# **Standard Operating Procedure (SOP): Nature's Notebook**

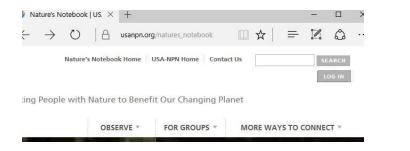
Created by: Elizabeth Orcutt Last updated: April 04, 2018

#### Table of Contents:

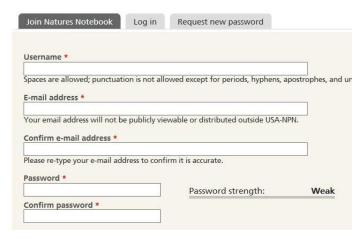
Creating an Account	1-2
Joining/Adding a Site	2-3
Creating a Site	3-4
Adding a Plant	4-5
Datasheets	5-6
Printing Datasheets for Individual Plant	5-6
Printing Individual Plant Information Sheet	6
Printing Datasheets for all Plants and all Information Sheets	6
Online Data Entry	7-8
Downloading Data	8
Downloading App	9
Using App	10
Creating a Walk	10-12
Example of Species-by-Species Datasheet	13
Example of Day-by-Day Datasheet	13

# Creating an Account: \*you will need an account to add data

- 1. Go to Nature's Notebook website (<a href="https://www.usanpn.org/natures">https://www.usanpn.org/natures</a> notebook)
- 2. On top right of page click Log In



- 3. In the center of page click on Join Nature's Notebook
- 4. Fill in the required information



- 5. In the Partner Groups section select:
  - a. Find Schoodic Phenology Trail and check the box
    - RMSSN Academy
    - SABCC
    - Schoodic Phenology Trail
    - SciStarter
    - Seeley Lake RD
- 6. Read/agree with terms of use, fill out verification code, and hit create a new account

Joining/Adding a Site: \*A site is for when there are many people that want to make observations at the same locations on the same plants. In order to add observations to the SERC Pheno Trail you must the join/add the site to your account

There are three ways to add a site to your account:

- 1. Adding it while creating an account (see Creating an Account step 5)
- 2. You can add a site by creating a new one (See Creating a Site)
- 3. Adding an already created site after you have created an account:
  - a. Login into your account
  - b. Click on My Observation Deck
  - c. Scroll part way down page to the My Account Box and Click on My Account Details



- d. Click on the Edit tab in the middle of the page
- e. Scroll down to Partner Groups and look through the list until you find Schoodic Phenology Trail and select it
  - EMSSN Academy
     SABCC
     Schoodic Phenology Trail
     SciStarter
     Seeley Lake RD
- f. Scroll to bottom of page and hit save

### Creating a Site: \*\*There is already one created for the Schoodic Phenology Trail Sites

In order to be able to collect data on plants you need to make a site and then add the plants you want to collect data on to that site: This is done on the website.

- 1. Login into your account
- 2. On the top right of webpage click on My Observation Deck button



3. Scroll to Bottom of page (there will be a row of boxes) the first one is Sites click on the drop arrow in the top of the box:



- a. In the drop down menu you should see SERC Pheno Trail and My Sites:
  - i. If you want to add a new site (not related to the Pheno Trail) you would:
    - 1. Click on My Sites in the drop down
    - 2. Go to the bottom of the box and click on: Add a new Personal Site
    - 3. Fill in the Add a new Site information:
      - a. Site name, address, city, state, zipcode, enter the location or find it on the map.
      - Also fill in what you can of the Optional Additional Information, making sure to look at all three tabs: Overall, Plants, Animals
    - 4. Click on Create Site at bottom of page
    - 5. The site will now appear in the site box under My Sites.
  - ii. If you want to add another Pheno Trail at your location:\* need administrative access
    - 1. Click on SERC Pheno Trail in the drop down
    - 2. Go to the bottom of the box and click on: Add a new SERC Pheno Trail Site
    - 3. Fill in the Add a new Site information:
      - a. Site name, Address, City, State, zipcode, enter the location or find it on the map.
      - Also fill in what you can of the Optional Additional
         Information, making sure to look at all three tabs: Overall,
         Plants, Animals
    - 4. Click on Create Site at bottom of page

### Adding a Plant: \*All plants have been added but if you want to add more

- 1. Login into your account
- 2. Click on My Observation Deck
- 3. Scroll down to middle of page where the line of boxes is located
- 4. In the sites box click on drop down and select the site you want to add a plant to

5. In the My Plants & Animals box Click on Add or Edit Plants



- 6. Fill out the information:
  - a. Select site where plant/animal is located, type in plant species, give plant unique nickname (ex. Winterberry-2), select shade status, if it's wild, watered or fertilized. Fill in everything that pertains or that you can.
- 7. Click save this plant
- 8. If you want to add a second scroll back to the top and click on add new plant and then repeat steps 6-7



Datasheets: \* If you do not have access to an app on a smartphone or ipad they have paper datasheets that you can use.

Printing datasheet for individual Plant: \*recommended if going out multiple days to observe the same plant.

- 1. Login into your Account
- 2. Click on My Observation Deck
- 3. Scroll down to middle of page where line of boxes is located
- 4. In the sites box select SERC Pheno Trail and Sundew
- 5. In the My Plants & Animals box click on the plant you need a datasheet for
- 6. In the Details for this Organism click on Print Field Datasheet.
- 7. Save datasheet to desktop and then print.

Note: The way these datasheets are structured are for one sheet per individual plant, with the multiple columns representing different days. However, if your group is just going out to do the observation on one day, you can use one datasheet for all 4 plants by putting one plant in each column with the unique plant name at the top of the column or you can use the Day-to-Day Datasheet (see Printing Datasheets for all Plants)

#### Printing Individual Plant Information Sheet:

- 1. Login into your Account
- 2. Click on My Observation Deck
- 3. Scroll down to middle of page where line of boxes in located
- 4. In the Sites box select SERC Pheno Trail and Sundew
- 5. In the My Plants & Animal box click on the plant you need the info sheet for
- 6. In the Details for this Organism click on Print Phenophase Definition Sheet
- 7. Save Information sheet to desktop and then print

#### Printing Datasheets for all Plants and Information Sheets:

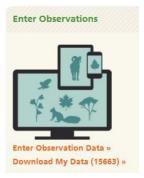
\*There is a way to print one of each datasheet and/or the information sheets all at once:

- 1. Login into your Account
- 2. Click on My Observation Deck
- 3. Scroll down to middle of page where line of boxes is located
- 4. In the sites box select SERC Pheno Trail and Sundew
- 5. In the My Plants & Animals box click on Print Field Datasheets
- 6. In the box that pops up click on the boxes of the sheets you want to print:
  - a. Put a check next to Species-by-Species for datasheets for single plant sheet
  - b. Put a check next to Day-by-Day\* for all 4 plants on 1 sheet
     \*Recommended if going out only once per group to observe plants
  - c. Put a check next to Create Phenophase Definition Sheet for information sheets
- 7. When you have the sheets you want selected click on Create Datasheets
- 8. Save the pdf to your desktop and print

<sup>\*</sup>Examples of each type of datasheet are at end of SOP

### Online Data Entry:

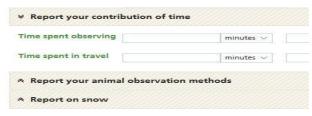
- 1. Login into your Account
- 2. Click on My Observation Deck
- 3. Scroll to middle of page where line of boxes is located
- 4. In the Sites box select SERC Pheno Trail and Sundew
- 5. In the Plants & Animals box select the first plant in the list (when the next page opens all the plants will be listed on the sheet)
- 6. In the Enter Observation box click on enter observation data



7. Once the Enter Observation page opens make sure the drop down box for site says correct location



- 8. Click on the Date/Time (see above photo)
  - a. For the Date: click on the calendar icon and select the correct date
  - b. For the Time: click on the clock and select the time\*
    - \*The time is by 1 hour intervals only and all plants are given the same time
- 9. The next three sections: Report your contribution of time, Report your animal observation methods, and Report on snow are optional but reporting your time is highly suggested.



10. Find the plant you want to enter data for and enter the data

a. If you cannot see the boxes to enter data click on the drop down arrow in front of plant name)



- 11. Repeat Step 10 for the rest of the plants you need to enter
  - a. You can collapse the plant you just entered by clicking on drop down arrow in front of plant name making it easier to find your next plant
- 12. When all the data is entered scroll to bottom of page
  - a. If all your data has been entered click Submit Observations on the left side, once clicked it will take you back to your observation deck
  - b. If you have a lot of data you are entering you can scroll to bottom and click on the Enter More Data button on the right. This will save what you have entered so far but keep you on the data entry page so you can continue entering the rest of your data.
  - c. Once the data has been entered for the entire datasheet write "Entered" with the initials of the person who entered it and the date it was entered on the paper datasheet.

# Downloading Data:

- 1. Login into your Account
- 2. Click on My Observation Deck
- 3. Scroll to middle of page where line of boxes is located
- 4. Go to the Enter Observations Box (last one) and click on Download my Data
- 5. Click Save as and save file to desktop

### Downloading App:

- 1. Open internet on your device (iphone, ipad, android etc.)
- 2. Go to <a href="https://www.usanpn.org/nn/mobile-apps">https://www.usanpn.org/nn/mobile-apps</a> or google search for nature's notebook app and click on first link (Nature's Notebook Mobile Apps/ USA National Phenology Network
  - a. If you scroll to the bottom of the website there is a link

    (<a href="https://www.usanpn.org/mobile-app-tip-sheets">https://www.usanpn.org/mobile-app-tip-sheets</a>) for in-depth step by step sheets for set up and submitting observations from mobile devices

#### 3. Download:

- a. Iphone: download from iTunes
  - i. https://itunes.apple.com/us/app/natures-notebook/id508465801?ls=1&mt= 8



- b. Android: download from Google Play Store
  - i. https://play.google.com/store/apps/details?id=org.usanpn.android.naturesn otebook

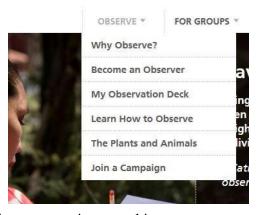


#### Using App:

- 1. Open the App on your device
  - a. If it's the first time opening the app you will have to sign into your account. You only have to sign in once and then it will keep you logged in.
- 2. You will be brought to a home screen (if you are signed in)
- 3. In the Choose a network drop down list select SERC Pheno Trail
- 4. In the Choose a site drop down list select site
- 5. Walk the trail until you find your first tagged plant and then at the bottom of the screen click on Add plant observation
- 6. In the select a plant drop down select the plant name that you are at
- 7. Click on the Date box:
  - a. Make sure the date and time is correct
  - b. Hit ok
- 8. Scroll to the Do you see?....section and observe the plant
  - a. Look of the first yes or no question (Breaking Leaf Buds)
  - b. Click on the blue exclamation (!) button to read what the question is asking for
  - c. Click the Y (yes), N (no) or ? (don't know) to answer the question
    - i. If the answer is Y a box will pop up: select the category or percentage range that you determine fits the plant and the box will disappear
  - d. Once all of the questions are answer scroll to bottom of your screen and click the submit observation button
- 9. Continue walking the trail stopping at the tagged plants and repeating steps 6-8
- 10. Once all plants are done close the app
  - a. The app will work without using data or wifi. It will sync to the online website once you have wifi again. Double check online to make sure that it is syncing correctly.

# Creating Walk (physical walk):

- 1. Determine the location (road, path, trail etc.) of your walk
- 2. Create the new site in Nature's Notebook (see Creating a Site)
- 3. Create a list of species that you want to collect data on
  - a. The Nature's Notebook has a list of all the plants they have to collect data on
    - i. Login into your account
    - ii. Click on the Observe drop down menu on the top of the home page and click the Plants and Animals page (second from the bottom)



- iii. Type in the plant you are interested in:
  - 1. If it is one of the species on Nature's Notebook it will show up under the search boxes
  - 2. If it is not one of Nature's Notebook species it will say We are sorry there are no species matching your search criteria at this time
    - a. If they plant you want is not one of Nature's Notebook you have to contact them and request it, they will review the plant and decide if it meets their criteria.



- 4. Walk the road/path/trail/etc. Selected looking for your target species (determined in step 2) that do not require leaving the trail to find/observe.
  - a. When you find an individual of one of your species:
    - i. Mark it with unique plant name (ex. Sundew Pheno Trail Winterberry 1)
    - ii. Get the GPS location of each individual so the location can always be found
    - iii. Record the information that is needed (if applicable) when adding the plant into your site on Nature's Notebook (species, nickname, patch, shade status, wild, watered, fertilized, gender, planting data, plant image)

- 5. Once all your plants are tagged add them to your Nature's Notebook Site (See Adding a Plant)
- 6. Once all plants have been added start collecting data
  - a. Can use datasheets (See Datasheets and Data Entry)
  - b. Can use Nature's Notebook App (See Downloading app and Using App)

# Species-by-Species Datasheet:

### Trees and Shrubs Deciduous

Directions: Fill in the date and time in the top rows and circle the appropriate letter in the column below.

y (phenophase is occurring); n (phenophase is not occurring); ? (not certain if the phenophase is occurring).

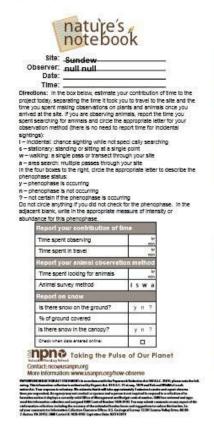
Do not circle anything if you did not check for the phenophase. In the adjacent blank, write in the appropriate measure of intr



Species: Sorbus americana
mon Name: American mountain ash
Nickname: American mountain ash-4
Site: Sundew
Year: 2016
Observer: pull null

	Date:							
Do you see	Time:							
Breaking leaf buds	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?_
Leaves	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?_
ncreasing leaf size	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Colored leaves	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Falling leaves	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Flowers or flower buds	уп?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Open flowers	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Fruits	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?_
Ripe fruits	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Recent fruit or seed drop	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ? _
Check when data entered online:								

# Day-by-Day Datasheet:



Do you see?	Check when data ordered online.
Breaking leaf buds	yn?_
Lauves	y n ?
ncreasing last was	y n ?
Colored leaves	y n ?
Talling leaves	y n ?
Flowers or Nower buds	y n ?
Open Rowers	y n ?
ruite	y n ?
Ripa truite	y n ?
tecent fruit or seed drop	y n ?
	y n ?
ommon Name: AM liokname: Americar	erican mountain 1 mountain ash-5
ommon Name: AM lokname: AMericar	ericana erican mountain n mountain ash-5 Check when data antared colons
ommon Name: AM liokname: AMERICAR o you see?	ericana erican mountain n mountain ash-5 Chack when data antend colons
common Name:AM llokname: Americar to you see? Breaking leaf buds	ericana erican mountain n mountain ash-5 Check when data a stand contex y n ?
common Name:AM lickname: AMericar to you see? treaking leaf buds	ericana erican mountain n mountain ash-s Check when take antered online y n ? y n ?
peoles: Sorbus ams common Name: AM lickname: American Ocyou see? Breaking loof buds 	ericana mountain and na mounta
common Name: AM lickname: AMericari lo you see? Preaking leaf buds serves serves serves serves serves serves serves serves serves serves serves serves serves serves serves	ericana erican mountain n mountain ash-s Check when take antered online y n ? y n ?
ommon Name: _Americal lo you see?  Ireaking loaf buds  serves  consecuting behale  done leaves  alteg boves	ericana mountain and a mountain a mountain and a mountain a m
common Name: _AMPICASI Co you see? Ireaking leaf buds serve consessing buf sick Colored serve altag bases altag bases	ericana mountain and a mountain and a mountain and a set was referenced by n ?  y n ?  y n ?  y n ?  y n ?
ommon Name: AMPICAL lo you see? Ireaking leaf buds serve consessing leaf sics colored wasse alting leave. lowers or flower buds pen flowers	y n ? y n ? y n ? y n ? y n ? y n ? y n ?
common Name: _AM lickname: Americar oo you see? Breaking leaf buds 	arlicana erican mountain mountain ash-5 Check when data y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ?
common Name: _AMPICASI Co you see ?  Breaking leaf buds	y n ? y n ? y n ? y n ? y n ? y n ? y n ?
common Name: _AMPICASI lockname: _AMPICASI lockname: AmPICASI lockname	arlicana erican mountain mountain ash-5 Coses when data y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ?

Niokname: American Do you see?	Check when date entered online:
Breaking leaf buds	yn?
. aurwa	yn?
ricressing feet side	y n ?
olored leaves	y n ?
alling leaves.	y n ?
lowers or flower bads	y n ?
Open flowers	y n ?
rutu	y n ?
Spe fruits.	y n ?
becent trust or swed drop	y n ?
	y n ?
ommon Name: Am	erican mountain
ommon Name: <u>AM</u> lokname: American	ericana erican mountain
ommon Name: <u>AM</u> lokname: AMERICAR o you see?	ericana erican mountain mountain ash-1
ommon Name: <u>AM</u> lokname: AMERICAR o you see? reaking leaf buds	ericana erican mountain mountain ash-1 Check when data entered online:
ommon Name: AM lokname: AMerican o you see? reaking leaf buds	ericana erican mountain mountain ash-1 Check when data entered online.
ommon Name: AM lokname: American o you see? reaking leaf buds.	oricana erican mountain mountain aeh-1 Check when chek antared on look y n ?
peoles: Sorbus ame ommon Name: Am Merican to you see? treaking leaf buds servia treaking leaf buse storas (servia storas (servia storas (servia storas (servia	oricana erican mountain i mountain ash-1i Cheek when data entered online  y n ?  y n ?  y n ?
ommon Name: _American to you see? reaking leaf buds serves covered leaf buds covered leaf buds covered leaf buds	ricana erican mountain mountain ash-li Crace when cata entend critical y n ? y n ? y n ? y n ?
ommon Name: AMPTCST to you see? reaking leaf buds server creasing leaf size stored harves	y n ? y n ? y n ?
ommon Name: Ani lokanes: American o you see? reaking leaf buds saves creasing leaf size closed heres sting leaves.	y n ? y n ? y n ? y n ? y n ?
ommon Name: Amilian o you see? reaking leaf buds seves covered heres still part of the seves stressing leaf asse stores flowers buds pan Storens	ricana erican mountain mountain ash-li Chee when data y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ?
ommon Name: AMPICSF lokname: AMPICSF lokname: APPICSF lok	ricana erican mountain mountain ash-li Chase when cata y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ?
ommon Name: Amilian to you see? reaking leaf buds serves coverage leaf size stored ferves stilling leaf size stored ferves pass forest ferves pass forest ferves pass forest pass forest	ricana erican mountain mountain ash-ti mountain ash-ti conservan asta y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ? y n ?