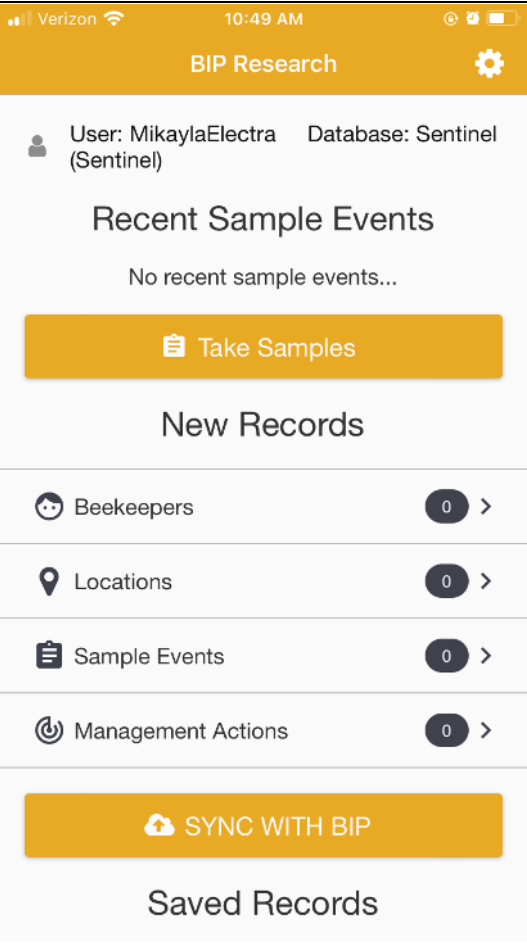


Sentinel App Quick Start Guide 2022



First, Register for an account at Research.Beeinformed.org and follow the App and Dashboard Protocol <https://beeinformed.org/citizen-science/sentinel-apiaries/> to download and install the app. The general workflow of the application is to use the mobile app to enter data. Then sync that data to the server and go online to view that data.

 The screenshot shows the Sentinel App interface. At the top, there's a status bar with "Verizon" and "10:49 AM". Below that is an orange header with "BIP Research" and a gear icon. The main content area has a user profile section with "User: MikaylaElectra" and "Database: Sentinel (Sentinel)". Below this is a section titled "Recent Sample Events" with the text "No recent sample events...". There's a large orange button labeled "Take Samples". Below that is a section titled "New Records" with a list of items: "Beekeepers", "Locations", "Sample Events", and "Management Actions". Each item has a circular counter with the number "0" and a right arrow. At the bottom of the "New Records" section is an orange button labeled "SYNC WITH BIP". Below that is a section titled "Saved Records".	Once setup, your app should look something like this screen, which has features... Gear icon, upper right: This links to login/out, and app configuration. 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 ... Enter Beekeeper/s (Apiary owners): Under the text "New Records" you can select Beekeepers 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. Next, you should enter locations. Once you have entered beekeepers and locations, you can reuse them in the future. You will not need to re-enter them.
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Verizon 4:28 PM

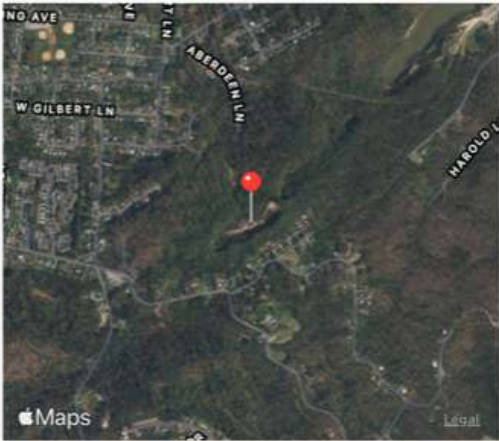
← New Location ↗

Beekeeper

👤 Mikayla Wilson ✕

Location Name

Sunnyville



PICK FROM MAP

Latitude

35.944850572811376

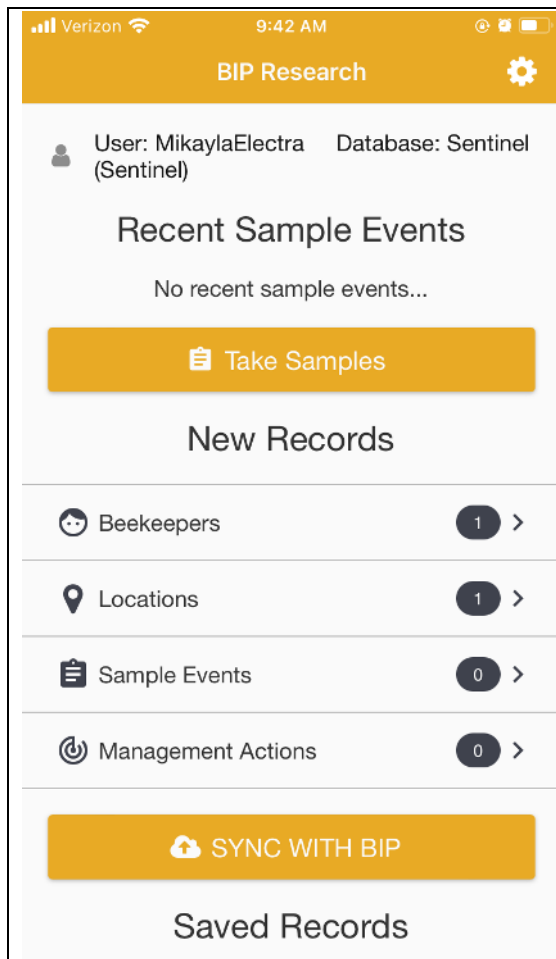
Enter Location/s: Click the Locations line, to create new locations.

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.

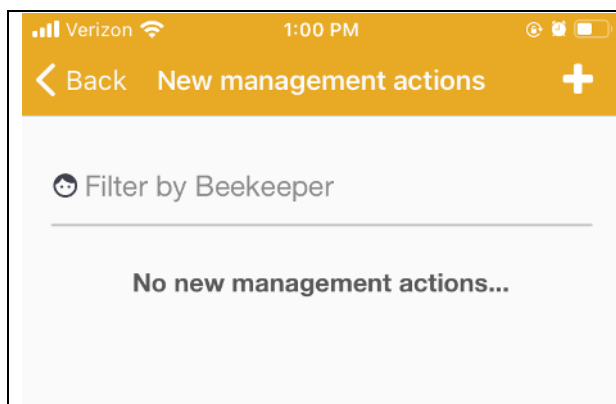
When done, be sure to click the floppy disk icon in the upper right hand corner to Save your work. Then click the back arrow in the upper left corner to return to the home screen.





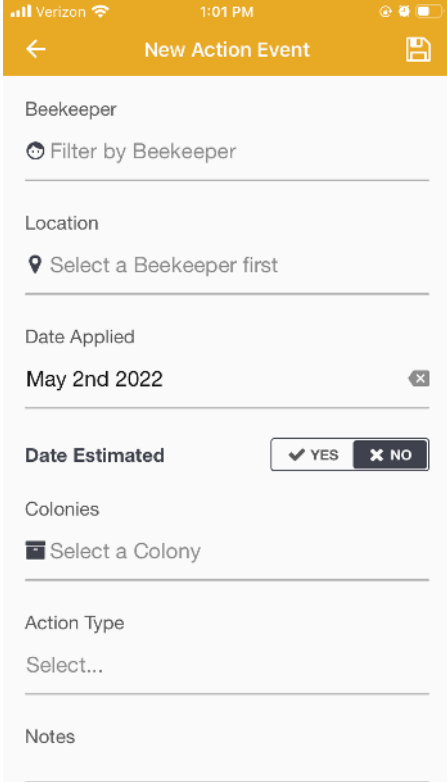
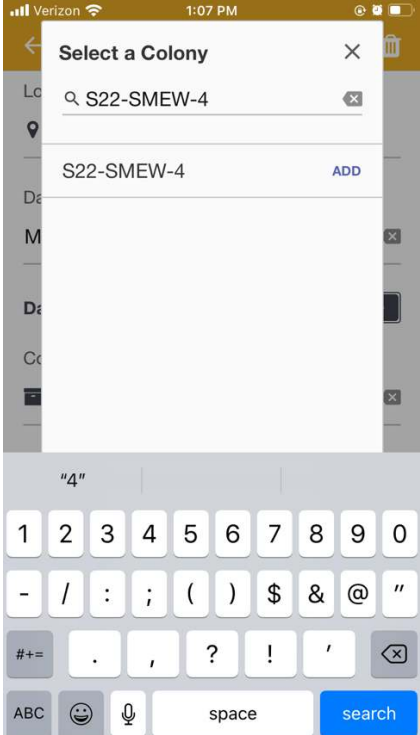
Back at the home screen, we see we have one new beekeeper and location under New Records. Now, we can either Take Samples, or record our recent management history.

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



When selecting, "Management Actions", the next screen looks like this. From here, click the Plus sign upper right to create a new one.



	Select the previously entered beekeeper and location where it says. You can back date the management to capture past events. If you are estimating the dates, record that. 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”.
	From this screen, you can type colony numbers in beside the magnifier, then click “Add”.



Verizon1:07 PM

Select a Colony

Search or Add Item...

2

3

S22-SMEW-1

S22-SMEW-2

S22-SMEW-3

S22-SMEW-4

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

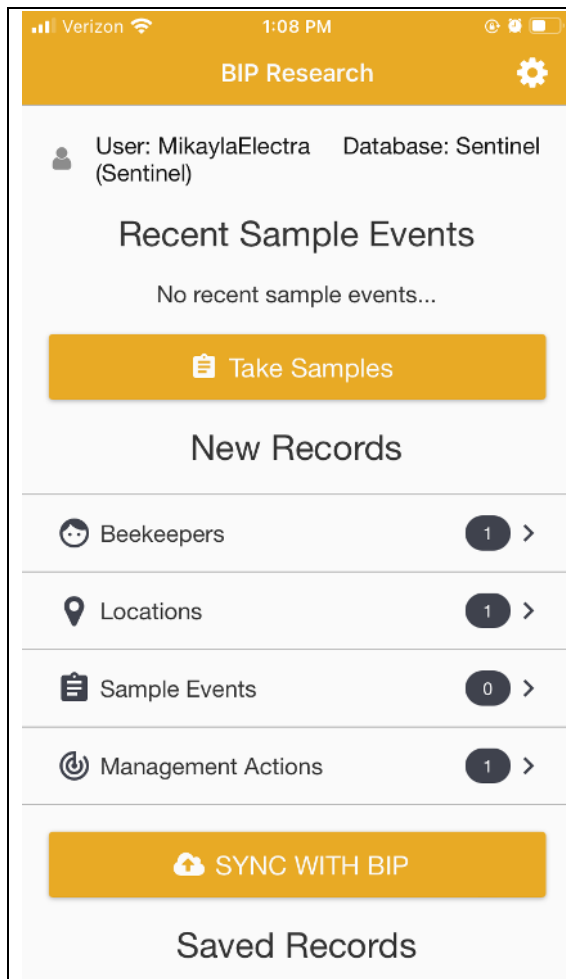
Select...

Now, I have a May 2nd 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



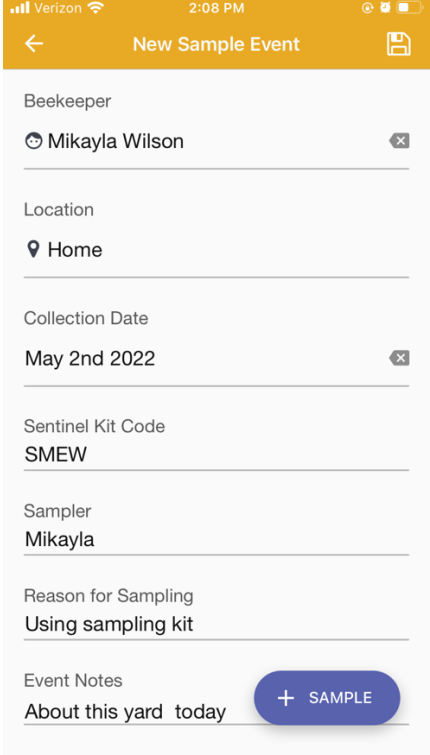
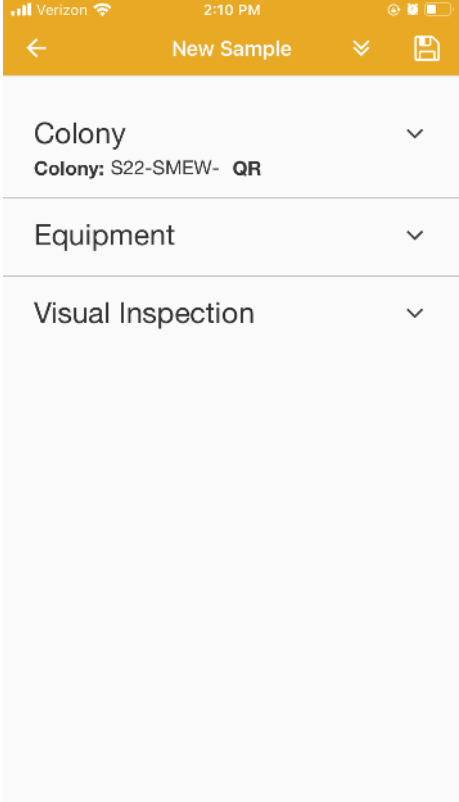


Back at the home screen, we can enter more recent Management Actions, or we can go to the apiary and “Take Samples” by clicking the button.

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.

1. Select “Take Samples”
2. On the next screen, select the Beekeeper or 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.



	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.
	On the Sample screen, it has 3 tabs for details about the colony.



Verizon 2:11 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.

Verizon 2:17 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

Verizon 2:18 PM

← Edit Sample

ALL NOT OBSERVED ALL N/A

Brood Diseases

Chalkbrood

OBSERVED NOT OBSERVED N/A

European foul brood

OBSERVED NOT OBSERVED N/A

American foul brood

OBSERVED NOT OBSERVED N/A

Sac brood virus

OBSERVED NOT OBSERVED N/A

Parasitic mite syndrome

OBSERVED NOT OBSERVED N/A



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 Database: Sentinel
(Sentinel)

Recent Sample Events

Home - 05/02/2022
Mikayla Wilson

VIEW

Take Samples

New Records

Beekeepers 1

Locations 1

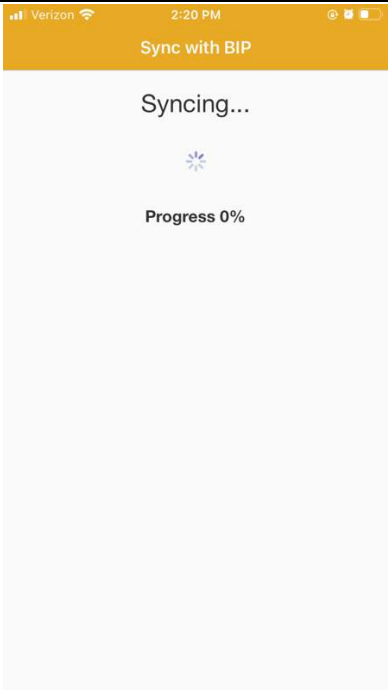
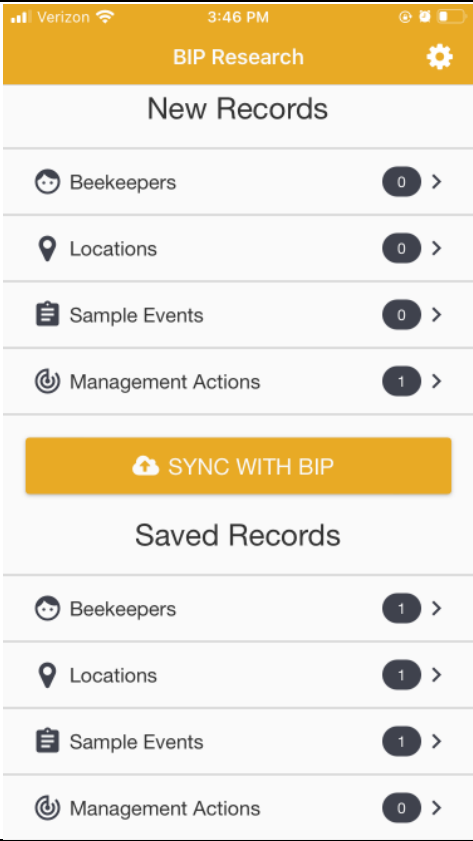
Sample Events 1

Management Actions 1

SYNC WITH BIP

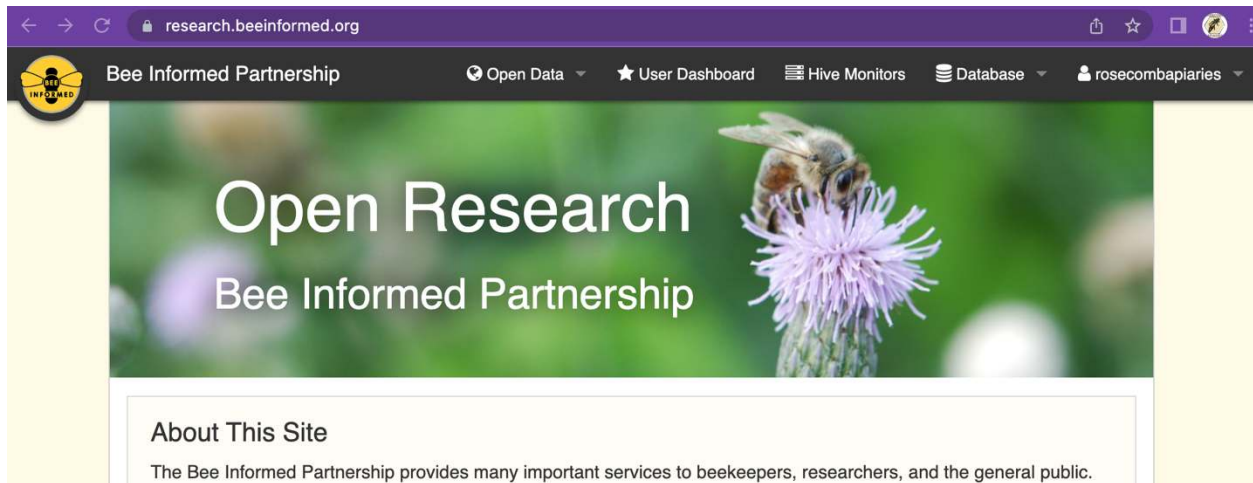
Back at home screen, we see one sample event. If done, AND you have a GOOD network connection, ready to “SYNC WITH BIP”.



	The app will let you know its Syncing and if successful.
	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.



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 the User Dashboard link in the topbar menu



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

