



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

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**WILDLIFE RESOURCES DIVISION**

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**COMMISSIONER**

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March 3, 2014

Jimmy Rickard  
United States Fish & Wildlife Service  
105 Westpark Drive  
Westpark Center; Suite D  
Athens, GA 30606

Dear Mr . Rickard,

Thank you for the opportunity to comment on the Proposed Listing (pL) and Proposed Critical Habitat (pCH) Designations for Georgia Rockcress (*Arabis georgiana*). Overall, I found the information contained within the two documents to be both accurate and thorough. I concur with the conclusions drawn concerning listing, conservation, management, and designations of critical habitat. My comments are enumerated below.

Subject Matter Comments:

- 1) Taxa Background . I would recommend some mention of the of two other species of *Arabis* that are known to be syntopic (occurring on same site) with *A. georgiana*. They are *A. canadensis* and *A. laevigata*, which are now assigned to the genus *Boecheera* (Al-Shehbaz [2003]). This seems important to inform future survey and management work, as well as to prevent any illusion that *Arabis georgiana* is, in fact, “more” abundant on these sites than otherwise presented in the pL and the pCH (i.e. confusion with the two *Boecheera* taxa gives the impression of greater abundance and perhaps no need for listing or protection). I will be forwarding to you a comparison chart of the 3 taxa for field ID purposes. In my opinion, there is no need to include this in either the pL or the pCH, this is just for your use.

Al-Shehbaz, I.A. 2003. Transfer of most North American species of *Arabis* to *Boecheera* (Brassicaceae). *Novon* 13: 381-391.g

- 2) Inclusion of Alicia Garcia’s survey work. Alicia surveyed all known *A. georgiana* sites in GA and AL in 2010 and 2011. In Georgia, her survey partners included Michele Elmore (TNC), Malcolm Hodges (TNC), Columbus State University researchers, GaPower personnel, and JCA private contractors. The survey results are contained in her thesis work, as well as in the Excel file that I will be forwarding to you.

Survey and assessment reports by Elmore (2010) and Schotz (2010) are cited dozens of times throughout the pL and the pCH. Since Garcia surveyed with Elmore and Schotz, it may be that your numbers taken from their reports reflect her efforts. I would suggest you “crosswalk” Garcia’s numbers with those of Elmore (2010) and Schotz (2010) just to be certain.

- 3) Conclusions from Garcia’s 2010/2011 survey work (which may be reflected in Elmore’s and Schotz’s reports). The greatest changes in measured population size between 2005 (Moffett) surveys and 2010/2011 (Garcia) surveys involve the Whitmore’s Bluff, Goat Rock Dam, and Ft. Benning, AL populations. Whitmore’s Bluff decreased by  $\approx -75\%$  (from 50 to 12 rosettes). This is consistent with the known general decline of all nw GA (Coosa/Oostanaula Rivers) populations. Conversely, surveys of the two central GA populations on the Chattahoochee River recorded substantial increases: Goat Rock Dam  $\approx +130\%$  (from 999 to 2320 rosettes); and Ft. Benning, AL  $\approx +270\%$  (from 162 to 598 rosettes). The increase at Goat Rock Dam likely reflects, at least in part, habitat improvement efforts (woody reduction and control of invasive species) by the GPCA and GaPower. This supports the active management of sites on which this species occurs. The increase at Ft. Benning, AL likely reflects a more intense survey effort in 2010/2011 than in 2005. The survey effort in 2005 was a cursory one, since it was technically outside the scope of the project. The 2005 survey established the EO.
- 4) Threats at Resaca Bluffs. There should be some mention of threats from trash dumping, runoff from a nearby truckstop, and the existence of what appears to be a makeshift “homeless” camp in and around the *Arabis* site.
- 5) Threats at Whitmore’s Bluff. There should be some mention of the threat from housing and subdivision development. The epicenter of the known Whitmore’s Bluff population is essentially in someone’s backyard. The habitat along the bluff in the downstream direction is in an area already legally subdivided (platted) for development.
- 6) Safeguarding (Reintroductions) at Blacks Bluff. The safeguarding for this site is inaccurate. There are 2 safeguarding outplantings at Blacks Bluff. The first is sited very near the original EO; the second, is sited at the other end of the TNC Preserve. Both populations were established using Blacks Bluff ONLY material. No material from other nw GA populations has been added or mixed at Blacks Bluff, although it has been discussed by the GPCA. A mixed nw GA ecotype is under cultivation now at a GPCA member institution (Chattahoochee Nature Center), but to date has not been outplanted *in situ*.

Editorial Comments: Misspellings that appear periodically throughout: Allison (misspelled Alison); Fort Gaines (misspelled Fort Gains); and Nepalese Browntop (misspelled Napalese Browntop).

Regards,



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Botanist

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