

2025 New Mexico Rare Plant Technical Council Meeting Notes

February 4th, 2025

Rare Plant Listing Process, Nomination & Discussion

Updates from Erika Rowe, State Botanist, RPTC Chair

Defining RPTC: Roles, Responsibilities, and Membership (see slides for additional context)

- Brief History of RPTC and evolution, NM Rare plants website a huge addition initiated by B. Sivinski's tenure.
- What is the RPTC primary duties: Council meets annually to review species additions, deletions, and edits and makes decisions based on group discussions and consensus;
- Role in Supporting Agencies and NGOs
- Other roles and support are needed!
 - designated person(s) to document and manage meeting records and content and sharing/posting meeting content, and help with meeting planning;

Key Questions:

- How can we establish a system of accountability in the RPTC to accomplish goals and assigned tasks? Erika doesn't want to have to pursue people to complete their tasks
- Decision making processes and structure are vague - Are bylaws needed to define RPTC missions, roles and responsibilities? How about an advisory committee?
- Does there need to be a formalized Conservation Strategy Partnership (Daniela Roth, Erika's predecessor, wanted this); the Partnership would be committed to the goals of the Strategy, separate from RPTC?
- Should the RPTC align its activities with the [Conservation Strategy](#) priority goals?
- Should RPTC consider identifying/listing rare, threatened habitats? E.g., Cienegas
- Should the "chair" be rotating, or by default be the "state botanist" – this is not documented anywhere and not currently in erika's position description
 - Bob Sivinski states it should always just be the state botanist given our responsibilities and statutes.

Other updates:

- Critical we contribute/submit rare plant data (location, habitat, #s) to Natural Heritage for tracking!
 - Data gaps hinder informed decision-making on conservation efforts and understanding rarity.
- EMNRD will be working to update rare plant factsheets here: <https://nmrareplants.unm.edu/>
 - A systematic process will be developed for submitting and tracking taxonomic updates, photos needs, reviewing text and making

consistent/plain language, updating maps. Will prioritize state and federally listed species.

A New Framework for Rare Plant Status Ranking, Nominations and Delisting Process (Erika)

- Historical context on previous nomination methods
 - The past nomination process for listing rare plants has been someone nominating a plant at RPTC meeting, discuss, vote, assign tasks, etc.
 - Annual meetings would be 1-2 days
- Key Issues:
 - Inconsistent Documentation on plant nominations: Missing or inconsistent records (or no records) make it difficult to track past decisions.
 - Erika gets challenged on this which is why so it's important to record
 - Confusion between lists
 - Distinction between NMRPTC List and Strategy Species List unclear, leading to uncertainty about their purposes and how they relate
 - Perceived barriers to adding new taxa
 - Unclear criteria on what defines “rare” and no methodology

New Framework – Why Change?

A revised approach is needed to enhance clarity, standardization, and documentation in ranking and listing rare plants.

Key changes:

- **Clarifying Ranking & Listing:** Ensure transparency in how species are ranked and listed.
- **Nomination Process:**
 - research and justification done initially through nomination forms/PP presentation for plant being nominated.
 - completed forms/factsheets done at beginning, resolves need to assign tasks (writing website factsheets, etc) later (lots of outstanding tasks still not completed from 2017 and 2021!). And provides documentation/tracking.
- **Standardized Updates:**
 - Initial review will be led by the Rare Plant Working Group for consistency and efficiency prior to RPTC.
 - In this way, we can now track justifications, review dates, and decisions more systematically, with more task completion from the beginning.
- **Enhanced Documentation & Collaboration:**
 - Publish decision-making criteria and establish clear methodology for how decisions are made on listing, otherwise decisions can be challenged.
- **Expanding Inclusion Criteria:**

- Reevaluate historically excluded categories (e.g., peripheral and disjunct populations) on a case-by-case basis.
- Broaden the definition of ‘rare’ to recognize the significance of select peripheral and disjunct populations.
- These populations often exhibit genetic distinctiveness and are supported by scientific research.
- Increases attention to under-surveyed taxa, particularly in critical habitats and range-edge populations.
- Aligns with scientific evidence supporting the conservation of peripheral species.

Recommended Change:

- **Adopt a tiered framework** for ranking and listing to improve clarity and decision-making.

Overview of New Framework: Nomination, Review and NM Rare Plant Ranks (Marty Purdy, Asst State Botanist)

- Currently still draft processes and ranks, feedback welcome
- Inspired by processes in CA, ID, OR and others
- New Ranking Framework
 - Formation of rare plant working group to review nominations
 - Developing a standardized nomination form and PowerPoint template to make the case for why plant deserves to be listed to simplify and improve process
 - Updating NatureServe ranks at the same time
- Rare Plant Working Group (RPWG)
 - Smaller group to complement rare plant technical council
 - More efficient review and discussion
 - Review and rank plants nominated for status change (uplist, delist, etc)
 - Will be presented and voted on at the annual RPTC meeting
 - Update NatureServe ranks, crosswalk old list to new ranks

New Process: Nominations and Review (Marty, continued)

- Initial information gathering and assessment (done by person proposing change)
- Proposed status change – fill out nomination template and create PowerPoint – examples later
- Additional information gathering and assessment by RPWG and submittee (if necessary)
- Initial status review at RPWG meeting
- Final status and determination at annual NMRPTC meeting
- If ratified update rare plant list and NM rare plants website factsheet Ranking Framework
 - NM Rare Plant Rank (NMRPR) 4 different ranks (have a vote on name of system?)
 - Tiered system based on CA NPS

- 1 – rare in NM and elsewhere
- 2 – Rare in NM but common elsewhere
- 3 - Review list, taxonomic uncertainty
- 4 – Watch list (uncommon, has limited distribution in NM)
- Dropped list
- Threat suffixes
 - 0.1 – Highly threatened in NM
 - 0.2 - Moderately threatened in NM
 - 0.3 – Not very threatened in NM
 - Example: Holy ghost ipomopsis: NMRPR 1.1
- Efficient communication of rarity and threat info in the rank (e.g., 1.1 Globally rare and highly threatened)
- Where are we drawing lines between different ranks
 - Creating matrix as starting point for ranking assessments and rarity; quantifiable thresholds and criteria table are being developed
 - What is rare vs uncommon?
 - Define using Element Occurrences, Area of Occupancy, and NatureServe ranks
 - EO definition: population or group of populations found within 1 km of each other – Natureserve
 - Area of Occupancy: Easy to calculate with GeoCAT.
 - Bob Sivinski comment:– the way Natureserve does EOs could be over 1km such as 20km? Above is oversimplified.
 - Other key factors to assess:
 - Rarity, trends, Threats
 - status and conditions of EO's – are they still extant?
 - How large is population size?
 - Environmental specificity
 - Trends – short and long term
 - Threats
 - Crosswalking existing lists
 - Developing system of cross walking currently listed species into NMRPR
 - Rare plant working group (RPWG) would take lead on this
 - Goal would be to have it all integrated in the next year, before next meeting

If you have opinions about this new system, please volunteer to be part of that NM RPWG and they will finalize what the new system is.

Afternoon Session: Review and Discussion of Proposed Species for addition/deletion

2021-2023 Unfinished business:

Erika found two separate lists of proposed additions/changes from 2017 and for 2021 regarding species voted/nominated for NM Rare list. They don't match. The below list are species, to the best of her knowledge that still having outstanding tasks to be completed!

- **Agastache mearnsii**, on the web, says "D", jim nominated
- **Astragalus iodopetalus**, on the web, no info, Jim nominated for SS??
- **Berlandiera macvaughii** - Jim –drafted a factsheet and it's on the web
- **Cuscuta draconella** (completed)
- **Delphinium sapellonis** – Bob doesn't think it belongs on list; Erika reminds it was nominated in 2017 for the SS list. But Erika wants to see if impacted by CCHP.
- **Erythranthe plotocalyx**, **Jim nomination ?, nothing on the web yet**
- **Heterotheca cryptocephala**- Heterothecas controversial, eventually adopted (Bob?)
- **Heterotheca sierrablancensis**, no info, not on web
- **Heuchera glomerulata** – on the web, no info, says "D", Cecilia email says she will write up, have not received (Dec. 14, 2023)
- **Ipomoea gilana**; on the web, no info, Cecilia email says she will write up, have not received (De. 14, 2023)
- **Ipomopsis wrightii** – on the dropped list, but no "D", Cecilia email says will write up, have not received (De. 14, 2023); Bob says could be put together quickly from email.
- **Lechea mensalis** – Jim had agreed to write up. Bob says only known in big bend. Somebody identified specimen from guadalupes that keys out.
- **Malaxis abieticola** – Erika and Marty searched for it. Wanted photos for writing up factsheet but couldn't find it.
- **Muilla lordsburgana** – Cecilia described, have all the info to write factsheet
- **Phemeranthus rhizomatus**, Dave F. nominated, agreed to do factsheet in 2017/2023
- **Sicyos glaber**, on the web, no info, says "D", Cecilia email says she will write up but have not received (De. 14, 2023)
- **Mentzelia holmgreniorum** – Cecelia nominated in 2017, Bob: It was conditionally nominated. Species expert said no it's more common.
- **Asclepias uncialis** – Jim sent in factsheet to Erika.

2025 NMRPTC Species proposed for addition/deletion

Lichen Species Consideration Summary

- **Acarospora organensis**: Initially not supported by the group due to lack of expertise in lichen identification. However, Daniela advocated for its inclusion, so it was added to the list despite disagreement. A final decision is still needed on whether to keep.
- **Acarospora applanata**: Erika agrees with Bob not to include lichens, so this species will likely be dropped from consideration.

- **BLM Lichen Policy:** Currently, BLM has one lichen on its sensitive species list and may consider adding more. Rare or at-risk lichens should be directed to Sam Reiss for further evaluation.

Species to Drop: Vote to drop *Muhlenbergia villiflora* var. *villosa* – Hairy Muhly

- Bob: But if were still listing peripherals, this could still be considered.
- Dave: Whether or not it is real taxon, still a valid taxon in the literature. Keep that in mind. Add statement, we don't think this is valid.
- Bob: But we do have to make those decisions.
- Erika: maybe perfect candidate for moving to new NMRPR #3.

Action: No decision made, Raise up for discussion at later RPWG meeting.

2025 New Rare Plant Nominations: follows new NMRPR ranking process with nomination forms and presentations:

1. Harpo Faust nominations:

Harpo Faust said each presentation took about an hour to put together, just for reference, with filling out nomination forms and PowerPoint slideshow and NatureServe rank calculator, etc. She had done similar work in Idaho as a graduate student.

Botrychium tunux

An aside: Technically the WG would first review the nomination form, before the next RPTC meeting vote. Erika hasn't read through nomination forms yet.

- **Proposed NMRPR 2.2** All Yes's; Katie plus one more person says should be 2.1. Katie provided argument for .1 suffix.
- Now Harpo says 2.1 sounds reasonable. Threat suffix required for 1's and 2's.
- Larger convo needed for how to quantify climate change threats.
- Need more information about severity of threats and population trends. While we know/assume that alpine species are threatened by climate change (on a ladder to extinction), there's no NM-specific documentation of declining trends for alpine species.
- **Action: Final vote determination: 2.1** But will re-evaluate. Be conservative to start.

***Pseudathryium alpestre* – American alpine ladyfern**

- **Proposed NMRPR 2.3** Peripheral sp. with low threats.
- **Action: 2.3 AYE many. Bob is silent but disagrees with the concept. No nays.** Challenge: Sivinski has been botanizing all over NM; have they found this plant?
- Should we vote on if we should include peripherals at all?? Maybe tomorrow or next day

Ageratina paupercula – Santa Rita snakeroot

- **Proposed as 2.3. Plenty of nays to this.**
- (Katie) Based on system, as is, she agrees, but if we're going to revise whether peripherals make it should reconsider
- **Action: 2.3, but revisit in a year to discuss final system for dealing with peripherals and whether and where it should be adopted in the ranking.**

2. Bob Sivinski Nominations:

Oreocarya worthingtonii – Guadalupe oreocarya.

- **Proposed NMRPR 1.3: VOTE: 1.2 or 1.3 More Aye's for 1.2**
- **Action: Don't have all threat documentation right now. Need to look into this more and then confirm- revisit rank after closer looks at threats/EOs. People perceive threats differently.**

Cirsium culebraensis - Culebra thistle

- **Action: Proposed at NMRPR 1.2; Vote: Many Ayes, No Nays**
- note: may need to revisit the severity of climate change as a threat.

Mertensia ovata var. caelestina Alpine bluebell

- **Action: NMRPR 1.2; Vote: Many Aye's. No Nay's.**

3. Russ Kleinman general comments on mosses/liverworts etc.

- Kleinman is a bryologist.
- NatureServe ranking criteria may not translate well for bryophytes. When you think about bryophytes, you need to think in terms of MICROhabitats.
- Kleinman hasn't seen or collected any of these nominated taxa personally, but they have SEARCHED, unsuccessfully, for them.
- Kleinman (with Allred and Blisard) published a key to NM bryophytes in 2023. Of the 480+ taxa of bryophytes known from New Mexico, 134 are known from 3 or fewer collections.
- taxa that were at the extreme of their range were eliminated, or that were not particularly rare on a worldwide basis. This still leaves 58 total bryophyte species in New Mexico that should be considered rare!
- For these nominations, Kleinman picked the 2 least controversial taxa and arguably the most rare. Kleinmann's slides have a list of additional bryophyte candidates not nominated today. Not many people had been looking at rare bryophytes prior to Allred (2017) getting bryophyte #1 (*Fissidens littlei*) onto the NM Rare list.

- When describing moss or liverworts – need to think in terms of clump or mat. Could be hundreds of individuals within a clump.

Didymodon anserinocapitatus

- **Proposed 1.1. Vote - All Aye's no Nay's**
- Este question: how to think about EO's and not counting individuals.
- Erika: been a lot of interest from other states in figuring out how to rank EO's and NatureServe is part of a new working group
- Separate delineation distance for bryophyte EOs?
- Shannon Lencioni question: Thoughts on extreme disjunct. Most bryophytes like that. Spores travel widely. Much different than seed transmission.
- How to account for genetic individuality when its unknown and individuals form filamentous clumps?

Mannia paradoxa

- **Recommended NMRPR 1.1; VOTE 1.1 Many Aye's, no Nay's**

4. Jim McGrath Nominations

Mc Grath is on the Southwest Carex (Sedge) Working Group (SWCWG). They worked on Flora Neomexicana descriptions, keys, etc. for Carex. We need more teams taking on taxonomic groups. Today Jim is nominating species that were previously relegated to the peripherals list. Erika made Jim's slides.

Carex amplifolia

- **Proposed NMRPR 2.1**
- **VOTED yes on 2.1 and 2.1 was on powerpoint but Jim doesn't agree with that. Doesn't think threats are currently that serious.**
 - **CHANGE TO 2.2 VOTE - Aye's many, no Nay's**
 - Threats climate change and fire. Many EO's burned in 2022 black fire. Unknown effects.

5. Katie Sandbom Nomination

***Abronia nealleyi* - Carleton's sand verbena**

Recommended NMRPR 1.2

- Erika: could table it and move to NMRPWG for consideration or **VOTE NMRPR 1.2**
- Some casual surveys happening in summer 2025
- Get out and get more information on this one – **NO VOTE – tabled for now**