

# Flora of Alligator Creek Wildlife Management Area, Wheeler County, Georgia

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## Introduction

Recently acquired by Georgia Department of Natural Resources, Alligator Creek Wildlife Management Area [ACWMA] comprises about 1,255 hectares of sand hills, flatwoods, and associated habitats located in Wheeler County at the confluence of Little Ocmulgee River and Alligator Creek in the upper coastal plain of southeastern Georgia and centered about 4.0 km N of Lumber City (Figure 1).

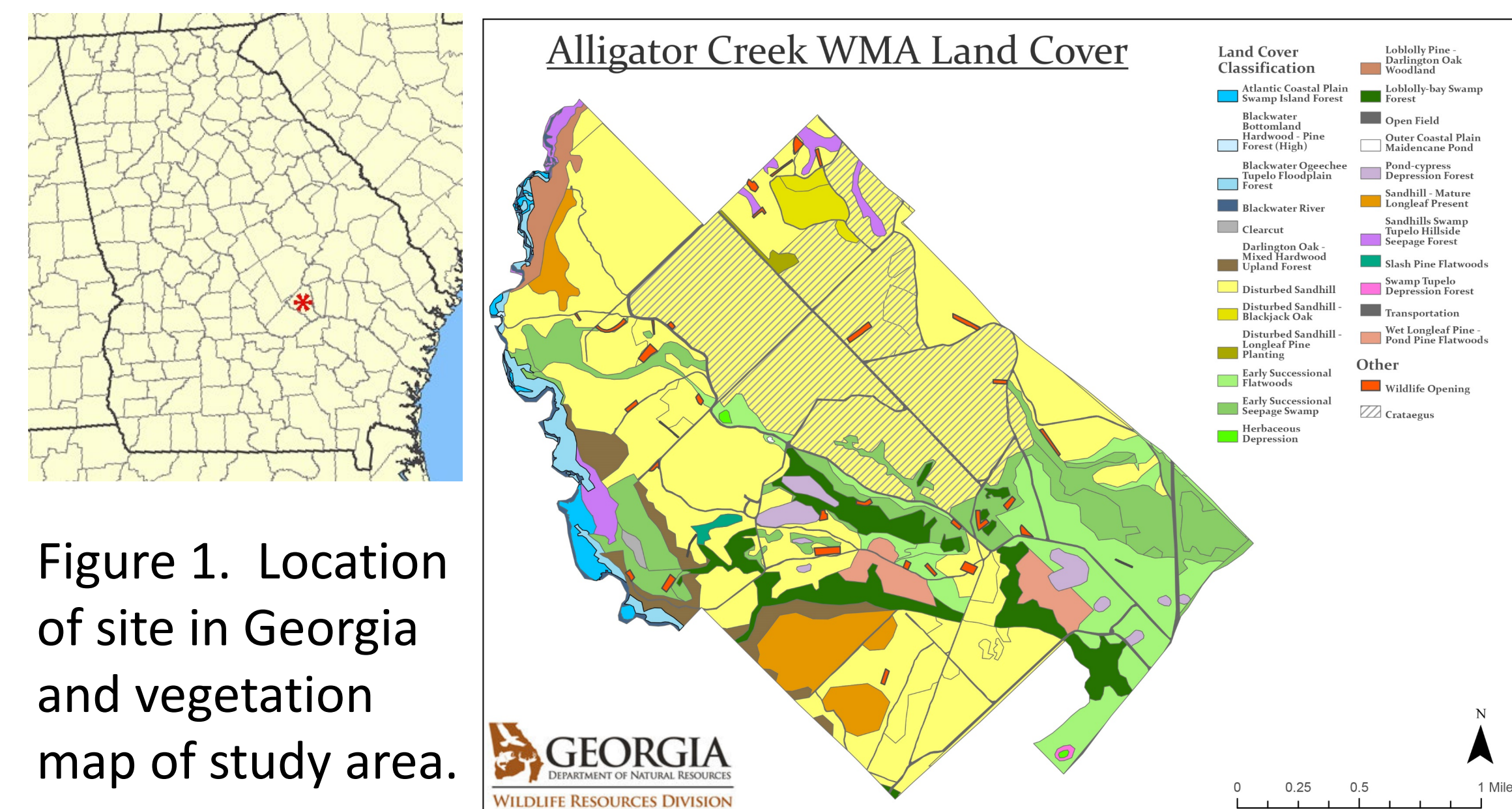


Figure 1. Location of site in Georgia and vegetation map of study area.

## Methods

From 2016 through 2020, Snow and Carter spent 29 days and parts of two days in the field searching for and recording observations of rare and unusual vascular plant species, gathering data on plant communities, and generally documenting the vascular flora through the preparation of voucher specimens deposited at the Valdosta State University Herbarium (VSC). Nomenclature and family classification follow Weakley (2015).

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Figure 2. Representative ACWMA habitats. A) Turkey oak-longleaf pine sandscrub, B) Little Ocmulgee River, C) *Elliottia racemosa* in ecotone along base of sandridge and gordonia swamp, D) Alligator Creek, E) disturbed sandscrub, F) edge of pocosin and gordonia swamp, G) exsiccated cypress-gum pond, H) bluff along Little Ocmulgee River, I) sphagnous seep at base of bluff along floodplain of Little Ocmulgee River, J) floodplain of Little Ocmulgee River.

TABLE 1. LARGEST FAMILIES RANKED BY NUMBER OF SPECIES.

Family	Number of species (number of additional infraspecific taxa)
Poaceae	110 (9)
Asteraceae	85 (1)
Cyperaceae	79 (1)
Fabaceae	39
Ericaceae	22
Rosaceae	16 (2)
Euphorbiaceae	15
Plantaginaceae	15
Lamiaceae	14
Hypericaceae	13
Onagraceae	13
Convolvulaceae	12
Fagaceae	12
Juncaceae	12 (1)
Rubiaceae	11

TABLE 2. LIST OF RARE PLANTS OBSERVED AND DOCUMENTED AT ACWMA; ABBREVIATIONS FROM KRAKOW (2018).

Accepted Taxon Name	Federal Status	Georgia Status	Global/State Rank
<i>Agalinis tenella</i> Pennell	NA	NA	G4/S2?
<i>Coleataenia tenera</i> (Beyrich ex Trinius) Soreng	NA	NA	G4/S1
<i>Elliottia racemosa</i> Muhlenberg ex Elliott	NA	T	G2G3/S2S3
<i>Helianthus tenellum</i> (Martius) Britton	NA	NA	G3Q/S2?
<i>Litsea aestivalis</i> (L.) Fernald	NA	R	G3?/S2
<i>Marshallia ramosa</i> Beadle & F.E. Boynton	NA	R	G2G3/S2
<i>Muscadinia rotundifolia</i> (Michaux) Small var. <i>mussoniana</i> (Simpson ex Planch.) Weakley & Gandhi	NA	NA	G5T4?/S2?
<i>Penstemon dissectum</i> Elliott	NA	R	G2/S2
<i>Rhynchospora harperi</i> Small	NA	NA	G4?/S1S2
<i>Sarracenia flava</i> L.	NA	U	G5?/S3S4
<i>Sarracenia minor</i> Walter	NA	U	G4T4/S4

## Results

752 taxa, including 733 species and 19 infraspecific taxa, were documented with vouchers. The largest families with numbers of taxa are shown in Table 1. Eleven rare, threatened or endangered taxa with official status in Georgia (Table 2) were observed and mapped, and one species, *Ludwigia ravenii* Peng, not previously known from Georgia, was vouchered. Twenty plant communities were identified and mapped (Figures 1 and 2).

## Future Research

Much of the habitat is fire-dependent and in need of intensive fire management. Additional survey work will be conducted after completion of controlled burns, particularly in flatwoods and overgrown ecotones along ponds and drains.

## References

Krakow, G. A. (ed.). 2018. Georgia rare natural elements data portal. (<http://gakrakow.github.io/>, 11-16-2018). Georgia DNR, Wildlife Resources Division, Social Circle, Georgia.

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