

In the spotlight: Kentucky's rare species and communities

Fraser's Sedge (*Cymophyllus fraserianus*)

Kentucky State Nature Preserves Commission Status:
Endangered.

General Description: A perennial herb with strap-shaped, thick, flat blades.

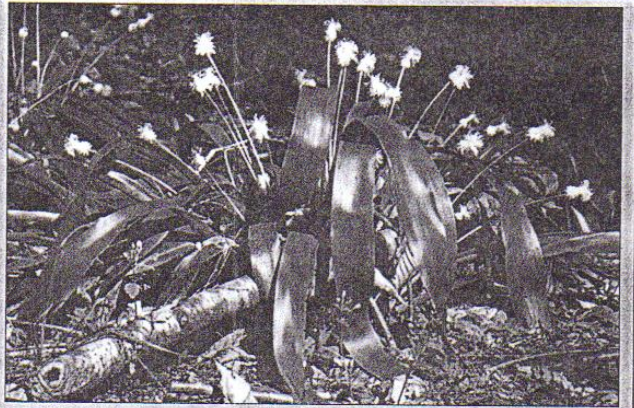
Habitat: Rich mountain woods, cove forests and along streams at the base of mountain slopes.

Flowering Period: Early May to late June.

Range: Generally Appalachian states with Kentucky at the western and northern extreme of the range.

Reasons for Listing: Very narrow range and few known populations.

Photo by Heather Housman, KSNPC



Rare Cane Borer Moth (*Papaipema undescribed species #5*)

State Status: Threatened.

General Description: Adult moths are light brown with a few small, white spots typical of *Papaipema* species.

Habitat: Cane breaks in extreme western Kentucky.

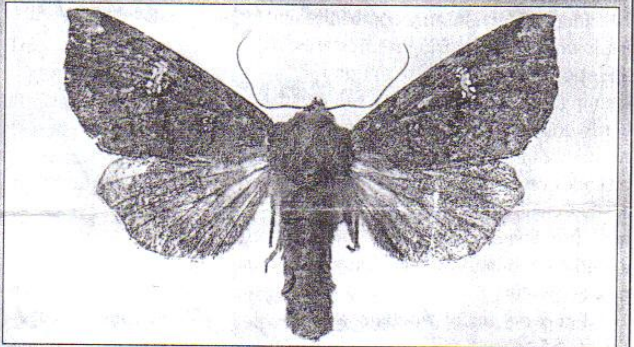
Larval Foodplant: Giant cane (*Arundinaria gigantea*).

Flight Season: Mid-October.

Range: Isolated populations in Kentucky, Mississippi, Missouri and Tennessee.

Reasons for Listing: Globally rare with isolated populations in a limited geographic area. In Kentucky, it is known only from a handful of sites in extreme western Kentucky.

Photo by Ellis Lauder milk, KSNPC



Shawnee Hills Sandstone Glade

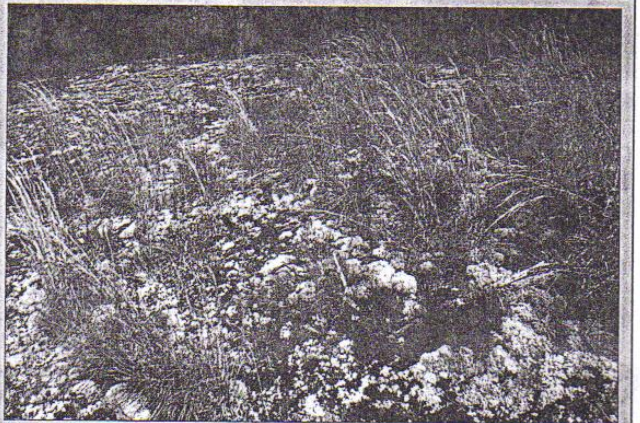
Kentucky State Nature Preserves Commission Status:
Endangered.

General Description: This is a small community (up to a few acres in size) on level or gently sloping terrain with usually a south to west facing aspect. This community is extremely dry and remains mostly open due to droughty, thin soils and exposed sandstone bedrock. Large colonies of lichens and mosses dominate the community, but pockets or depressions in the bedrock where soil can develop support prairie grasses such as little bluestem and broomsedge. These pockets can also harbor forbs such as Willdenow's rushfoil, pinweed, rough buttonweed and narrowleaf pinweed. Due to such droughty conditions, trees and shrubs such as red cedar, Virginia pine and redbud struggle to grow and often are gnarly and stunted.

Range: This community is restricted to the Shawnee Hills physiographic region of Kentucky. This region extends into Indiana and Illinois where this natural community can also be found.

Reasons for Listing: This community is small, rare and restricted in range.

Photo by Martina Hines, KSNPC



AMELANCHIER:
 SUMMARY COMPARISON OF 4 FORMS OF COLONIZATION OF THE FOREST
 COLUMN AT FARM, ELLIOTT COUNTY, KENTUCKY

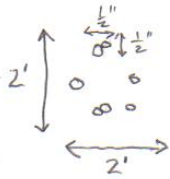
Excluding A. arborea and A. laevis, non-colonizing forms.

Observations by Mike Crane (502-778-6155) AT OF HIS FARM.

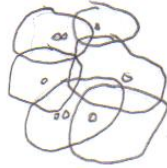
Form 1: Fastigate, suckering stem, to 12'

Individual Plant Detail

Stems at Ground
 (cross-section)



Outline of Canopy
 (from top)



Side View
 (whole plant)



Colony Detail

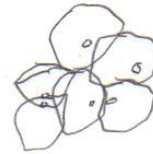
Colony Size
 (length X width X height)
 (2' X 2' X 12')

1 plant with
 2-4 suckers/colony

Colony Shape
 (cross-section at ground)



Canopy Relationship



COLONY 1



COLONY 2

Comment on canopy: Intra-plant canopy overlaps itself. Inter-plant canopies do not overlap. Plant canopy competes with small trees, rhododendron, and laurel level.

Nature of Stolon

Short, diagonal, 0.5" diameter: a sucker 4" below surface quickly piercing surface.
 Colony is smallest of four forms, limited to original stem and suckering stems surrounding it.

POSSIBLE IDENTIFICATION:

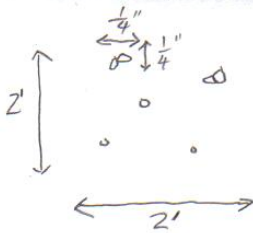
A. canadensis

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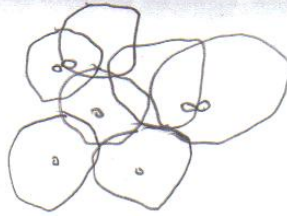
Form 2: Fastigate, suckering stem, to 4'; stoloniferous

Individual Plant Detail

Stems at Ground
(cross-section)



Outline of Canopy
(from top)



Side View
(whole plant)



Colony Detail

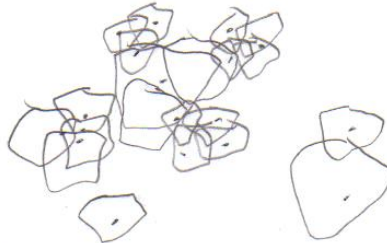
Colony Size
(length X width X height)
($\frac{1}{2}$ MILE X $\frac{1}{2}$ MILE X 4')

100's of plants/
COLONY

Colony Shape
(cross-section at ground)



Canopy Relationship



Comment on canopy: Intra-plant canopy overlaps itself. Inter-plant canopies, closely placed, also overlap. Plant canopy competes with herbaceous species and small tree seedlings level.

Nature of Stolon

String-like, brittle, 0.1" diameter, many feet long, 6" below surface; does not pierce surface. Colonies may be huge; largest of four forms. This plant extends over most of the 180 acres under study.

Possible identification:

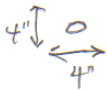
A. stolonifera

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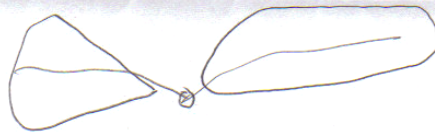
Form 3: Arching single stem, to 15'; stoloniferous

Individual Plant Detail

Stems at Ground
(cross-section)



Outline of Canopy
(from top)



Side View
(whole plant)



Colony Detail

Colony Size
(length X width X height)

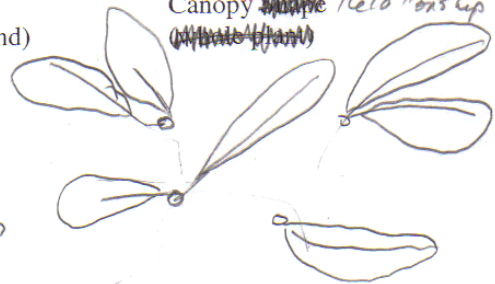
(10' X 10' X 15')

4-10 plants/colony

Colony Shape
(cross-section at ground)



Canopy ~~Relationship~~ Relationship
(~~Relationship~~)



Comment on canopy: Intra-plant canopy does not overlap itself: that is, each branch is widely separated from another. Inter-plant canopies, closely placed, do not overlap. Plant canopies compete in sub-canopy layer with small trees and large laurel or rhododendron level.

Nature of Stolon

Woody, tough, smooth, 0.5" diameter, at surface of ground in duff or slightly below mineral layer. Colonies are small, limited to at most 10 plants as observed; third largest of four forms.

Possible identification:

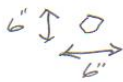
A. sanguinea

Summary, page 4

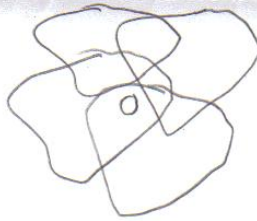
Form 4: Upright single stem, to 30'; stoloniferous

Individual Plant Detail

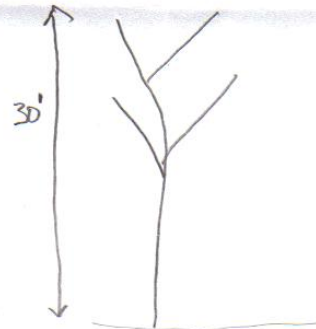
Stems at Ground
(cross-section)



Outline of Canopy
(from top)



Side View
(whole plant)



Colony Detail

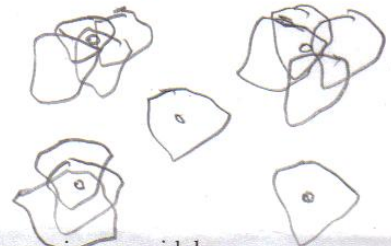
Colony Size
(length X width X height)
(400' X 200' X 30')

to 60 plants/
colony

Colony Shape
(cross-section at ground)



Canopy ~~Shape~~ Relations ^{up}
(~~whole plant~~)



Comment on canopy: Intra-plant canopy overlaps itself. Inter-plant canopies are widely spaced and do not overlap. Plants compete in canopy top with gums, sour wood, hemlock, and oaks.

Nature of Stolon

Woody, tough, smooth, 1" diameter, 1' deep, and long. Colony is second largest of four forms, occupying to several acres, as observed.

Possible identification:

A. humilis

3/25/08

Bellings:

Your cone has a history. I acquired this cone from the edge of a parking lot of a drive-in movie in about 1967. It grew in Georgetown, Ky. ~~with~~ and a piece was transplanted to the present site in 1977.

The broke has a resident moth larvae population. I'm trying to catch ^{a moth} ~~one~~, but maybe you'll see it or the larvae. Look for holes in stems — they occupy this hollow space.

Maybe it's a rare cone-feeder.

-Mike Greene