

REGION 3, SECTION 6 GRANT PROPOSAL

Submitted by the ODNR, Division of Natural Areas & Preserves
2045 Morse Road, Building F-1, Columbus, Ohio 43229
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PROJECT TITLE:

Surveys for Virginia Sneezeweed (*Helenium virginicum*) & New Populations of Virginia Spiraea (*Spiraea virginiana*) in Ohio

NEED: The discovery of Virginia sneezeweed in Missouri after many years of the species being known only from Virginia has shown that species could very well occur in similar habitats in eastern North America. Virginia sneezeweed is very similar to the common sneezeweed (*Helenium autumnale*) and could possibly be mistaken for this common species. The species could very well occur in Ohio as the habitat it grows in, shallow sinkhole ponds, occurs in the Interior Low Plateau region of southwest Ohio. This rare sneezeweed likely occurs in between Missouri & Virginia in suitable habitats and an intensive survey for this species in the field and in Ohio herbaria is needed to verify its presence or absence in Ohio.

Appalachian or Virginia spiraea (*Spiraea virginiana*) is primarily found in the Appalachian Mountains in Kentucky, Georgia, North Carolina, Pennsylvania, Tennessee, Virginia, and West Virginia. Several locations of Appalachian spiraea were discovered in Ohio in the early 1990s along Scioto Brush Creek in Scioto County. The Ohio populations are at the northwestern limit of the species range.

Other waterways in the vicinity of Scioto Brush Creek have not been surveyed including Bear, Camp and Sunfish Creeks. Sunfish Creek is very similar to Scioto Brush Creek in flow regime, size, and vegetation and has the best possibility of having additional populations of this Federally Threatened species. Sunfish Creek is entirely in Pike County and flows into the Scioto River as do Bear and Camp Creeks. Bear and Camp Creeks are between Sunfish and Scioto Brush Creeks. These two creeks are smaller systems than Sunfish and Scioto Brush Creeks. Although their size and flow may not be the best conditions for the species, Appalachian spiraea may occur on these smaller systems because of its close proximity to Scioto Brush Creek and they both flow directly into the Scioto River.

The Division of Natural Areas & Preserves (DNAP) recently acquired land that contains one of the known populations of Appalachian spiraea on the Scioto Brush Creek. A detailed map of the population and a census are needed to determine the condition of this population and to develop a management plan for this site.

OBJECTIVE: The objectives of this project will be to determine if there are any occurrences of the Federally Endangered *Helenium virginicum* in Ohio through field surveys and examining specimens in Ohio herbaria; and if there are any populations of the Federally Threatened *Spiraea*

virginiana along Sunfish Creek and nearby streams. A secondary objective (contingent on discovery of new populations) will be to conserve these sites through fee-simple purchase, conservation easements or management MOUs.

EXPECTED RESULTS OR BENEFITS: The results of this project will be to determine if *Helenium virginicum* occurs in Ohio and if *Spiraea virginiana* occurs along Bear, Camp and Sunfish Creeks (which all feed into the lower Scioto River and have a good possibility for *S. virginiana* populations). If sites are located for either of these two species, the site will become a priority site for conservation. Division staff will contact landowner(s) about conservation options such as conservation easements, management agreements, or outright sale to the Division or other conservation organization.

APPROACH: For the *Helenium virginicum*, staff of the Heritage Program (DNAP) will visit four major Ohio herbaria, Kent State University, Miami University, Ohio University, and The Ohio State University that may contain specimens from southern Ohio for any mis-identified specimens of the similar *Helenium autumnale*. We will visit ponds and other wetlands in the Interior Low Plateau region of Ohio in Adams and Pike counties during its peak blooming period in August and September (Attachment A). If populations are found during the survey, detailed habitat information, and number of plants, or stems for *S. virginiana*, including number of flowering plants will be collected for each site. Observed threats to the population will be noted as well. Population location and area will be mapped with a GPS unit. Voucher specimens will be deposited at the Ohio State University herbarium. Photographs will be taken of the habitat and individual plants.

For the *Spiraea virginiana*, Heritage staff will conduct surveys from canoe and by foot along the stretch of Sunfish Creek from St. Rt. 32 to its confluence with the Scioto River. We will also visit the lower stretch of Bear and Camp Creeks. If populations are found during the survey, detailed habitat information will be collected as well as total number of stems, number of flowering stems, and any observed threats to the population will be noted. Population location and area will be mapped with a GPS unit. Voucher specimens will be deposited at the Ohio State University herbarium. Photographs will be taken of the habitat and individual plants. DNAP staff will also do detailed mapping and population census of the known population on the recently acquired Beach Tract on the Scioto Brush Creek and write a management plan for this site.

LOCATION:

Surveys for *Helenium virginicum* will be conducted in the Interior Low Plateau or "Bluegrass Region" of Adams & southwestern Pike counties (Attachment A).

The survey for new populations of *Spiraea virginiana* will be conducted on Camp and Sunfish Creeks in Pike County and Bear Creek in Scioto County (Attachment B).

ESTIMATED BUDGET:

Helenium virginicum:

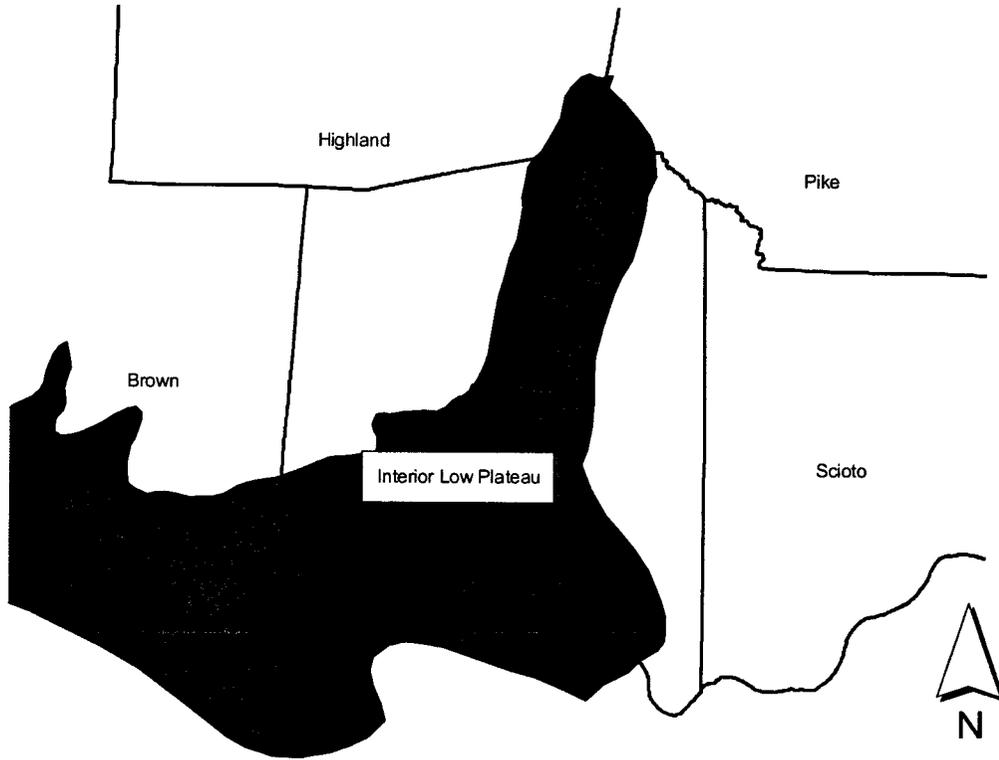
Staff Time: 244 Hours
USFWS: \$4607.20
DNAP: \$1448.71

Spiraea virginiana:

Staff Time: 384 Hours
USFWS: \$9617.80
DNAP: \$2113.79

Project Total: \$19,036.62
USFWS Share: \$14,225.00
DNAP Match: \$4811.62

Attachment A. Map showing the Interior Low Plateau Region of southwestern Ohio. The region in Adams and adjacent Pike County will be surveyed in 2006 for Virginia sneezeweed (*Helenium virginicum*).



Attachment B: Map showing the three main watersheds that will be surveyed in 2006 for Appalachian Spiraea (*Spiraea virginiana*).

Sunfish Creek, Camp Creek & Bear Creek

