

Rare Plant Forum 9 April 2011, at Jennings Environmental Education Center

The meeting was called to order at 9:40 AM

Welcome & Introduction by Steve Grund.

Announcements :

Rick Mellon – there is a new bird book out, The Crossley ID Gude: Eastern Birds, it's a spectacular bird guide available from Princeton University Press [ISBN: 978-1-4008-3923-0]. Author is an incredible birder from Cape May.

Susan Munch: Introduction to Mosses is available from Susan she has some copies available.

We want to set the date for next year's forum as early as possible at the request of Jim Bissell. We decided last year that we would hold the forum on the first available Saturday after April 1<sup>st</sup>. Please let Steve know of any conflicts ASAP so we can set the date. It is likely to be the 14<sup>th</sup> or the 21<sup>st</sup> of April next year.

Proposals :

**Carex bebbii** – proposed by Pete Woods, 2 years ago while doing field work for the Erie Co. inventory they found several new populations for *Carex bebbii*. If we lump all of the Presque Isle populations together than there are 15 extant populations in the state mostly in the NW. A few are scattered in other places. Bissell – there is a lot at Presque Isle. Woods – we tried to rank the populations that were not ranked with the available data. There are 6 or 7 A or B populations which are large viable populations. There are 7-9 C ranks that are not strong holds for the species but there is some viability. It is hard to judge the total populations. It's hard to count them all in a large wetland when you find them. Based on the extant populations it is between endangered & threatened. There are probably more out there than we know about, we suspect that there are. There's not a ton more out there but we are picking up some new populations.. Grund – the map comes from BONAP which is the Biota of North America project. They are county distribution maps for the whole US & provinces of Canada. Yellow means that the species is tracked in that state. On the NatureServe map red means S1 which is like endangered, orange is S2 or threatened, yellow is S3 rare, light green S4 & dark green is S5. Brown means not ranked, or undetermined. K- Is it in New Jersey, I can't tell from here? Grund - yes. On the PA map blue represents a large population. Green is smaller etc. Where is the Centre Co. population? Kunsman - Millbrook Marsh. Grund - Pete is suggesting that its time to move it to PT from PE. Bissell it's in Presque Isle in the wet sands, when the water drops you see a lot of it. It's flushed out of the seed bank every time the water drops like its going to do this year. It's all through the park in all the protected bay shores & all the ponds. Grund - the proposal is to go to threatened. Does anyone think that it should stay at PE? Consensus is PT. **Goes to PT**

**Cypripedium reginae** – proposed by Chris Tracey (& Pete Woods)–during field work in Erie county we have been looking at the populations. A number of the records we could not find. The habitat has either been greatly modified by shading out or by deer. A couple of the sites we found more than the

initial surveys. So there is a stable trend at some of them. A number of the sites the plants were browsed by deer, some of the sites all of the flowering stems were browsed. We think this may be declining slightly despite some sites doing a little better. We propose to move it from PT to PE. Grund - Wes Knapp indicated that it is declining in Maryland also. There are a lot of red states on the NatureServe map. In Kentucky blue is presumable historic or extirpated. At Wattsburg Fen it had been hit hard by the deer year after year & then one year the plants were doing very well, so there is some robustness. It was nice to see it come back at that site. Loree Speedy - you said some sites were disturbed; is it possible that management would help those sites? Tracey - most of the sites were affected by Beaver activity, so possibly draining the sites would help, but beavers & natural disturbance are the majority of the disturbance. Bissell - did you find it on SGL 107 W of Titus? It was just S of the road. Tracey - Steve did that survey & did not find it. Woods - that is the site that we did not survey adequately enough to tell. There are some other sites that we didn't visit but no one has seen it outside of Erie County in the last 18 or 20 years. Kunsman - its at plain Grove, at circle Fen. Tracey - it is still at plain Grove. Grund - there are some historic sites in Huntingdon County at Birmingham. Kunsman - and BlairCounty too. Grund - we don't know if we have more beaver than presettlement or not & these are susceptible to wetland loss. Mellon - I'm not that familiar with the NW, but in the NE beavers were coming in but they were extirpated & then reintroduced so now there are no predators. The continual change of conditions that we would have had is gone. Kunsman - we have seen a lot of sites in the NW where the beaver went out & the fen came back immediately. Grund - maybe management of the beaver is something that we should be more concerned about. Zimmerman - we also had areas that were being pastured which was managing the sites. Grund - that also opens them up for invasives. Bissell - narrowleaf cattail is a big threat. Tracey - with the Viburnum beetle many of the sites that were being shaded out are now being opening up, there is a lot going on here. **Goes to PE**

***Elephantopus carolinianus*** – proposed by Mark Bowers – after looking at the numbers its pretty solidly in the rare category but I'm still making a proposal because there is more out there than documented. The habitat is out there. It likes mowed wood edge, old woods, disturbed, cow pasture, and trails in recovering woods. There are at least 18 existing sites with around 50000 individuals mostly in SW PA, Greene Fayette & Washington Co's. There are some in SE PA, historic that have not been found again. The amount of pasture land may be declining but there are other types of disturbance that are creating habitat. It's a G5 species. It's secure in adjacent states. Last summer in WV there were a lot of pasture lands with it in it. We are on the edge of its range. Grund - has anyone seen this in the SE? Ebert - there are sites in Delaware not far from the state line where it is a pest. Holt - but we don't have a lot of it in SE PA, there are a few more sites than shown but none are large populations. It's not common at all in our part of the state. Grund - to summarize, you can make an argument to make it as rare by the number of known locations but it is a weedy species that can be aggressive. Pastures are one of its favorite sites & those may be diminishing but there are other disturbances happening. Grund - everything that we have taken off the list in the past has moved to the watch list. We have been using the watch list for several reasons such as rare but not rare enough to track or hybrids of interest etc. Anyone want to argue that this should stay as rare? Joe Isaac - I object to the watch list. There is way too much. Some populations there are 10000 plants. Grund - the watch list does not mean you have to take a bunch of data, we don't want you to take data where it is well known & there are lots of

individuals. Joe Isaac - I would rather have it on the watch list that listed at rare. It's very much like ironweed; the cows avoid it but reduce the competition. **Goes to Watch**

***Lemna obscura*** – Grund - for most of these we don't have any extant localities so it might seem weird to take it off the list. I'm not sure that this one is even native to PA. It was collected twice in the same area. If you compare the map in FNA to the BONAP map you get a very different picture. It doesn't seem to be supported by collections. This may be because Landolt has collections that he has identified that have not made it into BONAP. Plus the fact that it doesn't show up in PA because his data came from the old atlas & they didn't recognize it. It is a well chosen epithet because it is very obscure. The much smaller *Wolffia*'s are easier to tell apart than the *Lemna*'s. The Lemnaceae site at Waynes Word [<http://waynesword.palomar.edu/1wayindx.htm>] is an incredible site. Holt - those sites in Philadelphia would be 2 separate sites, one is a more northern site than the other. Grund - I was going for the record on the number of TU modifiers. Because they grow in highly eutrophic habitats I hate to ask people to mitigate for sites where there is a lot of sewage going into the sites. It would be good if we could recognize these. Maybe more than one of these are growing in natural sites & then we would want to reconsider them. So that is why I am suggesting the Watch list. Joe Isaac – *Lemna*'s tend to grow very rapidly in eutrophic waters. It is likely that they were brought into these waters by waterfowl & they might pop up again in the future. Grund - that is what I am suggesting they may not be introduced by people but are more waifs & may be eliminated by a hard winter. Kunsman - why not list as PX? Grund - because if it is not native then we shouldn't put it on as PX. anyone think it should still be TU? (No answers) Grund - anyone think it should not be on the watch list? [No objections] **Goes to Watch list**

***Lemna perpusilla, turionifera & valdiviana*** – Grund - these are likely native in PA.

***L. perpusilla*** - The yellow dot up in Erie is Jim's.

***L. turionifera*** – overwinters by turions.

***L. valdiviana*** – this is the one that you would most likely notice that it is different, it is more elongated.

Taking these 3 together I'm suggesting that they all go to the watch list for the same reasons that we did for *L. obscura*.

**All go to Watch list.**

***Sisyrinchium montanum*** – Grund - this came up years ago when Sue Thompson & Bonnie Isaac went through the atlas & looked at all species that had less than 60 dots. When this one came up there was some question about taxonomy so we sent it to the special problems list which was like purgatory. It came to attention again recently when Kartesz called & said you have *var. crebrum* mapped & they should all be *var. montanum*.

There were some questions that came up when looking at the specimens. Anita Cholewa was inconclusive when annotating the specimens. Grund –the varieties may be good but they are tough to distinguish. I'm suggesting that we never mind the varieties, the species itself is uncommon enough that we should be able to just track the species. Bissell - I disagree, you should track both varieties if you

have both varieties. Kunsman - *montanum* is everywhere & *crebrum* is restricted to the NE. Bonnie Isaac - Cholewa noted that *var. cerebrum* is not in PA. Bissell - Tony [Reznicek] says that Michigan has mostly *montanum* but they have *crebrum* too. Kunsman - what about specimens from the east have they been looked at? Grund - I don't know. The conundrum is that it is possible that *crebrum* is worthy of something higher than PA rare, but we don't have the info to say that right now. Kunsman - Jim is there a habitat difference? Bissell - no there isn't, we find them in sandy oak openings W of Toledo mostly. There is a site near Cleveland for *var. crebrum*. Grund - I'm suggesting URH for *var. montanum* & UEH for *var. crebrum* any comments on that? Opinions? Bonnie Isaac - I'm uncomfortable with splitting the species if we don't know that we have them. How about URFH for the species? - **species goes to URFH**

***Stenanthium gramineum*** – Pete Woods, right here we are pretty much in the epicenter of *Stenanthium* in PA. They are all clustered around Butler county & half a county away from Butler. We keep finding feather bells wherever we go. It likes floodplain habitats & edges of beaver meadows & it doesn't seem to mind a moderate amount of disturbance whether it's grazing or beaver flooding or timbering. It is ranked TU right now, it is S1 S2, we think it should be a PR. It's easy to overlook when its not flowering, but it jumps out at you when it is flowering. Ebert - are there any sites in the SE? Holt - There is one that is near New Texas where they are trying to clean it out to see what returns. Woods - I can't distinguish them from bunchflower when it is not flowering. It doesn't usually flower in shady situations. Deer usually browse the flower stalks. They often don't set seed when they survive browsing. Grund - when we first added this to the list there were not many recent records. But we have more now especially since Pete started looking at it. Others have also sent in some records. Speedy – I found one in Indiana County one year, the following year there were thousands. More than the historic in Indiana co. I found all of the historic that I looked for. Rocky Gleason - were they flowering or vegetative? Speedy - all flowering, thousands of them. Tracey- some of those sites were mowed before seed set so there would be no recruitment in those populations. Ebert - are there any special insect pollinators? (unknown) Gleason - there is a reproductive issue, I think that threatened would be better. Holt - if you have tens of thousands in a population? Bissell - a Butler County population that I found was very nice. Joe Isaac - we haven't done enough field work on this, but a lot of people think there is enough. We should bring it down to rare. I think we can compromise at rare. Gleason – I can go rare, it does occur along roadsides, & RR. **Goes to PR**

***Triadenum walteri*** – Bissell – We've been finding this further north in Ohio it was known from Jackson County, then in showed up in Trumbull County & in Kingsville Swamp, so I looked at every buttonbush swamp in 2009, then when removing cattails in November last year I found it in fen & lots of it. Marsh Creek Fen or Bog Candle Fen, there were several hundred plants. I did not find it in Pymatuning Swamp, but it could be in Mercer Co somewhere. Holt – it seems like one of those species that likes the coastal plain & the lake plains. It is weedy on the coastal plain. Bissell - It is easy to walk by it. You have to check the flowers then there is no mistake. It's in Crawford County in the Oil Creek drainage. **Goes to PE**

***Vitis x novae-angliae*** – Grund - when we decided to track it, it was considered to be a good species, but Dr. Moore determined that it is a sterile hybrid of 2 very common species. *Vitis labrusca x riparia*. This

does not fall in our guidelines as to when we track a hybrid. It would go to the watch list because its of botanical interest. Bonnie Isaac - what plant would not be of botanical interest? Are you suggesting that the entire flora should be on the watch list? Grund - that is John's idea. I see your point. Bill Paxton – I have this growing on my property, they don't bloom & pollinate at the same time, *labrusca* & *riparia* would not be able to hybridize. Joe Isaac - They may not bloom together in your area but grapes move around. - Some folks would like to still track it. More would prefer that it be removed from the list. Loeffler - suggested that we should recheck the paper. Grund - so that would be the argument for UET? B. Isaac – Let's send it to the technical committee & have some folks read the paper & then send to technical committee to vote on. **Goes to Technical Committee**

***Desmodium glabellum*** – Holt - Ann [Rhoads] was going to suggest this last year but we ran out of time. With our experience we can get a feel for these in SE PA. We have seen them in the Delmarva. We found it on a gas pipeline near Downingtown. It was distinct, it does occur. *Desmodium's* are in a lot of trouble in SE PA from conversion of habitat, invasives etc. This is not an easy plant to identify; it looks a lot like *perplexum*. Grund – I reidentified the specimen from here as *perplexum*. So the Butler Co. dot has been reidentifeid. Holt - there is taxonomic confusion between *glabellum* & *perplexum*. *D. glabellum* has all hooked hairs, the whole plant will hold on to you. Grund - there are some venation characters too. Tracey – it is found on the Allegheny-Washington Co. border at Settlers County Park. We should check into the Erie County specimens at Carnegie. Grund - Jack is suggesting Endangered? Bonnie Isaac - even if all of our questions are settled then it's still PE. Holt - I think it's a good PE. Ebert - I was just questioning whether it should be TU because of the taxonomic questions. Grund - the proposal is PE. Does anyone else think it should be a TU? Woods - it sounds like there are few people that can distinguish the species. Grund - what are the chances that it is lower than PT? PE & PT are treated pretty much the same for environmental review. TU is treated very differently. **Goes to PE**

***Desmodium laevigatum*** – Holt – this is one of the easiest *Desmodium's* to distinguish; vegetatively & in flower. It is very showy. Again, similar situation, the habitat is under stress, sites have been destroyed. If people are not seeing it, it is probably not out there. It is very showy. **Goes to PE**

***Desmodium nuttallii*** –Holt – We can look at this and *viridiflorum* together. They physically look similar. This is one of our biggest *Desmodium's*. It can be 4-5 ft tall with large almost furry leaves. We see it fairly frequently in the SE, but there are not many populations. The one green dot in Chester County is from last year. It is very locally abundant but not common. Grund - There are 8 extant records in the database. Holt - They also suffer from deer browse, deer like beans & they are chewing these things down. The number of plants are very low. Ebert -I think PT is more appropriate. Grund - any comments? Janet is leaning toward PT. Holt - I won't object. This is the most common of the *Desmodium's* that we are proposing. **Goes to PT**

***Desmodium obtusum*** – Holt - this one is difficult, it physically resembles *D. ciliare*. I have trouble trying to figure this out. It is a difficult plant. I always keep an eye out for small leaved *Desmodium's* just to make sure I'm not missing something. Maybe it should be TU instead. Grund - so are you changing your recommendation? Holt - no I still think it is a PE. I think it deserves protection! Grund - so he is suggesting PE or maybe a TU? Any discussion – Loeffler - what is your gut feeling about how much

protection it needs? It would make a big difference TU or PE. Holt - yes very much so. Ebert - it will be right in harms way for construction. Grund - do you think this is not a good species? Holt - no I think it's a good species. Loeffler - if you took all the things it could be confused with & considered them collectively what rank would it have? Holt - I always look at this group. Ebert - the whole group needs more work. Grund - how surprised would you be if some people did more work & we discovered that it should be PR? Holt - I could see that. Ebert - the trouble is that people aren't looking at them & the habitat is disappearing fast. Grund - what about PT? Holt - I have no basis, I'm not seeing it. Munch - if he's not seeing this & we aren't sure than it would stay TU. Sitch - if we make it PE, how confident are we that any one else could go out & identify it. Schultzabarger – in the end the argument between T & E is it would get work done, a TU would not get any work done. Grund - it sounds like we are between PE & PT. Bonnie Isaac - what is the most recent specimen? Maybe it should be PX. Grund - these are all old enough that if we felt that none of these are extant then it would be PX. Holt - I think we may have seen it but I can't be certain that we have. This plant is very difficult to identify. The taxonomy is a problem. Grund - this in the heritage program we would list as SH. None of these will generate hits they are all too old. Sitch - I think PE would be appropriate for environmental review. Holt - I don't feel comfortable calling it a PX, it's probably still out there with that many specimens. Grund - any objections for PE? **goes to PE**

***Desmodium viridiflorum*** – Holt - this is a close relative of *D. nuttallii*, the distinction has to do with the lobing of the leaves & the leaf bases are more rounded. This is more of a southern species. I thought that we collected it at Scarlets Mills. I'm not confident that it wasn't *nuttallii* that was 20 years ago. It's in the same category as *laevigatum*. It's strictly SE PA. We have been in the field enough to say that it is not out there. There are probably darn few populations. Mellon - I've not seen it. Holt -It's a big husky furry *Desmodium* that is not easy to overlook. It's distinctive as a *Desmodium*. There are 3 historic records. Grund - any objections to PE? **Goes to PE**

Forum adjourned for lunch at 11:40 AM

Reconvened after lunch at 12:15 PM

Eric Burkhart gave a powerpoint presentation on Ginseng populations and habitat in Pennsylvania. Eric updated information that he has given us in past years.

Kelly Sitch – Kelly reminded everyone that the requirements & application process for wild plant management permits have changed. There is a lot more info on the application. It is more of a botanical background check rather than a pass or fail situation. They will check references & then send permits. They have processed about 25 permits so far, 15 were heritage people. There were 75 permits issued last year & they expect more this year. Now the protocols recommend a permit is obtained. Most people have been very receptive. Not many grumblings have been heard. If you need more info or need a permit talk to Kelly afterward. Send applications to the heritage office for processing.

Ellen Schultzabarger, - The last time we discussed things we were in the process of updating the regs. We were also working on pulling the actual list of plants out of the regs & posted it on the Bureau of

Forestry website. In the end we will not be doing that. The concern is that if the species were not physically in the regs it could possibly decrease the protection. So that is being nixed. When we update the plant list, as opposed to the game commission, it is approved by the commissions & then goes to the pa bulletin. We are under the governor so we have a bunch of hoops to jump through. Grund - what has changed in the process to make it quicker? Schultzabarger - we will start the process every year so that it will be done regularly. There should be fewer species to add every year. So we now have 600 listed species, we will have about 660 after these changes. We are increasing the number of actual listed species. We will present the changes to the bureau head & then we are not sure where it will go. The concern is the large number of species moving to T & E. What might help is if we have a letter come from the technical committee. We will talk to legal for advice. We are also updating the justification of why they are listed. This will be presented to the secretary & deputy secretary in about another month. We have been trying to figure out how to put in the justifications with reasons not so broad & generalized. We are just unsure right now how legal will handle these. Our concerns are that there is site specific information in the minutes. Whatever is referred to in the regs must be available to the public. We will meet with the secretary. It is ready to go; we just need the OK to go ahead with it. There is a new DCNR BOF website. It is revamped & we will eventually have a lot of good stuff on there.

Bob Harris gave a presentation on managing *Phragmites* at Presque Isle State Park. The presentation included a spatial analysis of invasive *Phragmites australis* populations.

Harland Patch a research scientist at PSU discussed the Penn State Pollinator Garden. Grund noted that one of the biggest data gaps in plant conservation is pollinator biology. PSU is developing a pollinator garden at Penn State Arboretum.

Forum adjourned at 1:50 PM (there were 45 attendees)