

To: file
From: Elizabeth Scherrer
CC: Christy Shumate
Date: October 1, 2012 (Revised 10/9/12)
Re: Surveys for Schweinitz's sunflower, Michaux's sumac, and Georgia aster at Monroe Bypass (STIP No. R-3329/R-2559) Revised Task Order 13F(E)

On September 17 through 21, Atkins scientists Elizabeth Scherrer and Jonathan Carr performed surveys for Schweinitz's sunflower (*Helianthus schweinitzii*), Michaux's sumac (*Rhus michauxii*), and Georgia aster (*Symphotrichum georgianum* or *Aster georgianus*) at the Monroe Bypass project site. The survey area consisted of all areas affected by the project, including ROW, utility relocations, borrow/fill site, staging areas, etc., to update the survey conducted in September and October 2007. Also included in the survey area were the three known locations of Schweinitz's sunflower near the project area with a 500-foot buffer. Since all sites for utility relocations were not known at the time of the surveys, extensions of the plant survey area were drawn along all intersections with existing roads for a distance of 1,000 to 1,500 feet and a width of 200 feet.

Previous to the field surveys, Atkins reviewed aerial photos of the affected area to identify possible habitat areas for the three species. Suitable habitat consists of roadsides, utility right-of-ways, field edges, and other areas that receive abundant sunlight and are infrequently but regularly maintained. A total of approximately 35 acres, or 13.5 miles of linear transects, were targeted for field surveys. Surveys were performed visually using systematic overlapping transects to cover all suitable habitat areas. No plants of any of the three species were found. The Biological Conclusion is No Effect.

Previous to the field surveys, Atkins scientists visited the known locations of Schweinitz's sunflower along Secret Shortcut Road to determine the local phenology of the species and to establish a search image. The two populations on the east side of the road appeared to be declining due to encroachment of shrubs and saplings. Four plants with 8 stems were found at the more northerly location, while 3 plants with 6 stems were seen at the more southerly location. In the powerline population east of Secret Shortcut Road, an estimated 17 plants with 60 stems were found. Maintenance in this right-of-way area appears to be more regular and timed to ensure survival and increase of Schweinitz's sunflower. Atkins scientists visited the site of a known location along Highway 601 just north of the project corridor, but did not find any plants. A known population of Georgia aster on Cunningham Lane in Union County was also visited where approximately 12 stems were found that were in the first stages of blooming.