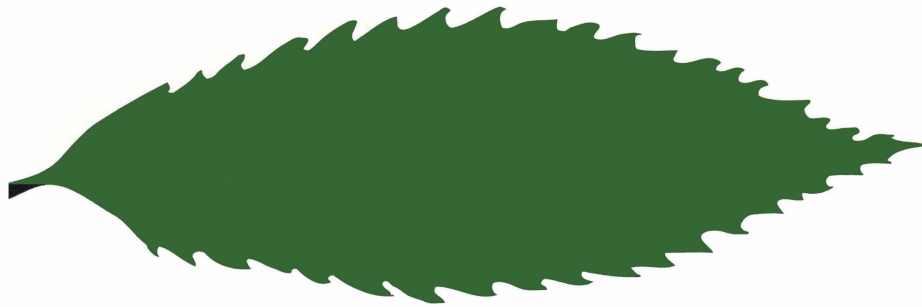


TACF *dentata*Base

User Guide, V1.1



Websites

Testing/Staging Server: <http://dentatabase-staging.herokuapp.com>

Production Server: <http://acf.herokuapp.com>

User Guide

Introduction

Welcome to TACF's *dentata*Base! This on-line data management tool has been developed for use by TACF staff, members, partners, and cooperators to serve as a repository of data related to American chestnut breeding, planting and restoration. The *dentata*Base is a multi-user, on-line database accessible to anybody with an internet connection and a user account. This web-based database allows anyone participating in our science program to input and evaluate data from their office or home computer. Our ultimate goal is to create a database that can handle the large amount of data associated with all aspects of our long-term and large-scale species restoration project.

The *dentata*Base is available for use by member cooperators at no cost and designed with a tiered access model, allowing different users to have appropriate data access customized for them and easing the sharing of data across a universal platform. The database structure is hierarchical, following to some degree the organization of TACF itself. This organizational structure should make sense as you work through the system, but if not please use this User Guide to help you navigate.

Because the *dentata*Base is currently only about 25% complete it is useable but awkward in places. Once you get the hang of it the work flow is fairly straight-forward, but we realize there are a lot of ways to improve this tool. For now, we hope this User Guide will help when you are unsure of how to do something, and of course, contact your Regional Science Coordinator with any questions. A glossary of terms is available in Appendix B and also as a stand-alone document. Any terms defined or explained in the glossary are **bolded** throughout this guide. In cases where there are a set of acceptable terms (i.e. where a drop-down selection list is planned for future implementation), those terms are ***bolded AND italicized***. These acceptable terms are also listed in the glossary.

We are currently working to load all existing Meadowview and State Chapter data into the database and plan to use this system as our main tool for data management from here on out. We hope you will help in that effort and look forward to using this tool to support our work.

- The *dentata*Base Team

Please Note:

The database currently has very limited error correction capabilities. We need to be careful when entering data to make sure that it is as correct as possible. For this reason, all users will need to demonstrate some manner of proficiency on the Testing/Staging Server before being given access to the Production Server.

In addition, the security model is not yet sophisticated enough to protect sensitive location or contact information and therefore users will only be given access to the entities they work directly with. We hope to be able to resolve these issues soon and open-up wider access on the Production Server, but for now the best solution is to restrict users to data with which they have a need to work.

That said, we are very excited about this new system for the storage and entry of data related to our science program and hope you enjoy working with it!

User Guide

Table of Contents

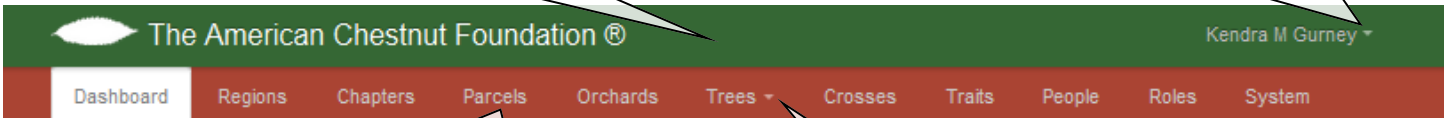
1. [Basic Navigation Features](#)
2. [CSV Files](#)
3. [Sign-In](#)
4. [Dashboard](#)
5. [Regions - Overview](#)
 - 5.1 Regions - Region Detail
 - 5.2 Regions - Add New or Edit Region
6. [Chapters - Overview](#)
 - 6.1 Chapters - Chapter Detail
 - 6.2 Chapters - Add New or Edit Chapter
7. [Parcels - Overview](#)
 - 7.1 Parcels - Parcel Detail
 - 7.2 Parcels - Add New or Edit Parcel
8. [Orchards - Overview](#)
 - 8.1 Orchards - Orchard Detail
 - 8.2 Orchards - Add New or Edit Orchard
9. [Plots - Overview](#)
 - 9.1 Plots - Add New or Edit Plot
 - 9.2 Plots - Add New or Edit Plot (2)
 - 9.3 Plots - Review Plot
 - 9.4 Plots - Plot Map and Editing Plot Spaces
 - 9.5 Plots - CSV Plot Creation and Editing
10. [Plantings - Overview](#)
 - 10.1 Plantings - Overview (2)
 - 10.2 Plantings - Add a New Planting
 - 10.3 Plantings - Add a New Planting (2)
 - 10.4 Plantings - Design Planting CSV Template
 - 10.5 Plantings - Finalize a Planting
 - 10.6 Plantings - Correcting a Planting
 - 10.7 Plantings - Commit a Planting
11. [Detailed Map Table](#)
 - 11.1 Space or Edit Space
12. [Trees - All Trees](#)
 - 12.1 Trees - Tree and Edit Tree
 - 12.2 Trees - Move or Remove a Tree
13. [Wild Trees](#)
14. [Crosses - Overview](#)
 - 14.1 Crosses - Detail
 - 14.2 Crosses - Add New or Edit Cross
 - 14.3 Crosses - Export Cross Data
15. [Observations - Overview](#)
 - 15.1 Observations - Record Observations
 - 15.2 Observations - Using the Detailed Map Table
 - 15.3 Observations - Generating a Worksheet
 - 15.4 Observations - Data Entry CSV
 - 15.5 Observations - Uploading Observations
16. [Traits - Overview](#)
 - 16.1 Traits - Add New or Edit Trait
17. [People - Overview](#)
 - 17.1 People - Add New or Edit Person
 - 17.2 People - Invite Person to Create an Account
18. [Roles - Overview](#)
 - 18.1 Roles - Add or Edit Role
19. [System - Overview](#)
 - 19.1 System - Grant Permissions
 - 19.2 System - Upload Cross Data in Bulk
 - 19.3 System - Upload Historic Planting Data
 - 19.4 System - Historic Planting Data Template
 - 19.5 System - Upload Historic Observation Data
 - 19.6 System - Historic Observation Data Template
20. [Appendix A - Data Model Diagram](#)
21. [Appendix B - Glossary of Terms](#)

User Guide

1. Basic Navigation Features

This green and red navigation header appears at the top of all pages in the *dentata*Base.

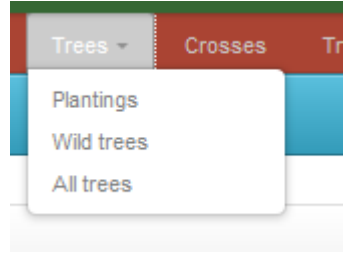
Edit Profile and Sign Out are available via drop-down list by clicking the caret next to the signed-in **user** name.



All major **entity** headings in the red navigation bar are links to the overview page for each **entity**.

A **sort caret** in a table heading allows you to sort in alphabetical or numerical order, either descending or ascending.

A caret in the navigation bar will open a drop-down menu of options:

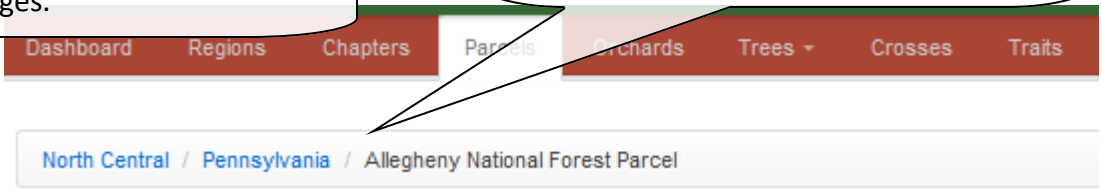


Parcel	Chapter	Region	Latitude	Longitude	GPA/MOU Status
Acker-Funk Farm (Peak Cove)	Carolinas	Southern	36.407592	-81.66947	on file
Air Products	Pennsylvania	North Central	40.837448	-76.024173	None
Allegheny National Forest	Pennsylvania	North Central	41.636404	-79.37462	On file
Allshouse	Pennsylvania	North Central			None
Ammons (Mountain Heritage)	Carolinas	Southern	35.855441	-82.476348	on file

Any blue text found throughout the *dentata*-Base is a **hyperlink** that will open the named page, allowing for ease of navigation.

This "Return to Table of Contents" **hyperlink** is available on all pages.

These "**breadcrumbs**" are displayed as you drill down into different entities and aid in navigation. The items in blue are **hyperlinks**, to the Pennsylvania Chapter and North Central Region, in this example.



User Guide

2. CSV Files

What are CSV files? CSV stands for “comma separated value” and is a file format that stores tabular data in plain-text form. So this isn’t a “pretty” file format but is a good tool for getting data into and out of the *dentata*Base. This file type shows up in several places throughout the system. There are several places where the *dentata*Base will create a CSV for you, you will enter your data and then upload the file. Make sure when saving files to upload you save them in the .csv format or the database will not be able to process them. Below are a few more instructions but if you have any trouble don’t hesitate to contact your Regional Science Coordinator. Specific CSVs will be covered in appropriate sections of this User Guide.

IMPORTANT: All columns to the LEFT of the “I” column (column J) contain data generated by the database and should **NOT** be changed. If any edits are needed **DO NOT** make them in these columns or the file will not upload back into the system.

All columns to the **RIGHT** of the “I” column (column J) can be edited and used to upload data into the system.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Plot name	Space ID (internal)	Space label	Row	Position	Tree ID (internal)	Tree name	Cross name	Cross year		Comments	Height (Feet)	Tree alive/dead
1	Lake St. Catherine	150277	R1T1	1	1	16853	SC13-R1T1	VT-RH049 x BG39	2012				dead
2	Lake St. Catherine	150278	R1T2	1	2	16985	SC13-R1T2	NH-EN153 x SC921	2012				dead
3	Lake St. Catherine	150279	R1T3	1	3	17163	SC13-R1T3	VT-RH025 x GA63	2012				alive
4	Lake St. Catherine	150280	R1T4	1	4	16852	SC13-R1T4	VT-RH049 x BG39	2012				dead
5	Lake St. Catherine	150281	R1T5	1	5	16867	SC13-R1T5	VT-CC006 x open	2011				alive
6	Lake St. Catherine	150282	R1T6	1	6	16851	SC13-R1T6	VT-RH049 x BG39	2012				dead
7	Lake St. Catherine	150283	R1T7	1	7	17201	SC13-R1T7	Wilkinson x op12	2012				alive
8	Lake St. Catherine	150284	R1T8	1	8	17162	SC13-R1T8	VT-RH025 x GA63	2012				alive
9	Lake St. Catherine	150285	R1T9	1	9	17023	SC13-R1T9	VT-VV04T1 x VT-BR019	2012				alive
10	Lake St. Catherine	150286	R1T10	1	10	16850	SC13-R1T10	VT-RH049 x BG39	2012				dead
11	Lake St. Catherine	150287	R1T11	1	11	16984	SC13-R1T11	NH-EN153 x SC921	2012				alive
12	Lake St. Catherine	150288	R1T12	1	12	17161	SC13-R1T12	VT-RH025 x GA63	2012				dead
13	Lake St. Catherine	150289	R1T13	1	13	16849	SC13-R1T13	VT-RH049 x BG39	2012				dead
14	Lake St. Catherine	150290	R1T14	1	14	16866	SC13-R1T14	VT-CC006 x open	2011				alive
15	Lake St. Catherine	150291	R1T15	1	15	17160	SC13-R1T15	VT-RH025 x GA63	2012				alive
16	Lake St. Catherine	150292	R1T16	1	16	16983	SC13-R1T16	NH-EN153 x SC921	2012				alive
17	Lake St. Catherine	150293	R1T17	1	17	16848	SC13-R1T17	VT-RH049 x BG39	2012				dead
18	Lake St. Catherine	150294	R1T18	1	18	17159	SC13-R1T18	VT-RH025 x GA63	2012				alive
19	Lake St. Catherine	150295	R1T19	1	19	16847	SC13-R1T19	VT-RH049 x BG39	2012				dead
20	Lake St. Catherine	150296	R1T20	1	20	16982	SC13-R1T20	NH-EN153 x SC921	2012				alive

The “I” column is used in all CSV files as a visual reminder to make edits and enter data to the **RIGHT** of that column only.

User Guide

3. Sign-In

Testing Server: <http://tacf.hoteldelta.net>

See the [Glossary](#) for more discussion of the proper use of the **Testing** and **Production Servers**.

Production Server: <http://acf.herokuapp.com>



Sign in

Email

Password

[Forgot your password?](#)

Remember me

Sign in

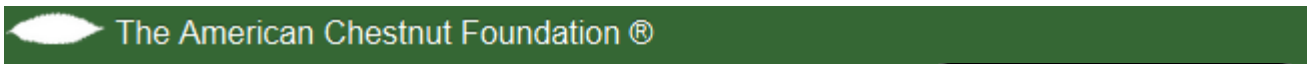
Access to the database is limited to **users** who have been entered to the system and invited to create an account. Use the email address that your automated invitation was sent to for logging into the *dentata*-Base.

The first time you access the system you will need to create a password. Use this password each time you log into the system.

The “Remember Me” box may be checked if you would like the Trees Database to remember your log-in information. Just be sure your web browser settings allow for saved cookies in order for this to work properly.

Forget your password? Click this blue **hyperlink** to open instructions for resetting your password (see below).

THE AMERICAN CHESTNUT FOUNDATION • 160 ZILICOA STREET, SUITE D • ASHEVILLE, NC 28801 • PHONE: 828-281-0047 • FAX: 828-253-5373



Forgot your password?

Email

Send me reset password instructions

Sign in

The “Sign in” button will take you back to the Sign-in screen.

Use the email address that your automated invitation was sent to for resetting your password. If you do not receive an email (and it's not in your junk mailbox), contact your Regional Science Coordinator for further assistance.

THE AMERICAN CHESTNUT FOUNDATION • 160 ZILICOA STREET, SUITE D • ASHEVILLE, NC 28801 • PHONE: 828-281-0047 • FAX: 828-253-5373

User Guide

4. Dashboard

The screenshot shows the dashboard for 'The American Chestnut Foundation'. The user is logged in as 'Kendra M Gurney'. The navigation menu includes: Dashboard, Regions, Chapters, Parcels, Orchards, Trees, Crosses, Traits, People, Roles, System. A blue banner at the top says 'Signed in successfully.' with a callout: 'Sign-in confirmation is displayed here.' Below this is a 'Status of jobs' section with a 'CLEAR MESSAGES' button. Two green messages are shown: 'File Orchards 2014-01-15 03:39pm UTC.csv is ready to download.' and 'File Orchards 2014-01-15 03:39pm UTC.csv is ready to download.' A callout points to these messages: 'The status of any jobs and/or system messages are displayed here.' The main content area is divided into three sections: 'My Orchards', 'My Plots', and 'My Plantings', each with a corresponding table. A large callout on the right side of the dashboard says: 'The Dashboard displays every time the user signs-in and shows some major entities the user has created: **Orchards, Plots, Plantings** and **Crosses**. This allows for quicker navigation. We hope to eventually make this a customizable page.'

My Orchards

Orchard	Code	Plots	Spaces	Available	Trees	Parcel	Chapter	Region
Ashfield Hawley 2004	MA-AH04	1	300	300	0	Ashfield Hawley	Massachusetts/Rhode Island	New England

My Plots

Plot	Code	Rows	Positions	Spaces	Available	Trees	Orchard
Camp Endo	VT-CE13	21	26	366	50	316 (detailed table)	Camp Endo
Lake St. Catherine	VT-SC13	9	58	520	22	498 (detailed table)	Lake St. Catherine

My Plantings

Planting	Shortcode	Orchard	Parcel	Status	Planted on	Type	Crosses	Trees
Camp Endo 2013	VT-CE13	Camp Endo	Camp Endo	cemented	2013-05-25		6	307 (detailed table)

My Crosses

Cross	Chapter	Year	Seed Lot	Type	Female SC	Male SC	Respar	Total nuts	Remaining nuts	Line
NH-AN178 x MA49	Vermont/New Hampshire	2013	NH-B41304	B4	NH-AN178	MA49	m	14	14	BH2A8G

User Guide

5. Regions - Overview

The screenshot shows the 'Regions' page of the TACF *dentata*Base. At the top is a green header with the American Chestnut Foundation logo and name. Below it is a red navigation bar with links for Dashboard, **Regions**, Chapters, Parcels, Orchards, Trees, Crosses, and Traits. The main content area features a 'New Region' button and a table of existing regions. The table has columns for Region, Latitude, and Longitude. Callout boxes provide additional context: one points to the 'New Region' button, another to the 'Region' column header, and a third to the 'Latitude' and 'Longitude' columns. A footer contains contact information for the American Chestnut Foundation.

Regions are defined by the set of states/ Chapters each Regional Science Coordinator covers. Meadowview is also considered a **Region**. "At-large" is used for any material we can not assign to a specific **region** (used very sparingly).

The **Latitude** and **Longitude** for regions should be the location of the regional office or headquarters in **decimal degrees (DD)**.

Click to create a **New Region** (should not be needed often).

The **Region** list may be sorted from A-Z or Z-A by clicking the **sort caret**.

Region	Latitude	Longitude
At-large		
Meadowview		
Mid-Atlantic		
New England	44.452592	-73.190805
North Central	40.805669	-77.852022
Southern	33.8	-84.38

THE AMERICAN CHESTNUT FOUNDATION • 160 ZILICOA STREET, SUITE D • ASHEVILLE, NC 28801 • PHONE: 828-

User Guide

5.1 Regions - Region Detail

The American Chestnut Foundation ® Kendra M Gurney ▾

Dashboard | **Regions** | Chapters | Parcels | Orchards | Trees ▾ | Crosses | Traits | People | Roles | System

Regions / New England Region

New England Region

Office name: US Forest Service, Northern Research Station
 Office address:
 705 Spear Street
 South Burlington, VT 05403

Office phone number: (802) 951-6771 x1350
 Office cell phone number: (802) 999-8706
 Office fax number: (802) 951-6368
 Office email address: kendra@acf.org
 Latitude: 44.452592
 Longitude: -73.190805
 Comments:
 At this office: Kendra Gurney, New England Regional Science Coordinator

Chapters

Chapter	Region	States	Status	Latitude	Longitude
Connecticut	New England	Connecticut	Active		
Maine	New England	Maine	Active		
Massachusetts/Rhode Island	New England	Massachusetts, Rhode Island	Active		
Vermont/New Hampshire	New England	Vermont, New Hampshire	Active		

THE AMERICAN CHESTNUT FOUNDATION • 160 ZILICOA STREET, SUITE D • ASHEVILLE, NC 28801 •

Regional Office address, contact information and **Latitude/Longitude**. Preferred format for **Latitude** and **Longitude** is **decimal degrees (DD)**.

Comments are used to capture any notes and list the names of any people who work out of a Regional Office. (Used as a placeholder for now until we can associate people in the system with more entities.)

Listing of all Chapters associated with the **Region**. Text in blue are **hyperlinks** to detail pages for those Chapters or the **Region**. Again, the **sort caret** in the table header can be used to sort the list from A-Z or Z-A.

Click [here](#) to navigate to the Chapters section for discussion of the use of Chapter **Latitude** and **Longitude**.

User Guide

5.2 Regions - Add New or Edit Region

The American Chestnut Foundation ®

Dashboard **Regions** Chapters Parcels Orchards Trees ▾ Crosses

Regions / New Region

Name

Office name

Office address

Office phone number

Office cell phone number

Office fax number

Office email address

Latitude

Longitude

Comments

Save

Utilize the blue **hyperlink** to go back to the **Regions** list.

Assign the **Region** a Name and Office Name. Be sure the **Region** you are creating does not already exist.

Enter Regional Office address, contact information and **Latitude/Longitude**. Preferred format for **Latitude** and **Longitude** is **decimal degrees (DD)**.

Comments are used to list the names of any people who work out of a Regional Office. (Used as a placeholder for now until we can associate people in the system with more entities.) May also be used to note anything important about the **Region**.

Verify that the information is correct and use this button to Save.

User Guide

6. Chapters - Overview

Chapters correspond to those currently recognized by TACF and may involve more than one state. Meadowview and "At Large" are also listed as chapters to capture data occurring at the Price Research Farm in Meadowview, VA and data that does not fall under either a chapter or Meadowview.

Click to create a New Chapter (should not be needed often).

This is the **region** that the relative chapter belongs to. Click [here](#) to navigate to the **Regions** section of this manual for more information.

This is a list of the state or states that belong to the corresponding chapter listed on the left.

Latitude and **Longitude** for chapters should be the mailing address for the chapter.

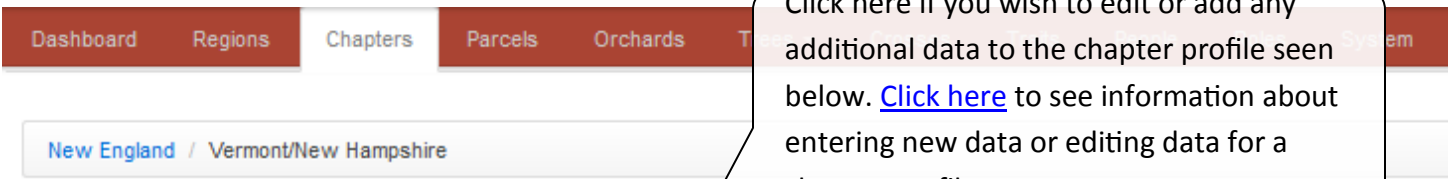
All chapters should be found here. If you are not sure which chapter your data belong to or need to add a chapter and do not have the appropriate site **permissions**, contact your Regional Science Coordinator for assistance.

"Status" refers to **Chapter Status** or the activity level of the chapter. Four choices available are: **Active, Inactive, Provisional, and Contact.**

Chapter	Region	States	Status	Latitude	Longitude
Alabama	Southern	Alabama	Active	34.1133	-88.8569
At-large	At-large				
Carlinas	Southern	North Carolina	Active	35.0018	-78.1764
Connecticut	New England	Connecticut	Active		
Florida	Southern	Georgia	Active		
Indiana	North Central	Indiana	Active	40.4234	-86.9153
Kentucky	Southern	Kentucky	Active	37.4591	-84.272
Maine	New England	Maine	Active		
Maryland	Mid-Atlantic	Maryland	Active		
Massachusetts, Rhode Island	New England	Massachusetts, Rhode Island	Active		
Meadowview	Meadowview				
New York	North Central	New York	Active	43.0352	-76.1342
Ohio	North Central	Ohio	Active	39.3243	-82.1016
Pennsylvania	North Central	Pennsylvania, New Jersey	Active	40.8056	-77.852

User Guide

6.1 Chapters - Chapter Detail



Click here if you wish to edit or add any additional data to the chapter profile seen below. [Click here](#) to see information about entering new data or editing data for a chapter profile.

New England / Vermont/New Hampshire

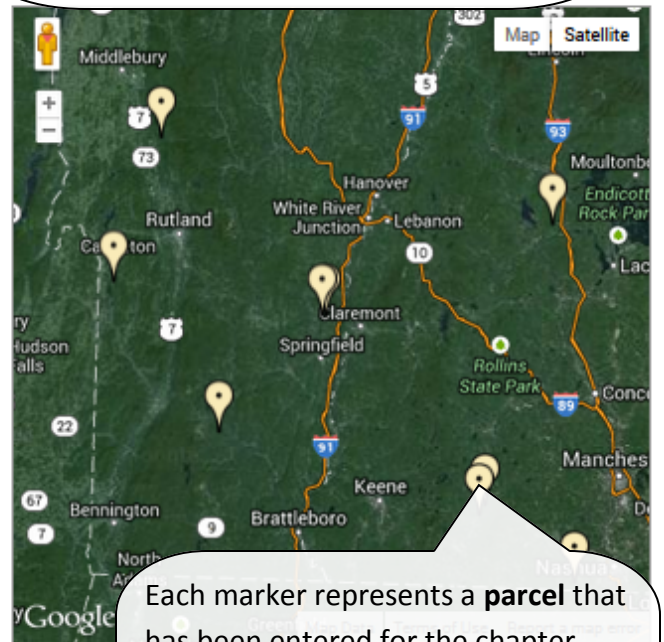
Vermont/New Hampshire Chapter EDIT

PERMISSIONS

See all wild trees in this chapter (0)
See all crosses in this chapter (99)

States: Vermont, New Hampshire
Status: Active
Office name: Yurij Bihun
Office phone number: (802) 899-1249
Office cell phone number: (802) 310-4491
Office email address: shelterwoods@comcast.net
Comments:
This is the contact information for the VT/NH Chapter President

Chapter contact details. Chapter President or Board member contact info can be used if desired.



Listing of all **parcels** associated with the chapter. Text in blue are **hyperlinks** to the detail page for each **parcel**, just click to navigate to that particular **parcel** page.

Each marker represents a **parcel** that has been entered for the chapter selected. Click on a location marker on the map to navigate to the **parcel** page represented by that marker. [Click here](#) to navigate to the **parcel** overview page.

Parcels

New Parcel

Parcel	Latitude	Longitude	GPA/MOU Status
Beaver Brook	42.7226	-71.6066	On-file
High Shelter Farm	43.3991	-72.4663	On-file

Location of **parcel**. [Click here](#) for information on **latitude** and **longitude** of **parcels**.

GPA/MOU Status - options are "**None**" if no GPA or MOU has been signed by all parties or "**On File**" if signed GPA has been signed, and/or "**MOU**" is an MOU has been submitted and filed with TACF.

User Guide

6.2 Chapters - Add New or Edit Chapter

Dashboard Regions Chapters **New Chapter**

Chapters / New Chapter

Utilize either link to abort adding new chapter and navigate back to chapters page.

Region
At-large

Name

States

Status

Office name

Office address

Office phone number

Office cell phone number

Office fax number

Office email address

Latitude

Longitude

Comments

Save

Select the appropriate **region** and assign the chapter a name and list states belonging to the chapter being created.

Four choices available are: **Active**, **Inactive**, **Provisional**, and **Contact**. Active is for chapters currently in operation. Inactive is for chapters previously recognized by TACF but no longer operating. Provisional is for chapters designated as provisional by TACF. Contact is a place holder for entities participating in TACF plantings that cannot be considered chapters.

Contact information for the chapter. Information for the Chapter President, Board member or the Regional Science Coordinator can be used here.

Location that represents the chapter. This should be the Chapter’s mailing or office address. This will show up on the Google Map.

Use this **space** to make any necessary comments about the above information (who you can contact with information provided), list chapter website, or notes on how or when best to contact the chapter.

Be sure to click “Save” before navigating to another page. Information entered will be lost if “Save” is not clicked before navigating away or closing the window.

User Guide

7. Parcels - Overview

A **parcel** is defined as a single property with a single landowner. There may be one or several **orchards** on a **parcel**, but generally the land should be contiguous. **Parcel** is where the landowner contact and agreement information is stored. For many TACF breeding and American germplasm conservation **orchards**, there will be a 1:1:1 relationship between **Parcel**, **Orchard** and **Plot**. If you have any questions, please contact your Regional Science Coordinator.

Click to create a New **Parcel**. [Click here](#) to navigate to instructions on creating a new parcel.

Use these filters to narrow down the list of parcels seen below. Choose a chapter to see all parcels that belong to that chapter and/or enter all or part of the name of the **parcel** in the box after "Name contains:" and then click on "update" to see the results.

1 2 3 4 5 6 →

Parcel	Chapter	Region	Latitude	Longitude	GPA/MOU status
Acker-Funk Farm (Peak Crv)	Carolin...	Southern	36.407592	-78.66947	on file
Air Products	Pen...	North Central	39.77318333	-76.77318333	None
Allegheny National Forest	Pen...	North Central	39.77318333	-76.77318333	On file
Allshouse	Pennsylvania	North Central			None
Ammons (Mountain Heritage)	Carolin...	Southern	35.855441	-82.476348	on file
Amstrong	Pen...	North Central	39.77318333	-76.77318333	On file

These numbers represent pages of **parcel** listings, and will continue to grow. There are roughly 50 parcels listed per page.

List of parcels by name. The page defaults by ordering results in alphabetic order by **parcel** name. You can also sort results by chapter or **region** by clicking on the appropriate column heading.

You can also navigate to a **Parcel** through the **Region** and Chapter pages. These **breadcrumbs** show navigation from the New England Region, to the VT/NH Chapter and the Lake St. Catherine Parcel.

User Guide

7.1 Parcels - Parcel Detail

This page is displaying information about this particular **parcel**.

New England / Vermont/New Hampshire / Lake St. Catherine Parcel

Lake St. Catherine Parcel

[EDIT](#) [PERMISSIONS](#)

Address:
 Lake St. Catherine State Park
 3034 - South Vermont 30
 Poultney, VT 05764

Phone number: (802) 287-9158
 Cell phone number: (802) 779-6060
 Email address: Denis.Lincoln@state.vt.us
 Latitude: 43.480564
 Longitude: -73.201789
 GPA/MOU status: On-file, plus Special Use P
 Comments:
 Denis Lincoln is the orchard manager and Regional Supervisor for the VT State Parks. Parcel short code is VT-SC.

Contact info, location, and comments for selected **parcel**. You can edit this information by clicking on "Edit" above.

A list of **orchards** associated with this **parcel**.

Plots associated with corresponding **orchard**.

Map displays markers that represent the location of any **orchards** that are associated with the selected **parcel**. Click on markers to navigate to the corresponding **orchard** profile page.

This is a **shortcode** assigned to each **orchard**. These codes generally start with the state's abbreviation, followed by a short code of letters and/or numbers.

Use this **hyperlink** to open the [detailed map table](#) for the **orchard**.

Listing of **spaces** within the **orchard**, number of **spaces** currently available, and number of trees within each **orchard** – all based on the most current data that has been entered for each **orchard**.

Orchard	Code	Plots	Spaces	Available	Trees
Lake St. Catherine	VT-SC13	1	520	22	498 (detailed table)

User Guide

7.2 Parcels - Add New or Edit Parcel

Parcels / New Parcel

Chapter
Alabama

Name

Address

Phone number

Cell phone number

Fax number

Email address

Latitude

Longitude

GPA/MOU status

Comments

Save

Choose the chapter that the **parcel** belongs to from the drop down list.

Enter a name for the **parcel**.

Enter an address for the **parcel**.

Enter contact information for the **parcel**. This information should be associated with the landowner or regulatory body that would be notified in the case of needed access.

Enter location of associated **parcel**. This can be the location of an **orchard** on that **parcel**, the street entrance to that **parcel**, a structure on that **parcel**, or the center of the **parcel**. Lat/Long should be entered in **decimal degrees (DD)**.

Enter the **GPA/MOU status** of any agreement(s) associated with the **parcel** that is/are on file with TACF ("**On file**" and/or "**MOU**"). If there is no such agreement, enter "**None**".

Use this **space** to make any special notes about the **parcel**. If the contact information entered above is for someone other than the landowner, such as the farm manager, indicate this here. Also enter any access restrictions here. If information pertains to one of two or more **orchards** in the **parcel**, you may wish to enter that information in that orchard's profile comments.

Click "Save" to create (or edit) a **parcel** profile and save the above information. If you navigate away from this page or close it before saving, your entered information will be lost.

User Guide

8. Orchards - Overview

Orchards are intentional **plantings** of chestnut trees with a common management/experimental objective contained within a contiguous area. There can be several **orchards** within one **parcel**. **Orchards** may be planted over several years, but must meet the above definition.

The screenshot shows the 'Orchards' section of the application. At the top is a navigation bar with tabs for Dashboard, Regions, Chapters, Parcels, Orchards, Trees, Crosses, Traits, People, Roles, and System. Below the navigation bar are buttons for 'Orchards' and 'New Orchard'. A 'Filters' section includes a 'Chapter' dropdown menu set to 'Pennsylvania (195)', a 'Name contains' search box, and an 'Export data' button. Below the filters is a table of orchards with columns: Orchard, Code, Plots, Spaces, Available, Trees, Parcel, Chapter, and Region. The table lists several orchards, including 'Adapt 1997', 'Age-Pa 1990', 'Alabama 2000', and 'Allegheny National Forest'. Callouts provide detailed explanations for various elements: 'Click here to create a New Orchard.' points to the 'New Orchard' button; 'You can filter the displayed results by selecting a chapter, parcel, name, and then clicking on "Update" within the filters box...' points to the filter section; 'A shortcode given to the orchard.' points to the 'Code' column; 'Links to further pages of orchard listings.' points to the pagination numbers; 'Orchard name. Click on the orchard name to take you to a detailed page for that orchard.' points to the 'Adapt 1997' link; 'Displays the number of plots that have been listed for the orchard. Most orchards will not use more than one plot, except for cases like seed orchards.' points to the 'Plots' column; and 'List of spaces within the orchard, number of spaces currently available, and number of trees within the orchard - all based on the most current data that has been entered for each orchard. Click on detailed table in the trees column to see a detailed map table of the orchard.' points to the 'Trees' column.

User Guide

8.1 Orchards - Orchard Detail

Indicates the **orchard** being displayed. Click on Edit or **Permissions** to change the information found below or the **permissions** for the **orchard**.

Lake St. Catherine Orchard EDIT PERMISSIONS

Shortcode: VT-SC13
 Latitude: 43.483864
 Longitude: -73.205373

Displays **shortcode** for the **orchard**.

This orchard currently contains 499 planted trees.
[View tree details in color-coded table](#)

Location entered for the **orchard**. This corresponds to the marker seen on the Google Map.

Observations

View or record **observations** about the orchard itself
 You can see **observations** for all trees in this orchard in the [detailed table](#).

There are two options to view or record **observations** below, one for the **orchard** itself, and one for individual trees in the **orchard**.

Shows number of planted trees according to data entered. Click on the link below, "View tree details in color-coded table" to navigate to the **detailed map table**, coded by cross.

Plots

Plot	Code	Rows	Positions	Spaces
Lake St. Catherine	VT-SC13	9	58	520

Table displaying any **plots** that have been generated for this **orchard**. [Click here](#) to navigate to the section about **plots**. Click "New Plot" to [create a new plot](#) in this **orchard**.

Plantings

Planting	Shortcode	Status	Plant
Lake St. Catherine 2013	VT_SC13	cemented	2013-05-16

Table displaying any **plantings** that have been entered for this **orchard**. You can click on the **Planting** name in the first column to see the profile page for the **planting** or click on the detailed table link in the Trees column to go directly to the **detailed map table** of the **orchard** or click on the number in the Trees column to see a table of details for each tree planted within that row's **planting**. Click "Create a planting in this orchard" to [add a new planting](#).

User Guide

8.2 Orchards - Add New or Edit Orchard

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits

Orchards / New Orchard

Chapter and Parcel
New York - Zoar/William W. V. ▾

Name

Shortcode

Latitude

Longitude

Directions

Comments

Click to see a drop down list of parcels and their associated chapter. An **orchard** cannot be added correctly if the **parcel** has not been created within the database.

Enter a name for the **orchard**.

Enter a **shortcode** for the **orchard**. **Shortcodes** should be assigned using a consistent system across an entire chapter. If you have questions contact your Regional Science Coordinator.

Enter a **Lat/Long in decimal degrees (DD)** for the **orchard**. It is preferred to list the location of the first tree in the first row of the **orchard**. The location entered will be displayed on the Google map on the **orchard's** profile page.

Enter directions to the **orchard**. Be sure to make them clear and accurate, including any restrictions or cautions for getting to the **orchard**.

Enter any comments about the **orchard**.

Click "Save" to create (or edit) an **orchard** profile and save the above information. If you navigate away from this page or close it before saving, your entered information will be lost.

User Guide

9. Plots - Overview

A **plot** is the physical layout of the **spaces** you will plant. The *dentata*Base only accommodates **plots** laid-out on a grid. There are several options for customization that will be detailed in this section of the User Guide, and the *dentata*Base should be able to accommodate any layout desired.

For many TACF breeding and American germplasm conservation **orchards**, there will be a 1:1:1 relationship between **Parcel**, **Orchard** and **Plot**. For seed orchards, the **Plot** functionality is used for tracking trees in different **lines**. *Please note: we cannot yet add spaces to a plot once it is created and contains planted trees so if you will be planting within the area over several years it is best to create the full plot layout up front.*

Dashboard Regions Chapters Parcels **Orchards** Trees - Crosses Traits People Roles System

New England / Vermont/New Hampshire / Lake St. Catherine / Lake St. Catherine Orchard

Lake St. Catherine Orchard

Shortcode: VT-SC13
 Latitude: 43.483864
 Longitude: -73.205373

This orchard currently contains 498 planted trees.
[View tree details in color-coded table](#)

Observations

[View or record observations about the orchard itself](#)

You can see observations for all trees in this orchard in the [detailed table](#).

Record observations on all trees in this orchard

Use the “New **Plot**” button to open the [plot-creation page](#).

Any **Plots** existing in an **orchard** are listed on the **Orchard** detail page, along with pertinent information about available **planting spaces** and existing trees.

The “detailed table” **hyperlink** will open the [detailed map table](#), capable of showing data.

Plots

New Plot

Plot	Code	Rows	Positions	Spaces	Available	Trees
Lake St. Catherine	VT-SC13	9	58	520	22	498 (detailed table)

User Guide

9.1 Plots - Add New or Edit Plot

Dashboard Regions Chapters Parcels **Orchards** Trees ▾ Crosses Trails People Roles System

[New England](#) / [Vermont/New Hampshire](#) / [Lake St. Catherine](#) / [Lake St. Catherine \(Vermont/New Hampshire chapter\)](#) / [New Plot](#)

Name

Shortcode

Latitude

Longitude

Space between rows (feet)

Space between positions (feet)

Compass direction: rows run at

degrees (north = 0°, east = 90°, south = 180°)

Row designations

- Numeric
- Alphabetic

Position designations

- Numeric
- Alphabetic

Plot name can be the same as the **orchard** name in cases where the **orchard** only has one **plot**. For seed orchards, **plot** name should be the **plot** number (generally 1-20 for most State Chapters).

Shortcode must be unique by Chapter and should follow any naming convention specific to the Chapter. If you have questions, please contact your Regional Science Coordinator.

In cases where the **orchard** has only one **plot**, it may be the same as the **orchard shortcode**, for seed orchards check with your Regional Science Coordinator for naming conventions. **Shortcode** examples may be found in the glossary.

Rows and positions can be alphabetic or numeric. Use radio buttons to make the desired selection.

Latitude and **Longitude** should be for Row 1, Tree 1 of the **plot** and preferred format is **decimal degrees (DD)**. Space between rows and space between positions (or trees within the row) should be in feet. The compass direction should be the direction the rows run in.

the row and position counts begin at this corner:
 upper left upper right

lower left lower right

Starting layout

Labels can be changed later

Space between rows and positions

A completely plantable plot with

positions

and

- label the spaces with sequential numbers
- label the spaces with numbers in a serpentine pattern
- label the spaces with R#T#
- don't automatically label the spaces

Upload a CSV file:

Provide a rectangular grid where each cell contains 'p', 'u', or 'n' to represent plantable, unplanted, and nonexistent spaces, respectively. You may add a space (character) followed by more text in the same cell to set that space's label.

No file selected.

Comments

User Guide

9.2 Plots - Add New or Edit Plot (2)

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Trails People Roles System

New England / Vermont/New Hampshire / Lake St. Catherine / Lake St. Catherine (Vermont/New Hampshire chapter) / New Plot

Plot maps may be oriented in whatever way makes the most sense to the orchard manager. Use the radio buttons to select the orientation of the rows (horizontal or vertical) and which corner Row 1, Tree 1 is in. It may help to sketch this out first if you are unsure.

Orientation

On maps of this plot, the rows run

horizontally

vertically

and the row and position counts begin at this corner:

<input checked="" type="radio"/> upper left	<input type="radio"/> upper right
<input type="radio"/> lower left	<input type="radio"/> lower right

Regardless of whether you have the *dentata*Base create the **plot** for you or you upload a **CSV**, be sure to select the proper orientation.

Space between positions (feet)

As noted previously, the **plot** must be laid out on a rectangular grid, even if the planting area itself is not rectangular. There are some editing tools available so if the **plot** is mostly rectangular it will be simplest to have the *dentata*Base create the **plot** and then make the edits on-screen ([details here](#)). To do this, fill in the number of rows, the number of positions within each row, and then select the radio button corresponding with how the **spaces** should be labelled.

Starting layout

Note: space statuses and labels can be changed later.

Spaces (rectangular plot)

A completely plantable plot with

rows

by

positions

and

label the spaces with sequential numbers

label the spaces with numbers in a serpentine pattern

label the spaces with R#T#

don't automatically label the spaces

Upload a CSV file:

Provide a rectangular grid where each cell contains 'p', 'u', or 'n' to represent plantable, unplantable, and nonexistent spaces, respectively. You may add a space (character) followed by more text in the same cell to set that space's label.

No file selected.

Comments

For more irregular shaped **plots**, or **plots** with **space labelling** conventions not covered in the automated options, select this option. Detailed instructions are available [here](#).

Verify that the information is correct and use this button to Save.

User Guide

9.3 Plots - Review Plot

Spaces

		Position																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Row	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
		p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
	2	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
		p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
	3	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	
4	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	
5	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	
	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	

Legend

p	Plantable space
T	Plantable space with a live tree
d	Plantable space with a dead tree
u	Unplantable space
n	Nonexistent space

If the status of any **spaces** need to be edited, click here to open the **plot map** in [Edit mode](#).

Or [download the CSV for this plot](#), make changes to statuses and labels, then upload it below.

No file selected.

If significant edits are needed, or a different labelling scheme needs to be employed, download the **CSV** of the **plot** and make the appropriate edits. Then use the "Browse" button to locate the updated file and the "Upload" button to load it into the database. **CSV plot** mapping is covered in more detail [here](#).

All **spaces** are initially assigned a **status** of "**plantable**", denoted by a "p", meaning a tree could be planted there. When creating the **plot**, there will likely be **spaces** that are not available for planting that show up in this initial grid. Before any trees are planted, alternative **space statuses** may be assigned: "**unplantable**" (within the **plot** but unsuitable for planting for some reason) or "**non-existent**" (not actually part of the **plot** but an artifact of creating a completely **plantable** rectangle).

User Guide

9.5 Plots - CSV Plot Creation or Editing

Basic Plot CSV

In this basic **plot** layout, “p” notes **spaces** that are “**plantable**”, “u” notes **spaces** that are “**unplantable**” and “n” notes **spaces** that are “**nonexistent**”. This table could be saved in the .csv file format and uploaded as a **plot** layout.

p	p	p	p	p	p	p	p
p	p	p	u	u	p	p	p
p	p	p	u	p	p	n	n
p	p	p	u	p	p	n	n
p	p	p	u	p	p	n	n
p	p	p	u	u	p	n	n

Custom Space-labelling with Plot CSV

In this example the **spaces** in the **plot** are labelled in a pattern not accommodated by options built into the *dentata*Base. **Space labels** can be added by typing in the **space status** designation (“p”, “u” or “n”), followed by a space and the appropriate label (labels can be numeric or alphabetic).

p 516	p 416	p 316	p 216	p 116
p 515	p 415	p 315	p 215	p 115
p 514	p 414	p 314	p 214	p 114
p 513	p 413	p 313	p 213	p 113
p 512	p 412	p 312	p 212	p 112
p 511	p 411	p 311	p 211	p 111
p 510	p 410	p 310	p 210	p 110
p 509	p 409	p 309	p 209	p 109
p 508	p 408	p 308	p 208	p 108
p 507	p 407	p 307	p 207	p 107
p 506	p 406	p 306	p 206	p 106
p 505	p 405	p 305	p 205	p 105
p 504	p 404	p 304	p 204	p 104
p 503	p 403	p 303	p 203	p 103
p 502	p 402	p 302	p 202	p 102
p 501	p 401	p 301	p 201	p 101

This **plot** starts in the *lower right* corner and rows run *vertically*. When uploading this table it would be important to select these [orientation options](#) in the “Add New Plot” page.

Remember, the **plot** needs to be a complete rectangle so if you have an irregularly shaped planting area you still need to work within a rectangle by utilizing as many **nonexistent spaces** as needed. Also, if you download a **CSV** from the edit **plot** page, keep the dimensions the same and only change **space statuses** and labels to ensure integrity when uploaded.

User Guide

10. Plantings - Overview

To view all **plantings**, use the Trees dropdown menu to select "**Plantings**".

Utilize the filters box to find **Plantings** by chapter, **planting stage** (see below), **planting type** or name.

1 2 3 4 5 6 →

Planting	Shortcode	Orchard	Parcel	Stage	Planted on	Type	Crosses	Trees
D1-2013	D1-2013	Duncan 1	Duncan	cemented	2013-03-15		2	173 (detailed table)
Old Gurdy 2013	NH-OG13 - 2013	Old Gurdy Farm	Old Gurdy Farm	cemented	2013-05-19		7	226 (detailed table)
W9-2012	W9-2012	Wagner 9	Wagner	committed	2012-03-14		1	150 (detailed table)
W9-2013	W9-2013	Wagner 9	Wagner	committed	2013-04-02		1	12 (detailed table)

All blue **hyperlinks** may be used to navigate around the database.

Click to [add a new planting](#).

The **planting stage** of the **planting** can generally be New, Designed, Committed and Cemented. See Glossary for more information.

User Guide

10.1 Plantings - Overview (2)

[New England](#) / [Vermont/New Hampshire](#) / [Lake St. Catherine](#) / Lake St. Catherine Orchard

Lake St. Catherine Orchard [EDIT](#) [PERMISSIONS](#)

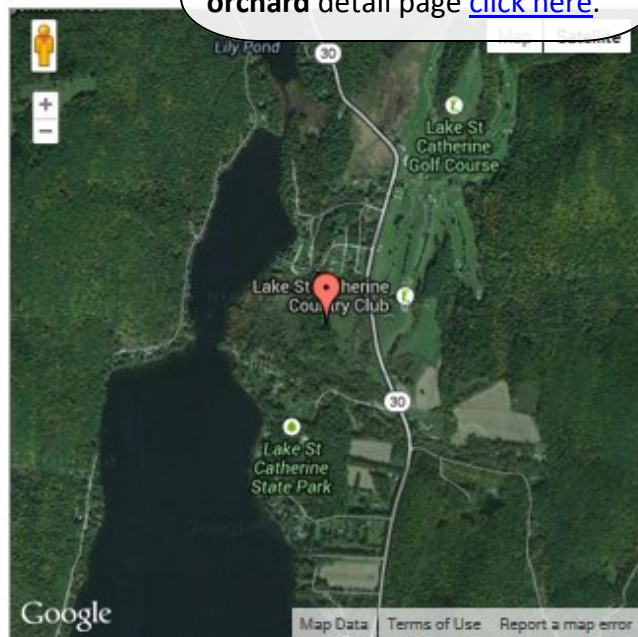
Shortcode: VT-SC13
 Latitude: 43.483864
 Longitude: -73.205373

This orchard currently contains 498 planted trees.
[View tree details in color-coded table](#)

Observations

[View or record observations about the orchard itself](#)
 You can see observations for all trees in this orchard in the [detailed table](#).

[Record observations on all trees in this orchard](#)



Plantings may also be accessed though the **Orchard** detail page for a particular **orchard**. For more information about the **orchard** detail page [click here](#).

Plots

[New Plot](#)

Plot	Code	Rows	Positions	Spaces
Lake St. Catherine	VT-SC13	9	58	520

Information about all **plantings** in an **orchard** of interest may be found in this table. The **hyperlinked** text will take you to the detail page for the **planting** or open the **detailed map table**. Select the "Create a planting in this orchard" button to open the [new planting page](#).

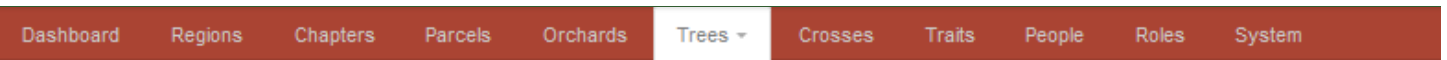
Plantings

[Create a planting in this orchard](#)

Planting	Shortcode	Status	Planted on	Type	Crosses	Trees
Lake St. Catherine 2013	VT_SC13	cemented	2013-05-16		7	498 (detailed table)

User Guide

10.2 Plantings - Add a New Planting



Plantings / New Planting

Assign a name to the **planting**. Commonly, this will be the name of the **Orchard** and the year of **planting**.

Name: Lake St. Catherine 2013

Comments

Planting shortcode should be the **orchard shortcode** and 2-digit planting year.

Shortcode: VT-SC13-13

Please see Glossary for a list of acceptable **planting types**.

Planting type: Breeding Orchard

Select the crosses that will be used in this planting and give each a short distinct map code (such as "a", "b", "c"). These codes will only be used in the next step to indicate which crosses will be planted in which spaces. The codes won't appear elsewhere or affect anything else.

Meadowview 2012 2012: Preston Abbott (fema)

map code: PA

quantity: 3

Note: this cross has 3 remaining nuts.

Carolinas 2013 2013: CC-125 x A92

map code: CC-125

quantity: 100

Note: this cross doesn't have information on the number of total or remaining nuts

Filter by chapter... Filter by year... Select a cross:

Use these filters to select the **crosses** you will plant in this **planting**. Only **crosses** entered in the system may be planted so be sure all the **crosses** you need have been created. Assign a map code that will make sense to you (it is used in the [detailed map table](#) display) and a quantity of nuts to plant.

Select the destination orchard and plots for this planting.

Orchard:

Filter by chapter... Lake St. Catherine (1 plot)

Select a plot:

103 seeds in total; 131 spaces available in selected plots

Use these filters to select the **Orchard** and **Plot** you will plant into. The seed total (from your **cross** selections above) and available **spaces** (from your **plot** selection(s)) will continually update as you filter. When you have the selected **crosses** and **plots** for the **planting** click "Save". You will still have opportunities to make any changes.

Save

User Guide

10.3 Plantings - Add a New Planting (2)

Dashboard Regions Chapters Parcels Orchards **Trees ▾** Crosses Traits People Roles System

Planting was successfully created.

[New England](#) / [Vermont/New Hampshire](#) / [Jill's Farm](#) / [Jill's Farm \(Vermont/New Hampshire chapter\)](#) / Planting: New Planting

Planting: Lake St. Catherine 2013 EDIT

Status: new
 Shortcode: VT_SC13
 Planting type: Breeding Orchard

Once a **planting** is saved, this page gives you the option to download a **CSV** template to design the **planting**. See more specifics on the planting template [here](#).

Design planting

If the crosses and plots specified below are correct, then [download the CSV template](#). This template contains a row for every available space in the given plots. Fill in the "Cross code" column with the codes, below, for which cross will be planted in each space. If any spaces in the file will not be used, you may leave them blank or remove their rows. Once the given amount of each cross has been filled in, upload the file below and the information will be committed.

Enter information to the right of the 'I' column. The fields to the left of that column are for reference purposes.

No file selected.

Once the **planting** is designed, the file can be located and uploaded. It is good practice to save these files in case you need to refer back to them at some point in the future.

Crosses and codes

- CC-125 x AB214 (100 seeds): CC-125
- Preston Abbott (3 seeds): PA

The map codes for the **crosses** you selected to plant will be used to design the **planting**.

Plots

- [Lake St. Catherine](#)

If you need to make any changes to the **crosses** or **plots** selected for **planting** use this button to go "back".

User Guide

10.4 Plantings - Design Planting CSV Template

Using the map codes assigned to the **crosses** selected, assign a **cross** to each **space**. These map codes **MUST MATCH** the codes used to create the **planting** and the number of trees planted for each **cross MUST MATCH** the number selected to plant.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Space ID (internal)	Orchard name	Plot name	Plot ID	Space label	Row	Position		Cross map code	Tree shortcode (leave blank for default)	Tree name (leave blank to use shortcode)	Tree tag (optional)	Planted as (seed or seedling; default seed)
2	34712	Lake St. C	Lake St. C	104	104	4	1	4		CC-125			4
3	34713	Lake St. C	Lake St. C	104	104	5	1	5		CC-125			5
4	34714	Lake St. C	Lake St. C	104	104	6	1	6		CC-125			6
5	34715	Lake St. C	Lake St. C	104	104	7	1	7		CC-125			7
6	34716	Lake St. C	Lake St. C	104	104	8	1	8		CC-125			8
7	34717	Lake St. C	Lake St. C	104	104	9	1	9		PA			9 seedling
8	34718	Lake St. C	Lake St. C	104	104	10	1	10		CC-125			10
9	34719	Lake St. C	Lake St. C	104	104	11	1	11		CC-125			11
10	34720	Lake St. C	Lake St. C	104	104	12	1	12		CC-125			12
11	34721	Lake St. C	Lake St. C	104	104	13	1	13		CC-125			13
12	34722	Lake St. C	Lake St. C	104	104	14	1	14		CC-125			14
13	34723	Lake St. C	Lake St. C	104	104	15	1	15		CC-125			15
14	34724	Lake St. C	Lake St. C	104	104	16	1	16		CC-125			16
15	34725	Lake St. C	Lake St. C	104	104	17	1	17		CC-125			17
16	34726	Lake St. C	Lake St. C	104	104	18	1	18		CC-125			18
17	34727	Lake St. C	Lake St. C	104	104	19	1	19		PA			19 seedling
18	34728	Lake St. C	Lake St. C	104	104	20	1	20		CC-125			20
19	34729	Lake St. C	Lake St. C	104	104	21	1	21		CC-125			21
20	34730	Lake St. C	Lake St. C	104	104	22	1	22		CC-125			22
21	34731	Lake St. C	Lake St. C	104	104	23	1	23		CC-125			23

Check the order of the rows and positions (or **space labels**) to ensure you are **planting** trees in the **spaces** you intend. You can always re-sort this spreadsheet to facilitate your **planting** design.

Tree shortcode, name and tag are all optional. Defaults exist for **tree shortcode** and name, default for a tag (which is a physical tag on the tree) is null.

Default type of material planted is seed, but “seedling” may be entered when appropriate. Spreadsheet filtering tools can help you make sure you have the correct designation associated with all trees in that **cross**.

User Guide

10.5 Plantings - Finalize a Planting

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

[New England](#) / [Vermont/New Hampshire](#) / [Lake St. Catherine](#) / [Lake St. Catherine \(Vermont/New Hampshire chapter\)](#) / [Planting: Lake St. Catherine 2013](#)

Planting: Lake St. Catherine 2013 EDIT

Status: designed (with 103 trees)

Shortcode: VT_SC13

Planting type: Breeding Orchard

Finalize planting

Last time a commit was attempted, the following problems prevented trees from being created:

Cross map code 'CC-125' appeared 125 times instead of 100.
 If there are many problems with the data integrity, you may want to generate the CSV template again.

Use these plot maps to plant seeds according to the design, then to note any changes between the design and what was actually planted. Once you've verified everything is correct, commit the planting to finalize it and start tracking its trees.

- [Lake St. Catherine](#)

Planted on:

Today (2014-01-20)

Yesterday (2014-01-19)

Other (yyyy-mm-dd):

Check the **planting** design, using the blue **hyperlink**, to make any changes and ensure everything is correct. This is particularly important if you design the **planting** before installing it in the field. Often small changes are made when actual planting occurs and this is the way to make those edits.

Committing the planting will create the trees in the system and can be difficult to undo. Make sure everything is correct first!

Commit

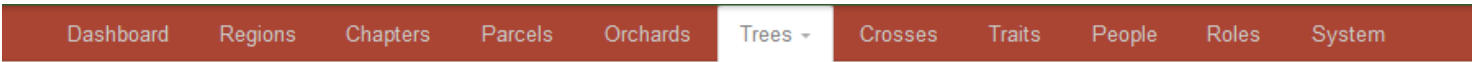
When you are ready to Commit the **planting**, select the appropriate planting date. Note: if entering an "Other" date, select the radio button AND type in the date.

Use the "Commit" button **ONLY** when you are sure all crosses are in the right **spaces**, the planting date is correct and the **planting** design is correct.

Remember, committed **plantings** can still be rolled back and REDONE until **observations** are made. It is VITAL that these elements all be CORRECT before moving forward. Double-check the design in the **detailed map table** before taking **observations** and cementing the **planting(s)**.

User Guide

10.6 Plantings - Correcting a Planting



Correcting plan for Planting: Lake St. Catherine 2013

Click on spaces to note differences between what was planned and what was actually planted. If a space appears plantable but not interactive, it may be already occupied.

Row		1	2	3	4	5	6	7
Position	20			55 CC-125	75 CC-125	95 CC-125	115 •	135 •
	19			54 CC-125	74 (none)	94	114	134
	18		35 CC-125	53 CC-125	CC-125 x AB214			
	17	17 CC-125	34 CC-125	52 CC-125	Preston Abbott			
	16	16 CC-125	33 CC-125	51 CC-125	Shortcode: (select-generate)			
	15	15 CC-125	32 CC-125	50 CC-125	Name: (use shortcode)			
	14	14 CC-125	31 CC-125	49 CC-125	Tag:			
	13	13 CC-125	30 CC-125	48 CC-125	66 CC-125	86 CC-125	106 •	128 •
	12	12 CC-125	29 CC-125	47 CC-125	67 CC-125	87 CC-125	107 CC-125	127 •
	11	11 CC-125	28 CC-125	46 CC-125	66 CC-125	86 CC-125	106 CC-125	126 •
	10	10 CC-125	27 CC-125	45 CC-125	65 CC-125	85 CC-125	105 CC-125	125 •
	9	9 PA	26 CC-125	44 CC-125	64 CC-125	84 CC-125	104 CC-125	124 •
	8	8 CC-125	25 CC-125	43 CC-125	63 CC-125	83	103 CC-125	123 •
	7	7 CC-125	24 CC-125	42 CC-125	62 CC-125	82 CC-125	102 CC-125	122 •

Legend	
•	Plantable space
•	Cross changed
•	Plantable space with a live tree
•	Plantable space with a dead tree
•	Unplantable space
•	Nonexistent space

The **plot map** Legend will help you understand the colors assigned to each **space**.

Clicking on a **space** allows you to change the **cross** planted to another of the selected **crosses** in the **planting** or "none" if a **space** was not planted.

Any changes made are listed below the **plot map** and may be undone.

Changes:
space 74 (row 4, position 19) cross changed from CC-125 to PA [UNDO](#)

[Save changes](#) or [go back to planting](#)

Save any necessary changes or, if all is correct, go back to the **planting** to Commit.

User Guide

10.7 Plantings - Commit a Planting

Dashboard Regions Chapters Parcels Orchards Trees - Crosses Traits People Roles System

New England / Vermont/New Hampshire / Jill's Farm / Jill's Farm (Vermont/New Hampshire chapter) / Planting: New Planting

Planting: Lake St. Catherine 2013 EDIT

Status: committed (with 103 trees)
 View tree details in color-coded table
 Shortcode: VT_SC13
 Planting type: Breeding Orchard
 Planted on: 2013-10-03

The committed **planting** can be rolled back until **observations** are made on the planted trees. It is important to double-check the layout of the **planting** before making any **observations**.

This commit can still be rolled back.

Undo commit

Click on "Undo commit" to roll back the **planting**. This will take you back to the [finalize planting](#) page and give you options for making changes. It may take several minutes for the database to undo a committed planting.

Observations

View or record observations about the planting itself

You can see observations for all trees from this planting in the [detailed table](#)

Crosses and codes

- [CC-125 x AB214](#) (100 seeds): [CC-125](#)
- [Preston Abbott](#) (3 seeds): [PA](#)

Any of the **hyperlinks** can help you navigate to related pages.

Plots

- [Lake St. Catherine](#)

The **plot hyperlink** will open the planted **plot** (below), so you can double-check your **planting** before adding any **observations**. It is important to check that the **planting** is correct here or in the **detailed map table**.

Spaces

Row		1	2	3	4	5	6	7
Position	20	n	n	55 T	75 T	95 T	115 p	135 p
	19	n	n	54 T	74 T	94 T	114 p	134 p
	18	n	35 T	53 T	73 T	93 T	113 p	133 p
	17	17 T	34 T	52 T	72 T	92 T	112 p	132 p
	16	16 T	33 T	51 T	71 T	91 T	111 p	131 p
	15	15 T	32 T	50 T	70 T	90 T	110 p	130 p

Legend

p	Plantable space
T	Plantable space with a live tree
d	Plantable space with a dead tree
u	Unplantable space
n	Nonexistent space

User Guide

11. Detailed Map Table

Dashboard Regions Chapters Parcels **Orchards** Trees ▾ Crosses Traits People Roles System

New England / Vermont/New Hampshire / Old Gurdy Farm / Old Gurdy Farm Orchard / Table

Select attribute or **observation** data you wish to display in the **detailed map table** and click "Update" to apply those settings.

Trees in orchard: **Old Gurdy Farm**

Set all crosses to one color | [Use automatic colors](#)

Crosses in planting Old Gurdy 2013
(show only trees from this planting):

- Haun x open (2012) Am
- NH-BR156 x OP (2012) Am2
- Wilkinson x open (2012) Ch
- NH-CN045 x NH117 (2012) CN
- NH-EN153 x SC921 (2012) EN
- VT-EX022 x VT-VV04T1 (2012) F1
- NH-LD115 x SC913 (2012) LD

Cross colors are assigned automatically but may be changed manually. Color assignments may not be saved at this time.

Show in table: Updated

- Cross mapcode
- Cross type
- Cross year
- Cross name
- Tree tag
- Tree comments
- Planted as
- Classification
- Planted on
- Alive?
- Date of death
- Space comments

▼ Observations

Height (Feet)

2013-09-28 — Observer (98)

Click any cross to open the [Cross detail](#) page.

This detailed map table may be displayed by **orchard, plot, or planting**.

Plot: Old Gurdy Farm (Show only this plot)

		Position																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Space						1-6 (1)	1-7 (2)	1-8 (3)	1-9 (4)	1-10 (5)	1-11 (6)	1-12 (7)	1-13	1-14	1-15	1-16	1-17	1-18
	Mapcode						EN	Am	EN	LD	CN	EN	EN						
2	Space	2-1	2-2	2-3	2-4	2-5 (8)	2-6 (9)	2-7 (10)	2-8 (11)	2-9 (12)	2-10 (13)	2-11 (14)	2-12 (15)	2-13 (16)	2-14 (17)	2-15 (18)	2-16 (19)	2-17 (20)	2-18
	Mapcode					CN	LD	EN	LD	EN	LD	CN	LD	CN	EN	CN	EN	Ch	
3	Space	3-1	3-2	3-3	3-4 (21)	3-5 (22)	3-6 (23)	3-7 (24)	3-8 (25)	3-9 (26)	3-10 (27)	3-11 (28)	3-12 (29)	3-13 (30)	3-14 (31)	3-15 (32)	3-16 (33)	3-17 (34)	3-18
	Mapcode				EN	F1	Ch	F1	EN	Ch	EN	Ch	EN	Ch	LD	Am2	CN	LD	
4	Space	4-1	4-2	4-3 (35)	4-4 (36)	4-5 (37)	4-6 (38)	4-7 (39)	4-8 (40)	4-9 (41)	4-10 (42)	4-11 (43)	4-12 (44)	4-13 (45)	4-14 (46)	4-15 (47)	4-16 (48)	4-17 (49)	4-18
	Mapcode			LD	EN	Am	EN	EN	Am	EN	F1	LD	CN	LD	EN	CN	EN	F1	
5	Space	5-1	5-2	5-3	5-4 (50)	5-5 (51)	5-6 (52)	5-7 (53)	5-8 (54)	5-9 (55)	5-10 (56)	5-11 (57)	5-12 (58)	5-13 (59)	5-14 (60)	5-15 (61)	5-16 (62)	5-17 (63)	5-18
	Mapcode				CN	EN	CN	CN	EN	CN	EN	EN	EN	Am2	F1	LD	LD	CN	LD
6	Space	6-1	6-2 (65)	6-3	6-4 (66)	6-5 (67)	6-6 (68)	6-7 (69)	6-8 (70)	6-9 (71)	6-10 (72)	6-11 (73)	6-12 (74)	6-13 (75)	6-14 (76)	6-15 (77)	6-16 (78)	6-17 (79)	6-18
	Mapcode																		

The **plot map** may be opened with this **hyperlink**.

Click **space** to navigate to the "[Space](#)" page.

Click mapcode to navigate to the "[Cross](#)" page.

User Guide

11.1 Space or Edit Space

[New England](#) / [Vermont/New Hampshire](#) / [Old Gurdy Farm](#) / [Old Gurdy Farm \(Vermont/New Hampshire chapter\)](#) / [Old Gurdy Farm](#) / 18 (row 2, position 15)

Space: Old Gurdy Farm / Old Gurdy Farm 18 (row 2, position 15) EDIT

Status: plantable

Label: 18

Currently contains [OG13-18](#) (since 2013-05-19)

[Observations](#)

Hyperlink to make **observations** on the space itself.

Hyperlink to the individual [Tree page](#). The history of this space is displayed here as well. It important to note that a Tree occupies a Space, but they are tracked separately within the database.

Click to edit the space's label or add a comment (below).

[New England](#) / [Vermont/New Hampshire](#) / [Old Gurdy Farm](#) / [Old Gurdy Farm \(Vermont/New Hampshire chapter\)](#) / [Old Gurdy Farm](#) / 1 (row 1, position 6)

Label

1

Comments

Edit the Space's Label or Comments.

Save

User Guide

12. Trees - All Trees

[Click here](#) to add a New Tree.

To access a list of all trees in the system, sorted by **shortcode**, select the "All trees" drop-down from the Trees heading.

Utilize the filters to narrow down the list of trees; click "Update" to submit your search.

Use the **sort caret** to change the order of the trees in the table.

The page number **hyperlinks** will help you navigate to additional pages in your list of trees.

The **hyperlinks** will help you navigate to a tree (through the **shortcode**), **cross** or **orchard**.

The screenshot shows the 'Trees' section of the application. At the top, there is a navigation menu with 'Trees' selected, which has opened a dropdown menu with options: 'Plantings', 'Wild trees', and 'All trees'. Below the menu is a 'New Tree' button. A filters section contains dropdowns for 'Chapter' (set to 'All'), 'Orchard' (set to 'All'), 'Cross' (set to 'Year'), and a text input for 'Contains'. An 'Update' button is to the right of the filters. Below the filters is a pagination bar with page numbers 1 through 32, followed by an ellipsis and the number 1598. The main content is a table with columns: Shortcode, Tag, Classification, Cross, and Orchard. The 'Shortcode' column has a small upward-pointing caret icon. The table lists several tree records with their respective shortcodes, crosses, and orchards.

Shortcode	Tag	Classification	Cross	Orchard
D2-21-6			2005: CB615 x OP	Duncan 2
D2-21-5			2005: AG	
D2-21-4			2005: AG	
D2-21-3			2005: AG101 x OP	Duncan 2
D2-21-2			2005: AG101 x OP	Duncan 2
D2-21-1			2005: AG101 x OP	Duncan 2
D2-20-135			2005: AG355 x OP	Duncan 2
D3-13-150			2006: IL151 x OP	Duncan 3
D3-13-149			2006: IL151 x OP	Duncan 3
D3-13-148			2006: IL151 x OP	Duncan 3

User Guide

12.1 Trees - Tree and Edit Tree

New England / Vermont/New Hampshire / Old Gurdy Farm / Tree: OG13-18

Tree: OG13-18

Delete will bring up this warning box. In general, **DO NOT DELETE TREES!!!!** If you have questions contact your Regional Science Coordinator.

Alive
Shortcode: OG13-18

Click to Edit (see below).

Part of planting: Old Gurdy 2013
From cross: NH-CN045 x NH117 (2012)

Are you sure?

Currently planted in

Click to [move or remove](#) a tree.

Old Gurdy Farm / Old Gurdy Farm 18 (row 2, position 15) (since 2013-05-19). [History of this space](#)

Observations

[Observations on this tree](#)

Use **hyperlinks** to navigate to the **plot**, **space** or **observations** on the tree itself.

New England / Vermont/New Hampshire / Old Gurdy Farm / Old Gurdy Farm (Vermont/New Hampshire chapter) / Old Gurdy Farm / Tree: OG13-1 / Edit

Chapter: Vermont/New Hampshire
Name: OG13-1
Shortcode: OG13-1

Tag

Use to add a physical tag to a tree.

This tree is:

- Alive
- Dead

As of (yyyy-mm-dd):

You may change the tree from Alive to Dead (include date) and then back if the tree re-sprouts. The [Remove](#) function is how a dead tree is removed from a space and the space can be freed up for re-planting.

Classification

Comments

Classification applies to **wild trees**. **Bred trees** are classified by **cross type**.

Make sure to click "Save" when your edits are complete and correct.

User Guide

12.2 Trees - Move or Remove a Tree

[New England](#) / [Vermont/New Hampshire](#) / [Old Gurdy Farm](#) / [Old Gurdy Farm \(Vermont/New Hampshire chapter\)](#) / [Old Gurdy Farm](#) / Tree: [OG13-18](#) / [Actions](#)

This tree (planted on 2013-05-19) was...

- moved
- removed

Removed on (yyyy-mm-dd):

Transplanted on (yyyy-mm-dd):

In chapter:

Orchard:

Plot:

To move a tree, select the “moved” radio button, enter a removed date, then the transplanted date (date the tree was replanted in another space). Use the drop-down menus to pick an **orchard** into which to transplant. This will bring up a drop-down menu for the **plots** in the **orchard**. Choosing a **plot** will bring up a **plot map**, from which you can select a space.

Select a space:

		Position																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Row	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	2	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	3	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	
	4	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	
	5	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125

The space selected for the transplanted tree is highlighted in blue.

“Save” will not become active until you enter the dates, **orchard**, **plot** and space. Click “Save” to implement your choice.

[New England](#) / [Vermont/New Hampshire](#) / [Old Gurdy Farm](#) / [Old Gurdy Farm \(Vermont/New Hampshire chapter\)](#) / [Old Gurdy Farm](#) / Tree: [OG13-18](#) / [Actions](#)

This tree (planted on 2013-05-19) was...

- moved
- removed

Mark tree as dead

Removed on (yyyy-mm-dd):

To remove a tree from a space without transplanting it, select the “removed” radio button. Enter the removal date (which will also become the death date if “Mark tree as dead” is checked).

“Save” will not become active until you enter a “Removed on” date. Click “Save” to implement your choice.

User Guide

13. Trees - Wild Trees

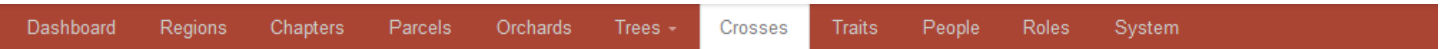
Wild trees are going to be significantly changed very soon. Eventually, the page will look very much like our Tree Locator Form.

Until then, we recommend **not entering or uploading wild trees**. For any **CROSSES** that are uploaded, ensure that the name given to the parent tree in the **CROSS** will match to whatever name is given to the tree to be uploaded as a **Wild Tree**.

User Guide

14. Crosses - Overview

Crosses are defined as the progeny resulting from the crossing of two trees. The process of crossing involves open pollinations or controlled pollinations between a mother tree (producing burs) and a father tree (providing the pollen for the **cross**). **Crosses** can be F1s, B1s, B3F3s, pure Americans, etc. The **cross** is identified by the two parents used and the year the **cross** was made and requires listing the mother (female flower) times the father (pollen) - female x male.



Click "Add cross" to create a [new cross](#).

Add cross

Search for a specific **cross** by Chapter, Year, Type or Name

Filters:

Chapter: All Type: All

Year: All Name contains: Update

▼ Export data

The above filters will be applied to what gets exported, even if they haven't been applied to the table below. Note: only your most recent 5 exports will be kept on the dashboard for you to download.

Include extended information about related entities:

Chapter Region

Click caret to open options for [cross data export](#) on specific crosses you submit a filtered search for.

1 2 3 4 5 6 7 8 9 10 11 →

Cross	Chapter	Year	Seed lot	Type	Female SC	Male SC	Respar	Total nuts	Remaining nuts	Line
A0802 MPCu xOP Amer	Carolinas							26	26	
AB124 x Am22	Meadowview	1997		B3	AB124	Am22		70	0	
AB185 x Am22	Meadowview	1997		B3	AB185	Am22		18	0	
AB185xHazy Way	Carolinas	2002		B3	AB185	Hazy Way		79	79	
AB247 x KYClinton	Kentucky	2006	KY-B40605	B4	AB 247	Clinton Co. 2		87	87	
AB311 x Am22	Meadowview	1997		B3	AB311	Am22		31	0	

The **Cross** list may be sorted from A-Z or Z-A by clicking the **sort caret**.

Utilize the blue **hyperlink** to be taken to a specific chapter's page.

Example of a **cross**: AB185x Am22 is a B3 produced by pollinating the female tree AB185 (a Meadowview B2) with pollen from an American tree, Am22. Clicking on the blue **hyperlink** will open specific data on that **cross**.

User Guide

14.1 Crosses - Detail

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

[New England](#) / [Vermont/New Hampshire](#) / Cross: NH-CN045 x NH117

Cross: NH-CN045 x NH117 EDIT

Shows all data entered for a particular cross. Edit will open the cross in the [New Cross/Edit Cross](#) page.

Female shortcode (not in system): NH-CN045
 Male shortcode (not in system): NH117
 Year: 2012
 Seed lot: NH-B41204
 Cross type: B4
 Resistant parent: male
 Planted trees: [34](#)
 Total nuts: 34
 Remaining nuts: 34

Resistance source:
 Graves

Fresh or dried: Dried
 Bag date: 2012-06-27
 Pollination date: 2012-07-09
 Harvest date: 2012-09-30
 Pollinated bags placed: 47
 Pollinated bags recovered: 46
 Pollinated burs recovered: 29
 Pollinated nuts recovered: 34
 Unpollinated bags placed: 4
 Unpollinated bags recovered: 5
 Unpollinated burs recovered: 0
 Unpollinated nuts recovered: 0

Click to open a list of all tree planted from this cross (see below).

[Observations about this cross](#)

Utilize the blue **hyperlink** to navigate to the desired page.

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses **Trees** People Roles

[New England](#) / [Vermont/New Hampshire](#) / [NH-CN045 x NH117 \(2012\)](#) / [Trees](#)

Shortcode+	Tag	Classification	Planting	Orchard	Plot	Space
OG13-101			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	101 (row 8, position 9)
OG13-108			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	108 (row 8, position 16)
OG13-109			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	109 (row 8, position 17)
OG13-123			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	123 (row 9, position 15)
OG13-125			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	125 (row 10, position 2)
OG13-130			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	130 (row 10, position 7)
OG13-135			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	135 (row 10, position 12)
OG13-14			Old Gurdy 2013	Old Gurdy Farm	Old Gurdy Farm	14 (row 2, position 11)

User Guide

14.2 Crosses - Add or Edit Cross

The screenshot shows the 'New Cross' form with a navigation bar at the top containing: Dashboard, Regions, Chapters, Parcels, Orchards, Trees, Crosses, Traits, and People. The form fields include:

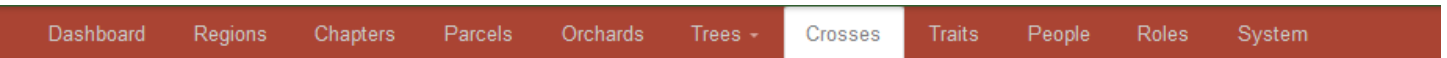
- Chapter (required)**: A dropdown menu.
- Name (required)**: A text input field.
- Year (required)**: A text input field.
- Seedlot**: A text input field.
- Female shortcode (required)**: A text input field.
- Male shortcode**: A text input field.
- Female parent chapter (required)**: A dropdown menu.
- Male parent chapter**: A dropdown menu.
- Resistant parent (required)**: A dropdown menu with 'neither' selected.
- Cross type**: A text input field.
- Line**: A text input field.
- Resistance source**: A text input field.
- Total nuts**: A text input field.
- Comments**: A text area.
- Pedigree**: A text area.
- Save**: A blue button at the bottom left.

Callout boxes provide the following information:

- Top Callout:** Fill in known information about the **cross**, such as the name of the **cross** (female x male), the year the **cross** was made, the **seedlot**, male and female **shortcodes**, **cross** type (e.g. F1, B1, B3F2, etc.), **line**, source of resistance (e.g. Clapper, Graves, etc. - if applicable), the number of nuts harvested, pollination and harvest data (if known), and the **pedigree** (if known).
- Seedlot Callout:** **Seedlot** is usually chapter abbreviation + cross type code + year cross was made + assigned number for each cross made in a particular year (i.e. KYB30602 = a KY chapter B3, made in 2006, **seedlot** #2 out of six **crosses** made in 2006 for KY).
- Shortcode Callout:** **Shortcode** is the code used to identify the parent tree.
- Line Callout:** **Line** is derived from the American parents of various Meadowview B2s. If you are unsure contact your Regional Science Coordinator.
- Pedigree Callout:** **Pedigree** refers to all of the parents used in any **cross'** lineage. Your Regional Science Coordinator can help with this.
- Save Callout:** Click "Save" when your information is complete and correct.

User Guide

14.3 Crosses - Export Cross Data



Crosses

Add cross

Filters:

Chapter: Carolinas (86) Type: All

Year: 2010 (36) Name contains

▼ Export data

The above filters will be applied to what gets exported, even if they haven't been applied to the table below. Note: only your most recent 5 exports will be kept on the dashboard for you to download.

Include extended information about related entities:

Chapter Region

Update

Export

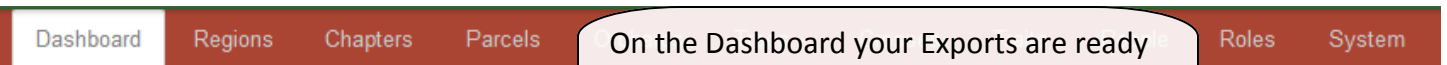
Click the "Export data" caret and use the Filters to search by Chapter, Year, Type and/or name of **cross(es)** you want to export into a spreadsheet.

Cross	Chapter	Year	Seed lot	Type	Female SC	Male SC	Respar	Total	Remaining	Line
A0802 MPCu xOP Amer	Carolinas	2010		AM	A0802 MP				20	
AL50xPMW	Carolinas	2010		BC4	AL50	PMW		33	33	
B2 214x B3 21 (CC James)	Carolinas	2010		B3	B2 214	B3 21 (CC James)		1	1	
B2 214 x B3-36 (CC James)	Carolinas	2010		B3	B2 214	B3-36 (CC James)		1	1	
B2 214 x CC-WWC190	Carolinas	2010		B3	B2 214	CC-WWC190		1	1	

Click "Export" button when you have the desired data in the cross table.

This message will display after clicking "Export".

File is now being generated. Check the dashboard to see its status.



Dashboard

On the Dashboard your Exports are ready (the five most recent exports will show up on your dashboard).

Status of jobs [CLEAR MESSAGES](#)

File Crosses 2014-01-17 0921pm UTC.csv is [ready to download](#).

File Orchards 2013-12-18 0546pm UTC.csv.csv is [ready to download](#).

Click "ready to download" to open in Excel.

User Guide

15. Observations - Overview

The American Chestnut Foundation © Sara Fitzsimmons ▾

[New England](#) / [Massachusetts/Rhode Island](#) / [Gosh Darn Farm](#) / [Gosh Darn Orchard \(Massachusetts/Rhode Island chapter\)](#) / [Plot: Oh Gosh](#)

Plot: Oh Gosh [EDIT](#) [DELETE](#)

Shortcode: MA-G014
 Rows: 5
 Positions: 25
 Row designations: numeric
 Column designations: numeric
 Space between rows: 15 feet
 Space between positions: 7 feet
 Orientation: 25.0°

[Create a planting in this plot](#)

Observations

[View or record observations about the plot itself](#)

You can see observations for all trees in this plot in the [detailed table](#).

[Record observations on all trees in this plot](#)

Spaces

		Position																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Row	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	2	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	3	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
	4	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	5	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125

Observations can be made on several different types of **entities**. It is VERY IMPORTANT to note the **entity** on which you are recording an **observation**. Clicking this **hyperlink** will take you to a page to take **observations** on the “Oh Gosh” **plot**, NOT the trees in the **plot**.

Using the **detailed map table**, a user can input **observations** on any individual tree in a **planting**. To record many **observations** on all trees planted in a **plot**, use the button that says “Record observations on all trees in a plot”.

The **plot map** below displays all rows and positions that have been created for this **plot**. [Click here](#) to navigate to the section on creating **plots** and their associated **spaces**.

To record **observations** on all the trees in a **plot**, click this button to be taken to a page where you will generate a **CSV** worksheet of all trees currently planted in the **plot**. Note that this will show all trees, dead and alive, which have not been formally removed.

User Guide

15.1 Observations - Record Observations

These **breadcrumbs** tell you on which **entity** you will record an **observation**. If you want to record **observations** on all **trees** in a **plot**, click this **hyperlink** to the **plot**.

Recorded observations

When you click this button, you will be taken to the next page, shown below, to record an **observation** on the **entity** shown in the **breadcrumbs**. Here, that would be the "Oh Gosh" **plot**.

To record **observations** on an individual **tree**, click this **hyperlink** to go to the **detailed map table**.

Currently, this page does not tell you on what specific **plot** you are about to record an **observation**. We are working to change that. In the meantime, hit the **back button** on your browser to confirm the **plot** on which you are working.

To see the values we'd like to have input for a given **trait**, **right-click** the **Traits** tab and open it in a new tab. Click the **hyperlink** for the **trait** of interest to see requested values.

Click the drop-down list to see **traits** available for this **entity**. If you do not see the **trait** you want, contact your **Regional Science Coordinator** to see whether it should be added, or if you should enter the data in a different fashion.

For now, values are accepted as "**TEXT ONLY**" meaning you could mistakenly enter text e.g. "Santa Claus" for a **trait** that should be recorded as a numeral and the system would allow it. Please take special care to ensure your data are correct before uploading into the system.

User Guide

15.2 Observations - Using the Detailed Map Table

Plot: [Otter Brook Farm \(Show only this plot\)](#)

		Row																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Position	1	Space	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	10-1	11-1	12-1	13-1	14-1	15-1	16-1	17-1	18-1 (R18T1)
	Mapcode																			Can
2	Space	1-2	2-2	3-2	4-2	5-2	6-2	7-2	8-2	9-2	10-2	11-2	12-2	13-2	14-2	15-2	16-2 (R16T2)	17-2	18-2 (R18T2)	
	Mapcode																MM		CNSC	
3	Space	1-3	2-3	3-3 (R3T3)	4-3	5-3 (R5T3)	6-3	7-3	8-3	9-3	10-3	11-3	12-3 (R12T3)	13-3	14-3	15-3 (R15T3)	16-3 (R16T3)	17-3 (R17T3)	18-3 (R18T3)	
	Mapcode			CC		WS							MM			CNSC	MM	PT	CN	
4	Space	1-4	2-4 (R2T4)	3-4 (R3T4)	4-4	5-4 (R5T4)	6-4	7-4	8-4	9-4	10-4	11-4	12-4 (R12T4)	13-4 (R13T4)	14-4 (R14T4)	15-4 (R15T4)	16-4 (R16T4)	17-4 (R17T4)	18-4 (R18T4)	
	Mapcode		CC	CC		WS							MM	CNSC	CN46	Hls	MM	MM	MM	
5	Space	1-5	2-5 (R2T5)	3-5 (R3T5)	4-5 (R4T5)	5-5 (R5T5)	6-5	7-5	8-5	9-5	10-5	11-5	12-5 (R12T5)	13-5 (R13T5)	14-5 (R14T5)	15-5 (R15T5)	16-5 (R16T5)	17-5 (R17T5)	18-5 (R18T5)	
	Mapcode		WS	WS	WS	WS							Hls	CN46	CNSC	Am12	Hls	Hls	MS	

To enter data on all trees in a **plot**, click this **hyperlink** to go to the **plot** and click the button that says "Record observations on all trees in this plot".

To access an individual tree through the **detailed map table**, click on the space which is "16-3" here. If you click on the map code, "MM" here, it will take you to information on the **cross**.

[New England](#) / [Vermont/New Hampshire](#) / [Otter Brook Farm](#) / [Otter Brook Farm \(Vermont/New Hampshire chapter\)](#) / [Otter Brook Farm / R16T3 \(row 16, position 3\)](#)

Space: Otter Brook Farm / Otter Brook Farm R16T3 (row 16, position 3) EDIT

Status: plantable
 Label: R16T3
 Currently contains [VT_OB10-VT_OB10-R16T2-2012](#) (since 2012-09-14)

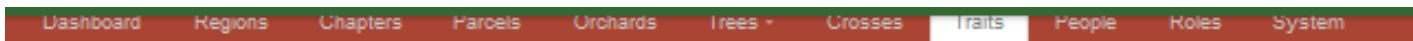
[Observations](#)

Clicking this **hyperlink** will show you **observations** on this space, not the trees in this space. To see or record **observations** on a tree in this space, click the **hyperlinked** tree name.

This page shows ALL the trees EVER planted in this **space**. Here, only one tree has been planted. Click on this tree to enter **observations** on this tree only.

User Guide

15.3 Observations - Generating a Worksheet for Data Collection and/or Entry



New England / Vermont/New Hampshire / Otter Brook Farm (Vermont/New Hampshire chapter) / Otter Brook Farm
 / Observations / Prepare worksheet

[Click here](#) to learn more about **traits** and their accepted values.

Generate worksheet

Select the traits that will be recorded for the trees in this plot.

- Blight Resistance Rating
- Blight Resistance Rating Comment
- Blight Resistance Rating - EP-155
- Blight Resistance Rating - SG 2,3
- Bud Break
- Comments
- Condition (M/D/P/F/G/E)
- Diameter (DBH - Inches)
- Germination (Y/N)
- Growth
- Height (Feet)
- Inoculated (Y/N)
- Rogue (Y/N)
- Sampled - Foliar Analysis
- Selection (Y/N)
- True to type?

These worksheets will be used not only for uploading **observation** data into the TACF Trees DB, but can also be used either electronically or as a printout, to collect the data in the field.

You can select any number of **traits** to show up in your worksheet. If you don't see the **trait** you'd like to collect data on, contact your local Regional Science Coordinator.

Note that all **observation** worksheets for trees in a **plot** already contain a column to record SURVIVAL, and **users** are encouraged to update survival of trees whenever entering other **observations**.

[Generate worksheet](#)

Upload worksheet

After filling in a worksheet with observations, upload from record form. Enter information below and click on the links to the left of that column are for reference purposes.

Recorded on:

- Today (2014-01-16)
- Yesterday (2014-01-15)
- Other (yyyy-mm-dd):

Once you've selected all the **traits** on which you'd like to record **observations**, click this button to open a **CSV** file in which you can record those **observations**. A file manager window will open asking you to select a location to save the file. Be sure to organize your files in folders to keep track of them. It would be wise to create a logical folder and file system to hold the **CSV** files created for data uploaded to the TACF *dentata*Base. The file name here can easily be found in an "Otter Brook Farm" folder. You can rename this file to assist with file management.

User Guide

15.4 Observations - Data Entry CSV

DO NOT edit any data to the left of the “|” column. The data on the left side of the “|” column are used by the system to match up the current data to the new data you are entering. They must not be edited.

To the right of the “|” column are the **traits** you selected to generate the worksheet, followed by an automatically included column for SURVIVAL.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Plot name	Space ID (Space lab	Row	Position	Tree ID (ir	Tree name	Cross nam	Cross year		Condition (M/D/P/F/G/E)	Height (Feet)	Tree alive/dead	
2	Otter Brook Farm	5697	R1T8		1	8	5686 VT_OB10-	NH-WS020	2010		E	3.5	alive	
3	Otter Brook Farm	5715	R1T9		1	9	5685 VT_OB10-	NH-WS020	2010		E	4.2	alive	
4	Otter Brook Farm	5733	R1T10		1	10	5702 VT_OB10-	VT-EX022	2010		E	6.5	alive	
5	Otter Brook Farm	5751	R1T11		1	11	5684 VT_OB10-	NH-WS020	2010		G	3.5	alive	
6	Otter Brook Farm	5769	R1T12		1	12	5683 VT_OB10-	NH-WS020	2010		G	3.7	alive	
7	Otter Brook Farm	5787	R1T13		1	13	5682 VT_OB10-	NH-WS020	2010		G	2.5	alive	
8	Otter Brook Farm	5805	R1T14		1	14	5681 VT_OB10-	NH-WS020	2010		F	9.8	alive	
9	Otter Brook Farm	5823	R1T15		1	15	5680 VT_OB10-	NH-WS020	2010		F	4	alive	
10	Otter Brook Farm	5841	R1T16		1	16	5696 VT_OB10-	VT-EX022	2010		E	5	alive	
11	Otter Brook Farm	5859	R1T17		1	17	5679 VT_OB10-	NH-WS020	2010		D	2.4	alive	
12	Otter Brook Farm	5877	R1T18		1	18	5678 VT_OB10-	NH-WS020	2010		D	10039	alive	
13	Otter Brook Farm	5895	R1T19		1	19	5577 VT_OB10-	NH-WS020	2009		D	5.8	alive	
14	Otter Brook Farm	5626	R2T4		2	4	5450 VT_OB10-	VT-CC006	2008		M	Santa Claus	dead	
15	Otter Brook Farm	5644	R2T5		2	5	5677 VT_OB10-	NH-WS020	2010		M		dead	
16	Otter Brook Farm	5662	R2T6		2	6	5676 VT_OB10-	NH-WS020	2010		M		dead	
17	Otter Brook Farm	5680	R2T7		2	7	5574 VT_OB10-	NH-WS020	2009		P	6.7	alive	
18	Otter Brook Farm	5698	R2T8		2	8	5446 VT_OB10-	VT-CC006	2008		F	8.4	alive	
19	Otter Brook Farm	5716	R2T9		2	9	5445 VT_OB10-	VT-CC006	2008		G	9	alive	
20	Otter Brook Farm	5734	R2T10		2	10	5444 VT_OB10-	VT-CC006	2008		E	5.4	alive	
21	Otter Brook Farm	5752	R2T11		2	11	5675 VT_OB10-	NH-WS020	2010		G	3.5	alive	
22	Otter Brook Farm	5770	R2T12		2	12	5701 VT_OB10-	VT-EX022	2010		E	6.7	alive	
23	Otter Brook Farm	5788	R2T13		2	13	5441 VT_OB10-	VT-CC006	2008		E	7.5	alive	
24	Otter Brook Farm	5806	R2T14		2	14	5674 VT_OB10-	NH-WS020	2010		E	2.4	alive	
25	Otter Brook Farm	5824	R2T15		2	15	5673 VT_OB10-	NH-WS020	2010		E	8.5	alive	
26	Otter Brook Farm	5842	R2T16		2	16	5672 VT_OB10-	NH-WS020	2010		E	8.9	alive	
27	Otter Brook Farm	5860	R2T17		2	17	5671 VT_OB10-	NH-WS020	2010		M		dead	
28	Otter Brook Farm	5878	R2T18		2	18	5695 VT_OB10-	VT-EX022	2010		M		dead	
29	Otter Brook Farm	5896	R2T19		2	19	5670 VT_OB10-	NH-WS020	2010		E	10.3	alive	

Once you have completed filling out the data for the **observations**, be sure to re-save to update the file before uploading.

Then, in the TACF *dentata*Base, navigate to the **plot** and click on the button to “Record observations on all trees in this plot”. Scroll to the “Upload Worksheet” section of the page.

Note that it can be easy to make mistakes in data entry. There are currently no data controls in place and these two rather ludicrous values will be accepted by the system. Be sure to double-check your data BEFORE uploading in to the system. A good trick is to sort each column of data before entering to see if there are any outliers. It is easy to edit values for one tree once uploaded, but it is not so easy to edit multiple values at this time. Be extra sure that the correct values are assigned to the correct trees.

User Guide

15.5 Observations - Uploading Observations

- Comments
- Condition (M/D/P/F/G/E)
- Diameter (DBH - Inches)
- Germination (Y/N)
- Growth
- Height (Feet)
- Inoculated (Y/N)
- Rogue (Y/N)
- Sampled - Foliar Analysis
- Selection (Y/N)
- True to type?

Once you have confirmed that the data in your **CSV** are correct, you can upload the completed worksheet. **BE CERTAIN TO VERIFY THE DATA BEFORE UPLOADING.** Because the system only handle **TEXT-ONLY values**, it is vital that data integrity be confirmed by the **user**.

Generate worksheet

Upload worksheet

After filling in a worksheet with observations, upload it here to record them. Enter information to the right of the 'I' column. The fields to the left of that column are for reference purposes.

Recorded on:

- Today (2014-01-16)
 - Yesterday (2014-01-15)
 - Other (yyyy-mm-dd):
-

Record the date that the data was collected in the field, not the day it was entered. Be sure that the date is in the correct format and that the radio button for the correct date is selected.

Observed by:

Filter by chapter... Kendra M Gurney

Be sure to select a person with whom to attribute the **observation**. If the person isn't in the list, they will need to be added by clicking the [People](#) tab in the navigation bar at the top of your browser window.

CSV file:

Otter Brook Farm data 2014_01_16.csv

Upload worksheet

It would be wise to create a logical folder and file system to hold the **CSV** files created for data uploaded to the TACF *dentata*Base. The file name here can easily be found in an "Otter Brook Farm" folder.

User Guide

16. Traits - Overview

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses **Traits** People Roles System

Traits

New Trait

Trait	Orchards	Plots	Plantings	Spaces*	Crosses	Trees
Fertilized	yes	yes	yes	yes	no	no
Accessible Crown	no	no	no	no	no	yes
Blight	no	no	no	no	no	yes
Bur Count	no	no	no	no	no	yes
Burs	no	no	no	no	no	yes
Canopy	no	no	no	no	no	yes
Catkins	no	no	no	no	no	yes
Comments	no	no	no	no	no	yes
Diameter (Centimeters)	no	no	no	no	no	yes
Diameter (Inches)	no	no	no	no	no	yes
Erosion	no	yes	no	no	no	no
Health	yes	no	yes	no	no	yes
Height (Feet)	no	no	no	no	no	yes
Height (Inches)	no	no	no	no	no	yes

Only **users** with a System level **role** may create a new **trait**. If you do not see the **trait** you'd like to use, contact your local Regional Science Coordinator for more information or to request a new **trait**.

Note that **traits** may be applied to one or more **entities** as defined when the **trait** is created. Here, fertilization data may be recorded for all but two entities.

As more funds are raised for development, we hope to create tools such as conversions for data collected in different units. Until that time, be sure to either collect data in preferred units, or convert the data prior to entering into the TACF Trees DB. Often the preferred unit is listed in parenthesis beside the **trait** name here and within generated worksheets.

User Guide

16.1 Traits - Add New or Edit Trait

The screenshot shows the 'New Trait' form in the TACF *dentata*Base system. The navigation bar at the top includes Dashboard, Regions, Chapters, Parcels, Orchards, Trees, Crosses, Traits (selected), People, Roles, and System. The form has a breadcrumb 'Traits / New Trait' and a 'Name' field containing 'Condition (M/D/P/F/G/E)'. Below the name field, there are checkboxes for 'This trait may apply to:' with options: Orchards (checked), Plots (checked), Plantings (checked), Spaces (unchecked), Crosses (unchecked), and Trees (checked). A 'Comments' text area contains the text: 'Describes the health of an Orchard, Plot, Planting, or Tree. Appropriate values are: M = Mortality, D = Dying, P = Poor, F = Fair, G = Good, E = Excellent'. At the bottom left is a blue 'Save' button. Five callout boxes provide instructions: 1) 'Creating a new **trait** is easy, but only **users** with a System level **role** may create a new **trait**. If you do not see **trait** you'd like to use, contact your local Regional Science Coordinator for more information or to request a new **trait**.' 2) 'Be concise for the name of the **trait** and ensure that other **traits** don't already cover the characteristic. Place desired units next to the **trait** name in parenthesis e.g. Height (feet).' 3) 'Because values are currently input as **TEXT ONLY**, it is vital to use comments to both define the **trait** AND to describe the appropriate values for that **trait**. Eventually, these values will be used to control input of values in the system.' 4) 'Use this text-box expansion tool to drag out and adjust the size of the text-box.' 5) 'Click "Save" when this information is complete and correct.'

User Guide

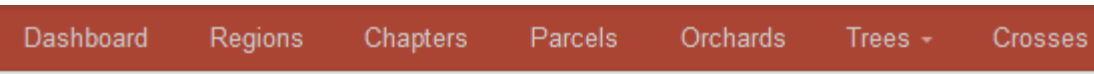
17. People - Overview

The screenshot shows the 'People' overview page with a navigation bar at the top containing: Dashboard, Regions, Chapters, Parcels, Orchards, Trees, Crosses, Traits, **People**, Roles, System. Below the navigation bar are buttons for 'People' and 'New Person'. A 'Filters:' section includes a 'Chapter' dropdown menu set to 'All' and an 'Update' button. A table lists people with columns for First name, Middle name, Last name, Chapter, and Email. Callouts provide instructions: 'Click to [add a New Person](#).', 'Use the Filter function to search for people by Chapter or Name.', 'Click on a person's first or last name to follow the **hyperlink** to their **user** account information.', 'People – includes everyone in the system, including people who use the database, people who add data to the database, people who browse the database, and anyone that may be mentioned anywhere in the database, such as **orchard stewards**, people who own specific trees, collaborators and volunteers associated with **plantings**, etc.', and 'You may sort people by their last name A-Z or Z-A by clicking the **sort caret**.' The table data is as follows:

First name	Middle name	Last name	Chapter	Email
Carl		Absher	Virginia	...@gmail.com
Bill		Adamsen	Connecticut	...@aexp.com
William		Adamsen	Connecticut	...@gmail.com
David		Allen	Maine	...@aol.com
Isabel		Allende	Alabama	...@acf.org
Mary		Ayres	PA-TACF	...@verizon.net

User Guide

17.1 People - Add New or Edit Person



People / New Person

Chapter

Alabama

Select the appropriate chapter (or else click "At Large") to associate the new person with.

First name

Middle name or initial

Add **user** account/contact information data (name, address, etc.).

Last name

Phone number

Address

Comments

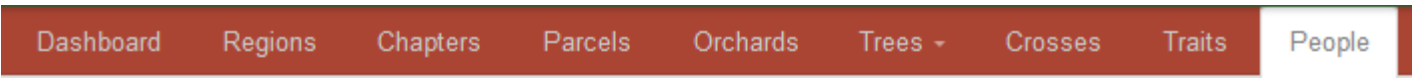
Add relevant comments, if applicable.

Save

Click to Save the New Person.

User Guide

17.2 People - Invite Person to Create an Account



People / George Clooney

George Clooney EDIT DELETE PERMISSIONS

Phone number: 888-867-5309

Address:

#1 Mansion

Venice Italy

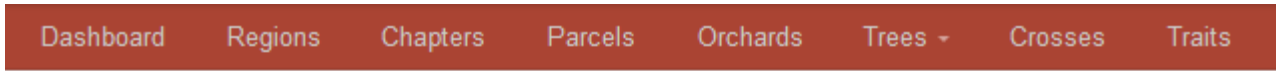
Comments:

Mr. Clooney has been the Chapter president of every chapter and has a ten thousand tree orchard.

This person does not have an account in the system.

Invite this person to create an account

If this person should have access to the system, click the "Invite this person to create an account" button.



Invite George Clooney to the system

Email

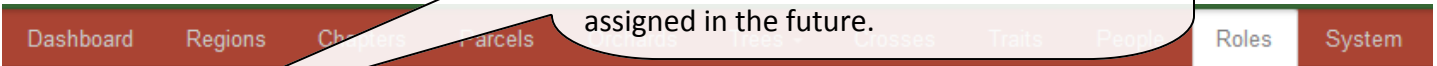
Send invitation

Enter their email and click "Send invitation". They will receive an invitation and instructions on how to create an account. They can update their **user** account information at any time. Alter anyone you invite to the *dentata*Base that you have done so, as the email may be filtered as spam.

User Guide

18. Roles - Overview

A **role** defines the access **privileges** a **user** has to the TACF *dentata*Base system. Currently, **roles** may be assigned to one or more **entities**. Additional entities may be assigned in the future.



Roles

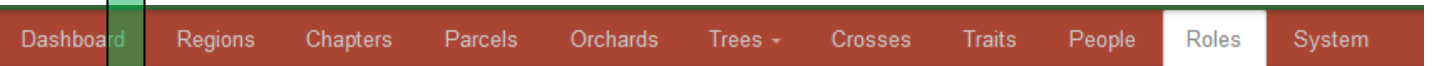
New Role

Role	System	Regions	Chapters	Parcels	Orchards	Grants	Cascades	
Admin: chapter	no	no	yes	no	no	write	yes	PEOPLE
Admin: region	no	yes	no	no	no	write	yes	PEOPLE
Admin: system	yes	no	no	no	no	write	yes	PEOPLE
Parcel Manager	no	no	no	yes	yes	write	yes	PEOPLE
Public	yes	yes	yes	no	no	read	yes	PEOPLE

Click on a **role's** **hyper-link** to be taken to a page describing that **role**. **Users** with high enough access can then edit that **role**.

If a **role** is set to **cascade**, the same **privileges** given to the highest **entity** will also apply to all lower entities as defined by the Trees Database **hierarchy**.

A **user** with System administrative **privileges** may assign people to a given **role** using this button.



Roles Role: Admin: system

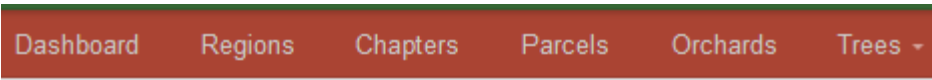
Role: Admin: system EDIT PEOPLE

Associated with: System
 Grants permissions: Write
 These permissions extend below the entity itself.

Users with high enough **privileges** in the system can edit **roles** and assign a **role** to people using these buttons.

User Guide

18.1 Roles - Add New or Edit Role



Roles / New Role

Title

This role may be associated with:

- System
- Regions
- Chapters
- Parcels
- Orchards

Grants permissions:

None

These permissions extend to everything under the entity.

Comments

Save

Click to Save changes to the **role**.

Only **users** with System administrator **privileges** may create new **Roles** for **users**.

Select the **entity** or **entities** the **role** will be associated with using the check boxes.

Permissions can be "none", "read" or "write". "Write" permission allows **users** to make edits.

Check this box to set the **role** to **cascade**, meaning the same **permissions** given to the highest **entity** will also apply to all lower entities as defined by the *dentata*Base **hierarchy**. For example, **permissions** assigned to a Chapter and selected to **cascade** would apply to all **Parcels, Orchards, Plots, Crosses, Observations**, etc. within that Chapter.

User Guide

19. System - Overview

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

People with systemwide permissions

Upload cross data in bulk | Upload historic planting data | Upload historic observation data

Grant privileges

User	Role	Privileges	Comments
Al Eelman	Administrator	Write privileges on the system and below	
Allen Nichols	Administrator	Write privileges on the system and below	
Anthony Whouse	Administrator	Write privileges on the system and below	
Barrett Walker	Administrator	Write privileges on the system and below	COMMENT REVOKE
Ben Finegan	Administrator	Write privileges on the system and below	COMMENT REVOKE

Use these **hyperlinks** to access [bulk](#) and [historic data upload](#) functions.

Click "[Grant Privileges](#)" to assign **permissions** to a user's account.

The System tab shows all **users** with system-wide **permissions** and is only available to those **users**. While many **users** are granted administrator **permissions** in the **testing server**, this level of access will only be available to a few **users** in the **production server**.

Access to the bulk and historic data upload is currently restricted to **users** with systemwide **permissions**. Most **users** will not have this level of access. If you need to use these bulk or historic templates but do not have access through your **user role**, contact your Regional Science Coordinator. Your RSC can send you the appropriate template and then upload it for you after it has been completed and checked for errors.

User Guide

19.1 System - Grant Permissions



Grant Permissions

Role

Parcel Manager (applies to:)

Use this dropdown to select the **role** being assigned to a person in the system.

Person

Filter by chapter... Tyler Kulfan

Entity

System

Region

Chapter

Parcel

Pennsylvania Hummlestown

Select the **entity** to which the **role** will be applied, especially if there is a specific Chapter, **Parcel** or **Orchard** to be assigned.

Be sure to click the radio button as they do not automatically get selected (though should, soon).

Orchard

Filter by chapter...

Comments

Details on this person's role

Make any comments regarding the person's **role** assignment, if desired.

Click on "Save" to set **permissions** for the **user** selected above.

User Guide

19.2 System - Upload Cross Data in Bulk

Dashboard	Regions	Chapters	Parcels	Orchards	Trees ▾	Crosses	Traits	People	Roles	System
-----------	---------	----------	---------	----------	---------	---------	--------	--------	-------	--------

People with systemwide permissions Click to enter **cross** data in bulk.

[Upload cross data in bulk](#) | [Upload historic planting data](#) | [Upload historic observation data](#)

Grant privileges

User	Role	Privileges	Comments

Dashboard	Regions	Chapters	Parcels	Orchards	Trees ▾	Crosses	Traits	People	Roles	System
-----------	---------	----------	---------	----------	---------	---------	--------	--------	-------	--------

[Crosses](#) / [Upload Crosses in Bulk](#) Click to download template file.

Download this CSV template, fill in any number of rows with cross data, then upload it below. Column headers starting with * are required.

Browse... No file selected. "Browse" to completed file when ready to upload.

Upload Click to upload file.

	A	B	C	D	E	F	G	H	I	J
1	*Cross name	*Year	*Chapter name	*Female parent's shortcode	Female parent's chapter (same as cross's chapter by default)	Male parent's shortcode (or 'OP' for open pollination)	Male parent's chapter (if applicable, same as cross's chapter by default)	*Resistant parent (female, male, neither, or both)	Line	Resistance source
2	VT-SB001 x AB247	2004	Vermont/New Hampshire	VT-SB001	Vermont/New Hampshire	AB247	Meadowview	male		Graves
3	VT-WD002 x AB419	2004	Vermont/New Hampshire	VT-WD002	Vermont/New Hampshire	AB419	Meadowview	male		Graves
4	VT-WD002 x BG531	2005	Vermont/New Hampshire	VT-WD002	Vermont/New Hampshire	BG531	Meadowview	male	PaulGalloway	Graves
5	VT-BL003 x AB419	2005	Vermont/New Hampshire	VT-BL003	Vermont/New Hampshire	AB419	Meadowview	male		Graves
6	VT-CC004 x AB248	2005	Vermont/New Hampshire	VT-CC004	Vermont/New Hampshire	AB248	Meadowview	male		Graves
7	VT-WD002 x AB419	2006	Vermont/New Hampshire	VT-WD002	Vermont/New Hampshire	AB419	Meadowview	male		Graves
8	VT-CC004 x AL50	2006	Vermont/New Hampshire	VT-CC004	Vermont/New Hampshire	AL50	Meadowview	male	BH2T2G	Graves
9	VT-BL003 x DV189	2006	Vermont/New Hampshire	VT-BL003	Vermont/New Hampshire	DV189	Meadowview	male	HBW1G	Graves
10	NH-FT001 x SC444	2007	Vermont/New Hampshire	NH-FT001	Vermont/New Hampshire	SC444	Meadowview	male	BH2T1G	Graves

	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	Seed lot	Cross type	Total nuts	Fresh or dried (leave blank for unknown)	Bag date (yyyy-mm-dd)	Pollination date (yyyy-mm-dd)	Harvest date (yyyy-mm-dd)	Pollinated bags placed	Pollinated burs bagged	Pollinated bags recovered	Pollinated burs recovered	Pollinated nuts recovered	Unpollinated bags placed	Unpollinated burs bagged	Unpollinated bags recovered
2	VT-B30401	B3	198	dried								198			
3	VT-B30402	B3	28	dried								28			
4	VT-B40501	B4	20	dried								20			
5	VT-B30501	B3	1	dried		6/27/2005						1			
6	VT-B30502	B3	12	dried								12			
7	VT-B30601	B3	16	dried		7/19/2006	10/2/2006	96		96	528	16	10		10
8	VT-B40601	B4	38	dried	7/11/2006	7/17/2006	10/2/2006	32		32	33	38	22		
9	VT-B40602	B4	127	dried	7/10/2006	7/18/2006	9/28/2006	36		32	75	127	4		4
10	NH-B40701	B4	154	dried	7/6/2007	7/17/2007	10/4/2007	75		74	135	154	10		9

	W	X	Y	Z	AA
1	Unpollinated bags placed	Unpollinated burs bagged	Unpollinated bags recovered	Unpollinated burs recovered	Unpollinated nuts recovered
2					
3					
4					
5					
6					
7	10		10	48	3
8	22			25	3
9	4		4	7	0
10	10		9	14	0

Enter data into the spreadsheet template. Columns marked with an asterisk (*) are required. Spell chapter names out completely. Be sure that any tree shortcodes used will match the appropriate orchard or wild tree shortcodes entered with plantings or as wild trees.

User Guide

19.3 System - Upload Historic Planting Data

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

People with systemwide permissions Click to upload historic **planting** data.

[Upload cross data in bulk](#) | [Upload historic planting data](#) | [Upload historic observation data](#)

Grant privileges

User	Role	Privileges	Comments

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

[Plantings](#) / Upload a Historic Planting

Download the CSV template

Download template for orchard:

Filter by chapter... ▾

Acker-Funk-1

Download

Once the **Parcel**, **Orchard** and **Plot** are created, use this filter to download a **planting** template spreadsheet. One big advantage of this method of **plantings** is that you can plant and note a death date for all trees, freeing up any **spaces** used for re-planting. This functionality will only accommodate trees planted on the same date.

Upload historic planting

Fill in the cross and death date information in one of the templates above, then enter the information for the planting and upload the CSV below. Enter information to the right of the '||' column. The fields to the left of that column are for reference purposes.

Planting name:

Planting shortcode:

Date planted (yyyy-mm-dd):

CSV:

No file selected.

Once the **planting** data are entered in the template file, assign it a name, **planting shortcode** and date and use the "Browse" button to locate the file and "Upload" to load it into the system.

Upload

User Guide

19.4 System - Upload Historic Planting Data Template

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Space ID (internal)	Orchard name	Plot name	Plot ID	Space label	Row	Position	II	Cross name	Cross year	Cross map code	Tree death date (leave blank if still alive)	Tree shortcode (leave blank for default)	Tree name (leave blank to use shortcode)	Tree tag (optional)	Planted as (seed or seedling; default seed)
2	1501	Valley Vie	Valley Vie	4	R1T1	1	1		VT-BL003 :	2006	BL					
3	1502	Valley Vie	Valley Vie	4	R1T2	1	2		TrTi-1 x op	2006	TR					
4	1503	Valley Vie	Valley Vie	4	R1T3	1	3		VT-BL003 :	2006	BL					
5	1504	Valley Vie	Valley Vie	4	R1T4	1	4		GR119 x A	2006	GR	5/6/2010				
6	1505	Valley Vie	Valley Vie	4	R1T5	1	5		NY001 x Zc	2006	NY					
7	1506	Valley Vie	Valley Vie	4	R1T6	1	6		ATK-069 x	2006	AT					
8	1507	Valley Vie	Valley Vie	4	R1T7	1	7		90005 x op	2006	90					
9	1508	Valley Vie	Valley Vie	4	R1T8	1	8		VT-BL003 :	2006	BL					
10	1509	Valley Vie	Valley Vie	4	R1T9	1	9		VT-CC004	2006	CC					
11	1510	Valley Vie	Valley Vie	4	R1T10	1	10		VT-BL003 :	2006	BL					
12	1511	Valley Vie	Valley Vie	4	R1T11	1	11		Lasdon x c	2006	LA					
13	1512	Valley Vie	Valley Vie	4	R1T12	1	12		GR119 x A	2006	GR	2/24/2009				
14	1513	Valley Vie	Valley Vie	4	R1T13	1	13		TrTi-1 x op	2006	TR					
15	1514	Valley Vie	Valley Vie	4	R1T14	1	14		Lasdon x c	2006	LA					

All data to the left of the "II" column comes pre-loaded from the system. In this example, DO NOT EDIT columns A-H, including and to the left of the "II" column.

Enter **cross** names and year exactly as entered as **crosses** in the database. Assign a Cross Map Code to identify the cross quickly in the detailed map table. A death date may be entered if the death date is known, which is likely for historic data. If you have any questions about using this template, contact your Regional Science Coordinator.

Save this data file with a file name that will make it easy to find, should it be needed for reference. For Example, "ValleyView_Planting_2007" .

User Guide

19.5 System - Upload Historic Observation Data

Dashboard Regions Chapters Parcels Orchards Trees ▾ Crosses Traits People Roles System

People with systemwide permissions

Click to upload historic **observation** data (see below).

[Upload cross data in bulk](#) | [Upload historic planting data](#) | [Upload historic observation data](#)

Grant privileges

Generate worksheet

Select the orchard, the traits to generate columns for, and the dates of observations along with the people who took those observations, if known.

Orchard:

Vermont/New Hampshire ▾

Valley View - Upper ▾

Use the filters to select the appropriate **orchard**.

Traits:

- Comments
- Height (Feet)
- Diameter (DBH - Inches)
- Inoculated (Y/N)
- Blight Resistance Rating
- Growth
- Bud Break
- Germination (Y/N)
- Blight Resistance Rating Comment
- True to type?
- Sampled - Foliar Analysis
- Blight Resistance Rating - SG 2,3
- Blight Resistance Rating - EP-155
- Condition (M/D/P/F/G/E)
- Rogue (Y/N)
- Selection (Y/N)

Check all **traits** for which you wish to enter data.

Dates:

Begin entering dates as yyyy-mm-dd. More fields will appear. These will be ordered from earliest to latest in the CSV regardless of the order they're entered here.

Date:

Observed by:



Enter a date and select the appropriate observer (you may enter data for more than one date).

Generate worksheet

Upload historic observations

After filling out a template from above, upload the CSV below. Enter information to the right of the '||' column. The fields to the left of that column are for reference purposes.

CSV:

Browse...

No file selected.

To upload, browse to the appropriate file (saved with a file name you can use to find the file again, if need be), and click "Upload".

Upload

User Guide

19.6 System - Upload Historic Observation Data Template

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1												Kendra M Gur	Kendra M Gur	Kendra M Gur	Kendra M Gur	Kendra M Gur
2												5/22/2008	5/22/2008	5/6/2010	5/6/2010	11/22/2010
	Space				Tree ID						Removed		Height		Height	
3	Plot name	label	Row	Position	(internal)	Tree cross	Tree name	Planted on	Died on		on	II	Comments		Comments	
4	Valley Vie	R1T1	1	1	453	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.26		2.75	
5	Valley Vie	R1T2	1	2	320	TrTi-1 x open	VT_VV07-VT_\	10/10/2007	---	---			1.41		6.17	
6	Valley Vie	R1T3	1	3	454	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.23		3.33	
7	Valley Vie	R1T4	1	4	463	GR119 x A2155	VT_VV07-VT_\	10/10/2007	5/6/2010	6/7/2010			1.18			
8	Valley Vie	R1T4	1	4	493	VT-EX022 x open	VT_VV07-VT_\	6/7/2010	---	---						
9	Valley Vie	R1T5	1	5	474	NY001 x ZoWSA	VT_VV07-VT_\	10/10/2007	---	---			2.07		5.17	
10	Valley Vie	R1T6	1	6	400	ATK-069 x open	VT_VV07-VT_\	10/10/2007	---	---			0.66		2.5	
11	Valley Vie	R1T7	1	7	338	90005 x open	VT_VV07-VT_\	10/10/2007	---	---			1.38		4.5	
12	Valley Vie	R1T8	1	8	455	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.52		4.58	
13	Valley Vie	R1T9	1	9	387	VT-CC004 x AL50	VT_VV07-VT_\	10/10/2007	---	---			0.75		5.75	
14	Valley Vie	R1T10	1	10	456	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.59		3	
15	Valley Vie	R1T11	1	11	371	Lasdon x open	VT_VV07-VT_\	10/10/2007	---	---			0.85		4.83	
16	Valley Vie	R1T12	1	12	464	GR119 x A2155	VT_VV07-VT_\	10/10/2007	6/24/2009	6/7/2010			1.18			
17	Valley Vie	R1T12	1	12	476	VT-EX022 x VT-CC004	VT_VV07-VT_\	6/7/2010	11/22/2010	---						no sprout
18	Valley Vie	R1T13	1	13	321	TrTi-1 x open	VT_VV07-VT_\	10/10/2007	---	---			0.66		2.92	
19	Valley Vie	R1T14	1	14	372	Lasdon x open	VT_VV07-VT_\	10/10/2007	---	---			0.43		4.5	
20	Valley Vie	R1T15	1	15	457	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.36		1.5	
21	Valley Vie	R1T16	1	16	373	Lasdon x open	VT_VV07-VT_\	10/10/2007	---	---			0.49		2.17	
22	Valley Vie	R1T17	1	17	458	VT-BL003 x DV189	VT_VV07-VT_\	10/10/2007	---	---			0.72		3.42	
23	Valley Vie	R1T18	1	18	388	VT-CC004 x AL50	VT_VV07-VT_\	10/10/2007	5/22/2008	6/7/2010						
24	Valley Vie	R1T18	1	18	492	VT-EX022 x open	VT_VV07-VT_\	6/7/2010	11/22/2010	---						no sprout
25	Valley Vie	R1T19	1	19	374	Lasdon x open	VT_VV07-VT_\	10/10/2007	---	---			0.62		4.42	

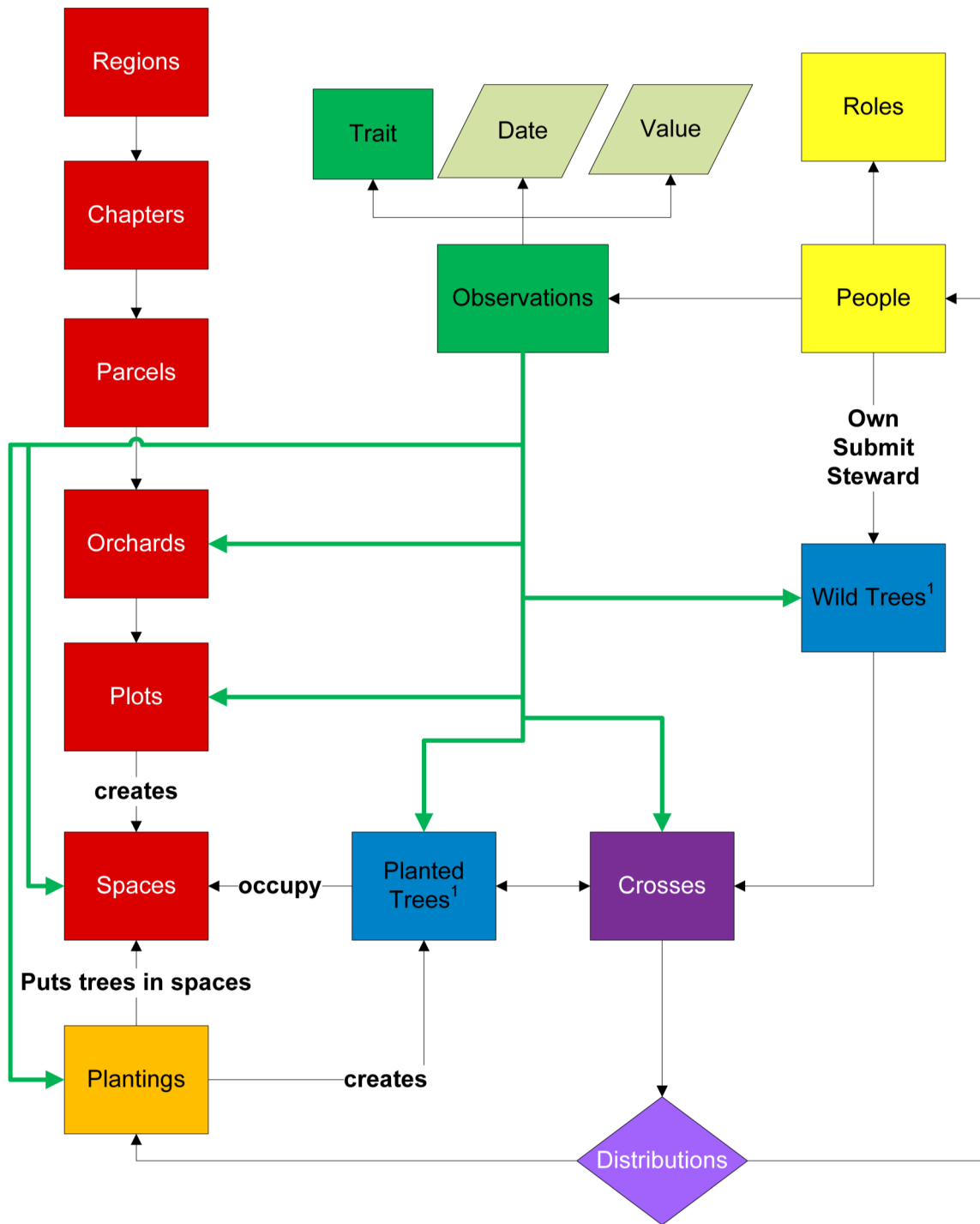
All data to the left of the "II" column comes pre-loaded from the system. In this example, DO NOT EDIT columns A - K.

Enter data for each trait in the appropriate date column. You may skip or delete columns that are not needed (all selected traits will be available for all dates). If you have any questions about using this template, contact your Regional Science Coordinator.

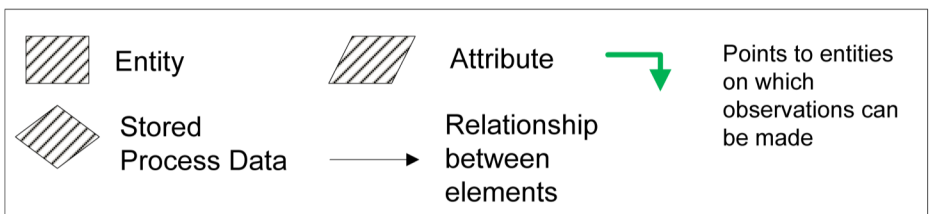
Save this data file with a file name that will make it easy to find, should it be needed for reference. For Example, "ValleyView_HistoricObservations_2007".

User Guide

Appendix A - Data Model Diagram



LEGEND



¹In the database, both planted and wild trees are handled in the same table. They are split here for ease of explaining the design and relationships to other entities.

User Guide

Appendix A - Description of the Data Model

The *dentata*Base is **hierarchical**, following to some degree the organization of TACF itself. The **hierarchy** is depicted graphically by the red boxes in Data Model Diagram, which depicts the major **entities** in the Database and their relationships. Starting from the top of the **hierarchy**, there are **Regions**, corresponding to our four Regional Science Coordinators. Chapters are located within **Regions**. Chapter **orchards** are located on Parcels of land (which can contain more than one **orchard**, but often don't). Usually there is only one **plot** within an **orchard**, but not always. For instance, seed orchards often contain multiple **plots**. Finally, **spaces** are locations within **plots**, into which trees are planted. There is one **space** per tree.

Usually, you will start out your experience by planting some trees. This is a multistep process. First, if they don't exist, Parcels, **orchards** and **plots** will need to be created, in that order. Additionally, if they don't exist, **crosses** from which nuts are obtained for **planting** will have to be created. Finally, an **orchard** with a **plot** can be planted to some trees who have **crosses**.

After you have successfully created a **planting**, you can attach **observations** to the trees. However, **observations** also can be made on an **orchard**, **plot**, **space** or **cross**. For instance, while we might **observe** whether or not hairs are present on the leaves of a tree, we also might **observe** that a **space** is located in swampy ground (or even an entire **plot** or **orchard**). We also might **observe** that we fertilized an **orchard** with 1000 pounds per acre of 20-6-6 as ammonium nitrate, diammonium phosphate and potash on May 15, 2006. Or the fertilization may have been restricted to only one **plot** or a **space** or two.

Observations (in green in the Data Model Diagram) consist of a **trait**, such as leaf hairiness, it's **value**, such as hairy, the date the **observation** was made and the person who made the **observation**.

People (in yellow) are a central part of TACF and of the database. Their ability to access various parts of the database are set by their **roles**. People make the **observations**, plant the trees, make the **crosses**, tend the trees, own the land on which **plantings** are made, etc. They have been a central part of the design and development of this database.

User Guide

Appendix B - Glossary of Terms

Breadcrumbs – Also called a “breadcrumb trail”, this is a tool that aids in **user** navigation of a website or on-line application. The “crumbs” help the **user** keep track of their location within the application and are displayed in our database in the white bar just below the red navigation header.

Bred Tree – A tree produced from either an uncontrolled or a controlled **cross** that has been planted.

Cascade – In the TACF *dentata*Base security model, a **role** may cascade for a given **entity**, meaning that the same **privileges** given to that **entity** will also apply to all lower **entities** as defined by the database **hierarchy**.

Chapter Status – The activity level of the chapter – Active, Inactive, Provisional or Contact. Active is for chapters currently in operation. Inactive is for chapters previously recognized by TACF but no longer operating. Provisional is for chapters designated as provisional by TACF. Contact is a place holder for **entities** participating in TACF plantings that cannot be considered chapters.

Classification (tree) – The species or other similar category, i.e. BC1, F1, etc., of a **wild tree** in the *dentata*-Base. The classification **entity** is used to categorize only **wild trees**, not **bred trees**. **Bred trees** are categorized by their **cross** type. Accepted **cross** type values TBD.

Cross - A set of progeny resulting from the crossing of two trees. A cross is identified by the two parents used to make it. The same cross can be made in more than one year; those are indexed separately and the database uses the combination of the two parents and year to differentiate each cross as unique. In the name of a cross, the mother (female flower) is listed first followed by the father (pollen) – female x male. In controlled crosses, the male parent is known, in uncontrolled crosses, the male parent is unknown and usually designated "OP" for "open pollination."

CSV – This stands for “comma-separated value” and is a file format that stores tabular data in plain-text form. This file type is the format by which bulk data are imported into or exported from the *dentata*-Base. There are several places where the Database will create and export a CSV file into which the **user** will enter data and then upload the file back into the database. Make sure when saving files for upload that they are saved in the .csv format. Otherwise, the database will not be able to process them.

Decimal Degrees (DD) –A format for recording the **latitude** and **longitude** of geographic coordinates as decimal fractions. This format is commonly used by web mapping applications such as Google Maps, and available on GPS devices. Decimal degrees are an alternative to using degrees, minutes, and seconds (DMS). For our locations in North American, positive **latitudes** and negative **longitudes** should be used for proper mapping. **Latitude** and **longitude** are usually expressed in that sequence, **latitude** before **longitude**, which is how they are displayed in the *dentata*Base.

User Guide

Appendix B - Glossary of Terms (continued)

Detailed map table – This table shows all trees planted in an **Orchard, Plot** or **Planting**, along with the option to display attribute and observation data of interest. The detailed map table is designed to show data associated with **plot spaces** and the trees that occupy those **spaces**.

Dead – A tree may be marked dead any time it is observed as such. Chestnut trees commonly re-sprout so it is possible to change the **observation** to “alive” at any time as well. To mark a tree dead and re-use the planting **space**, it must be marked dead and removed. Only do this when the tree is truly gone from the **space**. Resurrecting a tree once it has been removed is not something even System Administrators currently have the ability to do.

Entity – In data modeling, an object about which the **user** needs to track data that can be classified and that has stated relationships to other entities. Examples of entities in our database are Parcel, People, **Roles**, Trees, etc., etc. *See data model in Appendix A for an example of how our entities relate to one another.*

GPA/MOU Status – Indication of whether a Germplasm Agreement (GPA) or Memorandum of Understanding (MOU) is on-file for a Parcel or landowner. Use “None”, “On-file” for a signed GPA and “MOU” if an MOU exists for the Parcel.

Hierarchy – Certain elements of the *dentata*Base follow a ranked arrangement. This allows for **permissions** and other elements to **cascade** and/or be dependent on higher ranked items. For example, our **planting** hierarchy is ranked based on geographic size, in order from largest to smallest: Region -> Chapter -> Parcel -> Orchard -> Plot -> Planting -> Space. *For a visual representation of this hierarchy, please see the data model in Appendix A.*

Hyperlink – Hyperlinks are imbedded links that aid in the navigation of the *dentata*Base. Any available hyperlinks are displayed as underlined blue text.

Latitude (Lat) – The geographic coordinate that defines the north-south position of a point on the Earth’s surface. Please enter Latitude in **decimal degrees (DD)**, the format offered by Google Maps and most GPS devices.

Line – Meadowview line codes are named for the American parents of various B2s made from **crosses** with 'Graves,' 'Clapper' or other sources of blight resistance. Genetic diversity is increased when each chapter makes **crosses** of Meadowview lines onto local American chestnut trees.

Longitude (Long) - The geographic coordinate that defines the east-west position of a point on the Earth’s surface. Please enter Longitude in **decimal degrees (DD)**, the format offered by Google Maps and most GPS devices. (Note: longitude should be a negative number for North American locations).

User Guide

Appendix B - Glossary of Terms (continued)

Nonexistent – This **space status** refers to any **space** within a **plot** map that does not actually exist as part of the planting area on the ground. In contrast, an **unplantable** space is one that might become available for planting someday. Because the *dentata*Base only accepts rectangular **plots**, nonexistent spaces are part of the rectangular **plot** grid but not part of the **plot** in reality. For instance, a rectangular **plot** might spill over onto a neighbor's property; any such spaces in that **plot** would be designated as nonexistent. Nonexistent spaces are displayed with an “n” and grey color in the **plot** map.

Observation – An observation can be made on several **entities** in the database. When assigning a **trait**, one notes the **entity** or **entities** to which the **trait** applies. A single observation is made unique by the combination of the **trait** of interest, the **value** of the observation for that **trait**, the date on which the observation was taken and the **entity**. This allows multiple observations for the same **trait** on an **entity** to be taken at different times. For instance, the height of a tree might be measured in two separate years.

Orchard – An orchard is an intentional **planting** of chestnut trees with a common management or experimental objective that is contained within a contiguous area. There can be multiple orchards within one parcel. Orchards may have multiple **plantings** over several years, but must meet the above definition.

Owner – The person on whose land a **wild tree** is growing or the owner of a **parcel** on which an **orchard** is located. That person must be entered into the *People* tab of the system to be selected, but they do not have to have an account established. The owner may or may not be the same as the **submitter** and/or **steward**.

Pedigree – Refers to all of the parents used in any **cross**' lineage.

Permissions/Privileges – The type of access a **user** has to the *dentata*Base. A **user** may be assigned either **read** or **write access** to one or more **entities** in the Database based on their given **role**.

Plantable – This **space status** refers to any space within a **plot** that could have a tree planted in it. Plantable spaces are displayed with a lower case “p” and light green color in the **Plot** map. Plantable spaces occupied by a live tree are displayed with an upper case “T” in a dark green color, while plantable spaces occupied by a dead tree are displayed with a lower case “d” and a gold color. If the dead tree is removed, the space reverts to the plantable status.

Planting – A planting is the intersection between spaces, trees and time. Plantings are used so that replants and multi-year establishment can be properly tracked.

User Guide

Appendix B - Glossary of Terms (continued)

Planting Stage – As a **planting** is designed and implemented it goes through several stages. “New” has been created, “Designed” is saved but not yet ready to execute, “Committed” is executed but may still be rolled back and “Cemented” is a “Committed” **planting** that has **observations** associated with the trees. A “Cemented” **planting** may not be rolled back.

Planting Type – Classification of the type of **planting**. Please only use one of these options (this eventually will be a drop-down selection) and if you have questions contact your Regional Science Coordinator.

- Breeding Orchard
- Seed Orchard
- Ceremonial
- Demonstration
- Site Test
- American
- Transgenic
- CMS
- Progeny Test – inoc
- Progeny Test
- Restoration Planting
- Phytophthora Test
- Silviculture Test
- Research

Plot – A plot is the physical layout of the spaces you will plant. The *dentata*Base only accommodates plots laid-out on a grid. There are several options for customization that should be able to accommodate any layout desired. For many TACF breeding and American germplasm conservation **orchards**, there will be a 1:1:1 relationship between Parcel, **Orchard** and Plot. In contrast, seed **orchards** are partitioned into multiple plots, usually with one plot per breeding **line**.

Plot Map – The plot map shows the layout, **space label** and **space status** of all **spaces** in a **plot**. For additional data associated with the **plot spaces** or trees occupying those **spaces** use the **detailed map table**.

Production Server – This is the server/website on which the *dentata*Base resides with TACF’s real data. Once a **user** has practiced on the **testing server** and feels comfortable with how data are entered and structured in the *dentata*Base, they will be given an account on the production server. Generally, **permissions** for the production server will be reduced from those for the **testing server** to only those **entities** to which the **user** needs access. The current address of the production server is: <http://acf.herokuapp.com>

User Guide

Appendix B - Glossary of Terms (continued)

Read access – **Users** of the *dentata*Base may have read or **write privileges** for one or more **entities**. Read access only gives a **user** the capacity to see the data for that **entity**. **Users** cannot edit, or **write** to, **entities** for which they have only read **privileges** assigned.

Region – The highest level of geographical classification, the Region includes the states or Chapters that are served by a Regional Science Coordinator (RSC). Meadowview is also classified as its own Region (and Chapter). In most cases, **users** will only have access to the Region their chapter belongs to.

In addition, an “At-large” Region exists to associate any data that cannot be verified as belonging to a specific Region. The most common use of the “At-large” Region is for trees that have no record of origin. The “At-large” Region should be used sparingly.

Role – In the *dentata*Base, a role defines the access **privileges** a **user** has to the system. Currently, roles may be assigned for one or more of the following **entities**: System, **Regions**, Chapters, Parcels and **Orchards**. Additional **entities** may be assigned in the future. Given the **hierarchy** of the *dentata*Base, roles may also **cascade**, meaning that the same **privileges** of a given **entity** will also apply to all lower **entities**. The choice of whether or not to **cascade** a role is optional. If you have access, you can find out more about a given role in the system by clicking on the *Roles* tab and exploring from there.

In addition to being assigned to a given **entity**, a role also defines whether a **user** will have read or write capabilities for that **entity**. Only **users** with System Administrative **privileges** may create roles and assign **users** to those roles. **Users** who would like additional **privileges** should make such a request to their local Regional Science Coordinator.

Security model – A database security model defines the level of access a **user** of the *dentata*Base has to the system. **Users** may have access to one or more **entities** and may have either read or write access to those **entities**. In order to access the *dentata*Base, all **users** must be invited by a System Administrator and subsequently create an account. In the future, the system may allow a person to create their own **user** account without being invited.

Seedlot – Used to identify a **cross** made in a given year (must be unique). Various schemes can be used to name seedlots. One common one is: Chapter abbreviation + **cross** type code + year **cross** was made + assigned number for each **cross** made in a particular year (i.e. KYB30602 = a KY chapter B3, made in 2006, seedlot #2 out of six **crosses** made in 2006 for KY).

User Guide

Appendix B - Glossary of Terms (continued)

Shortcode (Tree) – Tree Shortcode is used to identify a tree (wild or planted). It must be unique by Chapter and should follow any naming convention specific to the Chapter. Often there will be a different convention for **orchard** trees and **wild trees**. For **orchard** trees, the shortcode is often the **orchard shortcode** plus the **space label** where the tree is planted. Some chapters insert a hyphen between the **orchard shortcode** and the **space label**. For **wild trees**, the shortcode is commonly a 2-letter state abbreviation, followed by a hyphen, and then a short location abbreviation and a 3-digit sequential number.

Shortcode (**Orchard**) – **Orchard** Shortcode must be unique by Chapter and should follow any naming convention specific to the Chapter. Commonly, this will be the 2-letter state abbreviation, followed by a hyphen and then a short site abbreviation and the two-digit year of initial planting. For example, “VT-SC13” = Vermont, Lake St. Catherine, established 2013. If you have questions, please contact your Regional Science Coordinator.

Shortcode (**Plot**) – **Plot** Shortcode must be unique by Chapter and should follow any naming convention specific to the Chapter. If you have questions, please contact your Regional Science Coordinator.

In cases where the **orchard** has only one **plot**, this may be the same as the **orchard shortcode** (see above). For a seed **orchard**, one suggestion is to use a 2 letter abbreviation for the site (and the block number if there is more than one on the site), followed by a hyphen and the **plot** number. For example, “BR1-2” = Bunker Road Preserve, Block1, Plot 2.

Sort caret – A caret, or small inverted V-shaped symbol, is shown in the column header of any tables with sorting capability. It will point “up” when the list is in A-Z order and “down” when the list is in Z-A order.

Space – A space is the physical place within a **plot** that a planted tree may occupy. The *dentata*Base only accommodates plots laid-out on a grid; however there are several options for customization of **space statuses** that should be able to accommodate any real-world layout desired. Spaces can be identified by **space labels**.

Space label – A space label uniquely identifies a space within a **plot**, but not between **plots**. Space labels can be sequential numbers or combinations of alphanumeric characters of the **user's** choice.

Space Status – All spaces within a plot are assigned a status of **plantable**, **unplantable** and **nonexistent**. Space status is assigned at the time of **plot** creation and best viewed in the **plot map**.

Steward – The person who is in charge of monitoring the health, flowering status, etc. of a **wild tree** or **orchard**. That person must be entered into the *People* tab of the system to be selected, but they do not have to have an account established. The steward may or may not be the same as the **submitter** and/or **owner**.

User Guide

Appendix B - Glossary of Terms (continued)

- Submitted by – The person who submitted a tree for recording to TACF. That person must be entered into the *People* tab of the system to be selected, but they do not have to have an account established. The submitter may or may not be the same as the **steward** and/or **owner**.
- Testing Server – Also called the staging server, this is where **users** and programmers try out new functionality. It also offers system **users** a place to practice and test all elements of the *dentata*Base. The testing server holds a mixture of both real and fake data. **Users** should not take pains to ensure accuracy of data entered into the server, but rather use the testing server as an opportunity to ensure they understand how all elements of the system work. In general, **users** will be given higher **privileges** in the testing server than in the **production server**. The current address of the testing server is: <http://dentatabase-staging.herokuapp.com>
- Text-only values – All data entry fields in the *dentata*Base will accept any text characters (alphabetic or numeral). There are no controls on these entries and they will be saved exactly as they are entered. For example, a height of “B26 #Santa” or a **cross shortcode** of “I don’t know” would be accepted by the system. We hope to provide finer control over the content of data fields in future versions for the *dentata*Base.
- Trait – A trait is a characteristic of an **entity** in the *dentata*Base about which, on a given date, we gather some **value** to create an observation. Traits may be assigned to the following **entities**: **Orchards, Plots, Plantings, Spaces, Crosses**, and Trees. In future phases, additional **entities** such as People will be allowed to have traits.
- While working in the *dentata*Base, click on the *Traits* tab to discover what traits are available and assigned for a given **entity**. To find out how the trait should be used, and what **values** should be assigned to the trait, click on the **hyperlink** for that trait.
- Only **users** with System Administrative **privileges** may add new traits. A **user** without System Administrative **privileges** may request that a new trait be added by contacting a TACF Science Staff member, preferably their local Regional Science Coordinator.
- Unplantable - This **space status** refers to any space within a **plot** that could not have a tree planted in it. Unplantable spaces are within the real-world confines of the **plot** space but can not be planted for one reason or another (obstruction like a rock or ledge, wet spot, etc.). If the rock were removed, for instance, an unplantable space might be rendered **plantable**, unlike a **nonexistent** space. Unplantable spaces are displayed with a “u” and pink color in the **plot** map.
- User – The term applied to a person with an account in the system. Anyone wishing to access the *dentata*Base must be invited and subsequently create a password-protected user account.

User Guide

Appendix B - Glossary of Terms (continued)

Value – One of three elements that create a unique observation. Currently, all values **are TEXT ONLY**. This means that, for example, you can enter a value of “Santa Claus” as the height of a tree. We are working very hard to raise funds for developing better controls on these values, but it will take until at least mid-2014, if not longer, before these controls are in place. Please take special care to ensure your data are correct before uploading into the system.

Wild Tree – A wild tree is defined as any tree for which we do not have previous **crossing** information. The tree may have actually been planted, but we do not have the information regarding the **planting** and choose instead to treat it as an individual, non-planted tree. All species of chestnut can be handled under wild trees, not just American chestnuts.

Write access – **Users** of the *dentata*Base may have **read** or write **privileges** for one or more **entities**. Write access gives a **user** the capacity to both see and edit **entities** for which they have been assigned write **privileges**.