


# Sentinel App Quick Start Guide 2023



First, **Register for an account** at [Research.Beeinformed.org](https://Research.Beeinformed.org) (see upper right corner of page)

Next, follow the **App and Dashboard Protocol** guide downloadable from <https://beeinformed.org/citizen-science/sentinel-apiaries/> . It provides instructions to download and install the mobile app.

The general workflow of the application is to use the mobile app to enter data. Then sync that data to the web server. Finally, go online to view your data. Editing your data online will be a new feature added in 2023.

**Bee Informed Partnership | Open Research**

Open Data ▾ Register ↗ Login

### About This Site

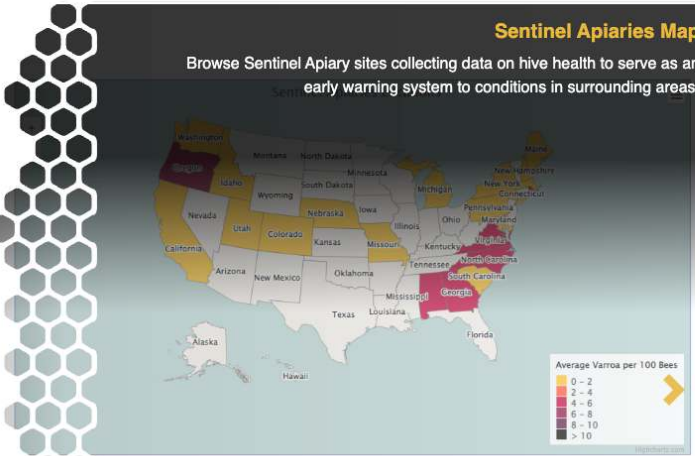
The Bee Informed Partnership provides many important services to beekeepers, researchers, and the general public.

Feel free to select one of our featured interactive tools here, or visit the navigation menu above to browse our complete set

Also, see our [homepage](#) where we frequently publish our research findings, important news, and fun beekeeping info.

### Sentinel Apiaries Map

Browse Sentinel Apiary sites collecting data on hive health to serve as an early warning system to conditions in surrounding areas.



	<p>Once setup, your app should look something like this screen, which has features...</p> <p>Gear icon, upper right: This links to login/out, and app configuration.</p> <p>A list of recent sample events will populate as you enter data. New records will also be counted in the ovals under New Records. These have not been synced to the server. Once you click the ‘SYNC WITH BIP’ button, the data will be saved on the server and viewable there. The counts will then go back to zero and appear as this screen. To get started ...</p> <p><b>Enter Apiary Owners:</b> Under the text “New Records” you can select Apiary Owners to enter a new one. Enter your information if you are only collecting data from your bees, or enter more people if also collecting data from other beekeepers.</p> <p>Next, you should <b>enter Locations</b>. Once you have entered <b>Apiary Owners</b> and <b>Locations</b>, you can reuse them in the future. You will not need to re-enter them.</p>
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Verizon 4:28 PM

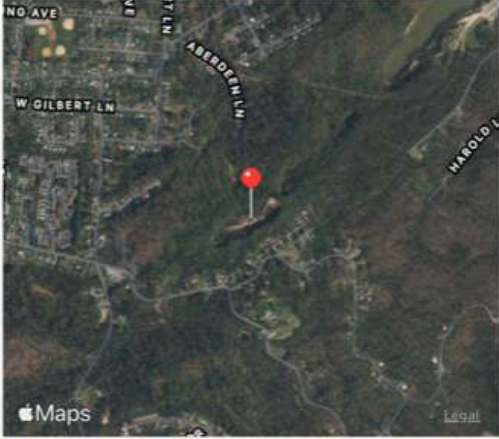
New Location

Beekeeper

Mikayla Wilson

Location Name

Sunnyville



PICK FROM MAP

Latitude

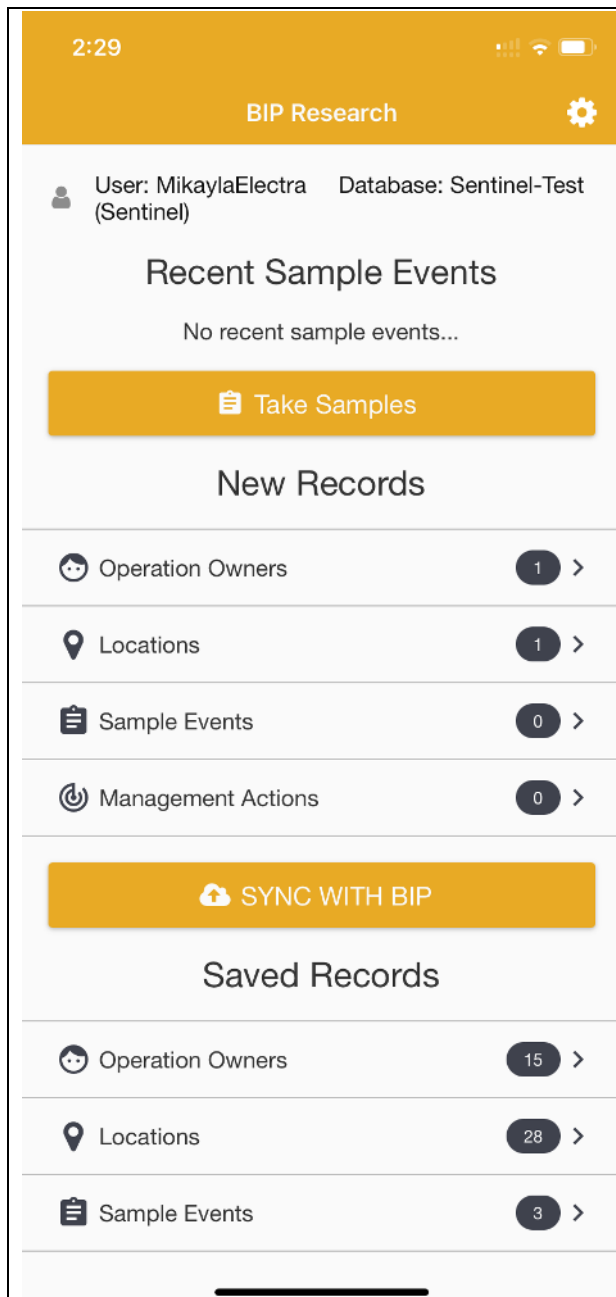
35.944850572811376

**Enter Location/s:** Click the Locations line, to create new locations.

Pick From Map is best. This will populate GPS points. You can provide additional detail such as street address. Adding the State and County is helpful for us to populate your data to the regional map online.

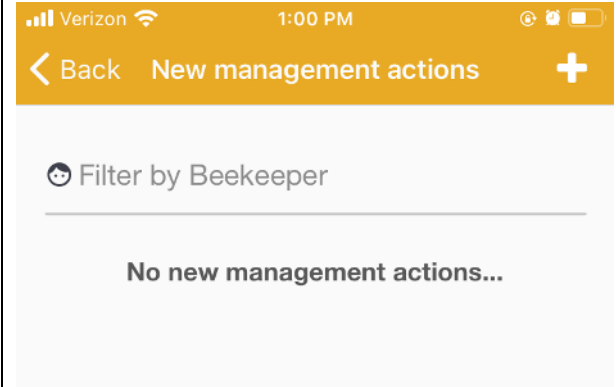
Note: Your specific location will not be publicly shared to protect your privacy.

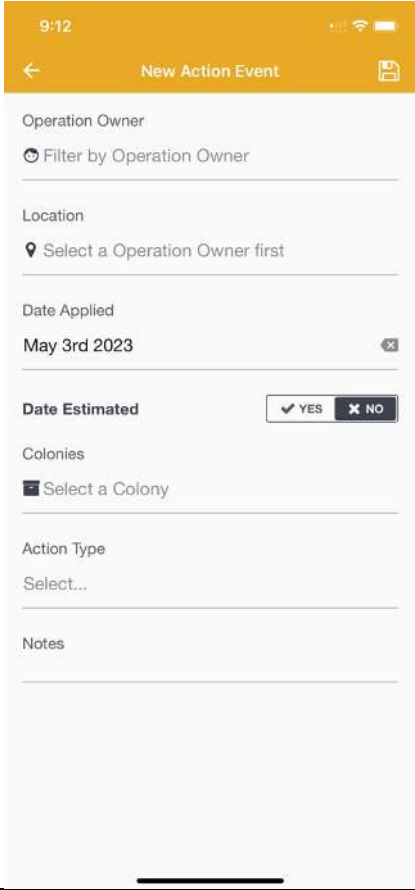
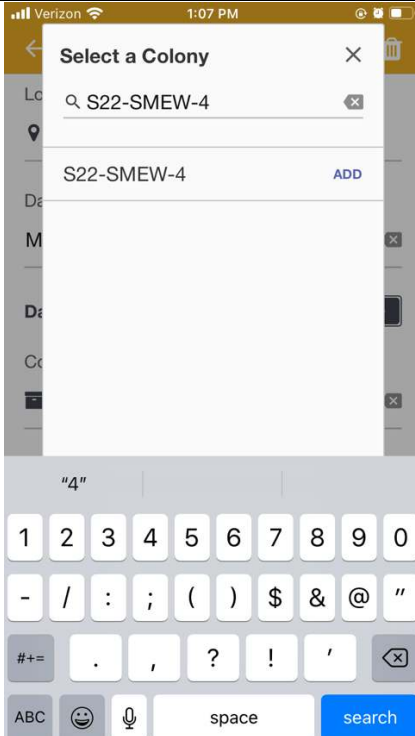
When done, be sure to click the floppy disk icon in the upper right hand corner to Save your work. Then click the back arrow in the upper left corner to return to the home screen.

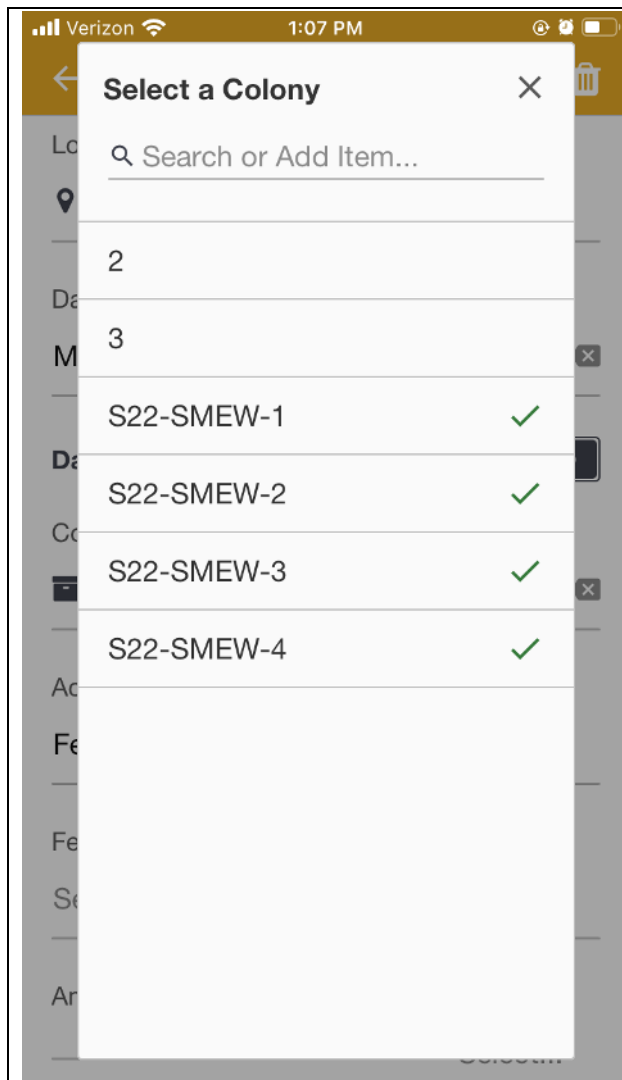


Back at the home screen, we see we have one new beekeeper and location under New Records. Now, we can either Take Samples, or record our recent management history.

Let's enter the recent Management that has been done to the colonies. Select the Management Actions row in the list below New Records.

	<p>When selecting, “Management Actions”, the next screen looks like this. From here, click the Plus sign upper right to create a new one.</p>
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	<p>Select the previously entered Apiary Owner and Location where it says.</p> <p>You can back date the management to capture past events. If you are estimating the dates, check the 'YES' box after 'Date Estimated'.</p> <p>If the management applies to all the colonies at the location, you can leave the Colonies entry blank, but it is best to specify the colony numbers, especially if not all colonies are treated the same. Tap "Select a Colony".</p>
	<p>From this screen, you can type colony numbers in beside the magnifier, then click "Add".</p>



Once colonies are added, select them to apply the management to them. In this screen four colonies are selected, while colonies "2" and "3" are not selected.

Once entered, your colony numbers are available for reuse in other screens. Please carefully type each one, and you won't have to do that again.

Verizon 1:08 PM

← Edit Action Event

Beekeeper

Mikayla Wilson

Location

Home

Date Applied

May 2nd 2022

Date Estimated

YES NO

Colonies

S22-SMEW-1, S22-SMEW-2, S22-SMEW-3, S22-SMEW-4

Action Type

Feed

Feed Type

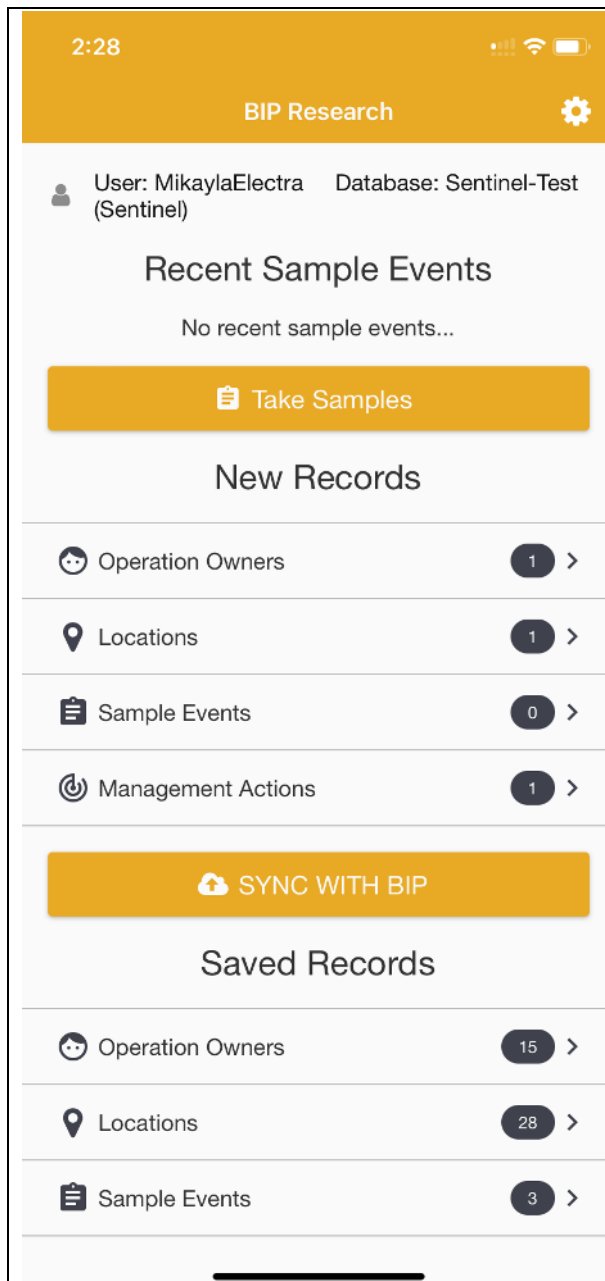
Select...

Now, I have a May 2<sup>nd</sup> Management on four colonies. I can add more detail such as Feed Type, then click the save button.

Under Action Type, there are additional choices such as Treatment, Requeen, and Change Equipment. The details provided for each choice vary.

After saving, click the back arrow to return to home screen





Back at the home screen, we can enter more recent Management Actions, or we can go to the apiary and “Take Samples” by clicking the button.


1. Select “Take Samples”
2. On the next screen, select the Apiary Owner of where you are sampling. You can create a new one from this screen too.
3. A new screen will open, there select the Location you are at. You can create a new one from this screen too.

Note: Some participants prefer to record data on paper when in the Apiary, and later use the app to enter their paper notes. If you do this, you will want to review the forms and prepare your datasheet first to be sure to capture all the data.

9:14

←

New Sample Event



Operation Owner

☺ Me 2

✕

Location

📍 Home2

Collection Date

May 3rd 2023

✕

Sentinel Kit Code

Mykit

✕

Sampler

Mikayla

Reason for Sampling

Using sampling kit

Event Notes

About this yard today

Applied Management Actions

No Managment Action Applied Yet

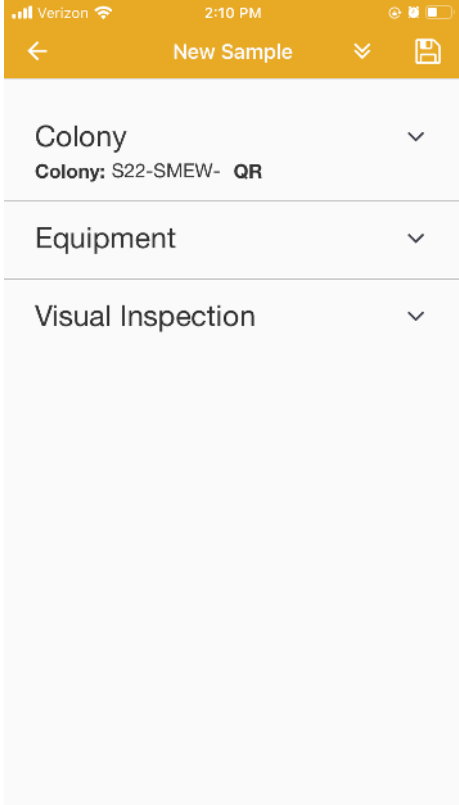
Add Management Action

+ SAMPLE

This is the Sample Event screen. Enter some details and select “+ Sample”.

Notes:

Sampler is the person making the observations while Beekeeper is the owner or manager of bees. Event notes are about this date and location, while after you select “+ Sample” you can make notes about each colony.

 <p>Verizon 2:10 PM</p> <p>← New Sample ✓</p> <p>Colony ▾ Colony: S22-SMEW- QR</p> <p>Equipment ▾</p> <p>Visual Inspection ▾</p>	<p>On the Sample screen, it has 3 tabs for details about the colony.</p>
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Verizon2:11 PM

←

New Sample

⌵

Colony

Colony is...

ALIVE

DEAD

NON-VIABLE

Colony

S22-SMEW-1

✕

Bottle ID

S22-SMEW-1-1

✕

Yard Group

Queen Status

Queen Right

✕

Frames of Bees (in terms of deeps)

n/a

✕

The 3 tabs expand out to these screens.

Verizon2:17 PM

←

Edit Sample

Equipment

Number of Frames

5 Frames

8 Frames

10 Frames

Colony Type

Select...

Deeps

2

3/4s

n/a

Mediums

1

Shallows

n/a

9:16

←

New Sample

Visual Inspection

ALL NOT OBSERVED

ALL N/A

Brood Diseases

Chalkbrood

MILD

MODERATE

SEVERE

OBSERVED

NOT OBSERVED

N/A

European foulbrood

MILD

MODERATE

SEVERE

OBSERVED

NOT OBSERVED

N/A

American foulbrood

OBSERVED

NOT OBSERVED

N/A

Sacbrood virus

OBSERVED

NOT OBSERVED

N/A

Parasitic Mite Syndrome

OBSERVED

NOT OBSERVED

N/A

Brood Visual Signs

Bald Brood

MILD

MODERATE

SEVERE

OBSERVED

Verizon 2:20 PM

← New Sample Event

### Samples

1st Sample  
Colony S22-SMEW-1 Bottle ID S22-SMEW-1-1  
QR

Total Colonies  
10

Healthy Colonies  
8

Non-healthy Colonies  
2

Dead Colonies  
0

Seasonal Info  
Cool

What is blooming?  
Maples

+ SAMPLE

Once you save and return to the Sample Event screen, the samples are listed. You can enter more from the “+ Sample” button. Other fields on the Sample Event screen are seen here. When all samples are in, click save button, then back arrow.

Verizon 2:20 PM

BIP Research

User: MikaylaElectra (Sentinel) Database: Sentinel

### Recent Sample Events

Home - 05/02/2022  
Mikayla Wilson VIEW >

Take Samples

### New Records

Beekeepers 1 >

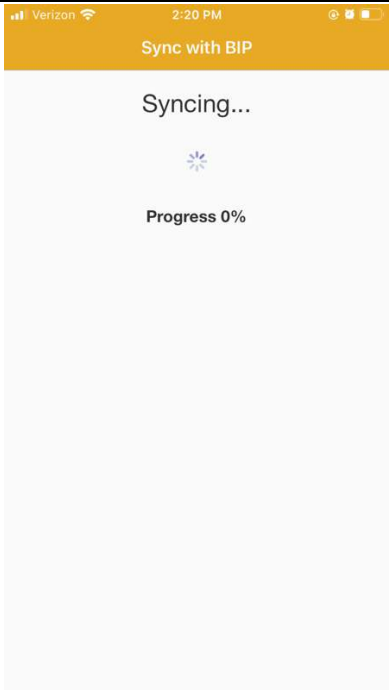
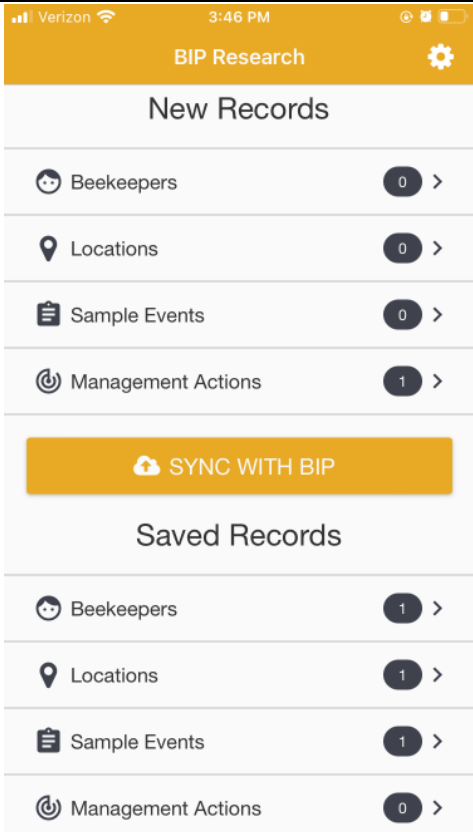
Locations 1 >

Sample Events 1 >

Management Actions 1 >

SYNC WITH BIP

Back at home screen, we see one sample event. If you are done adding data and making corrections, AND you have a GOOD network/WiFi connection, press the "SYNC WITH BIP" button to upload your data to BIP servers for safe storage

	<p>The app will let you know its Syncing and if successful.</p>
	<p>If successful, the records are moved to the Saved Records section and viewable there. These records are no longer editable on the app. If a correction is needed, please contact us, until data editing is available on the website.</p>

Once your data is Synced, you can go to [Research.beeinformed.org](https://Research.beeinformed.org) to view reports or download data. After logging in, click on Tools > Reports link in the topbar menu

The screenshot shows the Bee Informed Partnership website dashboard. The top navigation bar includes the logo, "Bee Informed Partnership | Open Research", and links for "Open Data", "User Dashboard", "Tools", "BIP", and a user profile "rosecombapiaries". A green notification bar states "Successfully signed in as rosecombapiaries." The "Tools" dropdown menu is open, showing "Reports" and "Exports" options. On the left, the "About This Site" section describes the partnership's services and provides links to the homepage. On the right, the "Sentinel Apiaries Map" is displayed, showing a map of the United States with a color-coded legend for "Average Varroa per 100 Bees" ranging from 0-2 (yellow) to 8-10 (dark red).

From there, you can Export your data, or view the Sentinel Report. If you have data from multiple beekeepers or from multiple years, make those selections before clicking the Sentinel Report button

The screenshot shows the "SENTINEL: Reports" page. The top navigation bar includes the logo, "Bee Informed Partnership | Open Research", and links for "Open Data", "Tools", "Sentinel", and a user profile "MikaylaElectra". The page features a search bar with "any state" selected, a "Find by ID#" button, and a "Find ID#" button. Below the search bar, a table displays report entries. The table has columns for "Beekeeper", "Membership", "State", "Last collection date", and "Edit + New". The first entry is for "Wilson, Mikayla" with membership "sentinel" and a collection date of "2021-09-08". Below the table, a message states "Showing 1 to 1 of 1 entries (filtered from 112 total entries)". At the bottom, there are three buttons: "Sentinel Report" (with a "2022" dropdown), "Export Management", and "Export Samples".

Beekeeper	Membership	State	Last collection date	Edit + New
Wilson, Mikayla	sentinel		2021-09-08	<a href="#">view / edit</a>