

**STATUS SURVEY AND SEARCH EFFORTS FOR *SCHWALBEA AMERICANA* L.
(AMERICAN CHAFFSEED) IN GEORGIA: 2013-2014**

FINAL REPORT

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Co-Principle Investigators

Richard Carter
Herbarium, Biology Department
Valdosta State University
Valdosta, GA 31698-0015

W. Wilson Baker
Biological Consultant
1422 Crestview Avenue
Tallahassee, FL 32303

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INTRODUCTION

Schwalbea americana L. (American chaffseed) is listed federally and by the State of Georgia as *Endangered* (U.S. Fish and Wildlife Service 1992; Anonymous 2008). Its rarity resulting from habitat fragmentation and the exclusion of fire has been well documented (Musselman and Mann 1978, Kral 1983, U.S. Fish and Wildlife Service 1995). Few plants are as closely adapted to fire as *S. americana* (cf. U.S. Fish and Wildlife Service 1995; Kirkman 1996; Kirkman et al. 1998; Norden and Kirkman 2004a, b), and all extant sites in Georgia appear to be managed with prescribed fire and have a wiregrass component. Moreover, recent publications on the life history and ecology of *S. americana* (Townsend 1997; Kirkman et al. 1998; Helton et al. 2000; Norden and Kirkman 2004a, b) have provided much information on its relationship with fire. In 2007-2008 a field survey of *S. americana* in Georgia was conducted (Carter and Baker 2009). Our purpose is to re-survey the permanent plots established during the 2007-2008 survey and, in general, other element occurrences reported by Carter and Baker (2009), and to search for additional populations. Following are specific goals of this project.

1. To monitor known populations of the target species, especially the permanent plots previously established, in order to determine population trends
2. To search for new populations in suitable habitat
3. To assess presence of other selected rare plants, animals and significant natural communities associated with or adjacent to both known and potential chaffseed localities

Rare plants known or suspected to be associated with *Schwalbea americana* habitats include purple honeycomb-head (*Balduina atropurpurea*), hummingbird flower (*Macranthera flammea*), wiregrass dropseed (*Sporobolus teretifolius*), dewthreads (*Drosera tracyi*), Stoke's aster (*Stokesia laevis*), crestless plume orchid (*Pteroglossaspis ecristata*) and savanna cowbane (*Oxypolis denticulata*). Other rarities of longleaf pine-wiregrass habitats include Bachman's sparrow, red-cockaded woodpecker, pocket gopher, indigo snake, gopher tortoise, and pine snake.

In addition to inducing the flowering of chaffseed, fire reduces plant cover and dead plant debris that hinder observation of chaffseed. Therefore, most observations on chaffseed are made on lands managed with prescribed fire. Since the persistent blackened old stems of chaffseed plants are conspicuous, searches may be fruitful right up to the next fire event, at least into the winter months. Special emphasis will be placed on public lands, such as Silver Lake Wildlife Management Area, Mayhaw Wildlife Management Area, Flat Tub Wildlife Management Area, Broxton Rocks Nature Preserve, and Doerun Pitcherplant Bog Natural Area and on well managed private lands with suitable habitat.

METHODS

Surveys of known sites were based upon those documented in Carter and Baker (2009). Because of the difficulty of locating plants in habitats not recently burned and the general beneficial effect of fire on *S. americana*, most survey effort was made in areas burned during the current year. In general, surveys of sites with the potential for supporting populations of *S. americana* were conducted using a four-wheel drive vehicle, covering as much of the area as possible via roads, jeep trails, fire breaks, and edges of fields. Generally, a team of two individuals was involved, with the team members searching from opposite sides of the survey vehicle, using binoculars when necessary. Additionally, frequent and regular foot surveys were made along these routes by the survey team.

When populations of *S. americana* were found, individual plants were counted. *Schwalbea americana* plants often branch basally producing multiple aerial stems. Thus, tight basal clumps of stems were generally counted as one individual plant – not multiple plants. Care was taken to examine the bases of plants with multiple stems to determine as accurately as possible the number of individuals present. Additional data recorded in the field, included date of survey, phenology (e.g., plant vegetative, plant in bud, plant in flower, plant in fruit), community type, lists of associated species, attributes of topography (e.g., steepness of slope, exposure of slope), evidence of disturbance, evidence of threats, information about ownership and management, observations on management practices, and observations of other rare or unusual species. In order to document populations associated species, including other rare or unusual flora, voucher specimens were prepared on a selected basis. Voucher specimens were deposited in the Valdosta State University Herbarium (VSC).

An additional 250m² permanent plot was established at the Doerun 03 site in the Doerun Pitcherplant Bog Natural Area in Colquitt County, and plots established in 2008 were monitored for *Schwalbea americana*, according to the protocol described in Carter and Baker (2009).

RESULTS

Data on numbers of *S. americana* plants observed, dates of observations, etc. are recorded in Table 1. Tables 2 and 3 compare results from the current survey with results from the 2007-2008 survey reported in Carter and Baker (2009). Although no new metapopulations were discovered, two additional population extensions were found in Thomas County (Arcadia 03b, Arcadia 05a). Field data are organized chronologically in Appendix A, including general locality data and the citation of voucher specimens and observations of rare or otherwise noteworthy taxa and other associated species. Populations of rare or otherwise noteworthy taxa are highlighted in yellow in Appendix A, and vouchers specimens with label data are deposited at the Valdosta State University Herbarium (VSC). Maps of the major areas surveyed for new populations of *S. americana* are shown in Appendix B. The location of the newly established 250m² permanent plot is shown in Table 4, and densities of *Schwalbea americana* plants in the 250m² permanent plots are reported in Tables 5 and 6 and are compared with similar data from 2008.

DISCUSSION

In general, population levels of *Schwalbea americana* were lower both in permanent plots and adjacent habitat in 2013-2014 than those reported by Carter and Baker in 2009. Other than temporary absence of fire (e.g., Jeffords 01, 01a, 01b, 01c, 03), habitat degradation did not appear to be a factor in the decline in numbers. Similar fluctuations were reported in Carter and Baker (2009) and do not seem to be any cause for concern, although all populations should be monitored in future in order to collect data that might be useful in understanding this phenomenon, especially as it might relate to climatic changes (e.g., drought). We also recommend establishing additional permanent plots in *S. americana* populations, and perhaps larger plots for a more robust analysis. It would also be desirable to be able to collect climatic data locally for each population, and this should be considered.

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REFERENCES CITED

- Anonymous. 2008. Georgia Rare Species and Natural Community Information – Special Concern Plant Species in Georgia. Date of information - 5/27/2008. Georgia Department of Natural Resources, Natural Heritage Program. Social Circle, Georgia. <http://georgiawildlife.dnr.state.ga.us>. [last accessed 06 January 2009].
- Carter, R. and W.W. Baker. 2009. Status survey and search efforts for *Schwalbea americana* L. (American chaffseed) in Georgia – Final report. Unpublished report to Georgia Department of Natural Resources. Social Circle, Georgia. 191 pp.
- Helton, R.C., L.K. Kirkman and L.J. Musselman. 2000. Host preference of the federally endangered hemiparasite *Schwalbea americana* L. J. Torrey Bot. Soc. 127(4):300-306.
- Kirkman, L.K. 1996. Final report for life history and experimental management of *Schwalbea americana*. U.S. Fish and Wildlife Service. Jacksonville Field Office. Jacksonville, Fla. 18 pp.
- Kirkman, L.K., M.B. Drew, and D. Edwards. 1998. Effects of experimental fire regimes on the population dynamics of *Schwalbea americana* L. Plant Ecology 137:115-137.
- Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the south. Two volumes. USDA Forest Service, Technical Publication R8-TP 2. Atlanta, Georgia. 1305 pp.
- Musselman, L.J. and W.F. Mann, Jr. 1978. Root parasites of southern forests. U.S. Dep. Agric. For. Serv. Gen. Tech. Rep. SO-20, 76 p. South. For. Exp. Stn., New Orleans, La.
- Norden, A.H., and L.K. Kirkman. 2004a. Factors controlling the fire-induced flowering response of *Schwalbea americana* L. (Scrophulariaceae). J. Torrey Bot. Soc. 131:16-22.
- Norden, A.H. and L.K. Kirkman. 2004b. Mechanisms controlling the fire-induced flowering response of the federally endangered *Schwalbea americana* L. (Scrophulariaceae). J. Torrey Bot. Soc. 131:31–41.
- Townsend, J.F. 1997. An unusual concentration of the federally endangered *Schwalbea americana* L. (Scrophulariaceae) in South Carolina. Castanea 62:281-281.
- U.S. Fish and Wildlife Service. 1992. Determination of *Schwalbea americana* to be an endangered species. Federal Register, Vol. 57, No. 189.
- U.S. Fish and Wildlife Service. 1995. American chaffseed (*Schwalbea americana*) recovery plan. Hadley, Massachusetts. 62 pp.

Table 1. 2013-2014 *Schwalbea americana* Element Occurrence survey results [Abbreviations: NA = not applicable, vg = vegetative plant, fl = flowering plant, fr = fruiting plant].

Element Occurrence (EO)	Date of Survey	General Condition of Site	Results	Permanent Plot Results	Miscellaneous Notes
Arcadia 01	2013-07-09	Burned 2013-04-17	186 plants	56 plants [46 vg + 10 fr]	Monument difficult to find: New GPS point taken: 30.77113N, 84.00262W: Located ca. 1.5 ft north of base of scarred <i>Pinus palustris</i> (28.4 cm dbh, scar on west side of tree), with a <i>Quercus falcata</i> sprout adjacent
Arcadia 01a	2013-07-09	Recent mid-April burn	0	NA	
Arcadia 02	2013-07-16	Recent mid-April burn	18 plants [14 fr + 4 vg]	NA	
Arcadia 02a	2013-07-16	Recent mid-April burn	5 plants [4 fr + 1 vg]	NA	
Arcadia 03	2013-07-16	Recent mid-April burn	1 plant [fr]	NA	
Arcadia 03a	2013-07-16	Recent mid-April burn	1 plant [fr]	NA	
Arcadia 03b [new EO]	2013-07-16	Recent mid-April burn	98 plants [94 fr + 1 vg]	NA	This EO is a westward extension of Arcadia 03a
Arcadia 04	2013-06-24	Burned 2013-04-17	25 plants [22 fr + 3 vg]	11 plants [10 fr + 1 vg]	
Arcadia 04a	2013-06-24	Recent mid-April burn	0		
Arcadia 05	2013-07-16	Recent mid-April burn	14 plants [fr]	NA	
Arcadia 05a [new EO]	2013-07-16	Recent mid-April burn	1 plant [fr]	NA	This EO is a southwestward extension of Arcadia 05: 30.76760, -84.00129.
Arcadia 06	2013-07-09	Recent mid-April burn	7 plants [fr]	NA	
Arcadia 07	2013-07-09	Recent mid-April burn	0	NA	
Arcadia 07a	2013-07-09	Recent mid-April burn	0	NA	
Arcadia 08	2013-07-09	Recent mid-April burn	36 plants [24 fr + 12 vg]	NA	
Arcadia 09	2013-07-16	Recent mid-April burn	2 plants [1 fr + 1 vg]	NA	Aerial stem of <u>vegetative</u> plant had been grazed of flowers/fruits.

Doerun 01	2013-07-17	Recent mid-May burn	0	NA	
Doerun 02	2013-07-17	1 year rough	--	NA	
Doerun 03	2013-07-17	Recent mid-May burn	82 plants [fr]	30 plants [fr]	Permanent plot established: Monument in SW corner (heading 320°): 31.29149, -83.88670. In permanent plot, majority of plants had multiple stems, up to 10 stems/plant; most plants were still green with mature fruit; 2 plants had recently died.
Jeffords 01, 01a, 01b, 01c	2013-05-07 2013-06-19 2014-07-11	1 year rough 2 year rough	--	Could not relocate monument	Site not burned during survey: A few scattered stems remaining from previous year; only a few green plants were observed in the greater area, these with mature fruits
Jeffords 02	2014-07-11	Good recent burn	97 plants [96 fl + 1 fr]	NA	
Jeffords 03	2013-06-19 2014-07-11	1 year rough 2 year rough	--	NA	
Jeffords 04	2013-07-17	Recent burn	33 plants [fr]	NA	Plants mostly robust with multiple stems
Jeffords 04a	2013-07-17	Recent burn	19 plants [fr]	NA	
Jeffords 05	2014-07-11	Good recent burn	23 plants [22 fr + 1 fl]	NA	
Jeffords 05a	2014-07-11	Good recent burn	2 plants [fr]	NA	
Jeffords-Hancock 01	2013-06-19	Good recent burn	0	NA	Return visit 2013-09-20: No plants found
Nilo 01	--	--	--	NA	
Nilo 01a	--	--	--	NA	
Pinewood	--	--	--	NA	Change in ownership and management: Survey not possible
Quail Ridge 01	2013-06-19	Burned 2013-04-20	21 plants [20 fr + 1 fl]	15 plants [14 fr + 1 fl]	
Quail Ridge 01a	2013-06-19	Burned 2013-04-20	0	NA	

Weatherbee 01	2014-07-11	2 year rough	--	NA	
Weatherbee 02	2014-07-11	2 year rough	--	NA	

Table 2. Comparison of *Schwalbea americana* populations and subpopulations from surveys conducted in 2007-2008 and 2013-2014; see Carter and Baker (2009) and Table 1 for details [Abbreviation: NA = not applicable].

EO Site Name	Number of Individuals		Percent Change
	2007–2008 Survey	2013–2014 Survey	
Arcadia 01	283 (2007)	56	-80%
Arcadia 01a	5 (2007)	0	-100%
Arcadia 02	4 (2007)	18	+450%
Arcadia 02a	17 (2007)	5	-71%
Arcadia 03	7 (2006)	1	-86%
Arcadia 03a	26 (2007)	1	-96%
Arcadia 03b	NA	98	
Arcadia 04	86 (2007)	25	-71%
Arcadia 04a	4 (2007)	0	-100%
Arcadia 05	126 (2007)	14	-89%
Arcadia 05a	NA	1	
Arcadia 06	15 (2007)	7	-53%
Arcadia 07	8 (2007)	0	-100%
Arcadia 07a	4 (2007)	0	-100%
Arcadia 08	18 (2007)	36	+100%
Arcadia 09	9 (2007)	2	-77%
Doerun 01	2 (2008)	0	-100%
Doerun 02	1 (2008)	--	
Doerun 03	100 (2008)	82	-18%
Freeman 01	581 (2008)	--	
Freeman 01a	13 (2008)	--	
Freeman 01b	242 (2008)	--	
Freeman 01c	6 (2008)	--	
Freeman 01d	4 (2008)	--	
Jeffords 01	393 (2007)	--	
Jeffords 01a	449 (2007)	--	
Jeffords 01b	154 (2007)	--	
Jeffords 01c	6 (2007)	--	
Jeffords 02	198 (2007)	97	-51%
Jeffords 03	76 (2007)	--	
Jeffords 04	26 (2008)	33	+27%
Jeffords 04a	13 (2008)	19	+46%
Jeffords 05	335 (2007)	23	- 93%
Jeffords 05a	9 (2007)	2	-78%
Jeffords-Hancock 01	7 (2007)	0	-100%
Nilo 01	13 (2007)	--	
Nilo 01a	108 (2007)	--	
Pinewood 01	6 (2008)	--	
Pinewood 02	5 (2008)	--	
Pinewood 03	16 (2008)	--	
Pinewood 03a	3 (2008)	--	
Pinewood 04	9 (2008)	--	
Pinewood 05	1 (2008)	--	
Pinewood 06	3 (2008)	--	
Pinewood 07	10 (2008)	--	
Quail Ridge 01	31 (2007), 283 (2008)	21	- 93%

Quail Ridge 01a	0 (2007), 13 (2008)	0	-100%
Weatherby 01	255 (2007)	--	
Weatherby 02	5 (2008)	--	

Table 3. Changes in sizes of *Schwalbea americana* metapopulations from 2009 to 2014.

Metapopulation	Number of Plants		Percent Change
	2007-2008	2013-2014	
Arcadia	608	264	-57%
Doerun	103	82	-20%
Freeman	846	--	--
Jeffords (excl. 01, 01a, 01b, 01c, 03)	588	174	-70%
Jeffords- Hancock	7	0	-100%
Nilo	121	--	--
Pinewood	59	--	--
Quail Ridge	296	21	-93%
Weatherbee	260	--	--

Table 4. Attributes of permanent 250m² plots, with reference to EO site, state, county, USGS topographic quadrangle, GPS coordinates, orientation of plot, position of primary plot corner, and survey date.

Element Occurrence Site Name	State / County	USGS Topo Quad	GPS Coordinates	Orientation of Plot / Position of Primary Corner	Survey Date
Arcadia 01	Georgia / Thomas Co.	Pine Park, GA	30.77113N 84.00268W	N to S / SE	2008-06-12
Arcadia 04	Georgia / Thomas Co.	Pine Park, GA	30.76464N 84.00242W	N to S / SW	2008-06-12
Doerun 03	Georgia / Colquitt Co.	Doerun, GA	31.29149N 83.88670W	320° / SW	2013-07-17
Jeffords 01	Georgia / Worth Co.	Tempy, GA	31.40547N 83.85597W	N to S / NE	2008-07-10
Quail Ridge 01	Georgia / Worth Co.	Norman Park, GA	31.32169N 83.72299W	E to W / NE	2008-06-20

Table 5. Summary of quantitative data on phenology and density of *Schwalbea americana* plants in permanent 250m² plots for 2007-2008 and 2013-2014 surveys.

Element Occurrence Site Name	Total Number of Plants (N)		Density (N/250m ²)	
	2008	2014	2008	2014
Arcadia 01	139	56	0.556	0.224
Arcadia 04	36	11	0.144	0.044
Doerun 03	--	30	--	0.125
Jeffords 01	63	--	0.252	--
Quail Ridge 01	104	15	0.416	0.060

Table 6. Percent change in the number of *Schwalbea americana* plants in permanent plots from 2008 to 2014.

Element Occurrence Site Name	Total Number of Plants (N)		Percent Change
	2008	2014	
Arcadia 01	139	56	-60%
Arcadia 04	36	11	-69%
Doerun 03	--	30	--
Jeffords 01	63	--	--
Quail Ridge 01	104	15	-86%

Appendix A. Field Survey Data 2013-2014. Data on all vouchers collected and general observations of associated species are presented here, with rare or otherwise noteworthy species highlighted in yellow. See Appendix B for maps of major areas surveyed.

MM/DD/YYYY

Collector with co-collector(s)

COUNTRY. State: County

Latitude/Longitude

Collection locality

Habitat [--]

Associated species [with]

Collection number [number of duplicates] Family *Genus species* Auth.

Determiner

Misc. data about individual collection

Noteworthy taxa highlighted in yellow.

3/21/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Miller County

31.21738N/84.805W

Mayhaw WMA, Willoughby Tract, E of Springhead Rd., E of long field

--degraded longleaf pine-wiregrass community

with *Pinus palustris*, *Quercus virginiana*, *Q. laevis*, *Q. pumila*, *Q. minima*, *Vaccinium myrsinites*, *V. darrowi*, *Myrica cerifera*, *Manfreda virginica*

20683 [3] Rhamnaceae *Ceanothus microphyllus* Michx.

det. R. Carter

low shrub, 4-5 dm tall, with sprawling crown; occasional

20684 [1] Violaceae *Viola septemloba* LeConte

det. R. Carter

plants infrequent, corolla deep blue

20685 [1] Polygala *Polygala nana* (Michx.) DC.

det. R. Carter

occasional; flowers yellow, roots aromatic

20686 [2] Myricaceae *Morella pumila* (Michx.) Small

det. R. Carter

low shrub, 5 dm tall, clonal, locally common

20687 [2] Myricaceae *Morella cerifera* (L.) Small

det. R. Carter

shrub, 2 m tall, common; staminate plant

20688 [2] Myricaceae *Morella cerifera* (L.) Small

det. R. Carter

shrub, 2 m tall, common; carpellate plant

20689 [2] Ericaceae *Gaylussacia nana* (A. Gray) Small

det. R. Carter

low shrub, 5 dm tall, occasional

20690 [1] Ericaceae *Vaccinium darrowii* Camp
det. R. Carter
low shrub, 5 dm tall, locally common, corolla white

--along ecotone between longleaf pine-wiregrass upland and creek swamp

20691 [6] Clusiaceae *Hypericum microsepalum* (Torr. & A. Gray) A. Gray & S. Wats.
det. R. Carter
locally common; low shrub, clonal, flowers yellow, showy

20692 [1] Loganiaceae *Gelsemium sempervirens* (L.) St. Hillaire
det. R. Carter
vine, locally common, corolla yellow, showy

20693 [1] Cistaceae *Crocانthemum carolinianum* (Walt.) Spach [*Helianthemum carolinianum* (Walt.) Michx.]
det. R. Carter
occasional; corolla yellow, showy

Richard Carter with W. W. Baker
31.21909N/84.80658W

Mayhaw WMA, Willoughby Tract, E of Springhead Rd., along wind row in long field
--edge of field

20694 [6] Rosaceae *Prunus umbellata* Ell.
det. R. Carter
occasional, local; large shrub, trunk with 3-4 inch basal diameter, lenticels horizontal, corolla white

--fallow field, sandy loam soil

20695 [3] Oxalidaceae *Oxalis corniculata* L.
det. R. Carter
locally common; stems creeping, corolla yellow

20695a [1] Onagraceae *Oenothera laciniata* Hill.
det. R. Carter
common, corolla yellow

20696 [3] Brassicaceae *Raphanus raphanistrum* L.
det. R. Carter
locally common; corolla yellow

20697 [3] Scrophulariaceae *Nuttallanthus texanus* (Scheele) D.A. Sutton [*Linaria texana* Schelle]
det. R. Carter
locally common; corolla lavender

20698 [1] Polygonaceae *Rumex hastatulus* Baldw.
det. R. Carter
locally common

--degraded longleaf pine-wiregrass community, edge

20699 [2] Loganiaceae *Gelsemium rankinii* Small
det. R. Carter
locally common vine; corolla yellow

Richard Carter with W. W. Baker

31.20827N/84.81324W

Mayhaw WMA, Willoughby Tract, 0.75 mi N jct. Springhead Rd and Griggs Lucille Rd, along E side of Springhead Rd

--disturbed edge of woods

with *Quercus virginiana*, *Q. nigra*, *Prunus serotina*, *Liquidambar styraciflua*, *Aralia spinosa*, *Osmanthus americanus*, *Smilax smallii*

20700 [2] Violaceae *Viola sororia* Willd.

det. R. Carter

locally common; corolla blue

20701 [1] Rosaceae *Rubus flagellaris* Willd.

det. R. Carter

low shrub with trailing stems, occasional, corolla white

Richard Carter with W. W. Baker

31.20573N/84.81323W

Mayhaw WMA, Willoughby Tract, 0.55 mi N jct. Springhill Rd and Griggs Lucille Rd, along E side of Springhead Rd

--low bluff grading into swamp forest

with *Quercus virginiana*, *Q. nigra*, *Q. hemisphaerica*, *Pinus taeda*, *Prunus serotina*, *Aralia spinosa*, *Aesculus pavia*, *Liquidambar styraciflua*, *Osmanthus americanus*, *Magnolia grandiflora*, *Lonicera sempervirens*

20702 [4] Lauraceae *Sassafras albidum* (Nutt.) Nees

det. R. Carter

understory tree, occasional, twigs aromatic

20703 [4] Oleaceae *Cartrema americana* (L.) Raf. [*Osmanthus americanus* (L.) Benth. & Hook. f. ex A. Gray]

det. R. Carter

tree 6 m tall, occasional; flowers white, fragrant

20704 [1] Araliaceae *Aralia spinosa* L.

det. R. Carter

shrub, 4-5 m tall; locally common

20705 [7] Sapindaceae[incl. Hippocastanaceae] *Aesculus pavia* L.

det. R. Carter

shrub, 2-4 m tall, locally common; corolla red

20706 [1] Smilacaceae *Smilax bona-nox* L.

det. R. Carter

vine, locally common

20707 [5] Cyperaceae *Carex striatula* Michx.

det. R. Carter

plants locally common along lower slope, cespitose

20708 [2] Araceae *Arisaema triphyllum* (L.) Schott

det. R. Carter

locally common along base of bluff and edge of swamp

20709 [2] Poaceae *Dichanthelium laxiflorum* (Lam.) Gould

det. R. Carter

locally common along base of bluff and edge of swamp; plants cespitose

20710 [2] Cyperaceae *Carex leptalea* Wahl. var. *harperi* (Fern.) Weatherby & Griscom
det. R. Carter
locally common, in elevated microsites of flooded swamp forest

20711 [1] Dryopteridaceae *Onoclea sensibilis* L.
det. R. Carter
occasional to locally common on raised microsites of flooded swamp forest

Richard Carter with W. W. Baker
31.19565N/84.81621W

Mayhaw WMA, 0.16 mi W jct. Springhead Rd. and Griggs Lucille Rd., ca. 200 m S of Whitepond Church
--degraded flatwoods depression

20712 [1] Ericaceae *Rhododendron canescens* (Michx.) Sweet
det. R. Carter
shrub 1.75 m tall, occasional to locally common; flowers pale pink, fragrant

5/7/2013

Richard Carter with W. W. Baker
U.S.A. Georgia: Worth County
31.42471N/83.85423W

3.25 mi N Anderson City, Old Hwy. GA 33, Jeffords Tract
--longleaf pine - wiregrass savanna of high quality

20727 [3] Poaceae *Danthonia sericea* Nutt.
det. R. Carter
locally common

20728 [2] Rosaceae *Rubus cuneifolius* Pursh
det. R. Carter
plants occasional, flowers white

20729 [2] Rosaceae *Rubus cuneifolius* Pursh
det. R. Carter
plants occasional, flowers white

--disturbed edge of longleaf pine - wiregrass savanna

20730 [1] Asteraceae *Gamochaeta argyrinea* G.L. Nesom
det. R. Carter
infrequent

--longleaf pine - wiregrass savanna of high quality

20731 [2] Anacardiaceae *Toxicodendron pubescens* Mill.
det. R. Carter
low shrub, 3-4 dm tall, occasional

20732 [3] Ericaceae *Vaccinium stamineum* L.
det. R. Carter
0.5 m shrub, corolla white

20733 [1] Dennstaedtiaceae *Pteridium aquilinum* (L.) Kuhn

det. R. Carter
common

Richard Carter with W. W. Baker
U.S.A. Georgia: Macon County
32.30822N/84.01309W

Montezuma, Hamilton Rd., between E. Railroad St. and Airport Dr.
--roadside and edge of woods

20734 [2] Asteraceae *Gamochaeta coarctata* (Willd.) Kerg.
det. R. Carter
locally common

--edge of woods and roadside

20735 [1] Scrophulariaceae *Veronica hederifolia* L.
det. R. Carter
plants locally common; stem weak, decumbent

--edge of woods

20736 [1] Caprifoliaceae *Lonicera japonica* Thunb.
det. R. Carter
vine, locally abundant, corolla white, fragrant

20737 [1] Oleaceae *Ligustrum sinense* Lour.
det. R. Carter
4 m shrub, locally common, corolla white

20738 [4] Moraceae *Morus alba* L.
det. R. Carter
small tree

--roadside and edge of woods

20739 [1] Asteraceae *Hypochaeris chillensis* (Kunth) Britton
det. R. Carter
locally common

--edge of woods

20740 [2] Juncaceae *Juncus tenuis* Willd.
det. R. Carter
locally common

20741 [3] Smilacaceae *Smilax bona-nox* L.
det. R. Carter
locally common

--mesic slope, edge of woods

with *Fagus grandifolia*, *Magnolia grandiflora*, *Quercus alba*, *Carya cordiformis*, *Q. hemisphaerica*,
Fraxinus americana, *Acer floridanum*, *Ostrya virginiana*, *Asimina parviflora*, *Hamamelis virginiana*,
Aesculus pavia, *Sideroxylon lanuginosa*, *Symplocos tinctoria*

20742 [1] Lygodiaceae *Lygodium japonicum* (Thunb.) Sw.
det. R. Carter

locally common, scandant

--mesic slope

with *Fagus grandifolia*, *Magnolia grandiflora*, *Quercus alba*, *Carya cordiformis*, *Q. hemisphaerica*, *Fraxinus americana*, *Acer floridanum*, *Ostrya virginiana*, *Asimina parviflora*, *Hamamelis virginiana*, *Aesculus pavia*, *Sideroxylon lanuginosa*, *Symplocos tinctoria*

20743 [1] Geraniaceae *Geranium carolinianum* L.

det. R. Carter

occasional

20744 [1] Sapindaceae *Acer floridanum* (Chapm.) Pax

det. R. Carter

windfall from large tree

20745 [3] Papaveraceae *Sanguinaria canadensis* L.

det. R. Carter

occasional

20746 [1] Poaceae *Dichanthelium commutatum* (Schult.) Gould

det. R. Carter

locally common

20747 [3] Cyperaceae *Carex radiata* (Wahl.) Small

det. R. Carter

locally common in seepy area, cespitose

20748 [3] Sapindaceae *Acer floridanum* (Chapm.) Pax

det. R. Carter

small understory tree, occasional, bark pale

20749 [1] Araceae *Arisaema triphyllum* (L.) Schott

det. R. Carter

locally common in seepy area

20750 [4] Oleaceae *Fraxinus americana* L.

det. R. Carter

large tree, locally common; branches from windfall

20751 [1] Aspleniaceae *Asplenium platyneuron* (L.) Britt. et al.

det. R. Carter

common

20751b [2] Juglandaceae *Carya pallida* (Ashe) Engler & Graebner

det. R. Carter

occasional tree

20752 [3] Aristolochiaceae *Hexastylis arifolia* (Michx.) Small

det. R. Carter

occasional

20753 [1] Trilliaceae *Trillium maculatum* Raf.

det. R. Carter

occasional

20754 [1] Orobanchaceae *Conopholis americana* (L.) Wallr.

det. R. Carter
occasional, plants achlorophyllous

20755 [4] Cyperaceae *Carex basiantha* Steud.
det. R. Carter
locally common

20756 [2] Cyperaceae *Carex abscondita* Mack.
det. R. Carter
locally common

20757 [1] Rubiaceae *Galium triflorum* Michx.
det. R. Carter
locally common, edge of woods

20758 [2] Poaceae *Glyceria striata* (Lam.) Hitchc.
det. R. Carter
local in seepy area

20759 [2] Dryopteridaceae *Polystichum acrostichoides* (Michx.) Schott
det. R. Carter
common

20760 [4] Cyperaceae *Carex lurida* Wahl.
det. R. Carter
locally common in seepy area

20761 [1] Smilacaceae *Smilax hugeri* (Small) J. B. Norton ex Pennell
det. R. Carter
occasional

Richard Carter with W. W. Baker
32.28044N/84.00344W

Montezuma, 0.75 mi S jct. Travellers Rest Rd. and Vienna Rd. (Hwy. GA 49), triangular strip between hwy. and railroad
--scraped sterile ruderal site
with *Diospyros virginiana*, *Opuntia*

20762 [2] Apiaceae *Spermolepis divaricata* (Walt.) Raf.
det. R. Carter
locally common

20763 [1] Asteraceae *Pyrhopappus carolinianus* (Walt.) DC.
det. R. Carter
locally common, heads yellow

20764 [1] Asteraceae *Lactuca floridana* (L.) Gaertn.
det. R. Carter
locally common, plants with latex, corolla blue

20765 [1] Asteraceae *Hypochaeris radicata* L.
det. R. Carter
locally common

20766 [1] Caryophyllaceae *Silene antirrhina* L.
det. R. Carter

locally common

20767 [1] Campanulaceae *Triodanus perfoliata* (L.) Nieuwl.

det. R. Carter

locally common, corolla blue

20768 [1] Valerianaceae *Valerianella radiata* (L.) Dufr.

det. R. Carter

locally common

20769 [1] Scrophulariaceae *Nuttallanthus texana* (Scheele) Sutton

det. R. Carter

locally common, corolla blue

20770 [1] Polygonaceae *Rumex hastatulus* Baldwin

det. R. Carter

locally common

20771 [1] Asteraceae *Hymenopappus scabiosaeus* L'Her.

det. R. Carter

locally common

20772 [1] Asteraceae *Gamochaeta pensylvanica* (Willd.) Cabrera

det. R. Carter

locally common

20773 [1] Asteraceae *Gamochaeta argyrinea* G.L. Nesom

det. R. Carter

locally common

20774 [1] Plantaginaceae *Plantago virginica* L.

det. R. Carter

locally common

20775 [1] Plantaginaceae *Plantago wrightiana* Decne.

det. R. Carter

locally common

20776 [2] Poaceae *Vulpia octoflora* (Walt.) Rydb. var. *hirtella* (Piper) Henr.

det. R. Carter

locally common

20777 [1] Verbenaceae *Verbena officianalis* L. var. *halei* (Small) S.C. Barber

det. R. Carter

locally common, corolla purple

20778 [2] Fabaceae *Vicia tetrasperma* (L.) Schreb.

det. R. Carter

locally common

5/8/2013

Richard Carter with W. W. Baker

32.3349N/84.0295W

ca. 2.4 airmi N Montezuma center, near W end of Crooks Landing Rd.

--steep bluff along E bank of Flint River

20779 [4] Nyssaceae *Nyssa sylvatica* Marshall
det. R. Carter
common tree

--ridge along E bank of Flint River

20780 [4] Celtidaceae *Celtis laevigata* Willd.
det. R. Carter
shrub, common, 4 m tall, dbh 2.5 inches

--steep bluff along E bank of Flint River

20781 [1] Apiaceae *Sanicula marilandica* L.
det. R. Carter
occasional

20782 [4] Tiliaceae *Tilia americana* L. var. *heterophylla* (Vent.) Loudon
det. R. Carter
occasional tree

--ridge along E bank of Flint River

20783 [7] Rutaceae *Ptelea trifoliata* L.
det. R. Carter
shrub, 2 m tall, locally common, foliage aromatic

--steep bluff along E bank of Flint River

20784 [2] Rosaceae *Crataegus marshallii* Eggl.
det. R. Carter
occasional understory tree

20785 [2] Sapotaceae *Sideroxylon lanuginosum* Michx. var. *lanuginosum*
det. R. Carter
occasional understory tree, dbh 3 inches

20786 [4] Moraceae *Morus alba* L.
det. R. Carter
occasional tree

--low terrace along E bank of Flint River

20787 [2] Celtidaceae *Celtis laevigata* Willd.
det. R. Carter
occasional tree, dbh 12 inches

--steep bluff along E bank of Flint River

20788 [6] Oleaceae *Fraxinus americana* L.
det. R. Carter
common tree

--ridge along E bank of Flint River, open ground

20789 [1] Poaceae *Sphenopholis obtusata* (Michx.) Scribn.

det. R. Carter
locally common

20790 [1] Poaceae *Piptochaetium avenaceum* (L.) Parodi
det. R. Carter
locally common

20791 [3] Cyperaceae *Carex albicans* Willd. ex Spreng. var. *australis* (L. H. Bailey) Rettig
det. R. Carter
forming large patches, local

--steep bluff along E bank of Flint River

20792 [2] Cyperaceae *Carex basiantha* Steud.
det. R. Carter
occasional to locally common, cespitose

20793 [2] Cyperaceae *Carex atlantica* L. H. Bailey subsp. *capillacea* (L. H. Bailey) Reznicek
det. R. Carter
occasional, cespitose

--ridge along E bank of Flint River, open ground

20794 [1] Solanaceae *Physalis heterophylla* Nees
det. R. Carter
rare, local, corolla yellow

--steep bluff along E bank of Flint River

20795 [5] Cyperaceae *Carex oxylepis* Torr. & Hook.
det. R. Carter
locally common, cespitose

20796 [2] Poaceae *Poa autumnalis* Muhl. ex Ell.
det. R. Carter
occasional

20797 [1] Fagaceae *Quercus alba* L.
det. R. Carter
common tree

20798 [5] Fagaceae *Quercus shumardii* Buckley
det. R. Carter
common tree

20799 [2] Fagaceae *Quercus rubra* L.
det. R. Carter
occasional tree

--steep bluff along E bank of Flint River, upper slope

20800 [1] Fagaceae *Quercus montana* Willd.
det. R. Carter
common tree

--steep bluff along E bank of Flint River

20801 [2] Cyperaceae *Carex blanda* Dewey
det. R. Carter
common

20802 [1] Cyperaceae *Carex striatula* Michx.
det. R. Carter
common

20803 [3] Cyperaceae *Carex cephalophora* Muhl. ex Willd.
det. R. Carter
common

20804 [2] Poaceae *Festuca subverticillata* (Pers.) E.B. Alexeev
det. R. Carter
occasional

--ridge along E bank of Flint River

20805 [1] Poaceae *Bromus pubescens* Muhl. ex Willd.
det. R. Carter
locally common

--steep bluff along E bank of Flint River

20806 [1] Poaceae *Dichantherium boscii* (Poir.) Gould & Clark
det. R. Carter
occasional

20807 [1] Arecaceae *Rhapidophyllum hystrix* (Pursh) H. Wendl. & Drude ex Drude
det. R. Carter
occasional understory shrub

Richard Carter with W. W. Baker
U.S.A. Georgia: Sumter County
32.0582N/84.22723W
Americus, jct. S. Lee St. and Burke St., Lee Street Methodist Church parking lot

20808 [8] Celtidaceae *Celtis laevigata* Willd.
det. R. Carter
tree ca. 10 m tall, ca. 15 in dbh, bark with warty excrescences

5/24/2013

Richard Carter with W. W. Baker, C. Louis
U.S.A. Georgia: Thomas County
30.75542N/83.9952W
4.12 mi S jct. Hwy. US 319 and Metcalf Rd., Arcadia Plantation, just inside S gate off Metcalf Rd.;
--open, recently burned longleaf pine savanna, sandy loam ± disturbed;

20844 [3] Acanthaceae *Ruellia ciliosa* Pursh
det. R. Carter
locally common, corolla blue.

5/29/2013

Richard Carter with W. W. Baker
U.S.A. Georgia: Thomas County
30.7767N/84.03576W

S of Thomasville by Hwy. US 319, Longpine Plantation;
--recently burned longleaf pine-wiregrass savanna, rolling topography, vic. 3 depressions;

20898 [1] Asteraceae *Lygodesmia aphylla* (Nutt.) DC.
det. R. Carter
locally common, heads pale blue.

20899 [2] Poaceae *Sporobolus junceus* (Beauv.) Kunth
det. R. Carter
locally common, cespitose.

20900 [2] Poaceae *Dichantherium oligosanthes* (Schultes) Gould
det. R. Carter
occasional.

20901 [1] Cyperaceae *Rhynchospora plumosa* Ell.
det. R. Carter
occasional.

20902 [1] Rhamnaceae *Ceanothus americanus* L.
det. R. Carter
occasional, corolla white.

20903 [1] Acanthaceae *Dyschoriste oblongifolia* (Michx.) Kuntze
det. R. Carter
common, corolla blue with dark blue lines.

20904 [1] Polemoniaceae *Phlox pilosa* L.
det. R. Carter
locally common, flowers viscid, corolla blue.

20905 [1] Euphorbiaceae *Tragia urens* L.
det. R. Carter
occasional.

20906 [1] Polygalaceae *Asemeia grandiflora* (Walt.) Small
det. R. Carter
occasional.

20907 [1] Scrophulariaceae *Buchnera floridanum* Gand.
det. R. Carter
occasional, corolla blue.

20908 [1] Fabaceae *Rhynchosia tomentosa* (L.) Hook. & Arn. var. *tomentosa*
det. R. Carter
occasional to locally common, corolla yellow.

20909 [1] Fabaceae *Galactia erecta* (Walt.) Vail
det. R. Carter
occasional, stems erect, corolla white.

20910 [2] Fabaceae *Tephrosia virginiana* (L.) Pers.
det. R. Carter

locally common, standard white, wings and keel rose pink.

20911 [1] Fabaceae *Tephrosia spicata* (Walt.) T. & G.
det. R. Carter
common.

20912 [2] Asteraceae *Gamochaeta argyrinea* G.L. Nesom?
det. R. Carter
local and infrequent.

20913 [2] Asteraceae *Pterocaulon pycnostachyum* (Michx.) Ell.
det. R. Carter
occasional, heads white.

20914 [1] Liliaceae *Aletris obovata* Nash ex Small
det. R. Carter
occasional, perianth white.

20915 [1] Poaceae *Dichantherium sphaerocarpon* (Ell.) Gould
det. R. Carter
occasional.

20916 [1] Poaceae *Dichantherium oligosanthos* (Schultes) Gould
det. R. Carter
occasional.

20917 [1] Cyperaceae *Scleria ciliata* Michx. var. *elliottii* (Chapm.) Fern.
det. R. Carter
occasional to locally common.

20918 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*
det. R. Carter
common.

Richard Carter with W. W. Baker

30.73933N/84.06506W

S of Thomasville by Hwy. US 319, Longpine Plantation;

--recently burned longleaf pine-wiregrass slope

with *Pinus palustris*, *Quercus margarettae*, *Q. incana*, *Q. laevis*, *Carya tomentosa*, *Asimina longifolia*, *Toxicodendron pubescens*, *Aristida stricta*, *Pteridium aquilinum*, *Tephrosia virginiana*, *Onosmodium virginianum*;

20919 [1] Lamiaceae *Scutellaria multiglandulosa* (Kearney) Small ex R.M.Harper
det. R. Carter
occasional, corolla pale blue to nearly white.

20920 [2] Fabaceae *Mimosa microphylla* Dryander
det. R. Carter
common clambering herb, heads pink.

20921 [1] Poaceae *Dichantherium ravenelii* (Scribn. & Merr.) Gould
det. R. Carter
occasional to common.

20922 [2] Asteraceae *Tetragonotheca helianthoides* L.
det. R. Carter

locally common, heads yellow.

Richard Carter with W. W. Baker

U.S.A. Georgia: Grady County

30.74334N/84.0889W

S of Thomasville by Hwy. US 319, Longpine Plantation;

--recently burned sloping longleaf pine-wiregrass savanna, ± disturbed site;

20923 [1] Polygalaceae *Polygala polygama* Walter

det. R. Carter

occasional, flowers pink to purple.

20924 [1] Polygalaceae *Polygala incarnata* L.

det. R. Carter

occasional, flowers purple.

20925 [1] Euphorbiaceae *Tragia urens* L.

det. R. Carter

occasional.

20926 [2] Fabaceae *Rhynchosia reniformis* DC.

det. R. Carter

common.

20927 [1] Orchidaceae *Spiranthes eatonii* Ames ex P.M. Brown

det. R. Carter

infrequent, flowers with greenish cast.

20928 [3] Fabaceae *Orbexilum psoraloides* (Walt.) Vincent [*Psoralea psoraloides* (Walt.) Cory]

det. R. Carter

infrequent and local, stems decumbent, flowers blue.

Richard Carter with W. W. Baker

30.73972N/84.07278W

S of Thomasville by Hwy. US 319, Longpine Plantation;

--recently burned sloping longleaf pine-wiregrass savanna, ± disturbed site;

Note: *Geomys* burrows observed

20929 [1] Asclepiadaceae *Asclepias amplexicaulis* J.E. Smith

det. R. Carter

infrequent.

20930 [1] Asclepiadaceae *Asclepias tuberosa* L.

det. R. Carter

common, flowers orange to red.

20931 [1] Euphorbiaceae *Stillingia sylvatica* Gard. ex L.

det. R. Carter

common.

Richard Carter with W. W. Baker

30.72898N/84.05083W

S of Thomasville by Hwy. US 319, Longpine Plantation;

--cut-over mixed pine-hardwood slope,

with *Pinus palustris*, *P. echinatus*, *Carya tomentosa*, *Aesculus pavia*, *Cercis canadensis*, *Viburnum rufidulum*, *Rhus copallinum*, *Diospyros virginiana*, *Cornus florida*, *Chionanthus virginicus*, *Quercus hemisphaerica*, *Prunus serotina*

20932 [4] Acanthaceae *Ruellia caroliniensis* (J.F. Gmel.) Steud.
det. R. Carter
locally common, corolla blue.

20933 [2] Fabaceae *Erythrina herbacea* L.
det. R. Carter
occasional to locally common, flowers red.

20934 [4] Pinaceae *Pinus echinata* Mill.
det. R. Carter
tree, 20 cm dbh, 15 m tall, common.

6/1/2013

Richard Carter with Phillip Lowe, Josh Steele

U.S.A. Georgia: Thomas County

30.83666N/84.01808W

Greenwood Plantation, W of Pinetree Blvd., S of railroad, ca. 1 mi SSE of headquarters;

--gently rolling longleaf pine - wiregrass savanna,

with *Pinus palustris*, *Aristida stricta*, *Pteridium aquilinum*, *Vaccinium stamineum*, *Quercus pumila*, *Asimina longifolia spatulata*, *Rhus copallinum*, *Dyschoriste oblongifolia*, *Aster adnatus*, *Rhynchosia tomentosa*

20954 [1] Asteraceae *Erigeron strigosus* Muhl. ex Willd.
det. R. Carter
common, rays white, disk yellow.

20955 [3] Annonaceae *Asimina longifolia* Kral var. *spatulata* Kral
det. R. Carter
1 m shrub, common.

20956 [1] Fabaceae *Tephrosia spicata* (Walt.) T. & G.
det. R. Carter
common.

20957 [2] Fabaceae *Crotalaria purshii* DC.
det. R. Carter
occasional.

20958 [1] Euphorbiaceae *Tragia urens* L.
det. R. Carter
occasional.

20959 [1] Fabaceae *Rhynchosia tomentosa* (L.) Hook. & Arn. var. *tomentosa*
det. R. Carter
occasional to locally common, corolla yellow.

20960 [1] Asteraceae *Oclemena reticulata* (Pursh) G.L. Nesom
det. R. Carter
locally common along drain, rays white, head yellow.

20961 [2] Poaceae *Dichanthelium dichotomum* (L.) Gould var. *dichotomum*
det. R. Carter

locally common.

20962 [1] Asteraceae *Pterocaulon pycnostachyum* (Michx.) Hill
det. R. Carter
occasional, heads white.

20963 [1] Fabaceae *Crotalaria rotundifolia* J.F. Gmel.
det. R. Carter
common, corolla yellow.

20964 [1] Fabaceae *Stylosanthes biflora* (L.) Britt. et al.
det. R. Carter
common, corolla yellow.

20965 [1] Polygalaceae *Asemeia grandiflora* (Walt.) Small
det. R. Carter
occasional, flowers purplish pink.

20966 [1] Hypericaceae *Hypericum suffruticosum* W.P. Adams & N. Robs.
det. R. Carter
common, petals yellow, falling readily.

20967 [1] Scrophulariaceae *Buchnera floridanum* Gand.
det. R. Carter
occasional, corolla blue.

20968 [1] Lamiaceae *Scutellaria integrifolia* L.
det. R. Carter
occasional.

20969 [1] Polemoniaceae *Phlox floridana* Benth.
det. R. Carter
common.

20970 [1] Cyperaceae *Scleria ciliata* Michx. var. *elliottii* (Chapm.) Fern.
det. R. Carter
common.

20971 [1] Liliaceae *Aletris obovata* Nash ex Small
det. R. Carter
common, perianth white.

20972 [2] Cyperaceae *Fimbristylis puberula* (Michx.) Vahl
det. R. Carter
occasional, caespitose.

20973 [1] Cyperaceae *Rhynchospora*
det. R. Carter
occasional.

Richard Carter with Phillip Lowe, Josh Steele

30.83491N/84.0149W

Greenwood Plantation, W of Pinetree Blvd., S of railroad, ca. 1.2 airmi SSE of headquarters;
--disturbed sandy loam of degraded hammock, under *Quercus virginiana*;

20974 [2] Cyperaceae *Carex complanata* Torr. & Hook.

det. R. Carter
locally common.

20975 [2] Polygalaceae *Polygala polygama* Walter
det. R. Carter
occasional, flowers pinkish.

20976 [1] Lamiaceae *Prunella vulgaris* L.
det. R. Carter
locally common.

20977 [2] Poaceae *Dichanthelium laxiflorum* (Lam.) Gould
det. R. Carter
locally common, cespitose.

20978 [1] Rubiaceae *Galium circaezans* Michx.
det. R. Carter
plants occasional, local; corolla maroon.

20979 [2] Poaceae *Dichanthelium ravenelii* (Scribn. & Merr.) Gould
det. R. Carter
locally common.

6/18/2013

Richard Carter with W. W. Baker, M. Hodges

U.S.A. Georgia: Worth County

31.4434N/83.96994W

2.9 airmiles N Bridgeboro (heading 7.76°)

--mesic woods along creek

with *Quercus shumardii*, *Q. michauxii*, *Q. falcata*, *Q. nigra*, *Q. stellata*, *Carya glabra*, *C. tomentosa*, *Pinus palustris*, *Liquidambar styraciflua*, *Cercis canadensis*, *Chionanthus virginicus*, *Crataegus*

20980 [1] Ranunculaceae *Thalictrum cooleyi* Ahles?

det. R. Carter

plants rare and local, 3 carpellate and 6 staminate individuals observed

20981 [1] Lamiaceae *Pycnanthemum tenuifolium* Schrad.

det. R. Carter

occasional

20982 [1] Rosaceae *Agrimonia incisa* Torr. & Gray

det. R. Carter

occasional

20983 [1] Apocynaceae *Matelea floridana* (Vail) Woodson

det. R. Carter

plants scandent, latex present; corolla and corona blackish maroon

20984 [2] Fabaceae *Hylodesmum pauciflorum* (Nutt.) Ohashi & R.R. Mill. [*Desmodium pauciflorum* (Nutt.) DC.]

det. R. Carter

occasional, flowers white

20985 [1] Apiaceae *Sanicula canadensis* L.

det. R. Carter

locally common

20986 [1] Poaceae *Elymus virginicus* L.
det. R. Carter
locally common

20987 [3] Poaceae *Dichantherium boscii* (Poir.) Gould & Clarke
det. R. Carter
locally common

6/19/2013

Richard Carter with W. W. Baker

31.31997N/83.72546W

4.17 airmiles NW Norman Park (heading 327.16°), "Quail Ridge"
--well managed longleaf pine-wiregrass savanna

20988 [1] Fabaceae *Galactia erecta* (Walter) Vail
det. R. Carter
occasional to locally common; corolla white

--well managed longleaf pine-wiregrass savanna, seep

20989 [1] Campanulaceae *Lobelia nuttallii* Schult.
det. R. Carter
occasional; corolla blue

--well managed longleaf pine-wiregrass savanna

20990 [1] Orchidaceae *Spiranthes tuberosa* Raf.
det. R. Carter
infrequent, perianth white

20991 [1] Fabaceae *Orbexilum psoralioides* (Walt.) Vincent [*Psoralea psoralioides* (Walt.) Cory]
det. R. Carter
occasional; corolla purplish blue, bracts bluish green

20992 [1] Lamiaceae *Pycnanthemum flexuosum* (Walt.) Britt. et al.
det. R. Carter
locally common

20993 [1] Lamiaceae *Scutellaria multiglandulosa* (Kearney) Small ex R.M. Harper
det. R. Carter
locally common, corolla blue and white

20994 [1] Lamiaceae *Physostegia purpurea* (Walt.) S.F. Blake
det. R. Carter
locally common, corolla pale purplish blue

20995 [3] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
locally common, corolla blue

20996 [3] Poaceae *Paspalum laeve* Michx.
det. R. Carter
occasional to locally common

20997 [3] Cyperaceae *Rhynchospora elliottii* A. Dietr.
det. R. Carter
locally common in seepage bog

20998 [1] Ericaceae *Kalmia hirsuta* Walter
det. R. Carter
occasional, corolla pink

Quail Ridge, 31.32193N 83.72257W
--seepage bog along SE side of bay creek
Habenaria nivea observed, ca. 250 plants in flower

Richard Carter with W. W. Baker
31.46994N/83.82685W

S of Sylvester, E side Hwy. GA 33, 1.5 mi N jct. Hwy. GA 33 and Dothit Rd., Southern Woods Plantation
--recently burned longleaf pine wiregrass savanna, ecotone upslope from bay creek

20999 [3] Apiaceae *Eryngium yuccifolium* Michx.
det. R. Carter
occasional to locally common

21000 [3] Asteraceae *Coreopsis delphinifolia* Lam.
det. R. Carter
occasional, ray and disk corollas yellow

6/20/2013

Richard Carter with W. W. Baker
U.S.A. Georgia: Colquitt County
31.12879N/83.84204W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--upland sandy slope along drain, recently burned
with *Pinus palustris*, *Aristida stricta*

21002 [1] Euphorbiaceae *Stillingia sylvatica* L.
det. R. Carter
aerial stems from woody rootstock, exuding latex; plants occasional

21003 [3] Fabaceae *Tephrosia virginiana* (L.) Pers.
det. R. Carter
multiple aerial stems from stout taproot; plants locally common

21004 [1] Acanthaceae *Ruellia caroliniensis* (J.F. Gmel.) Steud.
det. R. Carter
occasional, corolla blue

21005 [3] Asteraceae *Coreopsis delphinifolia* Lam.
det. R. Carter
heads yellow; plants clonal, locally common

21006 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
plants locally common, stems weak and reclining on adjacent vegetation

21007 [1] Poaceae *Dichanthelium oligosanthes* (Schult.) Gould
det. R. Carter

occasional

21008 [1] Convolvulaceae *Stylisma patens* (Desr.) Myint
det. R. Carter
prostrate vine, corolla white

21009 [1] Asteraceae *Rudbeckia hirta* L.
det. R. Carter
plants occasional, rays yellow, disk black

--seepage slope ecotone along drain, recently burned

21010 [1] Juncaceae *Juncus dichotomus* Ell.
det. R. Carter
plants cespitose, occasional

21011 [1] Lamiaceae *Scutellaria elliptica* Muhl.
det. R. Carter
corolla blue, with white markings; plants occasional

21012 [1] Nartheciaceae *Aletris aurea* Walt.
det. R. Carter
perianth yellow; plants occasional

21013 [1] Lamiaceae *Scutellaria racemosa* Pers.
det. R. Carter
locally common

21014 [2] Lamiaceae *Callicarpa americana* L.
det. R. Carter
plants 1-2 m tall, common

--seepage slope ecotone along drain, recently burned

21015 [1] Cyrillaceae *Cyrilla racemiflora* L.
det. R. Carter
small tree, locally common in drain

21015a [2] Violaceae *Viola primuliflora*
det. R. Carter
locally common

21016 [2] Cyperaceae *Eleocharis tuberculosa* (Michx.) Roem. & Schult.
det. R. Carter
locally common, cespitose

21017 [1] Orchidaceae *Calopogon tuberosus* (L.) Britt. et al.
det. R. Carter
rare

21018 [1] Polygalaceae *Polygala lutea* L.
det. R. Carter
locally common, flowers orange

21019 [1] Cyperaceae *Carex complanata* Torr. & Hook.
det. R. Carter

occasional

21020 [2] Poaceae *Dichanthelium dichotomum* (L.) Gould
det. R. Carter
locally common

21021 [2] Poaceae *Sacciolepis indica* (L.) Chase
det. R. Carter
locally common

21022 [1] Sarraceniaceae *Sarracenia flava* L.
det. R. Carter
locally common

21023 [1] Sarraceniaceae *Sarracenia minor* Walt.
det. R. Carter
locally common

21024 [2] Cyperaceae *Carex lurida* Wahlenb.
det. R. Carter
locally common

21025 [1] Scrophulariaceae *Gratiola pilosa* Michx.
det. R. Carter
occasional, corolla white

21026 [1] Xyridaceae *Xyris ambigua* Beyr. ex Kunth
det. R. Carter
locally common

21027 [1] Xyridaceae *Xyris baldwiniana* Schult.
det. R. Carter
locally common, cespitose, flowers yellow

21028 [1] Xyridaceae *Xyris baldwiniana* Schult.
det. R. Carter
locally common, cespitose, flowers yellow

21029 [2] Cyperaceae *Rhynchospora inexpansa* (Michx.) Vahl
det. R. Carter
locally common

21030 [1] Poaceae *Dichanthelium dichotomum* (L.) Gould
det. R. Carter
locally common

21031 [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
locally common

21032 [1] Juncaceae *Juncus marginatus* Rostk.
det. R. Carter
occasional

21033 [1] Poaceae *Dichanthelium strigosum* (Muhl. ex Ell.) Freckm.
det. R. Carter

occasional

21034 [1] Cyperaceae *Carex longii* Mack.

det. R. Carter

locally common

21035 [1] Cyperaceae *Rhynchospora compressa* J. Carey ex Chapm.

det. R. Carter

locally common

21036 [1] Poaceae *Dichantherium oligosanthes* (Schult.) Gould

det. R. Carter

occasional

21037 [1] Eriocaulaceae *Syngonanthus flavidulus* (Michx.) Ruhl.

det. R. Carter

locally common

21038 [1] Gentianaceae *Sabatia difformis* (L.) Druce

det. R. Carter

local, occasional

21039 [1] Asteraceae *Erigeron vernus* (L.) Torr. & A. Gray

det. R. Carter

locally common

21040 [1] Campanulaceae *Lobelia nuttallii* Schult.

det. R. Carter

occasional, corolla blue

21041 [4] Cyperaceae *Scleria distans* Poir.

det. R. Carter

locally common

21042 [1] Cyperaceae *Scleria ciliata* Michx.

det. R. Carter

locally common

21043 [2] Poaceae *Dichantherium ensifolium* (Baldw. ex Ell.) Gould var. *unciphyllum* (Trin.) Hans. & Wunderl.

det. R. Carter

locally common

21044 [1] Droseraceae *Drosera capillaris* Poir.

det. R. Carter

locally common

21045 [2] Hypoxidaceae *Hypoxis curtissii* Rose

det. R. Carter

local, occasional

21046 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*

det. R. Carter

locally common

21047 [2] Juncaceae *Juncus elliotii* Chapm.

det. R. Carter
occasional

--recently burned upland longleaf pine-wiregrass savanna, sandy soil

21048 [2] Asteraceae *Silphium asteriscus* L.

det. R. Carter
heads yellow, plants occasional

21049 [1] Asteraceae *Pterocaulon pyncostachyum* (Michx.) Ell.

det. R. Carter
plants occasional

21050 [1] Euphorbiaceae *Tragia smallii* Shinnery

det. R. Carter
plant with stinging hairs, occasional

21051 [1] Asteraceae *Gamochaeta purpurea* (L.) Cabrera

det. R. Carter
occasional

21052 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood

det. R. Carter
occasional

21053 [1] Cyperaceae *Cyperus filiculmis* Vahl

det. R. Carter
occasional

21054 [1] Apocynaceae *Asclepias cinerea* Walt.

det. R. Carter
occasional

21055 [1] Fabaceae *Tephrosia spicata* (Walt.) Torr. & A. Gray

det. R. Carter
occasional

21056 [1] Euphorbiaceae *Euphorbia curtisii* Engelm. ex Chapm.

det. R. Carter
occasional

21057 [1] Fabaceae *Orbexilum psoraloides* (Walt.) Vincent

det. R. Carter
occasional, stems reclining

Richard Carter with W. W. Baker

31.12815N/83.84332W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--recently burned, open sandy longleaf pine-wiregrass savanna
with *Pinus palustris*, *Aristida stricta*, *Tephrosia virginiana*, *Quercus pumila*, *Pteridium aquilinum*, *Licania michauxii*

21058 [1] Apocynaceae *Asclepias tuberosa* L.

det. R. Carter
occasional, corolla orange, latex absent

21059 [1] Annonaceae *Asimina longifolia* Kral
det. R. Carter
1 m shrub, occasional, petals white, with purplish bases

21060 [1] Campanulaceae *Wahlenbergia marginata* (Thunb.) DC.
det. R. Carter
occasional, corolla blue

21061 [1] Polygalaceae *Asemeia grandiflora* (Walt.) Small
det. R. Carter
plants occasional, roots aromatic

21062 [2] Asteraceae *Lygodesmia aphylla* (Nutt.) DC.
det. R. Carter
occasional to locally common, heads pale blue

21063 [2] Chrysobalanaceae *Licania michauxii* Prance
det. R. Carter
low clonal shrub, occasional to locally common

21064 [2] Convolvulaceae *Ipomoea pandurata* (L.) G. Meyer
det. R. Carter
prostrate vine, corolla white

21065 [1] Campanulaceae *Lobelia nuttallii* Schult.
det. R. Carter
occasional, corolla blue

21066 [1] Gentianaceae *Sabatia quadrangula* Wilbur
det. R. Carter
occasional

21067 [1] Eriocaulaceae *Gaylussacia nana* (A. Gray) Small
det. R. Carter
low clonal shrub, occasional to locally common

21068 [1] Aquifoliaceae *Ilex glabra* (L.) A. Gray
det. R. Carter
shrub ca. 1 m tall, common

21069 [3] Rosaceae *Crataegus uniflora* Münchh.
det. R. Carter
shrub ca. 1 m tall, occasional

21070 [1] Euphorbiaceae *Tragia urens* L.
det. R. Carter
occasional, plants with stinging hairs

21071 [3] Fabaceae *Lespedeza bicolor* Turcz.
det. R. Carter
plants ca. 2 m tall, locally common

Richard Carter with W. W. Baker

31.12741N/83.84383W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--ecotone between longleaf pine-wiregrass savanna and drain, one-year rough

21072 [2] Gentianaceae *Sabatia campanulata* (L.) Torr.
det. R. Carter
occasional

21073 [1] Linaceae *Linum striatum* Walt.
det. R. Carter
occasional

21074 [3] Lamiaceae *Pycnanthemum flexuosum* (Walt.) Britt. et al.
det. R. Carter
occasional to locally common

21075 [2] Cyperaceae *Rhynchospora elliotii* A. Dietr.
det. R. Carter
occasional

21076 [1] Campanulaceae *Lobelia puberula* Michx.
det. R. Carter
occasional, corolla blue

--bay creek bottom

21077 [1] Asteraceae *Hypochaeris chillensis* (Kunth) Britt.
det. R. Carter
occasional

21078 [1] Cyperaceae *Carex intumescens* Rudge
det. R. Carter
occasional to locally common

21079 [1] Cyperaceae *Carex lonchocarpa* Willd. ex Spreng.
det. R. Carter
occasional to locally common

21080 [1] Melianthaceae *Veratrum virginicum* (L.) Aiton f.
det. R. Carter
infrequent, but locally common

Richard Carter with W. W. Baker

31.12663N/83.84339W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--recently burned longleaf pine-wiregrass savanna

21081 [1] Scrophulariaceae *Penstemon multiflorus* (Benth.) Chapm. ex Small
det. R. Carter
occasional

21082 [1] Euphorbiaceae *Euphorbia pubentissima* Michx.
det. R. Carter
occasional

21083 [1] Cyperaceae *Scleria pauciflora* Muhl. ex Willd. var. *caroliniana* A. Wood
det. R. Carter
occasional

21084 [2] Fabaceae *Baptisia lanceolata* (Walt.) Ell.
det. R. Carter
occasional to locally common

21085 [1] Apiaceae *Eryngium yuccifolium* Michx.
det. R. Carter
occasional

--edge of drain in recently burned longleaf pine-wiregrass savanna

21086 [1] Styracaceae *Styrax americanus* Lam.
det. R. Carter
shrub 1-2 m tall, occasional

21087 [1] Melastomataceae *Rhexia mariana* L. var. *mariana*
det. R. Carter
locally common

21088 [1] Melastomataceae *Rhexia nashii* Small
det. R. Carter
locally common

Richard Carter

U.S.A. Georgia: Thomas County

31.00977N/83.85909W

E side of Coolidge, along Hwy. GA 188, near jct. Keith Way and Hwy. GA 188

--mowed roadside and backslope along N side of hwy.

with *Eremochloa ophiuroides*, *Paspalum notatum*, *Cynodon dactylon*

21089 [1] Asteraceae *Gamochaeta argyrinea* G.L. Nesom
det. R. Carter
locally common

7/10/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Thomas County

30.74584N/84.03033W

Elsoma Plantation, SSW of Thomasville along E side Springhill Rd.

--longleafpine-wiregrass savanna, slope grading into cypress pond

21104 [3] Hypericaceae *Hypericum galioides* Lam.
det. R. Carter
locally common in small, shallow sink

21105 [2] Cyperaceae *Rhynchospora inundata* (Oakes) Fern.
det. R. Carter
locally common, edge of pond

21106 [2] Cyperaceae *Rhynchospora filifolia* Gray
det. R. Carter
locally common, edge of pond

21107 [2] Cyperaceae *Carex verrucosa* Muhl.
det. R. Carter
occasional

21108 [3] Asteraceae *Pluchea baccharis* (P. Miller) Pruski [*Pluchea rosea* Godfrey]
det. R. Carter
locally common, edge of pond; heads pink

21109 [2] Poaceae *Leersia hexandra* Swartz
det. R. Carter
locally common, edge of pond

21110 [2] Ericaceae *Lyonia mariana* (L.) D. Don
det. R. Carter
low shrub, ca. 5 dm high, local

21111 [1] Hypericaceae *Hypericum myrtifolium* Lam.
det. R. Carter
edge of pond, locally common; corolla yellow

21112 [2] Tofieldiaceae *Triantha racemosa* (Walt.) Small [*Tofieldia racemosa* (Walt.) Britt. et al.]
det. R. Carter
locally common, perianth white

21113 [2] Linaceae *Linum floridanum* (Planch.) Trel. var. *floridanum*
det. R. Carter
corolla yellow

21114 [2] Gentianaceae *Sabatia campanulata* (L.) Torr.
det. R. Carter
occasional to locally common, corolla pink

Richard Carter with W. W. Baker

30.74365N/84.01954W

Elsoma Plantation, SSW of Thomasville, E of Springhill Rd.

--seepage bog in longleafpine-wiregrass savanna

with *Salix humilis*, *Ctenium aromaticum*, *Hypericum myrtifolium*, *Rhexia alifanus*, *R. mariana*, *Eupatorium rotundifolium*, *Sarracenia minor*, *Aster reticulatus*, *Hibiscus aculeatus*

21115 [2] Orchidaceae *Platanthera cristata* (Michx.) Lindl.

det. R. Carter

local; corolla yellow

Richard Carter with W. W. Baker

30.74457N/84.01931W

Elsoma Plantation, SSW of Thomasville, E of Springhill Rd.

--low ridge, longleafpine-wiregrass savanna

with *Pinus palustris*, *Quercus pumila*, *Q. margarettae*, *Carya tomentosa*, *Aristida stricta*, *Pteridium aquilinum*, *Eryngium yuccifolium*

21116 [1] Fabaceae *Clitoria mariana* L.

det. R. Carter

occasional, stems ±erect

21117 [1] Rhamnaceae *Ceanothus americanus* L.

det. R. Carter

occasional

21118 [1] Fabaceae *Indigofera caroliniana* P. Miller

det. R. Carter

occasional

21119 [1] Asteraceae *Rudbeckia hirta* L.

det. R. Carter

occasional; rays yellow, disk black

21120 [2] Asteraceae *Verbesina aristata* (Ell.) Heller

det. R. Carter

common; ray and disk corollas yellow

21121 [2] Fabaceae *Stylosanthes biflora* (L.) Britt. et al.

det. R. Carter

occasional; corolla yellow

21122 [2] Asteraceae *Silphium asteriscus* L.

det. R. Carter

occasional; ray corollas yellow, disk corollas yellowish green

21123 [5] Asteraceae *Tetragonotheca helianthoides* L.

det. R. Carter

occasional; ray and disk corollas yellow ±with reddish brown tint

21124 [4] Cyperaceae *Cyperus filiculmis* Vahl

det. R. Carter

occasional to locally common

21125 [2] Cyperaceae *Cyperus*

det. R. Carter

occasional

Richard Carter with W. W. Baker

30.7419N/84.01505W

Elsoma Plantation, SSW of Thomasville, E of Springhill Rd.

--mixed pine-hardwood drain

with *Pinus taeda*, *Quercus nigra*, *Q. virginiana*, *Q. stellata*, *Carya tomentosa*, *Nyssa biflora*, *Liquidambar styraciflua*, *Diospyros virginiana*, *Aesculus pavia*, *Sebastiania fruticosa*, *Callicarpa americana*, *Erythrina herbacea*, *Campsis radicans*

21126 [2] Euphorbiaceae *Ditrysinia fruticosa* (W. Bartr.) Govaerts & Frodin [*Sebastiania fruticosa* (W.

Bartr.) Fern.]

det. R. Carter

1.5 - 2 m shrub, with latex; locally common

Richard Carter with W. W. Baker

30.71373N/84.01691W

Elsoma Plantation, SSW of Thomasville, E of Springhill Rd.

--mixed pine-hardwood slope

with *Pinus echinata*

21127 [2] Poaceae *Tripsacum dactyloides* (L.) L.

det. R. Carter

21128 [2] Gentianaceae *Sabatia angularis* (L.) Pursh

det. R. Carter

locally common; corolla pink

21129 [4] Asteraceae *Coreopsis tripteris* L.
det. R. Carter
plants locally common; rays yellow, disk purplish black

--mesic hammock along drain
with *Quercus alba*, *Q. stellata*, *Q. nigra*, *Carya glabra*, *C. tomentosa*, *Morus rubra*, *Cornus florida*,
Chionanthus virginicus, *Asimina parviflora*, *Aralia spinosa*, *Callicarpa americana*

21130 [3] Smilacaceae *Smilax tamnoides* L.
det. R. Carter

21131 [1] Fabaceae *Clitoria mariana* L.
det. R. Carter

21132 [4] Poaceae *Dichantherium boscii* (Poir.) Gould & C.A. Clark
det. R. Carter

21133 [5] Acanthaceae *Elytraria caroliniensis* (J.F. Gmel.) Pursh var. *caroliniensis*
det. R. Carter
locally common; corolla white

21134 [2] Sapindaceae[incl. Hippocastanaceae] *Aesculus pavia* L.
det. R. Carter
local shrub, 2 m high

21135 [3] Asteraceae *Smallanthus uvedalia* (L.) Mack. ex Small [*Polymnia uvedalia* (L.) L.]
det. R. Carter
local; ray and disk corollas yellow

Richard Carter

U.S.A. Georgia: Brooks County
30.78879N/83.49976W

E of Quitman, along S side Hwy. US 84, 0.3 mi E jct. Hwy. US 84 and Devane Rd.
--seepage slope

21136 [2] Tofieldiaceae *Triantha racemosa* (Walt.) Small [*Tofieldia racemosa* (Walt.) Britt. et al.]
det. R. Carter
plants locally common; voucher for molecular study

7/11/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Decatur County

Silver Lake Wildlife Management Area, including "Hog Farm"

--longleaf pine-wiregrass savanna

No vouchers collected.

7/16/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Thomas County

30.77546N/84.00259W

SSW of Thomasville, W of Metcalf Rd., Arcadia Plantation

--longleaf pine-wiregrass savanna, recently selectively logged

21137 [1] Gentianaceae *Sabatia angularis* (L.) Pursh
det. R. Carter

locally common, corolla rose pink

Richard Carter with W. W. Baker

30.79023N/84.00305W

SSW of Thomasville, W of Metcalf Rd., Arcadia Plantation

--hardwood drain

with *Magnolia virginiana*, *Nyssa biflora*, *Quercus nigra*, *Liquidambar styraciflua*, *Carya glabra*, *Quercus alba*, *Pinckneya bracteata*, *Toxicodendron vernix*, *Rhododendron canescens*, *Myrica cerifera*, *Viburnum nudum*, *Leucothoe axillaris*, *Arundinaria tecta*, *Boehmeria cylindrica*, *Woodwardia areolata*, *Sanicula*, *Thelypteris*, *Chasmanthium*, *Sparganium americanum*, *Platanthera*, *Apteria*, *Pallavicinia lyellii*

21138 [2] Cyperaceae *Rhynchospora leptocarpa* Chapm.

det. R. Carter

local, occasional; stems reclining

21139 [2] Burmaniaceae *Apteria aphylla* (Nutt.) Barnh. ex Small

det. R. Carter

occasional to locally common; corolla violet

21140 [2] Orchidaceae *Platanthera flava* (L.) Lindl.

det. R. Carter

occasional and local; corolla green

21141 [1] Apiaceae *Sanicula canadensis* L.

det. R. Carter

21142 [3] Myrsinaceae *Ardisia crenata* Sims

det. R. Carter

shrub ca. 1 m tall, locally common, invasive; corolla white, fruit red

7/17/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Colquitt County

31.29149N/83.8867W

Doerun Pitcherplant Bog Natural Area, 2.65 airmiles SE Doerun town center (heading 137.34°), E of Hwy. GA 133, S of Hagen Still Rd.

--knoll in longleaf pine-wiregrass savanna

with *Pinus palustris*, *Aristida stricta*, *Quercus pumila*, *Gaylussacia dumosa*, *Tephrosia virginiana*, *Pteridium aquilinum*, *Baptisia lanceolata*, *Galactia erecta*, *Pityopsis graminifolia*, *Vernonia angustifolia*, *Stylosanthes biflora*, *Stylisma patens*

21143 [1] Orobanchaceae *Schwalbea americana* L.

det. R. Carter

locally common

Richard Carter with W. W. Baker

31.29387N/83.88204W

Doerun Pitcherplant Bog Natural Area, 2.74 airmiles SE Doerun town center (heading 130.71°), E of Hwy. GA 133, S of Hagen Still Rd.

--longleaf pine-wiregrass savanna, slope, ecotone above pitcherplant bog and hardwood drain

21144 [2] Cyperaceae *Cyperus echinatus* (L.) A. Wood

var. "sphaericus"

det. R. Carter

occasional

21145 [2] Cyperaceae *Cyperus echinatus* (L.) A. Wood
var. "sphaericus"
det. R. Carter
occasional

7/18/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Colquitt County

31.13021N/83.83842W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--seepage slope and drain

with *Pinus elliotii*, *Acer rubrum*, *Nyssa biflora*, *Magnolia virginiana*, *Myrica heterophylla*, *Sarracenia flava*,
S. minor, *Rhexia alifanus*, *Arundinaria tecta*, *Woodwardia areolata*, *Osmunda regalis*, *Smilax laurifolia*,
Sphagnum

21146 [1] Apiaceae *Eryngium baldwinii* Spreng.
det. R. Carter
locally common, heads blue

21147 [2] Asteraceae *Gnaphalium simplicicaulis* (Willd. ex Spreng.) Cabrera
det. R. Carter
infrequent

21148 [1] Cyperaceae *Cyperus polystachyos* Rottb.
det. R. Carter
locally common

21149 [2] Asteraceae *Cirsium muticum* Michx.
det. R. Carter
common, heads pink

21150 [1] Asteraceae *Pluchea baccharis* (Mill.) Pruski
det. R. Carter
common, heads pink

21151 [1] Cyperaceae *Carex glaucescens* Ell.
det. R. Carter
occasional

21152 [1] Xyridaceae *Xyris baldwinii* Schult.
det. R. Carter
locally common

21153 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
occasional

21154 [2] Gentianaceae *Sabatia campanulata* (L.) Torr.
det. R. Carter
occasional, corolla pink, stems lax

21155 [1] Gentianaceae *Sabatia difformis* (L.) Druce
det. R. Carter
occasional, corolla white with yellow tint

21156 [1] Scrophulariaceae *Gratiola pilosa* Michx.
det. R. Carter
occasional, corolla white

21157 [1] Cyperaceae *Rhynchospora gracilentia* Gray
det. R. Carter
locally common

21158 [1] Poaceae *Dichantherium scabriusculum* (Ell.) Gould & Clark
det. R. Carter
occasional

21159 [1] Tofieldiaceae *Triantha racemosa* (Walt.) Small [*Tofieldia racemosa* (Walt.) Britt. et al.]
det. R. Carter
occasional, local

21160 [1] Malvaceae *Hibiscus aculeatus* Walt.
det. R. Carter
occasional, corolla white, dark purple proximally

21161 [1] Xyridaceae *Xyris ambigua* Beyr. ex Kunth
det. R. Carter
common

21162 [1] Lamiaceae *Pycnanthemum nudum* Nutt.
det. R. Carter
locally common

21163 [1] Xyridaceae *Xyris caroliniana* Walt.
det. R. Carter
occasional

21164 [2] Cyperaceae *Rhynchospora ciliaris* Michx.
det. R. Carter
occasional

21165 [1] Xyridaceae *Xyris platylepis* Chapm.
det. R. Carter
occasional

21166 [1] Cyperaceae *Scleria pauciflora* Muhl. ex Willd var. *pauciflora*
det. R. Carter
occasional

21167 [2] Cyperaceae *Cyperus haspan* L.
det. R. Carter
locally common, cespitose

Richard Carter with W. W. Baker
31.12726N/83.83981W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--seepage bog, recently burned

21168 [1] Asclepiadaceae *Asclepias lanceolata* Walt.
det. R. Carter
occasional

21169 [2] Alismataceae *Sagittaria weatherbiana* Fernald
det. R. Carter
infrequent

21170 [1] Melastomataceae *Rhexia alifanus* Walt.
det. R. Carter
common

21171 [1] Melastomataceae *Rhexia petiolata* Walt.
det. R. Carter
occasional

21172 [1] Asteraceae *Erechtites hieraciifolius* (L.) Raf. ex DC.
det. R. Carter
occasional to locally common

21173 [1] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
locally abundant

21174 [2] Cyperaceae *Rhynchospora gracilentia* A. Gray
det. R. Carter
locally common

21175 [4] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
locally common

21176 [1] Urticaceae *Boehmeria cylindrica* (L.) Sw.
det. R. Carter
locally common

--plow line, disturbed sandy loam

21177 [2] Rubiaceae *Diodia teres* Walt.
det. R. Carter
locally common

21178 [2] Rubiaceae *Diodia virginiana* L.
det. R. Carter
occasional

21179 [1] Rubiaceae *Richardia scabra* L.
det. R. Carter
locally common

Richard Carter with W. W. Baker

31.12355N/83.84441W

SW of Moultrie by Lower Meigs Rd., SW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., Morrison Pines Plantation

--seepage slope along drain, recently burned

21180 [1] Apocynaceae *Asclepias connivens* Baldw.
det. R. Carter
rare

21181 [1] Euphorbiaceae *Tragia smallii* Shinners
det. R. Carter
occasional

21182 [1] Melastomataceae *Rhexia mariana* L.
det. R. Carter
common

--drain

21183 [2] Nyssaceae *Nyssa ogeche* Bartr.
det. R. Carter
small tree, common

Richard Carter with W. W. Baker

31.11835N/83.84564W

SW of Moultrie by Lower Meigs Rd., SW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., Morrison Pines Plantation

--disturbed jeep trail through drain

21183a [1] Iridaceae *Crocasmia xcrocosmiifolia* (Lem. ex Morr.) N.E. Br.
det. R. Carter
locally common, perianth orange

--sandy ridge and slope, shallow sand over clay/pebbly clay, recently burned
with *Pinus palustris*, *Aristida stricta*, *Tephrosia virginiana*, *Pityopsis graminifolia*, *Coreopsis delphinifolia*

21184 [3] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21185 [1] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21186 [1] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21187 [2] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21188 [1] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21189 [1] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21190 [1] Cyperaceae *Cyperus*
det. R. Carter
tissue voucher for molecular study

21191 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*
det. R. Carter
common

21192 [2] Asteraceae *Coreopsis delphiniifolia* Lam.
det. R. Carter
locally common

21193 [1] Apocynaceae *Asclepias obovata* Ell.
det. R. Carter
occasional

Richard Carter with W. W. Baker
31.12891N/83.84379W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--longleaf pine/wiregrass upland grading into seepage slope, recently burned

21194 [2] Cyperaceae *Scleria pauciflora* Muhl. ex Willd var. *caroliniana* A. Wood
det. R. Carter
occasional

21195 [3] Cyperaceae *Cyperus plukenetii* Fernald
det. R. Carter
occasional

21196 [1] Convolvulaceae *Ipomoea pandurata* (L.) G. Meyer
det. R. Carter
prostrate vine, locally common, corolla white

Richard Carter with W. W. Baker
31.08786N/83.82729W

1.20 mi N jct. Mack Dekle Rd. and Hwy. US 319, east side Mack Dekle Rd.
--impoundment

21197 [3] Salviniaceae *Salvinia rotundifolia* Baker
det. R. Carter
natant aquatic, locally abundant

7/23/2013

Richard Carter with W. W. Baker
U.S.A. Georgia: Lowndes County
30.79247N/83.38557W

Kinderlou Plantation, 0.63 airmiles WSW (heading 248°) of headquarters
--recently burned, well managed longleaf pine-wiregrass savanna

21198 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
det. R. Carter

21199 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
var. "sphaericus"
det. R. Carter

Richard Carter with W. W. Baker
30.78918N/83.38952W

Kinderlou Plantation, 0.93 airmiles WSW (heading 240.40°) of headquarters
--seepage slope in recently burned longleaf pine-wiregrass savanna

with *Pinus palustris*, *Quercus minima*, *Q. pumila*, *Myrica cerifera*, *Ilex glabra*, *Vaccinium myrsinites*, *Lyonia ferruginea*, *Serenoa repens*, *Aristida stricta*, *Sporobolus floridanus*, *Muhlenbergia expansa*, *Ctenium aromaticum*, *Xyris*, *Rhynchospora fascicularis*, *R. ciliaris*, *Eleocharis baldwinii*, *Lachnocaulon anceps*, *Sarracenia minor*, *Rhexia alifanus*, *R. petiolata*, *R. mariana*, *Polygala lutea*, *Tofieldia racemosa*, *Pycnanthemum nudum*, *Eupatorium rotundifolium*, *Aster reticulatus*, *Platanthera ciliaris*, *P. cristata*, *Carphephorus tomentosus*, *Hypericum myrtifolium*, *Pteridium aquilinum*, *Lycopodium alopecuroides*, *Osmunda cinnomomea*

Note: *Sarracenia minor*, locally common

21200 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
var. "sphaericus"
det. R. Carter

21201 [1] Orchidaceae *Platanthera cristata* (Michx.) Lindl.
det. R. Carter
plants local, corolla orange

21202 [1] Orchidaceae *Platanthera ciliaris* (L.) Lindl.
det. R. Carter
plants local, corolla orange

21203 [1] Tofieldiaceae *Triantha racemosa* (Walt.) Small [*Tofieldia racemosa* (Walt.) Britt. et al.]
det. R. Carter
plants local, perianth white

21204 [1] Lamiaceae *Pycnanthemum nudum* Nutt.
det. R. Carter
plants locally common

Richard Carter with W. W. Baker

30.78687N/83.36593W

Kinderlou Plantation, 0.86 airmiles SE (heading 137.55°) of headquarters
--recently burned, well managed longleaf pine-wiregrass savanna
with *Pinus palustris*, *Quercus pumila*, *Q. falcata*, *Diospyros virginiana*, *Aristida stricta*, *Eryngium yuccifolium*, *Tephrosia virginiana*, *Pteridium aquilinum*, *Baptisia lecontei*, *Rhynchosia tomentosa*

Note: *Baptisia lecontei* observed, plants occasional

21205 [1] Euphorbiaceae *Tragia urticifolia* Michx.
det. R. Carter
plants with stinging hairs, infrequent

21206 [1] Asteraceae *Verbesina aristata* (Ell.) A. Heller
det. R. Carter
occasional to locally common

21207 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
common

21208 [1] Clusiaceae *Hypericum pseudomaculatum* Bush
det. R. Carter
occasional

21209 [3] Cyperaceae *Cyperus retrofractus* (L.) Torr.
det. R. Carter
plants local and rare

21210 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
var. "sphaericus"
det. R. Carter

21211 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
det. R. Carter

21212 [2] Cyperaceae *Cyperus echinatus* (L.) A. Wood
det. R. Carter

21213 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood
det. R. Carter

7/24/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Brooks County

30.67572N/83.42018W

Riverbend Plantation, 0.93 airmiles ENE (heading 63.71°) of jct. Nankin Rd. and Clyattville Rd.
--recently burned longleaf pine-wiregrass matrix with isolated sinkhole depressions, margin of sinkhole pond

with *Pinus palustris*, *Aristida stricta*, *P. elliottii*, *P. taeda*, *Taxodium ascendens*, *Hibiscus aculeatus*,
Pteridium aquilinum, *Sarracenia minor*, *Ctenium aromaticum*, *Calopogon tuberosus*, *Scleria reticularis*,
Woodwardia virginica, *Xyris*, *Rhynchospora*

Note: *Calopogon tuberosus* observed, rare, no voucher taken; *Sarracenia minor* observed, plants occasional

21214 [1] Asclepiadaceae *Asclepias verticillata* L.
det. R. Carter
plants infrequent; corolla white, latex present

21215 [2] Ericaceae *Lyonia fruticosa* (Michx.) G.S. Torrey
det. R. Carter
2 m shrub, common

21216 [2] Scrophulariaceae *Penstemon multiflorus* Chapm. ex Benth.
det. R. Carter
occasional

21217 [1] Agavaceae *Manfreda virginica* (L.) Salisbury ex Rose [*Polianthes virginica* (L.) Shinnery]
det. R. Carter
infrequent

21218 [1] Asteraceae *Eupatorium rotundifolium* L.
det. R. Carter
locally common; heads white

21219 [1] Melastomataceae *Rhexia petiolata* Walt.
det. R. Carter
plants locally common, corolla pinkish purple

21220 [1] Asteraceae *Pluchea baccharis* (Mill.) Pruski [*Pluchea rosea* Godfrey]
det. R. Carter
plants locally common, heads rose

21221 [1] Hypoxidaceae *Hypoxis juncea* Sm.

det. R. Carter
plants local, perianth yellow

21222 [1] Scrophulariaceae *Strophonanthe hispida* Benth. ex Lindl. [*Gratiola hispida* (Benth. ex Lindl.) Pollard]

det. R. Carter
plants locally common, corolla white

21223 [2] Xyridaceae *Xyris ambigua* Beyr. ex Kunth

det. R. Carter
plants common, corolla yellow

21224 [2] Onagraceae *Ludwigia suffruticosa* Walter

det. R. Carter
plants locally common

21225 [1] Cyperaceae *Scleria triglomerata* Michx.

det. R. Carter
occasional

21226 [1] Orchidaceae *Platanthera ciliaris* (L.) Lindl.

det. R. Carter
plants local, just coming into anthesis; corolla yellowish orange

21227 [1] Xyridaceae *Xyris caroliniana* Walter

det. R. Carter
plants occasional, base mucilaginous

21228 [1] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl

det. R. Carter
common

21229 [2] Poaceae *Ctenium aromaticum* (Walt.) A. Wood

det. R. Carter
locally common

Richard Carter with W. W. Baker

30.67864N/83.41964W

Riverbend Plantation, vic. lodge, 1.07 airmiles ENE (heading 54.56°) of jct. Nankin Rd. and Clyattville Rd.
--recently burned longleaf pine-wiregrass upland, sandy river bluff grading into mesic slope
with *Pinus palustris*, *P. echinata*, *P. taeda*, *Carya tomentosa*, *Hamamelis virginiana*, *Asimina parviflora*

21230 [3] Apiaceae *Sanicula canadensis* L.

det. R. Carter
locally common

21231 [1] Rubiaceae *Galium pilosum* Aiton

det. R. Carter
common

21232 [1] Asteraceae *Eupatorium album* L.

det. R. Carter
common, heads white

21233 [2] Asteraceae *Verbesina aristata* (Ell.) A. Heller

det. R. Carter

locally common

21234 [1] Cyperaceae *Cyperus plukenetii* Fernald
det. R. Carter
occasional

Richard Carter with W. W. Baker
30.68241N/83.42475W

Riverbend Plantation, vic. lodge, 1.05 airmiles NE (heading 32.85°) of jct. Nankin Rd. and Clyattville Rd.
--recently burned floodplain terrace along Withlacoochee River
with *Liquidambar styraciflua*, *Pinus taeda*, *Carya tomentosa*, *Quercus virginiana*, *Q. nigra*, *Diospyros virginiana*, *Quercus minima*

21235 [3] Fabaceae *Baptisia alba* (L.) Vent.
det. R. Carter
locally common

21236 [2] Lamiaceae *Pycnanthemum flexuosum* (Walt.) Britt. et al.
det. R. Carter

21237 [2] Cistaceae *Lechea pulchella* Raf.
det. R. Carter
locally common

21238 [2] Poaceae *Tripsacum dactyloides* (L.) L.
det. R. Carter

21239 [1] Poaceae *Dichanthelium aciculare* (Desv. ex Poir.) Gould & Clark
det. R. Carter
common

8/2/2013

Richard Carter with F. Snow
U.S.A. Georgia: Coffee County
31.53944N/82.81755W

NE Douglas, along N side Hwy. GA 206 (N Connector Rd.), ca. 0.5 mi E jct. Hwy. US 221, along powerline right-of-way
--degraded sandridge east of Seventeen Mile Creek

21240 [2] Cyperaceae *Cyperus filiculmis* Vahl
det. R. Carter
occasional

Richard Carter with F. Snow
31.53956N/82.81673W

NE Douglas, along N side Hwy. GA 206 (N Connector Rd.), ca. 0.5 mi E jct. Hwy. US 221, edge of sandpit along powerline right-of-way
--degraded sandridge east of Seventeen Mile Creek

21241 [3] Cyperaceae *Cyperus hystericinus* Fernald
det. R. Carter
infrequent and local

Richard Carter with F. Snow
31.53944N/82.81849W

NE Douglas, along N side Hwy. GA 206 (N Connector Rd.), ca. 0.5 mi E jct. Hwy. US 221, edge of sandpit along powerline right-of-way
--degraded sandridge east of Seventeen Mile Creek

21242 [2] Cyperaceae *Cyperus nashii* Britt. in Small

det. R. Carter

infrequent and local

21243 [1] Fabaceae *Galactia volubilis* (L.) Britt.

det. R. Carter

occasional

21244 [1] Cistaceae *Lechea deckertii* Small

det. R. Carter

occasional

21245 [1] Caryophyllaceae *Paronychia herniarioides* (Michx.) Nutt.

det. R. Carter

occasional

21246 [1] Cistaceae *Lechea deckertii* Small

det. R. Carter

occasional

21247 [3] Asteraceae *Helianthus debilis* Nutt. subsp. *cucumerifolius* (Torr. & A. Gray) Heiser

det. R. Carter

occasional

Richard Carter with F. Snow

31.53969N/82.81764W

NE Douglas, along N side Hwy. GA 206 (N Connector Rd.), ca. 0.5 mi E jct. Hwy. US 221
--sandpit, water atypically deep because of recent precipitation

21248 [4] Clusiaceae *Hypericum brachyphyllum* (Spach) Steud.

det. R. Carter

common

21249 [2] Eriocaulaceae *Lachnocaulon minus* (Chapm.) Small

det. R. Carter

common

21250 [1] Lycopodiaceae *Lycopodiella appressa* (Chapm.) Cranfill [*Lycopodium appressum* (Chapm.) Lloyd & Underw.]

det. R. Carter

common

21251 [1] Lycopodiaceae *Pseudolycopodiella caroliniana* (L.) Holub. [*Lycopodium carolinianum* L.]

det. R. Carter

common

21252 [1] Lycopodiaceae *Lycopodiella prostrata* (Harper) Cranfill [*Lycopodium prostratum* Harper]

det. R. Carter

common

21253 [1] Burmanniaceae *Burmannia capitata* (J.F. Gmel.) Mart.

det. R. Carter

common

21254 [1] Droseraceae *Drosera intermedia* Hayne
det. R. Carter
common

Richard Carter with F. Snow
U.S.A. Georgia: Jeff Davis County
31.78221N/82.81223W

Flat Tub WMA, Rocky Hammock Tract, N of Hwy. GA 107, 0.5 mi E jct. Dan Kirkland Rd. and Piney Grove Church Rd., along N side Piney Grove Church Rd., 0.6 mi W Piney Grove Church
--degraded longleaf pine-wiregrass community adjacent to rock outcrop, ca. 8 weeks post burn

21255 [1] Cyperaceae *Eleocharis brittonii* Svens. ex Small
det. R. Carter
common

Richard Carter with F. Snow
U.S.A. Georgia: Coffee County
31.74168N/82.84193W

Broxton Rocks Preserve, Ricketson Tract, S of Hwy. GA 107 by Mobley Rd./Robert Ricketson Rd.
--thin soil over sandstone, seepy

21256 [1] Cyperaceae *Rhynchospora pusilla* Chapm. ex M.A. Curtis
det. R. Carter
common

Richard Carter with F. Snow
31.7421N/82.84622W

Broxton Rocks Preserve, Ricketson Tract, S of Hwy. GA 107 by Mobley Rd./Robert Ricketson Rd.
--thin soil over sandstone, seepy

21257 [1] Xyridaceae *Xyris flabelliformis* Kral
det. R. Carter
rare and local

--thin soil over sandstone

21258 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
rare and local

8/26/2013

Richard Carter with E. E. Sheeley
U.S.A. Georgia: Brooks County
30.67864N/83.41964W

Riverbend Plantation, vic. lodge, 1.07 airmiles ENE (heading 54.56°) of jct. Nankin Rd. and Clyattville Rd.
--recently burned longleaf pine-wiregrass upland, sandy river bluff grading into mesic slope
with *Pinus palustris*, *P. echinata*, *P. taeda*, *Carya tomentosa*, *Hamamelis virginiana*, *Asimina parviflora*

21298 [1] Orchidaceae *Habenaria quinqueseta* (Michx.) Eaton
det. R. Carter
plants rare, local

8/27/2013

Richard Carter with R. E. Mears, F. Snow

U.S.A. Georgia: Coffee County

31.53944N/82.81755W

NE Douglas, along N side Hwy. GA 206 (N Connector Rd.), ca. 0.5 mi E jct. Hwy. US 221, along powerline right-of-way

--degraded sandridge east of Seventeen Mile Creek

21299 [3] Cyperaceae *Cyperus*

det. R. Carter

locally common, cespitose

21300 [1] Brassicaceae *Warea cuneifolia* (Muhl. ex Nutt.) Nutt.

det. R. Carter

locally common; corolla lavender

Richard Carter with R. E. Mears, F. Snow

U.S.A. Georgia: Jeff Davis County

31.78829N/82.81323W

Flat Tub WMA, Rocky Hammock Tract, N of Hwy. GA 107, 0.5 mi E jct. Dan Kirkland Rd. and Piney Grove Church Rd., along N side Piney Grove Church Rd.

--degraded longleaf pine-wiregrass community near rock outcrop; elev. ca. 230 ft.

21301 [1] Poaceae *Anthaenantia villosa* (Michx.) P. Beauv.

det. R. Carter

occasional, locally common

21302 [1] Cyperaceae *Cyperus plukenetii* Fern.

det. R. Carter

occasional, locally common

21303 [2] Cyperaceae *Cyperus echinatus* (L.) A. Wood

det. R. Carter

local

21304 [5] Cyperaceae *Cyperus echinatus x filiculmis*

det. R. Carter

local

Richard Carter with R. E. Mears, F. Snow

U.S.A. Georgia: Coffee County

31.73309N/82.85473W

Broxton Rocks Nature Conservancy Preserve, slope along jeep trail to Rockhouse Falls, SW side of branch

--degraded upland pine woods

21305 [2] Pinaceae *Pinus serotina* Michx.

det. R. Carter

tree ca. 10 m tall, local

--sandstone outcrop

with *Chionanthus virginicus*, *Vaccinium arboreum*, *V. elliotii*, *Osmanthus americanus*, *Pinus taeda*, *Liquidambar styraciflua*, *Rhus copallina*, *Hypericum hypericoides*, *Callicarpa americana*, *Rubus*, *Gelsemium sempervirens*, *Smilax glauca*, *Vitis rotundifolia*, *Parthenocissus quinquefolia*, *Allium bivalve*, *Bigelowia nuttallii*, *Penstemon dissectus*, *Crotonopsis elliptica*, *Ophioglossum nudicaule*, *Evolvulus sericeus*, *Steinchisma hians*, *Scutellaria parvula*, *Panicum anceps rhizomatium*, *Centrosema nictitans*,

Chamaecrista nictitans, *Paspalum setaceum*, *Polygala curtisii*, *Diodia teres*, *Drosera brevifolia*, *Xyris flabelliformis*

21306 [2] Oleaceae *Forestiera ligustrina* (Michx.) Poir.
det. R. Carter
2 m shrub, common along edge of outcrop

Richard Carter with R. E. Mears

U.S.A. Georgia: Ware County

31.3001N/82.55997W

3.75 mi NW jct. Hwy. GA 158 and Hwy. US 82, along SW side Hwy. GA 158 just SE of Satilla River bridge

--sandridge, white sand, elev. ca. 140 ft.

with *Quercus geminata*, *Q. myrtifolia*, *Q. chapmanii*, *Osmanthus americanus*, *Vaccinium arboreum*, *Lyonia ferruginea*, *Serenoa repens*

21307 [2] Cyperaceae *Cyperus*

det. Carter

local in relatively undisturbed sand

21308 [1] Cyperaceae *Cyperus*

det. Carter

locally common, in disturbed sand

9/3/2013

Richard Carter with Jacob Thompson

U.S.A. Georgia: Camden County

30.82761N/81.54435W

Kings Bay Submarine Base, Cherry Point

--hardwood hammock

with *Quercus virginiana*, *Q. hemisphaerica*, *Carya glabra*, *Sabal palmetto*, *Juniperus virginiana silicicola*, *Prunus serotina*, *Persea borbonia*, *Ilex vomitoria*, *Cercis canadensis*, *Serenoa repens*, *Arundinaria gigantea*

21310 [3] Poaceae *Chasmanthium sessiliflorum* (Poir.) Yates [*Chasmanthium sessiliflorum* (Poir.) Yates *sessiliflorum* (Poir.) Wipff & S.D. Jones]

det. R. Carter

Richard Carter with Jacob Thompson

30.82815N/81.5518W

Kings Bay Submarine Base, Cherry Point

--hardwood hammock remnant along E side of golf course

with *Quercus virginiana*, *Q. hemisphaerica*, *Carya glabra*, *Xanthoxylum clava-herculis*, *Rhus copallinum*, *Osmanthus americanus*, *Vaccinium arboreum*, *Callicarpa americana*

21311 [11] Fagaceae *Quercus nigra* L.

det. R. Carter

tree, 15 m tall

with *Quercus virginiana*, *Q. hemisphaerica*, *Carya glabra*, *Sabal palmetto*, *Juniperus virginiana silicicola*, *Prunus serotina*, *Persea borbonia*, *Ilex vomitoria*, *Cercis canadensis*, *Serenoa repens*

21312 [5] Fagaceae *Quercus hemisphaerica* Bartr. ex Willd.

det. R. Carter

tree, 20 m tall

Richard Carter with Jacob Thompson

30.83473N/81.54543W

Kings Bay Submarine Base, Cherry Point

--hardwood hammock

with *Quercus virginiana*, *Q. hemisphaerica*, *Carya glabra*, *Sabal palmetto*, *Juniperus virginiana silicicola*, *Prunus serotina*, *Persea borbonia*, *Ilex vomitoria*, *Cercis canadensis*, *Serenoa repens*, *Arundinaria gigantea*

21313 [6] Nyssaceae *Nyssa sylvatica* Marsh.

det. R. Carter

tree, 15 m tall, trunk with fairly constant taper to base; leaves membranous, dull green above

Richard Carter with Jacob Thompson

30.81996N/81.54320W

Kings Bay Submarine Base, Etowah Park, along approach to landing at public boat dock

--open sandy loam

Aeschynomene viscidula Michx. [no voucher taken, confirmation of earlier record: Carter 12976 (VSC), 1 Jul 1996]

plants local, ~10 plants observed [population vigor and size essentially unchanged since 1996]

9/10/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Miller County

31.20573N/84.81323E

Mayhaw WMA, 5.3 airmi WNW (296.61°) of Colquitt center, 0.55 mi N jct. Springhead Rd and Griggs

Lucille Rd, by Springhead Rd

--sandy bank along rd through shaded hardwood hammock

21318 [5] Commelinaceae *Commelina communis* L.

det. R. Carter

plant locally common; stems ±decumbent, rooting at nodes; spathes proximally pale; flowers with 2 blue petals and 1 white central petal

21319 [4] Polygonaceae *Persicaria pensylvanica* (L.) Small [*Polygonum pensylvanicum* L.]

det. R. Carter

plant locally common, stems decumbent, perianth pink

21320 [4] Lamiaceae *Perilla frutescens* L.

det. R. Carter

plants locally common, aromatic, corolla pale purple

--swamp

with *Magnolia virginiana*, *Taxodium distichum*, *Acer rubrum*, *Planera aquatica*, *Fraxinus pennsylvanica*, *Cornus foemina*, *Persea palustris*, *Sabal minor*, *Berchemia scandens*

21321 [2] Cyperaceae *Rhynchospora miliacea* (Lam.) A. Gray

det. R. Carter

plants locally common

21322 [1] Brassicaceae *Nasturtium*

plants sterile, local in shallow water, rooted in mud, leaves natant

Richard Carter with W. W. Baker

31.21682N/84.80858E

Mayhaw WMA, 5.45 airmi NW (305.47°) of Colquitt center, N of Griggs Lucille Rd, E of Springhead Rd

--degraded longleaf pine-wiregrass savanna
with *Pinus palustris*, *Quercus margarettae*, *Q. laevis*, *Q. incana*, *Q. falcata*, *Q. hemisphaerica*, *Q. virginiana*, *Q. pumila*, *Prunus serotina*, *Diospyros virginiana*, *Sassafras albidum*, *Rhus copallinum*, *Aristida stricta*, *Schizachyrium tenerum*, *Tephrosia virginiana*

21323 [1] Asclepiadaceae *Asclepias tuberosa* L.

det. R. Carter
occasional, latex absent

21324 [1] Poaceae *Anthaenantia villosa* (Michx.) P. Beauv.

det. R. Carter
occasional

21325 [4] Fabaceae *Strophostyles umbellata* (Muhl. ex Willd.) Britt.

det. R. Carter
occasional, corolla pink with purple tipped keel

21326 [1] Asteraceae *Sericocarpus tortifolius* (Michx.) Nees [*Aster tortifolius* Michx.]

det. R. Carter
occasional, heads white

21327 [1] Asteraceae *Eupatorium hyssopifolium* L.

det. R. Carter
common, heads white

21328 [2] Fabaceae *Dalea carnea* (Michx.) Poir. var. *gracilis* (Nutt.) Barneby

det. R. Carter
occasional, flowers white

21329 [1] Fabaceae *Dalea pinnata* (J.G. Gmel.) Barneby var. *trifoliata* (Chapm.) Barneby

det. R. Carter
occasional, flowers white

21330 [2] Asteraceae *Pityopsis aspera* (Shuttlew. ex Small) Small

det. R. Carter
occasional, heads yellow

21331 [1] Polygalaceae *Asemeia grandiflora* (Walter) Small [*Polygala grandiflora* Walter]

det. R. Carter
occasional, flowers purple, roots aromatic

21332 [2] Poaceae *Paspalum bifidum* (Bertol.) Nash

det. R. Carter
occasional, leaves glaucous

21333 [1] Asteraceae *Liatris elegans* (Walt.) Michx.

det. R. Carter
occasional, tips of bracts pale purple to cream

21334 [2] Lamiaceae *Trichostema dichotomum* L.

det. R. Carter
occasional to common, corolla blue

21335 [1] Fabaceae *Desmodium ciliare* (Muhl. ex Willd.) DC.

det. R. Carter
common, flowers greenish purple

Richard Carter with W. W. Baker

31.21654N/84.79697E

Mayhaw WMA, 4.88 airmi NW (309.66°) of Colquitt center, 1.6 mi N of Griggs Lucille Rd by main dirt trail
--longleaf pine-wiregrass savanna grading into margin of cypress pond

21336 [2] Asteraceae *Rudbeckia mohrii* A. Gray

det. R. Carter

infrequent and local, in shallow water along edge of pond, rays yellow, disk black

21337 [2] Cyperaceae *Rhynchospora careyana* Fern.

det. R. Carter

locally common in shallow water, edge of pond

21338 [2] Cyperaceae *Cyperus plukenetii* Fern.

det. R. Carter

occasional in sandy upland

21339 [1] Cyperaceae *Cyperus echinatus* (L.) A. Wood

det. R. Carter

occasional in sandy upland

21340 [1] Asteraceae *Elephantopus elatus* Bertol.

det. R. Carter

common in sandy upland, flowers purple

21341 [1] Asteraceae *Vernonia angustifolia* Michx. var. *angustifolia*

det. R. Carter

occasional in sandy upland, heads purple

21342 [1] Scrophulariaceae *Mecardonia acuminata* (Walt.) Small

det. R. Carter

occasional, corolla white

21343 [2] Euphorbiaceae *Euphorbia pubentissima* Michx.

det. R. Carter

occasional to locally common in sandy upland; petaloid appendages white, plant with latex

21344 [1] Euphorbiaceae *Tragia urticifolia* Michx.

det. R. Carter

occasional in sandy upland, plant with stinging trichomes

9/11/2013

Richard Carter with F. Snow

U.S.A. Georgia: Coffee County

31.73309N/82.85473W

Broxton Rocks Nature Preserve, just N of waterfall on W side of branch

--sandstone outcrop, thin soil over sandstone; elev. ca. 200 ft

with *Nothoscordium bivalve*, *Allium mobilense*, *Bigelovia nuttallii*, *Talinum*, *Dichantherium*, *Penstemon dissectus*, *Crotonopsis elliptica*, *Evolvulus sericeus*, *Hypericum gentianoides*, *Ophioglossum nudicaule*, *Steinchisma hians*, *Scutellaria parvula*, *Rhynchospora globularis*, *Lindernia monticola*, *Xyris flabelliformis*, *Drosera brevifolia*, *D. capillaris*, *Diodia teres*, *Cheilanthes lanosa*, *Centrosema virginica*, *Chamaecrista nictitans*, *Commelina erecta*, *Panicum anceps*, *Asplenium platyneuron*, *Paspalum setaceum*, *Smilax glauca*, *Euthamia*, *Polygala curtissii*, *Packera tomentosa*, *Tradescantia hirsuticaulis*, *Chionanthus virginicus*, *Forestiera ligustrina*, *Callicarpa americana*, *Pinus taeda*, *Gelsemium sempervirens*,

Liquidambar styraciflua, *Osmanthus americanus*, *Quercus nigra*, *Rhus copallinum*, *Vitis rotundifolia*, *Vaccinium arboreum*, *V. elliotii*, *Hypericum hypericoides*, *Parthenocissus quinquefolia*, *Yucca filamentosa*

21345 [5] Oxalidaceae *Oxalis*
plants locally common in pockets of shallow soil; corolla pinkish violet

21346 [1] Clusiaceae *Hypericum setosum* L.
det. R. Carter

21347 [1] Asteraceae *Eupatorium hyssopifolium* L.
det. R. Carter
locally common, heads white

21348 [1] Poaceae *Dichantherium strigosum* (Muhl. ex Ell.) Freckm. subsp. *leucoblepharis* (Trin.)
Freckm. & Lelong [*Panicum ciliatum* Ell.]
det. R. Carter
locally common

21349 [1] Poaceae *Dichantherium sphaerocarpon* (Ell.) Gould
det. R. Carter

21350 [1] Cyperaceae *Fimbristylis annua* (All.) R. & S.
det. R. Carter
infrequent

Richard Carter with F. Snow
U.S.A. Georgia: Jeff Davis County
31.78531N/82.82189W

SW corner of Rocky Hammock Tract, sandstone outcrop #1, 0.35 mi NNW jct. Kirkland Rd and Piney Grove Church Rd

21351 [3] Oxalidaceae *Oxalis*
plants locally common in pockets of shallow soil and occasional in sandy soil along the edge of outcrop; corolla pinkish violet

21352 [2] Cyperaceae *Fuirena squarrosa* Michx.
det. R. Carter
plants cespitose, locally common in sandy seep adjacent to rock outcrop

21353 [2] Cyperaceae *Rhynchospora debilis* Gale
det. R. Carter
plants cespitose, locally common in sandy seep adjacent to rock outcrop

21354 [2] Cyperaceae *Rhynchospora pusilla* Chapm. ex M.A. Curtis
det. R. Carter
disturbed sandy area adjacent to outcrop, plants locally common

21355 [2] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*
det. R. Carter
occasional to locally common

21356 [2] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*
det. R. Carter
occasional to locally common in disturbed sands adjacent to outcrop

21357 [2] Cyperaceae *Rhynchospora inexpansa* (Michx.) Vahl

det. R. Carter
occasional in disturbed sands adjacent to outcrop

21358 [1] Cyperaceae *Rhynchospora microcarpa* Baldw. ex A. Gray
det. R. Carter
occasional to locally common in disturbed sands adjacent to outcrop

9/20/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Colquitt County

31.13068N/83.84205W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--seepage slope bog

with *Pinus elliotii*, *Acer rubrum*, *Nyssa biflora*, *Magnolia virginiana*, *Myrica heterophylla*, *Sarracenia flava*,
S. minor, *Pinckneya bracteata*, *Sphagnum*

21362 [1] Poaceae *Aristida purpurascens* Poir. var. *virgata* (Trin.) Allred
det. R. Carter
common

21363 [3] Poaceae *Andropogon virginicus* L. var. *glaucus* Hack
det. R. Carter
common

21364 [4] Poaceae *Panicum longifolium* Torr.
det. R. Carter
occasional

21365 [1] Onagraceae *Ludwigia linearis* Walt.
det. R. Carter
common

21366 [2] Poaceae *Saccharum baldwinii* Spreng.
det. R. Carter
locally common

21367 [4] Cyperaceae *Scleria reticularis* Michx. var. *pubescens* Britt.
det. R. Carter
locally common

21368 [1] Poaceae *Sporobolus teretifolius* R.M. Harper
det. R. Carter
local, rare

21369 [1] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
occasional, corolla blue

21370 [2] Asteraceae *Eupatorium rotundifolium* L.
det. R. Carter
common, heads white

21371 [1] Asteraceae *Cirsium virginianum* (L.) Michx
det. R. Carter
occasional

- 21372** [1] Apiaceae *Eryngium integrifolium* Walt.
det. R. Carter
local, occasional
- 21373** [1] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
common
- 21374** [1] Asteraceae *Balduina atropurpurea* R.M. Harper
det. R. Carter
local, rare
- 21375** [1] Asteraceae *Eupatorium leucolepis* (DC.) Torr. & A. Gray
det. R. Carter
occasional, heads white
- 21376** [1] Cyperaceae *Fuirena squarrosa* Michx.
det. R. Carter
locally common
- 21377** [1] Asteraceae *Elephantopus elatus* Bertol.
det. R. Carter
common
- 21378** [2] Poaceae *Panicum verrucosum* Muhl.
det. R. Carter
locally abundant
- 21379** [2] Xyridaceae *Xyris jupicai* L.C. Rich.
det. R. Carter
common
- 21380** [1] Convolvulaceae *Cuscuta compacta* Juss. ex Choisy
det. R. Carter
occasional, parasitic on low shrubs, stems yellowish white
- 21381** [1] Hypericaceae *Hypericum setosum* L.
det. R. Carter
infrequent
- 21382** [1] Loganiaceae *Mitreola sessilifolia* (J.F. Gmel.) G. Don
det. R. Carter
locally common
- 21383** [1] Asteraceae *Pluchea baccharis* (Mill.) Pruski
det. R. Carter
common
- 21384** [1] Asteraceae *Solidago fistulosa* Mill.
det. R. Carter
common
- 21385** [2] Asteraceae *Pluchea baccharis* (Mill.) Pruski
det. R. Carter
common

21386 [1] Lamiaceae *Lycopus americanus* Muhl. ex Bart.
det. R. Carter
locally common

21387 [1] Campanulaceae *Lobelia puberula* Michx.
det. R. Carter
occasional, corolla blue

21388 [1] Lamiaceae *Pycnanthemum nudum* Nutt.
det. R. Carter
locally common

21389 [1] Asteraceae *Mikania scandens* (L.) Willd.
det. R. Carter
locally common vine, heads white

Richard Carter with W. W. Baker

31.12683N/83.84146W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--seepage slope bog
with *Pinus elliotii*, *Acer rubrum*, *Nyssa biflora*, *Magnolia virginiana*, *Myrica heterophylla*, *Sarracenia flava*,
S. minor, *Pinckneya bracteata*, *Sphagnum*

21390 [1] Poaceae *Anthaenantia rufa* (Nutt.) Schult.
det. R. Carter
locally common

21391 [1] Asteraceae *Bigelovia nudata* (Michx.) DC subsp. *nudata*
det. R. Carter
locally common, heads yellow

21392 [1] Asteraceae *Balduina atropurpurea* R.M. Harper
det. R. Carter
local, rare

21393 [2] Asteraceae *Liatris spicata* (L.) Willd. var. *resinosa* (Nutt.) Geiser
det. R. Carter
common

21394 [1] Asteraceae *Helianthus floridanus* A. Gray ex Chapm.
det. R. Carter
common, ray and disk flowers yellow

21395 [2] Poaceae *Muhlenbergia capillaris* (Lam.) Trin.
det. R. Carter
common

21396 [2] Poaceae *Andropogon gerardii* Vitman
det. R. Carter
common

21397 [2] Asteraceae *Liatris gracilis* Pursh
det. R. Carter
common, heads purple

Richard Carter with W. W. Baker

31.12399N/83.84231W

SW of Moultrie by Lower Meigs Rd., ca. 600 m SW (Heading 225.8°) jct. Lower Meigs Rd. and Tree Farm Rd.; "Morrison Pines Plantation"

--seepage slope bog

with *Pinus elliotii*, *Acer rubrum*, *Nyssa biflora*, *Magnolia virginiana*, *Myrica heterophylla*, *Sarracenia flava*, *S. minor*, *Sphagnum*

21398 [10] Poaceae *Sporobolus teretifolius* R.M. Harper

det. R. Carter

locally abundant, huge clumps

21399 [1] Cyperaceae *Rhynchospora gracilentata* A. Gray

det. R. Carter

locally abundant, cespitose

21400 [1] Poaceae *Sporobolus teretifolius* R.M. Harper

det. R. Carter

locally abundant, cespitose

21401 [4] Poaceae *Coelorachis rugosa* (Nutt.) Nash

det. R. Carter

locally abundant

21402 [2] Asteraceae *Balduina atropurpurea* R.M. Harper

det. R. Carter

local, rare

21403 [1] Scrophulariaceae *Agalinis linifolia* (Nutt.) Britt.

det. R. Carter

locally common

9/24/2013

Richard Carter with F. Snow, R. L. Mears

U.S.A. Georgia: Jeff Davis County

31.76486N/82.81883W

Flat Rock, 4.1 mi W Snipesville by Hwy. GA 107, 1 mi E of Jeff Davis/Coffee county line, ca. 0.2 mi N Hwy. GA 107

--sandstone outcrop and adjacent upland

with *Pinus palustris*, *P. taeda*, *Quercus marilandica*, *Q. nigra*, *Q. hemisphaerica*, *Liquidambar styraciflua*, *Prunus serotina*, *Acer rubrum*, *Nyssa biflora*, *Juniperus virginiana*, *Osmanthus americanus*, *Elliottia racemosa*, *Vaccinium elliotii*, *Serenoa repens*, *Callicarpa americana*, *Vaccinium arboreum*, *Gelsemium sempervirens*, *Smilax glauca*, *Aristida stricta*, *Schizachyrium scoparium*, *S. tenerum*, *Hypericum gentianoides*, *Bigelovia nuttallii*, *Trichostema setaceum*, *T. dichotomum*, *Portulaca biloba*, *Talinum*, *Nothoscordium bivalve*, *Aureolaria pectinata*, *Seymeria cassioides*, *Selaginella acanthonota*, *S. arenicola*, *Crotonopsis elliptica*, *Dichantherium aciculare*, *Panicum anceps*

21404 [2] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.

det. R. Carter

rare, occasional locally

21405 [1] Poaceae *Dichantherium strigosum* (Muhl. ex Ell.) Freckm. var. *strigosum*

det. R. Carter

occasional locally

21406 [1] Poaceae *Schizachyrium scoparium* (Michx.) Nash var. *stoloniferum* (Nash) Wipff

det. R. Carter
occasional

21407 [1] Asteraceae *Symphotrichum dumosum* (L.) G.L. Nesom
det. R. Carter
common

21408 [1] Portulacaceae *Portulaca biloba* Urb.
det. R. Carter
rare, occasional locally

21409 [5] Oxalidaceae *Oxalis*
locally common, corolla magenta

Richard Carter with R. L. Mears
U.S.A. Georgia: Charlton County
30.92401N/82.09129W

6.4 mi NW Homeland jct. hwys. US 1 and US 301, Spanish Creek wetland along E side Hwy. US 1
--shallow depression
with *Nyssa biflora*, *N. ogeche*, *Acer rubrum*, *Pinus elliotii*, *Cyrilla racemiflora*, *Myrica cerifera*, *Hypericum fasciculatum*, *Oxypolis filiformis*, *Nymphaea odorata*

21410 [2] Xyridaceae *Xyris jupicai* Rich.
det. R. Carter
locally common

21411 [1] Xyridaceae *Xyris fimbriata* Ell.
det. R. Carter
locally common

21412 [2] Xyridaceae *Xyris platylepis* Chapm.
det. R. Carter
locally common

21413 [2] Cyperaceae *Rhynchospora corniculata* Lam.
det. R. Carter
locally common

21414 [3] Cyperaceae *Eleocharis melanocarpa* Torr.
det. R. Carter
local, forming large clumps

Richard Carter with R. L. Mears
30.86136N/82.0116W

Homeland, W side Hwy. US 1, at jct. hwys. US 1 and US 301
--mowed roadside adjacent to low flatwoods, sandy soil
with *Hypericum cistifolium*, *Gratiola pilosa*, *Hedyotis uniflora*, *Erigeron vernus*, *Lachnocaulon anceps*, *Syngonanthus flavidulus*, *Rhexia mariana*, *Lachnanthes caroliniana*, *Lobelia paludosa*

21415 [2] Cyperaceae *Rhynchospora fernaldii* Gale
det. R. Carter
local

21416 [2] Cyperaceae *Rhynchospora wrightiana* Boeckl.
det. R. Carter
local

10/15/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Decatur County

30.73584N/84.75677W

0.17 mi N jct. Faceville Rd. (Hwy. GA 97) and Davis Ln., along NW side of Davis Ln.

--degraded upland with *Pinus elliotii* and *P. taeda* over sandy loam

21418 [2] Asteraceae *Symphytichum oolentangiense* (Riddell) G.L. Nesom

det. R. Carter

locally common

21419 [3] Fabaceae *Baptisia megacarpa* Chapm. ex Torr. & A. Gray

det. R. Carter

occasional

21420 [4] Scrophulariaceae *Agalinis obtusifolia* Raf.

det. R. Carter

locally common, sprawling herb

21421 [2] Asteraceae *Prenanthes serpentaria* Pursh

det. R. Carter

21422 [3] Poaceae *Andropogon gyrans* Ashe var. *gyrans*

det. R. Carter

occasional in well drained sandy soil

21423 [1] Poaceae *Andropogon gyrans* Ashe var. *gyrans*

det. R. Carter

occasional in well drained sandy soil

21424 [1] Poaceae *Aristida purpurascens* Poir. var. *purpurascens*

det. R. Carter

locally common

21425 [1] Poaceae *Sporobolus compositus* (Poir.) Merr. var. *clandestinus* (Biehler) Wipff & S.D. Jones

det. R. Carter

infrequent

21426 [2] Poaceae *Andropogon scoparium* (Michx.) Nash var. *stoloniferum* (Nash) Wipff

det. R. Carter

common

21427 [1] Poaceae *Aristida stricta* Michx.

det. R. Carter

infrequent, local

21428 [3] Lamiaceae *Trichostema dichotomum* L.

det. R. Carter

occasional, corolla blue

21429 [1] Scrophulariaceae *Agalinis*

det. R. Carter

occasional

21430 [1] Asteraceae *Eupatorium hyssopifolium* L.

det. R. Carter
common

21431 [1] Asteraceae *Conoclinium coelestinum* L.
det. R. Carter
occasional; heads blue

21432 [1] Asteraceae *Conoclinium coelestinum* L.
det. R. Carter
occasional; heads blue

21433 [1] Asteraceae *Symphotrichum dumosum* (L.) G.L. Nesom
det. R. Carter
common

21434 [1] Asteraceae *Bidens alba* (L.) DC.
det. R. Carter
occasional; rays creamy white with purple nerves, disk yellow

21435 [2] Fabaceae *Desmodium rotundifolium* DC.
det. R. Carter
stems prostrate, corolla blue

21436 [1] Asteraceae *Eupatorium compositifolium* Walt.
det. R. Carter
locally common

21437 [2] Asteraceae *Solidago odora* Aiton var. *odora*
det. R. Carter
locally common; heads yellow, leaves aromatic

21438 [3] Asteraceae *Euthamia caroliniana* (L.) Greene ex Port. & Britt.
det. R. Carter
locally common, heads yellow

21439 [2] Asteraceae *Liatris elegantula* (Greene) K. Schum.
det. R. Carter
infrequent, heads purple

21440 [1] Asteraceae *Symphotrichum undulatum* (L.) G.L. Nesom
det. R. Carter
infrequent

21441 [2] Asteraceae *Chrysopsis mariana* (L.) Ell.
det. R. Carter
common

21442 [2] Asteraceae *Eupatorium semiserratum* DC.
det. R. Carter
common

21443 [2] Asteraceae *Pityopsis graminifolia* (Michx.) Nutt.
det. R. Carter
common

21444 [3] Asteraceae *Ageratina jucunda* (Greene) Clew. & Woot.

det. R. Carter
occasional, heads white

--sandy ditch bank and drain

21445 [3] Selaginellaceae *Selaginella ludoviciana* (A. Braun) A. Braun

det. R. Carter
locally common

Richard Carter with W. W. Baker

30.72964N/84.76662W

Faceville Rd. (Hwy. GA 97), S of North Mosquito Creek, along W side of Faceville Rd.

--powerline right-of-way and edge of mesic woods

21446 [4] Asteraceae *Solidago rugosa* Ait. var. *aspera* (Ait.) Fern.

det. R. Carter
locally common, heads yellow

21447 [2] Scrophulariaceae *Mecardonia acuminata* (Walt.) Small var. *acuminata*

det. R. Carter
locally common, corolla white

21448 [5] Celastraceae *Euonymus americanus* L.

det. R. Carter
2 m shrub, occasional; fruits and seeds red

Richard Carter with W. W. Baker

30.74391N/84.75224W

Davis Lane, just SE of jct. James B. White Rd. and Davis Ln.

--ditch, moist loamy clay

21449 [5] Araceae *Alocasia macrorrhizos* (L.) G. Don

det. R. Carter
locally abundant

Richard Carter with W. W. Baker

30.74512N/84.74673W

0.38 mi W jct. Davis Ln. and Recovery Rd., along S side Davis Ln.

--margin of karst pond

21450 [6] Cyperaceae *Eleocharis robbinsii* Oakes

det. R. Carter
locally abundant, emergent in shallow water

21451 [8] Asteraceae *Eupatorium leptophyllum* DC.

det. R. Carter
locally common

21452 [2] Mayacaceae *Mayaca fluviatilis* Aubl.

det. R. Carter
locally common, submersed in shallow water

21453 [1] Hypericaceae *Hypericum nitidum* Lam.

det. R. Carter
locally common

21454 [4] Cyperaceae *Rhynchospora sulcata* Gale
det. R. Carter
locally common

21455 [3] Cyperaceae *Rhynchospora nitens* (Vahl) A. Gray [*Psilocarya nitens* (Vahl) A. Wood]
det. R. Carter
locally common

21455a [1] Poaceae *Panicum verrucosum* Muhl.
det. R. Carter
locally common

21455b [2] Cyperaceae *Fuirena squarrosa* Michx.
det. R. Carter
locally common

21455c [2] Onagraceae *Ludwigia linearis* Walt.
det. R. Carter
locally common

21455d [2] Asteraceae *Euthamia caroliniana* (L.) Greene ex Port. & Britt.
det. R. Carter
locally common, heads yellow

21455e [2] Menyanthaceae *Nymphoides cordata* (Ell.) Fern.
det. R. Carter
locally common, leaves floating in shallow water

10/16/2013

Richard Carter with Frankie Snow

U.S.A. Georgia: Coffee County

31.73309N/82.85473W

Broxton Rocks Nature Conservancy Preserve, along SW side of branch, N of Rockhouse Falls

--sandstone outcrop

with *Chionanthus virginicus*, *Vaccinium arboreum*, *V. elliotii*, *Osmanthus americanus*, *Pinus taeda*, *Liquidambar styraciflua*, *Rhus copallina*, *Hypericum hypericoides*, *Callicarpa americana*, *Rubus*, *Gelsemium sempervirens*, *Smilax glauca*, *Vitis rotundifolia*, *Parthenocissus quinquefolia*, *Allium bivalve*, *Bigelovia nuttallii*, *Penstemon dissectus*, *Crotonopsis elliptica*, *Ophioglossum nudicaule*, *Evolvulus sericeus*, *Steinchisma hians*, *Scutellaria parvula*, *Panicum anceps rhizomatium*, *Centrosema nictitans*, *Chamaecrista nictitans*, *Paspalum setaceum*, *Polygala curtisii*, *Diodia teres*, *Drosera brevifolia*, *Xyris flabelliformis*

21456 [8] Oxalidaceae *Oxalis*
plants locally common; corolla fuschia-magenta

21457 [1] Selaginellaceae *Selaginella acanthonota* L. Underw.
det. R. Carter
locally common

--slope with degraded mixed pine hardwood forest

21458 [1] Rosaceae *Agrimonia incisa* Torr. & A. Gray
det. R. Carter
plants infrequent and local

--along west bank of creek

21459 [1] Poaceae *Danthonia sericea* Nuttall

det. R. Carter

locally common in shallow sandy soil over rock along stream just above fall

--sandstone outcrop

with *Chionanthus virginicus*, *Vaccinium arboreum*, *V. elliotii*, *Osmanthus americanus*, *Pinus taeda*, *Liquidambar styraciflua*, *Rhus copallina*, *Hypericum hypericoides*, *Callicarpa americana*, *Rubus*, *Gelsemium sempervirens*, *Smilax glauca*, *Vitis rotundifolia*, *Parthenocissus quinquefolia*, *Allium bivalve*, *Bigelovia nuttallii*, *Penstemon dissectus*, *Crotonopsis elliptica*, *Ophioglossum nudicaule*, *Evolvulus sericeus*, *Steinchisma hians*, *Scutellaria parvula*, *Panicum anceps rhizomatum*, *Centrosema nictitans*, *Chamaecrista nictitans*, *Paspalum setaceum*, *Polygala curtisii*, *Diodia teres*, *Drosera brevifolia*, *Xyris flabelliformis*

21460 [1] Scrophulariaceae *Agalinis obtusifolia* Raf.

det. R. Carter

locally common; corolla purplish pink

--shaded woods

21461 [1] Scrophulariaceae *Agalinis purpurea* (L.) Pennell

det. R. Carter

plants infrequent and local

--slope with degraded mixed pine hardwood forest

21462 [1] Fabaceae *Desmodium lineatum* DC.

det. R. Carter

plants occasional; stems prostrate

21463 [2] Poaceae *Gymnopogon ambiguus* (Michx.) Britt. et al.

det. R. Carter

plants occasional

Richard Carter

U.S.A. Georgia: Lanier County

31.04926N/83.06522W

N Lakeland, E of Hwy. GA 135, via N Linda St.

--degraded sandridge

21464 [2] Asteraceae *Pseudognaphalium obtusifolium* (L.) Hilliard & Burt

det. R. Carter

occasional

21465 [1] Scrophulariaceae *Agalinis fasciculata* (Ell.) Raf.

det. R. Carter

locally common; corolla purplish pink

10/29/2013

Richard Carter with W. W. Baker

U.S.A. Georgia: Colquitt County

31.12892N/83.83987W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"

--longleaf pine savanna

with *Pinus palustris*, *Aristida stricta*

- 21467** [2] Asteraceae *Symphyotrichum lateriflorum* (L.) Löve & Löve
det. R. Carter
common
- 21468** [4] Poaceae *Saccharum giganteum* (Walt.) Pers.
det. R. Carter
locally common
- 21469** [4] Poaceae *Saccharum giganteum* (Walt.) Pers.
det. R. Carter
locally common
- 21470** [2] Poaceae *Andropogon virginicus* L. var. *decipiens* C.S. Campb.
det. R. Carter
locally common
- 21471** [2] Asteraceae *Eupatorium leucolepis* (DC) Torr. & A. Gray
det. R. Carter
common, heads white
- 21472** [3] Asteraceae *Bigelowia nudata* (Michx.) DC subsp. *nudata*
det. R. Carter
locally common, heads yellow
- 21473** [2] Asteraceae *Solidago fistulosa* Mill.
det. R. Carter
common, heads yellow
- 21474** [2] Asteraceae *Euthamia caroliniana* (L.) Greene ex Port. & Britt.
det. R. Carter
common, heads yellow
- 21475** [3] Poaceae *Saccharum baldwinii* Spreng.
det. R. Carter
locally common
- 21476** [6] Asteraceae *Symphyotrichum dumosum* (L.) Nesom
det. R. Carter
common
- 21477** [3] Asteraceae *Eupatorium album* L.
det. R. Carter
common, heads white
- 21478** [1] Asteraceae *Symphyotrichum dumosum* (L.) Nesom
det. R. Carter
common
- 21479** [1] Asteraceae *Symphyotrichum lateriflorum* (L.) Löve & Löve
det. R. Carter
common
- 21480** [2] Asteraceae *Helianthus angustifolius* L.
det. R. Carter
common

- 21481** [1] Asteraceae *Symphotrichum lateriflorum* (L.) Löve & Löve
det. R. Carter
common
- 21482** [1] Poaceae *Dichanthelium leucothrix* (Nash) Freckm.
det. R. Carter
locally common
- 21483** [2] Poaceae *Andropogon virginicus* L. var. *decipiens* C.S. Campb.
det. R. Carter
common
- 21484** [1] Fabaceae *Lespedeza capitata* Michx.
det. R. Carter
locally common
- 21485** [1] Asteraceae *Carphephorus paniculatus* (J.F. Gmel.) H. Herbert
det. R. Carter
common, heads blue
- 21486** [1] Cyperaceae *Rhynchospora ciliaris* (Michx.) C. Mohr
det. R. Carter
occasional
- 21487** [1] Convolvulaceae *Cuscuta compacta* Juss. ex Choisy
det. R. Carter
occasional, achlorophyllous vine
- 21488** [2] Poaceae *Andropogon virginicus* L. var. *decipiens* C.S. Campb.
det. R. Carter
locally common
- 21489** [2] Asteraceae *Carphephorus odoratissimus* (J.F. Gmel.) H. Herbert
det. R. Carter
locally common, heads blue, plants aromatic
- 21490** [3] Cyperaceae *Scleria ciliata* Michx. var. *glabra* (Chapm.) Fairey
det. R. Carter
occasional
- 21491** [2] Poaceae *Aristida stricta* Michx.
det. R. Carter
common, plants in large tufts
- 21492** [2] Poaceae *Schizachyrium scoparium* (Michx.) Nash var. *scoparium*
det. R. Carter
locally common
- 21493** [1] Osmundaceae *Osmunda cinnamomea* L.
det. R. Carter
locally common
- 21494** [4] Asteraceae *Symphotrichum adnatus* (Nutt.) G.L. Nesom
det. R. Carter
occasional

21495 [1] Asteraceae *Pityopsis aspera* (Shuttlew. ex Small) Small var. *aspera*
det. R. Carter
occasional, heads yellow

21496 [2] Apiaceae *Angelica dentata* (Chapm. ex Torr. & A. Gray) Coult. & Rose
det. R. Carter
locally common

21497 [1] Hypericaceae *Hypericum setosum* L.
det. R. Carter
occasional

21498 [2] Asteraceae *Ageratina jucunda* (Greene) Clewell & Wooten
det. R. Carter
common, heads white

21499 [1] Asteraceae *Helianthus radula* (Pursh) Torr. & A. Gray
det. R. Carter
locally common

21500 [1] Asteraceae *Liatris elegantula* (Greene) K. Schum.
det. R. Carter
locally common, heads blue

21501 [2] Asteraceae *Symphotrichum concolor* (L.) G.L. Nesom
det. R. Carter
occasional

21502 [3] Scrophulariaceae *Agalinis purpurea* (L.) Pennell
det. R. Carter
occasional

Richard Carter with W. W. Baker

31.12738N/83.84164W

SW of Moultrie by Lower Meigs Rd., NW quadrant of jct. Lower Meigs Rd. and Tree Farm Rd., "The Hill"
--longleaf pine savanna
with *Pinus palustris*, *Aristida stricta*

21503 [3] Poaceae *Sorghum bicolor* (L.) Moench. subsp. *bicolor*
det. R. Carter
locally common in disturbed game plot

21504 [3] Poaceae *Pennisetum glaucum* (L.) R. Br.
det. R. Carter
locally common in disturbed game plot

21505 [1] Hypericaceae *Hypericum nitidum* Lam.
det. R. Carter
locally common

21506 [1] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
occasional, corolla blue

21507 [1] Onagraceae *Gaura filipes* Spach

det. R. Carter
occasional

21508 [1] Asteraceae *Solidago patula* Muhl. ex Willd.
det. R. Carter
locally common, heads yellow

21509 [1] Asteraceae *Solidago canadensis* L.
det. R. Carter
locally common, heads yellow

21510 [1] Asteraceae *Eupatorium perfoliatum* L.
det. R. Carter
locally common, heads white

21511 [1] Poaceae *Sporobolus junceus* (P. Beauv.) Kunth
det. R. Carter
common

21512 [2] Poaceae *Andropogon gyrans* Ashe
det. R. Carter
occasional

21513 [1] Asteraceae *Symphyotrichum dumosum* (L.) G.L. Nesom
Common
det. R. Carter

21514 [3] Apiaceae *Oxypolis rigidior* (L.) Raf.
det. R. Carter
locally common

21515 [2] Pedaliaceae *Sesamum orientale* L.
det. R. Carter
local in disturbed game plot

Richard Carter with W. W. Baker

31.04436N/83.5941W

2.6 mi SE Berlin, N side of Hwy. 133

--creek bottom, clayey loam substrate

with *Nyssa biflora*, *N. ogeche*, *Acer rubrum*, *Pinus elliottii*, *Magnolia virginiana*, *Quercus laurifolia*, *Q. nigra*, *Cyrilla racemiflora*, *Cephalanthus occidentalis*, *Baccharis halimifolia*, *Itea virginica*, *Ligustrum sinense*, *Woodwardia areolata*, *Saururus cernuus*, *Gel*

21516 [3] Asteraceae *Symphyotrichum pilosum* (Willd.) G.L. Nesom
det. R. Carter
common

21517 [10] Poaceae *Phanopyrum gymnocarpon* (Ell.) Nash
det. R. Carter
locally common

3/18/2014

Richard Carter with F. Snow

U.S.A. Georgia: Coffee County

31.73309N/82.85503W

Broxton Rocks Nature Preserve, ca. 450 m E of Rocky Creek Rd, ca. 200 m NW Rock House Falls,
outcrop along W side Rocky Creek
--flat, mostly open expanse of rock

21551 [2] Commelinaceae *Tradescantia hirsuticaulis* Small
det. R. Carter
occasional, corolla blue

21552 [1] Poaceae *Dichantherium strigosum* (Muhl. ex Ell.) Freckm. var. *leucoblepharis* (Trin.) Freckm.
[*Panicum ciliatum* Elliott]
det. R. Carter
common

21553 [1] Rubiaceae *Houstonia pusilla* Schoepf
det. R. Carter
common, corolla blue

21554 [1] Asteraceae *Packera anonyma* Weber & Löve [*Senecio anonymus* Wood]
det. R. Carter
common, heads yellow

21555 [2] Ericaceae *Vaccinium corymbosum* L.
det. R. Carter
shrub, 1-2 m tall, common, corolla white

Richard Carter with F. Snow

31.73267N/82.85485W

Broxton Rocks Nature Preserve, ca. 350 m E of Rocky Creek Rd, ca. 150 m WNW Rock House Falls
--degraded longleaf pine-wiregrass savanna

21556 [1] Gelsemiaceae *Gelsemium sempervirens* (L.) Ait.
det. R. Carter
vine, common, corolla yellow

Richard Carter with F. Snow

31.74279N/82.86499W

Broxton Rocks Nature Preserve, ca. 400 m W of Rocky Creek Rd, burn unit 8, vic. "Falling Down Rock"
--thin soil over sandstone

21557 [1] Oxalidaceae *Oxalis*
locally common

--degraded longleaf pine-wiregrass savanna

21558 [1] Ericaceae *Vaccinium darrowii* Camp
det. R. Carter
low shrub, common, ca. 5 dm tall, corolla rose-tinted white

21559 [1] Ericaceae *Vaccinium myrsinites* Lam.
det. R. Carter
low shrub, common, ca. 5 dm tall, corolla rose-tinted white

21560 [1] Ericaceae *Vaccinium corymbosum* L.
det. R. Carter
shrub, 1 m tall, common, corolla white

21561 [2] Oleaceae *Osmanthus americanus* (L.) Benth. & Hook. f. ex Gray
det. R. Carter
small tree, common, ca. 6 m tall, corolla white, flowers fragrant

Richard Carter with F. Snow

31.74168N/82.86523W

Broxton Rocks Nature Preserve, ca. 450 m W of Rocky Creek Rd, burn unit 8
--mesic woods, mixed pine-hardwood along base of sandstone outcrop

21562 [1] Caprifoliaceae *Lonicera sempervirens* L.
det. R. Carter
vine, occasional, corolla red

21563 [4] Rosaceae *Amelanchier arborea* (Michx.) Fern.
det. R. Carter
tree, 6-8 m tall, 12 cm dbh, occasional

Richard Carter with F. Snow

31.74854N/82.86083W

Broxton Rock Nature Preserve, ca. 0.20 airmile SE of confluence of east and west branches of Rocky Creek, along E side of Rocky Creek Rd, between road and rock cliff
--degraded upland woods

21564 [3] Rosaceae *Prunus umbellata* Elliott
det. R. Carter
tree, ca. 6 m tall, occasional, flowers white

21565 [3] Lauraceae *Sassafras albidum* (Nutt.) Nees
det. R. Carter
tree, ca. 8 m tall, occasional, flowers yellowish green, inner bark aromatic

21566 [1] Hippocastanaceae *Aesculus pavia* L.
det. R. Carter
shrub, ca. 2 m tall, occasional to locally common, corolla red

21567 [1] Rosaceae *Rubus flagellaris* Willd.
det. R. Carter
common, flowers white

Richard Carter with F. Snow

31.75009N/82.86211W

Broxton Rock Nature Preserve, along E side of Rocky Creek Rd, just S of confluence of Rocky Creek and branch from the west
--slope with degraded mesic woods

21568 [2] Symplocaceae *Symplocos tinctoria* (L.) L'Her.
det. R. Carter
shrub 3-4 m tall, locally common

Richard Carter with F. Snow

31.73635N/82.85597W

Broxton Rock Nature Preserve, 0.32 airmile NNW of Rock House Falls, 0.25 mi ESE of Rocky Creek Rd to end of jeep trail
--sandy knoll
with *Pinus palustris*, *P. echinata*

21569 [4] Pinaceae *Pinus echinata* Mill.
det. R. Carter
tree, 1 ft dbh, local

Richard Carter with F. Snow

31.72795N/82.85808W

Broxton Rock Nature Preserve, ca. 0.6 mi ENE of NW entrance to preserve by Rocky Creek Rd, along E side of Rocky Creek Rd
--degraded secondary woods, mixed pine-hardwood

21570 [1] Rosaceae *Malus angustifolia* (Ait.) Michx.
det. R. Carter
understory tree, 3 in dbh, infrequent and local, corolla rose-pink

4/19/2014

Richard Carter with F. Snow

U.S.A. Georgia: Coffee County

31.7284N/82.86159W

Broxton Rocks Nature Preserve, 0.25 mi E of SW entrance to Preserve by Rocky Creek Rd, ca. 200 m N of Rocky Creek Rd
--degraded seepage bog below longleaf pine-wiregrass savanna, recently burned, ca. 4 weeks post-fire

21571 [1] Osmundaceae *Osmunda cinnamomea* L.
det. R. Carter
plants common, forming large isolated clumps

21572 [1] Violaceae *Viola primulifolia* L.
det. R. Carter
common

21573 [1] Hypoxidaceae *Hypoxis sessilis* L.
det. R. Carter
occasional, flowers yellow

21574 [4] Cyperaceae *Carex venusta* Dewey
det. R. Carter
infrequent, but locally common, cespitose

Richard Carter with F. Snow

31.72739N/82.86268W

Broxton Rocks Nature Preserve, 0.25 mi E of SW entrance to Preserve by Rocky Creek Rd, ca. 100 m N of Rocky Creek Rd
--degraded longleaf pine-wiregrass savanna grading into a seepage bog, recently burned, ca. 4 weeks post-fire
with *Pinus palustris*, *Aristida stricta*

21575 [1] Cyperaceae *Carex complanata* Torr. & Hook.
det. R. Carter
occasional, cespitose

21576 [1] Poaceae *Dichanthelium tenue* (Muhl.) Freckm. & Lelong
det. R. Carter
common

21577 [2] Euphorbiaceae *Euphorbia exserta* (Small) Coker
det. R. Carter

infrequent

21578 [1] Polygalaceae *Polygala nana* (Michx.) DC.
det. R. Carter
common, corolla yellow, roots aromatic

Richard Carter with F. Snow

31.72649N/82.86478W

Broxton Rocks Nature Preserve, 0.10 mi E of SW entrance to Preserve by Rocky Creek Rd
--degraded longleaf pine-wiregrass savanna, disturbed sandy upland

21579 [1] Scrophulariaceae *Nuttallanthus canadensis* (L.) Sutton [*Linaria canadensis* (L.) Chaz.]
det. R. Carter
common, corolla blue

21580 [1] Asteraceae *Krigia virginica* (L.) Willd.
det. R. Carter
common, heads yellow

21581 [1] Polygonaceae *Rumex hastatulus* Baldwin
det. R. Carter
common

21582 [1] Campanulaceae *Wahlenbergia marginata* (Thunb.) DC.
det. R. Carter
common, corolla blue

21583 [1] Poaceae *Danthonia sericea* Nutt.
det. R. Carter
common

Richard Carter with F. Snow

31.73152N/82.85825W

Broxton Rocks Nature Preserve, 0.80 mi NE of SW entrance to Preserve by Rocky Creek Rd, W side of Rocky Creek Rd
--degraded longleaf pine-wiregrass savanna, slope along N side of creek

21584 [1] Fabaceae *Baptisia alba* (L.) Vent.
det. R. Carter
occasional, plants 1-1.5 m tall, corolla white

--seep along creek

21585 [1] Violaceae *Viola lanceolata* L.
det. R. Carter
common, corolla white

Richard Carter with F. Snow

31.73294N/82.85657W

Broxton Rocks Nature Preserve, 0.80 mi NE of SW entrance to Preserve by Rocky Creek Rd, ca. 200 m E of Rocky Creek Rd
--narrow ecotonal seep over sandstone outcrop below longleaf pine-wiregrass savanna

21586 [1] Hyacinthaceae *Schoenolirion croceum* (Michx.) Wood
det. R. Carter
occasional, corolla yellow

21587 [1] Lentibulariaceae *Utricularia cornuta* Michx.
det. R. Carter
common, corolla yellow

21588 [1] Lentibulariaceae *Utricularia subulata* L.
det. R. Carter
common, corolla yellow

21589 [1] Poaceae *Dichantherium strigosum* (Muhl. ex Ell.) Freckm. var. *strigosum*
det. R. Carter
plants cespitose, common

--seepy slope of drain in longleaf pine-wiregrass savanna

21590 [1] Ericaceae *Eubotrys racemosa* (L.) Nutt. [*Leucothoe racemosa* (L.) Gray]
det. R. Carter
low shrub, less than 5 dm tall, occasional, corolla white

21591 [1] Ericaceae *Rhododendron canescens* (Michx.) Sweet
det. R. Carter
low shrub, less than 5 dm tall, occasional, corolla pink

21592 [1] Sarraceniaceae *Sarracenia flava* L.
det. R. Carter
common

--sandstone outcrop, pockets of thin soil

21593 [1] Poaceae *Agrostis elliotiana* Schult.
det. R. Carter
locally common

21594 [1] Caryophyllaceae *Minuartia uniflora* (Walter) Mattfield
det. R. Carter
locally common, petals white

--longleaf pine-wiregrass savanna

21595 [1] Apocynaceae *Amsonia ciliata* Walter
det. R. Carter
occasional, corolla blue

21596 [1] Rhamnaceae *Ceanothus microphyllus* Michx.
det. R. Carter
common, flowers white

21597 [2] Ericaceae *Gaylussacia dumosa* (Andr.) Gray
det. R. Carter
low shrub, common, stems ca. 3 dm tall, corolla white

21598 [1] Fabaceae *Baptisia lanceolata* (Walter) Elliott
det. R. Carter
common herb, aerial shoots ca. 0.5 m tall, corolla yellow

21599 [1] Ericaceae *Vaccinium stamineum* L.

det. R. Carter

low shrub, common, aerial shoots ca. 5 dm tall, abaxial leaf surface glaucous, corolla white

Richard Carter with F. Snow

31.73226N/82.85347W

Broxton Rocks Nature Preserve, E of Rocky Creek Rd, ca. Rock House Falls

--edge of sandstone outcrop

21600 [1] Bignoniaceae *Bignonia capreolata* L.

det. R. Carter

vine, occasional reddish orange

21601 [1] Cyperaceae *Carex floridana* Schwein.

det. R. Carter

common, cespitose

Richard Carter with F. Snow

31.73318N/82.85463W

Broxton Rocks Nature Preserve, E of Rocky Creek Rd, glade ca. 150 m NW of Rock House Falls

--open expanse of flat sandstone with pockets of thin soil and occasional deep fissures

21602 [1] Asteraceae *Packera anonyma* (Wood) Weber & Löve [*Senecio anonymus* Wood]

det. R. Carter

common, heads yellow

21603 [1] Poaceae *Dichanthelium strigosum* (Muhl. ex Ell.) Freckm. var. *leucoblepharis* (Trin.) Freckm.

[*Panicum ciliatum* Elliott]

det. R. Carter

common, cespitose

21604 [1] Lamiaceae *Scutellaria parvula* Michx.

det. R. Carter

locally common, corolla blue

21605 [1] Poaceae *Dichanthelium strigosum* (Muhl. ex Ell.) Freckm. var. *leucoblepharis* (Trin.) Freckm.

det. R. Carter

common, cespitose

21606 [1] Oleaceae *Chionanthus virginicus* L.

det. R. Carter

shrub, 4-5 m tall, profusely flowering, flowers white

21607 [1] Asteraceae *Gamochaeta antillana* (Urb.) Anderb.

det. R. Carter

occasional

21608 [1] Asteraceae *Gamochaeta pensylvanica* (Willd.) Cabr.

det. R. Carter

occasional

21609 [2] Plantaginaceae *Plantago virginica* L.

det. R. Carter

locally abundant

21610 [1] Asteraceae *Facelis retusa* (Lam.) Sch. Bip.

det. R. Carter

occasional

Richard Carter with F. Snow

31.73293N/82.85814W

Broxton Rocks Nature Preserve, 0.80 mi NE of SW entrance to Preserve by Rocky Creek Rd, along E side of Rocky Creek Rd

--ephemeral pool in shallow depression of open expanse of sandstone

21611 [1] Isoetaceae *Isoetes "snowii"* sp. nov., fide Lytton Musselman
locally common

Richard Carter with F. Snow

31.75499N/82.85383W

Broxton Rocks Nature Preserve, N end of Preserve, 0.43 airmile S jct. Rocky Creek Rd and Hwy GA 107, E of Rocky Creek Rd

--edge of sandstone outcrop

21612 [2] Ericaceae *Rhododendron canescens* (Michx.) Sweet
mutant form
det. R. Carter
shrub, ca. 2 m tall, local, flowers pink

21613 [2] Ericaceae *Rhododendron canescens* (Michx.) Sweet
det. R. Carter
shrub, ca. 2 m tall, common, flowers pink

Richard Carter with F. Snow

31.75397N/82.85355W

Broxton Rocks Nature Preserve, N end of Preserve, 0.50 airmile S jct. Rocky Creek Rd and Hwy GA 107, E of Rocky Creek Rd

--sandstone outcrop, pockets of thin soil

21614 [2] Geraniaceae *Geranium carolinianum* L.
det. R. Carter
occasional, corolla pink

21615 [1] Asteraceae *Gamochaeta argyrinea* Nesom
det. R. Carter
occasional

--mesic woods along creek, below sandstone outcrop

21616 [2] Rosaceae *Crataegus marshallii* Eggl.
det. R. Carter
understory tree, occasional, corolla white

5/16/2014

Richard Carter with F. Snow

U.S.A. Georgia: Coffee County

31.7320N/82.85855W

Broxton Rock Nature Preserve, ca. 0.85 mi NE of SW entrance to preserve by Rocky Creek Rd, along W side Rocky Creek Rd

--disturbed sandy loam along creek

21617 [2] Cyperaceae *Carex complanata* Torr. & Hook.

det. R. Carter
occasional

21618 [1] Asteraceae *Gamochaeta purpurea* (L.) Cabr.
det. R. Carter
occasional

21619 [1] Cyperaceae *Scleria pauciflora* Muhl. ex Willd var. *pauciflora*
det. R. Carter
occasional

21620 [2] Poaceae *Dichanthelium ovale* (Ell.) Gould & Clark subsp. *pseudopubescens* (Nash) Freckm. & Lelong
det. R. Carter
common

--disturbed sandy loam above creek

21621 [4] Fabaceae *Baptisia alba x lanceolata*
det. R. Carter
plant ca. 1.5 m tall, rare and local, corolla yellow

--disturbed sandy loam along creek

21622 [1] Liliaceae *Aletris obovata* Nash
det. R. Carter
occasional, flowers white

21623 [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
common, cespitose

21624 [1] Poaceae *Dichanthelium scabriusculum* (Ell.) Gould & Clark
det. R. Carter
common

21625 [1] Juncaceae *Juncus elliotii* Chapm.
det. R. Carter
common in moist sand along creek

Richard Carter with F. Snow
31.7327N/82.85833W

Broxton Rock Nature Preserve, ca. 0.85 mi NE of SW entrance to preserve by Rocky Creek Rd, along E side Rocky Creek Rd, vic. Snow's Glade
--seasonally wet, shallow pool over sandstone

21626 [1] Isoetaceae *Isoetes "snowii"* sp. nov., fide Lytton Musselman
plants locally common, emergent in shallow water

21627 [1] Poaceae *Dichanthelium ovale* (Ell.) Gould & Clark subsp. *pseudopubescens* (Nash) Freckm. & Lelong
det. R. Carter
common along edge of pool

21628 [1] Poaceae *Dichanthelium leucothrix* (Nash) Freckm.
det. R. Carter

plants common, cespitose

21629 [3] Cyperaceae *Rhynchospora rariflora* (Michx.) Ell.
det. R. Carter
locally common, cespitose

--open, flat sandstone outcrop

21630 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
locally common

21631 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
locally common

--ecotone between longleaf pine-wiregrass savanna and sandstone outcrop

21632 [1] Asclepiadaceae *Asclepias michauxii* Decn.
det. R. Carter
occasional

--seasonally wet, shallow pool over sandstone

21633 [1] Poaceae *Steinchisma hians* (Ell.) Nash [*Panicum hians* Elliott]
det. R. Carter
common

21634 [1] Eriocaulaceae *Eriocaulon texense* Korn.
det. R. Carter
common, cespitose

21635 [1] Lentibulariaceae *Utricularia cornuta* Michx.
det. R. Carter
common, corolla yellow

21636 [1] Droseraceae *Drosera capillaris* Poir.
det. R. Carter
common, corolla pink

--ecotone between longleaf pine-wiregrass savanna and sandstone outcrop

21637 [1] Scrophulariaceae *Penstemon dissectus* Elliott
det. R. Carter
locally common, corolla lavender-rose, white ventrally

21638 [1] Aquifoliaceae *Ilex glabra* (L.) Gray
det. R. Carter
shrub 1.5 m tall, common

21639 [1] Poaceae *Dichanthelium strigosum* (Muhl. ex Ell.) Freckm. subsp. *strigosum*
det. R. Carter
common

21640 [1] Poaceae *Dichanthelium sphaerocarpon* (Elliott) Gould
det. R. Carter

common

Richard Carter with F. Snow

31.74606N/82.85845W

Broxton Rocks Nature Preserve, ca. 1.8 mi NE of SW entrance to preserve by Rocky Creek Rd, E of Rocky Creek Rd, along east branch of Rocky Creek

--floodplain

with *Nyssa biflora*, *N. ogeche*, *Magnolia virginiana*, *Liriodendron tulipifera*, *Acer rubrum*, *Liquidambar styraciflua*, *Quercus laurifolia*, *Ulmus americana*, *Pinus taeda*, *Rhododendron canescens*, *Vaccinium elliotii*

21641 [2] Cyperaceae *Carex intumescens* Rudge

det. R. Carter

common, cespitose

21642 [3] Cyperaceae *Carex intumescens* Rudge

det. R. Carter

common, cespitose

21643 [1] Poaceae *Dichanthelium sphaerocarpon* (Elliott) Gould

det. R. Carter

common

21644 [3] Cyperaceae *Carex debilis* Michx.

det. R. Carter

common, cespitose

21645 [1] Cyperaceae *Eleocharis tuberculosa* Michx.

det. R. Carter

occasional, cespitose

21646 [1] Cyperaceae *Carex festucacea* Schukhr ex Willd.

det. R. Carter

occasional

--floodplain, edge of clearcut along edge of floodplain

with *Nyssa biflora*, *N. ogeche*, *Magnolia virginiana*, *Liriodendron tulipifera*, *Acer rubrum*, *Liquidambar styraciflua*, *Quercus laurifolia*, *Ulmus americana*, *Pinus taeda*, *Rhododendron canescens*, *Vaccinium elliotii*

21647 [1] Juncaceae *Juncus marginatus* Rostk.

det. R. Carter

occasional

Richard Carter with F. Snow

31.74617N/82.86007W

Broxton Rocks Nature Preserve, ca. 1.8 mi NE of SW entrance to preserve by Rocky Creek Rd, along E side of Rocky Creek Rd

--outcrop along west side of creek

21648 [4] Ranunculaceae *Clematis reticulata* Walter

det. R. Carter

occasional vine

21649 [1] Alliaceae *Allium cuthbertii* Small

det. R. Carter

common, flowers white

21650 [1] Asteraceae *Lactuca graminifolia* Michx.
det. R. Carter
occasional

--mesic slope below outcrop along west side of creek

21651 [2] Ericaceae *Vaccinium arboreum* Marshall
det. R. Carter
shrub 2-3 m tall, common, flowers white

21652 [2] Cyperaceae *Carex debilis* Rudge
det. R. Carter
occasional, cespitose

21653 [2] Poaceae *Dichanthelium ravenelii* (Scribn. & Merr.) Gould
det. R. Carter
common

21654 [1] Asteraceae *Gamochaeta calviceps* (Fern.) Cabr.
det. R. Carter
occasional, on boulder

21655 [1] Poaceae *Dichanthelium commutatum* (Schult.) Gould subsp. *commutatum*
det. R. Carter
common

--outcrop along west side of creek

21656 [1] Selaginellaceae *Selaginella arenicola* Underw. subsp. *riddellii* (van Esel.) Tryon
det. R. Carter
common

21657 [2] Poaceae *Dichanthelium oligosanthes* (Schult.) Gould subsp. *(Nash) Freckm. & Lelong*
det. R. Carter
common

--mesic slope below outcrop along west side of creek

21658 [3] Euphorbiaceae *Ditrysinia fruticosa* (Bartr.) Gov. & Frod. [*Sebastiania fruticosa* (Bartr.) Fern.]
det. R. Carter
shrub 1.5 m tall, common

--outcrop along west side of creek

21659 [3] Cyperaceae *Carex complanata* Torr. & Hook.
det. R. Carter
occasional

Richard Carter with F. Snow

31.75001N/82.86327W

Broxton Rocks Nature Preserve, west branch of Rocky Creek, near confluence of east and west branches of Rocky Creek

--low bluff along W side of west branch of Rocky Creek, mesic woods

with *Quercus alba*, *Q. nigra*, *Nyssa biflora*, *Acer rubrum*, *Pinus glabra*, *P. taeda*, *Cornus florida*, *Symplocos*, *Aesculus pavia*, *Vaccinium elliotii*, *Smilax pumila*

21660 [1] Liliaceae *Amianthium muscitoxicum* (Walt.) Gray
det. R. Carter
rare and local

Richard Carter with F. Snow

31.74798N/82.86656W

Broxton Rocks Nature Preserve, along W side of west branch of Rocky Creek, Corbett Tract, "Chaser Outcrop"

--edge of sandstone outcrop

21661 [2] Cyperaceae *Scleria pauciflora* Muhl. ex Willd var. *caroliniana* A. Wood
det. R. Carter
occasional

--sandstone outcrop, see

21662 [1] Lentibulariaceae *Pinguicula pumila* Michx.
det. R. Carter
locally common, flowers blue

21663 [2] Juncaceae *Juncus*
aff. *Juncus elliotii*: plants annual, 6-13 cm tall
det. R. Carter
locally common

--edge of sandstone outcrop

21664 [1] Asclepiadaceae *Asclepias longifolia* Michx.
det. R. Carter
occasional

21665 [1] Orchidaceae *Spiranthes praecox* (Walt.) Wats.
det. R. Carter
occasional

--sandstone outcrop

21666 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
locally common

21667 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
locally common

21668 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.
det. R. Carter
locally common

--seep below sandstone outcrop

21669 [1] Cyperaceae *Rhynchospora compressa* Carey ex Chapm.
det. R. Carter

occasional

--sandstone outcrop

21671 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *saxicola* (Small) Kük.

det. R. Carter

locally common

21672 [1] Cyperaceae *Rhynchospora plumosa* Elliott

det. R. Carter

occasional

21673 [1] Cyperaceae *Fimbristylis caroliniana* (Lam.) Fern.

det. R. Carter

occasional

21674 [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong

det. R. Carter

common, cespitose

Richard Carter with F. Snow

31.74883N/82.86381W

Broxton Rocks Nature Preserve, Corbett Tract, along west branch of Rocky Creek, ca. 250 m above confluence of east and west branches of Rocky Creek

--sphagnum seep

with *Liriodendron*, *Acer rubrum*, *Nyssa biflora*, *Pinus taeda*, *Viburnum dentatum*, *Vaccinium elliotii*, *Lilium superbum*

21675 [3] Cyperaceae *Carex lurida* Wahl.

det. R. Carter

common, cespitose

21676 [2] Cyperaceae *Carex atlantica* Bailey subsp. *capillacea* (Bailey) Rez.

det. R. Carter

common, cespitose

21677 [2] Juncaceae *Juncus marginatus* Rostk.

det. R. Carter

common

21678 [2] Eleocharis *tuberculosa* (Michx.) Roem. & Schult.

det. R. Carter

common, cespitose

--sphagnum seep and adjacent creekbank

with *Liriodendron*, *Acer rubrum*, *Nyssa biflora*, *Pinus taeda*, *Viburnum dentatum*, *Vaccinium elliotii*, *Lilium superbum*

21679 [3] Iteaceae *Itea virginica* L.

det. R. Carter

shrub, 1.5 m tall, common

--mesic woods by sphagnum seep

with *Liriodendron*, *Acer rubrum*, *Nyssa biflora*, *Pinus taeda*, *Viburnum dentatum*, *Vaccinium elliotii*, *Lilium superbum*

21680 [1] Aristolochiaceae *Aristolochia serpentaria* L.
det. R. Carter
infrequent, roots aromatic, flowers dark maroon

6/5/2014

Richard Carter with W. W. Baker, T. Patrick

U.S.A. Georgia: Worth County

31.43367N/83.87172W

1.20 airmiles S (heading 189.65°) jct. Dothit Rd and Evergreen Rd, Jeffords Place
--longleaf pine-wiregrass savanna

21683 [1] Anacardiaceae *Toxicodendron pubescens* Mill.
det. R. Carter
low shrub, ca. 5 dm tall, occasional

--seepage bog along drain in longleaf pine-wiregrass savanna

21684 [1] Sarraceniaceae *Sarracenia minor* Walter
det. R. Carter
occasional

Richard Carter with W. W. Baker, T. Patrick

31.41456N/83.83747W

2.38 airmiles S (heading 188.42°) jct. Dothit Rd and Hwy GA 33, E of Hwy GA 33, Jeffords Place
--longleaf pine-wiregrass savanna

21685 [1] Euphorbiaceae *Tragia urens* L.
det. R. Carter
plant with stinging trichomes, common

21686 [1] Cyperaceae *Rhynchospora harveyi* Boott
det. R. Carter
occasional

21687 [1] Fabaceae *Pedimelum canescens* (Michx.) Rydb. [*Psoralea canescens* Michx.]
det. R. Carter
occasional

21688 [1] Rhamnaceae *Ceanothus microphyllus* Michx.
det. R. Carter
occasional

21689 [1] Ericaceae *Vaccinium myrsinites* Lam.
det. R. Carter
low shrub, clonal, aerial stems 3-4 dm tall, common

--seepage bog along drain in longleaf pine-wiregrass savanna

21690 [1] Ericaceae *Gaylussacia nana* (Gray) Small
det. R. Carter
low shrub, aerial stems to about 1 m tall

21691 [2] Orchidaceae *Spiranthes praecox* (Walt.) S. Wats.
det. R. Carter
common

21692 [3] Cyperaceae *Rhynchospora rariflora* (Michx.) Ell.
det. R. Carter
common, cespitose

21693 [1] Cyperaceae *Eleocharis tortilis* (Link.) Schult.
det. R. Carter
common, cespitose

21694 [2] Poaceae *Dichanthelium scabriusculum* (Ell.) Gould & Clark
det. R. Carter
common

21695 [1] Asteraceae *Oclemena reticulata* (Pursh) Nesom [*Aster reticulatus* Pursh]
det. R. Carter
common

Richard Carter with W. W. Baker, T. Patrick

U.S.A. Georgia: Colquitt County

31.29169N/83.88699W

Doerun Pitcherplant Bog Natural Area, 0.57 airmile SE jct. Hagin Still Rd and Hwy GA 133
--longleaf pine-wiregrass savanna

21696 [2] Euphorbiaceae *Tragia urticifolia* Michx.
det. R. Carter
occasional

21697 [1] Orchidaceae *Spiranthes tuberosa* Raf.
det. R. Carter
occasional, flowers white

6/17/2014

Richard Carter with F. Snow, W. W. Baker

U.S.A. Georgia: Coffee County

31.74222N/82.84138W

Broxton Rocks Preserve, Ricketson Tract, 0.31 airmile SW (241.29°) of right-angle bend in Mobley Rd.
--seep

21699 [2] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
locally abundant

--longleaf pine-wiregrass savanna, sandy slope adjacent to rock outcrop, site burned about 8 weeks prior
with *Pinus palustris*, *Aristida stricta*, *Serenoa repens*

21700 [2] Apocynaceae *Amsonia ciliata* Walter
det. R. Carter
occasional, corolla blue, latex present

21701 [1] Polygalaceae *Polygala chapmanii* Torr. & Gray
det. R. Carter
occasional, flowers lavender

21702 [3] Fabaceae *Tephrosia virginiana* (L.) Pers.
det. R. Carter
perennial from woody rootstock, common, standard creamy white, keel and wings pink

21703 [1] Oxalidaceae *Oxalis*
only one plant observed; corolla purple

21704 [1] Asclepiadaceae *Asclepias michauxii* Decne
det. R. Carter
occasional, plant with latex

21705 [1] Fabaceae *Mimosa quadrivalvis* L. var. *angustata* (Torr. & Gray) Barneby
det. R. Carter
clambering perennial herb, heads pink, common

--seepage bog along drain in longleaf pine-wiregrass matrix

21706 [2] Cyrillaceae *Cyrilla racemiflora* L.
det. R. Carter
4 m shrub, common

21707 [1] Xyridaceae *Xyris baldwiniana* Schult.
det. R. Carter
plants cespitose, common, corolla yellow

21708 [1] Melastomataceae *Rhexia lutea* Walter
det. R. Carter
plants occasional, corolla yellow

21709 [2] Sarraceniaceae *Sarracenia minor* Walter
det. R. Carter
plants occasional

Richard Carter with F. Snow, W. W. Baker
31.74181N/82.84441W

Broxton Rocks Preserve, Ricketson Tract, 0.48 airmile WSW (bearing 248.72°) of right-angle bend in Mobley Rd.

--seepy drain below outcrop

21710 [1] Juncaceae *Juncus marginatus* Rostk.
det. R. Carter
occasional, plants in large clumps

21711 [3] Cyperaceae *Rhynchospora punctata* Ell.
det. R. Carter
plants forming large clumps, occasional

21712 [1] Xyridaceae *Xyris baldwiniana* Schult.
det. R. Carter
plants cespitose, common, corolla yellow

21713 [1] Clusiaceae *Hypericum myrtifolium* Lam.
det. R. Carter
plants common, flowers yellow

Richard Carter with F. Snow, W. W. Baker
U.S.A. Georgia: Jeff Davis County
31.76212N/82.83004W

Flat Tub Wildlife Management Area along N side Hwy GA 107, ca. 0.4 mi E of county line

--degraded longleaf pine-wiregrass savanna adjacent to sandstone outcrop, converted to planted pines

21714 [1] Asteraceae *Marshallia ramosa* Beadle & Boynton

det. R. Carter

plants occasional, heads pink

21715 [1] Asclepiadaceae *Asclepias cinerea* Walter

det. R. Carter

plant with latex, occasional, flowers lavender with white undertones

21716 [1] Orchidaceae *Spiranthes tuberosa* Raf.

det. R. Carter

occasional, flowers white

21717 [1] Poaceae *Paspalum plicatulum* Michx.

det. R. Carter

common

21718 [1] Chrysobalanaceae *Licania michauxii* Prance

det. R. Carter

plant clonal and suffrutescent, forming large patches, common

Richard Carter with F. Snow, W. W. Baker

31.77748N/82.81708W

1.40 mi NW jct. Hwy GA 107 and Dan Kirkland Rd, along E side Dan Kirkland Rd

--degraded sandridge

with *Quercus laevis*, *Q. incana*, *Serenoa repens*, *Yucca flaccida*, *Aristida stricta*, *Pteridium aquilinum*

21719 [5] Annonaceae *Asimina incana* (Bartram) Exell

det. R. Carter

shrub, ca. 2 m tall, occasional

Richard Carter with F. Snow, W. W. Baker

31.78479N/82.82118W

Flat Tub Wildlife Management Area, Rocky Hammock Tract, 0.3 mi N jct. Dan Kirkland Rd and Piney

Grove Church Rd

--degraded sandridge

with *Quercus laevis*, *Q. incana*, *Q. margarettae*, *Q. stellata*, *Q. marilandica*, *Q. hemisphaerica*

21720 [2] Liliaceae *Nolina georgiana* Michx.

det. R. Carter

occasional

21721 [10] Agavaceae *Yucca filamentosa* L.

det. R. Carter

common, flowers creamy white

Richard Carter with F. Snow, W. W. Baker

31.89114N/82.48617W

ENE of Hazlehurst, 0.6 mi ENE jct. John Rentz Rd and Altamaha Rd, along N side Altamaha Rd

--degraded seepage slope with planted pines, recently burned

with *Pinus taeda*

21722 [4] Asteraceae *Coreopsis delphiniifolia* Lam.

det. R. Carter

occasional, heads yellow

21723 [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
plants common, cespitose, heads grayish white

21724 [2] Cyperaceae *Rhynchospora chalarocephala* Fern. & Gale
det. R. Carter
plants locally common, cespitose

21725 [1] Alismataceae *Sagittaria graminea* Michx. subsp. *weatherbiana* (Fern.) Hayn. & Hellq.
det. R. Carter
plants locally common, with latex

21726 [3] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
plants common, heads white

6/18/2014

Richard Carter with D. Stevenson, W. W. Baker

U.S.A. Georgia: Bulloch County

32.41059N/81.89725W

Stanback Place, 4.0 mi N of Pulaski by Pulaski Rd, then S ca. 0.9 mi by Rosa's Lane

--longleaf pine-wiregrass savanna, burned ca. 8 weeks prior

with *Pinus palustris*, *Aristida stricta*, *Quercus laevis*, *Q. margarettae*, *Q. pumila*, *Q. incana*, *Vaccinium stamineum*, *Yucca filamentosa*, *Nolina georgiana*, *Ceanothus microphyllus*, *Pteridium aquilinum*, *Licania michauxii*, *Stillingia sylvatica*, *Rhynchosia tomentosa*, *R. reniformis*, *Galactia erecta*, *Rhynchospora grayi*, *Callisia graminea*, *Commelina erecta*, *Clitoria mariana*, *Stylosanthes biflora*, *Rudbeckia hirta*, *Cnidioscolus stimulosus*, *Orbexilum psoralioides*, *Polygala grandiflora*, *P. lutea*, *P. mariana*, *Rhexia alifanus*, *R. mariana*, *Baptisia perfoliata*, *Dyschoriste oblongifolia*, *Coreopsis delphiniifolia*, *Piriqueta caroliniana*, *Ipomoea pandurata*, *Mimosa quadrivalvis*, *Tephrosia spicata*, *Asclepias cinerea*, *Psoralea canescens*, *Solidago odora*, *Symphotrichum walteri*, *Xyris caroliniana*, *Carphephorus odoratissimus*, *Eryngium yuccifolium*, *Spiranthes tuberosa*, *Lespedeza repens*, *Stylodon carneum*, *Sporobolus curtisii*, *Crotalaria purshii*, *Eriogonum tomentosum*, *Sericocarpus tortifolius*, *Amsonia ciliata*

Note: *Gopherus* burrows abundant; *Nolina georgiana* – few plants observed

21727 [1] Asclepiadaceae *Asclepias cinerea* Walter
det. R. Carter
plants occasional, broken stems and leaves exuding latex, corolla lavender with white undertones

21728 [1] Ericaceae *Vaccinium myrsinites* Lam.
det. R. Carter
low shrub, < 5 dm tall, clonal, common

21729 [1] Fabaceae *Stylosanthes biflora* (L.) Britt. et al.
det. R. Carter
occasional, flowers yellow

21730 [1] Polygalaceae *Polygala nana* (Michx.) DC.
det. R. Carter
occasional, roots aromatic, flowers greenish yellow

21731 [1] Clusiaceae *Hypericum suffruticosum* Adams & Robson
det. R. Carter
occasional, corolla yellow, petals caducous

21732 [1] Linaceae *Linum medium* (Planch.) Britt. var. *texanum* (Planch.) Fern.
det. R. Carter

common, corolla yellow

21733 [1] Fabaceae *Crotalaria purshii* DC.
det. R. Carter
occasional, corolla yellow

21734 [1] Turneraceae *Piriqueta cistoides* (L.) Griseb. subsp. *caroliniana* (Walter) Arbo [*Piriqueta caroliniana* (Walter) Urban]
det. R. Carter
common, corolla yellow

21735 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
plant "lazy" and clambering, common

21736 [2] Asteraceae *Pterocaulon pycnostachyum* (Michx.) Ell.
det. R. Carter
common

21737 [6] Fabaceae *Baptisia perfoliata* (L.) R. Brown ex Aiton f.
det. R. Carter
occasional, corolla yellow

21738 [1] Polygalaceae *Asemeia grandiflora* (Walter) Small [*Polygala grandiflora* Walter]
det. R. Carter
plant occasional, roots aromatic, flowers pink

21739 [2] Fabaceae *Orbexilum psoralioides* (Walter) Vincent [*Psoralea psoralioides* (Walter) Cory]
det. R. Carter
plant occasional, flowers dark blue

21740 [1] Lamiaceae *Scutellaria incana* Bieler
"var. 1" in Weakley (2012)
det. R. Carter
plant occasional, corolla blue and white

21741 [2] Fabaceae *Clitoria mariana* L.
det. R. Carter
plant occasional, corolla blue and white

21742 [1] Polemoniaceae *Phlox glaberrima* L.
det. R. Carter
plant occasional, corolla blue

21743 [5] Cyperaceae *Rhynchospora grayi* Kunth
det. R. Carter
common

21744 [2] Cyperaceae *Scleria ciliata* Michx. var. *ciliata*
det. R. Carter
common

21745 [2] Euphorbiaceae *Stillingia sylvatica* L.
det. R. Carter
plant suffruticose, stems ca. 5 dm tall, broken stems and leaves exuding latex

21746 [1] Verbenaceae *Stylodon carneum* (Medik.) Moldenke
det. R. Carter
occasional

21747 [1] Cyperaceae *Cyperus filiculmis* Vahl
det. R. Carter
occasional

21748 [1] Cyperaceae *Cyperus echinatus* (L.) Wood
"var. sphaericus"
det. R. Carter
occasional

21749 [1] Asteraceae *Rudbeckia nitida* Nutt.
det. R. Carter
plants occasional, rays yellow, disk purplish black

21750 [2] Asteraceae *Coreopsis delphiniifolia* Lam.
det. R. Carter
common, heads yellow

21751 [2] Asteraceae *Rudbeckia hirta* L.
det. R. Carter
common, rays yellow, disk black

21752 [1] Poaceae *Dichanthelium oligosanthes* (Schult.) Gould
det. R. Carter
occasional

21753 [1] Juncaceae *Juncus marginatus* Rostk.
det. R. Carter
occasional

21754 [3] Fabaceae *Rhynchosia tomentosa* (L.) Hook. & Arn. var. *tomentosa*
det. R. Carter
common

21755 [1] Fabaceae *Galactia mollis* Michx.
det. R. Carter
trailing vine, infrequent, corolla blue

21756 [1] Fabaceae *Galactia erecta* (Walter) Vail
det. R. Carter
erect herb, occasional

21757 [2] Fabaceae *Galactia volubilis* (L.) Britt.
det. R. Carter
trailing vine, occasional, flowers blue

21758 [1] Fabaceae *Lespedeza repens* (L.) Barton
det. R. Carter
plants occasional, stems prostrate, corolla blue

21759 [2] Fabaceae *Rhynchosia reniformis* DC.
det. R. Carter
plants occasional

21760 [1] Asteraceae *Vernonia angustifolia* Michx. var. *scaberrima* (Nutt.) Gray
det. R. Carter
occasional

21761 [1] Commelinaceae *Callisia graminea* (Small) Tucker [*Cuthbertia graminea* Small]
det. R. Carter
occasional, petals magenta

21762 [1] Commelinaceae *Commelina erecta* L.
det. R. Carter
common, petals blue

21763 [1] Convolvulaceae *Stylisma patens* (Desr.) Myint var. *patens*
det. R. Carter
training vine, occasional, corolla white

Richard Carter with D. Stevenson, W. W. Baker

32.41032N/81.89855W

Stanback Place, 4.0 mi N of Pulaski by Pulaski Rd, then S ca. 0.9 mi by Rosa's Lane, along W side Rosa's Lane

--swale, burned about 8 weeks prior

with *Pinus elliotii*, *Ilex glabra*, *Gaylussacia frondosa*, *Vaccinium corymbosum*, *V. myrsinites*, *Clethra alnifolia*, *Myrica cerifera*, *Kalmia hirsuta*, *Tephrosia virginiana*, *Sarracenia minor*, *Polygala lutea*, *P. ramosa*, *Sabatia difformis*, *Lachnocaulon anceps*, *Ctenium aromaticum*, *Rudbeckia nitida*, *Rhexia alifanus*, *R. lutea*, *Xyris caroliniana*, *Drosera capillaris*, *Lobelia nuttallii*

21764 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common, flowers yellow

21765 [1] Nartheciaceae *Aletris aurea* Walter
det. R. Carter
common, flowers yellow

21766 [1] Ericaceae *Gaylussacia tomentosa* (Gray) Pursh ex Small
det. R. Carter
shrub, common, ca. 1.5 m tall, fruit turning blackish purple

21768 [1] Aquifoliaceae *Ilex glabra* (L.) Gray
det. R. Carter
shrub, common, ca. 1.5 m tall

21769 [2] Ericaceae *Lyonia mariana* (L.) D. Don
det. R. Carter
low shrub, stems mostly 3-5 dm tall, occasional

21770 [3] Ericaceae *Lyonia fruticosa* (Michx.) Torr.
det. R. Carter
shrub, 1-1.5 m tall, locally common

21771 [2] Ericaceae *Gaylussacia tomentosa* (Gray) Pursh ex Small
Plants seem intermediate between *G. tomentosa* and *G. nana*.
det. R. Carter
shrub, ca. 5 dm tall, locally common

- 21772** [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
plants common, cespitose, heads grayish white
- 21773** [1] Poaceae *Dichanthelium strigosum* (Muhl. ex Ell.) Freckm. var. *strigosum*
det. R. Carter
plants common, cespitose
- 21774** [2] Cyperaceae *Rhynchospora plumosa* Elliott
det. R. Carter
common, cespitose
- 21775** [1] Cyperaceae *Scleria ciliata* Michx. var. *glabra* (Chapm.) Fairey
det. R. Carter
common
- 21776** [1] Cyperaceae *Rhynchospora debilis* Gale
det. R. Carter
common
- 21777** [3] Cyperaceae *Rhynchospora torreyana* Gray
det. R. Carter
common, cespitose
- 21778** [1] Polygalaceae *Polygala mariana* Mill.
det. R. Carter
plants infrequent, roots aromatic, flowers pink
- 21779** [3] Fabaceae *Tephrosia virginiana* (L.) Pers.
det. R. Carter
plants clonal, common
- 21780** [1] Juncaceae *Juncus megacephalus* M.A. Curtis
det. R. Carter
occasional
- 21781** [1] Polygalaceae *Polygala lutea* L.
det. R. Carter
plant common, roots aromatic, flowers orange
- 21782** [1] Poaceae *Ctenium aromaticum* (Walter) Wood
det. R. Carter
common
- 21783** [2] Cyperaceae *Fimbristylis puberula* (Michx.) Vahl var. *puberula*
det. R. Carter
common
- 21784** [2] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
common, cespitose
- 21785** [1] Sarraceniaceae *Sarracenia minor* Walter
det. R. Carter
common

21786 [1] Gentianaceae *Sabatia difformis* (L.) Druce
det. R. Carter
common, corolla white

21787 [1] Ericaceae *Kalmia hirsuta* Walter
det. R. Carter
low shrub, occasional, corolla pink to magenta

21788 [1] Euphorbiaceae *Euphorbia discoidalis* Chapm.
det. R. Carter
occasional, broken stems and leaves exuding latex, cyathial appendages white

21789 [2] Campanulaceae *Lobelia nuttallii* Schult.
det. R. Carter
common, corolla blue

21790 [1] Melastomataceae *Rhexia lutea* Walter
det. R. Carter
common, corolla yellow

Richard Carter with D. Stevenson, W. W. Baker

32.3975N/81.89301W

Stanback Place, 4.0 mi N of Pulaski by Pulaski Rd, then S ca. 2.0 mi by Rosa's Lane

--degraded hammock

with *Pinus palustris*, *P. taeda*, *Quercus nigra*, *Q. margarettae*, *Q. incana*, *Hamamelis virginiana*,
Diospyros virginiana, *Vaccinium arboreum*

21791 [4] Oleaceae *Chionanthus virginicus* L.
det. R. Carter
shrub, local, 2 m tall

21792 [3] Rosaceae *Rubus pensilvanicus* Poir. [*Rubus betulifolius* Small]
det. R. Carter
shrub, 1.5 m tall, common

21793 [1] Cyperaceae *Rhynchospora inexpansa* (Michx.) Vahl
det. R. Carter
locally abundant along sandy jeep trail

21794 [5] Vitaceae *Vitis rotundifolia* Michx.
det. R. Carter
liana, common

21795 [2] Pinaceae *Pinus palustris* Mill.
det. R. Carter
common tree

Richard Carter with D. Stevenson, W. W. Baker

32.4134N/81.89624W

Stanback Place, 4.0 mi N of Pulaski by Pulaski Rd, then S ca. 0.75 mi by Rosa's Lane

--longleaf pine-wiregrass savanna grading into gum pond at head of impoundment, burned ca. 8 weeks prior

21796 [2] Euphorbiaceae *Tragia urticifolia* Michx.
det. R. Carter
plants with stinging trichomes, occasional

21797 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
plant "lazy" and clambering, common

21798 [2] Agavaceae *Yucca filamentosa* L.
det. R. Carter
plant 2-3 m tall, occasional, flowers white

21799 [1] Passifloraceae *Passiflora incarnata* L.
det. R. Carter
low vine, infrequent

21800 [1] Acanthaceae *Dyschoriste oblongifolia* (Michx.) Kuntze
det. R. Carter
plant common, flowers blue

21801 [2] Euphorbiaceae *Euphorbia exserta* (Small) Coker
det. R. Carter
plant infrequent, broken stems exuding latex

21802 [3] Fabaceae *Pedimelum canescens* (Michx.) Rydb. [*Psoralea canescens* Michx.]
det. R. Carter
occasional

--sandy jeep trail through longleaf pine-wiregrass savanna

21803 [1] Campanulaceae *Wahlenbergia marginata* (Thunb.) DC.
det. R. Carter
common, corolla blue

21804 [1] Asteraceae *Erigeron strigosus* Muhl. ex Willd.
det. R. Carter
common, rays white, disk yellow

--margin of gum pond at head of impoundment
with *Nyssa biflora*, *Liriodendron tulipifera*, *Magnolia virginiana*, *Acer rubrum*, *Clethra alnifolia*, *Lyonia lucida*, *Osmunda cinnamomea*, *Sphagnum*

21805 [1] Salviniaceae *Salvinia minima* Baker
det. R. Carter
plants floating, common

21806 [2] Cyperaceae *Carex elliotii* Schwein. & Torr.
det. R. Carter
locally common

21807 [3] Cyperaceae *Rhynchospora leptocarpa* (Chapm. ex Britt.) Small???, spikelets immature
det. R. Carter
plants forming very large clumps, stems "lazy" and reclining

7/8/2014

Richard Carter with F. Snow

U.S.A. Georgia: Coffee County

31.74875N/82.86418W

Broxton Rocks Nature Preserve, along W bank of west branch of Rocky Creek

--disturbed edge of floodplain

21809 [6] Asteraceae *Erechtites hieraciifolius* (L.) Raf. ex DC.
det. R. Carter
common

--floodplain

21810 [1] Adoxaceae *Viburnum dentatum* L.
det. R. Carter
shrub, 2-3 m tall, common

--floodplain, moist soil

21811 [1] Araliaceae *Hydrocotyle verticillata* Thunb.
det. R. Carter
prostrate herb, common

--floodplain

21812 [2] Cyperaceae *Rhynchospora caduca* Elliott
det. R. Carter
common

21813 [3] Cyperaceae *Rhynchospora caduca* Elliott
det. R. Carter
common

Richard Carter with F. Snow

31.75254N/82.86538W

Broxton Rocks Nature Preserve, NW of confluence of east and west branch of Rocky Creek, near NW corner of preserve

--floodplain

21814 [2] Betulaceae *Carpinus caroliniana* Walter
det. R. Carter
10 m tree, occasional, trunk irregularly fluted and appearing muscular, bark smooth and pale

21815 [2] Juncaceae *Juncus coriaceus* Mack.
det. R. Carter
occasional

Richard Carter with F. Snow

31.74006N/82.85758W

Broxton Rocks Nature Preserve, along road to High Rock

--degraded longleaf pine-wiregrass upland, disturbed sandy loam

21816 [1] Polygalaceae *Polygala incarnata* L.
det. R. Carter
occasional, roots aromatic, flowers lavender

21817 [1] Fabaceae *Tephrosia hispidula* (Michx.) Pers.
det. R. Carter
occasional

21818 [1] Asteraceae *Silphium compositum* Michx. var. *ovatifolium* Torr. & Gray

det. R. Carter
occasional, ray and disk corollas yellow

Richard Carter with F. Snow

31.73151N/82.86212W

Broxton Rocks Nature Preserve, ca. 0.5 m WSW of Rock Falls
--degraded longleaf pine-wiregrass upland, disturbed sandy loam

21819 [3] Chrysobalanaceae *Licania michauxii* Prance

det. R. Carter
plants clonal, in large patches, common

21820 [1] Cistaceae *Lechea mucronata* Raf. [*Lechea villosa* Elliott]

det. R. Carter
common

21821 [1] Agavaceae *Manfreda virginica* (L.) Salisb. ex Rose [*Agave virginica* L.]

det. R. Carter
occasional

21822 [1] Asteraceae *Vernonia angustifolia* Michx. var. *scaberrima* (Nutt.) Gray

det. R. Carter
common

21823 [3] Poaceae *Paspalum floridanum* Michx.

det. R. Carter
occasional

--degraded seepage slope along drain

21824 [2] Cyperaceae *Rhynchospora compressa* Carey ex Chapm.

det. R. Carter
common

21825 [1] Clusiaceae *Hypericum myrtifolium* Lam.

det. R. Carter
occasional, petals and stamens yellow

21826 [1] Xyridaceae *Xyris caroliniana* Walter

det. R. Carter
common

21827 [2] Xyridaceae *Xyris stricta* Chapm.

det. R. Carter
common

21828 [1] Gentianaceae *Sabatia campanulata* (L.) Torr.

det. R. Carter
occasional, corolla pink with small yellow eye

21829 [1] Polygalaceae *Polygala ramosa* Elliott

det. R. Carter
locally common, flowers yellow

21830 [1] Cyperaceae *Rhynchospora rariflora* (Michx.) Ell.

det. R. Carter

locally common, cespitose

Richard Carter with F. Snow

31.74152N/82.84257W

Broxton Rocks Nature Preserve, Rickerson Tract E

--sandridge adjacent to longleaf pine savannah, recently burned

with *Pinus palustris*, *Quercus laevis*, *Q. marilandica*, *Q. incana*, *Vaccinium stamineum*, *Serenoa repens*, *Nolina georgiana*, *Aristida stricta*, *Marshallia ramosa*, *Rhynchospora grayi*, *Pteridium aquilinum*, *Tephrosia virginiana*, *Solidago odora*

21831 [2] **Krameriaceae** *Krameria lanceolata* Torr.

det. R. Carter

rare and local, corolla magenta

21832 [1] **Cyperaceae** *Rhynchospora grayi* Kunth

det. R. Carter

occasional

Richard Carter with F. Snow

31.74293N/82.84523W

Broxton Rocks Nature Preserve, Rickerson Tract W

--xeric sandridge adjacent to sandstone outcrop, recently burned

with *Pinus palustris*, *Quercus laevis*, *Q. marilandica*, *Q. incana*, *Vaccinium stamineum*, *Serenoa repens*, *Nolina georgiana*, *Aristida stricta*, *Rhynchospora grayi*, *Pteridium aquilinum*, *Tephrosia virginiana*, *Solidago odora*

21833 [2] **Cyperaceae** *Cyperus filiculmis* Vahl

det. R. Carter

occasional

21834 [1] **Euphorbiaceae** *Tragia linearifolia* Elliott

det. R. Carter

plant with stinging trichomes, occasional

21835 [2] **Euphorbiaceae** *Euphorbia exserta* (Small) Coker

det. R. Carter

plants infrequent, with latex, cyathial appendages dark blackish maroon

21836 [1] **Asteraceae** *Hieracium gronovii* L.

det. R. Carter

occasional

--seep head, just E of "arch bridge", recently burned

with *Pinus palustris*, *Quercus laevis*, *Q. marilandica*, *Q. incana*, *Vaccinium stamineum*, *Serenoa repens*, *Nolina georgiana*, *Aristida stricta*, *Rhynchospora grayi*, *Pteridium aquilinum*, *Tephrosia virginiana*, *Solidago odora*

21837 [2] **Cyperaceae** *Rhynchospora globularis* (Chapm.) Small var. *globularis*

det. R. Carter

common, cespitose

21838 [1] **Asteraceae** *Oclemena reticulata* (Pursh) Nesom [*Aster reticularis* Pursh]

det. R. Carter

common, rays white, disk yellow

21839 [1] **Aquifoliaceae** *Ilex myrtifolia* Walter

det. R. Carter
shrub, basal shoots from base after burn

21840 [1] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

21841 [1] Cyperaceae *Rhynchospora rariflora* (Michx.) Ell.
det. R. Carter
common

7/10/2014

Richard Carter with W. W. Baker

U.S.A. Georgia: Worth County

31.45183N/83.96381W

Winecup Place, SW $\frac{1}{4}$, ca. 0.1 mi N powerline right-of-way

--longleaf pine-wiregrass savanna

with *Pinus palustris*, *Aristida stricta*, *Quercus stellata*, *Q. falcata*, *Sassafras albidum*, *Liquidambar styraciflua*, *Rhus copallinum*, *Vaccinium stamineum*, *Tephrosia virginica*, *Pteridium aquilinum*

21842 [3] Apiaceae *Angelica venenosa* (Greenway) Fern.
det. R. Carter
occasional, flowers white

21843 [2] Asteraceae *Coreopsis delphiniifolia* Lam.
det. R. Carter
occasional, rays and disk yellow

21844 [1] Polygalaceae *Polygala incarnata* L.
det. R. Carter
infrequent, roots aromatic, flowers blue

21845 [1] Asteraceae *Liatris squarrosa* (L.) Michx.
det. R. Carter
occasional, heads purplish blue

21846 [1] Campanulaceae *Lobelia puberula* Michx.
det. R. Carter
infrequent, corolla blue

21847 [1] Linaceae *Linum floridanum* (Planch.) Trel.
det. R. Carter
occasional, flowers yellow

21848 [1] Rubiaceae *Galium pilosum* Ait.
det. R. Carter
occasional

21849 [1] Fabaceae *Lespedeza repens* (L.) Barton
det. R. Carter
plants infrequent, stems trailing

21850 [2] Asteraceae *Silphium asteriscus* L.
det. R. Carter
occasional, heads yellow

21851 [1] Melianthaceae *Amianthium muscaetoxicum* (Walter) Gray
det. R. Carter
occasional

21852 [1] Dennstaediaceae *Pteridium aquilinum* (L.) Kuhn
det. R. Carter
common

21853 [2] Gentianaceae *Sabatia angularis* (L.) Pursh
det. R. Carter
occasional, corolla pink

21854 [3] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *pinetorum* (Britt. & Small) Gale
det. R. Carter
occasional

Richard Carter with W. W. Baker

31.4522N/83.96471W

Winecup Place, SW ¼, drain crossing, ca. 0.15 mi N powerline right-of-way

--hardwood drain

with *Quercus nigra*, *Diospyros virginiana*, *Liquidambar styraciflua*, *Celtis laevigata*, *Acer rubrum*, *Salix nigra*, *Prunus caroliniana*

21855 [4] Dioscoreaceae *Dioscorea floridana* Bartlett
det. R. Carter
vine, occasional

21856 [1] Acanthaceae *Ruellia caroliniensis* (Gmel.) Steud.
det. R. Carter

21857 [2] Apiaceae *Sanicula canadensis* L.
det. R. Carter
locally common

21858 [1] Schizaeaceae *Lygodium japonicum* (Thunb.) Swartz
det. R. Carter
twining vine, common

Richard Carter with W. W. Baker

31.44967N/83.97698W

Powerline right-of-way, 0.52 mi E Hwy GA 133

--open disturbed slope along drain

21859 [2] Lythraceae *Lythrum alatum* Pursh var. *lanceolatum* (Ell.) Torr. & Gray ex Rothr.
det. R. Carter
common, corolla purple

21860 [4] Menispermaceae *Menispermum canadense* L.
det. R. Carter
twining vine, common

21861 [3] Cyperaceae *Rhynchospora caduca* Ell.
det. R. Carter
common

21862 [2] Cyperaceae *Cyperus echinatus* (L.) Wood

det. R. Carter
occasional

21863 [4] Poaceae *Tripsacum dactyloides* (L.) L.
det. R. Carter
locally common

21864 [2] Poaceae *Elymus virginicus* L.
det. R. Carter
locally common

Richard Carter with W. W. Baker
31.4554N/83.97385W

Wiregrass Plantation, 0.60 airmile NE of headquarters
--longleaf pine-wiregrass savanna, slope above sink, recently burned
with *Pinus palustris*, *Aristida stricta*, *Baptisia albescens*, *Manfreda virginica*, *Coreopsis delphinifolia*,
Cyperus echinatus, *Silphium asteriscus*, *Angelica venenosa*, *Symphytotrichum adnatum*, *S. walteri*,
Sericocarpus tortifolius, *Ionactis linariifolia*, *Rudbeckia hirta*, *Asclepias obovata*, *Phlox pilosa*, *Eryngium*
yuccifolium, *Pityopsis graminifolia*, *Vernonia angustifolia*
Note: Gopher burrows observed, Bachman's sparrow heard

21865 [3] Convolvulaceae *Cuscuta obtusiflora* Kunth var. *glandulosa* Engelm.
det. R. Carter
occasional achlorophyllous twining vine, parasitic on herbaceous plants

21866 [1] Malvaceae *Callirhoe papaver* (Cav.) Gray
det. R. Carter
infrequent, corolla purple

Richard Carter with W. W. Baker
31.46166N/83.96858W

Wiregrass Plantation, 1.10 airmiles NE of headquarters
--slope along drain
with *Quercus alba*, *Q. falcata*, *Pinus taeda*, *Ulmus alata*, *Juniperus virginiana*, *Callicarpa americana*,
Smilax smallii

21867 [2] Lamiaceae *Pycnanthemum albescens* Torr. & Gray ex Gray
det. R. Carter
common

21868 [2] Asteraceae *Cirsium nuttallii* DC.
det. R. Carter
locally common, flowers purple

21869 [1] Asteraceae *Heliopsis helianthoides* (L.) Sweet var. *gracilis* (Nutt.) Gandhi & Thomas
det. R. Carter
locally common, heads yellow

21870 [1] Rubiaceae *Richardia brasiliensis* Gomes
det. R. Carter
common in disturbed sandy loam

Richard Carter with W. W. Baker
31.47185N/83.98035W

Wiregrass Plantation, 1.50 airmiles N of headquarters
--longleaf pine-wiregrass savanna, open slope, burned ca. 12 weeks prior

with *Pinus palustris*, *Aristida stricta*, *Rhus copallinum*, *Quercus stellata*, *Q. falcata*, *Diospyros*, *Sassafras*, *Prunus serotina*, *Gaylussacia frondosa*, *Vaccinium stamineum*, *Stillingia sylvatica*, *Tephrosia virginiana*, *Piriqueta caroliniana*, *Ionactis linariifolia*, *Eryngium yuccifolium*, *Toxicodendron pubescens*, *Schrankia microphylla*, *Cnidioscolus*, *Vernonia angustifolia*, *Rhynchosia tomentosa*, *Rudbeckia hirta*, *Apocynum cannabinum*, *Solidago odora*, *Pityopsis graminifolia*, *Amsonia ciliata*, *Pteridium aquilinum*, *Asclepias obovata*, *Hibiscus aculeatus*, *Symphytotrichum walteri*, *Galactia erecta*, *Polygala grandifolia*, *Coreopsis delphinifolia*, *Silphium asteriscus*, *Angelica dentata*

Note: *Angelica dentata*, occasional

21871 [1] Urticaceae *Tragia urticifolia* Michx.

det. R. Carter

plants occasional, with stinging hairs

21872 [1] Euphorbiaceae *Euphorbia pubentissima* Michx.

det. R. Carter

plants with latex, occasional

21873 [2] Asteraceae *Rudbeckia hirta* L.

det. R. Carter

common

21874 [2] Gentianaceae *Sabatia campanulata* (L.) Torr.

det. R. Carter

occasional, corolla pink

21875 [2] Commelinaceae *Commelina erecta* L.

det. R. Carter

occasional

21876 [1] Linaceae *Linum medium* (Planch.) Britt.

det. R. Carter

occasional

--drain in longleaf pine-wiregrass savanna, open slope, burned ca. 12 weeks prior
with *Pinus palustris*, *Aristida stricta*, *Rhus copallinum*, *Quercus stellata*, *Q. falcata*, *Diospyros*, *Sassafras*, *Prunus serotina*, *Gaylussacia frondosa*, *Vaccinium stamineum*, *Stillingia sylvatica*, *Tephrosia virginiana*, *Piriqueta caroliniana*, *Ionactis linariifolia*, *Eryngium yuccifolium*, *Toxicodendron pubescens*, *Schrankia microphylla*, *Cnidioscolus*, *Vernonia angustifolia*, *Rhynchosia tomentosa*, *Rudbeckia hirta*, *Apocynum cannabinum*, *Solidago odora*, *Pityopsis graminifolia*, *Amsonia ciliata*, *Pteridium aquilinum*, *Asclepias obovata*, *Hibiscus aculeatus*, *Symphytotrichum walteri*, *Galactia erecta*, *Polygala grandifolia*, *Coreopsis delphinifolia*, *Silphium asteriscus*, *Angelica dentata*

21877 [1] Asteraceae *Arnoglossum atriplicifolium* (L.) H. Rob.

det. R. Carter

locally common

21878 [5] Asteraceae *Rudbeckia mohrii* Gray

det. R. Carter

occasional, rays yellow, disk black

21879 [2] Cyperaceae *Rhynchospora microcarpa* (Britt.) Britt. ex Small

det. R. Carter

common

21880 [1] Cyperaceae *Fuirena breviseta* (Cov.) Cov.

det. R. Carter

common, cespitose

21881 [1] Poaceae *Dichanthelium scoparium* (Lam.) Gould
det. R. Carter
common

Richard Carter with W. W. Baker
31.47453N/83.97239W

Wiregrass Plantation, 1.77 airmiles NNE of headquarters, 0.85 airmile WNW of Sears Lake dam
--seepage slope ecotone along drain, below longleaf pine-wiregrass savanna, recently burned
with *Pinus elliotii*, *Myrica cerifera*, *Diospyros*, *Hibiscus aculeatus*, *Xyris caroliniana*, *Juncus scirpoides*,
Chaptalia tomentosa, *Erigeron vernus*, *Ctenium aromaticum*, *Rhexia alifanus*, *Rudbeckia mohrii*,
Rhynchospora, *Dichanthelium scoparium*, *Eupatorium rotundifolium*, *Aletris*, *Sabatia campanulata*, *Carex glaucescens*,
Polygala lutea, *Lachnocaulon anceps*

21882 [2] Melastomataceae *Rhexia virginica* L.
det. R. Carter
common, corolla rose-purple

21883 [1] Scrophulariaceae *Gratiola pilosa* Michx.
det. R. Carter
common, corolla white

21884 [1] Lamiaceae *Pycnanthemum flexuosum* (Walt.) Britt. et al.
det. R. Carter
occasional

21885 [2] Onagraceae *Ludwigia hirtella* Raf.
det. R. Carter
occasional, corolla yellow

21886 [2] Haloragaceae *Proserpinaca pectinata* Lam.
det. R. Carter
common

21887 [1] Asteraceae *Pluchea baccharis* (Mill.) Pruski [*Pluchea rosea* Godfrey]
det. R. Carter
common, heads pink

21888 [1] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
common, heads white

21889 [1] Asclepiadaceae *Asclepias longifolia* Walter
det. R. Carter
occasional, flowers reddish orang

21890 [1] Cyperaceae *Rhynchospora odorata* Wright ex Griseb.
det. R. Carter
common

21891 [1] Tofieldiaceae *Triantha racemosa* (Walt.) Small [*Tofieldia racemosa* (Walter) Britt. et al.]
det. R. Carter
common, flowers white

21892 [1] Xyridaceae *Xyris caroliniana* Walter

det. R. Carter
common

21893 [1] Onagraceae *Ludwigia maritima* Harper
det. R. Carter
common

21894 [3] Melianthiaceae *Veratrum virginicum* (L.) Aiton f. [*Melanthium virginicum* L.]
det. R. Carter
occasional

--longleaf pine-wiregrass savanna, recently burned
with *Pinus palustris*, *Aristida stricta*

21895 [1] Fabaceae *Crotalaria purshii* DC.
det. R. Carter
occasional, corolla yellow

21896 [1] Apiaceae *Eryngium yuccifolium* Michx.
det. R. Carter
occasional

Richard Carter with W. W. Baker
31.47357N/83.95432W
Wiregrass Plantation, just NE of Sears Lake
--upland pine woods with hardwood understory, recently burned
with *Pinus palustris*, *P. taeda*

21897 [2] Asteraceae *Verbesina aristata* (Ell.) Heller
det. R. Carter
occasional, heads yellow

21898 [1] Cistaceae *Lechea mucronata* Raf. [*Lechea villosa* Elliott]
det. R. Carter
common

21899 [1] Asteraceae *Tetragonotheca helianthoides* L.
det. R. Carter
occasional, heads yellow

21900 [2] Asteraceae *Arnoglossum atriplicifolium* (L.) H. Rob.
det. R. Carter
locally common

7/11/2014

Richard Carter with W. W. Baker
U.S.A. Georgia: Dougherty County
31.44518N/84.06768W

Weatherbee Tract, 0.32 airmile WNW of Rocky Hill Church, W of Gravel Hill Rd and S of powerline right-of-way

--longleaf pine-wiregrass savanna
with *Pinus palustris*, *Aristida stricta*, *Quercus nigra*, *Vaccinium stamineum*, *V. tenellum*, *Rhus copallinum*, *Prunus serotina*, *Stillingia sylvatica*, *Ceanothus microphyllus*, *Rubus cuneifolium*, *Hypericum microsepalum*, *Schizachyrium tenerum*, *Rhynchosia reniformis*, *R. tomentosa*, *Symphytotrichum adnatum*, *S. concolor*, *Ionactis linariifolia*, *Lygodesmia aphylla*, *Rudbeckia hirta*, *Tephrosia virginiana*, *Orbexilum lupinellus*, *Psoralea canescens*, *Stylosanthes biflora*, *Piriqueta*, *Stylodon*, *Centrosema virginiana*,

Cnidocolus, *Tragia urens*, *Solidago odora*, *Ageratina jucunda*, *Eupatorium serotinum*, *Penstemon australis*, *Asclepias tuberosa*, *Polygala incarnata*, *P. grandiflora*, *Scleria triglomerata*, *Smilax bona-nox*, *S. smallii*, *Pteridium aquilinum*

Note: Bachman's sparrow heard; *Hypericum microsepalum* occasional

21901 [1] Rubiaceae *Galium pilosum* Aiton

det. R. Carter

plants clambering, common

21902 [1] Asteraceae *Erigeron strigosus* Muhl. ex Willd.

det. R. Carter

common in disturbed sandy loam

21903 [2] Fabaceae *Mimosa quadrivalvis* L. var. *floridana* (Chapm.) Barneby

det. R. Carter

plants clambering, common

21904 [1] Convolvulaceae *Ipomoea pandurata* (L.) G. Mey.

det. R. Carter

trailing vine, corolla white with purple eye, common

21905 [1] Fabaceae *Rhynchosia tomentosa* (L.) Hook. & Arn. var. *tomentosa*

det. R. Carter

occasional

21906 [1] Orchidaceae *Pteroglossaspis ecristata* (Fern.) Rolfe

det. R. Carter

rare, 2 plants observed

21907 [1] Euphorbiaceae *Stillingia sylvatica* L.

det. R. Carter

plant from woody base, common, latex present

Richard Carter with W. W. Baker

31.44675N/84.06927W

Weatherbee Tract, 0.45 airmile WNW of Rocky Hill Church, W of Gravel Hill Rd and S of powerline right-of-way

--longleaf pine-wiregrass savanna

with *Pinus palustris*, *Aristida stricta*, *Quercus nigra*, *Vaccinium stamineum*, *V. tenellum*, *Rhus copallinum*, *Prunus serotina*, *Stillingia sylvatica*, *Ceanothus microphyllus*, *Rubus cuneifolium*, *Hypericum microsepalum*, *Schizachyrium tenerum*, *Rhynchosia reniformis*, *R. tomentosa*, *Symphytotrichum adnatum*, *S. concolor*, *Ionactis linariifolia*, *Lygodesmia aphylla*, *Rudbeckia hirta*, *Tephrosia virginiana*, *Orbexilum lupinellus*, *Psoralea canescens*, *Stylosanthes biflora*, *Piriqueta*, *Stylodon*, *Centrosema virginiana*, *Cnidocolus*, *Tragia urens*, *Solidago odora*, *Ageratina jucunda*, *Eupatorium serotinum*, *Penstemon australis*, *Asclepias tuberosa*, *Polygala incarnata*, *P. grandiflora*, *Scleria triglomerata*, *Smilax bona-nox*, *S. smallii*, *Pteridium aquilinum*

21908 [1] Asteraceae *Lygodesmia aphylla* (Nutt.) DC.

det. R. Carter

plant occasional, heads blue

21910 [1] Asteraceae *Rudbeckia hirta* L.

det. R. Carter

common, rays yellow, disk black

21911 [2] Euphorbiaceae *Acalypha gracilens* Gray

det. R. Carter
common in disturbed sandy loam

21912 [4] Fabaceae *Orbexilum lupinellus* (Michx.) Isely
det. R. Carter
locally common

21913 [2] Euphorbiaceae *Euphorbia pubentissima* Michx.
det. R. Carter
occasional, latex present

21914 [1] Euphorbiaceae *Tragia urens* L.
det. R. Carter
plants with stinging trichomes, common

21915 [1] Ericaceae *Vaccinium stamineum* L.
det. R. Carter
clonal shrub, common, stems <5 dm tall

21916 [1] Ericaceae *Vaccinium stamineum* L.
det. R. Carter
1-2 m shrub, common

21917 [1] Lythraceae *Cuphea carthagensis* (Jacq.) Macbr.
det. R. Carter
plants common in disturbed swale

21918 [1] Fabaceae *Crotalaria purshii* DC.
det. R. Carter
occasional

21919 [1] Fabaceae *Pediomelum canescens* (Michx.) Rydb. [*Psoralea canescens* Michx.]
det. R. Carter
occasional

--longleaf pine-wiregrass savanna grading into clay-based grady pond
with *Pinus palustris*, *Aristida stricta*, *Quercus nigra*, *Vaccinium stamineum*, *V. tenellum*, *Rhus copallinum*,
Prunus serotina, *Stillingia sylvatica*, *Ceanothus microphyllus*, *Rubus cuneifolium*, *Hypericum*
microsepalum, *Schizachyrium tenerum*, *Rhynchosia reniformis*, *R. tomentosa*, *Symphytotrichum adnatum*,
S. concolor, *Ionactis linariifolia*, *Lygodesmia aphylla*, *Rudbeckia hirta*, *Tephrosia virginiana*, *Orbexilum*
lupinellus, *Psoralea canescens*, *Stylosanthes biflora*, *Piriqueta*, *Stylodon*, *Centrosema virginiana*,
Cnidioscolus, *Tragia urens*, *Solidago odora*, *Ageratina jucunda*, *Eupatorium serotinum*, *Penstemon*
australis, *Asclepias tuberosa*, *Polygala incarnata*, *P. grandiflora*, *Scleria triglomerata*, *Smilax bona-nox*, *S.*
smallii, *Pteridium aquilinum*

21920 [1] Gentianaceae *Sabatia angularis* (L.) Pursh
det. R. Carter
occasional, corolla pink

21921 [2] Linaceae *Linum floridanum* (Planch.) Trel.
det. R. Carter
plant with yellow corolla, common

Richard Carter with W. W. Baker

31.44905N/84.07156W

Weatherbee Tract, powerline right-of-way, 0.56 mi W of Gravel Hill Rd

--seasonally inundated open flat in right-of-way

21922 [2] Alismataceae *Sagittaria graminea* Michx. subsp. *chapmanii* J.G. Sm.) Hayn. & Hellq.
det. R. Carter
common, petals white

21923 [1] Cyperaceae *Cyperus drummondii* Torr. & Hook.
det. R. Carter
locally abundant

21924 [1] Cyperaceae *Cyperus haspan* L.
det. R. Carter
common

21925 [1] Cyperaceae *Cyperus pseudovegetus* Steud.
det. R. Carter
common

21926 [1] Polygonaceae *Polygonum hydropiperoides* Michx.
det. R. Carter
locally abundant

21927 [1] Juncaceae *Juncus repens* Michx.
det. R. Carter
plants creeping, rooting at nodes, locally abundant

21928 [1] Ebenaceae *Diospyros virginiana* L.
det. R. Carter
6-8 m tree, common

21929 [1] Cyperaceae *Eleocharis obtusa* (Willd.) Schult.
det. R. Carter
locally abundant

21930 [2] Malvaceae *Hibiscus aculeatus* Walter
det. R. Carter
common, stems about 1 m tall, corolla white with purplish black eye

21931 [2] Onagraceae *Ludwigia decurrens* Walter
det. R. Carter
common, corolla yellow

21932 [4] Malvaceae *Hibiscus moscheutos* L.
det. R. Carter
shrub, common, branching at base, stems ca. 1.5 m tall, corolla white with purplish red eye

Richard Carter with W. W. Baker

U.S.A. Georgia: Worth County

31.43524N/83.83591W

0.2 mi S jct. Hwy GA 33 and Old Hwy 33, along W side of Old Hwy 33

--disturbed floodplain of creek, sandy loam soil

21933 [4] Asteraceae *Lactuca canadensis* L.
det. R. Carter
herb, common, stems to 3 m tall, corolla yellow

- 21934** [3] Smilacaceae *Smilax smallii* Morong
det. R. Carter
high climbing woody vine, common
- 21935** [3] Oleaceae *Fraxinus caroliniana* Mill.
det. R. Carter
small tree, common
- 21936** [2] Nyssaceae *Nyssa ogeche* Bartram ex Marshall
det. R. Carter
small tree, common
- 21937** [2] Clusiaceae *Hypericum mutilum* L.
det. R. Carter
common, corolla yellow
- 21938** [1] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
common, corolla blue
- 21939** [2] Alismataceae *Sagittaria latifolia* Willd.
det. R. Carter
common, petals white
- 21940** [2] Onagraceae *Ludwigia alternifolia* L.
det. R. Carter
common, corolla yellow
- 21941** [2] Xyridaceae *Xyris difformis* Chapm.
det. R. Carter
common
- 21942** [1] Cyperaceae *Fuirena breviseta* (Cov.) Cov.
det. R. Carter
common, cespitose
- 21943** [1] Haemodoraceae *Lachnanthes caroliniana* (Lam.) Dandy
det. R. Carter
common
- 21944** [1] Lythraceae *Cuphea carthagensis* (Jacq.) Macbr.
det. R. Carter
common
- 21945** [4] Juncaceae *Juncus validus* Coville
det. R. Carter
common
- 21946** [2] Cyperaceae *Rhynchospora corniculata* (Lam.) Gray
det. R. Carter
common

Richard Carter with W. W. Baker

31.43422N/83.85897W

1.90 airmiles SW jct. Hwy GA 33 and Douthit Rd, Jeffords Place
--disturbed edge of longleaf pine-wiregrass savanna

21947 [1] Fabaceae *Lespedeza repens* (L.) Barton
det. R. Carter
plants occasional, stems decumbent

Richard Carter with W. W. Baker
31.43288N/83.87125W

2.59 airmiles WSW jct. Hwy GA 33 and Douthit Rd, Jeffords Place
--seepage along drain in longleaf pine-wiregrass savanna

21948 [2] Cyperaceae *Rhynchospora compressa* Carey ex Chapm.
det. R. Carter
locally common

21949 [1] Cyperaceae *Rhynchospora gracilentia* Gray
det. R. Carter
locally common

7/16/2014

Richard Carter with W. W. Baker

U.S.A. Georgia: Turner County

31.6703N/83.69436W

3.25 mi NW Coverdale jct. CR 99 and Hwy GA 112, along SE side of Hwy GA 112
--degraded seepage slope along drain

21952 [1] Gentianaceae *Sabatia dodecandra* (L.) BSP.
det. R. Carter
occasional, corolla pink

21953 [1] Haloragaceae *Proserpinaca palustris* L.
det. R. Carter
common

21954 [1] Apiaceae *Oxypolis filiformis* (Walt.) Britt.
det. R. Carter
common

21955 [2] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
common

21956 [2] Juncaceae *Juncus marginatus* Rostk.
det. R. Carter
common

21957 [1] Gentianaceae *Sabatia macrophylla* Hook.
det. R. Carter
occasional

21958 [1] Juncaceae *Juncus polycephalus* Michx.
det. R. Carter
common

21959 [1] Juncaceae *Juncus scirpoides* Lam.
det. R. Carter
common

21960 [1] Cyperaceae *Rhynchospora cephalantha* A. Gray
det. R. Carter
common

21961 [2] Cyperaceae *Rhynchospora elliotii* A. Dietr.
det. R. Carter
common

21962 [3] Lamiaceae *Physostegia virginiana* (L.) Benth.
det. R. Carter
occasional

21963 [2] Linaceae *Linum striatum* Walter
det. R. Carter
occasional

21964 [3] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

21965 [1] Xyridaceae *Xyris difformis* Chapm.
det. R. Carter
common

21966 [2] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

Richard Carter with W. W. Baker

31.73019N/83.699W

3.5 mi NW of Ashburn center by Warwick Hwy (CR 249), along N side hwy, Little River Plantation
--ecotone between longleaf pine-wiregrass savanna and bay head

21967 [2] Cyperaceae *Rhynchospora chapmanii* M.A. Curtis
det. R. Carter
common

21968 [2] Cyperaceae *Rhynchospora gracilentia* A. Gray
det. R. Carter
common

7/17/2014

Richard Carter with W. W. Baker

U.S.A. Georgia: Wheeler County

32.04509N/82.69704W

1.80 airmiles WNW Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134; Reese Thompson Place,
Talmidge Tract

--xeric longleaf pine/turkey oak upland, deep sand

with *Pinus palustris*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Vaccinium arboreum*, *V. stamineum*,
Aristida stricta, *Licania michauxii*, *Eriogonum tomentosum*, *Tephrosia virginiana*, *Lupinus villosus*,
Amsonia ciliata, *Liatris tenuifolia*, *Galactia regularis*, *Gelsemium sempervirens*, *Hypericum gentianoides*,
Callisia rosea, *Pityopsis graminifolia*, *Solidago odora*, *Opuntia*, *Cyperus hystricinus*, *Bulbostylis warei*

21969 [1] Caryophyllaceae *Stipulicida setacea* Michx. var. *setacea*

det. R. Carter
occasional

21970 [1] Cyperaceae *Cyperus filiculmis* Vahl
det. R. Carter
occasional

21971 [1] Euphorbiaceae *Euphorbia exserta* (Small) Coker
det. R. Carter
occasional

21972 [3] Krameriaceae *Krameria lanceolata* Torrey
det. R. Carter
rare and local

21973 [1] Fabaceae *Clitoria mariana* L.
det. R. Carter
occasional

21974 [1] Commelinaceae *Commelina erecta* L.
det. R. Carter
occasional

21975 [1] Euphorbiaceae *Cnidoscolus stimulosus* (Michx.) Engelm. & A. Gray
det. R. Carter
common

21976 [1] Cyperaceae *Cyperus filiculmis* Vahl
det. R. Carter
occasional

21977 [2] Cyperaceae *Rhynchospora grayi* Kunth
det. R. Carter
occasional

21978 [1] Convolvulaceae *Stylisma patens* (Desr.) Myint var. *patens*
det. R. Carter
trailing vine, common, flowers white

21979 [1] Poaceae *Dichantherium aciculare* (Desv. ex Poir.) Gould & Clark
det. R. Carter
common

21980 [1] Cyperaceae *Cyperus hystricinus* Fernald
det. R. Carter
infrequent

21981 [1] Cyperaceae *Scleria ciliata* Michx. var. *ciliata*
det. R. Carter
common

21982 [1] Caryophyllaceae *Paronychia hernarioides* (Michx.) Nutt.
det. R. Carter
common

Richard Carter with W. W. Baker

32.04451N/82.70168W

2.04 airmiles WNW Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134; Reese Thompson Place, Talmidge Tract

--subxeric ecotonal slope between longleaf pine/turkey oak upland and creek, deep sand with *Pinus palustris*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Vaccinium arboreum*, *V. stamineum*, *V. elliotii*, *Hamamelis virginiana*, *Osmanthus americana*, *Gaylussacia frondosa*, *Toxicodendron pubescens*, *Serenoa repens*, *Styrax grandifolia*, *Aristida stricta*, *Licania michauxii*, *Eriogonum tomentosum*, *Tephrosia virginiana*, *Lupinus villosus*, *Amsonia ciliata*, *Liatris tenuifolia*, *Galactia regularis*, *Gelsemium sempervirens*, *Smilax auriculata*, *Hypericum gentianoides*, *Callisia rosea*, *Pityopsis graminifolia*, *Solidago odora*, *Eupatorium compositifolium*, *Opuntia*, *Cyperus hystrixinus*, *Bulbostylis warei*

21983 [3] Cyperaceae *Cyperus diminutus* R. Carter, sp. nov.

det. R. Carter

infrequent

21984 [1] Orobanchaceae *Aureolaria pectinata* (Nutt.) Pennell

det. R. Carter

occasional

Richard Carter with W. W. Baker

32.04124N/82.70024W

1.89 airmiles WNW Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134, Reese Thompson Place

--subxeric ecotonal flat at base of sandridge at confluence of two drains, open disturbed sand

21985 [1] Cyperaceae *Cyperus plukenetii* Fernald

det. R. Carter

occasional

21986 [2] Fabaceae *Indigofera caroliniana* Mill.

det. R. Carter

1.5 m herb, locally common

21987 [2] Rosaceae *Crataegus michauxii* Pers. [*Crataegus flava* sensu auth., non Aiton]

det. R. Carter

shrub, 4 m tall, occasional

21988 [2] Arecaceae *Serenoa repens* (W. Bartram) Small

det. R. Carter

common

Richard Carter with W. W. Baker

32.0313N/82.69548W

1.59 airmiles W Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134, Reese Thompson Place

--sandy flat, base of sandridge, between sandridge and drain

with *Pinus palustris*, *Quercus margarettae*, *Q. incana*, *Q. nigra*, *Liquidambar styraciflua*, *Prunus serotina*, *Rhus copallinum*, *Vaccinium arboreum*, *V. stamineum*, *V. myrsinites*, *Nolina georgiana*, *Toxicodendron pubescens*, *Aristida stricta*, *Anthaenantia villosa*, *Pteridium aquilinum*, *Sericocarpus tortifolius*, *Ionactis linariifolia*, *Solidago odora*, *Vernonia angustifolia*, *Eupatorium serotinum*, *Chrysopsis mariana*, *Silphium compositum*, *Berlandiera pumila*, *Baptisia lanceolata*, *Rhynchosia reniformis*, *Hypericum suffruticosum*, *Tragia urens*, *Cnidocolus*, *Euphorbia exserta*, *Eriogonum tomentosum*, *Stylisma patens*, *Piriqueta*, *Eryngium yuccifolium*, *Scutellaria multiglandulosa*, *Cyperus plukenetii*, *C. filiculmis*, *Rhynchospora grayi*

Note: *Nolina georgiana* occasional

21989 [1] Rubiaceae *Galium pilosum* Aiton

det. R. Carter

common

21990 [1] Asteraceae *Marshallia ramosa* Beadle & Boynton
det. R. Carter
infrequent

21991 [1] Asteraceae *Coreopsis delphiniifolia* Lamarck
det. R. Carter
occasional

21992 [1] Fabaceae *Orbexilum lupinellus* (Michx.) Isely
det. R. Carter
infrequent

21993 [1] Fabaceae *Stylosanthes biflora* (L.) Britt. et al.
det. R. Carter
common, flowers yellow

21994 [1] Fabaceae *Tephrosia virginiana* (L.) Pers.
det. R. Carter
common

21995 [1] Euphorbiaceae *Stylingia sylvatica* L.
det. R. Carter
common

21996 [2] Fabaceae *Baptisia perfoliata* (L.) R. Br.
det. R. Carter
occasional

21997 [1] Fabaceae *Pediomelum canescens* (Michx.) Rydb.
det. R. Carter
occasional

21998 [1] Polyremaceae *Polyremum procumbens* L.
det. R. Carter
common

21999 [1] Euphorbiaceae *Tragia urens* L. [*Tragia linearifolia* Elliott]
det. R. Carter
plants with stinging hairs, common

22000 [1] Annonaceae *Asimina longifolia* Kral
det. R. Carter
1.5 m shrub, occasional

22001 [1] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

22002 [1] Lamiaceae *Scutellaria multiglandulosa* (Kearney) Small ex Harper
det. R. Carter
occasional

Richard Carter with W. W. Baker

32.03458N/82.69065W

1.28 airmiles W Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134, Reese Thompson Place
--sandy, mesic slope

with *Pinus palustris*, *Aristida stricta*, *Quercus marilandica*, *Q. laevis*, *Q. margarettae*, *Q. incana*, *Ilex glabra*, *Diospyros virginiana*, *Vaccinium arboreum*, *V. myrsinites*, *V. stamineum*, *Rhus copallina*, *Lyonia mariana*, *Gaylussacia dumosa*, *Serenoa repens*, *Callicarpa americana*, *Toxicodendron pubescens*, *Yucca filamentosa*, *Smilax auriculata*, *Stillingia sylvatica*, *Nolina georgiana*, *Solidago odora*, *Pityopsis graminifolia*, *Pterocaulon pycnostachyum*, *Sericocarpus tortifolius*, *Lactuca graminifolia*, *Elephantopus elatus*, *Balduina uniflora*, *Eupatorium compositifolium*, *Berlandiera pumila*, *Eupatorium album*, *Liatis tenuifolia*, *Rudbeckia hirta*, *Symphyotrichum walteri*, *Vernonia angustifolia*, *Baptisia perfoliata*, *Galactia erecta*, *Tephrosia virginiana*, *Stylosanthes biflora*, *Chamaecrista nictitans*, *Mimosa strigillosa*, *Tragia urens*, *Xyris caroliniana*, *Panicum virgatum*, *Juncus dichotomus*, *Eriogonum tomentosum*, *Scutellaria multiglandulosa*, *Ipomoea pandurata*, *Cyperus filiculmis*, *Salvia azurea*, *Scleria triglomerata*, *Paspalum plicatulum*, *Polypremum procumbens*

Note: *Nolina georgiana* occasional

22003 [1] Asteraceae *Rudbeckia hirta* L.

det. R. Carter
occasional

22004 [1] Fabaceae *Tephrosia chrysophylla* Pursh

det. R. Carter
occasional

22005 [1] Fabaceae *Galactia erecta* (Walter) Vail

det. R. Carter
occasional

22006 [1] Asteraceae *Eupatorium rotundifolium* L.

det. R. Carter
common

22007 [1] Fabaceae *Rhynchosia tomentosa* (L.) Hook. & Arn. var. *tomentosa*

det. R. Carter
occasional

22008 [1] Asclepiadaceae *Asclepias obovata* Elliott

det. R. Carter
plants with latex, occasional

22009 [1] Asteraceae *Silphium compositum* Michx. var. *compositum*

det. R. Carter
common, heads yellow

22010 [1] Fabaceae *Crotalaria purshii* DC.

det. R. Carter
occasional

22011 [1] Cyperaceae *Scleria ciliata* Michx. var. *ciliata*

det. R. Carter
common

22012 [1] Poaceae *Dichanthelium sphaerocarpon* (Elliott) Gould

det. R. Carter
common

22013 [1] Fabaceae *Rhynchosia reniformis* DC.

det. R. Carter
occasional

Richard Carter with W. W. Baker

32.03598N/82.69W

1.24 airmiles W Jordan jct. Hwy GA 19, Hwy GA 126, and Hwy GA 134, Reese Thompson Place

--seepy ecotone between longleaf pine-wiregrass slope and drain

with *Pinus elliotii*, *Magnolia virginiana*, *Acer rubrum*, *Nyssa biflora*, *Quercus nigra*, *Cyrilla racemiflora*, *Myrica cerifera*, *Viburnum nudum*, *Vaccinium corymbosum*, *Toxicodendron vernix*, *Pinckneya bracteata*, *Ilex glabra*, *Lyonia lucida*, *Clethra alnifolia*, *Gaylussacia frondosa*, *Vitis rotundifolia*, *Smilax laurifolia*, *Rhexia mariana*, *R. alifanus*, *R. virginica*, *Polygala lutea*, *Apios americana*, *Cuscuta*, *Erechtites hieracifolia*, *Eupatorium rotundifolium*, *Xyris*, *Lachnocaulon anceps*, *Cyperus haspan*, *Fuirena breviseta*, *Juncus marginatus*, *J. scirpoides*, *Rhynchospora plumosa*, *Schizachyrium tenerum*

22014 [1] Loganiaceae *Mitreola sessilifolia* (J.F. Gmel.) G. Don

det. R. Carter

common

22015 [1] Gentianaceae *Sabatia quadrangula* Wilbur

det. R. Carter

occasional

22016 [2] Gentianaceae *Sabatia campanulata* (L.) Torr.

det. R. Carter

occasional

22017 [1] Scrophulariaceae *Gratiola pilosa* Michx.

det. R. Carter

occasional

22018 [1] Asclepiadaceae *Asclepias cinerea* Walter

det. R. Carter

occasional

22019 [1] Polygalaceae *Polygala nana* (Michx.) DC.

det. R. Carter

occasional

22020 [1] Clusiaceae *Hypericum myrtifolium* Lam.

det. R. Carter

common

22021 [1] Asteraceae *Balduina uniflora* Nutt.

det. R. Carter

common

22022 [1] Lycopodiaceae *Lycopodiella alopecuroides* (L.) Cranf.

det. R. Carter

occasional, runners arching up and rooting at intervals

22023 [1] Eriocaulaceae *Eriocaulon decangulare* L.

det. R. Carter

plants caespitose, common

22024 [1] Poaceae *Paspalum setaceum* Michx. var. *muhlenbergii* (Nash) D.J. Banks

det. R. Carter

common

22025 [1] Linaceae *Linum floridanum* (Planch.) Trel.
det. R. Carter
occasional

22026 [3] Cyperaceae *Rhynchospora microcephala* (Britt.) Britt. ex Small
det. R. Carter
common

22027 [1] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

22028 [3] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

22029 [1] Xyridaceae *Xyris jupicai* L.C. Rich.
det. R. Carter
common

22030 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

22031 [1] Poaceae *Ctenium aromaticum* (Walt.) Wood
det. R. Carter
common

--edge of drain

with *Pinus elliotii*, *Magnolia virginiana*, *Acer rubrum*, *Nyssa biflora*, *Quercus nigra*, *Cyrilla racemiflora*, *Myrica cerifera*, *Viburnum nudum*, *Vaccinium corymbosum*, *Toxicodendron vernix*, *Pinckneya bracteata*, *Ilex glabra*, *Lyonia lucida*, *Clethra alnifolia*, *Gaylussacia frondosa*, *Vitis rotundifolia*, *Smilax laurifolia*, *Rhexia mariana*, *R. alifanus*, *R. virginica*, *Polygala lutea*, *Apios americana*, *Cuscuta*, *Erechtites hieracifolia*, *Eupatorium rotundifolium*, *Xyris*, *Lachnocaulon anceps*, *Cyperus haspan*, *Fuirena breviseta*, *Juncus marginatus*, *J. scirpoides*, *Rhynchospora plumosa*, *Schizachyrium tenerum*

Note: *Pinckneya bracteata* in drain

22032 [2] Ericaceae *Lyonia lucida* (Lam.) K. Koch
det. R. Carter
1-2 m shrub, common

22033 [2] Cyrillaceae *Cliftonia monophylla* (Lam.) Britt. ex Sarg.
det. R. Carter
4-5 m shrub, common

--seepy ecotone between longleaf pine-wiregrass slope and drain

with *Pinus elliotii*, *Magnolia virginiana*, *Acer rubrum*, *Nyssa biflora*, *Quercus nigra*, *Cyrilla racemiflora*, *Myrica cerifera*, *Viburnum nudum*, *Vaccinium corymbosum*, *Toxicodendron vernix*, *Pinckneya bracteata*, *Ilex glabra*, *Lyonia lucida*, *Clethra alnifolia*, *Gaylussacia frondosa*, *Vitis rotundifolia*, *Smilax laurifolia*, *Rhexia mariana*, *R. alifanus*, *R. virginica*, *Polygala lutea*, *Apios americana*, *Cuscuta*, *Erechtites hieracifolia*, *Eupatorium rotundifolium*, *Xyris*, *Lachnocaulon anceps*, *Cyperus haspan*, *Fuirena breviseta*, *Juncus marginatus*, *J. scirpoides*, *Rhynchospora plumosa*, *Schizachyrium tenerum*

22034 [7] Poaceae *Sporobolus curtissii* (Vasey) Small ex Scribn.
det. R. Carter
locally common, cespitose

22035 [1] Malvaceae *Hibiscus aculeatus* Walter
det. R. Carter
common

22036 [1] Melastomataceae *Rhexia alifanus* Walter
det. R. Carter
common

22037 [1] Onagraceae *Ludwigia maritima* Harper
det. R. Carter
common

22038 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
common

Richard Carter with W. W. Baker

31.96133N/82.65343W

0.6 mi N jct. Hwy GA 19 and Bells Ferry Rd, along E side Hwy GA 20

--sphagnous drain

with *Magnolia virginiana*, *Acer rubrum*, *Gordonia lasianthus*, *Persea palustris*, *Cliftonia monophylla*, *Nyssa biflora*, *Lyonia lucida*, *Ilex glabra*, *Rhexia mariana*, *Woodwardia virginica*

22039 [3] Gentianaceae *Sabatia difformis* (L.) Druce
det. R. Carter
common

22040 [3] Cyperaceae *Rhynchospora capitellata* (Michx.) Vahl???, spikelets immature
det. R. Carter
plants cespitose, common

7/23/2014

Richard Carter with W. W. Baker

U.S.A. Georgia: Grady County

30.81262N/84.12234W

N of Lower Cairo Rd, Beverly Plantation, 0.75 airmile NW of headquarters

--margin of cypress-gum pond transitional to longleaf pine-wiregrass savanna

with *Acer rubrum*, *Persea palustris*, *Quercus virginiana*, *Ilex glabra*, *Lyonia ferruginea*, *Serenoa repens*, *Vaccinium darrowii*, *V. myrsinites*, *Aristida stricta*, *Pteridium aquilinum*, *Solidago stricta*, *Juncus marginatus*, *Seymeria cassioides*, *Rhexia alifanus*, *R. virginica*, *R. mariana*, *Bigelowia nudata*, *Gratiola pilosa*, *Tofieldia racemosa*, *Aletris*, *Eupatorium*, *Trilisa odoratissima*, *Balduina uniflora*, *Polygala lutea*, *Oclemna reticulata*, *Lachnocaulon anceps*, *Sabatia campanulata*, *Xyris caroliniana*, *X. stricta*, *Ilex glabra*

22041 [1] Campanulaceae *Lobelia nuttallii* Schult.
det. R. Carter
common, corolla blue

22042 [3] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

22043 [2] Gentianaceae *Sabatia difformis* (L.) Druce
det. R. Carter
common, corolla white

22044 [1] Gentianaceae *Sabatia campanulata* (L.) Torr.
det. R. Carter
common, corolla pink

22045 [1] Juncaceae *Juncus marginatus* Rostk.
det. R. Carter
common

22046 [3] Cyperaceae *Rhynchospora chapmanii* M.A. Curtis
det. R. Carter
common

22047 [2] Clusiaceae *Hypericum cistifolium* Lam.
det. R. Carter
common, flowers yellow

22048 [2] Loganiaceae *Mitreola sessilifolia* (Gmel.) D. Don
det. R. Carter
common, flowers white

22049 [1] Asteraceae *Balduina uniflora* Nutt.
det. R. Carter
common, heads yellow

22050 [1] Juncaceae *Juncus megacephalus* M.A. Curtis
det. R. Carter
common

22051 [1] Onagraceae *Ludwigia virgata* Michx.
det. R. Carter
common, corolla yellow

22052 [1] Linaceae *Linum sulcatum* Riddell
det. R. Carter
occasional, corolla yellow

22053 [1] Fabaceae *Chamaecrista fasciculata* (Michx.) Greene
det. R. Carter
common, corolla yellow

22054 [2] Cyperaceae *Rhynchospora plumosa* Elliott
det. R. Carter
common, cespitose

22055 [1] Poaceae *Dichanthelium ensifolium* (Baldw. ex Ell.) Gould var. *unciphyllum* (Trin.) Hans. & Wund.
det. R. Carter
common

22056 [2] Poaceae *Paspalum setaceum* Michx. var. *muhlenbergii* (Nash) D.J. Banks
det. R. Carter
common

22057 [1] Fabaceae *Orbexilum psoraloides* (Walter) Vincent
det. R. Carter
occasional, corolla blue

22058 [2] Fabaceae *Crotalaria purshii* DC.
det. R. Carter
occasional

22059 [2] Orchidaceae *Platanthera cristata* (Michx.) Lindl.
det. R. Carter
locally common, corolla yellowish orange

22060 [2] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl
det. R. Carter
common

22061 [2] Poaceae *Ctenium aromaticum* (Walter) Wood
det. R. Carter
common

22062 [1] Xyridaceae *Xyris platylepis* Chapm.
det. R. Carter
common

22063 [2] Eriocaulaceae *Eriocaulon decangulare* L.
det. R. Carter
common, heads white

22064 [1] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl
det. R. Carter
common

22065 [1] Cyperaceae *Rhynchospora torreyana* Gray
det. R. Carter
occasional

22066 [2] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl
det. R. Carter
common

22067 [1] Cyperaceae *Rhynchospora debilis* Gale
det. R. Carter
common, cespitose

22068 [1] Cyperaceae *Eleocharis baldwinii* (Torr.) Chap.
det. R. Carter
common

--longleaf pine-wiregrass savanna
with *Pinus palustris*, *Aristida stricta*, *Sporobolus floridanus*, *Quercus pumila*, *Pityopsis graminifolia*,
Asimina longifolia, *Xyris caroliniana*, *Rhexia alifanus*, *Pteridium aquilinum*, *Aster adnatus*, *A. tortifolius*,
Gaylussacia frondosa, *Rubus cuneifolius*

Note: *Gopherus* and *Geomys* burrows observed; Bachman's sparrow heard

22069 [1] Asteraceae *Vernonia angustifolia* Michx. var. *angustifolia*
det. R. Carter
common, heads purple

22070 [1] Apiaceae *Eryngium yuccifolium* Michx.

det. R. Carter
occasional

22071 [1] Asteraceae *Elephantopus nudatus* Gray
det. R. Carter
common, corolla purple

22072 [1] Fabaceae *Pedimelum canescens* (Michx.) Rydb. [*Psoralea canescens* Michx.]
det. R. Carter
occasional

--cypress-gum pond

with *Taxodium ascendens*, *Nyssa biflora*, *Ilex myrtifolia*, *Persea palustris*, *Lyonia lucida*, *Eubotrys racemosa*, *Itea virginica*, *Cyrilla racemiflora*, *Myrica cerifera*, *Carex striata*, *Xyris fimbriata*, *Woodwardia virginica*, *Sphagnum*

22073 [1] Xyridaceae *Xyris fimbriata* Elliott
det. R. Carter
common

22074 [2] Lauraceae *Persea palustris* (Raf.) Sarg.
det. R. Carter
10 m tree, common

22075 [1] Cyrillaceae *Cyrilla racemiflora* L.
det. R. Carter
8 m tree, common

22076 [3] Ericaceae *Eubotrys racemosa* (L.) Nutt. [*Leucothoe racemosa* (L.) Gray]
det. R. Carter
shrub, 3-4 m tall, common

22077 [1] Iteaceae *Itea virginica* L.
det. R. Carter
2 m shrub, common

22078 [1] Aquifoliaceae *Ilex myrtifolia* Walter
det. R. Carter
6 m tree, common

22079 [3] Ericaceae *Lyonia lucida* (Lam.) Koch
det. R. Carter
shrub, 4-5 m tall!, common

22080 [2] Cyperaceae *Rhynchospora cephalantha* Gray
det. R. Carter
common

22081 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

22082 [1] Cyperaceae *Rhynchospora inundata* (Oakes) Fern.
det. R. Carter
common

22083 [1] Cyperaceae *Carex striata* Michx.
det. R. Carter
locally abundant

22084 [1] Asclepiadaceae *Asclepias cinerea* Walter
det. R. Carter
occasional

Richard Carter with W. W. Baker
30.80638N/84.11964W

N of Lower Cairo Rd, Beverly Plantation, 0.41 airmile W of headquarters
--knoll in longleaf pine-wiregrass savanna
with *Pinus palustris*, *Aristida stricta*, *Sassafras albidum*, *Quercus falcata*, *Q. hemisphaerica*, *Vaccinium stamineum*, *V. myrsinites*, *Solidago odora*, *Aster tortifolius*, *Vernonia angustifolia*, *Centrosema virginiana*, *Pteridium aquilinum*

22085 [1] Rubiaceae *Galium pilosum* Ait.
det. R. Carter
plants clambering, common

22086 [1] Fabaceae *Rhynchosia reniformis* DC.
det. R. Carter
plants common, stems erect, corolla yellow

22087 [2] Asteraceae *Verbesina aristata* (Elliott) Heller
det. R. Carter
occasional

22088 [1] Asteraceae *Rudbeckia hirta* L.
det. R. Carter
common, rays yellow, disk black

Richard Carter with W. W. Baker
30.8080N/84.12132W

N of Lower Cairo Rd, Beverly Plantation, 0.54 airmile WNW of headquarters
--degraded flatwoods drain, planted in slash pine, heavily disturbed

22089 [1] Malvaceae *Hibiscus aculeatus* Walter
det. R. Carter
common, corolla white with dark purple eye

22090 [1] Lamiaceae *Pycnanthemum flexuosum* (Walter) Britt. et al.
det. R. Carter
common

22091 [1] Lamiaceae *Pycnanthemum flexuosum* (Walter) Britt. et al.
det. R. Carter
common

22092 [1] Fabaceae *Galactia regularis* (L.) Britt. et al.
det. R. Carter
twining vine, common, corolla blue

22093 [2] Asteraceae *Eupatorium album* L.
det. R. Carter
common

22094 [1] Cyperaceae *Cyperus strigosus* L.
det. R. Carter
common

22095 [2] Clusiaceae *Hypericum galioides* Lam.
det. R. Carter
locally common, flowers yellow

22096 [1] Loganiaceae *Cuphea carthagensis* (Jacq.) Macbr.
det. R. Carter
common, corolla purple

22097 [1] Euphorbiaceae *Ditrysinia fruticosa* (Bartr.) Gov. & Frod. [*Sebastiania fruticosa* (Bartram) Fern.]
det. R. Carter
shrub, 2 m tall, common

Richard Carter with W. W. Baker

30.81817N/84.12733W

N of Lower Cairo Rd, Beverly Plantation, 1.23 airmiles NW of headquarters

--mesic slope, riparian woods, river terrace

with *Magnolia grandiflora*, *Quercus virginiana*, *Q. hemisphaerica*, *Q. nigra*, *Fagus grandifolia*, *Pinus glabra*, *Carya glabra*, *Osmanthus americana*, *Amelanchier arborea*, *Serenoa repens*, *Ditrysinia fruticosa*, *Callicarpa americana*

Note: *Epidendrum conopseum* on 6-8 trees, all *Magnolia grandiflora*, but one *Quercus hemisphaerica*.

22098 [1] Orchidaceae *Epidendrum conopseum* Aiton [*Epidendrum magnoliae* Muhl., nom. illeg.]
det. R. Carter
epiphytic on bullbay magnolia

22099 [2] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
locally common, corolla blue

22100 [1] Ericaceae *Vaccinium arboreum* Marsh.
det. R. Carter
small understory tree, common

22101 [5] Arecaceae *Serenoa repens* (Bartram) Small
det. R. Carter
common

22102 [2] Hypoxidaceae *Hypoxis curtissii* Rose
det. R. Carter
common

7/24/2014

Richard Carter with F. Snow

U.S.A. Georgia: Atkinson County

31.24103N/83.02739W

6.96 airmiles S (bearing 170.65°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, Alapaha River Ranch

--disturbed seepage slope along ecotone between degraded sandridge and drain

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22103 [1] Melastomataceae *Rhexia petiolata* Walter
det. R. Carter
locally common

--degraded sandridge

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22104 [1] Poaceae *Dichantherium aciculare* (Desv. ex Poir.) Gould & Clark
det. R. Carter
common

22105 [1] Poaceae *Dichantherium sphaerocarpon* (Elliott) Gould
det. R. Carter
locally common

22106 [1] Clusiaceae *Hypericum microsepalum* (Torr. & Gray) Gray & Watson
det. R. Carter
locally common

22107 [4] Fabaceae *Indigofera caroliniana* Mill.
det. R. Carter
occasional

22108 [1] Fabaceae *Centrosema virginiana* (L.) Benth.
det. R. Carter
occasional

22109 [1] Commelinaceae *Commelina erecta* L.
det. R. Carter
occasional

22110 [1] Rubiaceae *Galium pilosum* Aiton
det. R. Carter
common

22111 [1] Euphorbiaceae *Croton argyranthemus* Michx.
det. R. Carter
occasional

22112 [2] Cistaceae *Lechea deckertii* Small
det. R. Carter
occasional

22113 [1] Euphorbiaceae *Croton michauxii* Webster [*Crotonopsis linearis* Michx.]
det. R. Carter
common

--disturbed seepage slope along ecotone between degraded sandridge and drain

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22114 [2] Xyridaceae *Xyris platylepis* Chapm.

det. R. Carter

occasional

--degraded sandridge

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22116 [2] Poaceae *Paspalum setaceum* Michx. var. *villosissimum* (Nash) Banks

det. R. Carter

common

--disturbed seepage slope along ecotone between degraded sandridge and drain

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22117 [1] Juncaceae *Juncus scirpoides* Lam.

det. R. Carter

common

--degraded sandridge

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22118 [1] Cyperaceae *Scleria triglomerata* Michx.

det. R. Carter

occasional

22119 [3] Cyperaceae *Cyperus diminutus* R. Carter, sp. nov.

det. R. Carter

occasional

22120 [1] Fabaceae *Clitoria mariana* L.

det. R. Carter

occasional

22123 [1] Rosaceae *Rubus cuneifolius* Pursh

det. R. Carter

common

--disturbed seepage slope along ecotone between degraded sandridge and drain

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22124 [1] Onagraceae *Ludwigia maritima* Harper

det. R. Carter

occasional

--edge of drain

with *Gordonia lasianthus*, *Cyrilla racemiflora*, *Cliftonia monophylla*, *Persea palustris*, *Myrica cerifera*, *Leucothoe racemosa*, *Lyonia lucida*

22125 [1] Cyrillaceae *Cliftonia monophylla* (Lam.) Sarg.

det. R. Carter

4-5 m shrub, locally common

22126 [1] Clethraceae *Clethra alnifolia* L.

det. R. Carter

1.5-2 m shrub, locally common

22127 [2] Ericaceae *Lyonia fruticosa* (Michx.) G.S. Torr.

det. R. Carter

3 m shrub, occasional

--degraded sandridge

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22128 [3] Annonaceae *Asimina incana* (Bartr.) Exell

det. R. Carter

occasional

22129 [3] Cyperaceae *Rhynchospora plumosa* Elliott

det. R. Carter

occasional

Richard Carter with F. Snow

31.23786N/83.02742W

7.18 airmiles S (bearing 170.95°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, Alapaha River Ranch

--degraded sandridge

with *Pinus palustris*, *P. taeda*, *P. clausa*, *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Q. virginiana*, *Rhus copallina*, *Lyonia mariana*, *Licania michauxii*, *Aristida stricta*, *Pteridium aquilinum*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22130 [1] Cyperaceae *Cyperus nashii* Britt. ex Small

det. R. Carter

infrequent

Richard Carter with F. Snow

31.23233N/83.02465W

7.58 airmiles S (bearing 170.18°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, Alapaha River Ranch

--head of creek

with *Nyssa biflora*, *Acer rubrum*, *Cliftonia monophylla*, *Myrica cerifera*, *Ilex myrtifolia*, *I. coriacea*, *Rhododendron viscosum*, *Smilax laurifolia*

22131 [1] Xyridaceae *Xyris jupicai* L.C. Rich.

det. R. Carter

locally common

22132 [2] Xyridaceae *Xyris stricta* Chapm.

det. R. Carter

locally common

22133 [1] Cyperaceae *Rhynchospora corniculata* (Lam.) Gray
det. R. Carter
occasional

22134 [1] Haemodoraceae *Lachnanthes caroliana* (Lam.) Dandy
det. R. Carter
occasional to locally common

22135 [1] Cyperaceae *Rhynchospora cephalantha* Gray
det. R. Carter
common

22136 [1] Xyridaceae *Xyris jupicai* L.C. Rich.
det. R. Carter
locally common

22137 [1] Xyridaceae *Xyris difformis* Chapm.
det. R. Carter
locally common

22138 [1] Xyridaceae *Xyris jupicai* L.C. Rich.
det. R. Carter
locally common

22139 [1] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl
det. R. Carter
common

22140 [2] Cyperaceae *Rhynchospora fascicularis* (Michx.) Vahl
det. R. Carter
common

22141 [2] Cyperaceae *Rhynchospora inexpansa* (Michx.) Vahl
det. R. Carter
common

22142 [3] Eriocaulaceae *Syngonanthus flavidulus* (Michx.) Ruhl.
det. R. Carter
locally common, cespitose

22143 [1] Eriocaulaceae *Lachnocaulon anceps* (Walt.) Morong
det. R. Carter
locally common, cespitose

22144 [2] Juncaceae *Juncus repens* Michx.
det. R. Carter
locally common

22145 [2] Aquifoliaceae *Ilex coriacea* (Pursh) Chapm.
det. R. Carter
locally common

22146 [3] Aquifoliaceae *Ilex myrtifolia* Walter
det. R. Carter

occasional

22147 [1] Scrophulariaceae *Gratiola hispida* (Benth. ex Lindl.) Pollard [*Sophranthe hispida* Benth. ex Lindl.]

det. R. Carter
occasional

22148 [1] Scrophulariaceae *Gratiola pilosa* Michx.

det. R. Carter
occasional

Richard Carter with F. Snow

31.23051N/83.03712W

7.61 airmiles S (bearing 175.80°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, Alapaha River Ranch

--head of creek

with *Nyssa biflora*, *Acer rubrum*, *Cliftonia monophylla*, *Myrica cerifera*, *Ilex myrtifolia*, *I. coriacea*, *Rhododendron viscosum*, *Smilax laurifolia*

22149 [1] Ericaceae *Lyonia ligustrina* (L.) DC.

det. R. Carter
occasional

22149a [1] Ericaceae *Eubotrys racemosa* (L.) Nutt. [*Leucothoe racemosa* (L.) Gray]

det. R. Carter
locally common

22150 [1] Polygalaceae *Polygala nuttallii* Torr. & Gray

det. R. Carter
occasional

22151 [2] Cyrillaceae *Cyrilla racemiflora* L.

det. R. Carter
4 m shrub, common

22152 [2] Aquifoliaceae *Ilex glabra* (L.) Gray

det. R. Carter
1.5 m shrub, common

22153 [1] Rubiaceae *Diodia virginiana* L.

det. R. Carter
common

22154 [1] Ericaceae *Lyonia lucida* (Lam.) K. Koch

det. R. Carter
1.5 m shrub, common

22155 [1] Poaceae *Dichanthelium aciculare* (Desv. ex Poir.) Gould & Clark

det. R. Carter
occasional

22156 [1] Juncaceae *Juncus validus* Cov.

det. R. Carter
occasional

22157 [1] Cistaceae *Lechea deckertii* Small

det. R. Carter
occasional

22158 [2] Clusiaceae *Hypericum galioides* Lam.
det. R. Carter
1.5 m shrub, locally common

Richard Carter with F. Snow
31.22513N/83.04829W

7.96 airmiles S (bearing 180.73°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, near end of McCranie East Rd, E of Alapaha River, vic. Round Lake and Half Moon Lake, Alapaha River Ranch
--overflow channel between Half Moon Lake and river
with *Nyssa ogeche*, *N. biflora*, *Taxodium distichum*, *Quercus laurifolia*, *Acer rubrum*

22159 [1] Asteraceae *Erechtites hieracioides* (L.) Raf.
det. R. Carter
occasional

22160 [1] Cyperaceae *Cyperus pseudovegetus* Steud.
det. R. Carter
locally common

22161 [1] Campanulaceae *Lobelia flaccidifolia* Small
det. R. Carter
infrequent, corolla blue

22162 [2] Poaceae *Paspalum boscianum* Flügge
det. R. Carter
locally common

22163 [2] Cyperaceae *Carex glaucescens* Elliott
det. R. Carter
occasional

22164 [1] Cyperaceae *Scirpus cyperinus* (L.) Kunth
det. R. Carter
locally common

Richard Carter with F. Snow
31.22864N/83.01985W

7.88 airmiles S (bearing 168.47°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, 0.6 mi SW jct. Hill Rd and Springhead Church Rd, along Hill Rd, Alapaha River Ranch
--degraded drain, disturbed sandy soil
with *Panicum hemitomon*

22165 [2] Onagraceae *Ludwigia suffruticosa* Walter
det. R. Carter
locally common

Richard Carter with F. Snow
31.23074N/83.01646W

7.78 airmiles S (bearing 166.82°) of Willacoochee jct. Hwy GA 135 and Hwy US 82, W of Springhead Church Rd, E of Alapaha River, 0.3 mi SW jct. Hill Rd and Springhead Church Rd, along Hill Rd, Alapaha River Ranch

--degraded sandridge, edge of pine plantation
with *Quercus laevis*, *Q. margarettae*, *Q. incana*, *Diospyros virginiana*, *Vaccinium arboreum*, *Rhus copallina*, *Asimina incana*, *Serenoa repens*, *Eriogonum tomentosum*, *Eupatorium compositifolium*

22166 [1] Fabaceae *Chamaecrista fasciculata* (Michx.) Greene
det. R. Carter
common

22167 [1] Euphorbiaceae *Euphorbia discoidalis* Chapm.
det. R. Carter
occasional

22168 [2] Asteraceae *Rudbeckia hirta* L.
det. R. Carter
common

22169 [1] Poaceae *Dichanthelium acuminatum* (Sw.) Gould & Clark subsp. *acuminatum*
det. R. Carter
common

22170 [1] Ericaceae *Vaccinium stamineum* L.
det. R. Carter
low shrub, common

22171 [1] Polypremaeae *Polypremum procumbens* L.
det. R. Carter
common

22172 [1] Clusiaceae *Hypericum gentianoides* (L.) Britt. et al.
det. R. Carter
common

22173 [1] Poaceae *Paspalum setaceum* Michx. var. *villosissimum* (Nash) Banks
det. R. Carter
common

Richard Carter with F. Snow

31.2169N/83.01578W

0.6 mi NW jct. Live Oak Church Rd and Springhead Church Rd, along E side Springhead Church Rd
--cypress-gum pond

with *Nyssa biflora*, *Taxodium ascendens*, *Ilex myrtifolia*, *Clethra alnifolia*, *Hypericum fasciculatum*,
Woodwardia virginica, *Panicum hemitomon*, *Amphicarpum muhlenbergianum*

Note: extensive clone of *Amphicarpum muhlenbergianum* observed along heavily logged pond margin near road.

22174 [1] Poaceae *Dichanthelium erectifolium* (Nash) Gould & Clark
det. R. Carter
common

22175 [3] Nyssaceae *Nyssa biflora* Walter
det. R. Carter
common

22176 [2] Clethraceae *Clethra alnifolia* L.
det. R. Carter
common

22177 [2] Ericaceae *Pieris phyllyreifolia* (Hook.) DC.

det. R. Carter

rare woody vine with its stem climbing between inner and outer bark of pond cypress

22178 [2] Ericaceae *Eubotrys racemosa* (L.) Nutt. [*Leucothoe racemosa* (L.) Gray]

det. R. Carter

3 m shrub, common

22179 [3] Droseraceae *Drosera capillaris* Poir.

det. R. Carter

locally abundant on exsiccated pond bottom

Richard Carter with F. Snow

31.20026N/82.99233W

Featherbed Bay, 1.75 mi NW jct. Hwy GA 64 and Springhead Church Rd, along NE side Springhead Church Rd

--bayswamp

with *Nyssa biflora*, *Magnolia virginiana*, *Gordonia lasianthus*, *Acer rubrum*, *Cyrilla racemiflora*, *Cliftonia monophylla*, *Myrica cerifera*, *Salix nigra*, *Cephalanthus occidentalis*, *Smilax laurifolia*

22180 [3] Rubiaceae *Cephalanthus occidentalis* L.

det. R. Carter

4 m shrub, common, flowers white

22181 [2] Iteaceae *Itea virginica* L.

det. R. Carter

2 m shrub, common

22182 [1] Ericaceae *Lyonia lucida* (Lam.) K. Koch

det. R. Carter

2 m shrub, common

22183 [3] Magnoliaceae *Magnolia virginiana* L.

det. R. Carter

10 m tree, common

22184 [3] Cyperaceae *Carex glaucescens* Elliott

det. R. Carter

occasional

8/13/2014

Richard Carter with F. Snow

U.S.A. Georgia: Jeff Davis County

31.79147N/82.81316W

0.87 airmile NW (312.50°) Piney Grove Baptist Church, Flat Tub Wildlife Management Area, W of Rocky Hammock Landing Rd, N of Piney Grove Church Rd

--seep over sandstone outcrop

with *Pinus taeda*, *Nyssa biflora*, *Acer rubrum*, *Liquidambar styraciflua*, *Vaccinium stamineum*, *Ilex glabra*, *Rhexia mariana*, *Rhynchospora inexpansa*

22187 [1] Poaceae *Dichanthelium aciculare* Desv. ex Poir. subsp. *neuranthum* (Griseb.) Freckmann &

Lelong

det. R. Carter

locally common

22188 [1] Polygalaceae *Polygala chapmanii* Torr. & Gray
det. R. Carter
occasional

22189 [1] Cyperaceae *Rhynchospora globularis* (Chapm.) Small var. *globularis*
det. R. Carter
occasional

22190 [2] Cyperaceae *Rhynchospora plumosa* Elliott
det. R. Carter
occasional

22191 [1] Melastomataceae *Rhexia mariana* L.
det. R. Carter
locally common

22192 [1] Melastomataceae *Rhexia mariana* L.
det. R. Carter
locally common

22193 [1] Asteraceae *Balduina uniflora* Nutt.
det. R. Carter
occasional

22194 [2] Poaceae *Eragrostis virginica* (Zucc.) Steud.
det. R. Carter
common

22195 [1] Cyperaceae *Scleria triglomerata* Michx.
det. R. Carter
common

--sandy bank of intermittent branch
with *Pinus taeda*, *Nyssa biflora*, *Acer rubrum*, *Liquidambar styraciflua*, *Vaccinium stamineum*, *Ilex glabra*,
Rhexia mariana, *Rhynchospora inexpansa*

22196 [2] Xyridaceae *Xyris platylepis* Chapm.
det. R. Carter
common

22197 [1] Poaceae *Chasmanthium laxum* (L.) H.A. Yates var. *sessiliflorum* (Poir.) Wipff & Jones
det. R. Carter
common

22198 [2] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

22199 [1] Cyperaceae *Rhynchospora cephalantha* A. Gray
det. R. Carter
common

22200 [1] Cyperaceae *Rhynchospora glomerata* (L.) Vahl
det. R. Carter
common

22201 [2] Cyperaceae *Carex glaucescens* Elliott
det. R. Carter
common

--seep over sandstone outcrop
with *Pinus taeda*, *Nyssa biflora*, *Acer rubrum*, *Liquidambar styraciflua*, *Vaccinium stamineum*, *Ilex glabra*,
Rhexia mariana, *Rhynchospora inexpansa*

22202 [1] Xyridaceae *Xyris elliottii* Chapm.
det. R. Carter
common

22203 [1] Asteraceae *Eupatorium album* L.
det. R. Carter
common

22204 [1] Asteraceae *Marshallia tenuifolia* Raf.
det. R. Carter
occasional

22205 [3] Cyperaceae *Fuirena squarrosa* Michx.
det. R. Carter
common

22206 [1] Scrophulariaceae *Gratiola pilosa* Michx.
det. R. Carter
occasional

22207 [1] Polygalaceae *Polygala chapmanii* Torr. & Gray
det. R. Carter
occasional

22208 [1] Clusiaceae *Hypericum setosum* L.
det. R. Carter
occasional

22209 [1] Xyridaceae *Xyris caroliniana* Walter
det. R. Carter
common

22210 [1] Eriocaulaceae *Eriocaulon*
det. R. Carter
common, cespitose
Note: Must work more with this specimen!

22211 [2] Poaceae *Schizachyrium tenerum* Nees
det. R. Carter
common

22212 [1] Clusiaceae *Hypericum gentianoides* (L.) Britt. et al.
det. R. Carter
common

22213 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter

common

22214 [1] Poaceae *Aristida longispica* Poir. var. *geniculata* (Raf.) Fern.
det. R. Carter
common

Richard Carter with F. Snow
31.79237N/82.81146W

0.84 airmile NW (320.23°) Piney Grove Baptist Church, Flat Tub Wildlife Management Area, W of Rocky Hammock Landing Rd, N of Piney Grove Church Rd
--disturbed sandy upland and seep
with *Pinus taeda*, *Nyssa biflora*, *Acer rubrum*, *Liquidambar styraciflua*, *Vaccinium stamineum*, *Ilex glabra*, *Rhexia mariana*, *Rhynchospora inexpansa*

22215 [1] Poaceae *Paspalum floridanum* Michx.
det. R. Carter
occasional

22216 [1] Melastomataceae *Rhexia alifanus* Walter
det. R. Carter
occasional

22217 [1] Poaceae *Steinchisma hians* (Ell.) Nash [*Panicum hians* Elliott]
det. R. Carter
occasional

22218 [1] Poaceae *Steinchisma hians* (Ell.) Nash [*Panicum hians* Elliott]
det. R. Carter
occasional

22219 [1] Poaceae *Urochloa ramosa* (L.) Nguyen [*Panicum ramosum* L.]
det. R. Carter
occasional

Richard Carter with F. Snow
31.79475N/82.80516W

0.83 airmile N (348.07°) Piney Grove Baptist Church, Flat Tub Wildlife Management Area, W of Rocky Hammock Landing Rd, N of Piney Grove Church Rd
--bank of small intermittent branch
with *Quercus nigra*, *Acer rubrum*, *Nyssa biflora*, *Liquidambar styraciflua*, *Lyonia lucida*, *Clethra alnifolia*, *Ilex glabra*, *Morella cerifera*, *M. caroliniensis*, *Cyrilla racemiflora*, *Viburnum nudum*, *Vaccinium elliotii*, *Chasmanthium sessiliflorum*

22220 [3] Cyperaceae *Rhynchospora gracilentia* A. Gray
det. R. Carter
common, cespitose

22221 [1] Cyperaceae *Rhynchospora corniculata* (Lam.) A. Gray
det. R. Carter
common

Richard Carter with F. Snow
31.79566N/82.80663W

0.91 airmile NNW (343.63°) Piney Grove Baptist Church, Flat Tub Wildlife Management Area, W of Rocky Hammock Landing Rd, N of Piney Grove Church Rd
--sandstone outcrop in a longleaf pine-wiregrass matrix

22222 [1] Portulacaceae *Phemeranthus mengesii* (Wolf) Kiger [*Talinum mengesii* Wolf]
det. R. Carter
common

22223 [1] Euphorbiaceae *Croton willdenowii* Webster [*Crotonopsis elliptica* Willd.]
det. R. Carter
common

22224 [1] Poaceae *Tridens ambiguus* (Ell.) Schult.
det. R. Carter
infrequent

22225 [2] Poaceae *Andropogon gerardii* Vittm.
det. R. Carter
occasional

22226 [1] Polygonaceae *Eriogonum tomentosum* Michx.
det. R. Carter
occasional

Richard Carter with F. Snow
31.81497N/82.82304W

Flat Tub Wildlife Management Area, Rocky Hammock Landing, along S bank of Ocmulgee River near
end of Rocky Hammock Landing Rd
--riparian woods

22227 [1] Scrophulariaceae *Lindernia dubia* (L.) Pennell var. *anagallidea* (Michx.) Cooperr.
det. R. Carter
common in sandy swale

22228 [2] Fagaceae *Quercus lyrata* Walter
det. R. Carter
large tree, occasional

22229 [1] Asteraceae *Conoclinium coelestinum* (L.) DC. [*Eupatorium coelestinum* L.]
det. R. Carter
common, heads blue

22230 [1] Poaceae *Chasmanthium latifolium* (Michx.) H.A. Yates
det. R. Carter
common, panicles drooping

22231 [1] Fabaceae *Galactia regularis* (L.) Britt. et al.
det. R. Carter
occasional

8/29/2014

Richard Carter with W. W. Baker
U.S.A. Georgia: Colquitt County
31.3170N/83.70817W

3.46 airmiles NNW (bearing 338.51°) Norman Park jct. Hwy US 319 and Norman Park-Ellenton Rd; Victor
Beadle property

--sandstone outcrop surrounded by longleaf pine-wiregrass savanna
with *Pinus palustris*, *Quercus marilandica*, *Q. virginiana*, *Nyssa*, *Aristida stricta*, *Schizachyrium tenerum*,
Andropogon gerardii

22232 [1] Clusiaceae *Hypericum virgatum* Lam.
det. R. Carter
occasional

22233 [1] Poaceae *Digitaria ciliaris* (Retz.) Koeler
det. R. Carter
locally common

22234 [1] Cyperaceae *Rhynchospora harveyi* Boott var. *culixa* (Gale) Kral
det. R. Carter
occasional

22235 [1] Asteraceae *Hieracium gronovii* L.
det. R. Carter
occasional

22236 [1] Poaceae *Muhlenbergia expansa* (Poir.) Trin.
det. R. Carter
common

22237 [1] Poaceae *Sporobolus floridanus* Chapm.
det. R. Carter
common

22238 [1] Xyridaceae *Xyris ambigua* Beyr. ex Kunth
det. R. Carter
common

22239 [1] Xyridaceae *Xyris platylepis* Chapm.
det. R. Carter
common

22240 [1] Asteraceae *Helianthus floridanus* A. Gray ex Chapm.
det. R. Carter
common

22241 [1] Euphorbiaceae *Euphorbia discoidalis* Chapm.
det. R. Carter
occasional

22242 [1] Asteraceae *Cirsium virginianum* (L.) Michx.
det. R. Carter
occasional

Richard Carter with W. W. Baker
31.3173N/83.71011W

3.53 airmiles NNW (bearing 336.98°) Norman Park jct. Hwy US 319 and Norman Park-Ellenton Rd; Victor Beadle property
--sandstone outcrop surrounded by longleaf pine-wiregrass savanna
with *Pinus palustris*, *Quercus marilandica*, *Q. virginiana*, *Nyssa*, *Aristida stricta*, *Schizachyrium tenerum*, *Andropogon gerardii*

22243 [3] Asteraceae *Eupatorium hyssopifolium* L.
det. R. Carter
common

22244 [1] Clusiaceae *Hypericum suffruticosum* Adams & Robson
det. R. Carter
occasional

22245 [1] Poaceae *Dichantheium strigosum* (Muhl. ex Ell.) Freckm. var. *leucoblepharis* (Trin.) Freckm.
[*Panicum ciliatum* Elliott]
det. R. Carter
locally common

22246 [1] Poaceae *Dichantheium aciculare* (Desv. ex Poir.) Gould & C.A. Clark subsp. *aciculare*
det. R. Carter
common

Richard Carter with W. W. Baker

U.S.A. Georgia: Worth County

31.32151N/83.72309W

4.14 airmiles NW (bearing 328.73°) Norman Park jct. Hwy US 319 and Norman Park-Ellenton Rd; Victor Beadle property

--seepage slope pitcher plant bog along baycreek
with *Sarracenia flava*, *S. minor*, *Lilium catesbaei*

22247 [1] Cyperaceae *Rhynchospora compressa* Carey ex Chapm.
det. R. Carter
common

Richard Carter with W. W. Baker

U.S.A. Georgia: Colquitt County

31.31728N/83.72593W

3.99 airmiles NW (bearing 324.50°) Norman Park jct. Hwy US 319 and Norman Park-Ellenton Rd; Victor Beadle property

--sandstone outcrop surrounded by longleaf pine-wiregrass savanna
with *Pinus palustris*, *Quercus marilandica*, *Q. virginiana*, *Nyssa*, *Aristida stricta*, *Schizachyrium tenerum*, *Andropogon gerardii*

22248 [1] Scrophulariaceae *Lindernia monticola* Nutt.
det. R. Carter
locally common

22249 [1] Xyridaceae *Xyris jupicai* L.C. Rich.
det. R. Carter
common

22250 [1] Xyridaceae *Xyris stricta* Chapm.
det. R. Carter
common

22251 [1] Xyridaceae *Xyris difformis* Chapm. var. *curtissii* (Malme) Kral
det. R. Carter
common

22252 [1] Cyperaceae *Rhynchospora debilis* Gale
det. R. Carter
locally common

22253 [1] Poaceae *Dichantheium leucothrix* (Nash) Freckm.

det. R. Carter
locally common

22254 [1] Loganiaceae *Mitreola sessilifolia* (Gmel.) G. Don
det. R. Carter
common

22255 [2] Scrophulariaceae *Gratiola pilosa* Michx.
det. R. Carter
occasional

22256 [1] Polygalaceae *Polygala ramosa* Elliott
det. R. Carter
common

22257 [1] Euphorbiaceae *Croton willdenowii* Webster [*Crotonopsis elliptica* Willd.]
det. R. Carter
common

Appendix B. Maps of major areas surveyed. Maps show locations and approximate boundaries of sites surveyed for the presence of *Schwalbea americana*.

- Figure 1. Alapaha River Ranch south of Willacoochee, along west side of Springhead Church Road, between Springhead Church Road and Alapaha River, Atkinson County, Georgia. Selected GPS points shown within survey area.
- Figure 2. Beverly Plantation west of Thomasville, along north side of Lower Cairo Road, Grady County, Georgia. Selected GPS points shown within survey area.
- Figure 3. Broxton Rocks Nature Preserve, southern portion including Rock House Falls, Coffee County, Georgia. Selected GPS points shown within survey area.
- Figure 4. Broxton Rocks Nature Preserve, northeastern portion including Corbett Tract, Coffee County, Georgia. Selected GPS points shown within survey area.
- Figure 5. Broxton Rocks Nature Preserve, Ricketson Tract, Coffee County, Georgia. Selected GPS points shown within survey area.
- Figure 6. Elsoma Plantation south of Thomasville, Thomas County, Georgia, selected GPS points shown in survey area.
- Figure 7. Faceville area north, along Davis Lane, Decatur County, Georgia. Selected GPS points shown within survey area.
- Figure 8. Flat Tub Wildlife Management Area, north of Hwy. GA 107, Jeff Davis County, Georgia. Selected GPS points shown within survey area.
- Figure 9. The Hill, southwest of Moultrie, north of Lower Meigs Road, west of Tree Farm Road, Colquitt County, Georgia. Selected GPS points shown within survey area.
- Figure 10. Kinderlou Plantation west of Valdosta, south of Hwy. US 84, Lowndes County, Georgia. Selected GPS points shown within survey area.
- Figure 11. Kings Bay Submarine Base, Etowah Park, Camden County, Georgia. Selected GPS points shown within survey area.
- Figure 12. Longpine Plantation south of Thomasville, Thomas County, Georgia, selected GPS points shown in survey area.
- Figure 13. Mayhaw WMA, northwest of Colquitt, north of Griggs Lucille Road, east of Springhead Road, Miller County, Georgia. Selected GPS points shown within survey area.
- Figure 14. Morrison Pines southwest of Moultrie along south side of Lower Meigs Road, Colquitt County, Georgia. Selected GPS points shown within survey area.
- Figure 15. Riverbend Plantation along Clyattville and Nankin roads, Brooks County, Georgia. Selected GPS points shown within survey area.
- Figure 16. Silver Lake Wildlife Management Area southwest of Bainbridge, Decatur County, Georgia, survey areas, including "Hog Farm."
- Figure 17. Southern Woods Plantation south of Sylvester, Worth County, Georgia, selected GPS point shown in survey area.
- Figure 18. Stanback Place, northeast of Pulaski, Bulloch County, Georgia. Selected GPS points shown within survey area.
- Figure 19. Reese Thompson Place west of Jordan Junction, Wheeler County, Georgia. Selected GPS points shown within survey area.
- Figure 20. Weatherbee Place west of Gravel Hill Road, vic. Gravel Hill Church, Dougherty County, Georgia. Selected GPS points shown within survey area.
- Figure 21. Winecup Tract along Hwy. GA 133, southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.
- Figure 22. Wiregrass Plantation southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.
- Figure 23. Detail of Wiregrass Plantation southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.

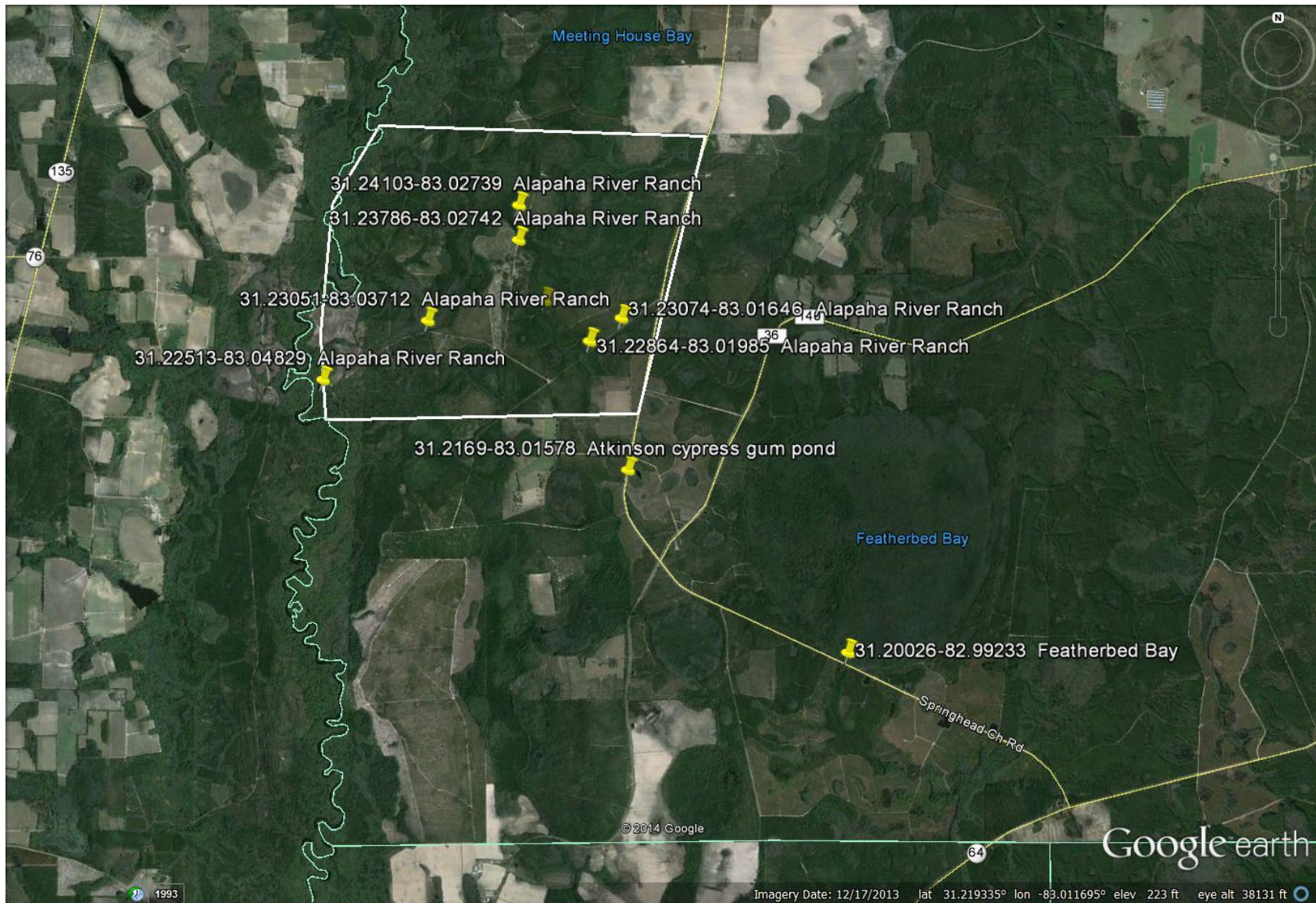


Figure 1. Alapaha River Ranch south of Willacoochee, along west side of Springhead Church Road, between Springhead Church Road and Alapaha River, Atkinson County, Georgia. Selected GPS points shown within survey area.

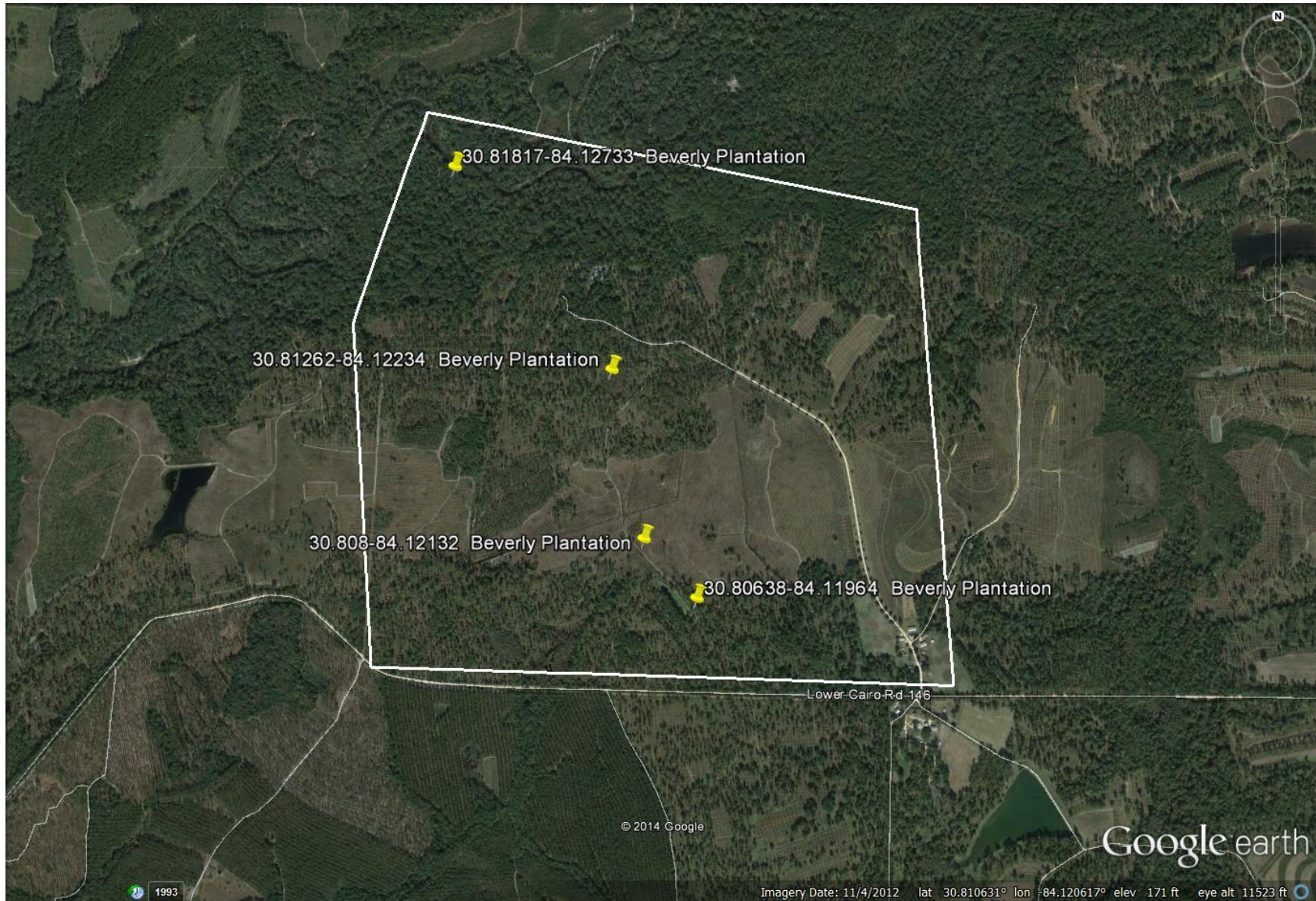


Figure 2. Beverly Plantation west of Thomasville, along north side of Lower Cairo Road, Grady County, Georgia. Selected GPS points shown within survey area.

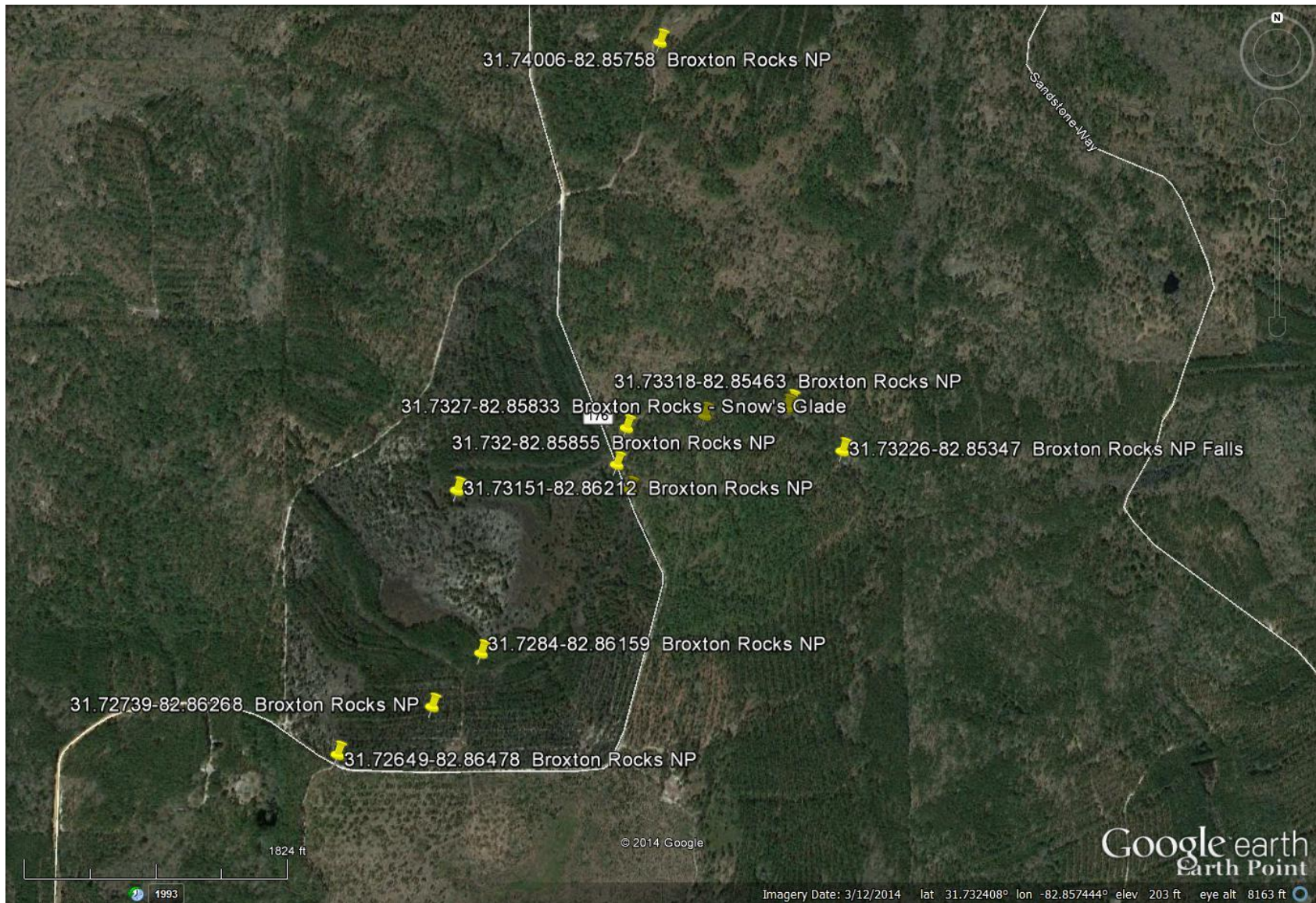


Figure 3. Broxton Rocks Nature Preserve, southern portion including Rock House Falls, Coffee County, Georgia. Selected GPS points shown within survey area.

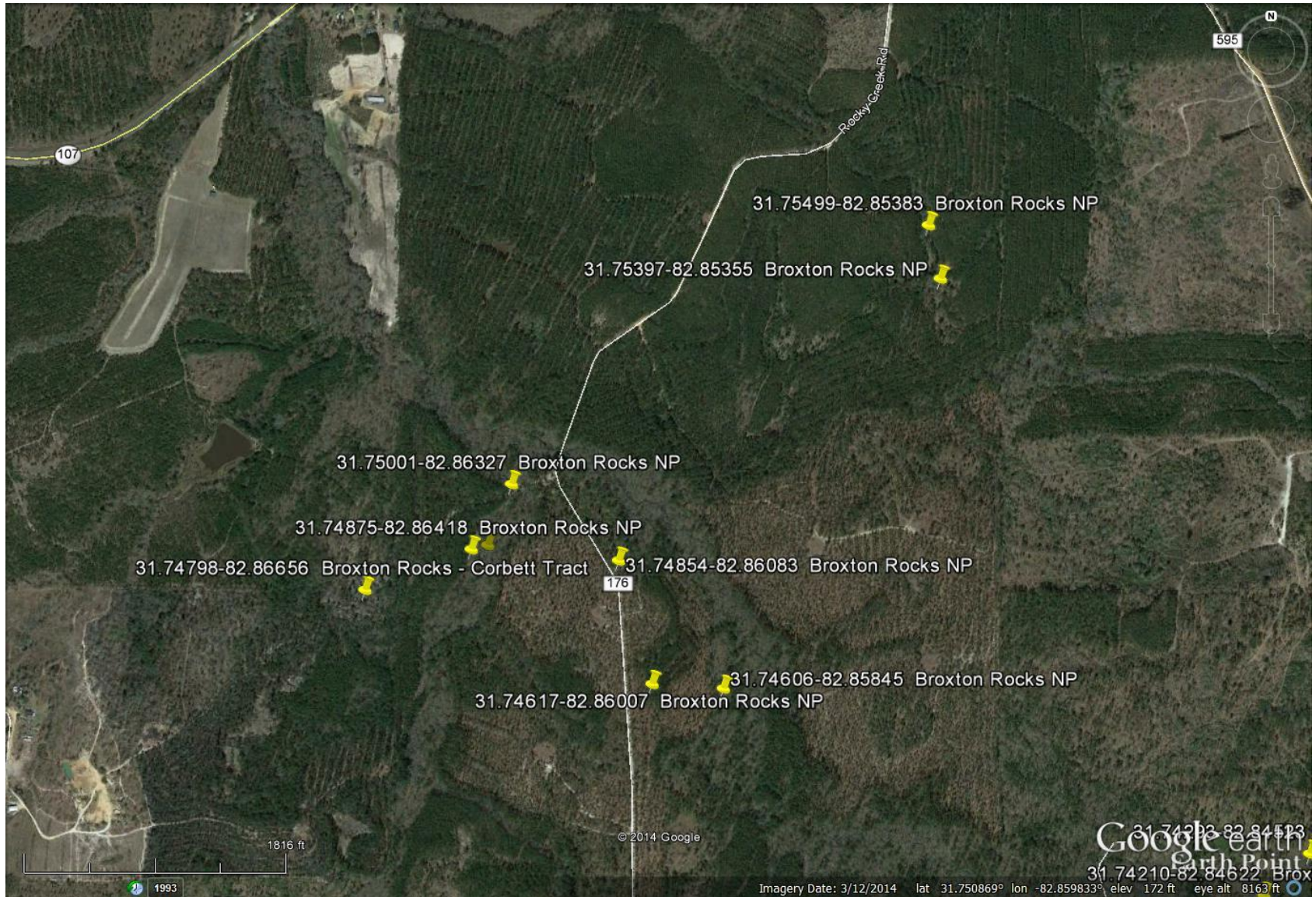


Figure 4. Broxton Rocks Nature Preserve, northeastern portion including Corbett Tract, Coffee County, Georgia. Selected GPS points shown within survey area.

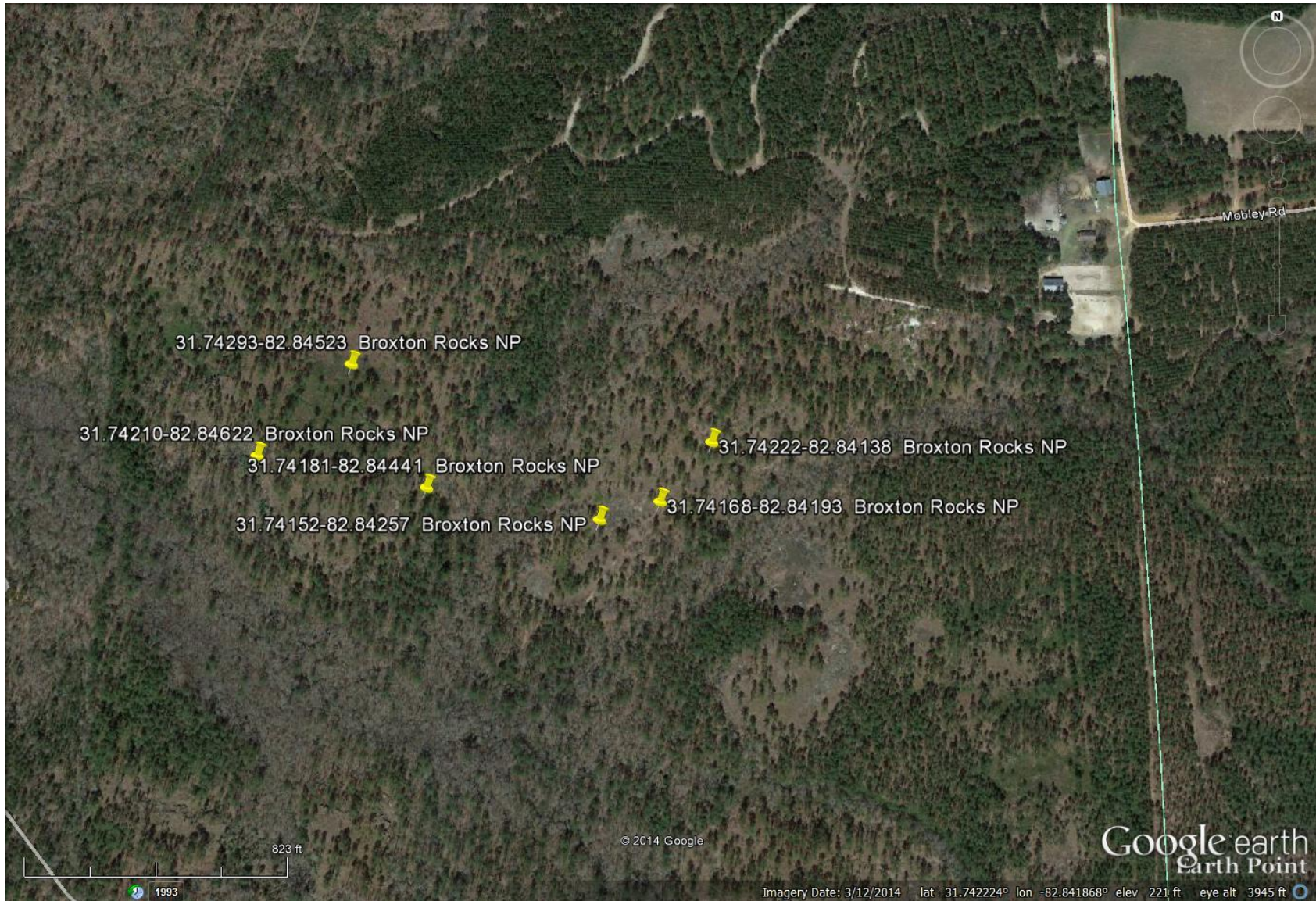


Figure 5. Broxton Rocks Nature Preserve, Ricketson Tract, Coffee County, Georgia. Selected GPS points shown within survey area.

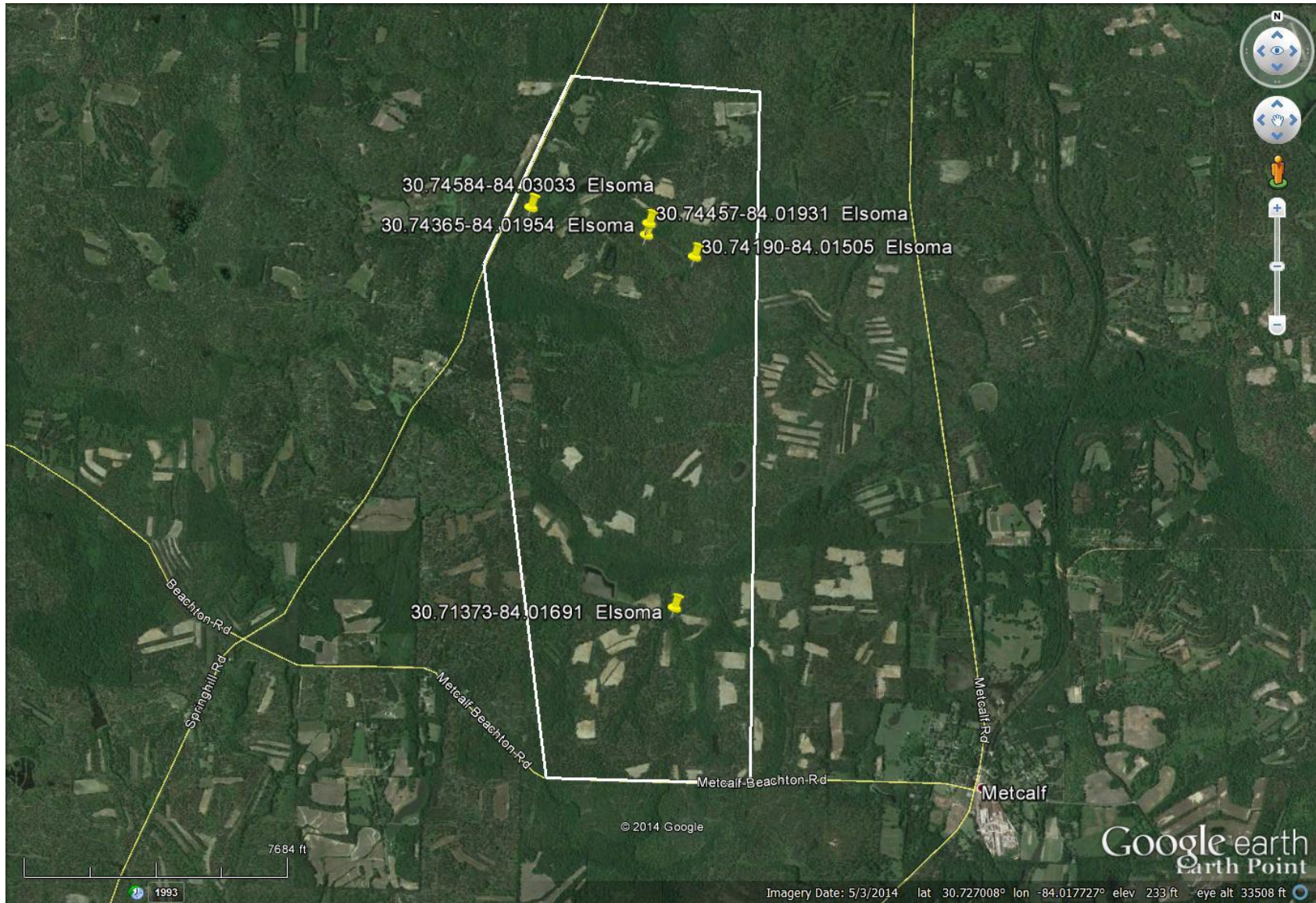


Figure 6. Elsoma Plantation south of Thomasville, Thomas County, Georgia, selected GPS points shown in survey area.

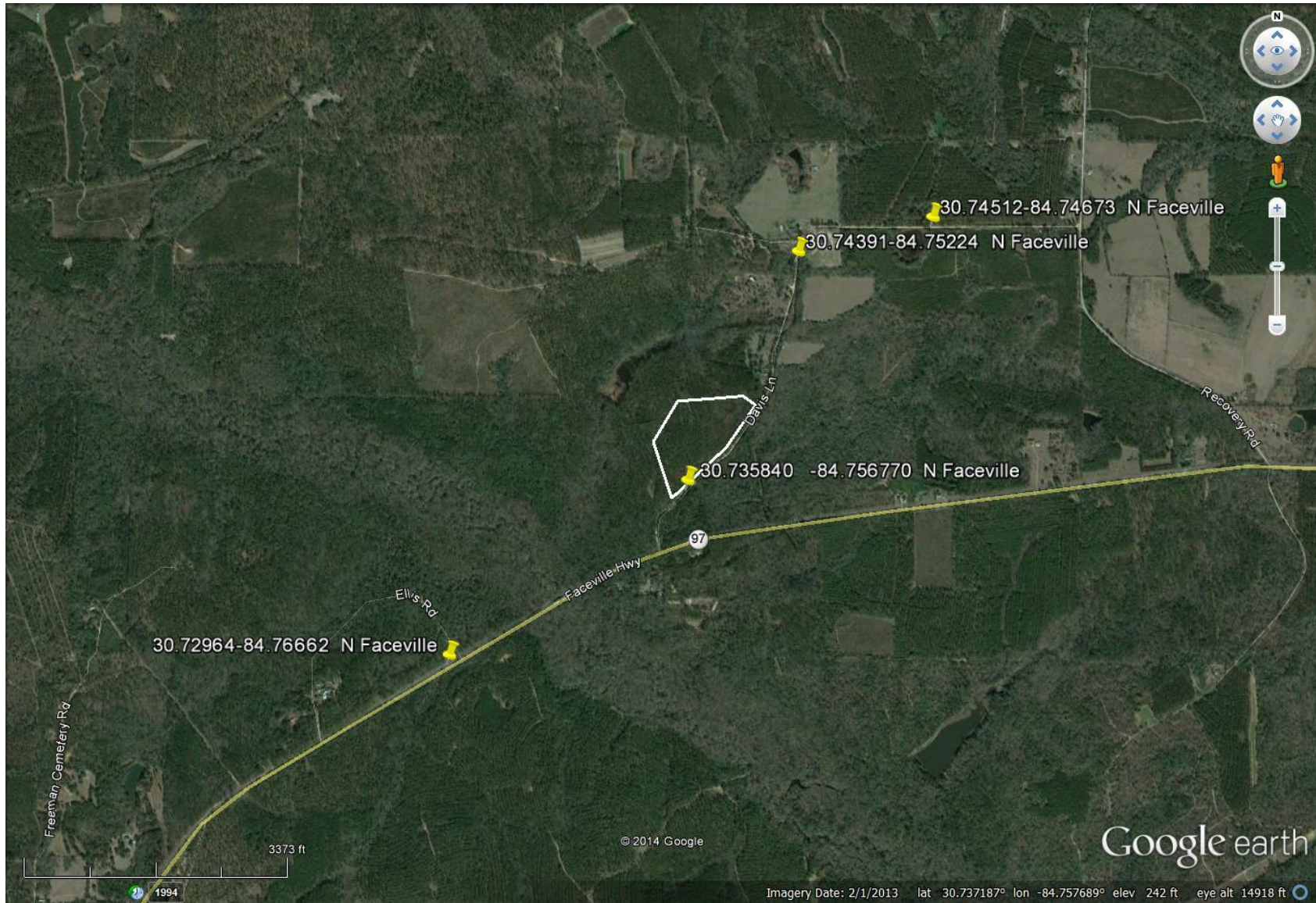


Figure 7. Faceville area north, along Davis Lane, Decatur County, Georgia. Selected GPS points shown within survey area.

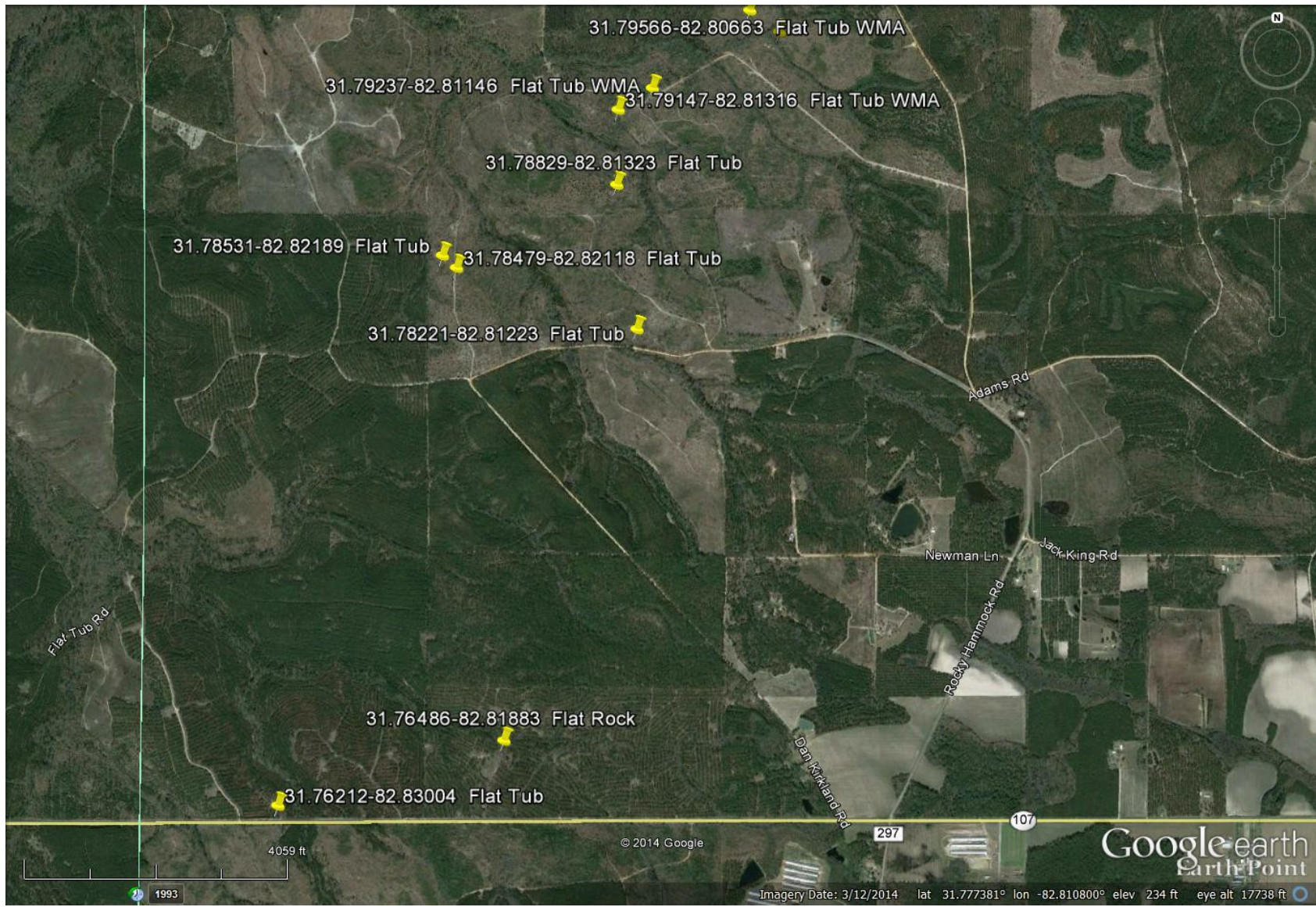


Figure 8. Flat Tub Wildlife Management Area, north of Hwy. GA 107, Jeff Davis County, Georgia. Selected GPS points shown within survey area.

Fig



Figure 9. The Hill, southwest of Moultrie, north of Lower Meigs Road, west of Tree Farm Road, Colquitt County, Georgia. Selected GPS points shown within survey area.

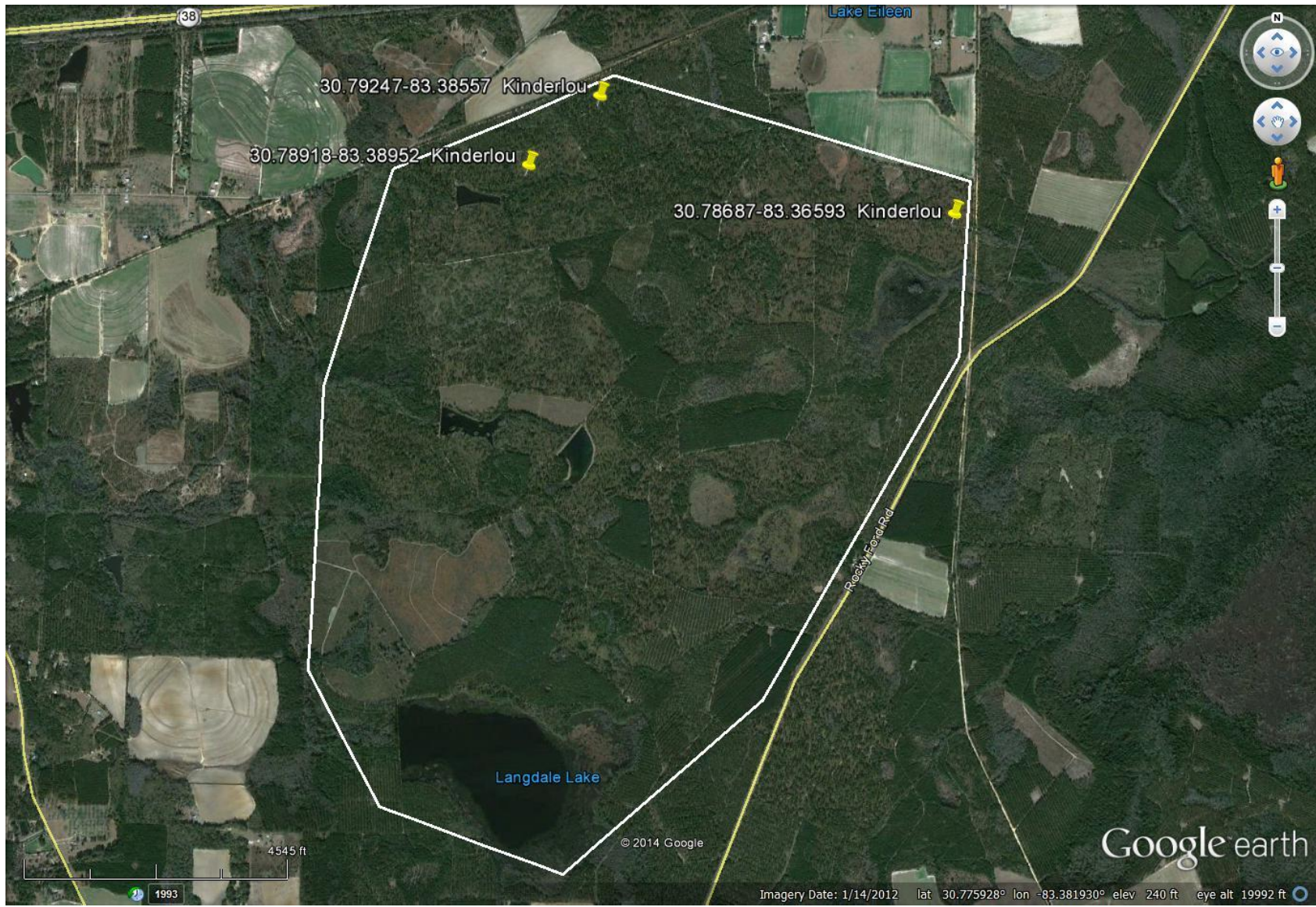


Figure 10. Kinderlou Plantation west of Valdosta, south of Hwy. US 84, Lowndes County, Georgia. Selected GPS points shown within survey area.



Figure 11. Kings Bay Submarine Base, Etowah Park, Camden County, Georgia. Selected GPS points shown within survey area.

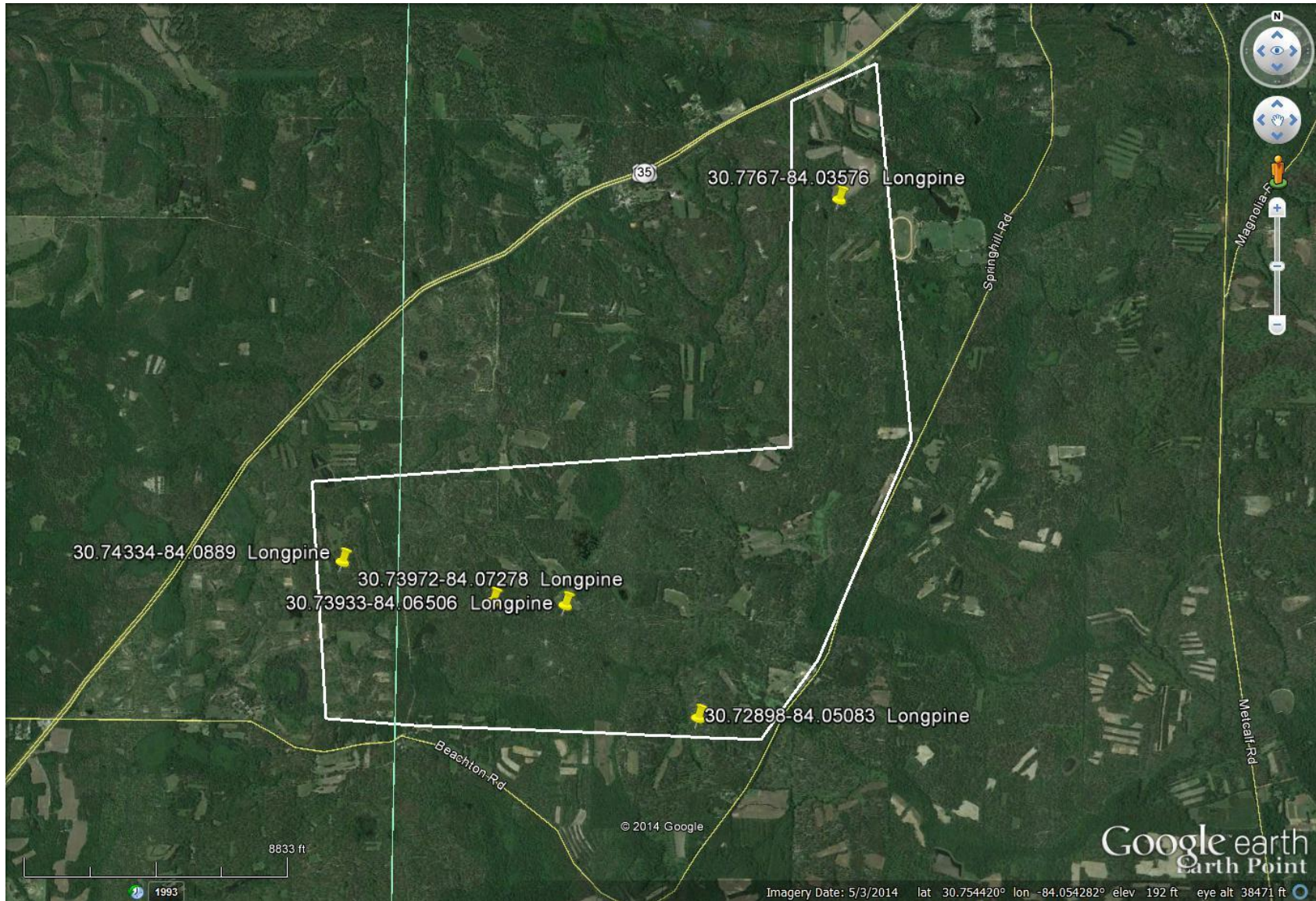


Figure 12. Longpine Plantation south of Thomasville, Thomas County, Georgia, selected GPS points shown in survey area.

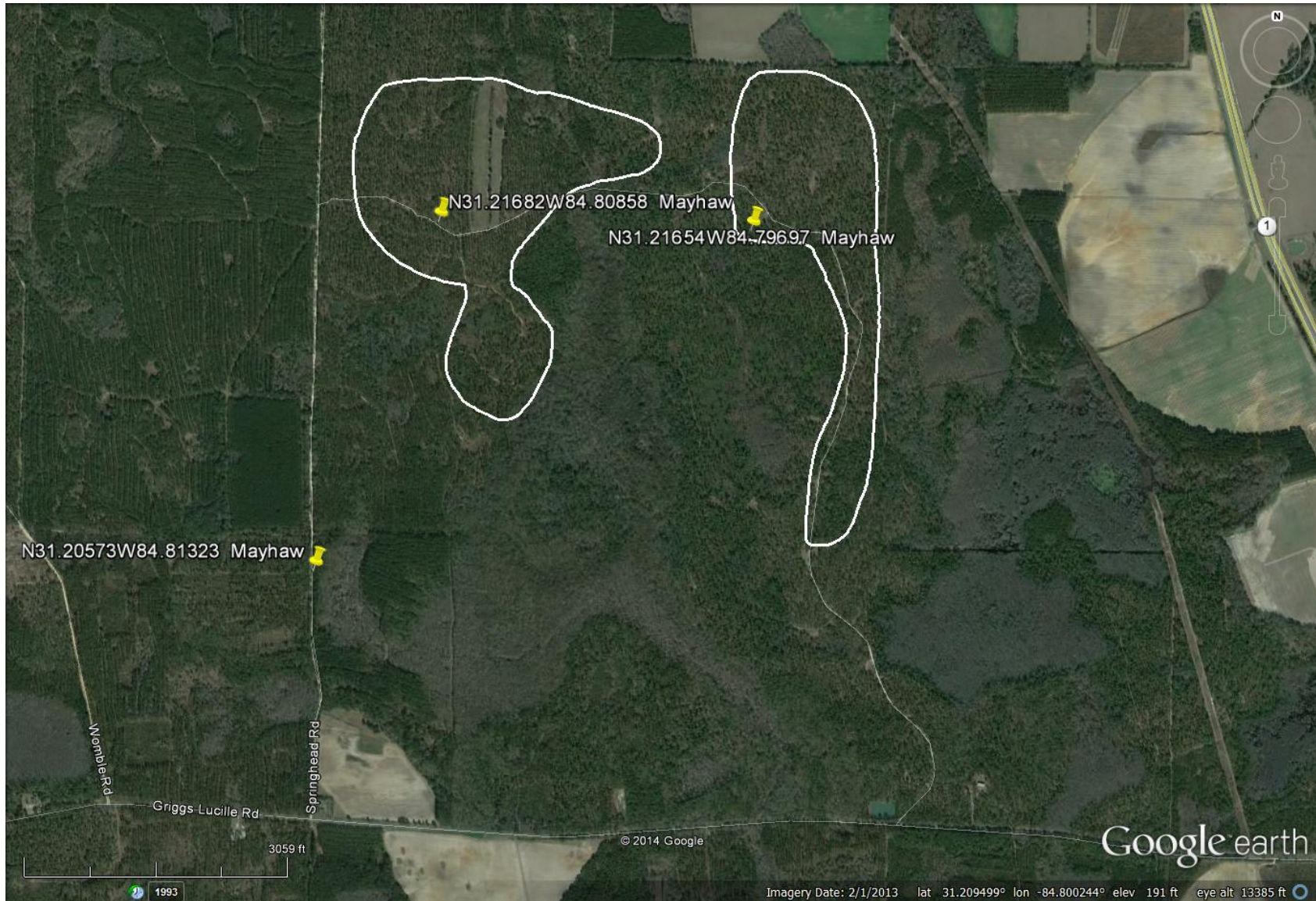


Figure 13. Mayhaw WMA, northwest of Colquitt, north of Griggs Lucille Road, east of Springhead Road, Miller County, Georgia. Selected GPS points shown within survey area.

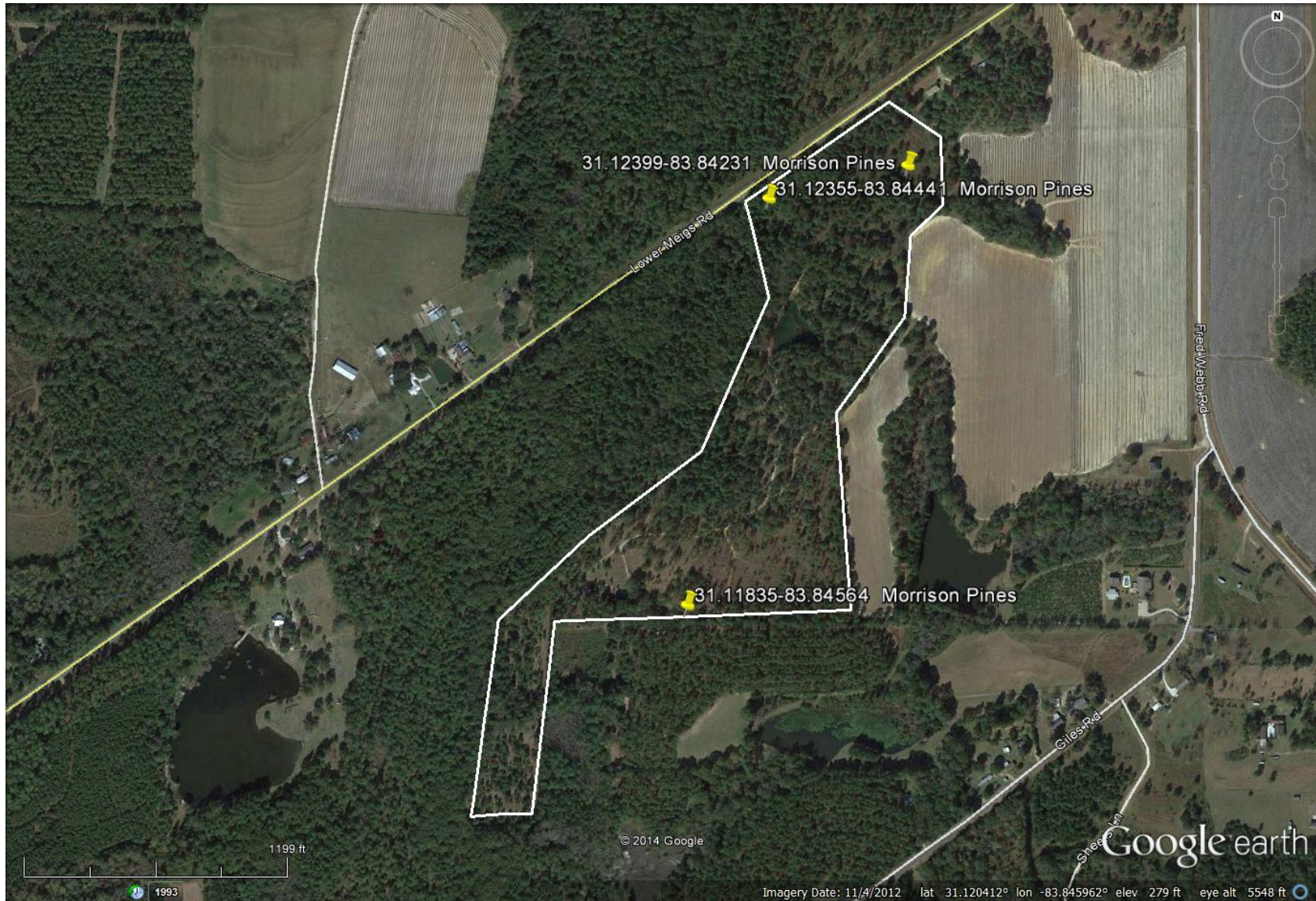


Figure 14. Morrison Pines southwest of Moultrie along south side of Lower Meigs Road, Colquitt County, Georgia. Selected GPS points shown within survey area.

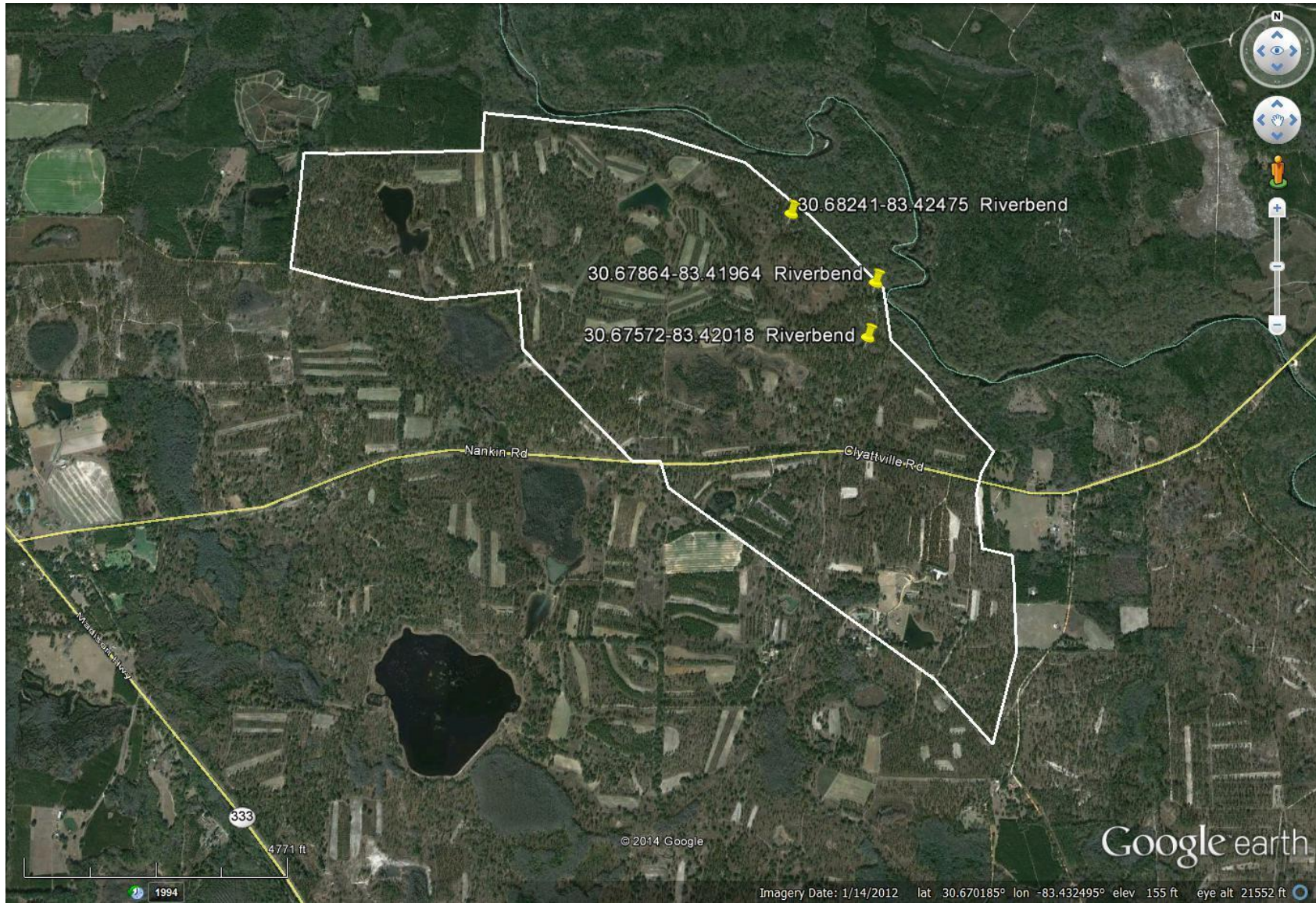


Figure 15. Riverbend Plantation along Clyattville and Nankin roads, Brooks County, Georgia. Selected GPS points shown within survey area.

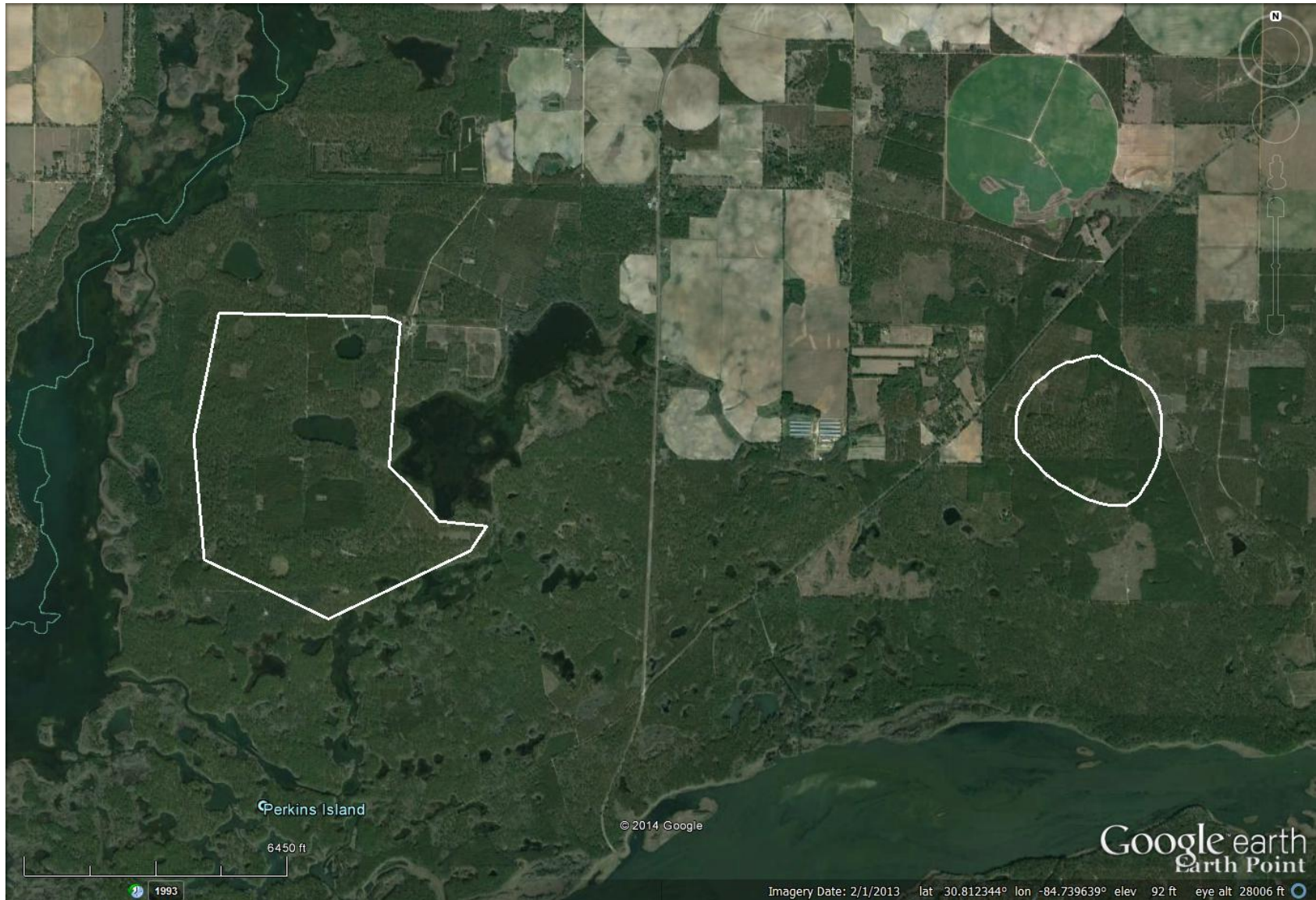


Figure 16. Silver Lake Wildlife Management Area southwest of Bainbridge, Decatur County, Georgia, survey areas, including “Hog Farm.”

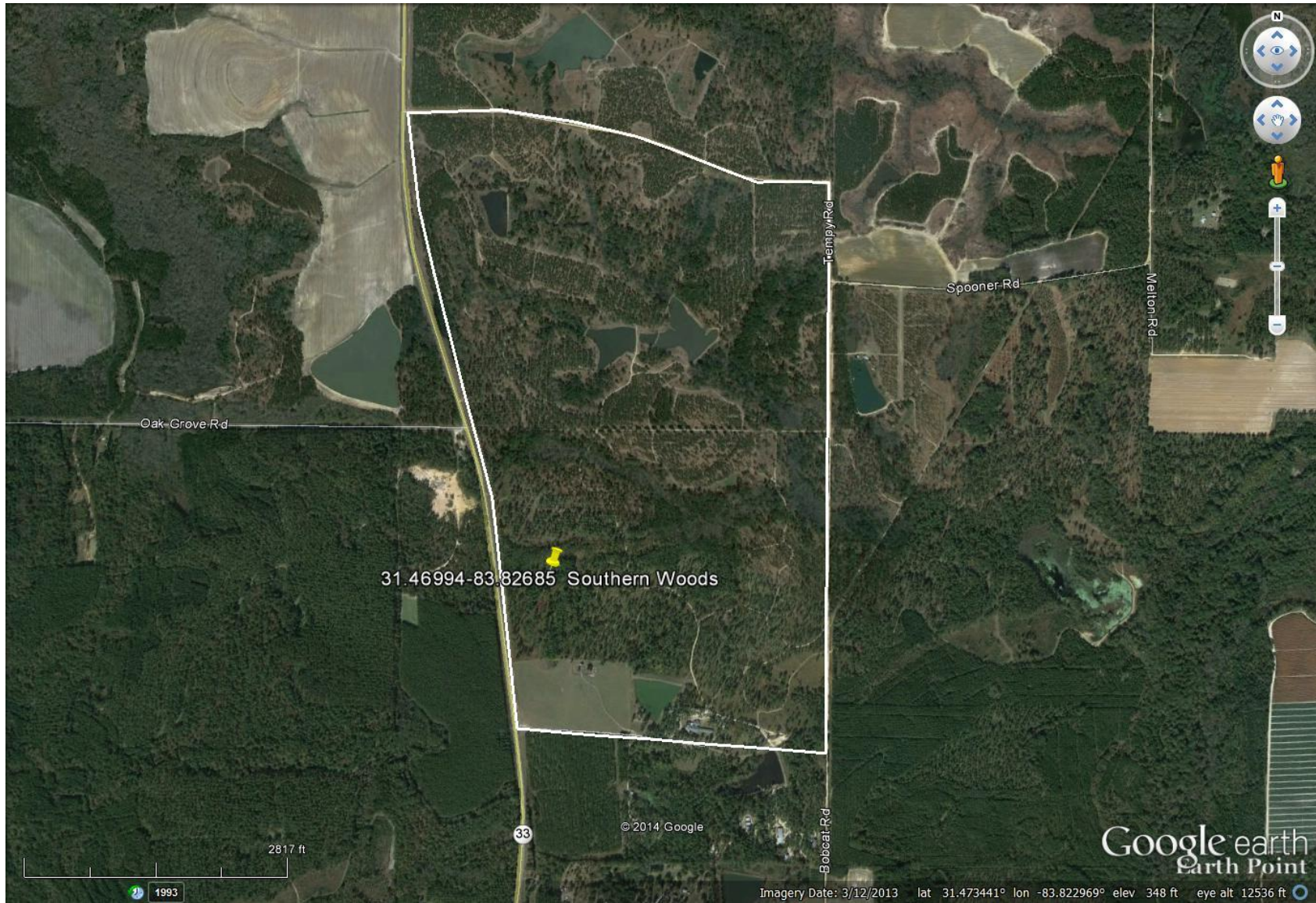


Figure 17. Southern Woods Plantation south of Sylvester, Worth County, Georgia, selected GPS point shown in survey area.



Figure 18. Stanback Place, northeast of Pulaski, Bulloch County, Georgia. Selected GPS points shown within survey area.

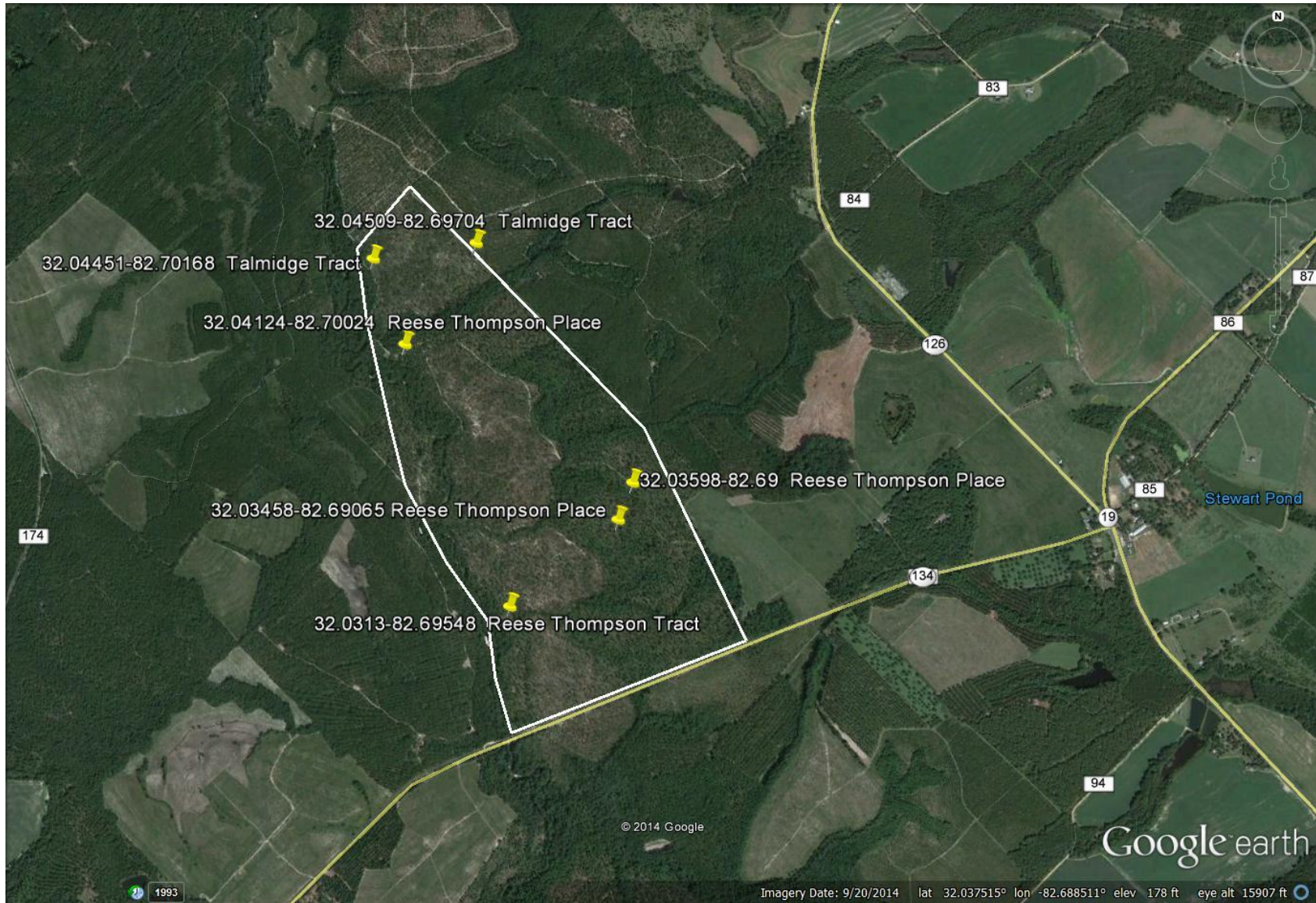


Figure 19. Reese Thompson Place west of Jordan Junction, Wheeler County, Georgia. Selected GPS points shown within survey area.

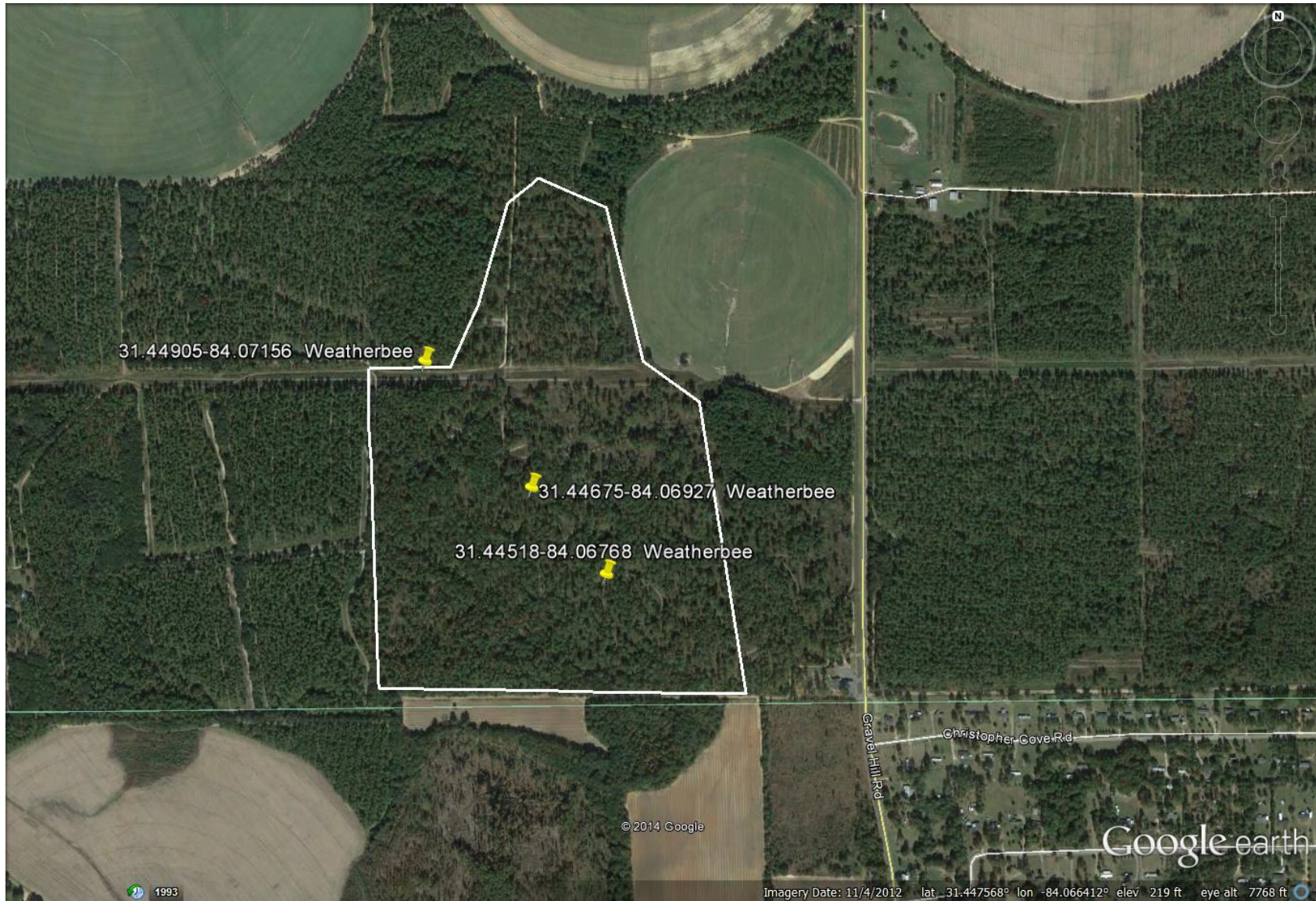


Figure 20. Weatherbee Place west of Gravel Hill Road, vic. Gravel Hill Church, Dougherty County, Georgia. Selected GPS points shown within survey area.

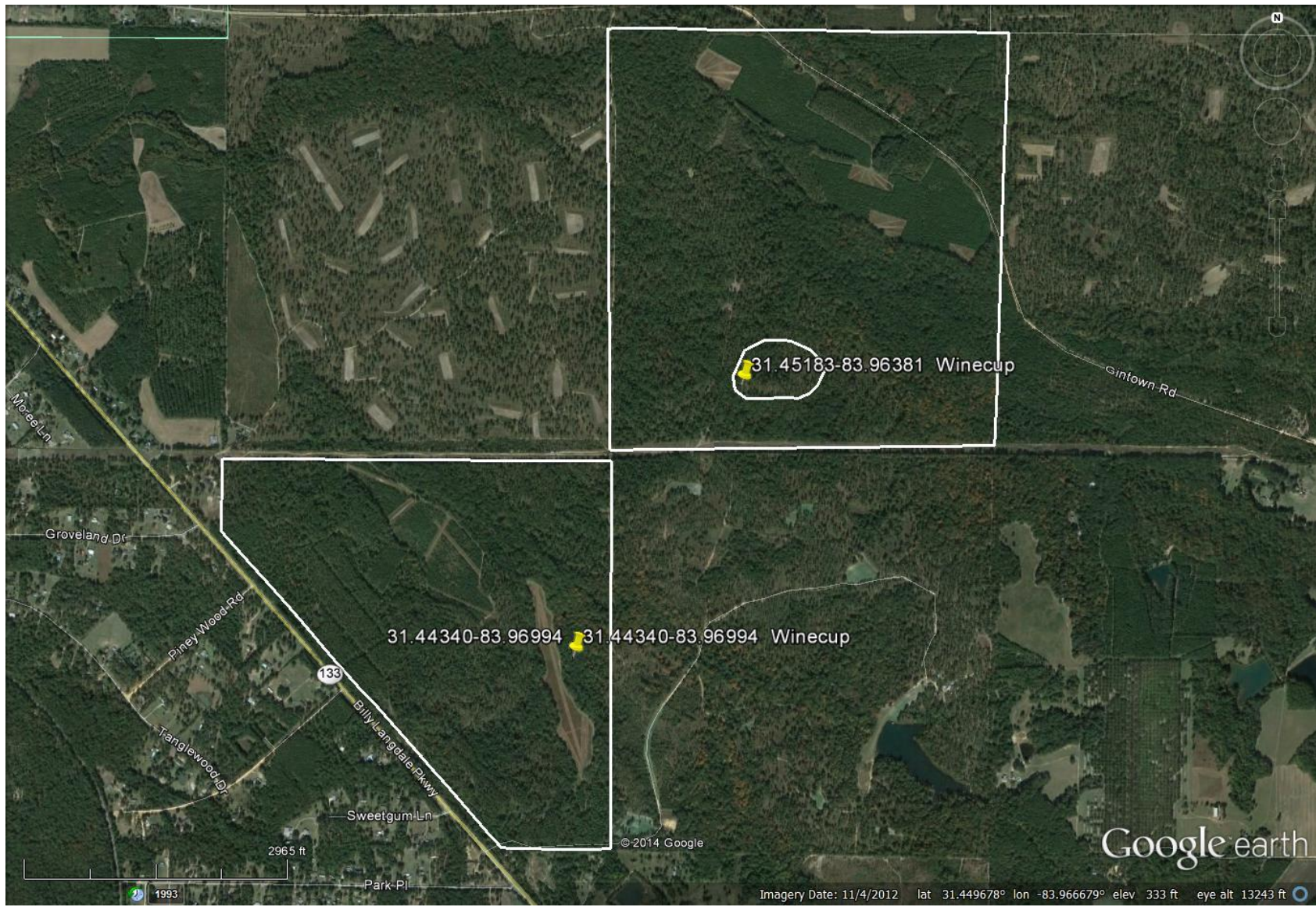


Figure 21. Winecup Tract along Hwy. GA 133, southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.

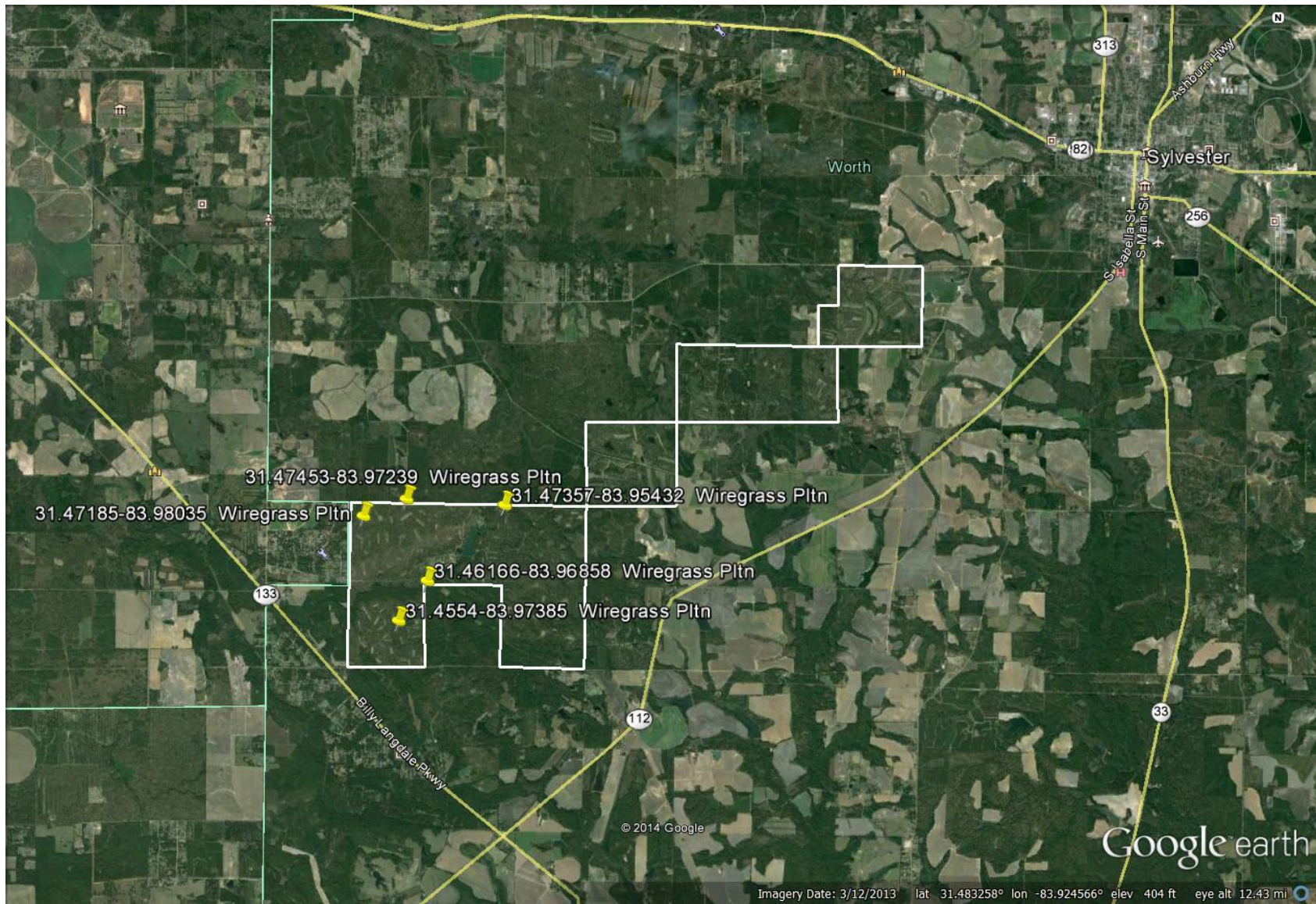


Figure 22. Wiregrass Plantation southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.

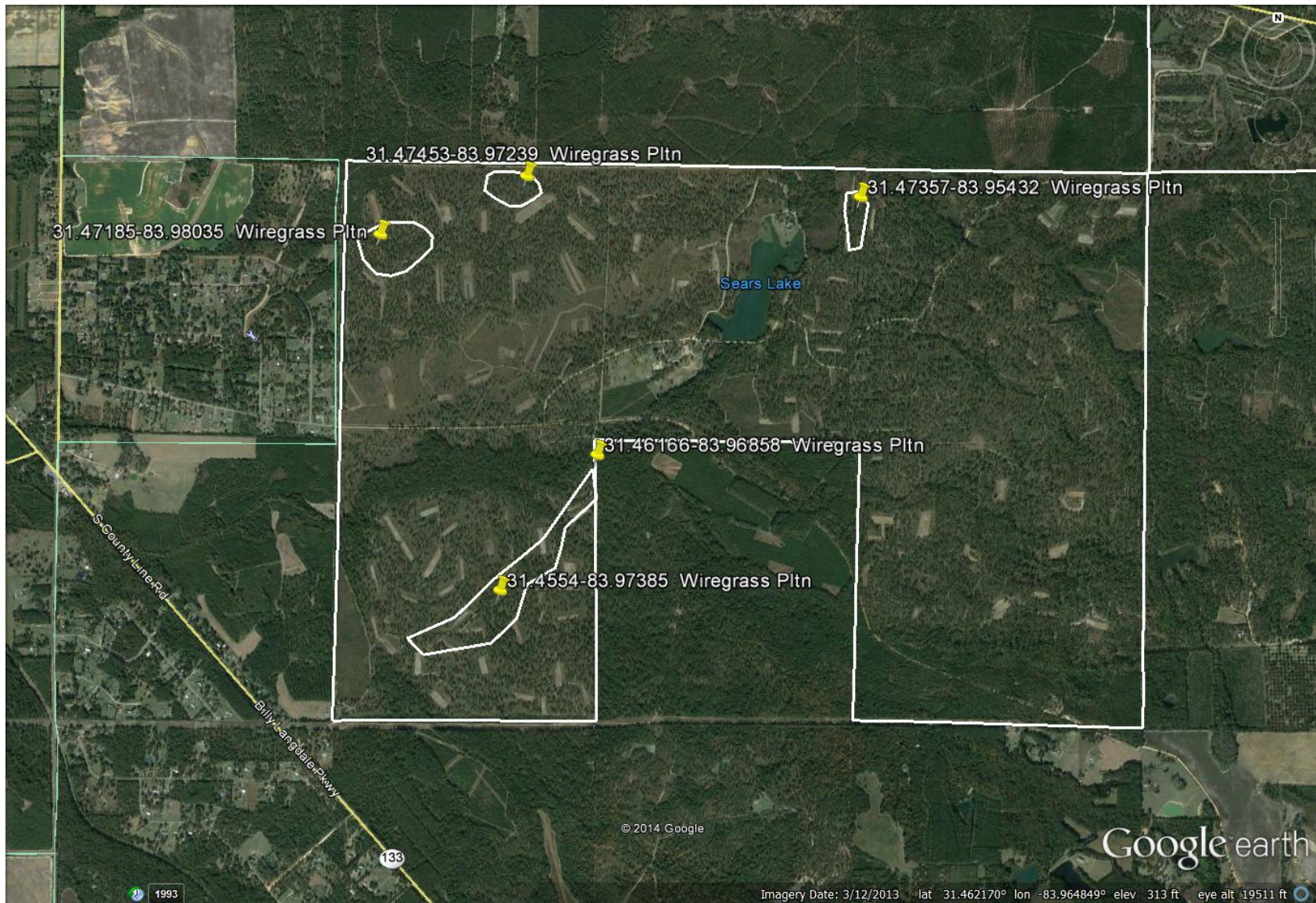


Figure 23. Detail of Wiregrass Plantation southwest of Sylvester, Worth County, Georgia. Selected GPS points shown within survey area.