt-bottomed. These streams become turbid after rain. These are generally more productive than headwater streams because of limestone valley bottoms.

Underground Streams

Includes streams of all sizes flowing through caves and other underground passages. These aquatic systems are important for rare species such as the Southern cavefish and Tennessee cave salamander.

BLUE RIDGE ECOREGION

Boulderfield Forests

High elevation mesic hardwood forest; dominated by broadleaf deciduous trees, occupying north-facing areas with angular rocks or blocks of rock and little visible soil. Includes rich flora with northern affinities. Typically very mesic, with trees such as yellow buckeye, sweet birch, yellow birch, rosebay rhododendron. A rare community of the Blue Ridge; only a few examples are known.

Canebrakes

Thickets of native river cane found along rivers and creeks under sparse to full tree cover. Canebrakes represent important wildlife habitat for a variety of neotropical birds and insects. These habitats require fire or other form of periodic disturbance for maintenance. Most examples in this ecoregion are small and fire-suppressed.

Caves, Rock Shelters, Talus Slopes

These habitats share characteristics, such as a bedrock component with a variety of microhabitats that provide cover for priority animal species. These habitats are usually embedded in a larger matrix of forest habitats. The Blue Ridge contains relatively few caves; these are typically fracture-type caves rather than solution caves. Rock shelters can be found under cliffs (vertical exposures of rock). Talus slopes are accumulations of rock beneath cliffs and steep slopes.

Floodplain Hardwood Forests

Forested wetlands characterized by a diverse association of deciduous hardwood trees, including both montane and low-elevation species. Generally lacking in the more flood-adapted oaks and hickories

prevalent in Piedmont bottomland hardwood forests. Many of these floodplain forests were converted to agricultural uses early in the history of settlement of this region.

Hemlock-Hardwood-White Pine Forests

Mesic and submesic forests dominated by a mixed canopy of hardwoods and hemlock and/or white pine. Hemlock forests are typically found along small to medium streams, in sheltered valleys and ravines. Thickets of rhododendron and mountain laurel frequently form a dense understory, which is important for many neotropical migratory birds. White pine may share dominance with oak-dominated forests in low- to mid-elevation slopes and sheltered low ridges. A serious threat to this forest type is the hemlock wooly adelgid, which is spreading from east to west across the region. A rare subtype of this forest type containing Carolina hemlock is found in scattered locations in the lower Blue Ridge.

High-Elevation Early Successional Habitats

Includes a variety of vegetation types found at high elevations that are maintained by periodic natural or anthropogenic disturbance. Many high priority species are dependent on this habitat type, including the golden-winged warbler, Appalachian Bewick's wren, star-nosed mole, pygmy shrew, and fringed gentian.

High Elevation Forested Heath Thickets

High elevation habitats characterized by dense thickets of ericaceous shrubs under an open canopy of hardwood trees. Herbaceous layer is sparse to patchy. Typical shrubs include huckleberry, mountain laurel, and rosebay rhododendron.

High Elevation Rocky Summits and Shrub Balds

These are small patch habitats typically found only on the highest peaks of the Blue Ridge in association with northern hardwood forest. Characterized by a mosaic of exposed rock and patches of shrub or herb-dominated vegetation. Trees are mostly dwarfed northern red oak. Shrubs may include Catawba rhododendron, mountain laurel, huckleberry, mountain ash, viburnum, and hawthorn.

Low Elevation Seepy Thickets and Wet Woods

Seasonally inundated or spring-fed wetland habitats. Thickets are dominated by a variety of shrubs. Includes forested habitats along seepage slopes and at the edge of mountain bogs, some of which are maintained by the actions of beaver.

Medium to Large Rivers

Moderate to high gradient rivers with cold, clear riffles, pools, and runs. Substrates may include boulders, bedrock, gravel, and pebbles. Many of these rivers traverse steep gorges. These aquatic habitats are low in productivity compared to streams of the Southwestern Appalachians/Ridge & Valley.

Mixed Pine-Hardwood Forests

Mesic to submesic forests of hardwoods and pines, typically at middle to low elevations over a broad range of topographic conditions. A large patch habitat that comprises a major forest type of the Blue Ridge. Dominants may include yellow-poplar, sweetgum, various oaks, and loblolly, white, and/or shortleaf pine.

Moist Cliff Faces and Spray Cliffs

Vertical to gently sloping rock faces located adjacent to waterfalls or seepage zones. These are wetlands dominated by mosses, liverworts, vascular herbs, and sparse shrubs or scrubby trees adapted to thin soils and high humidity. These small patch habitats represent unusually stable environments, where temperatures are moderated by the constant spray or seepage. Include many bryophytes and ferns representing disjunct occurrences from tropical regions as well as Southern Appalachian endemics.

Mountain Bogs and Wet Meadows

A mosaic of wetland communities usually dominated by shrubs or emergent herbs, with scattered trees. May occur as elongate bands along stream valleys, or in much smaller and more compact patches on flats or slopes. Includes wetlands maintained by beaver activity as well as small, sheltered seepage areas along the headwaters of mountain creeks.

Northern Hardwood Forests

High elevation mesic forests found in upper coves, flats and slopes with northerly aspects, usually at elevations above 3,500 ft. Dominant canopy species include American beech, yellow birch, sugar maple, and yellow buckeye, with white basswood, northern red oak, white ash, and black cherry also present. These forests are subject to broad scale disturbances such as ice storms. Old growth examples are rare and usually restricted to steeply sloped, inaccessible areas.

Oak Forest and Woodlands

This vegetation type includes a wide variety of upland forests dominated by Appalachian oaks. Composition and complexity of oak forests vary with elevation, slope and moisture. In more mesic sites, canopy dominants may include red oak, white oak, and black oak, along with hickories and mesophytic hardwoods. Canopy dominants of more xeric sites may include mountain chestnut oak, scarlet oak, southern red oak, and northern red oak. Also includes subxeric or xeric oak woodlands found on ridges and upper slopes at high elevations. These oak-dominated forests and woodlands represent the most extensive upland vegetation type of the Blue Ridge.

Pine-Oak Woodlands and Forest

Relatively open subxeric forest to xeric woodland, typically dominated by shortleaf pine, pitch pine, Virginia pine, and post and blackjack oaks, often with a diverse grass and shrub layer. A rare subtype is found on serpentine soils. Pitch pine, Virginia pine, red maple and post oak are the dominant canopy trees in this rare community; understory trees of sourwood, dogwood and sassafras are usually thinly scattered and shrubs are sparse to dense.

Rich Mesic Hardwood Forests (Cove Hardwoods)

The mixed mesophytic hardwood forests of the Southern Appalachians are the most biologically diverse habitats in the United States. Variations of this forest type can be found in the Blue Ridge at elevations from 1,000 to 3,800 ft. They are typically found in mesic sites on concave landforms and ravines, or on protected north and east-facing slopes at low elevations. A diverse mixture of mesophytic trees dominates the canopy, including yellow poplar, white basswood, sugar maple, yellow and sweet birch, cucumber magnolia, yellow buckeye, black cherry, eastern hemlock, white ash, blackgum, American beech, red maple, and various oaks and hickories.

Rocky Bluffs and Streambanks

Plant composition of these rocky streamside habitats is variable, depending on stream size, amount of rock, and extent of flooding. These periodically scoured rocky habitats typically support few trees

and sparse to moderate shrubs (sometimes thickets). A diverse stratum of light-loving herbs may be present.

Springs and Spring Runs; Gravelly Seeps

Springs are highly localized groundwater expressions. The waters of springs and associated habitats can be highly variable, depending on hydrology (hydroperiod and volume) and edaphic factors. These cool clean waters provide important habitat to a number of animal species, particularly salamanders.

Streams

Cold, clear, high gradient streams typically containing riffles, plunge-pools, cascades, and waterfalls. Substrata dominated by bedrock and boulders, but sand and gravel may also be present in depositional areas. These streams have low productivity and aquatic vegetation is rarely present.

Xeric Pine Woodlands

A heterogeneous group of xeric pine-dominated woodlands found on ridges and steep slopes with southerly aspects, knobs, and low-elevation peaks. Below 2,400 ft. shortleaf pine is a dominant, with Virginia pine a common associate. From 2,400 to 2,800 ft. on the driest ridges pitch pine dominates. Above 2,800 ft. on slopes and ridges, Table Mountain pine dominates. All of these habitats require periodic fire for maintenance.

PIEDMONT ECOREGION

Beaver Ponds; Freshwater Marsh

Beaver ponds are temporary impoundments created by beaver on small to medium sized streams. Freshwater marshes develop in shallow beaver ponds and along the edges of larger lakes and ponds. Dominants include a variety of sedges, rushes, grasses, and forbs, with scattered buttonbush, red maple, swamp dogwood, and tag alder. Few Georgia examples exist that are not invaded by the exotic weed, *Murdannia*. These wetlands provide habitat for a wide variety of wildlife species.

Bottomland Hardwood Forests

Forested wetlands of alluvial river floodplains, characterized by a diverse association of deciduous hardwood trees. Canopy dominants vary, but may include water oak, willow oak, overcup oak, cherrybark oak, swamp chestnut oak, green ash, sweetgum, bitternut hickory, and pignut hickory. Shrub layer may be dense or relatively sparse, containing a variety of mesophytic or hydrophytic woody plants and often a significant woody vine component. Many of these habitats have been impacted by invasive exotic species such as Chinese privet and Nepalese browntop.

Canebrakes

Thickets of native river cane found along rivers and creeks under sparse to full tree cover. Canebrakes represent important wildlife habitat for a variety of neotropical birds and insects. These habitats require fire or other form of periodic disturbance for maintenance. Most canebrakes in this region are relatively small and fire-suppressed, often occurring along the edges of fields and other clearings.

Granite Outcrops

Diverse mosaics of exposed granitic rock, herb and shrub dominated patches, and wetland microhabitats. Most have shallow solution pits that collect soil and support various stages of plant

succession. These environments support rare or endemic species of plants and animals. The most important of these habitats contain a variety of solution pits, seepage zones, and bare rock exposures. Some outcrops are monadnocks (rise above the ground) while others are flat rock exposures. The Georgia Piedmont is the center of granite outcrop species diversity.

Medium to Large Rivers

Low to moderate gradient meandering rivers, typically with heavy sediment loads. Floodplains are relatively narrow compared to similar rivers in the Coastal Plain. Extensive shoal habitats may occur, especially along the Fall Line. Dominant habitats include runs, pools, and shoals. Substrate is variable, but is dominated by sand in runs and pools and by bedrock in shoals. Aquatic vegetation may be present.

Mesic Hardwood Forests

Non-wetland forests of floodplains, ravines, and north-facing slopes in the Piedmont. These may include species such as American beech, white oak, northern red oak, bitternut hickory, pignut hickory, shagbark hickory, bigleaf magnolia, yellow poplar, blackgum, dogwood, black cherry, and loblolly pine. Typical shrubs include spicebush, sweetshrub, pawpaw, Oconee azalea, rusty viburnum, and pinxter-flower.

Montane Longleaf Pine-Hardwood Forest

A subxeric or xeric mixed forest with longleaf pine, oaks, and hickories. Georgia examples are typically fire-suppressed. Pine Mountain contains notable examples; others can be found along Dugdown and Hightower Mountain and in Paulding Forest and Sheffield WMAs. Includes a rare longleaf pine/Georgia oak subtype found on Hollis quartzite along the main Pine Mountain ridge.

Oak Woodlands and Savannas

Rare upland hardwood habitats found in scattered locations in the Piedmont. These xeric or subxeric oak-dominated woodland are influenced by edaphic conditions (i.e. thin soils, mafic rocks) and periodic fire. Dominants may include southern red oak, scarlet oak, post oak, and blackjack oak, sometimes with shortleaf pine. Sparkleberry and hawbushes are common shrub components. A particularly rare type, the post oak-blackjack oak savanna, was apparently much more common in pre-settlement times; only small, fire-suppressed remnants of these habitats exist today.

Oak-Hickory-Pine Forest

Considered the climax forest of the Piedmont, this forest type formerly covered 50% to 75% of the region; most examples on fertile soils were eliminated by conversion to agricultural uses. Remaining examples are often found in rocky areas that were difficult to convert to agricultural fields. Typically include a variety of hardwood species such as white oak, black oak, southern red oak, pignut hickory, shagbark hickory, mockernut hickory, red maple, blackgum, shortleaf pine, and loblolly pine, with dogwood, rusty viburnum, hog plum, dwarf pawpaw, and various hawbushes in the understory. American chestnut was formerly a major component of the canopy. Examples over circumneutral soils influenced by mafic or ultramafic bedrock are often floristically richer, and may contain species such as Oglethorpe oak, basswood, red mulberry, redbud, and fringetree.

Rocky or Cobbly River Shoals

Shallow, high gradient reaches with swift water and rocky substrates. These habitats are important spawning areas for fish, including darters, shiners, and suckers (such as the extremely rare robust redhorse). In addition, shoals provide foraging areas for wading birds, and sunning areas for turtles. May contain dense growths of riverweed (*Podostemum ceratophyllum*). The shoals spiderlily

(*Hymenocallis coronaria*), a State-protected plant, is found on rocky shoals in the middle reaches of the Savannah, Flint, and Chattahoochee rivers. Many shoals have been degraded by stream impoundments, altered water quality, and excessive silt deposition.

Rocky/Sandy River Bluffs

Exposed rocky or sandy bluffs along rivers in the Piedmont are often characterized by mixed pine-oak vegetation with shortleaf pine, loblolly pine post oak, eastern redcedar, southern red oak, blackjack oak, and white oak. Small trees and shrubs may include hornbeam, winged elm, sparkleberry, winged sumac, yucca, and century plant. More sheltered or east-facing bluffs may have mountain laurel and rosebay rhododendron.

Serpentine Outcrops/Woodland/Savanna

This rare habitat represents a complex mosaic of woodlands and savannas with scattered outcropping of serpentine rocks. The pine-mixed hardwood vegetation includes longleaf pine as a dominant. This type is maintained by fire and edaphic conditions. The only known Georgia examples are fire-suppressed. These habitats include disjunct coastal plain species such as pineland Barbara-buttons and Georgia plume.

Springs and Spring Runs

Springs are highly localized groundwater expressions. The waters of springs and associated habitats can be highly variable, depending on hydrology (hydroperiod and volume) and edaphic factors. Springs of the Piedmont have varying mineral content, chemical properties, and temperatures. Includes spring pools and first order streams immediately below springs where rare fish and invertebrates may occur.

Streams

In the upper Piedmont, streams are low to moderate gradient and typically contain well-defined riffles and pools. Substrate consists of gravel, pebble, sand, and silt; some bedrock may also be present. Lower Piedmont streams are lower gradient, have fewer riffles and pools, and their substrates have a higher proportion of silt, clay, and detritus than upper Piedmont streams. Turbidity is highly variable, but most of these streams become highly turbid after rain.

Upland Depression Swamp

A non-alluvial open swamp with water oak, southern shagbark hickory, Oglethorpe oak, and loblolly and shortleaf pine. Coastal plain elements in the understory include swamp palmetto and parsley haw. Usually found on Iredell or Enon soils in the lower Piedmont. These sticky, plastic soils pond water in the spring, resulting in swampy conditions for a portion of the year.

Xeric Pine Woodlands

Pine-dominated habitats of dry, rocky ridgetops and granitic outcrops. Dominants are loblolly, shortleaf, and Virginia pine. These woodland habitats are maintained by a combination of edaphic factors and periodic fire.

SOUTHEASTERN PLAINS ECOREGION

Alluvial (Brownwater) Rivers and Swamps

Large, low-gradient, meandering rivers with sandbars, sloughs and extensive floodplain swamps. Floodplains of these systems may remain inundated for extensive periods. Sand and silt are the

dominant substrata and these rivers typically carry heavy sediment loads. Extensive cypress-gum swamps can be found on all major alluvial rivers in the upper portion of the Southeastern Plains. These systems have been impacted by altered flows from upstream dams.

Altamaha Grit Outcrops

These small patch habitats represent mosaics of indurated sandstone outcrops (vertical and horizontal surfaces) interspersed with rock-influenced pine woodland, bogs, and bottomlands. Characterized by several endemic species and plant association.

Atlantic Whitecedar Swamps; Clearwater Stream Swamps

Narrow, linear forested systems along cold, clear streams of the Fall Line sandhills. Characterized by a fairly dense canopy of Atlantic whitecedar, with pond pine, red maple, sweetbay, and other mesic-hydric site species. Clearwater stream swamps are similar but without Atlantic whitecedar in the canopy. The shrub layer is usually well developed and diverse, while the groundlayer herbaceous vegetation is often sparse. These systems are thought to be maintained by periodic fire, beaver activity, and possibly other forms of disturbance.

Bayheads and Titi Swamps

Forested wetlands dominated by broad-leaved evergreen trees: sweetbay, redbay, and loblolly bay. Usually found in domed peatlands, broad interstream flats, or shallow drainageways. Includes shrubby areas dominated by titi (*Cyrilla racemiflora*). Considered a late successional community in a variety of hydrogeomorphic settings in the Coastal Plain

Beech-Magnolia Slope Forests

These are uncommon Coastal Plain hardwood forests, typically found on very mesic river bluffs, and occasionally on gentle slopes that are naturally protected from fire by topographic setting. In addition to American beech and southern magnolia, may contain water oak, water hickory, American holly, and other fire-intolerant species. Often small in extent and occupying a narrow zone between wetland and fire-maintained upland forests. May contain epiphytic species such as green-fly orchid. Often associated with and in close proximity to hillside seeps.

Black Belt Prairies

Small-patch prairie habitats occurring over alkaline Oktibbeha soils. These soils are adhesive when wet and hard when dry, limiting the growth of woody plants. Black Belt prairies consist of herb-dominated patches interspersed with woody scrub component. These habitats are maintained by a combination of soil conditions and periodic fire.

Bottomland Hardwood Forests

Diverse hardwood-dominated forests found on natural levees, upper floodplain flats and terraces along brownwater and blackwater rivers. Characterized by a diverse canopy of hardwood species dominated by various oaks, green ash, sweetgum, red maple, water hickory, and other mesic species. These extensive forested systems provide habitat for a wide variety of wildlife species, and are especially important for wide-ranging forest interior species. Bottomland hardwood forests have been impacted by altered hydrologic conditions, forest conversion, and invasive exotic species.

Calcareous Swamps

Hardwood dominated swamp forests that are influenced by calcareous soils. Examples include Spring Creek in the Dougherty Plain. These spring-fed swamps may contain rare plants such as

variable-leaved water plantain. Similar habitats are found along tributaries of the Ocmulgee and Ogeechee rivers.

Canebreaks

Thickets of native river cane found along rivers and creeks under sparse to full tree cover. Canebrakes represent important wildlife habitat for a variety of neotropical birds and insects. These habitats require periodic fire or other form of disturbance for maintenance.

Caves

Found primarily along the Pelham Escarpment in the southwestern portion of the ecoregion. A few caves are also found in karst environments near Cochran and Sandersville. These Coastal Plain caves provide habitat for high priority species such as the southeastern myotis and Georgia blind salamander.

Evergreen Hammocks and Mesic Hardwood Forests

Evergreen hammocks are typically associated with small isolated uplands within a floodplain or depressional wetland. Protected from frequent fire, these habitats are characterized by a canopy of submesic oaks and hickories, with southern magnolia, American holly, ironwood, flowering dogwood and spruce pine. Mesic hardwood forests are similar, and may occur in terraces above bottomland hardwood forests, ravines, or nonalluvial flats protected from frequent fire.

Flint Kaolin Outcrops

Unusual rock outcrops composed of flint kaolin, a hard, flinty conglomerate of metamorphosed sediments. Outcrops are surrounded by xeric mixed oak/pine forest. The plant communities of the outcrops resemble Altamaha Grit. Known only from Columbia County.

Forested Depressional Wetlands

Seasonally or semi-permanently flooded forests of depressional features, including Carolina bays, limesinks, and Grady ponds. Soils range from mineral to organic and canopy dominants may include bays, pondcypress, and/or pond pine. Fire plays a role in maintaining some of these systems. Isolated wetlands that do not support fish populations are very important breeding habitats for amphibians such as the flatwoods salamander.

Freshwater “Prairies”

Semipermanently flooded freshwater wetlands dominated by emergent vegetation and floating macrophytes, with scattered cypress, buttonbush, and swamp blackgum. The primary example in this region is Grand Bay, possibly the largest Carolina bay known. Other examples can be found in the Tallahassee Hills/Valdosta Limesink region. Fluctuations in water levels and/or periodic fire are required for maintenance. Many of these habitats have been impacted by altered hydrology (impoundment with dams or drainage) and/or fire suppression.

Hillside Seeps

Small patch habitats found on moist to wet lower slopes in sandy terrain. These seeps represent natural groundwater discharge points. May be dominated by shrubs or herbs (including pitcherplants), with scattered trees such as pond, slash, or longleaf pine. Most Georgia examples are fire-suppressed.

Limestone and Marl Outcrops; Calcareous Bluffs

Rich riparian or ravine habitats influenced by limestone substrate. Marl gorges and bluffs are restricted to tributaries of the Chattahoochee River (Town Creek, Kolomoki Creek) near Fort Gaines. These “blue marl gorges” have diverse mesic hardwood forests and unusual seepage cliffs. Mesic calcareous bluffs are also found along the Savannah River and contain plant species of northern affinities.

Longleaf Pine-Scrub Oak Woodlands

Sparse-canopied xeric longleaf pine system with patchy oak understory composed of turkey oak, sand post oak, bluejack oak, blackjack oak and other scrub oak species. Typically found on deep sand soils, on ridges and upper slopes. Contains a fairly diverse groundlayer of xerophytic grasses and forbs and scattered shrubs.

Longleaf Pine-Wiregrass Savannas

Large patch or matrix upland habitats characterized by a sparse canopy of longleaf pine (sometimes with slash pine) and a diverse herb layer dominated by wiregrass. Can range from mesic to dry, depending on topographic position and soils. Transitions downslope into wet pine savanna. These habitats are heavily dependent on frequent fire for maintenance.

Nonalluvial (Blackwater) Rivers and Swamps

Large, meandering rivers with tea-stained, but translucent waters and narrow to wide floodplains. Dominant substrate is sand, which may form extensive bars in larger systems. Runs and pools are dominant habitats. Large snags are a significant component of habitat heterogeneity. Limestone shoals occur on some of these rivers.

Open-Water Ponds and Lakes (Carolina Bays, Limesinks and Beaver Ponds)

Open water aquatic habitats ranging from isolated depressions to impoundments created by beaver. Vegetation is sparse and consists primarily of emergent and floating macrophytes. Many wildlife species are dependent on these habitats. Limesinks are generally round, formed by the collapse of underground caverns, and are found primarily in the Dougherty Plain. Carolina bays are characterized by an elliptical shape, NW-SE axis, and a deep sandy rim on the east and south edges. Beaver activity along small branches may semi-permanently inundate areas, creating open wetlands.

Pine Flatwoods

Seasonally wet forests with open to closed pine canopy, often with an ericaceous shrub understory. Canopy dominants may include slash, longleaf, and occasionally pond pine. These habitats generally occur on nonalluvial flats and low terraces, and have a strong herbaceous component (although not as diverse as the longleaf pine savanna). Maintained by periodic fire.

Rocky/Sandy River Bluffs

Subxeric mixed pine-hardwood forest on river bluffs. May contain species such as white oak, southern red oak, post oak, laurel oak, mockernut hickory, shortleaf pine, loblolly pine and spruce pine. The woody understory may include red buckeye, blueberry, and possumhaw. The herb layer is typically sparse, but may include rare species such as Alabama milkvine.

Springs and Spring Runs

Clear, flowing systems with circumneutral pH and stable temperature and flow regimes. Limestone, detritus, and woody debris are dominant substrata. Floodplains of these systems are poorly

developed. Mostly confined to the Dougherty Plain. Many of the larger springs in this ecoregion serve as important cool-water refuges for species such as striped bass.

Steephead Ravines

Rich mesic ravine forests characterized by a diverse canopy of hardwood trees, including American beech, southern sugar maple, southern magnolia, pyramid magnolia, basswood, and sugarberry. The most significant examples are the “Torreya Ravines” of the lower Pelham Escarpment near Lake Seminole. Similar habitats are found in the upper ends of narrow ravines in the Fall Line Sandhills and along the edges of deep limesinks in the Dougherty Plain.

Streams (Blackwater)

Meandering acidic streams with tea-stained, translucent waters and small to moderate-sized floodplains. Blackwater streams are highly acidic, high in dissolved organic materials, and low in suspended materials. Streambeds are characterized by sandy substrates, often with extensive woody debris and live plant roots are often interspersed. Pools and runs are the dominant microhabitats, but these are occasionally interspersed with beaver ponds and limestone outcroppings. These aquatic systems have been impacted by channelization, impoundment, and encroachment by agricultural and silvicultural uses.

Wet Pine Savannas, Herb and Shrub Bogs

Open pine savanna dominated by longleaf or slash pine, with interspersed bogs. Herb bogs are found in low swales or depressions. Herb bogs are often characterized by pitcherplants and a high diversity of forbs. Shrub bogs occur in the ecotones of Carolina bays or cypress ponds and along the drier edges of bay swamps. Dominated by shrubs with a few (usually stunted) scattered pines and a sparse herb layer.

Xeric Aeolian Dunes

Wind-formed deep well-drained dunes found mostly along the eastern side of rivers such as the Ochopee, Little Ochopee, Canoochee, and Little Ocmulgee. These unusual xeric habitats are dominated by deciduous or evergreen scrub oaks and scattered pines, with little groundcover other than patches of wiregrass and lichens. A number of rare plants are associated with these habitats, including sandhills rosemary and Ashe’s savory.

SOUTHERN COASTAL PLAIN ECOREGION

Alluvial (Brownwater) Rivers and Swamps

Large, low-gradient, meandering rivers with sandbars, sloughs and extensive floodplain swamps. Floodplains of these systems may remain inundated for extensive periods. Sand and silt are the dominant substrata and these rivers typically carry heavy sediment loads. Dominant canopy trees are baldcypress and tupelo gum; the understory tree/shrub vegetation may be patchy, often consisting of swamp priet, water elm, swamp dogwood, red maple, and Carolina ash. Cypress and gum-dominated swamps can be found along the Altamaha, Savannah, and Ogeechee rivers. These systems have been impacted by altered flows from upstream dams.

Barrier Island Freshwater Wetlands and Ponds

Usually found in broad flats or in elliptical to linear interdune depressions on Georgia’s coastal barrier islands. These wetland habitats are variable in physiognomy and species composition; deeper, more permanently flooded ponds often have a large extent of open water; shallower ponds are usually

dominated by a combination of submergent, emergent and/or floating macrophytes. Trees or shrubs are present mainly along the edges of the ponds. These habitats have been impacted by groundwater withdrawals, fire suppression, and invasive exotic plants such as Chinese tallow tree.

Bayheads and Titi Swamps

Forested wetlands dominated by broad-leaved evergreen trees: sweetbay, redbay, and loblolly bay. Usually found in domed peatlands, broad interstream flats, or shallow drainageways. Includes shrubby areas dominated by titi (*Cyrilla racemiflora*). Considered a late successional community in a variety of hydrogeomorphic settings in the Coastal Plain

Beech-Magnolia Slope Forests

These are uncommon Coastal Plain hardwood forests, typically found on very mesic river bluffs, and occasionally on gentle slopes that are naturally protected from fire by topographic setting. In addition to American beech and southern magnolia, may contain water oak, water hickory, American holly, and other fire-intolerant species. Often small in extent and occupying a narrow zone between wetland and fire-maintained upland forests. May contain epiphytic species such as green-fly orchid. Often associated with and in close proximity to hillside seeps.

Bottomland Hardwood Forests

Diverse hardwood-dominated forests found on natural levees, upper floodplain flats and terraces along brownwater and blackwater rivers. Characterized by a diverse canopy of hardwood species dominated by various oaks, green ash, sweetgum, red maple, water hickory, and other mesic species. These extensive forested systems provide habitat for a wide variety of wildlife species, and are especially important for wide-ranging forest interior species. Bottomland hardwood forests have been impacted by altered hydrologic conditions, forest conversion, and invasive exotic species.

Brackish Marsh and Salt Marsh

Salt marshes are salt-tolerant grasslands, dominated by cordgrasses and rushes, over soils with circumneutral pH. Extremely productive habitats. Brackish marshes occupy a wide ecotonal zone in the vicinity of river mouths.

Canebreaks

Thickets of native river cane found along rivers and creeks under sparse to full tree cover. Canebrakes represent important wildlife habitat for a variety of neotropical birds and insects. These habitats require periodic fire or other form of disturbance for maintenance.

Coastal Beaches and Sand Bars

Beaches and sand bars are dynamic, high-energy intertidal systems that represent important habitat for shorebirds and sea turtles. Longshore movement of sand on barrier islands results in erosion at the north end and building up at the south end. These unvegetated habitats are important foraging areas for coastal shorebirds; sea turtles nest in the foredunes at the upper ends of sandy beaches.

Coastal Dunes and Bluffs

These habitats consist of sparsely vegetated sandy interdunes, rear dunes, and bluffs. They constitute important habitats for a number of high priority species adapted to harsh temperatures and salt spray. Coastal dune habitats include a number of important microhabitats such as interdune meadows and depressions, shrub thickets, and dune scrub forests. Similar vegetation can be found along eroded or exposed coastal bluffs.

Coastal Scrub-Shrub Wetlands

Shrub dominated estuarine communities found along the upper border of salt marsh or brackish marsh. These habitats are infrequently flooded by tidal action and form ecotones between wetland and terrestrial environments. Typical shrubs include groundsel tree, marsh elder, yaupon holly, wax myrtle, Florida privet, and false willow. Wind-pruned redcedar may also be present.

Estuarine and Inshore Marine Waters

Estuaries (brackish water between barrier islands and mainland) and near-shore ocean waters. Estuaries serve as nurseries for many species of fish and shellfish as well as habitats for manatees and other marine mammals. Plant composition is influenced by tidal regime and salinity.

Evergreen Hammocks and Mesic Hardwood Forests

Evergreen hammocks are typically associated with small isolated uplands within a floodplain or depressional wetland. Protected from frequent fire, these habitats are characterized by a canopy of submesic oaks and hickories, with southern magnolia, American holly, ironwood, flowering dogwood and spruce pine. Mesic hardwood forests are similar, and may occur in terraces above bottomland hardwood forests, ravines, or nonalluvial flats protected from frequent fire.

Forested Depressional Wetlands

Seasonally or semi-permanently flooded forests of depressional features in broad interstream flats. Soils range from mineral to organic and canopy dominants may include bays, pondcypress, and/or pond pine. Fire plays a role in maintaining some of these systems. Isolated wetlands that do not support fish populations are very important breeding habitats for amphibians such as the flatwoods salamander.

Freshwater “Prairies”

Semipermanently flooded freshwater wetlands dominated by emergent vegetation and floating macrophytes, with scattered cypress, buttonbush, and swamp blackgum. The primary example in this region is the Okefenokee Swamp. Fluctuations in water levels and/or periodic fire are required for maintenance. Many of these habitats have been impacted by altered hydrology (impoundment with dams or drainage) and/or fire suppression.

Hillside Seeps

Small patch habitats found on moist to wet lower slopes in sandy terrain. These seeps represent natural groundwater discharge points. May be dominated by shrubs or herbs (including pitcherplants), with scattered trees such as pond, slash, or longleaf pine. Most Georgia examples are fire-suppressed.

Longleaf Pine-Scrub Oak Woodlands

Sparse-canopied xeric longleaf pine system with patchy oak understory composed of turkey oak, sand post oak, bluejack oak, blackjack oak and other scrub oak species. Typically found on deep sand soils, on ridges and upper slopes. Contains a fairly diverse groundlayer of xerophytic grasses and forbs and scattered shrubs.

Longleaf Pine-Wiregrass Savannas

Large patch or matrix upland habitats characterized by a sparse canopy of longleaf pine (sometimes with slash pine) and a diverse herb layer dominated by wiregrass. Can range from mesic to dry, depending on topographic position and soils. Transition downslope into wet pine savannas, pine flatwoods, or other wetlands. These habitats are heavily dependent on frequent fire for maintenance.

Maritime Forest and Coastal Hammocks

Coastal forests dominated by live oak and palmetto; hammocks are small islands of maritime forest usually surrounded by brackish water and/or salt marsh. These are restricted to a narrow band of shoreline and barrier islands. Characterized by sandy soils and wind-pruned canopy trees. Provide important habitat for neotropical migrant birds.

Mud and Sand Flats

Periodically inundated mud and sand deposits located in estuarine or inshore marine waters. These unvegetated habitats are generally covered at high tide and exposed at low tide. They serve as important feeding areas for a number of coastal shorebirds such as plovers, sandpipers, and dowitchers.

Nonalluvial (Blackwater) Rivers and Swamps

Large, meandering rivers with tea-stained, but translucent waters and narrow to wide floodplains. Dominant substrate is sand, which may form extensive bars in larger systems. Runs and pools are dominant habitats. Large snags are a significant component of habitat heterogeneity. Limestone shoals occur on some of these rivers.

Offshore Marine Waters

Georgia's offshore marine waters provide habitat for a number of high priority species, including loggerhead, green, Kemp's ridley, and leatherback turtles, North Atlantic right whales, and bottlenose dolphins. Hard-bottom areas are especially important habitats for marine fish and sessile organisms.

Open-Water Ponds and Lakes

Open water aquatic habitats ranging from isolated depressions to impoundments created by beaver. Vegetation is sparse and consists primarily of emergent and floating macrophytes. These habitats are relatively uncommon in this region. Maintained by periodic fire and fluctuating water levels.

Pine Flatwoods

Mesic or wet forests on flat, poorly-drained areas of the lower Coastal Plain. Dominated formerly by longleaf pine, now typically by slash pine, occasionally with loblolly or pond pine. Contains a well-developed shrub layer consisting of saw palmetto, gallberry, lowbush blueberry, and other ericaceous species. One of the most extensive and prevalent habitats of this ecoregion.

Tidal Rivers and Freshwater Tidal Marsh

Includes the tidally influenced portions of rivers and creeks and associated wetlands. Freshwater tidal marshes are wetlands found along the margins of tidal rivers and creeks above the brackish water zone, typically dominated by giant cutgrass, sawgrass, pickerel weed, wild rice, cattail, rushes, and a variety of other herbs.

Wet Oak Flats

These forested habitats occur on fluvial terraces and interstream divides in the Southern Coastal Plain. The soils of this vegetation are saturated by rainfall and seasonally high water tables with little influence from river or tidal flooding. Wet oak flats contain a unique mix of upland and wetland species, including live oak, willow oak, southern magnolia, bottomland post oak, red maple, cherrybark oak, swamp chestnut oak, diamondleaf oak, and loblolly pine. Calcareous examples can be quite diverse in the herbaceous layer.

Wet Pine Savannas, Herb and Shrub Bogs

Wet pine savannas are poorly drained wetlands with open to sparse canopies dominated by longleaf, slash, and/or pond pine. The shrub layer may be sparse, consisting mainly of gallberry, wax myrtle, and blueberries. The herbaceous layer is often diverse and dense, dominated by grasses, sedges, composites, orchids, and lilies. May include small peat-filled depressions dominated by titi and other shrubs or by herbaceous bog plants.