

## InfoVeg - Bug #2864

### Simplify level 3: no modules?, cover only by strata?

06/02/2007 03:25 PM - Michael Lee

<b>Status:</b>	Resolved	<b>Start date:</b>	06/02/2007
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Michael Lee	<b>% Done:</b>	0%
<b>Category:</b>	ProtocolDoc	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	x2008-Jan	<b>Spent time:</b>	0.00 hour
<b>Bugzilla-Id:</b>	2864		
<b>Description</b>			
<p>Cover records at Level 3. The intent of level 3 is to provide information sufficient to assign a plot to a community type within the NVC. We wish to achieve this without any extra burden on the participants. We agreed that it is a burden to track separate modules and to do both total cover and cover by strata. In general, we seemed to agree that it would be sufficient to record cover by strata and the total area of the plot, and that modules should not appear until level 4.</p> <p>Action Item: Everyone indicate to Bob their comfort level with this plan, and then Bob consults with others to arrive at a consensus.</p> <p>Action Item: bob conveys to Michael the decision and Michael makes appropriate changes in the datasheet and Manual.</p>			

#### History

##### #1 - 07/20/2007 12:24 PM - Michael Lee

obvious repercussions on datasheets and then entry tool

##### #2 - 07/15/2008 02:53 PM - Michael Lee

Comments from our group:

From: Robert K. Peet

Date: Fri, Jul 20, 2007 at 6:53 PM

We have pending a simplification of level 3 sampling. No one has commented to me except Mike Lee. I need comments from the rest of you.

Bob

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From: Mike Schafale

Date: Mon, Jul 23, 2007 at 5:55 AM

This sounds OK to me. I think you should have a reasonable ability to classify a plot to community type without separate modules.

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Michael P. Schafale

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From: Steven Roberts

Date: Mon, Jul 23, 2007 at 5:54 AM

Hey Bob,

I apologize for the delay. Because some of the monitoring contractors that will be asked to apply level 3 may have very limited experience, I am generally in favor of any effort to simplify it.

Steve

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From: Mike Schafale

Date: Mon, Jul 23, 2007 at 5:58 AM

I would note that even the maximum plot complexity pales in comparison with the complexity of being able to identify all the plants. That's the kind of

experience that should really matter. If you're people don't have that experience, things aren't going to go well.

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From: Alan S. Weakley  
Date: Mon, Jul 23, 2007 at 8:39 AM

This seems fine!

Alan Weakley

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From: Michael Lee  
Date: Mon, Jul 23, 2007 at 10:34 AM

Hi all,

Mike is right about the difficulty in identifying the plants. The saving grace in level 3 plots is that it is intended to capture only the dominant species, NOT a full inventory of all species occurring there. But it is also intended to provide enough information to classify a plot to a community. How we determine which species to include in this simplified inventory is still needing development. We imagine a cut-off of cover required, say 5% cover for the plot (which seems to be a 10m x 10m module now). Folks sampling the plot could also include species they felt were important that didn't reach the cut-off, such as T&E species, which might not reach the 5% cover.

I thought I'd do some quick research into what sort of information this might yield us. Our 10m x 10m module in CVS currently have an average of 31.0 species in them (median 27). They range in richness from 1 species (20 modules) to 129 (1 module, wow!).

If had sampled all plots in the CVS database as "level 3" plots and ignored species with less than 5% cover, there would be an average of 5.1 species per 10m x 10m plot (median 5). These range from 0 (72 modules) to 22 (1 astounding module).

The areas being sampled for level 3 plots are likely less diverse than the areas sampled in CVS, so I'm wondering if the 5% cut-off is going to lead to plot data that is helpful for classification, as we are hoping, and what further advice should be given to those sampling level 3 plots as to which species to include and which to ignore.

cheers,  
michael  
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From: Mike Schafale  
Date: Mon, Jul 23, 2007 at 11:53 AM

I think this is a significant concern. A lot of the indicators of unusual communities, such as those of basic soils, or different versions of savannas, may not be all that abundant. And that's in the best of examples. If you're working with degraded communities, you often have to scour places to find a few individuals to give you a hint what is going on. I think ignoring all species without 5% cover is going to lead to many rare communities interpreted as common ones, and a lot of other misclassifications. Or, maybe it will just lead to everything being classified as broadly defined successional associations that won't actually tell you anything about what should be there or whether your restoration is succeeding. Mike Lee's statistics say it pretty well. Knowing 5 species instead of 27 is a pretty big difference. If you're judging restoration success, not knowing whether you have 5 species or 27 is a pretty poor basis for judging. The error could go either way too -- up and coming desirable species would be missed, and the absence of important characteristic species would be missed.

I'm reminded of the early stages of research at the B.W. Wells savanna. A quick look at the woods adjacent to the power line led folks to classify it as a pond pine woodland association. That's what the vegetation looked like -- pond pine canopy and dense pocosin shrubs. But classifying it as that association would give everybody completely the wrong impression. All the description of the dynamics of pond pine woodlands wouldn't be true. The environmental description in the NVC wouldn't fit. When you thought about the site, you would think it was a bad place for a savanna restoration project. If you thought about the savanna plants in the power line corridor, you might conclude that they were weedy, readily invading mowed pond pine woodlands, rather than conservative species hanging on. If your data went into the NVC, it would confuse everybody about the nature of true pond pine woodlands. Those scattered savanna plants are the only thing in the woods that tell you this isn't what it appears at first glance. This is an extreme case, but I expect you'll find a lot of problems like this with such low resolution plot data.

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From: Alan S. Weakley  
Date: Mon, Jul 23, 2007 at 1:48 PM

Yes, I had the same reaction as Mike S. when I saw Mike L.'s stats. Might reduce it down to something approximating "cover types" in many cases, not associations...

**#3 - 07/18/2008 10:43 AM - Michael Lee**

Modules now eliminated for level 3. Level 3 plots are a single plot, but size of the plot is variable.

datasheets: Version 44\_3  
entry tool: v226\_p0715\_mid3

**#4 - 03/27/2013 02:21 PM - Redmine Admin**

Original Bugzilla ID was 2864