2015 Rare Plant Forum Minutes
April 11, 2015: The Pennsylvania State University, Forest Resources Building, Steimer Auditorium

Meeting convened at 8:30 a.m.

Welcome

Kelly Sitch welcomed everyone to the 2015 Rare Plant Forum.
Eric Burkhart: presented information about the facilities and housekeeping items.

General Introduction by Kelly

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

VPTC Update (by Carol Loeffler)

- VPTC Chair Chris Hardy could not make it and asked Carol Loeffler to give report.
- Met in November 2014 – next VPTC meeting is following the RPF meeting today.
- Ephraim Zimmerman asked to step away from the RPF Chair – he will be replaced by a RPF committee.
- Procedure for Proposals for RPF the 2015 – the VPTC will approve proposals immediately after the RPF except for difficult species. For those species, decisions will be deferred to the Fall VPTC meeting. Minutes will be posted at www.pabotany.org.
- The PA Botany Symposium – 2014 – was very successful. Workshops were appreciated and popular. Fall 2016 will be the next Symposium. Talked about financial support for students.
- Ginseng update given by Eric Burkhart at the VPTC meeting: TV shows have made things problematic because it glorifies illegal harvest of ginseng.
    - Through Eric's work with WRCP – establishing permanent monitoring plots on public land to establish and understand where this species is located and threats to the species. If anyone sees ginseng – contact Eric.
- Approved 2014 plant species proposals with the exception of the following: *Tipularia discolor* – remained as PR; *Hypericum pyramidatum* moved to TU (probably could be PR, needs field work). *Helianthus hirsutus* needs more herbarium work to establish nativity – and remains as TU.
- Spent time talking about the Watch List and Status of the ongoing attempts to get VPTC recommendations moved into official status.

DCNR Update (by Rebecca Bowen and Ellen Schultzabarger)

Status of regulatory package update (Rebecca Bowen): have a package (proposed plant updates) that we feel comfortable and confident with.

- Package is working through internal DCNR process (legal). New governor and legislators and new administration at DCNR, so there was a transition period that slowed things down. Moving ahead again.
- 50 species on list – mixture of additions, deletions, status changes and all name changes.
- Expect the updates to be posted in the PA bulletin this summer. DCNR secretary has to do final review and check off.
- Information will be put on website = provide training on what this means. Outreach "events" will be scheduled.

PNDI update (Ellen Shultzabarger):

- Updated PNDI tool is expected to be out this summer. Will include both planning and environmental review tools with lots of information – can click on/off conservation layers and prepare reports. Can log in to do PNDI reviews.
- All data (Endangered and Threatened species locations) will be visible (with login) to avoid impacts
- On track to have the PNDI tool out in July.
- DCNR working with NatureServe to create the system. The tool has GIS-like features and is pretty sophisticated to what we have now. Nature Serve has done a number of tools like this. Virginia has an existing tool as well as Parks Canada, Florida, and Arizona.

NatureServe Rank Calculator Presentation (by Steve Grund)

Background: PABS Steering Committee is considering a new format for recommending species for listing. PABS technical committees would use the Nature Serve Rank Calculator and a modification of IUCN ranking system to determine the rarity and conservation status rank. The VPTC will be meeting and discussing this process and make a formal recommendation on the application of this new process for listing of plants. The RPF will likely use the Nature Serve Rank Calculator for all proposals to determine status and justify information for all new RPF proposals.

The NatureServe Rank Calculator will allow more consistency among species and jurisdictions.

S1 ~ PE
S2 ~ PT
S3 ~ PR

We have focused mostly on rarity in the past.

Steve provided an overview of the Nature Serve Rank Estimator tool and how it will be used for proposals – general discussion followed. Main points of discussion are

- All instructions and background information is available on the NatureServe website.

- Will be made available on the PABotany.org website.

- PNHP will help with getting the data needed for new proposals for the RPF that are coming outside the PNHP.

- Many further discussions on how to determine number of occurrences/data used, threats, and trend information.

- PNHP will host a webinar/trainings for users in PA

Proposals (began at 9:57 a.m.)

Overview for Proposal Review Session: Kelly Sitch, Jessica McPherson, Scott Schuette

- Format – we will stick to 15 minutes – if more discussion needed, we will table it and kick it to the end.
- We have a written tally sheet for "votes" on status changes/updates – please complete tally sheet – will provide quantitative piece of information to VPTC
- Please be courteous to the presenter, if you have information, please speak up.

Scott and Kelly moderated. Jessica kept time and kept the queue on comments.

Overview of new format for Proposals by Jessica:
Proposals include the result from the Nature Serve Rank Calculator; maps are presented after the results page from the Nature Serve Rank Calculator. All of this year's proposals were run through the NS Rank Calculator (by Jessica and Steve)

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

Oxypolis rigidior: Loree Speedy, proposed PR

- Her first experience with the NS Rank Calculator (she ran her proposals through it).
- Lots of known occurrences, so some people are wondering if it needs listing.
- Her experience in the west: if you see it, it is in a nice wetland habitat. Also in open (wet) meadows, edges of streams, in forested wetlands, always on the edge.
- Loree asked John Kunsman (JK) if eastern populations are gone. JK says some are.
- In western there is less development, more intact wetlands, but does see it in some timbered wetlands and in right-of-ways.
- Often 5-6 or up to 10 plants at a site (see proposal for numbers).
- Talks through the threats in the proposal. Often sees deer browsing, but not in all populations. Some development threats.
  Kelly Sitch asks Jack Holt and Janet Ebert for comments.

JE: sees lots of small populations where she come back later, and the populations are gone.
JH: comments on threats-deer, invasive plants.
JK asks if invasive species are not so threatening in the west.
LS says *Microstegium* is not there yet, but…
JK says it is a big threat in the East.
Steve Grund says *Microstegium* is in the West, but it hasn't moved into all of the habitats it can yet. They expect it to.

- Loree and Jessica(JM) took threats into account in the NS Rank Calculator
- Rocky Gleason – will have the following comments on all proposals. Recommends reviewing the separation whenever populations are clumped to make sure the NS Rank Calculator doesn't lump them all in one population. DO THAT FOR ALL POPULATIONS.
  LS demonstrated that she checked separation when she ran the NS Rank Calculator.
- Someone asked what was the result of the NS Rank Calculator analysis when the threat of invasive was made C vs. B.
  LS & JM indicated that it came to S3 either way.
- Ephraim Zimmerman (EZ) recommends always running the tool with different threat levels for a species so that we are prepared to discuss when the committee disagrees on the threat level.
- JK asks Kelly Sitch (KS) what the conservation significance of PR.
  KS thinks the biggest advantage is we (DCNR) can manage PR species on public land.
  JK: so it is a "watch list" for PE and PT species?
  KS: depends on how you look at it.
  LS: thinks PR species get voluntary environmental review.
  KS awards 5 more minutes for discussion.
  Some man asks how can you factor that some, but not all populations are under threat?
  LS: Used some assumptions. She made comments to explain the assumptions she used in the NS Rank Calculator analysis for threats.
  Another man asks when one evaluates threat of extirpation, what time frame does one consider?
  JM indicates that it defined in the NS Rank Calculator. She gives some examples. She also adds that awarding a threat level of A make this species S2.
- What is the significance of the PR?
  SG reads definitions of PR from the Wild Resources Conservation Act. PR= uncommon because in restricted areas or in low numbers throughout PA. S3=at moderate risk because of limited numbers, etc.
- Straw poll – some votes for PR, none for PT, two for delist

Oxydendrum arboreum: Loree Speedy, proposed DL

- Loree presented pictures of Sourwood growing on strip mines, pipeline right-of-ways, and gas well pads and in surrounding forests. In addition to where it is found naturally in the understory, it appears to be able to grow on disturbed habitats. Loree looked hard for historic occurrences in Westmoreland County, but was unsuccessful.

- In Greene and Fayette Counties it is all over the place.
- Loree used the 2 km (4 km^2) grid to get area of occurrences.
- Habitat in in Fayette County is a bit fragmented – strip mines and such, but it it's a major component and she assumes there is a lot on private land that she didn't have access to.
- Scott Martin agrees (he helped look in the field) that it is all over.
- LS goes over what proportions we might lose to mining, development (commercial and residential), gas lines, We could lose some, but not a large proportion and it also seems to do well in disturbed edges, gas well pads, etc. Seems unlikely, but possible that timber companies will clear sourwood for other trees to grow.
- SG: good to put time into the threats because then it is documented and you will need the info for trend later so you can refer to it there.
  JM, actually, a low long term threat ranking does not "roll up" to be included in the calculations of rank.
- LS goes over the threats some more.
- A man objects to Loree's comment that it is resistant to acid deposition – nothing really is.
- LS summarizes disturbance has benefitted Sourwood - increase in edge, increase in agricultural land reverting to forest has helped it.
- Currently Sourwood is a TU species.
- SM: has done work in western PA in the last 2 years. He has seen a lot of it, and it almost grows in mine drainage. One farmer cleared out his Sourwood so that it wouldn't prevent him from building. Resulted in more Sourwood habitat.
- JK (to Scott M.) – you see it in acid mine drainage?
- SM cites a couple of examples of saplings growing in AMD
- LS: in many cases one sees seedlings, saplings. Hasn't seen a lot actually in AMD.
- JK, it a species of well drained habitat, surprised that it would have wet feet.
- LS: saw it in early successional woodland surrounding AMD.
- Mark Bowers (MB): saw shrub sized Sourwood near the edge of an AMD seep.
- SG: inclined to support conclusion. This is a good example. He is not sure where the calculator considers seedlings, which we are supposed to exclude from the number of individuals. In this case, mines can affect both positively or negatively.
- Heather Sahli: this seems like a limited geographic distribution. Doesn't that fit PR?
- MB: Have seen 1000's (probably tens of thousands) of seedlings, but one gets the impression that many will not survive. Forested areas tend to not have many seedlings. Doesn't seem to tolerate shade well.
- Eric Burkhart (EB): JK mentioned wet areas seem odd for. Eric says we do have other examples (e.g. Black gum, Whit ash). He also advises caution on whether it benefits from AMD, it may just tolerate it.
- LS: but it's also in roadsides, edges, people's back yards.
- Janet E.: It seems like a classic edge of range problem.
- LS: but it has a lot of trees at it edge of range.
- Some man: what constrains it?
- LS thinks it is moving north.
- A woman state "that Fayette and Greene Co. are the WV part of PA
- Straw poll: split between DL and PR.

- Jessica and Ephraim urge folks making proposals to mention numbers and what the numbers are based on (recent surveys,, etc.) so the minutes takers can get it down.

Viola appalachiensis. : Loree Speedy, proposed DL

- She has seen the most of it. Presented slides of plants and habitat.
- Loree says it looks like *Viola blanda* when it is not blooming, and like other species when it is blooming.
- Plant is found on a variety of habitats, including mature forests, forest edges, floodplains, trail edges, mowed grassy areas. She visited Portage Park in Cambria County this season, where she found it all over a lawn.
- Showed a list of the EO's (a table).
- Not particularly a wetland species, though is found in floodplains.
- Found in great numbers in Somerset and Cambria Counties.
- Loree thinks there is more of this species now than pre-colonization days because of the availability of lawns and edge habitats.
- Proposing that it be delist. Ranked G4 and PA the largest amount of *Viola appalachiensis*. (Currently PT).
- Janet Ebert(JE) asks when it was changed from PT to TU and why?
- Jessica asks Loree if she knows. Kelly Sitch thinks it came up at a RPF because some populations are extensive.
- Rebecca Bowen: In 1994 it was proposed to change to PR, but went to TU to stimulate more field work. Stayed TU in 1995 because of taxonomy questions. In 1998, more historic sites were found due to taxonomic work.
- Steve Grund: It likes disturbance, but fairly local endemic, most of it is in PA. He has been playing with the rank calculator for this species, gets S4. One thing PABS does is create a PA responsibility species. If we would put it on the Watch List, he would feel better about de-listing if we did that.
- Mark Bowers (MB): Several years ago, He talked with WV and NC heritage people. Two sites in NC, quite rare there. In WV, they weren't sure of its status. A number of sites, but some folks were not certain about the accuracy of some ID's. He has seen it in Somerset County in areas maintained by periodic mowing. Cannot say he has seen it in mature forests. In WV, he saw it last year in successional forest along an old road bed and edge of un-maintained cemetery (trees growing in it).
- Loree: Bill Grafton (WV) has seen it in riparian zones along two rivers: in Canaan Valley and Cathedral State Park (parking area in grass). She says knowledge of it in WV is nonetheless shaky.
- Jessica: if it likes lawns, may not need help, but personally would like to leave it PR until we have a better handle on it in PA. Responsibility issue and how should that affect ranking?
- J. Kunsman" If its weedy, why is it so restricted?
- Jack Holt: seems that the range maps probably are sadly out of date.
- Steve and Mark agree that they have seen more of it (than maps reflect).
- Steve: This may be a case in which invasive species will affect it soon (i.e. *Microstegium*).

- MB: it seems to prefer higher elevations and it does get into northern counties – maybe it has to do with frost free days or avg. temperatures (air/soil). But it tolerates mowing, so it isn't so threatened.
- Larry Klotz: Weakley considers it to be a variety of *Viola walterii* (SG says it is Bonnie Isaac's fault. He and Bonnie were validating a name for someone. But Harvey Ballard considers it a separate species.
- Straw poll was a inconlusive": Delist, TU or PA Rare.

Zizania palustris: Steve Grund (proposed PE)
- Jim Bissell looked at specimens. All specimens from Erie Co. were *Z. palustris*.
- Bonnie: already screened Carnegie Museum specimens. So we have two species at opposite ends of the state. *Z. palustris* is in a few ponds at Presque Isle.
- Rank calculator results indicate it is a S1 species.
- John Kunsman: Does the plant status have Jim's blessing?
- Steve: Yes
- Straw poll: PE

Zizania aquatica: Steve Grund (currently PR, proposed PT)
- In the agenda as a Proposal to PE, but modified to PT or (remaining) PR after pre-meeting discussion with Tim Block. Most sites are along the Delaware River.
- One population in Huntingdon County, which had little impact on the results of the evaluation.
- Janet Ebert: populations along Brandywine Creek Chester County are still there and vary in size (it is an annual and opportunistic).
- John Kunsman agrees. It on cycles and adaptable. He supports PR status.
- Kelly Sitch: What about Phragmites?
- JK: that's definitely a threat, but based on the adaptability he has seen, his is for PR status. Also, it has obviously been introduced in mitigation plantings in places, and God knows where the introduced plants are from (planted for mitigation). It is much more common in New Jersey.
- JE: its common in the state of Delaware.
- Another man agrees with JE. Viable populations in Delaware.
- Straw poll indicates people support PR.

Erythronium albidum: Steve Grund (presently TU, proposed PR)
- Has a surprisingly short bloom time. Can be identified by fruit if stigmas hang on.
- Some people say they can determine ID by leaves, but Steve says he can't. Some debate about ability to ID with vegetative characters (lack of leaf mottling, posture, etc.), but that happens in both species.
- Fair number of recent sightings, but when Steve did a threat analysis – it generally is a floodplain species with threats form dams, industry, agriculture in past have eliminated habitat, and presently invasive plants – he got a S3. Therefore, he proposes a rank of PR. Can be somewhat up on slopes.
- Larry Klotz: very rich slopes.
- Steve: not deep forests
- Mark Bowers: in rich forests, and can be up slopes.

- Korey McCluskey and Larry agree.
- Jessica thinks it is a calciphile.
- John Kunsman thinks it has an advantage in the *Microstegium* battle because it blooms before *Microstegium* is up.
- Steve asks does allelopathy has any effect.
- Some man asks if it hybridizes with *Erythronium americanum*. He indicates that in Cumberland County, the three populations he knows of grow with the Yellow trout lily species – 10 yellows for each white.
- April Moore" The four occurrences on Allegheny National Forest are currently impacted by invasive species. Garlic mustard and knotweed the major invasive competitors.
- MB: he has only seen relatively small populations.
- Jessica: Jim Bissell reports finding some new larger populations in NW PA.
- Straw poll to list as PR – no votes for anything else.

Ophioglossum pusillum: by Steve Grund (proposes PE)

- Much of what people once called *O. pusillium* turned out to be *O. vulgatum*. Bonnie and Joe published on this.
- Bonnie indicated that where were a lot of mis-identifications. Someone annotated specimens at CMNH in reverse.
- We used to track *O. vulgatum*. Found *O. pusillium* in a SGL in Warren County- first specimen in several decades except for another collection that they learned about (a second, nearby site). So two extant sites, rest of the collections are greater than 50 years old (H). Steve interprets this as a decline.
- Bonnie asks how many historic sites we looked for? She wrote a paper with Joe Isaac in 2004. They decided not to make a proposal until historic sites were looked for.
- Steve indicated that is an excellent point. TU might be appropriate. Need to stimulate field work.
- A man indicated he thinks this species (genera) overlooked.
- MB asks if *O. pusillium* is restricted to glaciated areas.
- Steve: In FNA it says "north of glaciation". , but we have exceptions and the specimens have been checked.
- Jack Holt: it is extremely eruptive – can see it everywhere, then 10 years later, none. He has seen it twice in Chester County.. Blends in well with other vegetation - usually thick vegetation in wet areas.
- Bonnie, mostly north of glaciated boundary, but south of it, is on sandy outwash and on coastal plain,
  O. vulgatum – spring ephemeral
  O. pusillum – more wet
  Lots of anatomical differences (she lists some). Can tell if you put in some effort.
  Endangered in OH, historic in WV, variously suggested rare in other states.
  Bonnie notes that the person who mis-identified specimens in Carnegie also did that elsewhere, so surrounding state ranks could be wrong.
- Steve now proposes TU (UEF).
- Consider adding it to the list of 2015 field targets.

- Straw poll for TU

Potamogeton alpinus: by Steve Grund (proposed PX to PE)
- Tim Block and Ann Rhoads found a population in a lake in Susquehanna County, so there is one known population. Seems stable. Map shows several populations.
- Carnegie specimens of *P. alpinus* need annotating. Some probably are duplicates of specimens that have been annotated. Includes John Kunsman specimens.
- John K.: he saw something in Delaware that he thought was *P. alpinus*.
- Ernie Schuyler annotated Philadelphia (PH) specimens. John K. feels his specimens are mis-identified.
- Only one occurrence
- Proposal for PE in straw poll

Lunch -12:00 p.m.

Watch List presentation (by Jessica McPherson) – 12:45 p.m.

- They have been working up a draft, mostly John Kunsman's work.
- Purpose of the Watch list is to follow the PABS purpose:

  "To increase knowledge of and foster the perpetuation of the natural biological diversity of the Commonwealth of Pennsylvania."

  Want to document things about plants that are not listed (yet). It is a non-regulatory list, but can be used by land managers.
- There are many categories listed in the Watch List definitions document (was emailed, will eventually be on the Pabotany.org website.
  Jessica went thru the 10 categories.

  1. Rare species
  2. Species that have distinct east/west, north/south outlier populations.
  3. Species that host rate invertebrates (e.g. West Virginia white butterfly, host is toothwort).
  4. Species that are indicators of unique habitats and possibly predict the presence of other significant species (e.g Alder-leaved buckthorn).
  5. "WOW" species (e.g. Blue-eyed Mary, *Trillium flexipes*, Ramps).
  6. Shared responsibility species (e.g. *Juncus gymnocarpus*, Rhodora).
  7. Species for which the type locality is known with certainty (e.g. *Calamagrostis porteri*. Known from Pulpit Rocks, Huntingdon County – John K, checked, and it is still there).
  8. Species being negatively impacted, or having the potential to be negatively impacted by various biological factors such as deer browse or insects (e.g. Viburnum leaf beetle).
  9. Species that may be indicators of climate change (e.g. *Betula papyrifera*).
  10. Species for which PA populations may have particular importance in the overall gene pool (e.g. Butternut without cankers, Red pine, etc.).

Steve not all butternuts, but those with no butternut cankers, look first for lots of dead branches. Keeping track of locations allows us to supply data to researchers on where they are, do conservation planning, etc.
- They don't know whose list this will be, for administrative purposes; depends on interest. WPC data management staff will enter data, after entering data for listed species.
- Someone said that Special populations will go back to the Watch List. Special populations list is on the PAbotany.org website.

<u>Proposals</u> (continued1:00 p.m.)

Viola selkirkii: Scott Schuette for Adam Hnatkovich (N, proposed de-list)
- Cool forest species. Greatest threat is fragmentation of habitat via gas development. Not a lot of invasive incursion.
- Need to keep looking in Potter County – likes cool moist conditions. AK reports it can grow under hay-scented fern canopy (rocky site). John K. says he hasn't seen it under Hay-scented fern, too moist.
- Jessica M.: with this species, it maters what the threat level is.
- John K.: he started looking for it in 1995. He thinks it is more common and widespread than he thought, but he doesn't like de-listing it because it grows in excellent habitat - great places to look for ginseng. The species triggers useful environmental review.
- Ephraim Z. agrees. These populations are on state forests and gamelands, interior highly diverse forest habitats with rich calcareous soils. Might be a good Watch List plant.
- Scott S., personally thinks this species should be PR – edge of range, steep ravines, very species rich habitats.
- Steve G.: not convinced it isn't affected by gas exploration, there is so much activity, plus there will be increases in invasive species. He hates to see it de-listed, only to see it having to be re-listed. NE records are on private land where John wasn't able to get access.
- Jessica M.: We see these populations persisting after cutting, but how long will they last.
- Kelly S.: depends on exact management practice is used. John K. agrees.
- Bonnie I. notes that all the dots on the map are post-1995, so the NE historic sites are not that old.
- Straw poll showed similar numbers for PA rare and DL.

Woodwardia areolata: by Jessica McPherson for Tim Block (PT to PR)
- Mostly in coastal plain of PA, but increasingly found outside of coastal plain, and not present in every coastal plain fragment. See comments in proposal.
- Scott Martin and another man indicate they have seen this species in acid mine drainage (AMD) in Greene Co. Jessica tells them to send their data for the sites.
- Janet Ebert says she sees this species in sandy acidic soil.
- Jack Holt says it is pretty common in DE and NJ in wet, acidic, mucky soils. Generally the populations are small.

- John Kunsman : has observed a little browsing. He has found it in more and more places, even Cameron Co. He is not sure if it is increasing or if it was being overlooked. He is finding this species in habitats that you might not expect.
- Proposed change to PA Rare – no straw poll.

Juncus biflorus: Jessica McPherson for Tim Block (TU to PR)
- Fairly degraded successional habitats (ditches, old fields, pastures).
- John K.: most sites tend to be calcareous, but we do have some on sand.
- JM: Major threat seems to be succession. Tim Block found a big population that lost many plants over a time interval. He re-visited some historical sites that are gone.
- Status (?) depends on this species ability to recolonize
- Decline seems to be apparent – loss of early successional habitat.
- Found in ditches, swales, etc. so it is hard to address in environmental review.
- Janet Ebert: this species likes wet right-of-ways – a plus for it.
- John K.: hundreds at Gettysburg were being grazed by cattle. The cattle are gone, and now the *Juncus* population has crashed. *J. biflorus* seems to be able to establish new sites.
- Loree Speedy: her field work results which were submitted aren't included in the proposal. She saw 3 populations in wet areas in hayfields (swale and seeps) in the middle of Bedford County.
- Scott Martin: expresses concern - people get upset when they have to reroute pipelines for PR species (?)
- Jessica asks how does DCNR respond if a PR species comes up in environmental review.
- Jason Ryndock says it is situational. PA DOT and PA turnpike commission only have to do surveys for PE and PT species. But for other permit applicants. DCNR can request surveys for PR hits.
- John K.: this will not happen (re-route requests?), but there should be different criteria for successional species where someone has to manage the site to keep the species there.
- Ephraim Z.: DCNR doesn't normally require re-routing of pipelines.
- Straw poll: PR.

Leucothoe racemosa: Jessica McPherson for Tim Block (PT, proposed PR)
- JM: Tim thinks there is a lot of tiny habitat fragments that might have this species, maybe half of them. Development threat is high in long term, though persists in the short term.
- John Kunsman sees it outside of coastal plain – vernal pools, swampy woods. Being in wetlands, there is some protection.
- Proposal of PT to PR is driven by number of occurrences.
- Jack Holt thinks there aren't that many populations left on the coastal plain. There are sizeable populations, and on that basis, he is okay with PR (e.g. Blue Mtn. populations).
- Janet Ebert: mentions that this species is disappearing in Bucks Co.

- Steve Grund: adjusting the trend changes the recommendation to S2S3 or even S2. It is clonal.
- Janet Ebert: asks how much habitat is out there that we can expect additional *L. racemosa*.
- John K.: not in Monroe Co. but there is in Pike Co. His hunch that there are no more than 10 additional sites in the Ridge and Valley.
- Steve G.: if you take the number of occurrences down to 21-80, or C. then the rank depends on what you do with the trend. It does not look as if its been stable since European colonization.
- Kelly Sitch: Tim's text is different from our discussion – lots of populations.
- Jessica M.: they are not high quality populations. It may be appropriate to leave this species as PT.
- Kelly Sitch: put them on the field list?
- John K.: I'm on the fence.
- A man: a major threat is development, which environmental review can help with.
- John K.: it is in little swampy shrub wetlands in North Hampton Co. – he has requested surveys for it in such spots.
- Mark B. and John K.: more observations/field work is needed.
- Jack Holt: can handle some disturbance – some occurrences along road sides in Delaware.
- Straw Poll resulted in inconclusive results: PA Rare/PA Threat.

Polygonella articulata: by Jessica McPherson e(PE, proposed DL)

- Can indicate good coastal plain/dune habitat, but PA doesn't have that except at Presque Isle.
  Good thing for Watch List, but is ephemeral and colonizes highly disturbed habitat – adventive, ruderal, ephemeral.
- Steve: if it were highly G-ranked or G5, but not secure in NJ, it would be different, but it doesn't look like PA is that important for this species.
- Bonnie I.: What is the oldest record?
  J.M.: 1896.
- John K.: last seen on Money Island, growing on dredge spoil.
- Steve G.: (He reviewed the PNHP database) Ann was the surveyor, saw 250+ plants, gave a 0.4 hectare estimate surrounding the plants in 2009. She said that mining, habitat destruction a threat and invasive.
  Proposed Watch List if we delist this species.
  Steve suggested waiting until we hear from Ann.
- Tabled until we get more information from Ann Rhoads and Tim

Carex ormostachya: Jessica McPherson (PT, proposed PE)

- At southern tip of range. A couple of the dots in the Flora of PA may not be "real". Steve G. Some specimens were misidentified. This species just has not thoroughly been surveyed for.
- Mark Bowers: He talked to Dr. Tony Reznicek about this species a couple years ago. Tony indicated that in Michigan, he finds this species in sandy, disturbed soils along logging roads and staging areas – described it as a "weedy" species.

- John Kunsman:
    - Just because there are few historic sites and we haven't found them doesn't mean it is rare – no one may be looking for them. He gave an example of *Scirpus ancistrochaetus*, a sedge that is way more abundant in PA than previously thought.
    - It is hard to look for this one since there a several (common) species that look just like it.
    - Habitat for this gets wider and wider – now we have logging roads. There are hundreds of places to look for this. I don't think we know crap about where to look for it.
    - He understands we finally have a known site (Rob Naczi's), we want to protect it, but you better have a paid "sedge head" go out to look for it.
- Steve G. agrees that there is a lot of uncertainty.
  Do we agree PT to PE?
  Can we go with PT? He asks for DCNR's opinion.
- Kelly Sitch had this on a pipeline environmental review project a few years ago.
  John K. asked who was going to ID it? The gas company hired a very good botanist who didn't find it on this project in Cameron County. DCNR had information for a historic site from the 1950's. That was recent enough at the time.
  Kelly recommended tabling the proposal.
- Proposal was tabled.

Proposals Done: 2:25 p.m.

Tipularia discolor update: by Scott Martin – see presentation

- VPTC was concerned about was happening in the western part of the state. In 2014, he had reported observing more than 6000 individual plants in SE PA. He found ten new sites (an additional1000 individual plants) in SE Greene Co. earlier this year. (See PDF in 2015 proposals). The Isaacs have indicated that they have 13 more sites. He is hoping to have to have enough data by next year to propose de-listing this species.
- Scott reported that 8 to 18 percent of the plants in the populations he has observed were flowering. He indicated that he often finds *Tipularia discolor* plants near tree bases. Topographically, he finds it from stream sides to the upper slopes. He thinks there are few threats.
- Janet Ebert objects to the comments regarding threats. She indicates that deer and worms are a threat in SE PA.
- Jack Holt comments that *Tipularia discolor* can't tolerate deep shade.
- Joe Isaac reports that the 13 sites is now 16.
- Eric Burkhart: he has been doing surveys in Lancaster Co. None of the populations are big. Type of forest *Tipularia discolor* needs is all over, but he didn't see reproductions in the Mountain laurel sites.
- Janet Ebert: She saw it growing under Multiflora rose.

Field Targets

- Kelly Sitch encourages discussion of field species on the list (*Ophioglossum pusillum*, *Leucothoe racemosa*, *Tipularia discolor*). (Scott Schuette records additions on a Word document).
- Mark Bowers asks folks to look for *Andropogon glomeratus* this field season. He presented plant and typical habitat (bogs, poor fens, coal spoil piles) photographs and information regarding phenology (August- October).
- Scott Martin discussed *Chasmanthium latifolium*. Identifiable by seed head all winter. A woman indicates that is not as common on the Susquehanna River as in SW PA.
  Jack Holt says this species on the very S. edge where Octararo Creek enter the Susquehanna River, but it is escaping into spots in Lancaster Co. Janet Ebert says it is an aggressive species.
  John Kunsman says it is cultivated more and more and it is aggressive.
  Jack Holts says the occurrences from 59 years ago are native, but not all the recent ones.
  Scott Martin discussed more about the populations on the Monongahela River upstream and downstream of Point Marion. He has observed it growing in disturbed areas.
- Jessica M.: had wanted to propose *Carex sprengelii* for a ranks of PT, but John Kunsman said not to because there is lots more of it along the Delaware River.

  Sisyrinchium montanum – distribution is northward, and the expert doesn't think the species is in PA. but she thinks we do. Looks for plants that don't have bracts – that is a characteristic of importance for distinguishing other species of *Sisyrinchium* from *S. montanum*.

  Galium trifidum – Jim Bissell will be looking for this species this season. The pedicels are greater than 1 cm long and they are scabrous.

- Mark Bowers asked folks to look for this species this field season. He presented plant and typical habitat (bogs, poor fens, coal spoil piles) photographs and information regarding phenology (August- October).

Announcements

- Send plant discoveries to anybody on the Rare Plant Forum team. At some point the RPF committee may post a running list on line,
- Ephraim Zimmerman is involved in a project on peatlands, including peaty places that are reverting to bogs that can become a cottongrass, poor fen and other wetland types. He hopes to get emails from anyone who finds such peatlands.
- Steve Grund reports that there is a new Flora of TN out (University of Tennessee Press).
  Steve asks how many people are interested in a webinar on the Nature Serve rank calculator – got some show of hands.

- Scott Schuette talked about the Botany Symposium group hosting workshops in odd years – the first will be a bryophyte identification workshop sometime in late-May 2015.
- VPTC has a sub-committee investigating native vs. naturalized planted species. Interested folks can make an inquiry by contacting the VPTC.

Closing remarks and thank-you by Kelly Sitch

RPF meeting Concluded at 3:30 p.m.