

2016 Rare Plant Forum Minutes **April 30, 2015: Millersville University**

Meeting convened at 9:10 a.m.

Introduction and Announcements

Kelly Sitch welcomed everyone to the 2016 Rare Plant Forum.

Christopher Hardy: presented information about the facilities and housekeeping items.

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

DCNR Update (by Rebecca Bowen)

Status of regulatory package updates (Rebecca Bowen):

- DCNR is at the beginning of the final review steps - 51 species on list of proposed changes and 82 name changes.
- DCNR is creating a “Communications Outreach” page on the “Plants” website. Regulatory updates will be posted. Expect the updates to be posted in the PA bulletin which will provide details about a public comment period.

Proposals (began at 9:18 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).

Tipularia discolor: Scott Martin, proposed to de-list (currently PR)

- Scott has observed the orchid in older growth forests in eastern PA, but early successional forest (40+/- yrs.) in western PA.
- In “Orchids of W PA” published in 1975, few sites were located. More populations have been found in PA and WV since then (based on 2015 surveys by Scott). It appears to be overlooked or it is expanding.
- In 2014, Scott inventoried 6000 individual plants in 29 populations.
- As of 2015, the Crane fly orchid had been documented at 82 sites in 13 counties in PA. The total number of plants counted is 7031, and Scott is estimating 28,000 plants.
- Scott indicated that 8-18 percent of the plants in a population flower. The flowering plants were observed at trail edges, adjacent to Multiflora rose, and Greenbrier. Populations that Scott has observed over time appear to be increasing in size.
- At Martic Hill, Scott counted 3620 plants in early 2016.

Discussion followed:

- Loree Speedy asked did he have information about where and when he observed winter leaves. Scott indicated from mid-October to mid-April.
- Susan Munch indicated here population had not changed, and she has observed variation in the winter leaf characteristics.
- Steve Grund commented that people tended to not collect material that was vegetative. He cautioned on the use of historic data in the 1975 orchid publication since it is based on field experience of the authors and CMNH specimens.
- Tim Draude said this species seems to be expanding its range northward.
- Janet Ebert commented that the populations she has observed don't seem to be persistent.
- Larry Klotz commented that although plants may not be persistent at individual sites, it is expanding its range.
- Chris Hoess said Delaware has variation in the purple coloration of the winter leaves.
- Mark Bowers indicated that the amount of successional woodlots has increased since the 1970's in W PA due to abandoned farmland.
- Steve Grund commented that many veined species with distinct veins have a 3-veined, plicate look. Are there other minor veins? Dehydration may cause these vein differences.
- Carol Loeffler asked if there are regional differences in Cranefly orchid leaves of the east and west populations.
- Scott Martin that in WV, Cranefly orchid is present in almost every county. Cranefly seed dispersal is wind-driven.
- Chris Hoess indicated that the Cranefly orchid has a mycorrhizal association, and the fungus is ubiquitous on
- Carol Loeffler that the status of Rare is assigned to 50 populations.
- Rocky Gleason commented that if you look at the rank calculator grid there may be fewer populations (Scott indicated that the number of populations is based on the grid analysis).
- Many more comments regarding Cranefly orchid followed.

Trillium nivale: Mark Bowers & Jessica McPherson, proposed PT (currently PR)

- This species has a preference for a particular type of habitat – mostly well-drained, calcareous slopes in forested areas and is limited to SW PA.
- Over the past 35 years, Mark has observed a marked increase in the amount of invasive species in SW PA, including some sites where Snow trillium is present.
- At a large North Huntingdon Twp., Westmoreland Co., population, there appears to be declines in the population over time due to logging and residential development.
- A small population at Lowries Run in Allegheny County has disappeared a site in Greene County was destroyed by road widening.
- There may have been some protection provided by the populations being on or adjacent to steep slopes.
- There has been a marked increase in oil and gas pipeline construction in SW PA, and often, the pipeline traverses steep slopes.
- There has been a change in DCNR policy in more recent years regarding avoidance, minimization of impacts, and re-location. Avoidance seems to have been preferred in the past, but more recently re-location of some plants is being permitted.

- Mark indicated that when he ran the rank calculator, the results vary from S3 to S2 depending on trend analysis and the rank given to the severity of the threats and trends.
- Jessica reports that the WPC has done many re-surveys and there has been a lot of survey effort.
- Jessica obtained a rank of S2 when she ran the rank calculator.

Discussion followed:

- Susan Munch thought there is more Snow trillium in Ohio.
- Range discussion – range maps from NatureServe vs. BONAP are inconsistent.
- Jessica discussed the Rank calculator analysis. There are 18 viable populations. She noted significant declines due to invasive species, residential development, **oil and gas**. Severity of impacts is moderate.
- Barry Poglein has seen deer pressure – flowers were browsed.
- McPherson Run and Little Sewickely Creek populations – invasive species are present, but we do not know if there is a decline.
- Mark Bowers remarked that (additional) long-term monitoring of populations is needed to determine trends.
- Mellon asked about the rank calculator – how multiple threats are accounted for.
- John Kunsman asked if most sites have been re-visited, and if the quality rank has stayed the same or changed.
Jessica replied that 5 sites have a dramatic decline and one had a small increase – however there is some uncertainty(?).
- Scott asked if there are new sites being found.
- Mark replied that there is a new site in Greene County.
- Joe Isaac said it has been cleared and logged.
- Steve Grund said that there probably are only a few undiscovered populations. There are a fair number of stable populations, but we know we have lost some.
- Loree Speedy said it is a habitat **generalist** (?), but when habitat is found, it is not found.
- Kelly Sitch remarked that Marcellus oil and gas pipelines are done on steep slopes and have a large footprint.

Magnolia fraseri. : Steve Grund, proposed PE

- A population consisting of a few big trees, seedlings, saplings has been recently found by a BOF forester in Forbes State Forest in Fayette County. A total of 40-100 stems. A “holy grail species” known in 3 adjacent counties in WV. A very showy species in flower and in summer leaf.
- Oil and gas and mineral rights have been severed and a coal company has a lease.
- The forest had acidic, low pH soils with ericaceous vegetation.
- Running through the Rank Calculator, Steve arrived at a status of S1, but he asks how do we treat a species that may be moving northward due to climate change?
- Steve thinks there are other sites out there.
- Size class distribution would preclude this being a waif.
- Discussion followed:
- Janet Ebert and Joe Isaac both indicated that birds, bears and other animals can move the seeds around.

- Chris Hardy commented that CC is an academic question, but we have one native population, and it should be classified as Endangered.
- John Kunsman asked if it is a more recent arrival, or here for a long time. Steve indicated that it is in a 2nd growth forest that was clear-cut in 1930.
- Some guy commented that the species covered acres. Steve said it is not a significant community.
- Andrew Rohrbaugh asked how do we want to treat the species?
- Larry Klotz stated that a species moving north is not a new concept.
- Rebecca Bowen asked why it isn't a waif - accidentally dispersed. Steve replied that the class distribution with few in the canopy.
- Jessica McPherson said it is in the canopy, so it is not a waif. Silvics of North America says it is hard for this species to get to the canopy?
- Some guy said that it is predominant in old growth forest in Kentucky.
- Steve said it is less common northward in WV. It is discontinuous. Steve reports that Jim Vanderhorst, WV DNR ecologist, says that it is quite rare in WV.
- Amy Faivre regarding CC increase, numbers are used legally now it is one population. We do not know what will happen in the future. Should we not use the number we have now?
- Tim Draude asked if there is any sence? Steve replied no.
- Rick Mellon asked what geological formation the population is located on. Steve replied that further surveys will consider that question, but it probably is on the Pennsylvanian age Allegheny formation or Glenshaw formation.

Lysimachia hybridum: Jessica McPherson (currently PT, should it be PE?)

- Only 6 extant populations, should it be PE?
- Occurrences along the Delaware River and in vernal pools in several central PA. A sixth population is in Delhaas Woods, White Mill Pond in Bucks Co., PA.
- Discussion followed:
- John Kunsman commented that 4 of the 6 populations are in vernal ponds at South Mountain. Larry Klotz said that there is an occurrence in a backwater swamp in Cumberland County where it gets browsed by deer.
- Jack Holt said this species likes backwater ecotone in Virginia.
- Five sites have less than 60 stems and one has greater than 2000 stems. *Rhamnus frangula* is a tremendous threat to this species. Small populations have not been re-visited. It has not been observed in 15-18 years.
- Kelly Sitch said Japanese stilt grass is a threat.
- John Kunsman said South Mountain is public land. Vernal pools have been surveyed. A new location in Bucks County.
- Jessica McPherson says there are only 6 known populations, there are invasive species threats, number of known populations is low, potential habitat is well surveyed.
- Jack Holt asked if the soil is acidic at PA sites, some replied yes.
- Steve Grund stated that the rank calculator was not run for this species.

Discussion Species

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

Stenanthium gramineum: (presently N)

- Numbers may not justify delisting - # of populations is 36(? – my notes say 42) which fall within the guidelines for PR.
- Location **xxxx**:
Loree – 4-5 historic
Jessica – 1-6 historic – 1940's and 1950's
- Habitat:
Jessica – Natural
Loree – dry mesic woodlands
Scott – pipeline ROW – found in areas being maintained by periodic mowing, disturbed habitats. In southern Butler Co., he observed it in beat up strip mine areas.
- Some people report seeing browsing of flowering stems.

Smallanthus uvedalia: by Mark Bowers (currently PR)

- 29 Extant populations (mostly in w. PA), and 25 Historic. Maps were provided
- Habitat – is an edge species – roads, utility right-of-ways, logged areas.
- Succession and herbicides may have an impact on populations in utility ROW's and road edges.
- Janet Ebert expects that all Delaware Co. populations are gone.
- Scott Martin checked on **?** site, H is okay?
- Mark said that a 1950's historic site was relocated.
- Kelly Sitch asked if this is a S3 or S4. Mark ran the rank calculator. He said either depending on level of threats and trends – succession may be a threat.
- John Kunsman said that ? are impacting the eastern populations.
- Natalie Shearer said that it does well in road sides and old pastures.
- Rick Mellon has observed in along two powerline ROW's in Greene Co. He wondered if it could be in a seed mix. It was a dominant plant in the recently installed ROW, and not present elsewhere.
- John Kunsman said equipment can bring seed in.
- Jessica said it lives in forests and in disturbed areas – has proclivity for base soil.
- Rocky Gleason said the eastern PA distribution is small, but there is a lot in Greene Co. in w. PA.
- Larry Klotz said that there is one a weak extant population in Franklin Co.
- Joe Isaac said there are 2 extant sites in Washington Co. and there are many more in Greene Co.
- Steve Grund said he observed *S. uvedalia* in a thicket in Bedford County – he may have re-located a Berkheimer specimen site.
- Rick Mellon said that is a little less likely to be overlooked
- Joe believes that this species should have been de-listed a long time ago.

Lunch Break

- Chris Firestone made a few announcements before people dispersed:
A PA Botany Symposium Violet workshop with Harvey Ballard is scheduled for May 6 at Powdermill Nature Reserve in Westmoreland Co. She passed out a Botany symposium handout for the Nov. 18th and 19th.
There will be a Tioga County Bioblitz – Aspah, PA, Black Ash Swamp Natural Area - June 23-35, 2016. She passed out some handouts to interested folks.

Discussion Species (cont., 12:50 p.m.)

- Panax quinquefolia*, American ginseng in PA: by Eric Burkhart (proposed aPR?)
- Regulations don't offer adequate protection. He worked through the rank calculator with Jessica McPherson – S3, Rare. It is not a secure plant.
 - Occurs in every county in PA, widely distributed in rich, mesic sites. State lists this species as vulnerable because it has been harvested for a long time.
 - Declining due to excessive collection – however, there is guerrilla planting on private and public (state) land. Some places population is increasing due to planting.
 - Are there spontaneously occurring
 - Wild appearing plants are selling for up to \$1500-\$2000/pound.
 - Harvest is occurring at non-sustainable rates. Popular culture is encouraging “hunting” to extinction. One person can wipe out another person's stewarded population.
 - Apparent decline in harvest since 2000. However, collecting trade data may not be accurate representation - 400,000 (plants?)/year.