

SUMMARY OF RARE AND REGULATED PLANTS: ALACHUA COUNTY, FLORIDA

Michael E. Drummond, Alachua County Environmental Protection Department

May 5, 2008

TAXON	FAMILY	STATUS			REPRODUCTIVE SEASON												HABITAT	NOTES	
		FDACS	FWS	FNAI	J	F	M	A	M	J	J	A	S	O	N	D			
<i>Acacia angustissima</i> (Mill.) Kuntze var. <i>hirta</i> (Nutt.) B.L. Rob.	Fabaceae	E					x	x	x	x	x	x	x					sandhills; disturbed sites	listed for Alachua County by Wunderlin and Hansen (2008)
<i>Adiantum tenerum</i> Sw.	Pteridaceae	E		S3	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; limestone ledges; shaded limestone sinkholes	epipetric; reproductive season not noted in Coile & Garland (2003)
<i>Agrimonia incisa</i> T. & G.	Rosaceae	E		S2									x	x	x	x	x	sandhills; upland pine forest	
<i>Andropogon arctatus</i> Chapm.	Poaceae	T		S3												x	x	dry-wet flatwoods; [sand pine scrub]	
<i>Asplenium monanthes</i> L.	Aspleniaceae	E		S1						x	x	x	x	x	X			hammocks & upland mixed forest, on limestone outcroppings near streams	epipetric; extirpated?; reproductive season not noted in Coile & Garland (2003)
<i>Asplenium pumilum</i> Sw.	Aspleniaceae	E		S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; shaded limestone boulders & ledges	epipetric; reproductive season not noted in Coile & Garland (2003)
<i>Asplenium verecundum</i> Chapm. ex Underw.	Aspleniaceae	E		S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; limestone sinkholes; shaded limestone boulders & ledges	epipetric; reproductive season not noted in Coile & Garland (2003)
<i>Asplenium x curtissii</i> Underw.	Aspleniaceae			S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; shaded limestone sinkholes	epipetric
<i>Asplenium x heterosiliens</i> W. H. Wagner	Aspleniaceae			S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; shaded limestone sinkholes	epipetric
<i>Asplenium x plenum</i> E. P. St. John ex Small	Aspleniaceae			S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone	epipetric
<i>Athyrium filix-femina</i> (L.) Roth ex Mert. subsp. <i>asplenioides</i> (Michx.) Hulten	Dryopteridaceae	T					x	x	x	x	x	x	x	x	x	x	x	moist hammocks; swamps; shaded bluffs	reproductive season not noted in Coile & Garland (2003)
<i>Blechnum occidentale</i> L. var. <i>minor</i> Hook.	Blechnaceae	E		S1	x	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, on limestone; shaded limestone sinkholes	epipetric; reproductive season not noted in Coile & Garland (2003)
<i>Brickellia cordifolia</i> Eil.	Asteraceae	E		S2												x	x	hammocks; upland hardwoods	
<i>Callirhoe papaver</i> (Cav.) A. Gray	Malvaceae	E		S2			x	x	x	x								open, dry hammocks and upland mixed forest; roadsides & open areas (note: often associated with current or former longleaf pine/southern red oak/mockernut hickory association)	
<i>Calopogon multiflorus</i> Lindl.	Orchidaceae	E		S2S3	x	x	x	x	x	x	x						x	mesic flatwoods (fire maintained); meadows	
<i>Carex chapmanii</i> Steud.	Cyperaceae	T		S3			x	x	x									calcareous hydric hammocks; slope forest; floodplain forest	
<i>Centrosema arenicola</i> (Small) F.J. Herm.	Fabaceae	E		S2						x	x	x	x	x	x			sandhills; pine- or oak-palmetto thickets	
<i>Cheilanthes microphylla</i> (Sw.) Sw.	Pteridaceae	E		S3						x	x	x	x	x	x			calcareous hammocks; [shell middens]	reproductive season not noted in Coile & Garland (2003)
<i>Coelorachis tuberculosa</i> (Nash) Nash	Poaceae	T		S3						x	x	x	x					margins of ponds, marshes, & sandhill lakes; wet prairie	
<i>Ctenium floridanum</i> (Hitchc.) Hitchc.	Poaceae	E		S2			x	x	x	x	x	x	x	x	x			wet-dry flatwoods; depression marsh; bogs	reproductive season not noted in Coile & Garland (2003)
<i>Drosera intermedia</i> Hayne	Droseraceae	T		S3			x	x	x	x	x	x	x	x	x			seepage slopes; wet flatwoods; margins of depression marshes, seepage streams, & sinkhole lakes; drainage ditches	listed for Alachua County by Coile & Garland (2003) & Wunderlin & Hansen (2008), but not by FNAI (1997)
<i>Epidendrum conopseum</i> R. Br.	Orchidaceae	C			x	x	x	x	x	x	x	x	x	x	x	x	x	cypress and hardwood swamps; moist hammocks (note: often mixed with resurrection fern on live oak branches)	epiphytic
<i>Forestiera godfreyi</i> L. C. Anderson	Oleaceae	E		S2			x	x	x									calcareous hammocks	
<i>Gymnopogon chapmanianus</i> Hitchc.	Poaceae			S3												x	x	sandhills; scrub; dry & mesic flatwoods; dry prairie	listed for Alachua County by Wunderlin & Hansen (2008), but not by FNAI (1997)
<i>Habenaria nivea</i> (Nutt.) Spreng. [syn. = <i>Platanthera nivea</i> (Nutt.) Luer]	Orchidaceae	T					x	x	x	x	x	x	x					wet pine savannas & flatwoods; bogs; wet prairies; ditches	
<i>Hartwrightia floridana</i> A. Gray ex S. Watson	Asteraceae	T		S2						x	x	x	x	x	x			clearings in mesic-wet flatwoods and baygalls; bogs; open seepage areas	listed for Alachua County by FNAI (1997), but not by Coile & Garland (2003) or Wunderlin & Hansen (2008)
<i>Hexalectris spicata</i> (Walt.) Barnhart	Orchidaceae	E					x	x	x	x	x	x	x					calcareous hammocks; pine/hickory woods; secondary woods	
<i>Lilium catesbaei</i> Walter	Liliaceae	T								x	x	x	x	x				mesic-wet flatwoods & pine savannas; wet prairie; bogs	
<i>Listera australis</i> Lindl.	Orchidaceae	T			x	x	x	x	x								x	wet hammocks; stream banks; often in peaty substrate	
<i>Litsea aestivalis</i> (L.) Fernald	Lauraceae	E		S2	x	x	x	x										margins of ponds; baygalls; wet hammocks; cypress domes; often in peaty substrate	listed for Alachua County by Coile & Garland (2003) and Wunderlin & Hansen (2008), but not by FNAI (1997)
<i>Lobelia cardinalis</i> L.	Campanulaceae	T								x	x	x	x	x	x			floodplain forests & spring runs; riverbanks	
<i>Lycopodiella cernua</i> (L.) Pic. Serm. [syn. = <i>Lycopodium cernuum</i> L.]	Lycopodiaceae	C								x	x	x	x	x	x			wet flatwoods; pond margins; bogs; wet hammocks; wet depressions; ditches; moist areas	reproductive season not noted in Coile & Garland (2003)
<i>Malaxis unifolia</i> Michx.	Orchidiaceae	E		S3	x	x	x	x										moist hammocks, slope forests; upland mixed forest; floodplain forest; sinks, bluffs, ravines; bogs	
<i>Matelea floridana</i> (Vail) Woodson	Apocynaceae	E		S2			x	x	x	x	x							hammocks; upland mixed forest; bluffs	
<i>Matelea gonocarpos</i> (Walter) Shinnars	Apocynaceae	T					x	x	x	x	x	x						hammocks; upland mixed forest; bluffs; floodplains	
<i>Matelea pubiflora</i> (Decne.) Woodson	Apocynaceae	E					x	x	x	x	x	x						sandhills; scrub	reproductive season based only on Wunderlin (2003); not noted in Coile & Garland (2003)
<i>Najas filifolia</i> R. R. Haynes	Hydrocharitaceae	T		S1			x	x	x	x	x	x	x	x	x			freshwater lakes & ponds (shallow water)	reproductive season based only on Wunderlin (2003); not noted in Coile & Garland (2003); not listed in FNAI (1997)
<i>Osmunda cinnamomea</i> L.	Osmundaceae	C					x	x	x	x	x	x						swamps; bogs; marshes; wet flatwoods; seepage slopes	reproductive season not noted in Coile & Garland (2003)
<i>Osmunda regalis</i> L. var. <i>spectabilis</i> (Willd.) A. Gray	Osmundaceae	C					x	x	x	x	x	x						swamps; bogs; marshes; wet flatwoods; seepage slopes	reproductive season not noted in Coile & Garland (2003)

TAXON	FAMILY	STATUS			REPRODUCTIVE SEASON												HABITAT	NOTES
		FDACS	FWS	FNAI	J	F	M	A	M	J	J	A	S	O	N	D		
<i>Pecluma dispersa</i> (A. M. Evans) M. G. Price [syn. = <i>Polypodium dispersum</i> A. M. Evans]	Polypodiaceae	E		S2	x	x	x	x	x	x	x	x	x	x	x	x	open, dry hammocks; usually on limestone	usually epipetric, occasionally terrestrial or epiphitic
<i>Pinguicula caerulea</i> Walter	Lentibulariaceae	T			x	x	x	x	x							x	sandy to sandy/peaty soils of flatwoods, ditches, & roadsides; bogs	
<i>Pinguicula lutea</i> Walter	Lentibulariaceae	T				x	x	x	x								sandy/peaty soils of flatwoods, seepage areas, ditches & roadsides	
<i>Platanthera blephariglottis</i> (Willd.) Lindl. var. <i>conspicua</i> (Nash) Luer	Orchidaceae	T								x	x	x	x	x	x		marshes; wet meadows; depressions; bogs in pine savannas	
<i>Platanthera ciliaris</i> (L.) Lindl.	Orchidaceae	T								x	x	x	x				bogs; swamps; marshes; pine savannas; flatwoods; floodplain forests; slope forests	
<i>Platanthera cristata</i> (Michx.) Lindl.	Orchidaceae	T								x	x	x	x				sphagnum and sedge bogs; wet meadows; pine savannas, flatwoods; wet prairies; edges of swamps; seepage slopes	
<i>Pogonia divaricata</i> (L.) R. Br. [syn. = <i>Cleistes divaricata</i> (L.) Ames]	Orchidaceae	T		S1			x	x	x	x	x	x	x				wet pinelands & savannas; pitcher plant bogs; swamps; flatwoods stream banks	listed for Alachua County by Coile & Garland (2003), but not by Wunderlin & Hansen (2008)
<i>Pogonia ophioglossoides</i> (L.) Ker Gawl.	Orchidaceae	T					x	x	x								sphagnum bogs; wet meadows, flatwoods, pine savannas, & prairies; bogs; swamps	
<i>Polygonum meisnerianum</i> Cham. ex Schtdl. var. <i>beyrichianum</i> (Cham. ex Schtdl.) Meisn.	Polygonaceae	E		S1						x	x	x	x	x	x		floodplain forest; wet hammocks; swamps; lake margins	
<i>Pteroglossaspis ecristata</i> (Fernald) Rolfe [syn. = <i>Eulophia ecristata</i> (Fernald) Ames]	Orchidaceae	T		S2						x	x	x	x	x	x		sandhills; mesic-scrubby flatwoods; oak hammocks [pine rockland; sand pine scrub]	
<i>Pycnanthemum floridanum</i> E. Grant & Epling	Lamiaceae	T		S3					x	x	x	x	x	x	x		moist areas in sandhills, upland mixed forest, pinelands, & hammocks; wet flatwoods; floodplain forest; roadside ditches	most commonly found at the dry end of this habitat spectrum
<i>Rhapidophyllum hystrix</i> (Pursh) Wendl. & Drude ex Drude	Arecaceae	C					x	x	x	x	x	x	x				stream bluffs; ravine slopes; wet-mesic hammocks; bottomlands	reproductive season based only on Wunderlin (2003); not noted in Coile & Garland (2003)
<i>Rhododendron canescens</i> (Michx.) Sweet	Ericaceae	C					x	x	x								flatwoods; baygalls; hammocks; floodplain forests (acidic soils)	
<i>Rhus michauxii</i> Sarg.	Anacardiaceae	E	E				x	x	x	x							dry hammocks; sandy, open, rocky woods; (basic soils); (note: probably longleaf pine/southern red oak/mockernut hickory association in Alachua County)	extirpated?; single specimen in FLAS herbarium collected by D. B. Ward in 1961
<i>Rudbeckia nitida</i> Nutt.	Asteraceae	E		S2					x	x	x	x	x	x	x		wet flatwoods & prairies; roadside ditches	listed for Alachua County by FNAI (1997), but not by Coile & Garland (2003) or Wunderlin & Hansen (2008)
<i>Sacoila lanceolata</i> (Aubl.) Garay var. <i>lanceolata</i> [syn. = <i>Stenorhynchos lanceolatus</i> (Aubl.) Rich. ex Spreng.]	Orchidaceae	T					x	x	x	x	x	x	x				wet flatwoods; pastures; roadsides; sandhills; oak hammocks; disturbed sites	
<i>Salix floridana</i> Chapm.	Salicaceae	E		S2			x	x	x								wet hammocks; bottomland forest; swamps; margins of spring-fed rivers and streams	reproductive season based only on Wunderlin (2003); not noted in Coile & Garland (2003) or FNAI (1997)
<i>Salvia urticifolia</i> L. [syn. = <i>Salvia chapmanii</i> A. Gray]	Lamiaceae	E		S1									x	x	x		calcareous hammocks; upland hardwood forest; [upland glades]	
<i>Sarracenia minor</i> Walter	Sarraceniaceae	T					x	x	x				x				flatwoods; bogs; ditches	
<i>Schoenolirion croceum</i> (Michx.) A.W. Wood	Hyacinthaceae	E		S2			x	x	x								wet savannas, bogs, seepage slopes, roadside swales	
<i>Sideroxylon alachuense</i> L. C. Anderson [syn. = <i>Bumelia anomala</i> (Sarg.) C. B. Clark]	Sapotaceae	E		S1						x	x	x	x				calcareous hammocks	
<i>Sideroxylon lycoides</i> L. [syn. = <i>Bumelia lycoides</i> (L.) Pers.]	Sapotaceae	E		S2			x	x	x								hammocks; floodplain forests	
<i>Spiranthes brevilabris</i> Lindl.	Orchidaceae	E		S1	x	x	x	x	x					x	x	x	wet flatwoods & prairies	
<i>Spiranthes floridana</i> (Wherry) Cory	Orchidaceae			S1	x	x	x	x	x							x	bogs; wet prairies; flatwoods	
<i>Spiranthes ovalis</i> Lindl. var. <i>ovalis</i>	Orchidaceae	E												x	x	x	moist, shady woods; hardwood swamp margins; wet hammocks; ravines; palmetto (<i>Sabal minor</i> ?) swamplands	
<i>Spiranthes tuberosa</i> Raf.	Orchidaceae	T					x	x	x	x	x	x					dry, acid soils of open flatwoods, sandhills, & scrub	
<i>Thelypteris reptans</i> (J. F. Gmel.) C. V. Morton	Thelypteridaceae	E		S2	x	x	x	x	x	x	x	x	x	x	x	x	hammocks, around limestone outcroppings & sinkholes	usually epipetric; reproductive season not noted in Coile & Garland (2003)
<i>Tipularia discolor</i> (Pursh) Nutt.	Orchidaceae	T								x	x	x	x				hammocks; ravine forests; bluffs; floodplains	
<i>Triphora trianthophoros</i> (Sw.) Rydb. [syn. = <i>Triphora trianthophora</i> (Sw.) Rydb. ex Britton]	Orchidaceae	T								x	x	x	x	x	x		hammocks	
<i>Verbesina heterophylla</i> (Chapm.) A. Gray	Asteraceae			S2						x	x	x	x				sandhills; mesic flatwoods; flatwood/sandhill ecotones	
<i>Zamia pumila</i> L.	Zamiaceae	C			x	x	x	x	x	x	x	x	x	x	x	x	well-drained sandy or loamy soils of oak hammocks & pinelands; [shell middens]	reproductive season based only on Wunderlin (2003); not noted in Coile & Garland (2003)
<i>Zephyranthes atamasca</i> [-co] (L.) Herb.	Amaryllidaceae	T					x	x	x								rich, moist woods; moist flatwoods; wet pastures and meadows; limestone outcrops	
<i>Zephyranthes atamasca</i> (L.) Herb. var. <i>treatiae</i> (S. Watson) Meerow [syn. = <i>Zephyranthes treatiae</i> (S. Watson)]	Amaryllidaceae	T					x	x	x								moist hammocks; floodplain forests; wet flatwoods; roadside swales; wet pastures	
<i>Zephyranthes simpsonii</i> Chapm.	Amaryllidaceae	T		S2S3	x	x	x	x	x								wet flatwoods, pastures, & meadows; roadsides; ditches;	listed for Alachua County by FNAI (1997), but not by Coile & Garland (2003) or Wunderlin and Hansen (2008)

::

USER NOTES:

TAXON: Pteridophyte nomenclature is consistent with that found in Wunderlin and Hansen (2000). Remaining nomenclature is consistent with that found in Wunderlin & Hansen (2008). Where alternate nomenclature is used by Coile & Garland (2003), or FNAI (1997), referenced synonyms are identified in [brackets]. Included taxa are those noted as occurring in Alachua County in one or more of the following references: Coile & Garland (2003), FNAI (1997), Wunderlin (2003), Wunderlin and Hansen (2000), and Wunderlin and Hansen (2008).

FAMILY: Family affiliations of Pteridophytes are consistent with the treatment found in Wunderlin and Hansen (2000). Family affiliations of remaining taxa are consistent with the treatment found in Wunderlin & Hansen (2008).

STATUS: Rarity/regulatory status of taxa is based upon lists maintained by the Florida Department of Agriculture and Consumer Services (FDACS), the U.S. Fish and Wildlife Service (FWS), and the Florida Natural Areas Inventory (FNAI). State-regulated taxa are those included in the Regulated Plant Index (Section 5B-40.0055, F.A.C.). Endangered (E), Threatened (T), and Commercially Exploited (C) taxa are as defined in the Preservation of Native Flora of Florida Act (Section 581.185, F.S.). Federally-regulated taxa are those included in Subsection 50 CFR 17.12. Endangered (E) taxa are as defined in Section 3 of the Endangered Species Act of 1973, as amended. Taxa tracked by the FNAI and considered rare (ranked S1 through S3) are listed in the Element Tracking Summary (2004). Explanations of FNAI-assigned rarity ranks can be found at the end of the Element Tracking Summary.

REPRODUCTIVE SEASON: This term generally refers to the period when a taxon bears flowers (spores on Pteridophytes), though fruits sometimes may be apparent. Reproductive seasons are derived from Coile & Garland (2003), FNAI (1997), Wunderlin (2003), and Wunderlin & Hansen (2000). Redundancy in two or more references regarding reproductive season is depicted in bold type. Users should consider that, while an effort has been made to accurately identify reproductive seasons based upon best available data, specimens or populations may be found flowering "out of season." Users also should bear in mind that taxa with broad latitudinal ranges will usually flower earlier in the southern part of the state than in the northern part. Of importance in rare plant surveys, certain (usually herbaceous) taxa may only be readily evident or reliably identified during the reproductive season, either because they are temporally cryptic or because of similarity to other, closely related taxa. It is critical in such cases that the survey be conducted at a time of year that maximizes a surveyor's chance of observing the taxon and obtaining an accurate identification.

HABITAT: Habitat proclivities are derived from Coile & Garland (2003), FNAI (1997), Wunderlin (2003), and Wunderlin and Hansen (2000), with rare modification based on the author's experience in Alachua County. In most cases, habitat descriptions are intentionally broad and intended to give the user a general impression of the situations in which a taxon may reasonably be expected to be found. As in the case with taxa flowering "out of season," plants sometimes may occur "out of habitat." Nonetheless, responsible survey efforts should be concentrated in areas that maximize a surveyor's opportunity of observing a target taxon. Habitats that generally are not relevant to Alachua County are identified in [brackets].

NOTES: Additional comments regarding occurrence, status, reproductive season, or habitat.

REFERENCES:

Coile, N. C. & M. A. Garland. 2003. Notes on Florida's Endangered and Threatened Plants. Botany Contribution 38, 4th ed. (PDF version). FL Dept. Agric. & Consumer Serv., Div. Plant Industry, Gainesville.

FNAI. 1997. County Distribution and Habitats of Rare and Endangered Species in Florida. Florida Natural Areas Inventory. Tallahassee.

FNAI. 2004. Element Tracking Summary (PDF version). [Online: <http://www.fnai.org/trackinglist.cfm>; May 2, 2008] Florida Natural Areas Inventory. Tallahassee.

Wunderlin, R. P. 2003. Guide to the Vascular Plants of Florida (2nd edition). University Press of Florida. Gainesville

Wunderlin, R. P. and B. F. Hansen. 2000. Flora of Florida, Volume 1: Pteridophytes and Gymnosperms. University Press of Florida. Gainesville.

Wunderlin, R. P. and B. F. Hansen. 2008. Atlas of Florida Vascular Plants. [Online: <http://www.plantatlas.usf.edu>; May 2, 2008] Institute for Systematic Botany, University of South Florida, Tampa.