Rare Plant Forum 24 April 2010

Wilkes University

Called to order at 10:15 AM

Introduction & welcome to Wilkes University by Ken Klemow, breakfast & lunch provided by Wilkes University Biology Dept.

Grund announced that the Rare Plant Forum has been meeting for over 30 years and is advisory to the state for conservation issues.

Introduction of people present.

Grund passed out a handout of the Watch, Problem & Special Populations list, they are in the process of adding a field stating as to why the species is on the list.

Grund also passed out a handout of nomenclatural adjustments from the Fall 2009 VPTC meeting, this is an effort to keep up to date with current nomenclature & taxonomy.

Munch inquired as to what we should do with the watch list? What should we do if we find one of these species? Grund responded that the heritage folks would like to know where the species are found and a few brief comments, they don't want you to do a complete write up. For tracked species too, we love to get forms filled out completely, it really helps, but we would much rather have coordinates & dates than nothing, so that we can understand the current status & have something in the database. Kunsman added that you do not have to fill out the field form for watch list species, just a few comments is great.

Ellen Shultzabarger asked if the name changes are what we are going with. Grund answered, yes, those are the PABS name & the names have already been changed in Biotics. Tim Draude inquired where we should send the data. Grund responded to send the data to Kunsman, Grund or Firestone, anyone is fine.

Rhoads asked "what is the citation for the watch list? If I'm talking to a land manager what should I tell him that it means?" Grund responded that species on the list are plants of ecological interest, this is valuable stuff for land conservation organizations, they don't care so much if the plant is legally listed. They want to know what is ecologically special on their land. Kunsman added that they are in the process of picking one name, they don't particularly like special population, but that's what is in the regs. Grund noted that some of the species come up on the web list; we want to get them off that list & put them on a special list on the web site. We will revisit this at the fall VPTC meeting. Janet Ebert agreed with John that special population doesn't work very well, it does need another name. Grund added that it will be nice when we

can give the reasons why the plant is on the watch list. Rhoads - so the authority for this rests with the VPTC? Everyone agreed that it did.

Grund - James Lendemer is a lichenologist & is now working on his PhD at NY. He just described 2 new species of lichens in the group that Howard Crum used to call isidiate goo on the bark of trees. One of them is *Chrysothrix susquehannensis*, so far it is only known from one site on the Susquehanna. [paper can be downloaded at http://sweetgum.nybg.org/philolichenum/biblio_detail.php?irn=247690]

Grund - Rob Naczi at NY is in process of updating the Gleason & Cronquist manual. He is interested in info from the botanical community. Let him know if there are keys or things that don't work well. There will be a manual & a web site. Klemow asked if they will be moving into the 21st century soon, so that they can be on kindles or handhelds of some sort. Grund responded that Ken should let Rob know, he wants input like that. [see Naczi talk about updating the manual at: http://www.vimeo.com/10897997]

Grund – we have spent a lot of time trying to come up with different systems for ranking elements. There is a sophisticated system available from Natureserve that is sort of complicated but Steve will be happy to distribute if anyone wants a copy.

[http://www.natureserve.org/publications/ConsStatusAssess_RankCalculator-v2.jsp]

Grund - Jim Bissell requested that we attempt to set a date for the 2011 RPF now. We can try to do this at least in a general way for now. If there are other conflicts let us know. We want to avoid the ESA mid Atlantic meeting & PA Academy meetings. We also want to avoid Easter weekend. [Easter 2011 is on April 24th] The consensus was to meet the first available Saturday after April 1st that doesn't conflict with known meetings. The plan is to be at Slippery Rock University.

Other announcements? Tim Block announced that their intern, Lauren Spitz made a poster that we are all welcome to look at.

Gilbert - We erected a deer exclosure around the *Taenidia montana* site on the Buchanan SF in Bedford County on the Maryland border, which John believes to be the only viable population left in the state. The *Linnaea borealis* at Colerain Ice Holes is not currently fenced, but we are going to look at this population this spring to assess plant sanctuary potential and any fencing or other management needs this spring. If anyone knows of other plant populations on state forestland that may be in great need of attention or management, please let me know, as I am delineating public plant sanctuaries and hopefully developing management plans.

Firestone – we had the first round of plant sanctuary nominations; she suggested that Delhaas Woods would be a good nomination. Criteria are on the DCNR forestry web site.

[http://www.dcnr.state.pa.us/forestry/wildplant/PrivateWildPlantSanctuary_application.doc] Shultzabarger added that these get people thinking about plants & they give the landowners some recognition.

Draude – there are a few people who are members of the bryophyte tech com & if any one is interested in joining the committee let us know, the tech committee is currently without a chair. They are trying to get James to serve another term.

Proposals

Carex gynocrates, (proposed by Grund, currently no status) we discussed this years ago & people were not comfortable with it. This was collected by John Goldie, this showed up in FNA. There is a specimen, the specimen was indeed collected in PA & was annotated by Sir Francis Boott. Rob Naczi has looked at a better copy of the scan of the specimen & thinks that it is correctly identified & that we should consider it as part of our flora. It occurs in cold bogs. You can see how this could be hiding out. Proposing that since it has been so long since it was collected that we should consider it extirpated. It's a boreal thing. Mellon – I was just looking through the list & noticed that Muhlenbergia cuspidata is also proposed for delisting, what is the difference between Muhlenbergia cuspidata & this species? Grund - Muhlenbergia (was discussed at an earlier meeting) was considered adventive and outside of the range & was considered a waif. Mellon - why is this one not considered a waif? Hardy - that's a good point, it's a very vague locality & we don't even know when it was collected. Grund - the consequences as to whether we put this on or not are not real great. If someone is looking for how the flora changed over time, they would have to look into Carex gynocrates. Hardy -. Currently we know that there are about 116 species extirpated? Is that an underestimate? How would we know unless we add things like this? Grund - was the Muhlenbergia as disjunct as this? Mellon - maybe more so in miles, but in terms of habitat I'm not so sure that it is. I think that it is a matter of making a call individually based on professional judgment as to whether it was part of the flora or not. Hardy - are we willing to put our professional reputations on the line? Obviously the locality is wrong. Grund - the locality info is not wrong, it was based on a different concept back then. Rhoads – there were not so many localities back in the 1800's, so the concept of locality was very different. Kunsman – we just have to make a judgment on this. Grund - I feel comfortable that it is correctly identified & that it was from PA even though it might not have been. Rhoads – I think we should accept it as extirpated. Mellon - I don't really have an opinion, I can see both sides. Mellon moved that we accept this as extirpated, Rhoads seconded. There were no objections.

Goes to PX

Cystopteris tennesseensis – (proposed by Rhoads & Block, currently TU) Block - this is a case of not having many recent collections, there are 12 sites scattered across state. Propose as PE based on the number of sites. Holt - does the fact that it can grow on man made bridges have any effect? Block - we look at man made structures. Holt - is this a valid species? Grund - pteridologists accept this as good species. Holt – I have an issue with if it's on man made structures. Draude - Janet Novak is finding it on masonry walls in the Philadelphia area. Grund – is it rare enough to be more than rare? Block - I would have a problem with arguing for a status lower than PE just because it shows up on masonry walls. Draude - my experience is that it only occurs on older masonry walls, not just because they are older but they changed the consistency of the mortar. Holt - would you tell someone that they can't fix their bridge? That would be a safety issue. Shultzabarger – No, we would not compromise safety. Goes to PE

Dichanthelium yadkinense – (proposed by Rhoads & Block, currently TU) Block – this has languished on the TU list; there are 3 records of collections. Grund -this looks pretty restricted in the SE part of the state where habitat is mostly gone. Holt – it's not a terribly restricted habitat, thin woods, but we don't see it very often. Grund – there is also the issue that not everyone accepts this as a good taxon, FNA treats as a subspecies & others lump it with *dichotomum*. Block – we've chosen to keep it as a good species because we feel that it is identifiable. Ebert – it just doesn't look quite right for *dichotomum*, but I can't say why. **Goes to PE**

Equisetum scirpoides (proposed by Grund, was already PE from Fall 2009 VPTC meeting)—this was found in Erie Co. while doing inventory work. Chris Tracey & Pete Woods found this species, it was not previously found in PA. It's a neat little distinctive horsetail. This is a no brainer. **Stays PE**

Eupatorium album (proposed by Rhoads & Block, currently PX) – Block – I hesitate to say that this is a no brainer; there are 2 locations in Delaware & Bucks Co. It was listed as PX but has been found so therefore it becomes PE. Joe Isaac - when was it listed PX? Bonnie Isaac – it was moved from TU to PX in 1991. **Goes to PE**

Juniperus communis var. *depressa* (proposed by Rhoads & Block, currently TU). Block – this is a pretty classic case of decline due to development & deer browse & successional forest development. There are very few recent collections. Firestone – it's at Colton Point in Tioga Co. Block – we are recommending PT because of the low number of sites & the pressure it is under. Grund –it's not difficult to identify. Holt - why not PE? The trend is going down not up. It's

not something that you won't notice in the field. Kunsman – we know of 6 sites, 5 of which have only 1 plant. Bonnie Isaac - what was the reason for proposing PT? Block - the number of sites that are less than 50 years old. We have no objection to PE. It's S1 in several states & SH in Maryland. Joe Isaac - how many of the historic sites have been searched for? Rhoads - this is a plant of openings in the forest & it probably exploded during the clearcut era of the 1890's. Loeffler - based on number of individuals it's a definite PE. Kunsman - this species brings up a problem for heritage with more than 80 historical sites that have not been looked for? Grund we are not saying they are not there, we are saying that most of them probably are not. Kunsman - I don't disagree with the proposal, but it's a problem for us in the database. Do we just say those are extirpated? Grund - no, we don't have to change the occurrence in the database, they are just H's. We have evidence based on what has happened to the other populations, this is less likely to be overlooked than many other species. Kunsman - this could be a remnant from cultivation, we don't want to list those as native populations. Block - it is usually pretty easy to tell if it is a remnant from cultivation. Kunsman – so this is based on the numbers of what we think are actually out there? Rhoads – yes. Holt – I move PE, Rhoads seconded. There was consensus. Goes to PE

Linum medium var. medium (proposed by Grund, currently N)— Grund - the typical variety is not the typical variety, var. texanum is very common & var. medium is very restricted, it's mostly in the Georgian Bay region with a few collections from around Lake Erie. There were some specimens from Ohio & NY that were redetermined. The specimens from Presque Isle have been annotated by a guy who is doing a revision of the group. It is S3 in Ontario because there is a fair amount in the eastern Georgian Bay. It's probably of hybrid origin; it has twice as many chromosomes as the other variety. We should seriously consider this. Bissell has looked for this at Presque Isle; var. texanum is fairly common. Holt - when was it collected? Bonnie Isaac - 1906 & 1916. Grund - it's probably still out there, but based on the age of the collections I'm proposing PX. Joe Isaac- would we call this adventives if we found it now? Grund - our rules about adventives allow us to track them if it appears that it was a natural range extension into the state. I think that it was part of our flora at the time. Rhoads - we consider it part of the flora. Goes to PX

Oldenlandia uniflora (proposed by Rhoads & Block, currently N)– Block – this is a plant in the Rubiaceae, Ann found it at Delhaas Woods, which is exactly where it belongs in PA. But it has never been seen there before. It was probably always there, it was found on a power line right of way. Rhoads – It's S3 in NJ & MD, it's unlikely to be a lot of other places in PA. It's newly discovered in the state, but it's not surprising given the range of the species. **Goes to PE**

Omalotheca sylvatica — (proposed by Rhoads & Block, currently TU) Block - is this still out there? Joe Isaac - how much field work has been done for this in the last 10 years? Block — probably none. Joe Isaac - I don't think that we should list this as PX. Grund - I agree. Mellon - maybe we should delist this, it is so far out of its range. Climatically, this is just like Muhlenbergia cuspidata. Block - we are going to argue that this is not that far out of its range, it's in a glacial relict microhabitat. Grund - if it was still there would we consider it native? Mellon - I'm raising the question of consistency between this & the Muhlenbergia. Block - I think that this is a different case from a Midwestern grass species on a scour zone; this was on a forested hillside. Bonnie Isaac - where is the specimen from? Kunsman - Tioga Co. in 1941. It maps out to an area near where a man made reservoir now is. It could have been brought in with excavation. Grund - there is a possibility that it is more common in NY than they know. We can agree that we don't know for sure & we have different opinions as to nativity. Block -we will leave it as a TU for now & I will look around for it this summer. stays TU

Platanthera aquilonis (currently N) – Platanthera hyperborea (currently PE) – Plantanthera huronensis (currently N) – (all proposed by Grund) Grund –according to current taxonomic revisions, P. hyperborea now only occurs in Greenland, Sheviak discusses the issue & described a new species (P. aquilonis) for what we were calling hyperborea. [see Lindleyana 14:193-203, 1999] P. huronensis is not that easy to tell apart from Pl. aquilonis. I looked at specimens at CM & I'm pretty sure we have mostly aquilonis & only one specimen of huronensis. So I'm suggesting that we list these as PE. Sheviak said that NY had mostly huronensis. Grund e-mailed him that he thought ours were mostly aquilonis. Sheviak may look at the specimens. They are easier to tell apart in the field than on a sheet. (P. aquilonis is diploid, with autogamous, yellowish scentless flowers. P. huronensis is tetraploid, with allogamous sweet scented whitish green flowers.) For now, suggesting that we have both species (80% sure), aquilonis & huronensis go to PE, hyperborea gets DL.

Platanthera macrophylla (proposed by Grund, currently N) –Grund - the current trend is that this has been recognized at the level of species. The specimens are easier to distinguish that I thought they would be. Scott Shriver annotated some of the specimens. It's pretty clear that we have both species & this one is pretty rare. So I'm suggesting that we it add as PE. Scott's specimen is from 1996. **Goes to PE**

Firestone - would you suggest that we add these to the sensitive species list? Grund - didn't we add all native orchids? YES

Loeffler – where did you get these maps you are using for the proposals? Grund - BONAP, North American digital flora. [https://rsgis.crrel.usace.army.mil/apex/f?p=703:2]

Meeting broke for lunch followed by presentations.

Presentations

Sarah Miller - Presentation of Regional Floristic Quality Assessment Project, Sarah Miller & Hannah Ingram. FQA measures the quality of a site based on an individual species fidelity to specific habitats.

Carrie Gilbert & Chris Firestone - Presentation on the impact on native flora by Marcellus shale, "Plant issues & Marchellus shale gas development on PA State forestlands"

Proposals resume

Persicaria setacea (proposed by Grund, currently PE)— looked at the numbers & thought this is probably PT. Variety *interjectum* doesn't seem to be recognized as significant anymore, so we might as well drop it. One population is very large with at least 10k plants. There are less than 14 known extant sites, but there are probably more. This is a little too common to call endangered, it is not restricted to fens. Most of the wetlands are buffered, mostly marshes & lake margins etc. It occurs in NW PA, above the glacial boundary, Crawford, Erie & Bucks co. **Goes to PT**

Trautvetteria caroliniensis (proposed by Grund, currently PR) – There is not really a change in what we know about this species. Whenever it comes up in environmental review, there are millions of plants & wiping out a few plants won't hurt the species. We are at the northern limit of the range in the east & it's pretty solid along the Yough & Casselman Rivers. It doesn't need our help. Holt - what invasives occur with it? Grund - Japanese knotweed is in some of its habitat, but there is so much Trautvetteria that I don't think it will get wiped out. Firestone - there are other species that are protected that grow in the same habitats like Marshallia & Aconitum so the habitats are being protected by surrogates. Grund - It's along about 80 miles of the river. There is so much of it that environmental review is pointless. It should stay on the watch list, we want to keep track of it, but for environmental review they will get hits on other plants that need focused on. Goes to W

Veronica catenata (proposed by Rhoads & Block, currently TU) Block – this is a simple taxonomic issue; it is a synonym for *Veronica anagallis-aquatica* which is not a tracked species. Holt - Fernald had *Veronica comosa* as a synonym for *catenata*, he was separating *anagallis-aquatic* & *comosa* & had this synonymized with *comosa*. Block- either way this is synonymous for a non tracked species – **goes to DL**

Viburnum trilobum (proposed by Grund, currently PR) Grund - we had this as rare for a long time, some people thought there was too much, Bissell wanted to keep it on the list. Four or 5 years ago we got a beetle that came in from New York & devastated the plant. In redoing the Erie County inventory we discovered that all we could find were dead shrubs & some little sprouts. It is almost completely gone, other than coming back from sprouts. Hopefully the beetle will cycle through. It is also affecting V. dentatum which is an important species in many places. We couldn't find any V. dentatum. This beetle came through really fast. Firestone - is the beetle impacting opulus also? Grund - we don't know. It seems to be selective as to which *Viburnum* it is impacting. Cornell has a good web site that talks about this species. [http://www.hort.cornell.edu/vlb/] The bug is Pyrrhalta viburni (Paykull). [This web site lists V. opulus as highly susceptible] Bonnie Isaac - have the heritage folks in New England tracked any Viburnums? Grund - I don't know. Firestone - many folks are planting what they believe is the native plant & they are probably planting opulus. Joe Isaac - if the beetle did a lot of damage to the Viburnum's in New England then they should have started tracking it. Grund - this is a little different case then deciding to list something that no one looked for. There is a concrete threat out there that we know about. Joe Isaac - I would be more comfortable with waiting till we know what is happening in New England. Firestone - if we make it PT or PE then there would be more money to work on the species, (not that there is money out there). Draude - did you say you went to sites & there was nothing left? Grund- no, that's not it. There are many dead plants & some that the leaves are distorted such that you can't identify it. A vote was taken for opinion on listing; there were 2 votes for Rare & many others for Threatened. So the consensus is PT. goes to PT

Meeting adjourned at 2:43 PM.