

## Vegetation Panel Meeting Day One

**Attendance:** Chelsea Fowler, Jill Parsons, Bob Peet, Carol Spurrier, Tom Wentworth, Jack Triepke, Don Faber-Langendoen, Alexa McKerrow, Alan Weakley, Pat Comer, Julie Evens, Dave Tart, Chris Lea, Rachelle Boul, Este Muldavin, Todd Keeler-Wolf, Serguei Ponomarenko

Notes: **Future Discussion Topic; Action Item; Potential Future Activity; Goals; Communications Plan**

### Session one: Peer Review Board Updates (Lead: Don)

**The peer review board was established after version one of the NVC was released.**

- 2 types of revision: Editorial revision and Peer Review revision
- 6 peer review meetings to date
- 2020- a formal set of spreadsheet tools were developed to expedite the process
- These reviews mostly focus on lower classification levels (group, alliance) with an occasional higher level (In Alaska, new macro-group was proposed).

### **Peer Review Meetings 2019-2020**

- The Washington Wetlands Analysis:
  - Remote meeting: 3 webinars
  - The meeting required a lot of preparation, but was successful

**Future Discussion Topic:** The Washington data are not range-wide. The REs were helpful in keeping context in mind; do we need to wait for range-wide data or is it helpful to include a dataset that's not range wide?

**Action Item: Don** will check with Michael on quantitative descriptions – examples of partial plot data summaries – should we make this available? There's a lot we could do if we decide to proceed.

- The Appalachian and North Atlantic Coastal Forest Meeting:
  - March 2020, VCU Rice River Center Charles City, VA
    - Successful meeting
    - Great venue (bunk-beds), cost-effective; Lisa's Café (catering, if we return to this venue in the future)
- Future meetings
  - Remote or Face-to-Face?
  - 3 meetings expected in the next year: Northeast meeting (partners in Quebec); Sagebrush meeting (Dave T); Rocky Mountain Woodland Review meeting.

**Action Item:** prioritize future peer review meetings, determine which can be done remotely.

## State Partners and the USNVC

- Don is keeping state partners informed of significant proposed changes to the USNVC in their areas – if they wish, they could formally submit changes to the NVC that would go through the peer review process.
- States would find an opportunity to provide input valuable - **Potential Future Activity**.
- Formalizing state partnerships: work in progress. When do we alert states? When the proposal is made, or when they would be responding to comments? We need a process. **Future Discussion Topic**
- Data management contributes to state partner relationships. New tools make the NVC more relatable for states. Particularly in the Midwest states, they can see what levels of the NVC line up with the state classification.
  - Michael has a data management spreadsheet (?)
  - **Action item:** Request spreadsheet from Michael
    - Who has crosswalked, who still needs to crosswalk? Is there a state that has the bandwidth to spend the time going through the process of assessing alliances in their state? **Future Discussion Topic**
    - **Long term Goal:** REs have contacts and relationships with state vegetation ecologists who would propose NVC changes.

## Alliances Plan

- The alliance level is a prime area where change is happening. Alliances sometimes need to be split to fit within the hierarchy, or associations need to be lumped together. Alliances are being redrafted.
- The alliance level is important for conservation management.
- We're in year one of a five-year plan. Since Jan 2019 12% of alliances have been formally adjusted. Probably more in the 15-20% range including informal adjustments.
- **Action Item:** Set up a spreadsheet to keep progress on alliances and where we are, along with associated REs.

## Editorial Review

- Cases <5 associations are handled primarily through email but this is a difficult method to track conversation and workflow. Other options? **Future Discussion Topic**

## Proceedings Website

- Contractor and ESA Webmaster are both working on getting the site functioning
- The Singhurst manuscript is submitted and ready to post

## Managing Editors Update: Jill Parsons

- Primary goal is getting the proceedings website operational
- More manuscripts are coming down the pipeline
- Erin Jones is acting as Copyeditor. Chelsea Fowler is helping with final formatting

**Long Term Goal:** 3 Peer Review Meetings per Year. Factors that contribute to this decision: funding constraints, honoraria, travel, etc. and data management load

**Todd:** California vets every project they have, the committee has become more active. Expect proceedings updates from California.

### **Communicating NVC Updates – Communications Plan**

- Julie Evens discovered there were changes to the NVC being proposed (Washington Wetland Proposal) during a NatureServe call.
- **Discussion Topic:** How can we better make impacted parties aware of proceedings proposals, so they have the chance to provide feedback before the proposals go into their final versions?
- Ideas: Regional Alerts, USNVC News Email Campaign
  - Regional Alerts: alert system for when changes are happening in a certain region.

**ACTION ITEM: Todd and Rachelle**, send a summary to the Veg Panel of California's review process and identify key players. What does the Peer Review board composition look like?

**ACTION ITEM: Everyone** The only region without a Regional Editor is the Central Midwest Region. If you know anyone who can fill this roll, let Don know.

### **Plot template update**

- A new template was distributed. The plot template provides structure for authors' data.
- Michael Lee is still developing a way for VegBank to receive the plot template data.

### **Session two: Communications Plan Workshop (Lead: Alexa McKerrow)**

**Attendance:** Chelsea Fowler, Jill Parsons, Este Muldavin, Alexa McKerrow, Robert Peet, Carol Spurrier, Don Faber-Langendoen, Jack Triepke, Chris Lea, Rachelle Boul, Patrick Comer, Alan Weakley, Todd Keeler-Wolf, Julie Evens, Serguei Ponomarenko

[Brainstorming Google Doc Here](#)

### **Who owns the plan?**

- FGCD Sub-committee owns the plan but we all have parts we are responsible for. Veg Panel owns a lot of the conceptual components and NatureServe owns a lot of the data.
- This plan will involve a lot of cross-communication between the various partners.

### **Key Implementation Objectives: These are the large big-picture goals**

- Facilitate and support the development of a standardized vegetation classification for the United States and its use for information sharing
- Maintain and disseminate the vegetation classification content

- Define and adopt standards and best practices for vegetation data collection and analysis used in the maintenance and revision of the classification
- Maintain scientific credibility of the national classification through peer review of proposed changes
- Facilitate inter-agency and inter-organizational collaboration and product consistency.

#### **Key Communication Objectives:**

- Obtain more resources to support the USNVC
- Facilitate widespread adoption of the USNVC and its approaches
  - Explain the benefits of using the USNVC
  - Get people to use the USNVC
  - Demonstrate benefits
- Maintain a common language – more efficiency (interoperability)
- Facilitate widespread engagement in the ongoing development of the USNVC

#### **Audiences:**

- Internal
  - FGDC subcommittee – (same page, sense of ownership), educate new people
    - USFS as lead agency; more responsibility; different informational needs; strong on providing resources
      - R&D – director-level briefings (face-to-face); briefing papers
    - Interagency efforts / MOU signing / 25<sup>th</sup> Panel Anniversary
      - Talking points of pride (possible strategy)
    - ESA Leadership
    - Federal Leadership
- External
  - Disciplines: Wildlife Biologists, Foresters, Rangeland Managers, Wetland Scientists/Regulators, Biodiversity Specialists, Remote Sensing Specialists, Watershed Managers
  - Partners
  - States – Shared Stewardship
    - Wildlife action plans, Land managers, Natural heritage programs, State forestry departments, Fish and game departments, Department of environmental quality (wetlands), Groups focused on invasive species (EPSIs?) invasive councils, Wildlife agencies (State Wildlife Action Plans)
  - Academics
    - Who is doing training in vegetation science?
    - Certified ecologists (ESA), Practitioners, consultants, Restoration ecology, Students, Early career scientists, Graduate students, Landscape ecology, Biogeographers

- Professional Societies
  - Natural Area Association, Society for Range Management, Society of American Foresters, The Wildlife Society, The Botanical Society of America/ASPB, Northern CA Botanists, North American Wildlife and Natural Resources (conference), Defenders of Wildlife
- Regional Groups
  - Governor's groups (WGA), WAFWA, AFWA, LANDFIRE (it's national and interagency)
- Priority Audiences
  - State groups

### **Key Messages:**

- Usability
  - Efficiency (i.e. you don't need to reinvent the wheel)
    - You immediately speak the same language as a wide variety of other stakeholders (communication)
  - Practical(?) Progress at making the mid-levels meaningful, useful units of the hierarchy
  - Utility across many stakeholders
    - Including wildlife biologists, botanists/plant ecologists, land managing agencies, conservation organizations, etc.
    - Conservation value
    - Mapping applications/attributes
    - Communicating across jurisdictions/boundaries
  - Stability
    - Clear about versions
    - Continuity of support (tie to 25<sup>th</sup> Panel Anniversary)
  - Defensibility; scientific standard; deep content; well-founded
    - Data (and analysis) behind the data
    - E.g. managing threats, rarity/status rankings for associations (and alliances)
  - Dynamism – updates are now being made upon synthesizing larger regional data and mapping projects
  - Engagement
    - Inclusive (federal, state, local, academic, consultants); collaborative approach

### **Venues and Opportunities**

- Upcoming meetings
  - 2020 ESA Meeting + 25<sup>th</sup> anniversary of the Panel
    - OOS/Field Trip/Booth – promote more?
- Future Webinar Topics:
  - Draw attention to recordings
  - Post-evaluation for webinars

- Identify appropriate audience and goals
- Other Ideas
  - LANDFIRE 2016 remap with USNVC Group Map
    - Opportunity for shared communication about new map products
    - Webinars – potential to coordinate (introduction to updated products)
    - Regional inventory and monitoring coordinators (Pat has presentation that can emphasize USNVC component)
  - BLM’s User Guide to USNVC
    - Presentation materials available from this could be used
  - State Partnerships
  - FIA – Keys to Macrogroups
  - SW REGAP: link USNVC to ecological systems
  - Newsletter? Possible focus on 25<sup>th</sup> anniversary of panel and broadening engagement
  - Social media?
  - Websites
    - Publications list
    - **ACTION ITEM: Chelsea** ask Alexa for publications spreadsheet

<b>Audience</b>	<b>Objective</b>	<b>Tactics</b>	<b>Tools</b>	<b>Key Messages</b>
US Forest Service	Provide sense of ownership/ leadership /responsibility	MOU signing, Briefings, Briefing Papers		
FGDC Subcommittee	Broader participation increased engagement	Agency-specific factsheets		
Foresters	Use the NVC	Silviculture/ fire workshops	Webinars? Digital presence/ keywords searches, Publication DOIs/citations, Social Media, Newsletter	Utility of classification: NVC can help you do your job; Standardization / common language: efficiency, save time and effort
Range Managers	Use the NVC	SRM Meetings	Webinars?	Integrate soil and site-based classification with vegetation
Wildlife Biologists	Use the NVC	Awareness-raising, Introduction level, In-depth training	Webinars?	Characterize habitat / related to management; Manage threats to species; Understand trends in habitat

### **Top Down and Bottom Up**

- The people at the top make a lot of the decisions and their decisions are driven by their agency wide objectives/mission/goal plan.
- But partners and other outside parties have influence also.
- We must appeal to both audiences in order to create buy-in for the agency as a whole

**Verdict:** Communication strategy needs to be tiered. No one size fits all.

### **Next steps**

SWOT, Tools and Activities, Resources, Timescales, Evaluation and Amendment

### **Session Three: Data Management (Lead: Alexa McKerrow)**

**Attendance:** Todd Keeler-Wolf, Tom Wentworth, Carol Spurrier, Serguei Ponomarenko, Robert Peet, Rachelle Boul, Patrick Comer, Michael Lee, Julie Evens, Este Muldavin, Don Faber-Langendoen, Dave Tart, Chris Lea, Alexa McKerrow, Alan Weakley, Jill Parsons, Chelsea Fowler

### **VegBank: NCEAS Status Report**

- NCEAS was tasked with revamping VegBank (\$15,000)
- The assessment is complete, and Bryce is now very familiar with VegBank.
- VegBank has the workload potential to occupy a developer for a year and a half to update everything.
- **Future Discussion Topic:** More funding for VegBank. Using NCEAS sooner rather than later because Bryce is now familiar with VegBank.
  - How do we prioritize the work?
  - How do we procure funding?

### **Vegetation Plot Template**

- Michael Lee has made progress in migrating Vegetation Plot Template elements into VegBank. Still working on migrating more boxes over.
- Added value of R interface:
  - R users wouldn't need a web interface.
  - An R interface would be a simpler more streamlined way to get information from the database into a useable form.
  - What about uploading data to VegBank? An API could be written to pour data in, but this doesn't seem to be an efficient.
  - R user would be more of a super user. Getting rid of a web interface would cause loss of users. Adding R would be ideal but removing the web interface would be unfavorable. Users that currently use the web interface wouldn't necessarily switch over to the R interface, the R interface would be for a 'super user'.

The real challenge with VegBank is getting data in.

## Regional State Opportunities Update

- A lot of data at the state level is not incorporated into VegBank.
- **Potential Future Activity:** There's an opportunity in the Northeast to compile the state data into a single dataset. There's a push to look through individual states' classifications and plot data to compare and consolidate like types, and fix errors.
- VegBank and ECOOVBS
  - VegBank: public facing, collaborative (receive, archive, and give it out to other people), exists to enable analysis but cannot carry out analysis. VegBank has the capabilities of sorting the different interpretations of a plot. The ideal situation would be providing both levels of data (smoothed over and raw).
  - Ecoovbs: internal facing, more of a state to state system.

## International Global Solutions

- See Alexa's Excel Table (attached to notes email)

**ACTION ITEM:** Talk more with Michael Lee to better crosswalk between databases.

- The degree of flexibility to pick and choose data storage standards between RelevA and DarwinCore is uncertain.
- Using one of these data storage programs would be a secondary way to get plot data.
- Is this a worthwhile endeavor?
  - Pros: This is potential to have a universal exchange for plot data. And if we could get our data into it, we would have a very powerful database to work within.
  - Cons: We're unsure how much environmental data could be entered into GBIF.

## Funding Opportunities

- NSF opportunity: Infrastructure Capacity for Biology
  - Large budget, no deadline. Through the division of biological infrastructure
  - [Solicitation Link](#)
  - Matt Jones: willing to participate, not willing to lead a proposal.
  - **Future Discussion Topic:** No clear scientific leader of this effort thus far.

## Communications plan and VegBank – **Communications Plan**

- If we can communicate the use and quality of VegBank we can solicit funds from other agencies.
  - **Future Discussion Topic:** How do we sell VegBank?
- **ACTION ITEM:** Identify a small piece of work that could be invested in, in the short term since Bryce is familiar with the system.



## Vegetation Panel Meeting Day Two

**Attendance:** Chelsea Fowler, Jill Parsons, Alan Weakley, Alexa McKerrow, Chris Lea, David Tart, Don Faber-Langendoen, Esteban Muldavin, Julie Evens, Rachelle Boul, Robert Peet, Carol Spurrier, Jack Triepke, Todd Keeler-Wolf, Patrick Comer

Notes: **Future Discussion Topic; Action Item; Potential Future Activity; Goals; Communications Plan**

**Session one: FGDC Veg Subcommittee update; Budgeting future; outreach to upper management (communications plan); State reps (session lead: Este)**

### FGDC:

- Charter is being resubmitted.
- Revisiting the agreement between NatureServe, ESA and the Forest Service: we need more clarification on what the role of the lead agency is.
- No state members on the Sub-Committee yet.

### Carol's Budget Update: US Forest Service

- \$40,000 for support of NVC. Planned to send to NatureServe.
- Typically, we receive \$75,000 from R&D but it hasn't been received by the Forest Service yet. It's unclear if this funding will clear.

### ESA/NS budget update (Jill and Don)

- ESA is on Year two of current agreement with USGS.
  - Year two goes through June 30<sup>th</sup>.
- The agreement with USGS goes through July 2021.
- Another \$75,000 coming to Veg Panel through USGS (not certain, but likely).
  - Highlighting the benefits of face-to-face regional meetings to would help encourage continued support.
- We do have funds in a USGS Purchase order 'rainy day fund'.

**ACTION ITEM:** Jill and Don will check in with the Washington and Appalachian REs on honoraria requests.

### Near-term Goals and Associated Expenses:

- Communications Plan: Are there costs associated with this?
  - Most likely salary expenses
- Data Management: What costs are associated with this?
  - USFS has supported VegBank at NatureServe in the past (out of the 40K)

**ACTION ITEM:** Jill and Chelsea will establish an average cost of RE meetings

**ACTION ITEM:** All ESA Support- let Jill and Chelsea know how they can support your work.

### **ESA Annual Meeting**

- Inspire Session Plant Science Decadal Vision (Tom Wentworth) Proposal Accepted
  - August 6<sup>th</sup>, 1-3:30pm
  - There are 9 speakers who submitted abstracts for the session
  - Currently in the presentation development phase. The talks are on a variety of topics with the general goal being to bring the decadal vision and discussion to ESA membership

**ACTION ITEM:** Chelsea add PSRN session to the AM post on website

### **Veg Panel and ESA Vegetation Section Joint mixer and session**

- August 5<sup>th</sup>
- Reach out to section lead and ask about contributions for food and drink from the Panel

### **Organized Oral Session: Documenting and Tracking Vegetation in the 21st Century (Scott Franklin)**

- Proposal submitted and approved. Abstracts submitted
- International Co-Authors are interested in attending the meeting
  - Australian co-author will not be coming to ESA AM (going to IVS)
  - South African co-author interested in attending
  - **ACTION ITEM: Jack** will follow up with his co-author on if they planning to attend
  - **ACTION ITEM: Este** will ask Scott if anyone else is looking for funding to support their co-author attending the meeting
- Can we use honoraria for these folks?
  - We don't have a lot of \$\$, is this something we want to prioritize?

### **Field Trip: The Wasatch Back: Plant Community Ecology, Classification, and Mapping (Dave Tart)**

- August 2<sup>nd</sup>
- ESA is handling lunch
- During the field trip the group will do vegetation plots at all the sites. The group will see mountain sagebrush; aspen; conifer forests; snow basin ski area; basin big sagebrush; cottonwood riparian forest. Mostly high elevation.

### **Session two: Breakout sessions**

- Communications Plan Breakout: [Brainstorming Google Doc Here](#)
- Data Management Breakout: Attached to notes email

### Session 3: Final Wrap up, NVC related pubs,

#### **NVC related publications (Este)**

- If these related publications are open source, we could add a page to the Veg Panel site and post papers as we find them. **Potential Future Activity:** Doing a literature review
- **ACTION ITEM:** Website group make sure the websites link to one another
- **Potential Future Activity:** workflow idea - Pictures on Instagram link to>veg panel site with a short article on the publication link to>publication on USNVC.org
- **ACTION ITEM:** Chelsea add a Publications sub-tab to the Resources tab
- International Vegetation Classification (IVC) was featured in the Encyclopedia of World Biomes (attached to notes email)
- Conservation Ranking: NatureServe focused on ecological systems. (Conservation letters Article)
- Link to NatureServe conservation statuses, a synthesis on parks services applications to the NVC (Karl)

#### **Archiving (Bob)**

- Will discuss the potential for archiving at IAVS [**update 3/26** IAVS meeting has been cancelled]
- Bob is archiving all the old Veg Panel information with the ESA historical committee
- People to tap for archive additions: Michael Jennings, Michael Barber, Denny Jenson
  - **ACTION ITEM:** Bob will reach out to the people above for their archives
- These archives can be instructive for other countries that want to create their own national vegetation classification

#### **Report on Nomenclature Committee**

- There's an ad-hoc group with the goal of standardizing terminology for naming classes (mid and lower levels, lower levels mostly)
  - Goal of the group: "Revise nomenclature guide to help standardize terminology for scientific and common names of type class naming, with an emphasis on a consistent list and definition for the physiognomic and ecosystem terms used to describe those types." (from nomenclature revision guide)
    - deferring colloquial names
  - Product: revised nomenclature guide
- Addressing inconsistencies in nomenclature
  - More consistency – easier use among practitioners. Consistency in terminology is important in the user committee.
- Implementation of the guide would be on Don
- **ACTION ITEM:** All let Jack know if you want to be involved in the group
- **Q:** What impact does this have on the proceedings and the review process? When should we have it done?
  - Somewhere in this process the revised nomenclature guide would go to the panel for review.

- Regional Editors should be pulled in towards the end to make sure that the revisions that impact their region made sense.
- Goal is to have the guide finished by 2021

### **Discussion about Keys**

- After the Nomenclature Guide is finished does this set us up to talk about keys as a part of the classification down to macrogroups (since they're relatively stable) for the practitioner community?
  - Dave has a key down to formation level.
  - Focus on keys after the regional reviews that solidify alliances & groups.
  - Keys are useful when crosswalking between USFS types and NVC types.
    - A key portrays the distinctions between the concepts.
    - A key sets up for mapping and building map units and map design.
    - Narrows the geography. Helps people get to the type more reliably.
    - Interior west ecoregions phone key.
      - Future post on veg panel site about the key?

### **Final Session: Wrap-up and Long Term Goals**

#### **Breakout Sessions**

- Communications Plan group will have a call in about a month
- Data Management will have a call in April

#### **Big Goals:**

- Keep moving forward on making the NVC more user friendly.
- Develop keys so people can understand the classification system.
- Outreach
  - Promotional Materials: [StoryMaps](#), Fact Sheets, One Pagers, BLM Guide, a 'pitch'
  - Award for Classification Work (students and professionals), Agency level awards
    - Talk to Veg Section
  - Autokeys available to use for new plot data
    - We never get the data back that runs through the autokeys, could be helpful if it was more available (LANDFIRE)
    - Persons responsible: Pat and Jim Smith (TNC) Henry Bastian (DOI)
    - **ACTION ITEM: Pat** will follow up with LANDFIRE

#### **Next Steps:**

- Moving forward with Nomenclature, Data Management, and Communications Plan
  - Nomenclature Guide target completion date: sometime this year
  - Exec: Think about what we should invest time and money in per group. Provide next step guidance for groups.
  - Entire Panel: 6 weeks follow up