

Ideas /Suggestions Resulting from April AdCom Meetings

Suggestions to be Considered for Prioritization

As background, the GRIN-Global (GG) development team uses “trac,” a ticket system in which software development tasks have been identified by users or developers. These tasks fall into two broad categories: enhancement changes or bug fixes. At any time, the trac system has many open tickets that are not recorded with any prioritization or level of effort.

The AdCom held sessions on April 11 and 25, 2023 to hear participants’ suggestions on improving their effectiveness for handling their genebank tasks. The sessions focus not on existing trac tickets, but rather on what would make NPGS more effective.

More questions will evolve from this process. If “reporting” becomes the number one focus, what reports are needed by the NPGS? What reporting tools should be implemented? (This question would be better answered by the developers.) Obviously more work is needed to specify any reporting development.

As with any software system with ongoing maintenance and development needs, the challenge is to weigh benefits against the effort needed to modify the software. The obvious constraints are the time and people needed to make these modifications. Of the needs, what are the most important that can be realistically addressed by the developers? Establishing this hierarchy of needs itself can be a daunting task. The hope is that the AdCom will be able to identify short term and long term development projects which the development team can then pursue.

This document summarizes the suggestions received in the meetings as well as some suggestions that were submitted separately after the meetings. Several training opportunities were mentioned. There were some specific requests mentioned. During the discussions, one overriding concern was the need to create reports consistently and less onerously than what is being done currently.

On the training page at http://grin-global.org/NPGS_news.htm, the two videos from the respective sessions are available for review, as well as this document, and the slides that were used in both sessions. Thanks to all who have participated and those who will pursue the next steps.

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Items Mentioned April 25 Discussion

Reports Needed

Each year annual reports are assembled and require considerable effort to gather data in a consistent format. The recent data gathering in preparing for the 5-year NPGS plan illustrated data inconsistencies including issues with how crops are defined and other inconsistencies. Gayle Volk mentioned the overriding concern “to be consistent, but not necessarily uniform” so that data can be reported with less manual effort.

A second reporting need pertains to regeneration data. Gayle raised this concern and Peter Bretting confirmed the importance of this data since regeneration is the most expensive process for the sites and is crucial data for the NPGS enterprise.

Gayle cited Riverside’s Robert Kruger using workarounds and primarily a local database to track clonal actions. Not using GG for managing this data may be partially attributed to a training need, and partially a need for additional GG database fields.

Jenny Smith echoed the need for being able to annually access data consistently for Crop Germplasm Committee (CGC) reports. She indicated that she spends considerable time and effort to produce the same reports each year but with the current year’s data – ideally, she would like to “push a button” instead of needing to manually manipulate data.

Later Gayle also expressed the desire to have a button – in this case, to click for clonal cryo status data across the collection.

Again later, Benjamin Haag added to this discussion; he mentioned Tableau and raised the question: Should a dashboard tool be considered where data can be accessed for reporting as needed?

Synonyms

Gayle Volk stated a need for “synonyms.” She used apple as her example. There are Malus Unique Numbers (a MUNk (sp?) number?). She sees this as something that crops need. She feels that this may be related to the work Cullen McGovern has been doing with genetic observations.

She also sees opportunities for “True to Type” data as well.

Inventory Actions

Jill Bushakra mentioned that the number of Inventory Actions was overwhelming and was wondering if actions could be grouped somehow to make it easier to find an appropriate action.

Marty opined that “consistency” seemed to be the theme today. Perhaps part of this is a training issue. He was thinking of Order Actions and cited the use of the “pending” status. He offered that this status is used in as many ways as there are sites.

Web Version of the Curator Tool

Jenny Smith indicated that when she works in the field, she wishes that she had a “web version of the CT” – that is, an easier way to collect her data directly into the database. Gayle added that ideally the field books and barcodes would make this a reality.

Gary explained that Kurt is currently exploring the Crop Trust’s GGCE (“GRIN-Global Community Edition”) software. (GGCE uses essentially the same GG schema, but focuses on using barcodes and scanners to directly capture live data and eliminate the bulk entering of data at a later time.) Kurt is testing GGCE using NPGS’s full dataset. The next steps are to resolve some questions with the Trust’s development team and then train a core group of NPGS testers. Since GGCE is compatible with the CT, one outcome could be that users would have a choice of tools plus have new capabilities, such as to be able to scan and capture data live, while still having CT access.

Gayle added to this discussion, saying that there is great need to simplify the current steps required in capturing data in the field and then getting the data into GRIN. She mentioned that she is not familiar with how each site is currently handling the interoperability of field books and using barcodes in the field, and questioned if maybe some sites are already doing this.

Attachment Fields

Jenny requested that training be provided on the how to record data in the fields used with the attachment wizard. She wants to know how data in these fields ultimately is displayed.

Next Steps

Gayle Volk asked: “What happens next?” She alluded to trac request tickets and how tickets may be in trac but asked how do these tickets get prioritized. Harold Bockelman suggested that the AdCom review the tickets. Lisa displayed two report tickets six years old. Stacey Estrada suggested that perhaps Tableau will be a solution.

Items Mentioned April 11 Discussion

Loading Observations Data – Make Easier / Intuitive

Loading crops, traits, codes, and observations into the Curator Tool at times can be overwhelming. There are really two issues:

1. Loading the traits and codes and their respective titles and descriptions
2. Loading observations

Traits and Codes

In loading the traits and codes, the process is fairly intense when codes are involved. With experience, the many steps work as designed and are not insurmountable, but it is also easy to get stuck in a loop when entering the titles and descriptions and sometimes the process needs to be started over.

A Crop Trait wizard has been requested. (One already exists. Also, a trac ticket does exist for the Crop Trait wizard. trac# [1929](#)) In fact, this working wizard has been tested. It has been suggested that with minor modifications, this wizard could be readily incorporated into the GG body of available wizards. This wizard was designed and developed by an external source (non-USDA), so some steps or notation must be taken regarding licensing.

Observations

While it is true that entering observation data into the Curator Tool is exactly like adding other data, there are several issues.

- In the CT, the interface does not provide any tips / suggestions to the user about what values are valid. The user cannot determine at a glance whether an observation requires a coded, numeric, or text value. A corollary issue is that more than one value can be entered for one record, but one datapoint is really the only valid entry.
- Observations that use coded values expect the value to be spelled / entered exactly as it was saved in the title of the coded value. It is easy to enter typos, extra spaces, whatever. A workaround was designed where the user can switch to a non-standard “ENG” language and enter the actual code. Simpler, but time consuming. Again, an experience user may understand this, but the entire process is a bit cumbersome and involves many manual steps, among other things, updating lookup tables twice.

Control of Decimal Zeroes in the CT

Several participants voiced a need to have better control of the zero display in the Curator Tool. Currently, numeric fields will display 5 decimal digits. Many Inventory fields illustrate this issue:

Site	Accession	Inventory	Inventory Maintenance Policy	Inventory Maint Policy Season	Web Order Request	Web Order Request
Quantity On Hand	Standard Distribution Form	Standard Distribution Quantity	Unit of Distribution	Distribution Critical Amount	Replenishment Critical Amount	
p germ...	3083.00000	SD	50.00000	count	550.00000	550.00000
lot re...	79.00000	SD	0.00000	count	1000.00000	2500.00000
ole	14680.00000	SD	100.00000	count	1000.00000	2500.00000
eed: w...	2956.00000	SD	0.00000	count	1000.00000	2500.00000

Production Location in the Inventory Table/Dataview (resolved)

A discussion resulted with an explanation that the Production Location can display, Country, State, and County since it uses the Geography lookup table.

Search Tool - Display All Columns (resolved in the next CT release)

The non-working Display All Columns checkbox was removed.

Public Website Reports – PDF Option

[Requested by Lisa Taylor]

A PDF option was requested for reports on the Public Website. This has actually been addressed, but is on the DEV system and most likely will be implemented in the next GG server release. [See <https://npgsweb.ars-grin.gov/trac/GG/ticket/2801>]

International Orders' Requirements

Since requirements for international orders seem to be consistently changing, a recommendation was made to have some means for determining what the requirements are. It was pointed out that in multiple site orders, each site is spending duplicative efforts in determining country requirements.

A repository of current information could be helpful. Jennifer Friedman should be consulted for any suggestions.

Also, requested was standard language to be used by NPGS sites when requesting a waiver. [Stacey Estrada]

Mapping Tool / Interface

[suggested by Harold Bockelman]

Harold suggested that it would be ideal if the Public Website used a more powerful mapping tool so that users could graphically select a region and the accessions held in the collection with their origins in that region would be selected. Lisa Burke added that this could be useful for collectors in determining what species were growing in the selected region.

Order Steps Automatic Email Notifications

[suggested by David Van Klaveren]

David indicated that the GG system should send automatic status update notifications to the requester. Whenever an action is spawned, a relevant email could be sent. Currently, the onus is on the user to login and search for their order in their profile. Many users simply use the Contact Us form to determine their order status. (In the recent server release, a Public Website change was made so that the user can indicate their web request number and the resulting email gets directed to the respective sites handling the request. This has reduced some email traffic.)

The users in many cases do not use the Order History Details and even then, it is not very clear on these details what the status of their request is. This is true when multiple orders are generated from one request and particularly true when a site has merged requests into one order.

[An addendum from Marty Reisinger, later]: Automatic emails should be sent regularly to the requester, however often “regularly” is defined – perhaps monthly? At GrinGlobal.Orders, we often receive emailed inquiries, usually sent via the Contact Us form, asking for an update, because the requester hasn’t heard from the NPGS *in many months*. This may be for valid reasons, such as seasonal cuttings. However, it would be reassuring to the requester to receive a monthly email indicating that their request hasn’t been dropped.

Cultivar Data

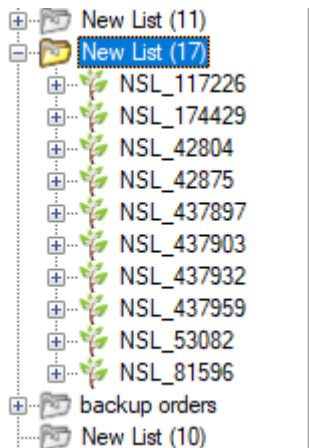
[emailed suggestion – from Melanie Schori]

<https://npgsweb.ars-grin.gov/trac/GG/ticket/1943>

NA and international sites have asked for the capability to store cultivar and Group data in designated tables. These are more important for horticultural crops than agricultural crops at the moment, but their lack is a major shortcoming for transferring data for the NPGS collections at the Arboretum.

List Sorting

[emailed suggestion – Lis a Burke] Sure would like the list to sort correctly - when I'm storing or count reviewing - see below.



Recent (2023) Tickets Approved by AdCom CCB

Add columns to the Inventory Maintenance Policy

<https://npgsweb.ars-grin.gov/trac/GG/ticket/2728>

Checkbox needed for manual tab/grid refreshes

<https://npgsweb.ars-grin.gov/trac/GG/ticket/2745>

2 Trac tickets Relating to Reports (Provided by Lisa Burke)

[#1375 \(Statistics Pages from GRIN Need to be Developed in GRIN-Global\) – GrinGlobal \(ars-grin.gov\)](#)

[#1224 \(Web Report Needed - Count accessions-genus-taxonomy BY site\) – GrinGlobal \(ars-grin.gov\)](#)