

ESA Vegetation Panel Meeting Notes

Austin, TX; Tuesday, August 9, 2011

Attendees: Scott Franklin, Cliff Duke, Alexa McKerrow, Mike Jennings, Chris Lea, Este Muldavin, Hazel Gordon, Dave Roberts, Pat Comer, Bill Gould, Bob Peet, John Sawyer, Orié Loucks, Todd Keeler-Wolf, Eileen Helmer, Exequiel Excurra, Jill Parsons (Don Faber-Langendoen & Aysik Solomeshch attended via conference call)

Upcoming action items for the whole Panel:

- Now: Send your comments on the L1 key and descriptions to Don
- September: review the Compass article
- October: begin reviewing Levels 1-3
- October/November: AEs sort through their group review comments and submit their forms
- Jan 30 – Feb 3: Face to face meeting

Individual action points:

- **Scott** will keep the Panel informed of the potential journal article from the EVS workshop (possibly on the peer review process).
- **Cliff** will follow up with Peggy Olwell at BLM re: the Veg Science Proposal.
- **Alexa** will ask the Panel to review the Compass article in September.
- **Jill** will do more location cost analysis in planning for the joint PRB/Panel meeting and send results to the Panel.
- **Bill** and **Eileen** will look into USFS funding opportunities relating to state and private forestry management.
- **Todd** will look into possibilities for a workshop in Portland.
- **Eileen** will ask the FS office in Portland if we could use their space for a workshop.
- **Jill** will look into the ESA Communicating Ecosystem Services Toolkit as a model for NVC online communication resources.
- **Orié** and **Scott** will work with the ESA Veg Section on an OOS or SYM proposal for the 2012 ESA meeting.
- **Bob** and **Pat** will help set up two case studies for proposed changes to the NVC, which the Panel can work through during the face to face meeting.
- **Jill** will send Exequiel a list of recent documents to update him on recent Panel activities.
- **Don** will pursue publication ideas related to the NVC hierarchy and engaging international colleagues.
- **Exequiel** will follow up with the Mexican Chapter President re: developing a meeting of Latin American vegetation ecologists.

General items for follow-up discussion:

- NVC booth activity: should we do it again?
- Finalizing dates/location/agenda for face-to-face meetings
- Keys
- Outcomes from the FGDC meeting

Peer Review items for future discussion:

- The role of plots in defining types
- Opportunities and challenges to standardizing biogeographical/ecoregional terms
- How formal will the review process be for Levels 1-3? Will we use SharePoint to manage the process?
- More on incorporating changes into the NVC

Discussion Items for the upcoming FGDC meeting:

- Draft Level 1 descriptions: is the Panel heading in the right direction with these? Looking for feedback that can be used when finalizing all upper level descriptions. Likely to be a working group on Tuesday.
- Draft Level 1 Key

- Confronting communication issues: having a scientifically rigorous classification system that can be used by all agencies and the concern that agencies could perceive this as telling them how to conduct their business.
- Communication and training: how can the Panel help Subcommittee members champion the NVC within their agencies? (Do you know success stories and how the NVC can be applied to your own agency? Do you have questions about the NVC that we can help answer? Can you help us identify the user community within your own agency? Could/should we look into an NVC certification system?)
- Setting up a cooperative agreement with the FGDC Subcommittee so a funding vehicle is ready (use MOU language as a jumping off point)

Status Reports

Field Trip (Alexa & Chris): There were 21 attendees including 6 students, and it was a diverse group, including people from USDA, FWS, and the Union of Concerned Scientists (UCS). The group was enthusiastic and asked good questions. Useful notes for the future include:

- Doing more outreach in advance to get more participants
- In terms of sampling protocol, trip leaders need to tell the same story (but don't be dogmatic about it)
- It would be useful to have more time at the beginning for an NVC overview
- Do a scoping trip further in advance (and see what areas are mapped correctly)

Workshop (Dave): There were 16 participants, including a number of grad students. Many had not used R before and the group learned a lot, working through a single dataset from Fort Hood, Pedernales State Park, and Balcones Canyon, though environmental data was limited. Notes for the future:

- 6 or 7 participants did the field trip and workshop; it was nice to have that link
- They couldn't use the data collected on the field trip because it wasn't clean enough

OOS (Pat): There's a nice, varied lineup of papers linked to ecological assessment, Dave Diamond stepped in to moderate.

NVC Booth (Alexa, Chris, Scott): We're trying to recruit reviewers at the booth. So far there's been a good level of activity during lunch and the poster session hours. We need to discuss how things went after the meeting is over.

Status Report: IAVS Meeting (Bob): There is still skepticism about the NVC, but also a wide recognition that there needs to be some level of cooperation between different classification systems. Bob organized a lunch meeting with Milan Chytry, John Rodwell, Laco Mucina and others; they discussed collaborating more but there aren't any specific actions lined up yet.

EVS Meeting (Scott): The European systems rely very much on plot data, which is different from our system; essentially they work from the bottom up and the NVC works from the top down in terms of data. Some of the data they used spanned 50 years. They are interested in what we're doing at the upper levels. There was a workshop and a publication could come from it, possibly focusing on the peer review process.

Funding (Jill): We have submitted the budget modification and forms to the FS but don't yet have the funds in hand. Our FS contract officer has been very busy over the past couple of months, but Jill will be in touch with him and keep the Panel updated. Our new year 2 will run from July 2011-July 2012. If anyone has questions about our year 2 budget please ask Cliff or Jill.

Proposals (Cliff): We floated the Veg Science Proposal to NSF but were advised not to submit it. Other ways forward include: revisiting our discussions with BLM, or trying USGS, or conducting a special session on the topic at ESA or another professional society's meeting.

Compass article (Alexa): It was submitted and we've been asked to revise it so there's more information on the NVC and less on mapping. Alexa will ask the Panel to review it in September and will submit the revised article in October.

Peer Review Progress

Upper levels:

- Last fall we agreed on units for the top levels. The Hierarchy Revisions Working Group (HRWG) has finished Level 1 descriptions and is finalizing Levels 2 and 3 (drafts to be completed in October).
- The Panel will be the main peer review body for the upper levels; the general process is outlined below:
 - 1) The HRWG will get feedback from the FGDC Subcommittee on Level 1 to ensure they are moving in the right direction in terms of upper level descriptions (at Aug FGDC meeting).
 - 2) The HRWG will take that feedback into account when finalizing Levels 2 and 3.
 - 3) The Panel will review all upper levels first, with an aim to address obvious concerns/issues.
 - 4) After the FGDC Subcommittee and Panel are comfortable with the Level 1-3 descriptions, the Panel may ask other selected individuals to review them and provide comments on the more specific or problematic issues.
 - 5) The Editor-in Chief (EIC) will oversee the final upper level descriptions, with an aim to have them in place in early 2012.
- Discussion on the different roles of the Panel and FGDC Subcommittee
 - 1) The FGDC is concerned that agencies may see the NVC as dictating how they do their business; the Panel's main role is to ensure scientific robustness.
 - 2) One thought is to be explicit about how the NVC should be used and applied in the upper level descriptions. Then, instead of stating that agencies have to follow it or change what they are doing, provide agency definitions and invoke their responsibility to make what they do relevant across agencies. This can help them see how they fit into the process.
 - 3) The Panel may need more direction from the FGDC: where do they see us and what do they want us to do? Ideally the FGDC should be comfortable with what we do. We want them to be engaged and express their concerns, but for the Panel to simultaneously be able to maintain scientific rigor.

Middle Levels:

- Out of 321 groups, 171 groups have reviews underway (more than half!), and an additional 25 from Alaska will be ready to be reviewed starting in October.
- We recently moved our timeline forward by about 4 months to allow more time for the review process. Some AEs have had an easier time getting reviewers to commit with the longer timeframe. This means the joint Peer Review Board (PRB) and Panel meeting will also get pushed back.

SharePoint Site Reflection:

- There have been some random kickouts, but for the most part comments from the reviewers are positive.
- It has been useful to see descriptions of comparable types in the site.
- Some reviewers have made changes in the actual descriptions and not filled in the online forms; AEs can fill in the forms themselves or call the reviewer and do it over the phone.

Associations

- The screening tool is being applied to associations and a review of all 6138 associations in the NatureServe database is complete.
- Between now and December associations will be finalized and then posted as NVC units with their confidence ratings.

Planning for Joint PRB/Panel Face-to-Face Meetings

Purpose:

- Assess any large problems that have arisen in the review process and make decisions about how to address them.

- Look at progress on upper levels and associations.
- Discuss long-term plans and how to handle ongoing issues
- Develop a timeline for changes
- We won't focus on the smaller problems – AEs should communicate with each other when dealing with their review results as needed to work out the smaller issues, and bring the overarching problems to the meeting

Timing:

- A 2-day PRB meeting followed by a 2-day Panel meeting
- We've reserved the week of Jan 30th – Feb 3rd, 2012.

Location:

- TBD – Possibly in NC (RTP area) or CO (Denver or Boulder) to save on accommodation costs
- 14 AEs are located in the Midwest, but winter weather could be a concern in CO
- If we can meet at a USFS facility we could use videoconferencing for remote attendees.

Agenda:

- See attached document

Forest Service Agreement Workshop

- We have around \$7K to use for outreach and training in Year 2; this could be for a workshop, or a webinar and static products, or a series of briefings.

Physical Workshop:

- Major stumbling blocks when the education subcommittee discussed this last year were: picking the right place and date to get people together, trying to identify a target audience, potential lack of travel funding; Also, should we train users or focus on increasing awareness?
- We could combine this effort with what we want to do in Portland near the 2012 ESA Meeting. One possible goal: convincing people that there are many uses for the NVC, that it's important, and has an impact on different management issues. Something on de-mystifying the NVC?
- Should we focus on users within agencies so that buy-in will trickle up? Will there be any users if upper management hasn't signed on yet? Outreach may need to happen at both ends.
- Government contractors are an important audience, and they have many misconceptions about the NVC.
- Should our target audience be the FGDC Subcommittee since many are mid-level managers? They are champions for the NVC but if they knew more details would that help implementation? (Key questions could be: "Do we as agency reps have to abide by the hierarchy rules? What are the options for flexibility based on business needs? How does it translate to mapping? Monitoring?") Maybe a session/workshop at a future FGDC meeting on the details of the NVC?

Product Ideas: because we have limited funding, an alternative could be to develop a high-end web-based workshop and/or online materials

- Develop a factsheet or series of factsheets for different agencies, demonstrating how the NVC applies to their business needs.
- Webinars that could be built on and modified; perhaps a series of webinars
- Use the NVC booth or a special session at ESA to highlight the NVC tools that are developed
- Develop a certification program? (similar to USGS ARC classes) – agencies can track who have taken a course, participants have certificates to show their supervisors.
- Develop briefing materials so FGDC members can get support from upper management, especially since there has been a lot of change in many agencies. Something engaging for a 15-min (10 slides) presentation.
- Develop an online toolkit for how to communicate to others and "sell" the NVC? Jill mentioned the ESA Communicating Ecosystem Services Toolkit that was developed a while back as a model (available: <http://www.esa.org/ecoservices/>)

How to move forward: First we will get feedback from the FGDC Subcommittee, ask them to submit questions, and the Education Subcommittee will develop ideas with a plan to address their questions and hold a workshop prior to the 2012 ESA Meeting.

NVC Keys: Discussion Highlights

- John pointed out that keys should have consistently comparable couplets; it should be as short as possible, use consistent terms, and reduce ambiguity.

- Others are not sure a key should always be dichotomous; or, the key could be strictly dichotomous higher up and have more options as you drill down – there’s some debate over whether dichotomy makes a key more usable or not.
- The key itself should be as simple as possible, though it may be impossible to optimize simplicity and accuracy at the same time.
- Maybe there should be a set of rules for how to “break ties” and make decisions.
- We could embed definitions into the key more, since many users will just go straight to the key.
- Most of the nomenclature used in the key is already embedded in the Standard; we need to make sure these terms are clearly defined.
- Users will need to read the key together with the descriptions.
- We should make sure users realize the importance of the terminology glossary very early on.
- Make the order of the key more explicit (e.g. is the first statement the most important/conventional)?
- Using a key in the tropics may not work well.
- The key should possibly have a disclaimer that it’s more likely to be wrong if a user is keying out only a single plot.

Incorporating Changes into the NVC: Discussion Highlights

- Changes to the NVC can take different forms (major boundary shifts vs. editorial changes), so we may need to establish different rules for different degrees of change.
- We need a tracking process if the NVC is going to be truly dynamic and cope with uncertainty.
- Funding may be an issue with the group review. Currently the plan is for NatureServe to incorporate changes to group descriptions as they have time, but there is no explicit funding to cover this work. Changes that the author and AE agree on will likely be incorporated, but more extensive changes may not get added quickly. This also applies to the long-term ongoing changes, but we may not know what resources we need until we get there.
- We may also need more funding for VegBank: to update the classification, add new levels, map new ones on old ones, and upgrade to the current version of USDA Plants.
- We have a draft infrastructure set up already, which we can use in trial runs, but we haven’t addressed how to confront some major issues (e.g. if a proposed change is based on data that doesn’t cover the full range of a type). Until we start working with proposals we won’t encounter all these challenges, so it may be useful to do some case studies now.
- At the Alvares meeting there was a proposed template for incorporating changes – Alexa will circulate this.
- At the joint meeting we will plan to work through some examples (Bob and Pat will provide example datasets from the East and West).

ESA Meeting 2012

Workshop/Field Trip:

- Possible issues/topics to cover:
 - 1) What is the NVC and how is it being used?
 - 2) How NVC keys can work under different applications
 - 3) Field Methods: how to sample a landscape, and possibly scale up so participants can think about context and how to capture data in that context; how to place plots; what is your overall strategy?; what is the best decision with respect to the NVC?; focus on real scenarios rather than data
 - 4) What questions do users have? What decisions are being made at the data collection level?
- General planning:
 - 1) We need to advertise it early and do more outreach in advance; target practitioners and people with travel funds.
 - 2) We could visit two different landscapes (where there are high resolution veg maps).
 - 3) Consider a 2-day workshop with an overnight stay; one day inside to discuss questions and give an NVC overview, and a whole day in the field.

- 4) We may consider doing this outside of the ESA meeting, so people who are not members are not dissuaded from coming (due to the registration fee), but linking the timing/location with the Portland meeting.

Organized Oral Session or Symposium: Orié and Scott will work with the Vegetation Section on an OOS or Symposium proposal that focuses on the issues in the Veg Science Proposal (vegetation change due to climate change, invasive species, pollution, land use change; plus trying to predict change, and thinking about how this change will affect the long-term development of the NVC)

Booth: To be determined!

International Collaboration Efforts: Discussion Highlights

- Pat and Michael attended an IUCN workshop on ecosystems management. They were asked to provide input about redlisting – essentially what should be redlisted and what are the criteria for that status? There are parallels to classification and veg classification in particular. We should consider how the UNSVC could fit into IUCN’s system somehow.
- We discussed developing some publications to further the international collaboration/discussion:
 - 1) Don is happy to pursue another Ecological Monographs article that deals with the whole hierarchy, in an effort to further the international conversation – maybe with an aim to publish it in a year or so.
 - 2) Or, a paper documenting the criteria and content for all levels for the US and Canada, essentially a description of veg types.
 - 3) Or, a paper on comparing different classification systems (what’s out there? What’s similar and different? What is each system good for/not good for?)
- We also discussed developing a meeting of Latin American vegetation ecologists to share their varying experiences of trying to classify, map, and understand the vegetation in their own countries.
 - 1) We could work with the Mexican Chapter of ESA – the Chapter President is interested in the idea – Exequiel will follow up with him.
 - 2) One possible venue for this could be the Association of Tropical Biology and Conservation annual meeting.