

**2017 Rare Plant Forum Minutes
April 29, 2017: Wilkes Barre University**

Meeting convened at 9:30 a.m.

Introduction and Announcements

Ken Klemow welcomed everyone to the 2017 Rare Plant Forum.

Ken: presented information about the facilities and housekeeping items.

Introduction of the RPF committee members: Mark Bowers, Jessica McPherson, Scott Schuette.

Upcoming bioblitz events:

Tim Block announced the Oxbow Bioblitz, northern Tioga Co., scheduled for June 2 & 3 and August 25 & 26

Lancaster Conservancy, scheduled for September 24, 2017

Steve Grund announced the bioblitz at Allegheny Land Trust's Wingfield Pines scheduled for July and September – check their website

Rebecca Bowen announced a bioblitz scheduled for May 28, June 25, August 27

Ken Klemow said the PA Biological Survey (PABS) had an announcement about bioblitz events. Check the PABS website.

DCNR Update (by Rebecca Bowen)

A webinar will be held regarding the regulatory package updates. There will also be an opportunity for the public to post formal comments on the updated regulations. Look for information and helpful links to be posted early this summer on the DCNR website.

<http://www.dcnr.pa.gov/Conservation/WildPlants/RareThreatenedAndEndangeredPlants/Pages/default.aspx>.

Proposals (began at 9:49 a.m.)

Proposals – the following are discussion items and notes following the presentation of the species (most of the presented information is in the proposal).

Adlumia fungosa: Jessica McPherson, proposed PR (currently N)

- Recent sightings in Bucks, Fayette and Clinton Cos.
- Steve Grund and Scott Martin have observed populations in Bedford/Fulton Cos. Scott M. observed approximately 12 in four quarters sites.
- Jack Holt has observed this species in Lackawanna Co. and in Montgomery Co. on diabase between 1980 and the present. He has seen it at the edge of a ballfield in disturbance habitat, appears to be an edge species.
- Bonnie Isaac reported that CMNH has a 2010 collection from the Butler-Freeport Trail in Butler Co.
- Jessica reported that there are 38 extant populations,
- Bowman's Hill has a person who is cultivating it, and he is asking about cultivating this species on a diabase ridge.
- John Kunsman also has observed this species in the mid-1990's on an acidic rock at Fort Indiantown Gap. It covered an area approximately 75 ft. x 75 ft. Three years later, he couldn't find any plants at the site. He also indicated that the Blair Co. sites generally are gone.
- Steve Grund reported that Rob Naczi says the species is declining over its range. Steve speculated that fire suppression could be a factor.
- Janet speculated that competition with Mile-a-minute plant could be an issue.
- Comparison of the 1800's vs. recent collections in a mid-western herbarium website shows that the species has spread over the years.
- Jessica indicated that rank calculations indicate that it is a S2 or S3 species. Generally small populations, based on observations from 38 museum specimens and the comments from today.
- Steve thinks it is a habitat specialist. Not all populations are small.
- Larry Klotz remarked that this species is biennial; possibly it is a seed banker species.
- Hand vote taken: 4 for PR and 17 for wait

Ageratina aromatica: Jessica McPherson & Tim Block, proposed PT (currently PR)

- This species has a strict preference for serpentine barrens.
- Few occurrences, but sizable populations.
- Janet says a historic population was on Blue Mountain.
- Jack Holt reports it is on the Delmarva Peninsula (?), and it responds well to fire.
- Seven (7) extant populations. most are very small, with a couple sizable populations.
- John Kunsman reported that there are a lot of historical sites, in weedy places like edges of roads, utility ROW's, etc.
- Ken Klemow asked if climate change could help this species (?)
- Rank calculator analysis: Calculated rank of S3, rare. Assigned a rank of PT due to the habitat being restricted to open serpentine areas.

- Hand vote taken: 0 for PR and 20 for PT

Ammannia coccinea. : Tim Block/Jessica proposed PT to N to watch list

- Tim Block reports that it is not native, historically not part of the flora. A waif found in navy yard in the 1860's. Edgar Wherry collected it in 1967.
- Jack Holt and Janet Ebert have seen this plant.
- Rick Mellon has observed this plant in a sediment basin. Philadelphia area has a lot of these basins. He has seen it in a soybean field too.
- John Kunsman stated that maybe it has seldom been collected. It is an annual.
- Steve Grund says that Kartesz says it is introduced. Can never be sure, but have occurrences on ballast in the 1960's.
- John Kunsman doesn't think it needs protection.
- Tim Block agrees with delisting this species, and placing it on the watch list as possibly not native.
- John Kunsman remarked that *Rotala ramosior* is in the same boat.
- Consensus: delist *A. coccinea*, place on watch list.

Calamagrostis stricta spp. *inexpansa*: Steve Grund (currently N, proposed PE)

- Southern limit of its range.
- He and Jessica collected it in a Bedford Co. fen. This is the only known population.
- Janet Ebert has observed this species in northern New Jersey. Jack Holt has observed it in Suffolk Co., NJ and the Reading Prong.
- Hitchcock and Chase's 1971 Manual of the Grasses of the US reports it in Pennsylvania
- Berkheimer collection in the 1960's in Bedford Co.
- Rick Mellon remarked that Kartesz's BONAP doesn't show any record in Pennsylvania.
- Steve said a *Calamagrostis* expert from Poland confirmed the I.D. of the Bedford Co. specimen.
- Rebecca Bowen asked if there are other possible sites. Steve thinks that the fens in NW Pennsylvania are potential sites.
- Ellen Shultzabarger asked if Steve had discussed this occurrence with Jim Bissell. Steve had not.
- Rick Mellon indicated that elevation doesn't seem to be a factor in the NJ fen occurrences.
- Consensus: Change status to PE.

Carex ormostachya: Steve Grund/Jessica McPherson (currently TU, proposed PT)

- Was one extant; reconsider given new meaning of TU.
- Currently two known extant locations and sites are small. Fourteen historic collections.
- Steve and Jessica looked at specimens of *Carex gracilescens*. Some *C. ormostachya* specimens were misidentified.
- John Kunsman thinks this species should remain TU. His concerns:
- how important are the historic?

What do you do with disturbance species?

Potential habitat is extensive.

We think it is at the south edge of its range in PA.

Climate risk?

How are you going to deal with it if well pad disturbance is beneficial?

Need to have qualified botanists do extensive surveys. Who is going to do the surveys?

- Jessica says Bells Gap site has *Cryptogramma stelleri*, a northern species.
- John Kunsman says it has a biological sense.
- Steve and Jessica looked at CMNH collections of *C. gracilescens* and *C. ormostachya*
- Heather says it seems that there isn't a lot of it.
- Mark Bowers thinks more survey work needs to be done.
- John Kunsman says he is very uncomfortable with PT, he thinks it should remain TU.
- Consensus: PT 15, TU 7
- Ellen Shultzabarger indicated that the DCNR can make a case to DEP permit reviewers to treat the species as PT.
- Rebecca Bowen remarked that a TU species gets reviewed as if it is listed?

Carex siccata: Steve Grund (currently PE, proposed PX)

- Steve checked a historic record in Lackawanna Co. He collected a specimen at the site.
- Tony Reznicek verified the I.D. of Steve's specimen as *C. foenea*.
- There are no extant *C. siccata* sites known.
- John Kunsman has a concern; we don't know the status – TU. He thinks it is PXH. No way to prove it.
- Tim Block indicated that there are 15 dots in the Atlas.
- Jack Holt thinks it should be PX. Remarked it is tough to I.D.
- Steve Grund said his proposal is withdrawn due to difficulty to identify (i.e. remains PE).

Dryopteris filix-mas spp. *brittonii*: Steve Grund (currently Watch List, proposed PE)

- In 2000, Joan Gottlieb discovered this fern at a land trust site in Allegheny Co., PA
- It is disjunct from site(s) on the Bruce Peninsula in Ontario.
- It is available from the nursery trade.
- A few sites have been discovered in Ohio.
- FNA says it is something else (taxonomy not well understood), probably a European species.
- At the Allegheny Co. site, it is not at the edge of a yard, but on a talus slope. Steve doesn't think it is likely that it is an escape. It is persistent, but there is no reproduction.
- It was proposed as TU in 2001.
- Steve feels that the site has longevity. Jim Montgomery concurs with the ID.
- Andrew Rohrbaugh suggested genetic work.
- Consensus, TU by half of the room.

Elodea schweinitzii: Tim Block/Jessica McPherson (currently TU, proposed PX)

- Bisexual, came from *E. nuttallii*
- Question about whether the flowers are reproductively functional.
- Tim is reconsidering if this is a good taxon.
- A specimen collected in 1857 is the type specimen. It isn't a great specimen – May not be a good species. Could be *E. canadensis*.
- Tim wants to keep it PX
- Bonnie Isaac indicated that Barry Hellquist thinks this species is “malarkey”.
- Tim wants to find a specimen with perfect flowers. Let Tim know if anyone finds one with perfect flowers. Typically, flowers are either functionally female or functionally male with rudimentary development of reproductive parts of the other sex.
- Tim doesn't care what happens – remove it from the list, leave it PX or change it from TU to N.
- Consensus, N, but place on the Watch List.

Ranunculus ambigens: Scott Schuette proposed, but presented by Jessica (currently TU, proposed PE)

- It has been found in a number of wetlands with no canopy.
- Not found at some historical sites.
- There used to be more extants.
- Jim Bissell reports that deer herbivory is a significant factor.
- Some threat due to invasive plant species.
- Could be PE or PT. Rank calculator results were S2 or S1.
- Jack Holt indicated he believes this species generally is in trouble. Habitat generally is muck, stream sides, etc. He thinks it should be ranked PE.
- Stan from Luzerne Co. has seen it growing in spring heads, and it is browsed extensively.
- Steve S. says Bissell says it is browsed a lot.
- Bowman's Hill rep. says that native *Ranunculus* species are often browsed.
- With 7, mostly small, populations – PT
- Steve G. says with the population size, it could be ranked PE.
- Consensus, PE, 6 and PT, 14

Sagittaria calycina var. *calycina*: Steve Grund and Jim Bissell (currently N, proposed PE)

- Had been identified as var. *spongiosa*, but is var. *calycina*.
- Janet Ebert says var. *spongiosa* is very small.
- Jack Holt says he has seen it in drawdown situations, planted and non-native.
- Another meeting participant said he has seen it in hydroelectric impoundments.
- Consensus, PE, 20

Triglochin palustre: Chris Tracey & Pete Woods proposed, but presented by Jessica (currently PX, proposed PE)

- There are 24 historical collections collected between 1868 and 1927 in an area that has been extensively botanized.
- New extant site on a bluff seep by Lake Erie.
- Main threat is *Phragmites*.
- Janet mentioned that *Triglochin maritima* has been reported along the Great Lakes.
- Consensus: PE, 30.

Break for Lunch. Resumed at 1 p.m.

Symphytotrichum laeve var. *concinnum*: Jack Holt (currently N, proposed ?)

- It has been found along abandoned railroad tracks within thin, partly shaded woods in the Seven Tubs Nature area.
- Basal leaves are narrower than in var. *laeve*.
- Tim Block said there was a 2011 collection at Crow's Nest Preserve. He listed eight recent collections. Some of them around Wilkes-Barre.
- Usually found on limestone or diabase – calcareous rocks.
- Chris Hardy mentioned that it has been observed (and collected?) near Conowingo Dam site in Maryland
- Steve Grund indicated that it is considered by some taxonomist as a variety, not a distinct subspecies or species. Previously considered a variety. How morphologically distinct is it.
- Jessica McPherson said that Weakley thinks that there is some genetic basis.
- Chris Hardy said that Cronquist made a distinction based on leaf width (greater than vs. less than 2.5 cm in width)
- Jack Holt said it is described in FNA.
- Bonnie Isaac said CMNH has two really old specimens from Chester Co., PA.
- Tim Block has a concern about treating varieties and subspecies.
- Jack Holt suggested a status of TU.
- Steve Grund said due to taxonomy questions, UTFE would be appropriate. But he said he would check with John Semple.
- John Kunsman talked about the significance of the watch list.
- Sense of the room, TU.
- Steve asked about ecological value.
- Jessica said that she has the inclination that it is rare.
- Ellen Shultzabarger explained how TU is used in environmental review.
- Consensus: TU, 11 and Watch List, 4.

Thalictrum dasycarpum: Steve Grund proposed, (currently TU, proposed PX)

- Distinct geographically and physically from *T. pubescens*.
- Ranges of the two species overlap in NW PA. Keener identified intermediates in collections and in the field. He recommended *T. dasycarpum* not be included in the flora of PA.
- Marilyn Park (PH) discovered a specimen collected in Warren Co. in 1951 identified as *T. dasycarpum* by H.A. Wahl. Carl Keener concurred with the I.D.
- Jim Bissell on board with Keener's recommendation that it is not part of the flora.
- Consensus, PX, 19

Proposals ended at 1:40 p.m.

Discussion Species (to establish awareness)

DCNR had requested additional discussion regarding these species that were presented as 2015 proposals

Bartonia paniculata: by John Kunsman (presently PABS PR)

- Historically, records were east of Blue Mountain. More recently, it is found much further west. John asked, what is PR? He doesn't think it needs protection. There is protection of wetlands where it is found.
- Dozens of new sites have been documented since the late 1990's.
- John wants local populations protected – geographically separate.
- Steve Grund stated that there is protection on state lands.
- Ellen S. says protection can depend on the type of project. Some are more broad. Look at PNDI policy – environmental review.
- John Kunsman said it is an annual, so a population can vary from year to year.
- Jessica M. outlined differences between *B. paniculata* vs. *B. virginica*. The leaf scales are mostly alternate in *B. paniculata*, etc.

Bidens laevis: discussion led by Steve Grund , (currently PT)

- May be some misidentification with *B. cernua*.
- Jack Holt and Janet Ebert talked about their experience with this species.
- Tim Block thinks it is vulnerable, and that the rank of PT is appropriate.
- *Bidens cernua* has apex chaff that is orange to orange-red, big branching inflorescence with nodding heads.

Cardamine maxima: by Jessica McPherson (currently TU)

- Question of whether it is a good species.
- “Selfs a lot”. It is either a species of hybrid origin with extremely low to no reproduction from seed, or is actually a hybrid (*C. concatenata* x *C. diphylla*).
- Leaves of *C. concatenata* in a whorl or opposite, *C. maxima*, alternate.
- *C. concatenata* has deeply constricted rhizomes that easily break. *C. maxima* has somewhat constricted rhizomes. *C. diphylla* rhizomes are +/- uniform in diameter. Steve Grund said that a new population has been discovered in Cook Forest.
- End of April and early May is the time to look for this taxon.

Carex sprengelii: by John Kunsman (currently PR)

- John Kunsman said there are 5 new populations on private land in the upper Delaware.
- Stan said there are 2 sites in Luzerne Co.
- Bowman Hill rep. knows of one site.
- Rick Mellon said there are sites on the upper and lower Delaware River in NJ.
- It fruits early and shatters.
- Hard to I.D. from other characters.
- Extant sites in eastern PA.

- Can occupy moderately disturbed habitats, but also a calciphile.

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Desmodium viridifolium: by Jack Holt (currently PX)

- Jack asked if anyone has seen it. No extant populations known.
- Berks Co. in the 1980's.
- Needs some herbarium work and field work.
- John Kunsman said that invasive plant species are an issue.
- Bonnie Isaac said there are 5 Porter specimens from the 1890's. Lancaster Co. at Furnace Hill.
- *D. nuttallii* split off of *D. viridifolium*.

Ilex opaca: by John Kunsman (currently PT)

- John said that some populations considered native based on the age of collections, in the lower Susquehanna R. watershed. Natural sites in southern NJ and Delaware.
- Historic records pre-1897(?).
- Scott Martin said it is everywhere in Lancaster Co. Locally abundant on a pipeline project. Considered special populations.
- John Kunsman said that a Florida student was doing studies on special populations, but lost funding.
- Ellen S. said that this species is a priority for WRCP.
- Many accounts of occurrences in young successional forest. Question about cultivated vs. native sources.
- Andrew Rohrbaugh mentioned that *Ilex cornuta* may be escaping from cultivation. It is a rounded shrub.

Field Species

Steve Grund led a discussion.

Harvey Ballard has been doing work on stemless yellow and stemless blue violets. Seeds and fruits are distinctive.

Viola subsinuata, etc.

Viola baxteri – has hairy stem, found on limestone prairies

Viola subsinuata – is biternate

Viola pseudo-brittoniana

Make collections.

Harvey is going to be giving a talk at Carnegie Museum of Natural History on May 22nd, 2017.

Stellaria corei present in SW PA. No current status.

Differences between *S. pubera* vs. *S. corei*

Calyx sepals: acute vs. attenuate, shorter than petals vs. longer than or equal to petals

Last year's field species? No discussion

Additional Announcements

- Eric Burkhart wants the location of any wild Goldenseal populations.

Closing remarks and thank you by Jessica McPherson

The 2017 RPF meeting concluded at 2:50 p.m.