

ANNUAL OBSERVATIONS

Understanding How to Collect Annual Observations
for the Grazewell Program

This manual was created by to be used by Grazewell members for accessing applications
under the Northway Ranch Services Organization.

March 2024



GRAZEWELL



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Instruction Manual for Annual Observations

Overview

Annual Observations are a requirement of the Grazewell program. This manual provides a background on how this information will be collected for members as well as instructions for device setup prior to going into the field to collect annual observations. The manual will also provide instructions on how to access and complete the Annual Observation form.

Introduction and Purpose

Annual observations will be documented at the Management Learning Locations (MLLs) that were identified on the ranch during the initial visit with the Technical Service Provider (TSP) during the onboarding process. The information that is being documented is meant to understand how the location/pasture is being managed from a grazing standpoint. Information will be collected such as use type (grazed, hayed, rested), use dates as well as visual observations.

The information needed for Annual Observations will be recorded using two Esri applications that will help store and manage the data in a program database (Field Maps & Survey123).

Introduction to Field Maps



Field Maps is an Esri application that is meant to be utilized in the field using handheld devices such as smartphones or tablets. The app provides locations and information of GIS features such as the MLLs for the program to be displayed and interacted with on the handheld devices.

Field Map uses the internal (or external if necessary) GPS of your smartphone or tablet to display the current location of the user in the form of a [Blue](#) dot. This allows the user to reference their current locations with any GIS feature's locations. This is useful for Grazewell members to be able to walk-up to each of their MLLs to complete an annual observation.

Interacting with GIS features such as the MLLs is easy by clicking the feature within the map view. This will bring up a 'pop-up' with information associated with that feature. This can include important attribute information, photographs, and in the case of MLLs, hyperlinks to the annual observation survey.



Introduction to Survey123



Survey123 is another Esri application that helps formulate field forms into simpler and easily understood surveys. The application can be utilized both on handheld devices as well as desktops and web browsers. Users are asked to populate the form by typing or selecting answers to questions. In some instances, questions may require the user to attach a photograph be either capturing using the devices camera or uploading from the device's storage.

The data entry survey can be customized to collect the necessary information with cascading questions being only made available upon how prior questions in the survey were answered. An example of this would be the data entry questions in the annual observation form pertaining to grazing are only available to the user if the use type for a specific MLL was identified as 'grazed'.

Once the form has been completed the user submits the survey using the check mark in the bottom right of the form. If there were any *** required** entries to questions that were missed the application will identify these questions as needing information added before submitting is allowed. After submitting the data is automatically added to the database to be stored and utilized in the Grazewell program.





Initial Setup

Overview

Annual Observations will need to be collected on a handheld device such as a smartphone or tablet. The applications used (Field Maps & Survey123) can be accessed and downloaded to either Android or Apple/IOS devices. Setup instructions for using an android or Apple/IOS device are provided below.

Android Users

Find the Google Play/Play Store application on your phone.



Within the Google Play application, search for the following applications and install onto your phone or tablet:



ArcGIS Field Maps
Esri



ArcGIS Survey123
Esri

Apple/IOS Users

Find the Google Play/Play Store application on your phone or tablet:



App Store

Within the App Store application, search for the following applications and install onto your device:



ArcGIS Field Maps 4+
ESRI
Designed for iPad
★★★★★ 2.8 • 102 Ratings
Free



ArcGIS Survey123 4+
ESRI
Designed for iPad
★★★★★ 2.8 • 100 Ratings
Free



First Time Access

Your first time accessing these applications will require signing in. Your sign in information with username and password is in your ShareFile Folder with Northway Ranch Services. Access to this folder may have been provided via email from tim@northwayrs.com on July 31, 2023, or arielle@northwayrs.com on January 16, 2024. Within the folder is a document titled *Hub Login and Access – Ranch Name*. Be sure to complete login information for both applications prior to arriving at any site to ensure access and seamless use.

IMPORTANT Login information is for the purpose operational needs. Sharing this information is a violation of the service agreement we have with our service provider (Esri). Please do not share this information with anyone outside of immediate operational personnel.



Accessing and Using the Annual Observation Survey

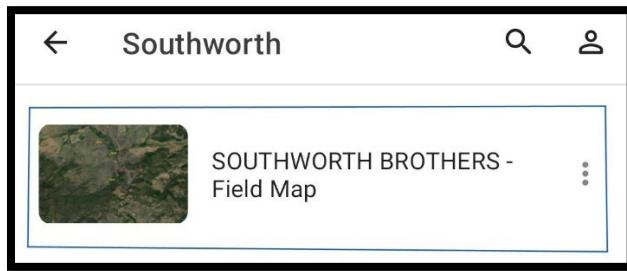
Accessing the Annual Observation Survey – Field Maps

The Annual Observation Survey is accessible through the Field Maps application. Each Management Learning Locations (MLL) contains a hyperlink to the survey in the pop-up that is displayed when selected in the map display. See the step-by-step instructions below to access the survey.

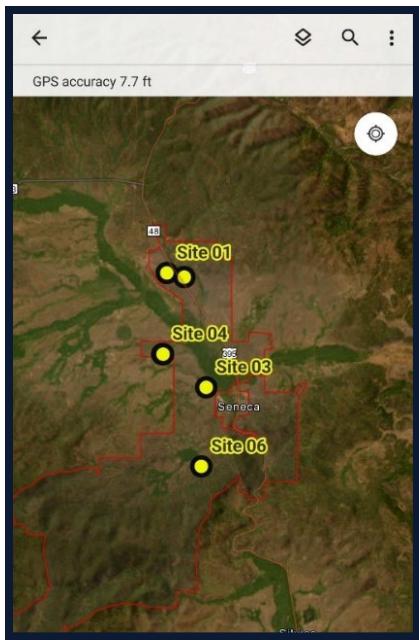
Step 1. Open the Esri Field Maps application on your phone or tablet. Select **OK** on the User Data Access popup.

- If you have not already logged in, use your unique login information to log into the application.

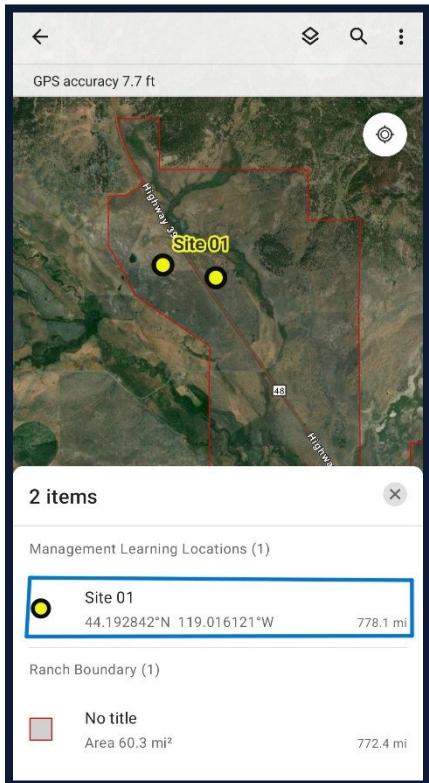
Step 2. Select the map **Ranch Name – Field Map**.



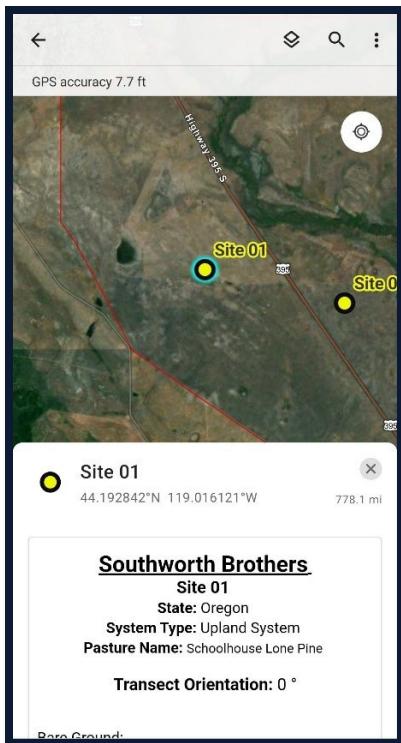
- A map of your ranch will populate reflecting the boundary and MLLs.



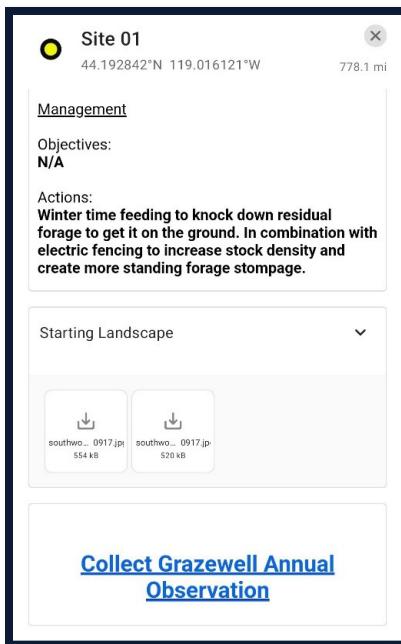
Step 3. Select the yellow dot of your current MLL. A pop up will populate at the bottom of the screen, select the site.



- Site specific information will populate at the bottom of the screen.



Step 4. Scroll down and select the [Collect Grazewell Annual Observation](#) link in blue.



- You will be directed to Survey123 with open with the Annual Observation form open.



Using the Annual Observation Survey – Survey123

The Annual Observation Survey comes pre-populated with attribute information from Field Maps about the specific MLLs. Information such as Ranch Name, Pasture Name, and Site Number will be automatically added to the form if you have accessed through Field Maps. See the step-by-step instructions below on how to fill out the survey's form.

Step 1. Enter your name and add your current location. To update your location to your current location of the devices GPS, click circle target.

Report Details

Name of Survey Responder *

Report Date
*Automatically populated

Tuesday, March 5, 2024
×

Location

Calculates non-moving¹ location

Click the target shape to update location

○
■

- As stated above the Site details including the date, ranch name, pasture name, and site number will be populated.

Pasture Details

Ranch Name *
*Automatically populated

×

Pasture Name *
*Automatically populated

×

Site Number *
*Automatically populated

▼

**Step 2.** Complete the question **Is this pasture being grazed, hayed or rested?**

Is this pasture being grazed, hayed or rested?

*

Grazed Hayed Rested

Step 3. Fill out the form's questions that are displayed depending on which Use Type is selected.

- Instructions for each use type (Grazed, Hayed, or Rested) are provided below.

Step 4. Once the survey form is populated, add any additional comments in the **Other Comments** section at the end of the survey.

Other Comments

Add any unique observations that you feel are important to document

[Large empty text area for comments]

Step 5. Submit the survey once you have finished populating the form by clicking the check mark in the bottom right.

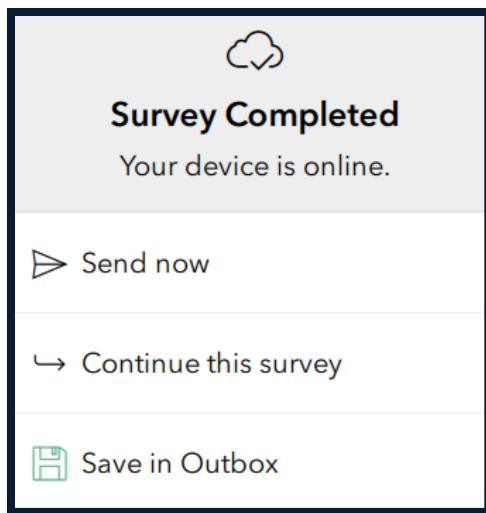
Other Comments

Add any unique observations that you feel are important to document

[Large empty text area for comments]

✓

- All questions with a red asterisk * must be completed.
- If you **Do** have cellular or Wi-Fi service, select **Send Now**.
- If you **Do Not** have cellular or Wi-Fi service, select **Save in Outbox**.
 - (a) Make sure to send the survey when you return to service or connect to Wi-Fi.





Grazed Use Type

Identify if you would like to complete a Pre-Use Report (Before Grazing) or a Post-Use Report (After Grazing).

Grazed Pre-Use Report (vegetation prior to grazing)

- Attach a photo that is representative of the vegetation growth prior to grazing by either selecting the **camera** or **folder** icon.

Pre-Use Photo

Add a photo that is representative of the vegetation growth PRE-USE (grazing or haying)

*click lightbulb for more information

**click icons below to take or insert photo

- Add use details by adding livestock information (pasture entry dates and livestock class and number into the survey).

Livestock Details

What date did the livestock Enter the Pasture? *

Date

Livestock Class *

Number of Livestock



- Answer the **Pre-Use Observation** question identifying how much opportunity the plants in the pasture had before they had been exposed to grazing.

Pre-Use Observations

How much opportunity did the plants have to grow before being exposed to grazing/ harvesting?

• Full
• Most
• Some
• Little
• None

*Grazed Post-Use Report (vegetation **after** grazing)*

- Populate the Post-Use Report questions similarly to how the Pre-Use Report questions were answered by:
 - (1) Attaching a photo that is representative of the vegetation growth after use.
 - (2) Entering the date the livestock left the pasture.
 - (3) Answering the Post-Use Observation questions.
 - (4) Answering the Management Action question and providing any additional comments.



Post-Use Photo

Add a photo that is representative of the vegetation growth POST-USE (grazing or haying)

click icons below to take or insert photo

Post-Use Observations

How much opportunity will the plants have to grow after being exposed to grazing/harvesting?

*

- Full
- Most
- Some
- Little
- None

what is your estimation of utilization from grazing/harvesting??

*

- Light (< 40%)
- Moderate (41-55%)
- Heavy (>55%)

Management Action

State the management action(s) that was identified for this site

*Automatically populated

Increase stock density, shorten grazing periods, increase growing season recovery periods, and utilization at different times of the year.

what is the majority growth stage of the plants during this grazing/harvesting period?

*

- Peak (Rapid Growth)
- Non-Peak (Early to Late Season Growth)
- Dormant

What is your estimation or your record of the precipitation that took place during the growing season at this location?

*

- Abundant (> 120% of Normal)
- Average (80% - 120%)
- Drought (< 80% of Normal)



Hayed Use Type

Identify if you would like to complete a Pre-Use Report (Before Haying) or a Post-Use Report (After Haying).

Hayed Pre-Use Report (vegetation prior to haying)

- Attach a photo that is representative of the vegetation growth prior to grazing by either selecting the **camera** or **folder** icon.

Pre-Use Photo

*

Add a photo that is representative of the vegetation growth PRE-USE (grazing or haying)

*

💡 **click lightbulb for more information*

**click icons below to take or insert photo

- Answer the **Pre-Use Observation** question identifying how much opportunity the plants in the pasture had before they had been exposed to harvesting.

Pre-Use Observations

*

How much opportunity did the plants have to grow before being exposed to grazing/ harvesting?

*

Full
 Most
 Some
 Little
 None

*Hayed Post-Use Report (vegetation after haying)*

- Populate the Post-Use Report questions similarly to how the Pre-Use Report questions were answered by:
 - (1) Attaching a photo that is representative of the vegetation growth after use.
 - (2) Entering the date the pasture was hayed.
 - (3) Answering the Post-Use Observation questions.
 - (4) Answering the Management Action question and providing any additional comments.



Post-Use Photo

Add a photo that is representative of the vegetation growth POST-USE (grazing or haying)

click icons below to take or insert photo

Post-Use Observations

How much opportunity will the plants have to grow after being exposed to grazing/harvesting?

*

- Full
- Most
- Some
- Little
- None

Hayed Date

Date

what is your estimation of utilization from grazing/harvesting??

*

- Light (< 40%)
- Moderate (41-55%)
- Heavy (>55%)

what is the majority growth stage of the plants during this grazing/harvesting period?

*

- Peak (Rapid Growth)
- Non-Peak (Early to Late Season Growth)
- Dormant

What is your estimation or your record of the precipitation that took place during the growing season at this location?

*

- Abundant (> 120% of Normal)
- Average (80% - 120%)
- Drought (< 80% of Normal)

Has the above action been met? *

- Yes
- No

Comments

Add any comments related to the management actions for the site

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Rested Use Type

- Attach a photo that is representative of the vegetation growth in the rested pasture by either selecting the **camera** or **folder** icon.

Add a photo that is representative of the vegetation growth in the rested pasture

*

 *click lightbulb for more information

  **click icons below to take or insert photo

- Answer the Management Action question and provide any additional comments.

▼ Management Action

State the management action(s) that was identified for this site

**Automatically populated*

Increase stock density, shorten grazing periods, increase growing season recovery periods, and utilization at different times of the year. ×

Has the above action been met? *

Yes

No

Comments

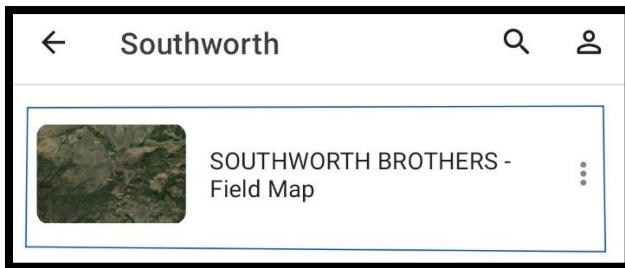
Add any comments related to the management actions for the site



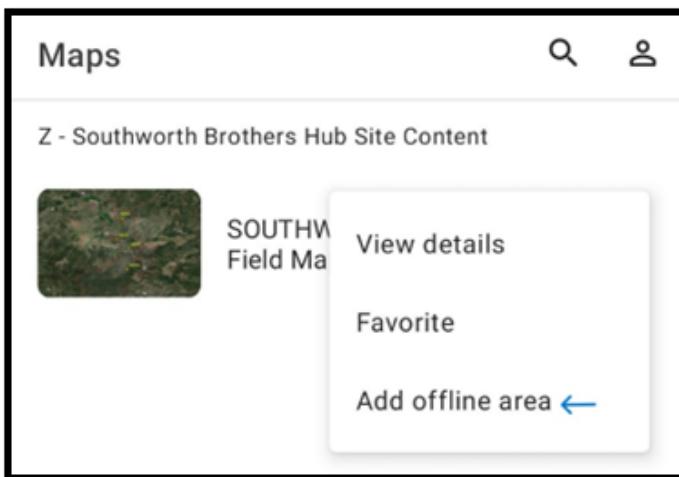
Offline Use

Downloading your map for offline use may be necessary if you will not have service in the location where you're collecting data. To do this make sure you are connected to Wi-Fi or have cellular data download enabled and follow the below steps:

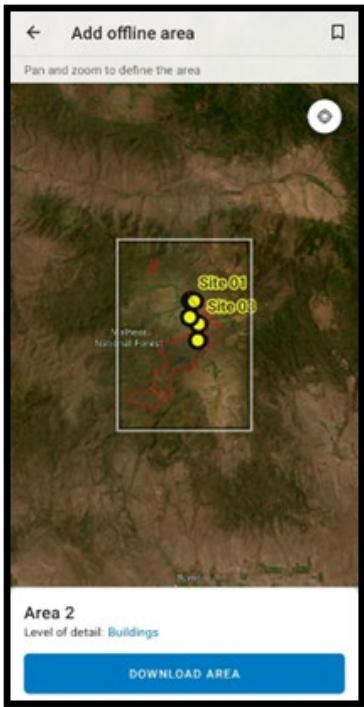
- Select the three dots to the right of the map.



- Select the **Add offline area** option.



- Your map will populate with a rectangle on the screen.

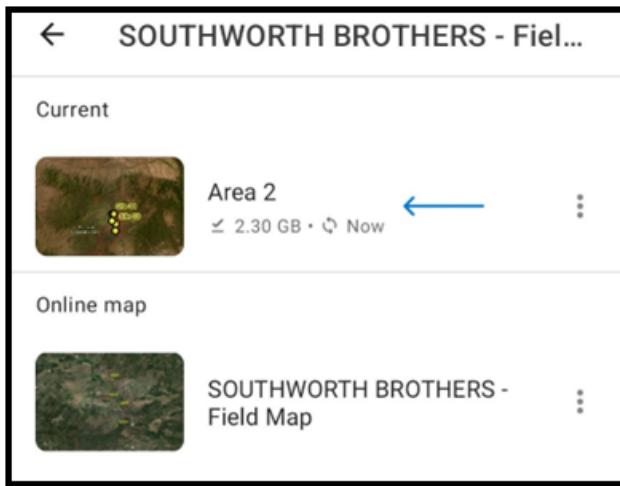


- Click on the **Buildings** in blue. A list of resolution levels will populate. Choose the **Neighborhood** option. Make sure that the white rectangle encompasses the area you want to download and click the **DOWNLOAD AREA** button to start the download process. The smaller the detail (resolution level), the more storage space the map will use.

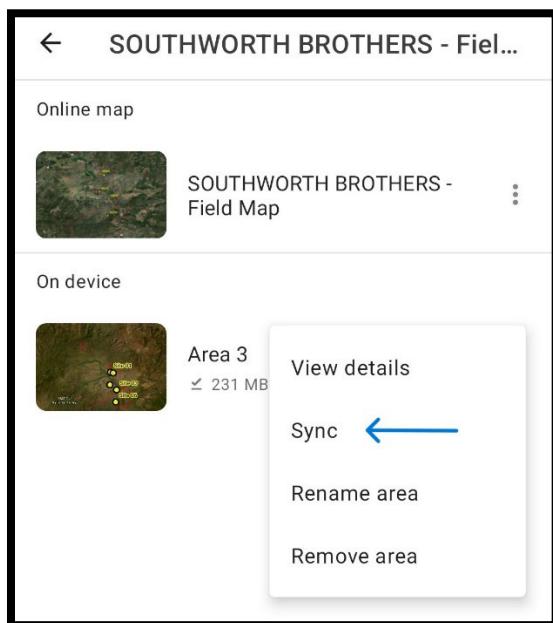




- Once complete, you will see a new map option that you can access without service.



- To send the data to the storage cloud once you return to service, make sure you sync your data on your device by selecting the three dots to the right of the map and choosing **Sync**.





Resources or Technical Support

Peer-to-Peer Team Leaders

Reach out to your team leaders of the peer-to-peer groups for additional questions and/or information on the Annual Observations.

Northway Ranch Services

The technical team at Northway is available for additional support and assistance. Reach out to Arielle Collier or Tim Bateman using the below emails:

- arielle@northwayrs.com
- tim@northwayrs.com