

# ALVAR REVIEW MEETING

March 15-16, 2010 Raleigh-Durham

Attendees: Alan Weakley - ESA Panel Member  
Mary Russo – NatureServe Database Manager  
Bob Peet - ESA Panel Member  
Alexa McKerrow – Program Manager -USNVC  
Mike Lee – VegBank Manager UNC  
Don Faber-Langendoen – ESA Panel Member  
Jim White – Programmer NCSU

## Summary

The majority of the time at the ALVAR Review meeting focused on the technical implementation of the existing software tools. There are substantial changes required to update the Peer Review and Proceedings Tool to support the new hierarchy and the template for type descriptions. Prior to this meeting, several of the types proposed in a document adapted from the “Conserving Great Lakes Alvars: A Final Technical Report of the International Alvar Conservation Initiative” were entered into to test the system. In addition to identifying a list of technical modifications to the Peer Review and Proceedings Software, this meeting clarified for the participants the proposed data flow, with a proposal narrative being submitted as a document and the type descriptions being entered interactively through the peer review and proceedings software interface. The proposed submission process will allow reviewers to interact in a familiar way with the proposal narrative during the review and will make transfer of the new type descriptions into the NVC Classification Database more efficient.

The conclusion was reached that with the current budget situation, the current software would be modified to address the changes, but it is recognized that a comprehensive refactoring of the software would be the ideal. Once the remaining NVC portal components are in place (NVC database, website, VegBank and other supporting plot databases,) this software should be modified to fit seamlessly with the other tools. The data flow as discussed in the meeting is sketched out in a flow diagram on page 6.

Below is a summary of the action items and proposed formats discussed at the meeting. Between now and the next review meeting as many of these changes will be implemented as is feasible within the context of the current software. Don Faber-Langendoen will have a draft of a full submission of the ALVAR proposal for the thirteen community types based on the new proposal narrative template and all of the proposed types will be entered into the tool. The ESA Panel will then be invited to a demonstration of the proposal submission and asked for feedback specific to the review process.

Currently the Peer Review and Proceedings Prototype can be found in two locations. Please feel free to visit the sites and test the submission process.

UNC Herbarium (original code - not changing) <http://herbarium.unc.edu:8080/nvcrs/>

USGS (code being edited) <http://ancalagon.zo.ncsu.edu:8080/nvcrs/>

## Programmatic Recommendations

Modify the presentation slide to show the Proceedings as a separate endpoint for information.  
(McKerrow)

Change the language within the Peer Review and Proceedings Tool – from “NVC REVISION SYSTEM” to PROPOSAL SYSTEM. (White).

Develop a user friendly view and letters to communicate the evaluation and editors decision to the author (McKerrow with ESA Panel input).

Implement a “No Conflict of Interest” statement for the peer reviewer to sign prior to accepting a proposal for review (McKerrow).

### **Content Recommendations**

A proposed template for the proposal narrative was outlined by the working group during the meeting. The narrative would be submitted as a supporting document and include the sections listed below. Each of the community types affected by the proposal would be submitted through the interactive form in the peer review and proceedings tool based on the template agreed upon by the ESA Panel for type descriptions. See Draft Proposal Narrative Template below.

### **Technical Recommendations**

Modify the Peer Review Software:

1. Create a template for data input based specifically on the current ESA Panel Template for type descriptions; mimic the information flow for the type description (White, Lee).
2. Develop a data flow for pre-populating the type description templates within the Peer Review Tool based on the current content in NatureServe’s Biotics Database and migrate that functionality to the NVC Database when appropriate. If that is not an option, develop the ability to “scrape” content from NatureServe Explorer to pre-populate the template for a type (White, Lee, Faber-Langendoen).
3. Develop an application within the Peer Review Tool that allows for a comparison of the initial content of a pre-populated type description the revised version as submitted. This comparison would be provided to the reviewers as a supporting document (White, Lee).
4. Incorporate editing and formatting (italics, spell checking) tools directly in the form views provided within the Peer Review and Proceedings Tools (White, Lee).
5. Clarify with the panel and Implement permissions specific to the proposals after acceptance and prior to formal publication in the proceedings (White).
6. Develop a species specific growthform list, start with USDA Plants and build a look up table with edit capability (Lee, Faber-Langendoen).
7. Expand the options for describing distribution to include Canadian Provinces, Mexican States, Federal Lands, TNC Ecoregion, USFS Ecoregion, Omernik Ecoregion) and develop the capability of displaying a map (Need guidance on units for the display; White).
8. Develop the ability to upload tables into the type description database for Physiognomy, floristics, Environment, plots, distribution, and references (White).
9. Address the data input issues not listed above that were raised in the list developed by Alexa McKerrow and Mary Russo in advance of the review meeting (see notes\_data\_entry\_mckerrow.docx & NVC Revisions System comments\_mjr1.xls; White, Lee).

### **Policy Recommendations and Questions Raised to be addressed in subsequent Panel Meetings (McKerrow)**

- The classification management team will need to identify and make changes within the NVC database if higher levels of the NVC Hierarchy are impacted when a revision proposal is accepted.
- All editing that results from the acceptance of a proposal should be made by the classification management team prior to publishing of the proceedings and the author should be provided a 2 day window of opportunity to proof the final copy. While this step is occurring the proceedings article would be considered “in press”.

- Questions to be addressed by the ESA panel Peer Review Meetings.
  - How different is the peer review process for the higher levels (above alliance) of the hierarchy?
  - Need high-quality examples of successful proposals to use for guiding future submissions.
  - What types of range maps need to be supported (state, federal lands, ecoregions)?
  - Need guidance with respect to guidelines for the appropriate number of typical plots for a community.
  - Need guidance with respect to referencing the Type Concept. The proposal was made that the type concept should reflect the current author of the description and that there should be a founding concept reference provided. Don will develop three or four specific case studies and request feedback from the ESA Veg Panel (Faber-Langendoen).
  - The recommendation was made that the taxonomy included in the proceedings document (the published proceedings) would be current at the time of publishing (i.e. concepts based on USDA Plants 2002) but once published remain unchanged, while the taxonomy in the descriptions for all types would be kept current as the taxonomy evolves.

## Draft Proposal Narrative Sample Outline

(See attached NVC Proposal Narrative Outline25Mar2010.docx).

Table of Contents

Introduction

Methods

Detailed Field Methods and/or compiled

Cover scale used

Taxonomic standard used

Sampling – range of environmental variation captured

Environmental variable measurements

Plot data (plot size, spatial distribution)

Data Analysis

Data preprocessing

How issues of ambiguous taxa were resolved

Summary of number of plots, number of taxa

Methods for deriving environmental site characteristics

Classification

Multivariate methods used

Software, including version number

Judgment and Interpretation (criteria used to vary from analysis)

Post-processing – criteria for discarding outliers

Type summary process (abundant vs. constancy)

Use and sampling of observation points

Results

Tables (Synoptic, Cover by Strata, Environmental – see examples below).

Communities recognized in the proposal

Issues

Environmental gradients, disturbance factors, ecology/biogeography (**Optional**)

Discussion

Acknowledgements

Table 1. Synoptic Data Table: This table would summarize the cover values by species across all plots. It would include the standard taxonomy. The table would include attribution of the species as Constant, Dominant and/or Characteristic for each type. Each plot would be attributed as typical or classification as well.

| Species  | Community 1 |          |                |         |                     |        | Community 2 |          |                |                     | Comm. n |
|----------|-------------|----------|----------------|---------|---------------------|--------|-------------|----------|----------------|---------------------|---------|
|          | Dominant    | Constant | Characteristic | Plot 1  | Plot 2              | Plot 3 | Dominant    | Constant | Characteristic | Plot 10             | Plot n  |
|          |             |          |                | % cover |                     |        |             |          |                | % cover             |         |
| Spp 1    | X           |          | X              | 11      |                     |        |             |          |                | 0                   | 15      |
| Spp 2    |             | X        |                | 95      |                     |        |             |          |                | 40                  | 0       |
| Spp n    |             |          |                |         |                     |        | X           |          |                |                     |         |
| Plot Use |             |          |                | Typal   | Classifi-<br>cation |        |             |          |                | Classifi-<br>cation |         |

Table 2. Summary of Cover by Stratum across types. This summary table would include a summary of cover by stratum across all communities. In this case, average, minimum and maximum cover by stratum are presented.

| Stratum    | Min Height | Max Height | Community 1 | Community 1 | Community 1 | Community 5 | Community n |
|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
|            |            |            | Average     | Minimum     | Maximum     |             |             |
|            | meters     |            | % cover     |             |             |             |             |
| Tree       | 5          | 20         | 1.04        | 0           | 9           |             |             |
| Tall Shrub | 3          | 5          | 0           | 0           | 0           |             |             |
| Herb       | 0          | 0.5        | 37.22       | 2           | 95          |             |             |

Table 3a. Examples of Summary of Site Characteristics by Plot (Optional)

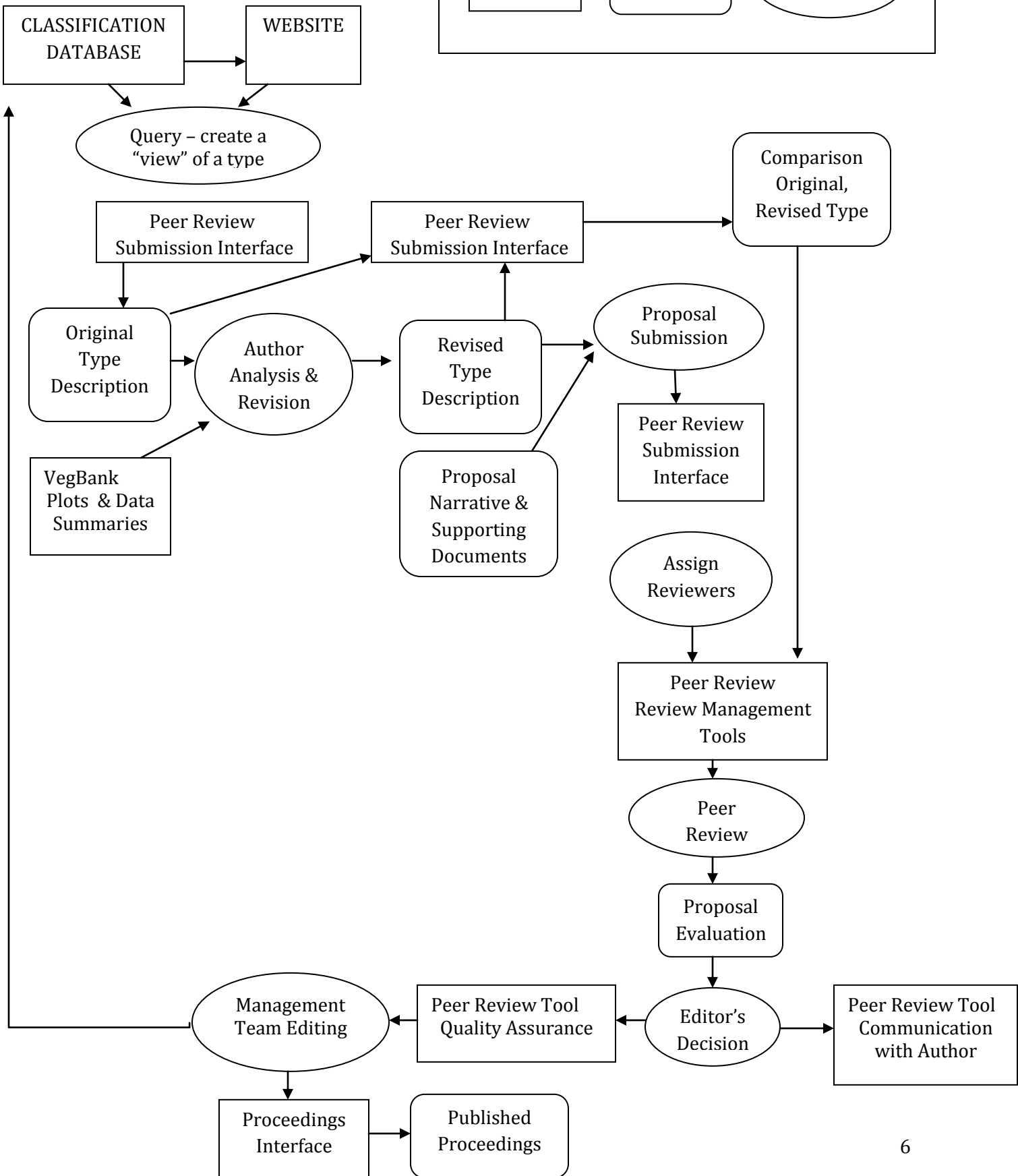
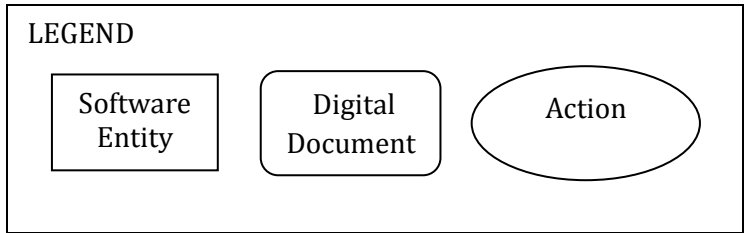
| Variable                | Units | Category | Plot 1 | Plot 2   | Plot 3 | Plot 10 | Plot n |
|-------------------------|-------|----------|--------|----------|--------|---------|--------|
| Bare Ground             | %     |          | 5      | 10       | 50     | 0       | 0      |
| Depth of Organic Matter | cm    |          | 3      | 4        | 3.5    | 10      | 14     |
| pH                      |       |          | 5.4    | 5.3      | 5.1    | 6.0     | 4.9    |
| Soil Moisture           |       |          | Xeric  | Subxeric | Xeric  | Mesic   | Mesic  |

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

Table 3b. Example of Summary of Site Characteristics by Type.

| Variable                | Units            | Category | Type 1  |     |     | Type 2  | Type n  |
|-------------------------|------------------|----------|---------|-----|-----|---------|---------|
|                         |                  |          | Average | Min | Max | Average | Average |
| Discrete Variables      |                  |          |         |     |     |         |         |
| Bare Ground             | %                |          | 10      | 1   | 25  | 0       | 0       |
| Depth of Organic Matter | cm               |          | 4       | 3   | 5   | 10      | 14      |
| pH                      |                  |          | 5.4     | 5.3 | 5.1 | 6.0     | 4.9     |
| Categorical Data        |                  |          |         |     |     |         |         |
| Soil Moisture           | Percent of Plots | Xeric    | 50      |     |     | 0       | 0       |
| Soil Moisture           | Percent of plots | Mesic    | 25      |     |     | 50      | 0       |

Information and Data Flow in preparing proposal, reviews and data management.



AGENDA for the ALVARS Peer Review and Proceedings Meeting  
March 15 – 16<sup>th</sup>, 2010 Chapel Hill, North Carolina.

**MONDAY**

- 1:00 Introductions and Goals of the Meeting  
Overview of Peer Review Process and role of Peer Review Tools  
Comment: In the overview slide presented the flow of information from the Peer review into the NVC database is misleading. There is a substantial amount of information that is gathered in the peer review and proceedings work flow that does not feed into the NVC Database directly. Therefore showing the proceedings as a separate endpoint is more appropriate.  
Overview of Alvars project (based on a review of the mechanistic issues that came up in the requirements analysis and policy issues as well.
- 2:00 – Peer Review Tools - demonstration of the submission of a proposal including the data input for one association in the ALVARS Project.
- 3:00 - Submission and Peer Review Process: Review of full proposal (previously submitted), including steps for peer reviewers and NVC data NVC managers.
- 5:00 - Summary of Tuesday tasks.

**TUESDAY**

- 8:00 – Peer Review Tools - technical review of submission process, recommendations or tasking out of further testing.
- 9:00 – Peer Review Tools - summary of recommendations for the technical fixes to the software.
- 10:00 – Data Management and Peer Review Tools – discussion of relation between Peer Review Tool and NVC Database (with Biotics as example)
- 11:00 – Peer Review Process - content review of proposal - policy issues, process flow, logistics, data management.
- 3:00 – Peer Review Process - summary of process flow and policy issue recommendations and requirements for broader input from the panel.
- 4:00 – Peer Review and NVC Proceedings. Recommendations for aesthetic fixes to the Proceedings.
- 5:00 - set schedule for follow up meeting.