

User Guide



2018

Version 1.4

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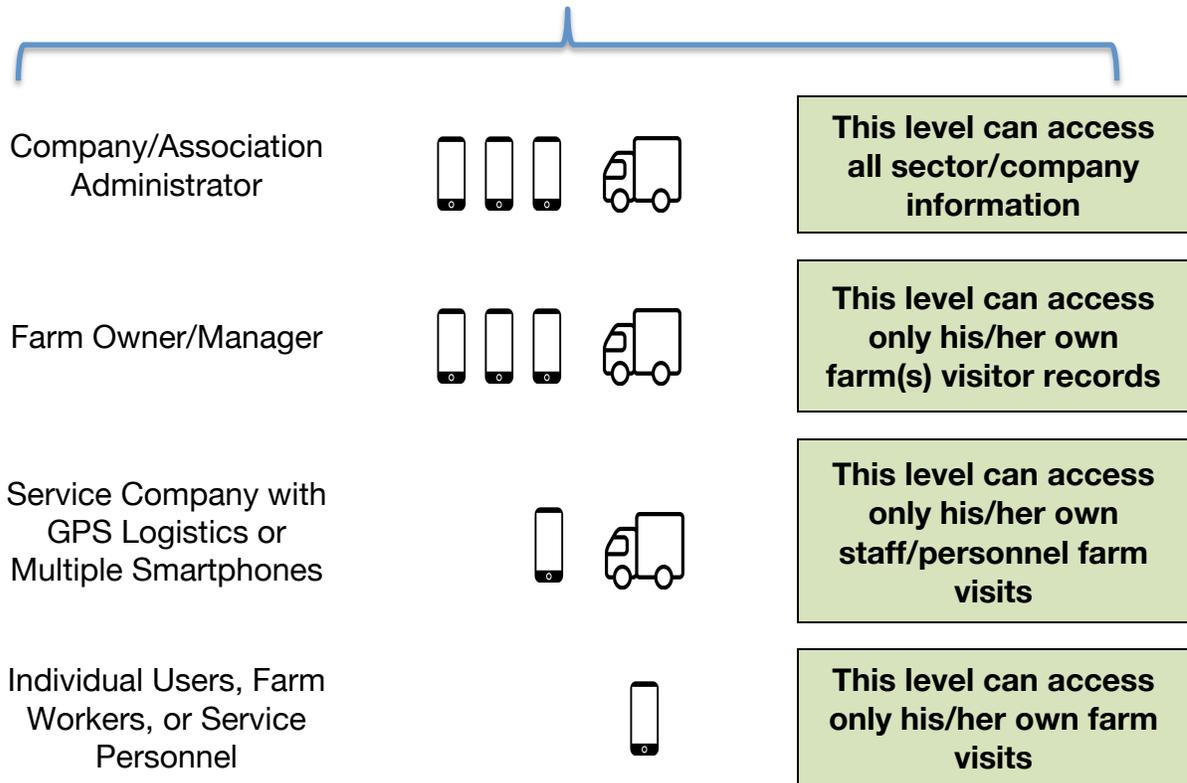
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Fences User Types

User Definitions and Hierarchy



Fences



Association Access

An association is a company or farmer cooperative that has control over multiple properties. Each association has its own secure database or container that Fences sets up through Amazon Web Services. The properties that are within the association are stored in that container. Each container is held within its own jurisdiction. For example, the United Kingdom data is held in the United Kingdom and is never transferred to any jurisdiction outside of the United Kingdom.

Phone Requirements

Fences supports the following minimum hardware and operating systems (OS):

- Apple iPhone 4S with iOS 9.3.4 (however, we recommend iPhone 5S with iOS 10 or greater)
- Android with OS Lollipop (5.0) (to ensure optimum performance Fences recommends that Android phones be no greater than 4 years old and to have cost more than \$500 USD at its release to guarantee its GPS software is suitable)
- BlackBerry BB10 OS (please note, push notifications are not available on the BlackBerry platform)

Browser Requirements

Fences supports all browser types except Internet Explorer. Internet Explorer's replacement, Microsoft Edge, is the best solution for this.

Set Up

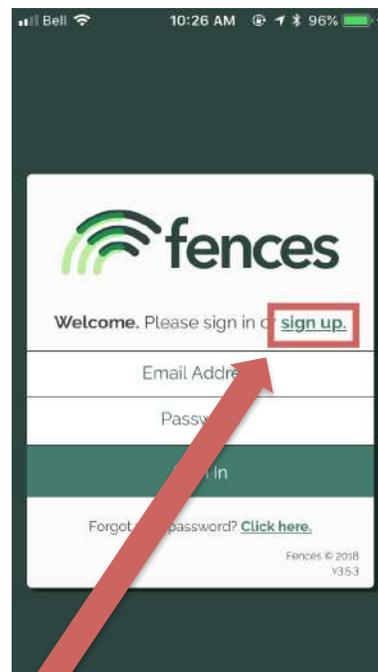
Downloading the App

On iPhones, the app can be found in the App Store, by searching for **Fences**.

On Androids, the app can be found in the Google Play Store, by searching for **Fences**.

On BlackBerrys, the app can be found in BlackBerry World, by searching for **Fences**.

The app is completely free on all platforms. Once it is downloaded, tap the app to open it and it will bring you to the main login page. It will ask you to 'allow' two options: location (to determine when you cross geofences, this should be set as **Always Allow**), notifications (select **Allow** to be notified when crossing fences) and motion and fitness activity (to determine when your phone is moving or sitting still, select **Allow** to be let the app conserve your phone's battery).



Registering Your Account

Please provide the following registration details:

Email Address

Password

Confirm Password

Given Name(s)

Family Name

Mobile Number

Next

Fences © 2018 V3.5.3

To register your account, click **sign up** on the login page. You will be directed to the registration form. Fill out the form using the email address you want linked to your account. Create a password that you will remember. Type in your first name in **Given Name** and last name in **Family Name**. Fill in the **Mobile Number** of the phone you'll be using the app on. Once this is all completed, select **Next**.

Completing Your Visitor Profile

The system will now ask you to fill in your **User Type**. There are three types: **Farm Worker**, **Farm Owner** and **Service Provider**.

Important - If you select Service Provider, you will receive the following question, which needs to be completed for your registration process. Please ensure this field is filled in correctly as it is extremely important in assessing individual risk profiles.

On farm visits, what is your proximity to the livestock?

You have a choice of three answers as follows:

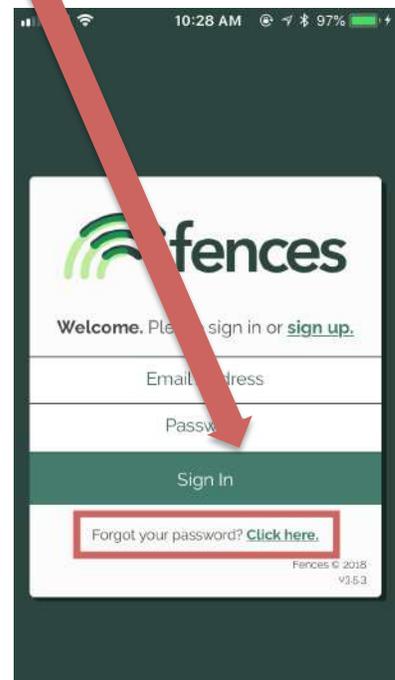
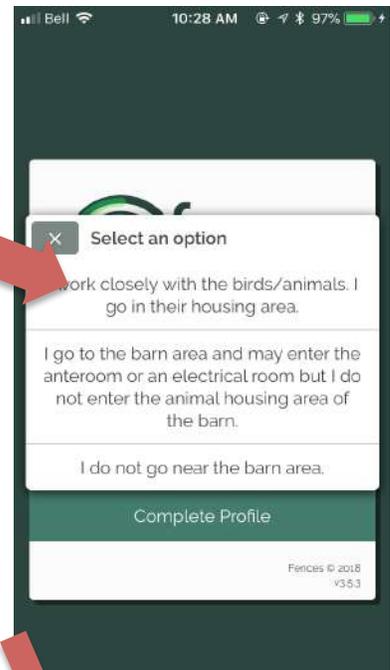
1. I work closely with the birds/animals. I go in the housing area.
2. I go to the barn area and may enter the anteroom or an electrical room but I do not enter the animal housing area of the barn.
3. I do not go near the barn area.

Once everything is filled in, select **Complete Profile**. A pop up success message will appear and after a few seconds, the login screen will appear again. Use your password and the email address you provided to login to your account for the first time.

Reset Your Password

If you forget your password, on the login page, select **Forgot your password? Click here.** This will open up a field where you can enter your email address. Once you've entered your email, click **Submit**. A success message will appear stating an email has been sent. You will receive an email to the email address you indicated. It will have a button stating **Reset Your Password**, click on that. This will open a link to the Fences dashboard with a new password field. Type in your new password, confirm it once more, and hit **Submit**. A success message will appear stating that your password has been reset. You can now login to the system using your new password.

Important - If you do not receive the email, please check that you have entered your email correctly. If you still have not received an email, please contact info@fencesapp.com.



Association Administrator Functions

To access the Fences dashboard, go to **fencesapp.com** and click the **Login** button at the top right-hand corner of the page. Or to go directly there, you can enter **web.fencesapp.com/** into your browser address bar. Enter your personal login credentials. This will bring you to the **Activity Overview** page. On the left side of the screen, you will see the menu options for an Association Administrator.

Activity Overview

Activity Overview is a list of all of your personal activity on Fences properties.

Select the menu item **Activity Overview**. The visits are grouped by **Last 7 Days**, **Last 30 Days**, and **Last 365 Days** in numbers at the top. Underneath that, the table shows your personal activity. Each of the three columns (**Property**, **Timestamp**, **Duration**) can be sorted alphabetically or numerically simply by clicking on that column's header. You can also search for your visits between specific date ranges by filling in **Start Date** and **End Date**, and clicking the **Search** button. By clicking on a visit, a pop-up will appear with more details on that visit. The data can be exported by clicking **Export CSV**. This will download the data as a CSV file or as a spreadsheet that can be opened in Excel. The map view beside this shows the properties you've visited on a map. You can hover over the layers button in the top right hand corner to toggle between **Satellite + Streets**, **Streets**, and **Monochrome** map types.

Activity Overview

Total Recorded Visits

Last 7 days: 3 | Last 30 days: 5 | Last 365 days: 40

Property Visit Records

Search Activity By Date [Export CSV] [Search]

Start Date: yyyy-mm-dd
End Date: yyyy-mm-dd

Property	Timestamp	Duration
Brynn Farms Ltd.	Apr 2 7:40 AM - 8:00 AM	20m
Vera Farms Ltd.	Apr 2 6:55 AM - 7:14 AM	19m
Raymond Farms Ltd.	Apr 2 6:21 AM - 6:29 AM	8m
Autumn Farms Ltd.	Mar 31 1:47 PM - 2:18 PM	31m
Sarah Farms Ltd.	Mar 31 6:46 AM - 7:07 AM	22m
Fulton Farms Ltd.	Mar 7 6:21 AM - 6:36 AM	15m
Vance Farms Ltd.	Mar 5 2:59 PM - 3:33 PM	34m
Fiona Farms Ltd.	Mar 5 2:26 PM - 2:48 PM	21m
Preston Farms Ltd.	Mar 4 3:38 PM - 3:53 PM	15m
Preston Farms Ltd.	Mar 4 2:53 PM - 3:12 PM	19m

Map view showing properties visited on a map of the region, including locations like Toronto, Mississauga, Hamilton, London, and Chatham.



Report Bird Sighting

Report Bird Sighting is only accessible on the mobile app. Association Administrators have the option to overlay wild waterfowl (and wind) movement over disease simulations to increase the prediction of disease movement (see **Simulate Outbreak**). All users are able to add to this waterfowl database by submitting waterfowl sightings as they occur. The mobile app will use your phone's location to determine where the waterfowl was sighted. To report a bird sighting, click on **Report Bird Sighting** on the **Activity Overview** or main page of the mobile app.

Select the type of birds you observed under the question **What kind of wild bird did you see?** The options are **Ducks, Geese, and Other Waterfowl.**

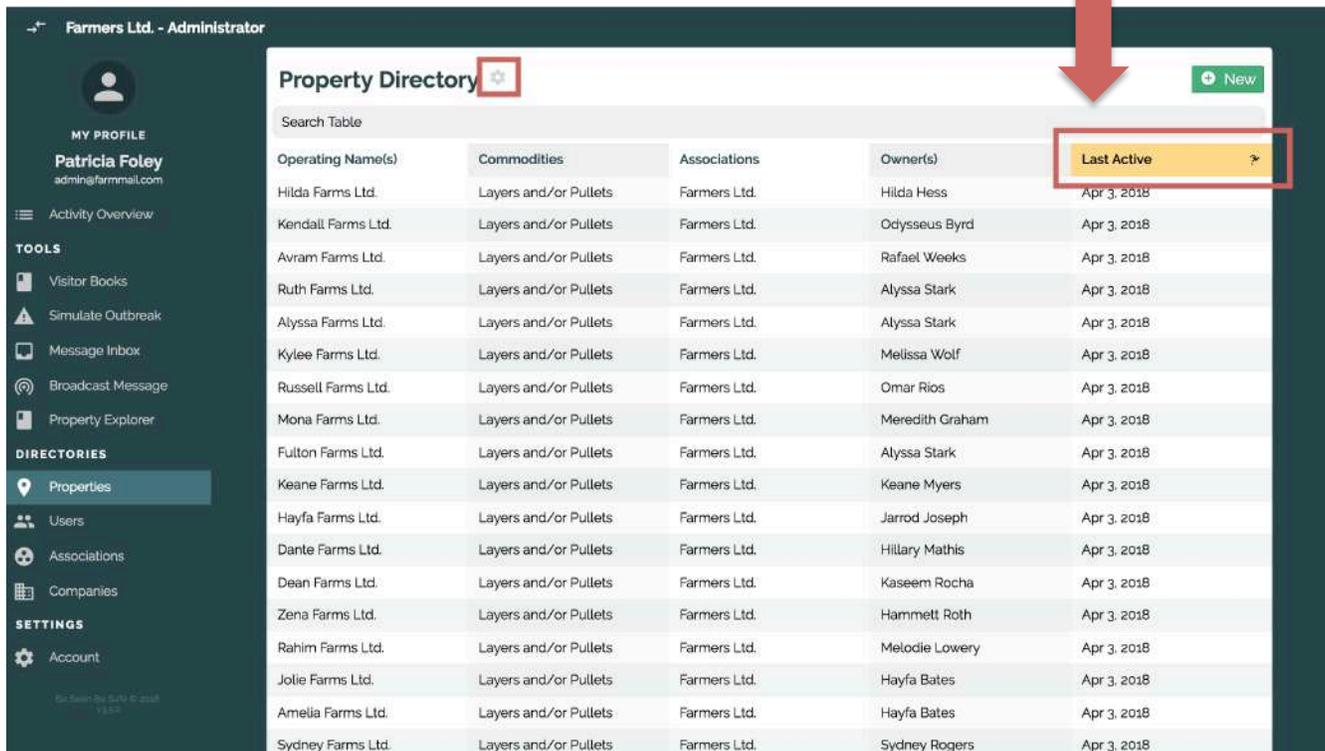
Non-water birds are not susceptible to the types of diseases poultry farms are prone to contracting from wild birds, so observations of their movements are not necessary for our purposes. Select the range of birds you observed under the question **How many birds did you see?** The options are **1-5, 5-25, 25-50, 50-100** and **>100**. In the example to the right, Geese and 5-25 have been selected. Once you have filled both options in, select **Submit**.



Properties

Properties is a list of all of the farms within the association.

Under Directories, click on **Properties**. On this screen, Association Administrators can sort, search, or edit their association's properties. Each of the five columns (**Operating Name(s)**, **Commodities**, **Associations**, **Owner(s)**, **Last Active**) can be sorted alphabetically or numerically simply by clicking on that column's header. The Last Active column shows the most recent activity date recorded for each property, it has been sorted as an example below.



Operating Name(s)	Commodities	Associations	Owner(s)	Last Active
Hilda Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Hilda Hess	Apr 3, 2018
Kendall Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Odysseus Byrd	Apr 3, 2018
Avram Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Rafael Weeks	Apr 3, 2018
Ruth Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Alyssa Stark	Apr 3, 2018
Alyssa Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Alyssa Stark	Apr 3, 2018
Kylee Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Melissa Wolf	Apr 3, 2018
Russell Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Omar Rios	Apr 3, 2018
Mona Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Meredith Graham	Apr 3, 2018
Fulton Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Alyssa Stark	Apr 3, 2018
Keane Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Keane Myers	Apr 3, 2018
Hayfa Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Jarrod Joseph	Apr 3, 2018
Dante Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Hillary Mathis	Apr 3, 2018
Dean Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Kaseem Rocha	Apr 3, 2018
Zena Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Hammnett Roth	Apr 3, 2018
Rahim Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Melodie Lowery	Apr 3, 2018
Jolie Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Hayfa Bates	Apr 3, 2018
Amelia Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Hayfa Bates	Apr 3, 2018
Sydney Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Sydney Rogers	Apr 3, 2018

Columns are customizable. Just click on **Columns** at the top of the page.

Select Columns to Display

Search Table

Column Name

Operating Name(s)

Commodities

Associations

Owner(s)

Last Active

Cancel

Continue

This will generate a pop-up with selectable column options. Select the columns you wish to see and click **Continue**.

In the **Search Table** bar on the main **Property** page, you can search by property name, commodity, property owner, and last activity date. Click on a property name to view its **Property Details**.

You can change or add farm owners, edit any property information including property name and address, edit the geofence, and change or add staff.

In the **Property Details**, simply click **Edit** beside each heading to edit it.

Property Directory

Search Table

Operating Name(s)
Audra Farms Ltd.
Lucian Farms Ltd.
Hedwig Farms Ltd.
Christopher Farms Ltd.
Keane Farms Ltd.
Hop Farms Ltd.
Abra Farms Ltd.
George Farms Ltd.
Roth Farms Ltd.
Stella Farms Ltd.
Quyn Farms Ltd.
Camden Farms Ltd.
Maite Farms Ltd.
Kirk Farms Ltd.
Hilda Farms Ltd.
Raymond Farms Ltd.
Carissa Farms Ltd.
Nathan Farms Ltd.

Property Details Delete

Property Owners Edit
Hilda Hess

Address Edit
Address Line 1: 797-1218 Elaifend, Rd.
Address Line 2: Address Line 2
Address Line 3: Address Line 3
City: Guelph
Province/State: ON
Postal Code: 74183-089
Country: Canada

Geofence Maximise
Set center coordinates: 43.62452,-80.57969 Set

Production Types Add P Type

Property Directory

Search Table

Operating Name(s)
Audra Farms Ltd.
Lucian Farms Ltd.
Hedwig Farms Ltd.
Christopher Farms Ltd.
Keane Farms Ltd.
Hop Farms Ltd.
Abra Farms Ltd.
George Farms Ltd.
Roth Farms Ltd.
Stella Farms Ltd.
Quyn Farms Ltd.
Camden Farms Ltd.
Maite Farms Ltd.
Kirk Farms Ltd.
Hilda Farms Ltd.
Raymond Farms Ltd.
Carissa Farms Ltd.
Nathan Farms Ltd.

Production Types Add Production Type

Hilda Farms Ltd. Delete

General Edit
Operating Name: Hilda Farms Ltd.
Association: Farmers Ltd.
Commodity: Layers and/or Pullets

Staff Edit
Pascale Randall, Quyn Chandler, Claran Rodgers

Visitor Statistics
Last 7 days: 1
Last 30 days: 1
Last 365 days: 4

Monthly Visits by Risk Factor

Month	Total	Low	Medium	High
Nov '17	1.0	1.0	0.0	0.0
Dec '17	1.0	1.0	0.0	0.0
Jan '18	1.0	1.0	0.0	0.0
Feb '18	1.0	1.0	0.0	0.0
Mar '18	1.0	1.0	0.0	0.0
Apr '18	1.0	1.0	0.0	0.0

Visitor Statistics

At the bottom of the Property Details, the property's **Visitor Statistics** are listed. The visits are grouped by **Last 7 Days**, **Last 30 Days**, and **Last 365 Days** in numbers. The bar graph underneath shows monthly visits by risk factor for the property's visitors. For example, if a user who goes into swine barns regularly (eg. a veterinarian) enters a swine property, they will be recorded as a high risk visitor. This is determined by the profile they fill out when the user first downloads the app.

How to Edit a Geofence

Click **Maximize** to edit the geofence in a larger screen.



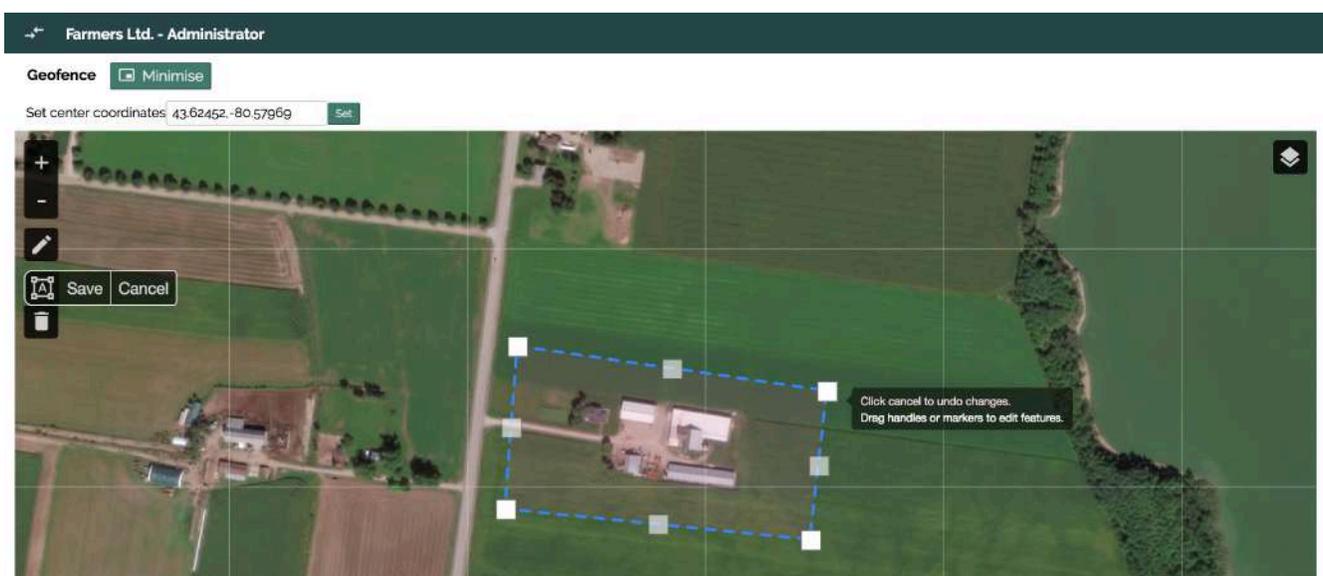
Geofence Maximise

Set center coordinates 43.62452, -80.57969

Edit Options:

- Zoom In
- Zoom Out
- Create Geofence
- Edit Geofence
- Delete Geofence

Click on the **Edit Geofence** button on the map (see the Edit Options legend above).



Farmers Ltd. - Administrator

Geofence Minimise

Set center coordinates 43.62452, -80.57969

Save Cancel

Click cancel to undo changes.
Drag handles or markers to edit features.

Now you can reposition any of the square markers by holding and dragging. The opaque white squares are the physical markers and the transparent grey squares are the potential markers you can use, if needed. You can also delete a square marker by clicking on it.

Click **Cancel** to undo any changes. Click **Save** beside the **Edit Geofence** tool to save any changes.

How to Delete a Geofence

To delete an entire geofence, click on the trash can icon (see **Delete Geofence** in the legend above), then click anywhere in the geofence. Click **Save** beside the **Delete Geofence** tool.

How to Replace a Geofence

Replacing a geofence involves deleting the old one (see section above) and drawing a new one. The points of the geofence have to create a complete polygon. Click on the **Create Geofence** icon (see legend above). Each click will create a new square marker, until you click back directly onto the first marker to complete the geofence.

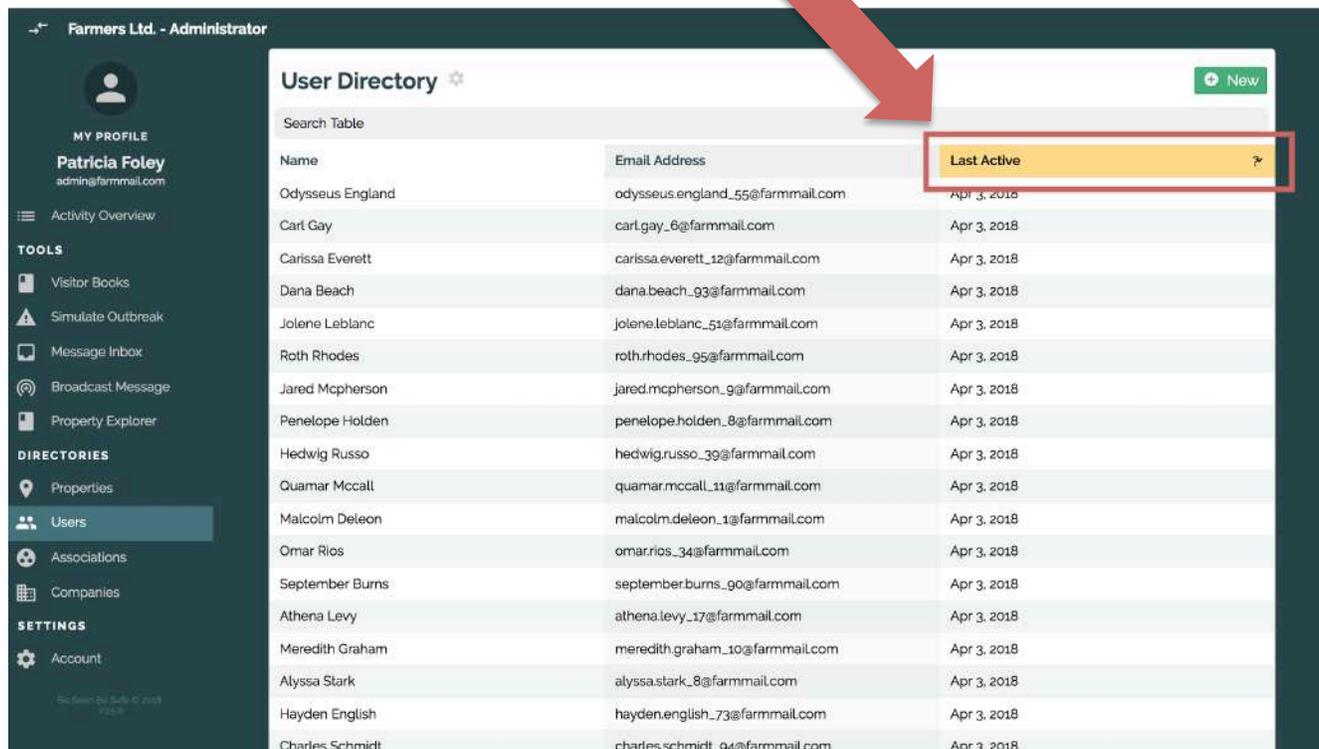
Once you have completed any edits, click **Save** beside the **Create Geofence** tool.

Please see 'Geofencing Rules' for further instructions on correctly editing geofences. Contact Be Seen Be Safe if you do not possess this document already.

Users

Users is a list of all of the users within the association.

Under Directories, click on **Users**. Association Administrators can sort, search, or edit any of their registered users. Each of the three columns (**Name**, **Email Address**, **Last Active**) can be sorted alphabetically or numerically simply by clicking on that column's header. The Last Active column shows the most recent activity date recorded for each property, it has been sorted as an example below.



The screenshot shows the 'User Directory' interface. The left sidebar contains navigation options: MY PROFILE (Patricia Foley), TOOLS (Visitor Books, Simulate Outbreak, Message Inbox, Broadcast Message, Property Explorer), DIRECTORIES (Properties, Users, Associations, Companies), and SETTINGS (Account). The main content area displays a table with the following columns: Name, Email Address, and Last Active. A red arrow points to the 'Last Active' column header, which is highlighted in yellow. A red box also highlights the 'Last Active' column header and the first row of data.

Name	Email Address	Last Active
Odysseus England	odysseus.england_55@farmmail.com	Apr 3, 2018
Carl Gay	carlgay_6@farmmail.com	Apr 3, 2018
Carissa Everett	carissa.everett_12@farmmail.com	Apr 3, 2018
Dana Beach	dana.beach_93@farmmail.com	Apr 3, 2018
Jolene Leblanc	jolene.leblanc_51@farmmail.com	Apr 3, 2018
Roth Rhodes	roth.rhodes_95@farmmail.com	Apr 3, 2018
Jared Mcpherson	jared.mcpherson_9@farmmail.com	Apr 3, 2018
Penelope Holden	penelope.holden_8@farmmail.com	Apr 3, 2018
Hedwig Russo	hedwig.russo_39@farmmail.com	Apr 3, 2018
Quamar Mccall	quamar.mccall_11@farmmail.com	Apr 3, 2018
Malcolm Deleon	malcolm.deleon_1@farmmail.com	Apr 3, 2018
Ormar Rios	ommar.rios_34@farmmail.com	Apr 3, 2018
September Burns	september.burns_90@farmmail.com	Apr 3, 2018
Athena Levy	athena.levy_17@farmmail.com	Apr 3, 2018
Meredith Graham	meredith.graham_10@farmmail.com	Apr 3, 2018
Alyssa Stark	alyssa.stark_8@farmmail.com	Apr 3, 2018
Hayden English	hayden.english_73@farmmail.com	Apr 3, 2018
Charles Schmidt	charles.schmidt_94@farmmail.com	Apr 3, 2018

The columns are customizable, just select **Columns** at the top and select the columns you wish to view in the directory. In the **Search Table** bar, you can search by name, email address, and last activity date. Click on a user's name to view their **User Details**.

You can edit a user's name, email address, phone number, phone manufacturer, phone type, language, and notification settings.

You can also edit **User Type** (Farm Worker, Farm Owner, or Service Provider), the company they work for, and their proximity to the livestock.

Important - If you select Service Provider, you will be required to fill out the livestock proximity question. Please ensure this field is filled in correctly as it is extremely important in assessing individual risk profiles. Please see the registration process at the beginning of this document for further information.

In the **User Details**, simply click **Edit** beside each heading in order to change it.

The screenshot shows the 'User Directory' page for 'Farmers Ltd. - Administrator'. The user 'Pascale Randall' is selected. The 'User Details' section includes: General (Given Name(s): Pascale, Family Name: Randall, Email Address: pascale.randall_35@farmmail.com, Mobile Number: 1 (234) 567-8910, Phone Manufacturer (i.e. Apple): Apple, Phone Model Number (i.e. iPhone 5S): iPhone 7), Application Preferences (Language: English, Notify of personal movements on properties owned by you: checked, Notify of visitor movements: checked, Notify of any personal movements: checked), Profile (User Type: Service Provider, Company Name: Farms Inc., On farm visits, what is your proximity to the livestock?: I do not go near the barn area.), and Total Recorded Visits (Last 7 days: 0, Last 30 days: 18, Last 365 days: 85). A red arrow labeled 'Scroll' points downwards from the bottom of this screenshot.

The user's **Total Recorded Visits** is listed by **Last 7 Days**, **Last 30 Days**, and **Last 365 Days** and is also viewable and searchable by date range. This data can be exported for future analysis by clicking **Export CSV**.

This screenshot shows the 'User Directory' page for 'Pascale Randall' with the 'Total Recorded Visits' section expanded. The 'Export CSV' button is highlighted with a red box. Below it, the 'Property Visit Records' section is visible, showing a table of visit data.

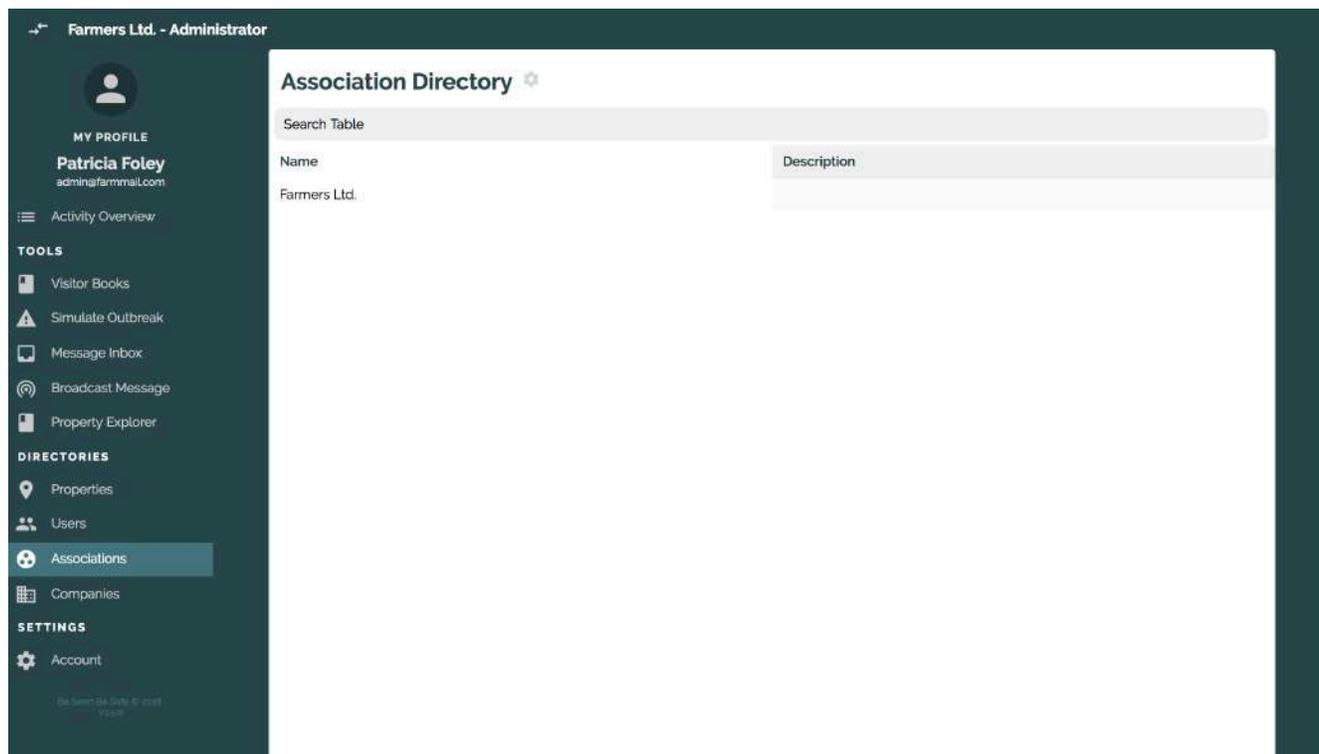
Property	Timestamp	Duration
George Farms Ltd.	Mar 30 11:57 AM - 12:02 PM	6m
Paki Farms Ltd.	Mar 30 10:49 AM - 11:42 AM	53m
Vincent Farms Ltd.	Mar 28 6:38 AM - 7:48 AM	1h 10m

To create a new user, click **Add User** on the top right-hand corner of the **User Directory** page. Fill in the new user's name and email address, and click **Submit**. The new user will receive an email on behalf of Fences asking them to login and register.

Associations

Associations is the list of the associations the administrator has authorization over.

Under Directories, click on **Associations**. Association Administrators can sort, search, or edit any of their associations. Typically, an Administrator would have just one Association.



Click on an association's name to view the **Association Details**. You can view any association information including association name, description, default coordinates, administrators, staff, commodities, and **Visitor Record Statistics**. To edit any of this information, please contact Fences.

Visitor Record Statistics

At the bottom of the Association Details, the association's **Visitor Record Statistics** are listed. The visits for the entire association are grouped by **Last 7 Days**, **Last 30 Days**, and **Last 365 Days** in numbers. The bar graph underneath shows monthly visits by risk factor for the association's visitors. The line graph below that shows the percentage of change in monthly visits by risk factor. For example, if a user who goes into sheep barns regularly (eg. a veterinarian) enters a sheep property, they will be recorded as a high risk visitor. This is determined by the profile they fill out when the user first downloads the app.

Farmers Ltd. - Administrator

Association Directory ⚙️

Search Table

Name: Farmers Ltd.

Farmers Ltd.

Association Details

General

Name: Farmers Ltd.
 Description: Description
 Default Coordinates - Latitude: 43.6532
 Default Coordinates - Longitude: -79.3832

Administrator(s)
 Patricia Foley

Staff
 None selected

Association Oversight
 None selected

Commodity Oversight
 Layers and/or Pullets, Turkeys

Visitor Record Statistics

Last 7 days: **62** | Last 30 days: **574** | Last 365 days: **4396**

Monthly Visits by Risk Factor

Legend: Total (Black), Low (Blue), Medium (Yellow), High (Red)



Farmers Ltd. - Administrator

Association Directory ⚙️

Search Table

Name: Farmers Ltd.

Farmers Ltd.

Visitor Record Statistics

Last 7 days: **62** | Last 30 days: **574** | Last 365 days: **4396**

Monthly Visits by Risk Factor

Legend: Total (Black), Low (Blue), Medium (Yellow), High (Red)

% Change in Monthly Visits by Risk Factor

Legend: Total (Black), Low (Blue), Medium (Yellow), High (Red)

Visitor Books

Visitor Books allows you to create a visitor log for properties for any date range required.

Under Tools, select **Visitor Books**. Select **New**. Next, select the date range of visits in **Start Date** and **End Date** and finally, select the properties by clicking **Click to select properties**.

The screenshot shows the 'Create Visitor Book' form with the following fields:

- Start Date:** yyyy-mm-dd
- End Date:** yyyy-mm-dd

The form includes a 'Submit' button and a 'Click to select properties' button. A red arrow points from the 'Click to select properties' button in the form to the 'Click to select properties' button in the 'Select Property Owners' pop-up below.

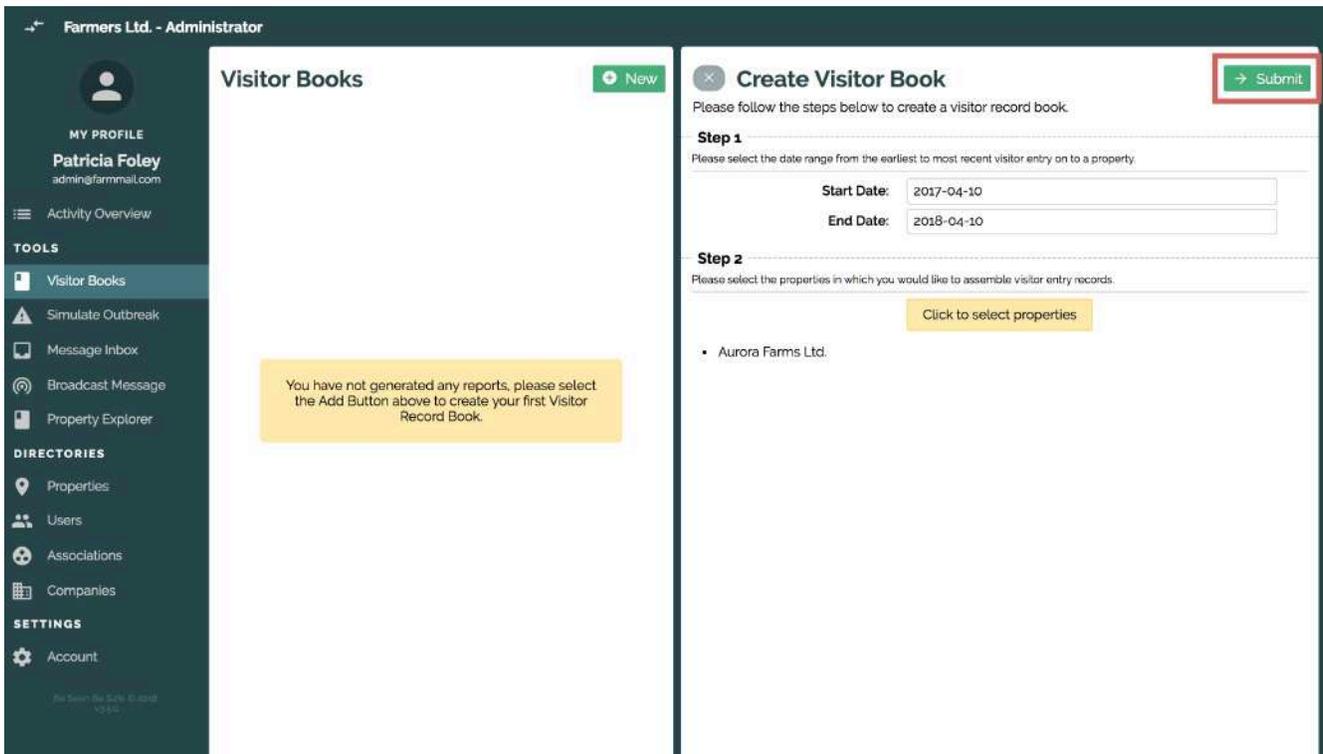
The 'Select Property Owners' pop-up contains a search table with the following columns: Operating Name(s), Owner(s), and Last Active. The 'Continue' button is highlighted with a red box and a red arrow pointing to it from the 'Click to select properties' button in the form above.

Operating Name(s)	Owner(s)	Last Active
Aurora Farms Ltd.	Aurora Hester	Mar 31, 2018
Clare Farms Ltd.	Clare Davis	Mar 14, 2018
Hayden Farms Ltd.	Hayden English	Mar 26, 2018
Kasper Farms Ltd.	Kasper Byrd	Mar 26, 2018
Audra Farms Ltd.	Audra Sherman	Mar 28, 2018
Lucian Farms Ltd.		Mar 27, 2018
Keane Farms Ltd.	Keane Myers	Apr 3, 2018
Hop Farms Ltd.	Hop Wong	Apr 1, 2018
Abra Farms Ltd.	Abra Watts	Apr 2, 2018
Roth Farms Ltd.	Roth Rhodes	Mar 24, 2018
Guyn Farms Ltd.	Guyn Raymond	Apr 2, 2018
Camden Farms Ltd.	Camden Stephens	Feb 20, 2018
Maitte Farms Ltd.	Maitte Ramos	Apr 2, 2018
Kirk Farms Ltd.	Kirk Hill	Apr 1, 2018
Hilda Farms Ltd.	Hilda Hess	Apr 3, 2018

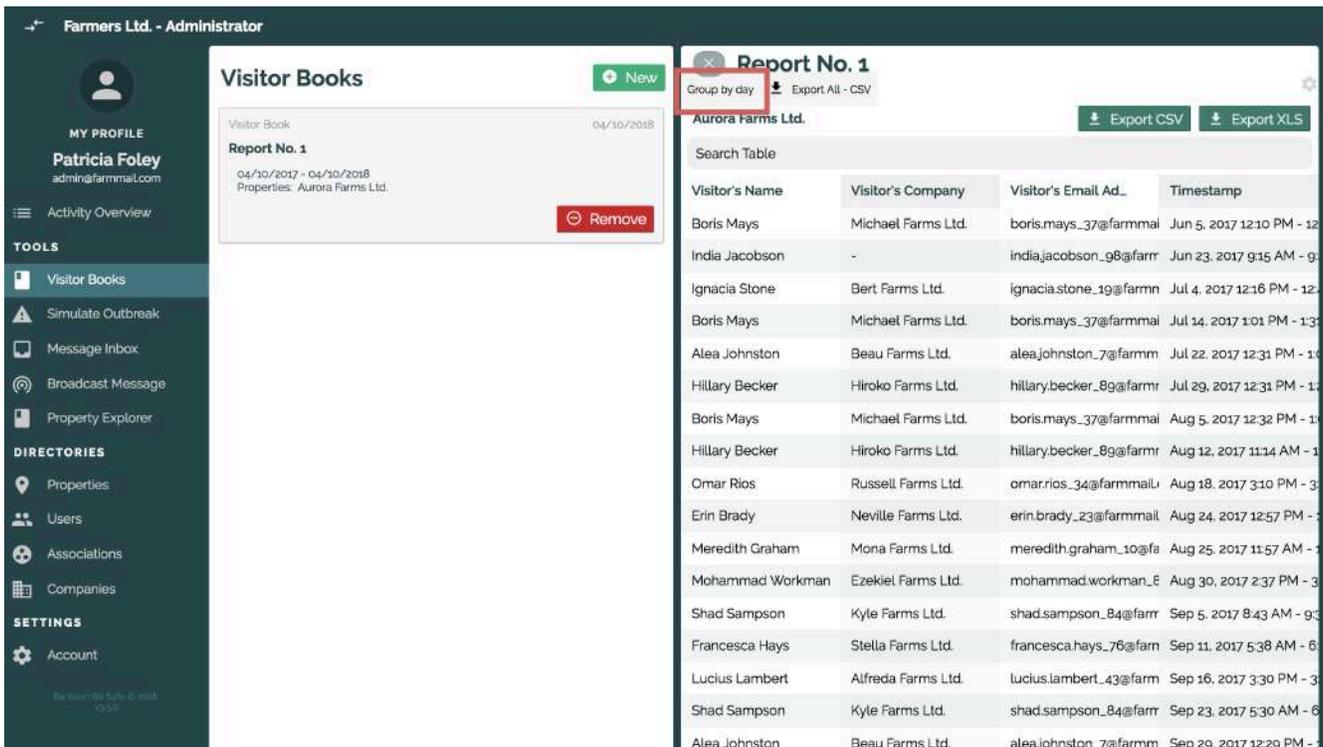
A pop-up will appear with properties to select from. In the **Search Table** bar, you can search by property name, owner, or last activity date. Each of the three columns (**Operating Name(s)**, **Owner(s)**, **Last Active**) can be sorted alphabetically or numerically simply by clicking on that column's header.

You can select one property, or multiple. Once you've selected properties, click **Continue** and the pop-up will disappear.

Click **Submit** on the Create Visitor Book page to receive the report.



Your generated visitor book will save as a report on this page for later review, if needed. You can group the visits by day or property. Click **Group by day** or **Group by property** to switch between the two. Each of the four columns (**Visitor's Name**, **Visitor's Company**, **Timestamp**, **Duration**) can be sorted alphabetically or numerically by clicking on that column's header.



Select Columns to Display

Search Table

Visitor's Name ✕ Timestamp ✕ Visitor's Company ✕ Visitor's Email Address ✕

Column Name

Visitor's Name

Visitor's Company

Visitor's Phone Number

Visitor's Email Address

Property

Timestamp

Duration

Columns are customizable. Select the gear icon at the top right of the page and a pop-up will appear with a choice of columns you can observe and export from the generated visitor book. Select the options you wish to have in that particular visitor book, and click **Continue**. For this example, **Visitor's Name**, **Visitor's Company**, **Visitor's Email Address** and **Timestamp** were selected. Other options include **Visitor's Phone Number**, **Property**, and **Duration**.

The screenshot shows the 'Farmers Ltd. - Administrator' interface. On the left is a sidebar with navigation options: MY PROFILE (Patricia Foley), Activity Overview, TOOLS (Visitor Books, Simulate Outbreak, Message Inbox, Broadcast Message, Property Explorer), DIRECTORIES (Properties, Users, Associations, Companies), and SETTINGS (Account). The main content area is titled 'Visitor Books' and shows a 'Report No. 1' for the period 04/10/2017 - 04/10/2018, generated for 'Aurora Farms Ltd.'. A table of visitor records is displayed with columns for Visitor's Name, Visitor's Company, Visitor's Email Address, and Timestamp. A gear icon in the top right corner of the report area is highlighted with a red arrow, indicating the column customization options.

Visitor's Name	Visitor's Company	Visitor's Email Ad...	Timestamp
Boris Mays	Michael Farms Ltd.	boris.mays_37@farmmail	Jun 5, 2017 12:10 PM - 12
India Jacobson	-	india.jacobson_98@farmr	Jun 23, 2017 9:15 AM - 9
Ignacia Stone	Bert Farms Ltd.	ignacia.stone_19@farmn	Jul 4, 2017 12:16 PM - 12
Boris Mays	Michael Farms Ltd.	boris.mays_37@farmmail	Jul 14, 2017 1:01 PM - 1:3
Alea Johnston	Beau Farms Ltd.	alea.johnston_7@farmm	Jul 22, 2017 12:31 PM - 1
Hillary Becker	Hiroko Farms Ltd.	hillary.becker_89@farmr	Jul 29, 2017 12:31 PM - 1
Boris Mays	Michael Farms Ltd.	boris.mays_37@farmmail	Aug 5, 2017 12:32 PM - 1
Hillary Becker	Hiroko Farms Ltd.	hillary.becker_89@farmr	Aug 12, 2017 11:14 AM - 1
Omar Rios	Russell Farms Ltd.	omar.rios_34@farmmail	Aug 18, 2017 3:10 PM - 3
Erin Brady	Neville Farms Ltd.	erin.brady_23@farmmail	Aug 24, 2017 12:57 PM - 1
Meredith Graham	Mona Farms Ltd.	meredith.graham_10@fa	Aug 25, 2017 11:57 AM - 1
Mohammad Workman	Ezekiel Farms Ltd.	mohammad.workman_E	Aug 30, 2017 2:37 PM - 3
Shad Sampson	Kyle Farms Ltd.	shad.sampson_84@farmr	Sep 5, 2017 8:43 AM - 9:3
Francesca Hays	Stella Farms Ltd.	francesca.hays_76@farm	Sep 11, 2017 5:38 AM - 6
Lucius Lambert	Alfreda Farms Ltd.	lucius.lambert_43@farm	Sep 16, 2017 3:30 PM - 3
Shad Sampson	Kyle Farms Ltd.	shad.sampson_84@farmr	Sep 23, 2017 5:30 AM - 6
Alea Johnston	Beau Farms Ltd.	alea.johnston_7@farmm	Sep 29, 2017 12:29 PM - 1

The visit data can be exported either as a CSV file (click **Export CSV**) or as a XLS file (click **Export XLS**) for further use. An example of the visitor book data export as a XLS (or Excel) spreadsheet shown below.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Visitor's Name	Visitor's Company	Property	Timestamp	Duration								
1	Ignacia Stone	Seth Farms Ltd.	Aurora Farms Ltd.	Jan 9 10:13 PM - 10:43 PM	31m								
2	Boris Mays	Olympia Farms Ltd.	Aurora Farms Ltd.	Jan 19 10:58 PM - 11:28 PM	30m								
3	Alea Johnston	Halla Farms Ltd.	Aurora Farms Ltd.	Jan 27 10:28 PM - 10:58 PM	30m								
4	Hillary Becker	Willa Farms Ltd.	Aurora Farms Ltd.	Feb 3 10:28 PM - 11:19 PM	51m								
5	Boris Mays	Olympia Farms Ltd.	Aurora Farms Ltd.	Feb 10 10:29 PM - 10:59 PM	30m								
6	Hillary Becker	Willa Farms Ltd.	Aurora Farms Ltd.	Feb 17 9:11 PM - 9:54 PM	43m								
7	Omar Rios	Carter Farms Ltd.	Aurora Farms Ltd.	Feb 24 1:07 AM - 1:37 AM	30m								
8	Erin Brady	Walker Farms Ltd.	Aurora Farms Ltd.	Mar 1 10:54 PM - 11:09 PM	15m								
9	Meredith Graham	Mona Farms Ltd.	Aurora Farms Ltd.	Mar 2 9:54 PM - 10:05 PM	10m								
10	Mohammad Workman	Ezekiel Farms Ltd.	Aurora Farms Ltd.	Mar 8 12:34 AM - 1:05 AM	31m								
11	Shad Sampson	Vera Farms Ltd.	Aurora Farms Ltd.	Mar 13 6:40 PM - 7:27 PM	47m								
12	Francesca Hays	Shelia Farms Ltd.	Aurora Farms Ltd.	Mar 19 3:35 PM - 4:05 PM	30m								
13	Lucius Lambert	Alfreda Farms Ltd.	Aurora Farms Ltd.	Mar 25 1:27 AM - 1:54 AM	28m								
14	Shad Sampson	Vera Farms Ltd.	Aurora Farms Ltd.	Mar 31 3:27 PM - 3:57 PM	31m								
15	Alea Johnston	Halla Farms Ltd.	Aurora Farms Ltd.	Apr 6 10:26 PM - 10:41 PM	15m								
16	Mari Melendez	Chase Farms Ltd.	Aurora Farms Ltd.	Apr 7 12:01 AM - 12:26 AM	25m								
17	Alea Johnston	Halla Farms Ltd.	Aurora Farms Ltd.	Apr 13 1:55 PM - 2:25 PM	30m								
18	Andrew Merritt	Service Provider's Unlimited	Aurora Farms Ltd.	Apr 20 1:29 AM - 2:00 AM	31m								
19	Alea Johnston	Halla Farms Ltd.	Aurora Farms Ltd.	Apr 28 4:17 PM - 4:22 PM	5m								
20	Summer Armstrong	Pamela Farms Ltd.	Aurora Farms Ltd.	May 25 12:17 AM - 12:21 AM	4m								
21	Alea Johnston	Halla Farms Ltd.	Aurora Farms Ltd.	May 26 1:32 AM - 2:02 AM	30m								
22	Mari Melendez	Chase Farms Ltd.	Aurora Farms Ltd.	Jun 14 4:58 PM - 5:45 PM	46m								
23													

Simulate Outbreak

A disease simulation can be run in order to predict where disease could spread in the event of an outbreak. This report can be used for evaluating truck movements between farms and risk profile of farm visitors. This information can then be used to alert property owners and visitors in real-time of the possibility that they may have been infected by, or carrying, a pathogen. This enables proactive mitigation of disease spread.

To create a disease simulation, under Tools, select **Simulate Outbreak**. Select **New**. Next, select the **Infection Date** and **Incubation Period**. Finally, select the index properties by clicking **Click to select properties**.

An index property is one on which a suspected or diagnostically confirmed infection has occurred. The incubation period is the period between exposure to an infection and the appearance of the first symptoms. For most common diseases of livestock and poultry, incubation periods are generally known.

The screenshot displays the 'Farmers Ltd. - Administrator' interface. On the left is a dark sidebar with a user profile for Patricia Foley (admin@farmmail.com) and a 'TOOLS' menu where 'Simulate Outbreak' is highlighted. The main content area is split into two panels. The left panel, titled 'Outbreak Simulations', contains a yellow message box stating: 'You have not generated any reports, please select the Add Button above to create your first Outbreak Simulation.' A red box highlights a green '+ New' button in the top right corner of this panel. The right panel, titled 'Create Outbreak Simulation', contains a form with three steps. Step 1 is 'Infection Date' with the value '2018-04-10'. Step 2 is 'Incubation Period' with the value '1'. Step 3 is 'Please select the property on which the disease was reported.' A yellow button labeled 'Click to select properties' is highlighted with a red box.

Select Property Owners

Operating Name(s)	Owner(s)	Last Active
Aurora Farms Ltd.	Aurora Hester	Mar 31, 2018
Clare Farms Ltd.	Clare Davis	Mar 14, 2018
Hayden Farms Ltd.	Hayden English	Mar 26, 2018
Kasper Farms Ltd.	Kasper Byrd	Mar 26, 2018
Audra Farms Ltd.	Audra Sherman	Mar 28, 2018
Lucian Farms Ltd.		Mar 27, 2018
Keane Farms Ltd.	Keane Myers	Apr 3, 2018
Hop Farms Ltd.	Hop Wong	Apr 1, 2018
Abra Farms Ltd.	Abra Watts	Apr 2, 2018
Roth Farms Ltd.	Roth Rhodes	Mar 24, 2018
Guyn Farms Ltd.	Guyn Raymond	Apr 2, 2018
Camden Farms Ltd.	Camden Stephens	Feb 20, 2018
Maite Farms Ltd.	Maite Ramos	Apr 2, 2018
Kirk Farms Ltd.	Kirk Hill	Apr 1, 2018
Hilda Farms Ltd.	Hilda Hess	Apr 3, 2018

A pop-up will appear with properties to select from. Each of the three columns (**Operating Name(s)**, **Owner(s)**, **Last Active**) can be sorted alphabetically or numerically simply by clicking on that column's header. You can select one index property, or multiple properties. Once you've selected properties, click **Continue**. Click **Submit** on the Create Outbreak Simulation page to receive the report.

Outbreak Simulations

Create Outbreak Simulation

Please follow the steps below to specify conditions of the disease outbreak simulation.

Step 1
Please select the date of the reported infection.
Infection Date: 2018-04-03

Step 2
Please select the incubation period of the disease reported.
Incubation Period: 5

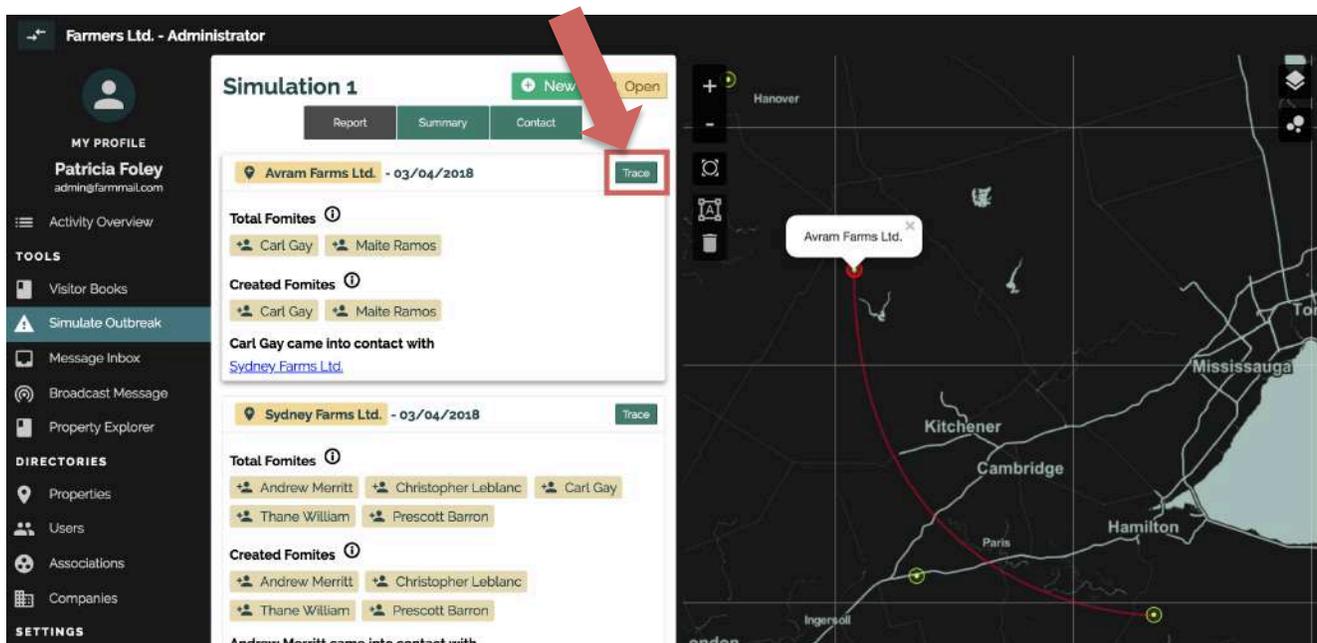
Step 3
Please select the property on which the disease was reported.
Click to select properties

- Avram Farms Ltd.

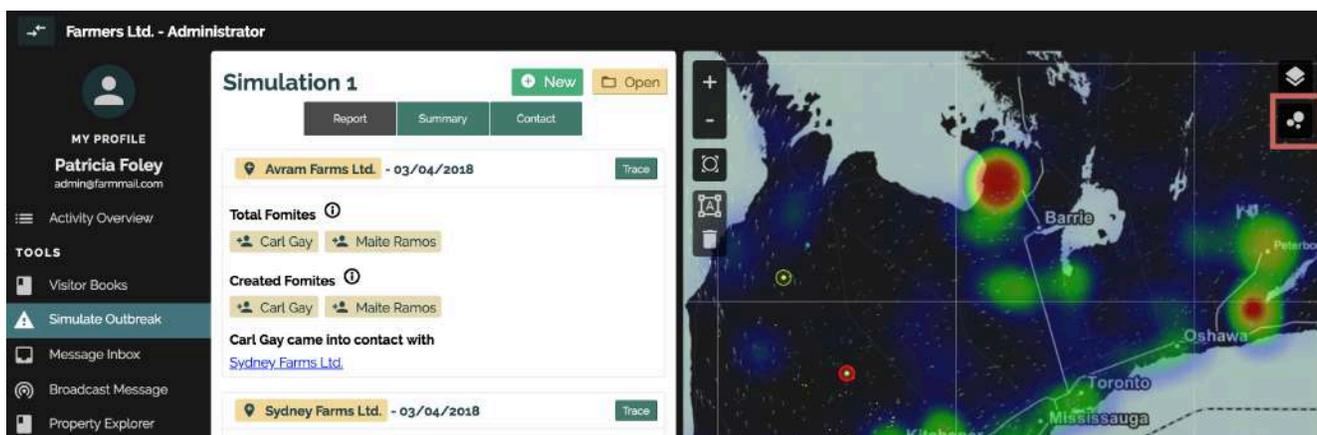
You have not generated any reports, please select the Add Button above to create your first Outbreak Simulation.

Simulate Outbreak Report

The first box of the report states the fomites (possible carriers of the disease) who have visited the initial farm during the incubation period selected. The second box of the report lists the next property that the fomites have visited since visiting the infected farm. The report repeats this process, providing a cascading list of potentially infected properties and fomites. By clicking **Trace** in any of the report boxes, the report will draw a line between that property and the properties directly linked to it within the simulation. You can click on property or people names in the report to view the **Property Details** for that location or **User Details** for that person.

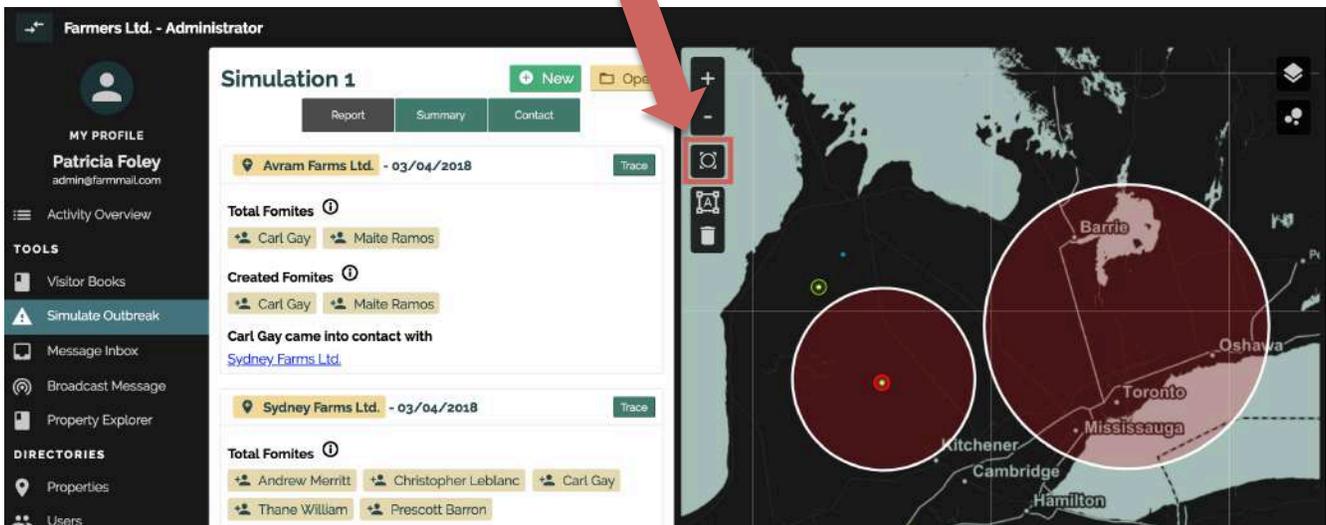


There are three available overlays; wild waterfowl movement, wind movement, and all other properties within the system. Hover over the dotted box on the map to toggle on and off real-time movement of **Birds** and **Wind** as well as **Properties** locations. **Wind** and **Properties** are available worldwide. **Birds** are available in Canada and soon to be internationally as well.

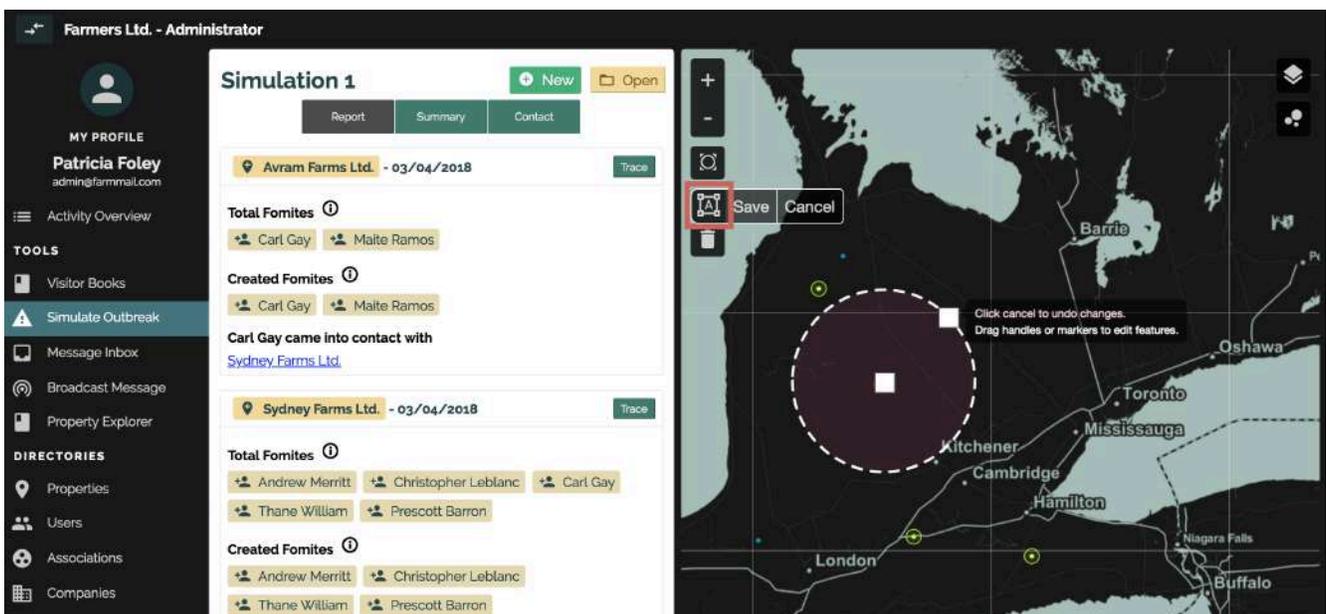


Quarantine Zone

Quarantine zones can be manually added to a disease simulation. Click on the circle button on the map.



Just as with geofences, quarantine zones can be edited by clicking on the **Edit Geofence** icon (see the **How to Edit a Geofence** section above to review the **Edit Options** legend). Once the boundary becomes dashed and not solid, the quarantine zone is ready to be edited. Click and drag the center white square to move the quarantine zone. Click and drag the outer white square to resize the quarantine zone. Click **Cancel** to undo any changes. Click **Save** beside the **Edit Geofence** tool to save any changes. To delete a quarantine zone, click on the **Delete Geofence** icon (see the Edit Options legend), then click anywhere in the quarantine zone. Click **Cancel** to undo any changes. Click **Save** beside the **Delete Geofence** tool to save the deletion.



Simulate Outbreak Summary

A summary of the disease simulation report can be found under the **Summary** tab. Click on **Summary**. You can again click on property or people names in the report to view the **Property Details** for that location or **User Details** for that person.

Farmers Ltd. - Administrator

Simulation 1 [New] [Open]

Report [Summary] Contact

Reported Date
Tuesday, April 3, 2018

Disease Incubation Period
5

Index Case(s)
[Avram Farms Ltd.](#)

Possible Infected Properties
[Sydney Farms Ltd.](#), [Rahim Farms Ltd.](#), [Anika Farms Inc.](#), [Anika Farms Ltd.](#), [Sonya Farms Ltd.](#), [Aiko Farms Ltd.](#), [Adena Farms Ltd.](#), [Dean Farms Ltd.](#), [Sheila Farms Ltd.](#), [Zena Farms Ltd.](#)

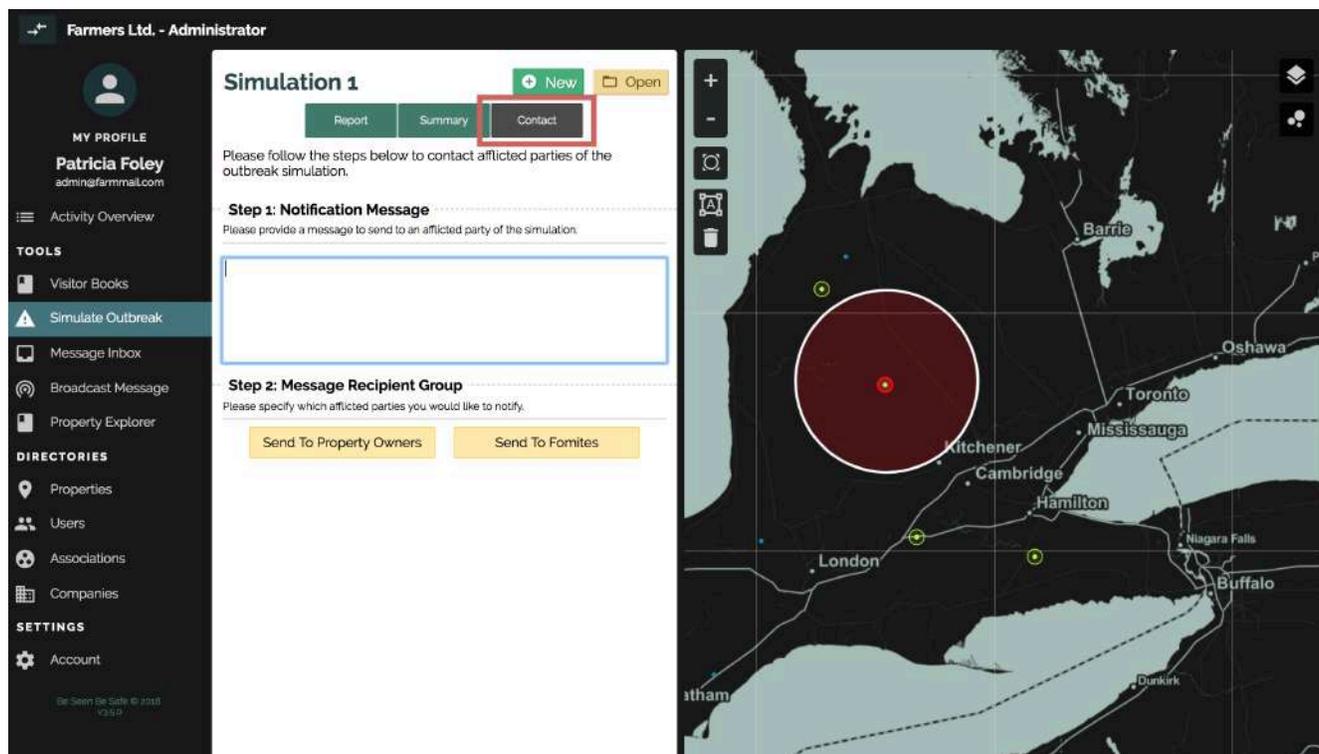
Possible Fomites

- Carl Gay, Maite Ramos, Andrew Merritt
- Christopher Leblanc, Thane William
- Prescott Barron, Tana Frost, Penelope Holden
- Hop Wong, Kimberly Anthony, Athena Levy
- Hayden English

Map showing the simulation area centered on Toronto, Ontario, Canada, with surrounding regions like New York, Pennsylvania, and Ohio visible.

Alerting Property Owners and Fomites

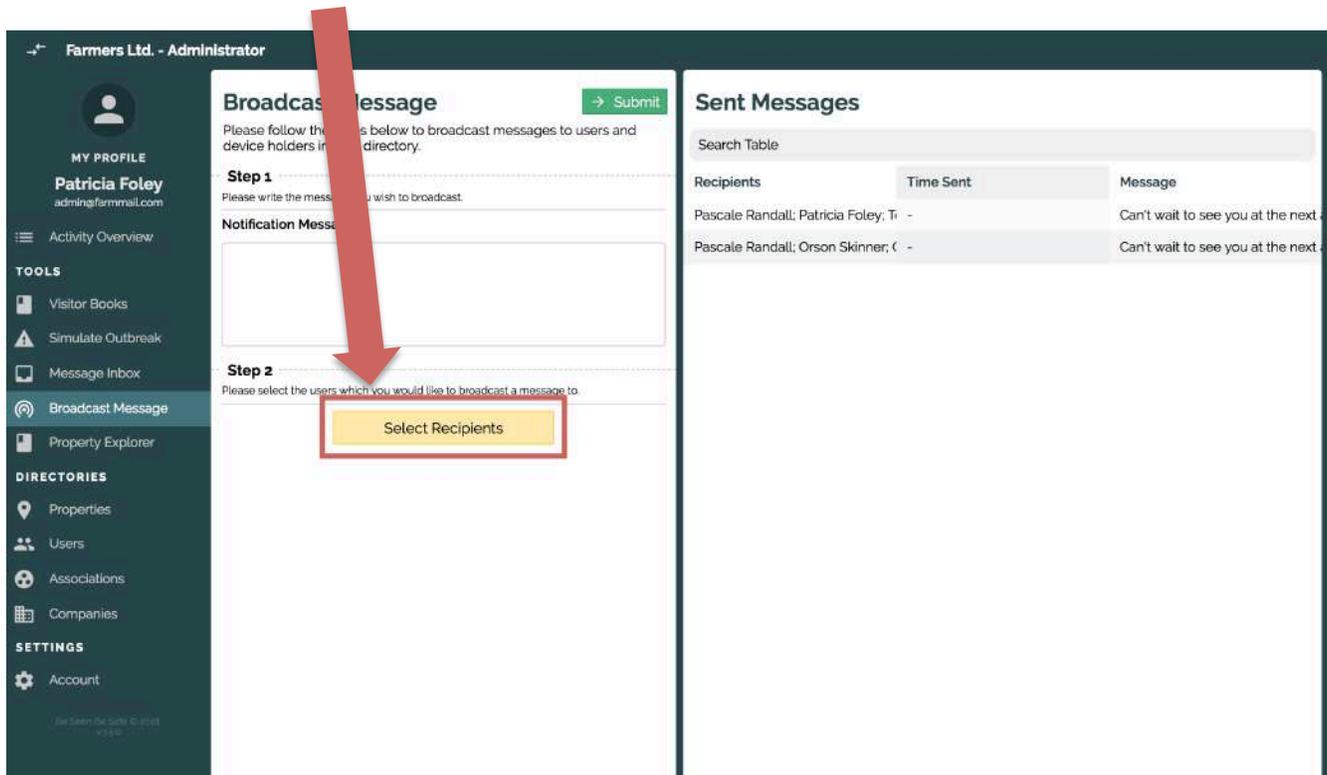
Property owners and fomites can be contacted immediately with warnings and advice. Click **Contact**. For property owners, create the property owner message in the **Notification Message** field and click **Send To Property Owners**. For fomites, create the fomite message in the **Notification Message** field and click **Send To Fomites**. The messages will be sent immediately to the listed property owners and fomites from summary of the simulation report.



Broadcast Message

Broadcast Message allows you to send a private, encrypted message to any registered users within your association at any time.

Under Tools, select **Broadcast Message**. Type the message in the **Notification Message** box. Click **Select Recipients**. A pop-up box will appear.



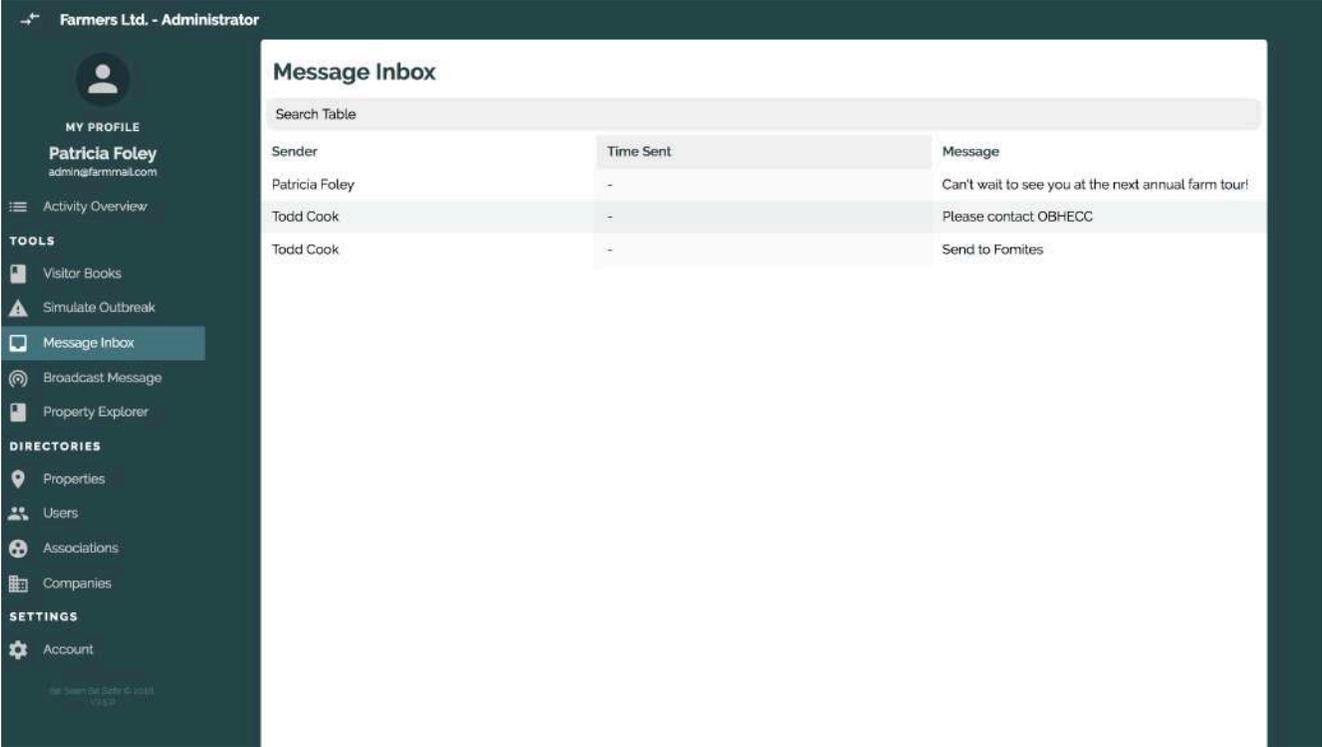
Recipients		Cancel	Continue
Search Table			
Name	Email Address		
Pascale Randall	pascale.randall_35@farmmail.com		
Quyn Chandler	quyn.chandler_92@farmmail.com		
Patricia Foley	admin@farmmail.com		
Orson Skinner	orson.skinner_60@farmmail.com		
Todd Cook	super.admin@farmmail.com		
Ciaran Rodgers	ciaran.rodgers_53@farmmail.com		
Paki Powell	paki.powell_88@farmmail.com		
Audrey Rodriguez	audrey.rodriguez_77@farmmail.com		
Odysseus Byrd	farm.owner@farmmail.com		
Charles Schmidt	charles.schmidt_94@farmmail.com		
Penelope Holden	penelope.holden_8@farmmail.com		
Daniel Garza	daniel.garza_73@farmmail.com		
Uma Gates	uma.gates_35@farmmail.com		
Jared Mcpherson	jared.mcpherson_9@farmmail.com		
Kimberly Anthonv	kimberly.anthonv_24@farmmail.com		

Each of the two columns (**Name** and **Email Address**) can be sorted alphabetically simply by clicking on that column's header. You can also search for specific names or emails in the **Search Table** field. The recipients that show up on the list are users who have logged in on the Fences app on their mobile device, so you can be sure that they will receive the message. Once you have selected all users, click **Continue**. When you have typed your message and selected your recipients, click **Submit** on the Broadcast Message screen. The message will send immediately. Sent messages will be in the **Sent Messages** area.

Message Inbox

If you receive a message, you can view any received messages in your **Message Inbox**.

Under Tools, select **Message Inbox**. You can then click on any message to review it.



The screenshot shows the 'Message Inbox' interface within the 'Farmers Ltd. - Administrator' dashboard. The left sidebar contains navigation options: 'MY PROFILE' (Patricia Foley, admin@farmma.com), 'Activity Overview', 'TOOLS' (Visitor Books, Simulate Outbreak, Message Inbox, Broadcast Message, Property Explorer), 'DIRECTORIES' (Properties, Users, Associations, Companies), and 'SETTINGS' (Account). The main content area displays a table of messages.

Sender	Time Sent	Message
Patricia Foley	-	Can't wait to see you at the next annual farm tour!
Todd Cook	-	Please contact OBHECC
Todd Cook	-	Send to Fomites

Property Explorer

Property Explorer allows Association Administrators to view all of their association's properties on a single map.

Under Tools, click **Property Explorer**. The orange markers are properties and the circled numbers are groups of properties. As you zoom in, the numbers will separate into their separate property locations. You can search for particular properties in the **Search Table** bar. The map will then zoom in on the property you have selected. You can also select a marker to view which property that marker belongs to.

The screenshot shows the 'Farmers Ltd. - Administrator' dashboard. The left sidebar contains sections for 'MY PROFILE' (Patricia Foley), 'TOOLS' (including Property Explorer), 'DIRECTORIES' (Properties, Users, Associations, Companies), and 'SETTINGS' (Account). The central 'Property Explorer' section features a 'Search Table' and a list of 20 operating names, such as 'Aurora Farms Ltd.' and 'Clare Farms Ltd.'. The right side displays a satellite map with orange location pins and green circles containing numbers, representing groups of properties.

Account

There are a number of options that can be changed in your **Account** settings at any time. You can select preferred language, notification types, and change your password.

Under Settings, click **Account**.

To change your language, select the **Language** drop-down and choose either English, Spanish, or French in the menu. Click **Save** to save any changes.

There are three types of notifications you can receive. A user can be notified of personal movements on properties they own, can be notified of visitor movements on properties they own, and can be notified of their personal movements on other properties in the entire Fences system. To receive each type of notification, make sure the checkmark appears beside that option. Uncheck the checkmark, by clicking on it, to cancel that type of notification. Click **Save** to save any changes.

To change your password, enter your current password, enter your new password, confirm the new password by typing it in again in the **Confirm New Password** field, then click **Submit** to save your new password.

You can also log out by clicking **Sign Out** at the top of the page.

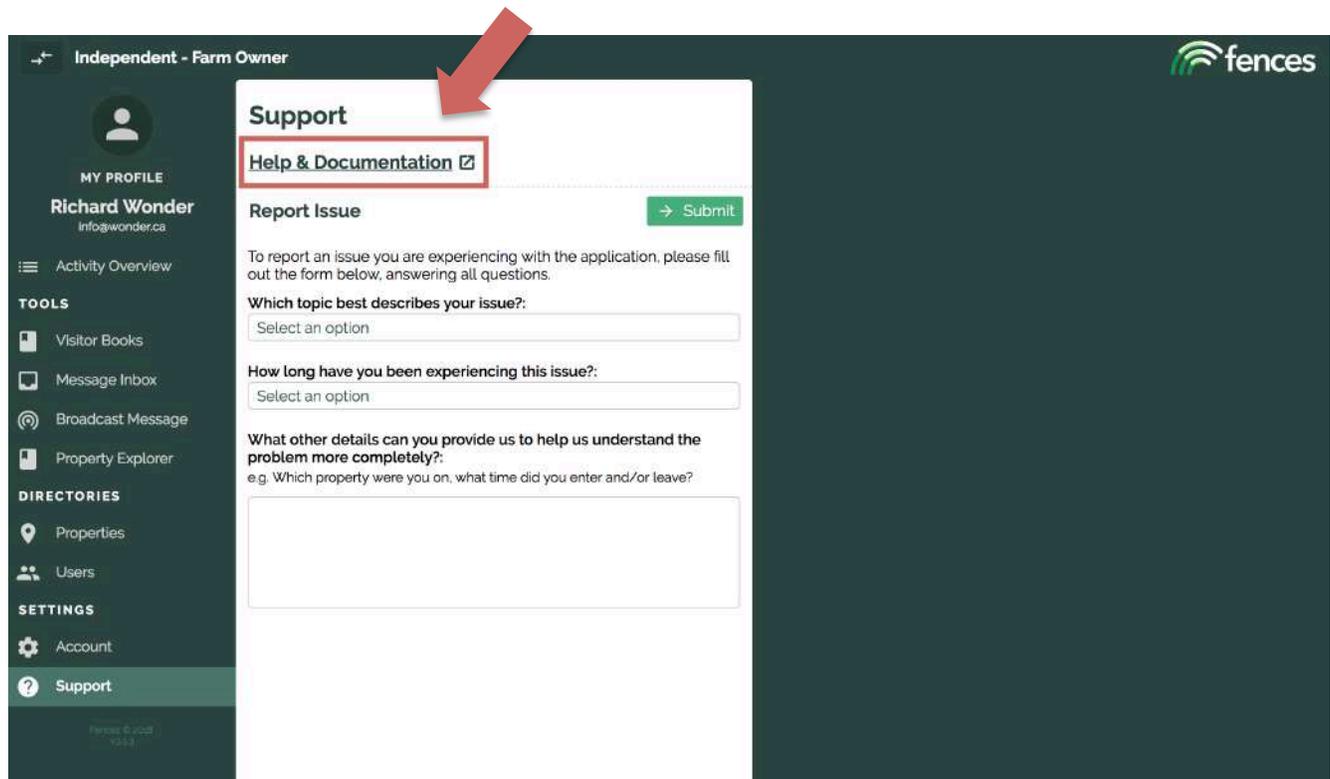
The screenshot displays the 'Account Settings' page for 'Farmers Ltd. - Administrator'. The page is divided into several sections:

- Account Settings:** Features a 'Sign Out' button at the top right, highlighted with a red box and a red arrow.
- Application Preferences:** Includes a 'Language' dropdown menu set to 'English', a 'Save' button, and three notification options, all of which are checked and highlighted with a red box:
 - Notify of personal movements on properties owned by you:** Be notified of activity you make on properties owned by yourself.
 - Notify of visitor movements:** Be notified of movements by visitors on properties owned by yourself.
 - Notify of any personal movements:** Be notified of all personal movements on any properties in the system.
- Change Password:** Includes a 'Submit' button and three input fields: 'Current Password', 'New Password', and 'Confirm New Password'.

Support

Support provides you quick access to the **Help** section of our website as well as a support form to submit any issues you may be having.

Under Settings, click **Support**. The link under Support, **Help & Documentation**, sends you to the Help section of the Fences website, with access to downloadable User Guides for each user type, YouTube how-to videos, FAQs, and much more.



The **Report Issue** section allows you to report any issues you may be having with the app or dashboard. The first question: **Which topic best describes your issue?** has four possible options:

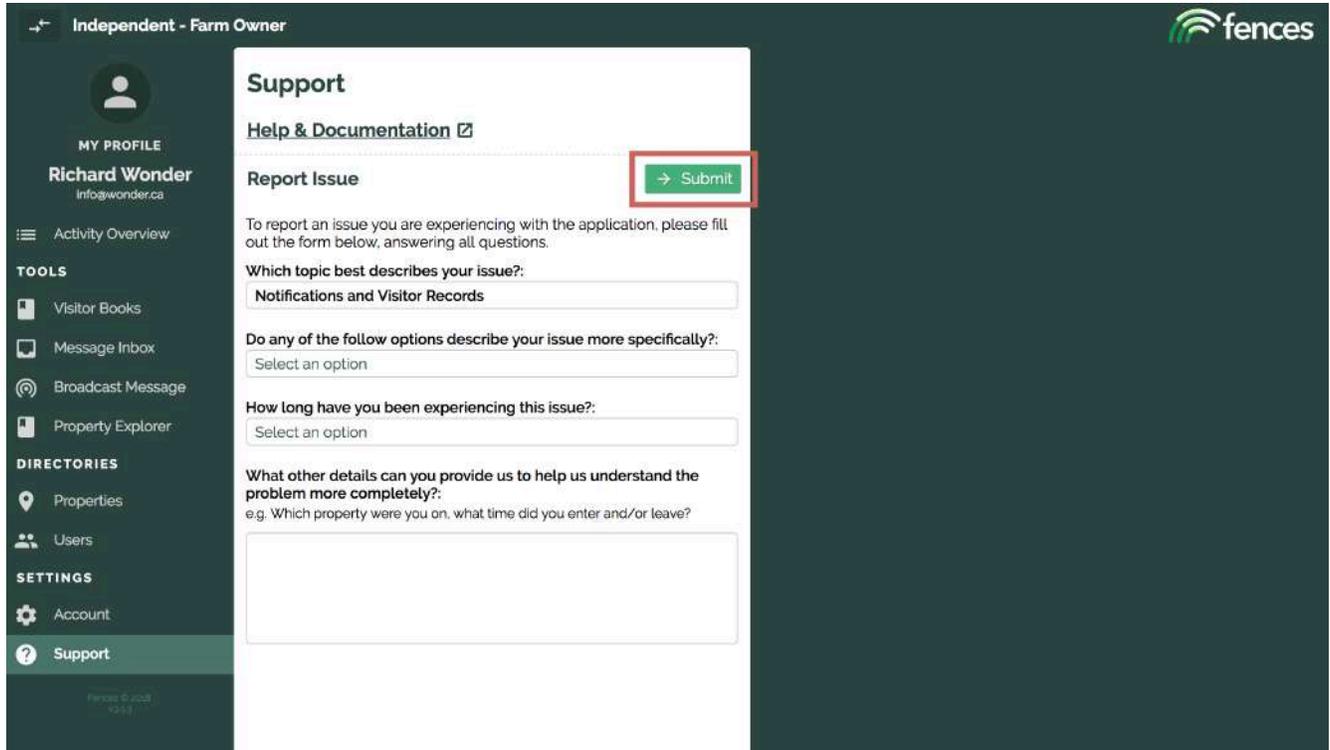
- Notifications and Visitor Records**
- Battery Performance**
- Inaccurate or Missing Property/Personal Information**
- Other**

From there, a new question will pop-up: **Do any of the following options describe your issue specifically?** which has multiple answers depending on your specific issue.

The third question: **How long have you been experiencing this issue?** with five possible timeframe options.

Finally, the last question is **What other details can you provide us to help us understand the problem more completely?** and you have an optional text box to fill in.

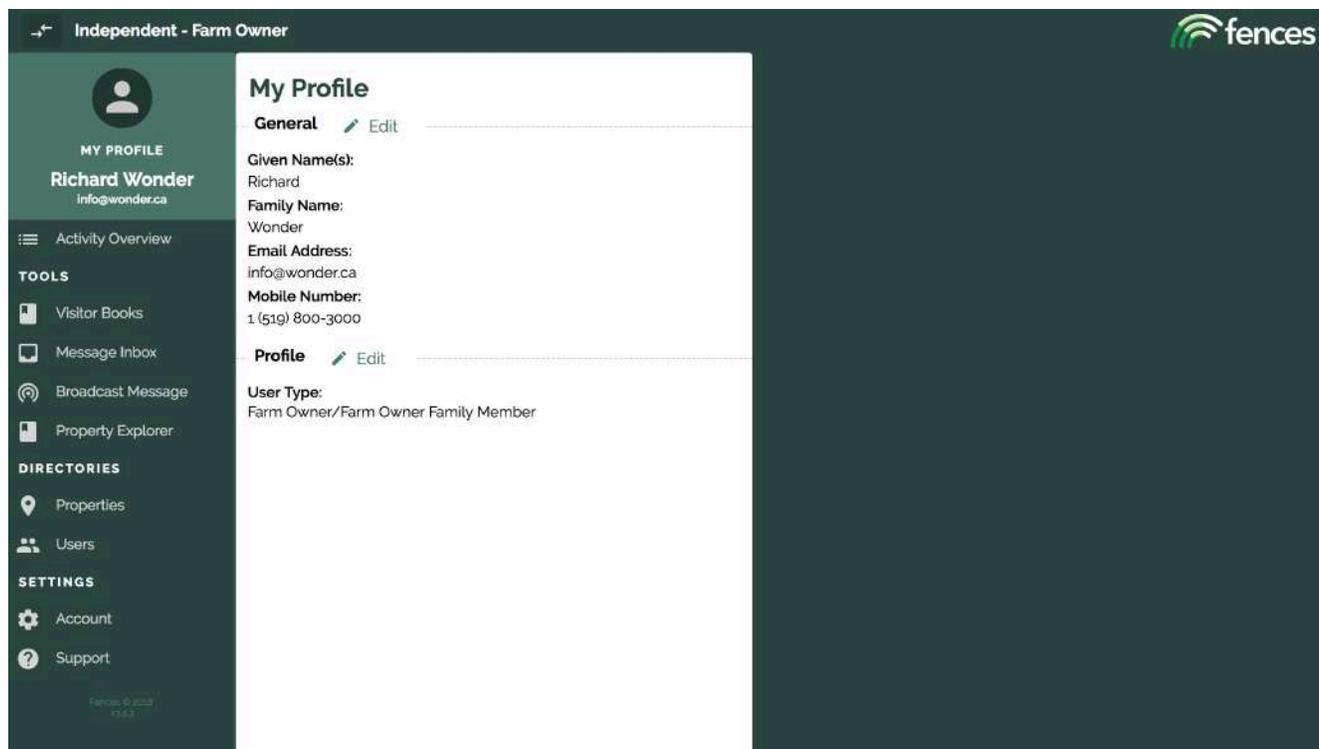
When you've completely filled out the form, click **Submit** and your issue will be sent to a Fences representative who will get back to you promptly.



My Profile

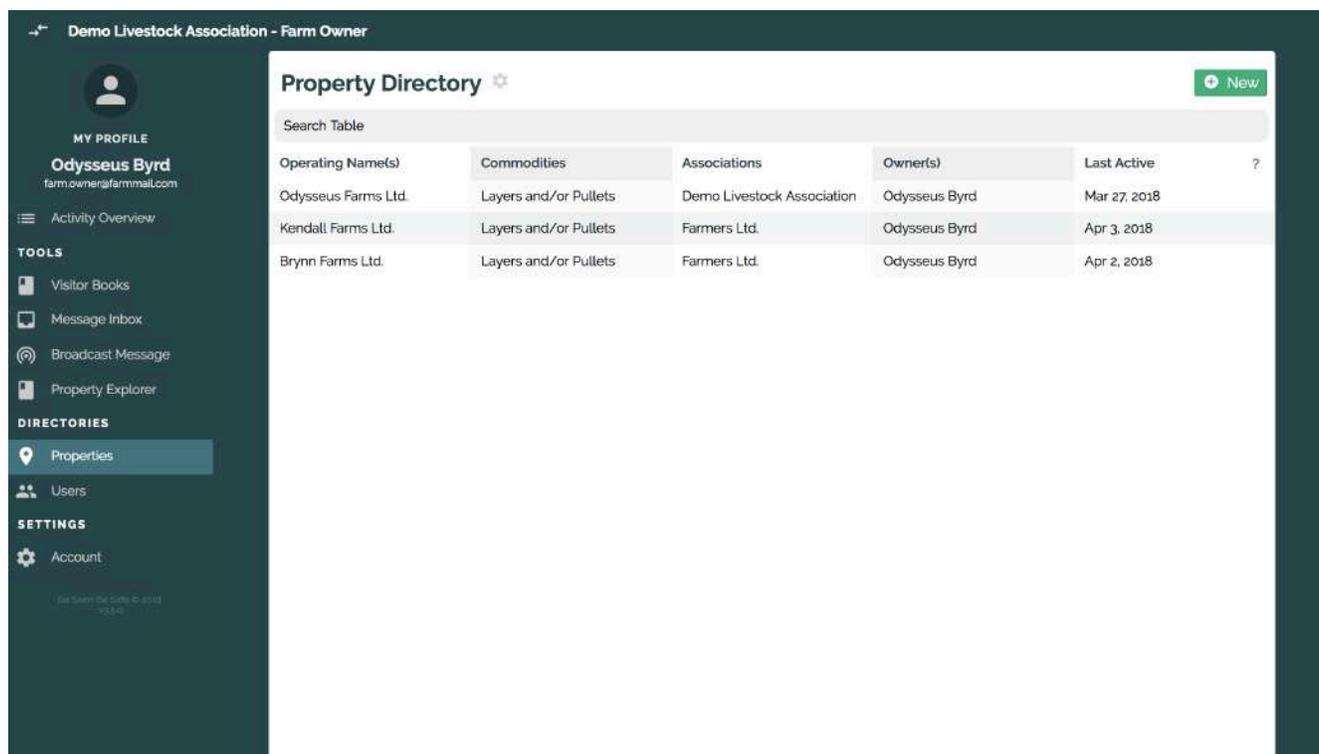
Your personal information and **User Type** can be changed in your **Profile** settings at any time. You can change your name, email, mobile number, user type, company name, and your proximity to the livestock.

On the menu, click the top area, labelled **My Profile** with your name and email underneath. Click **Edit** beside the section you would like to edit. Make any changes, then click **Save** at the top when finished.



Property Owner Functions

Property Owners have access to their own property details. When selecting properties for a visitor book or just viewing properties in the **Property Directory** or **Property Explorer**, Property Owners can only see their own properties, no one else's. When selecting users for broadcasting a message or just viewing users in the **User Directory**, Property Owners can only see themselves or their staff. For example, our demonstration Property Owner account below has three farms and therefore, can only see those three in their **Property Directory**.



The screenshot shows a web application interface for a Farm Owner. The header is "Demo Livestock Association - Farm Owner". The main content area is titled "Property Directory" and features a search bar and a table with the following data:

Operating Name(s)	Commodities	Associations	Owner(s)	Last Active	
Odysseus Farms Ltd.	Layers and/or Pullets	Demo Livestock Association	Odysseus Byrd	Mar 27, 2018	?
Kendall Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Odysseus Byrd	Apr 3, 2018	
Brynn Farms Ltd.	Layers and/or Pullets	Farmers Ltd.	Odysseus Byrd	Apr 2, 2018	

The left sidebar contains navigation options: MY PROFILE (Odysseus Byrd, farm.owner@farmmail.com), TOOLS (Activity Overview, Visitor Books, Message Inbox, Broadcast Message, Property Explorer), DIRECTORIES (Properties, Users), and SETTINGS (Account). A "New" button is visible in the top right corner of the Property Directory section.

If a Property Owner goes onto another Fences property, they will be notified of their entries and exits, and they will be able to see that property's name in their **Activity Overview** but they will not be able to look at that property's information, geofence, or any other visitors to that property, besides themselves.

On the menu bar, Property Owners can see **Activity Overview**, **Visitor Books**, **Message Inbox**, **Broadcast Message**, **Property Explorer**, **Properties**, **Users**, **Account**, **Support**, and **My Profile**.

Service Provider Functions

Company Service Provider

Company Service Providers can see themselves or any staff that are registered to their company in the **User Directory**.

If a Company Service Provider goes onto a Fences property, they will be notified of their entries and exits, and they will be able to see that property's name in their **Activity Overview** but they will not be able to look at that property's information, geofence, or any other visitors to that property, besides themselves and their staff.

Company Service Providers can export the data of their personal or staff's activity.

On the menu bar, Company Service Providers can see **Activity Overview**, **Broadcast Message**, **Message Inbox**, **Users**, **Account**, **Support**, and **My Profile**.

Individual Service Provider

Individual Service Providers can only see themselves in the **User Directory**.

If a Service Provider goes onto a Fences property, they will be notified of their entries and exits, and they will be able to see that property's name in their **Activity Overview** but they will not be able to look at that property's information, geofence, or any other visitors to that property, besides themselves.

Service Providers can export the data of their personal **Activity Overview**.

On the menu bar, Service Providers can see **Activity Overview**, **Message Inbox**, **Account**, **Support**, and **My Profile**.

Definition Index

Association: A company or farmer cooperative that has control over multiple properties

Association Administrator: A manager or director of an association who has access to all sector/company information

CSV File: A simple file format used to store tabular data, such as a spreadsheet or database that can be imported to and exported from programs that store data in tables, such as Microsoft Excel or OpenOffice Calc

Fomites: Objects or materials that are likely to carry infection, such as clothes, footwear, and vehicles

Incubation Period: The period between exposure to an infection and the appearance of the first symptoms

Index Property: A farm on which a suspected or diagnostically confirmed infection has occurred

Operating System: The software that supports a computer or phone's basic functions, such as scheduling tasks, executing applications, and controlling peripherals

Property Owner: The owner or manager of a farm who can access only their own farm(s) visitor records

Quarantine Zone: An area within which restrictions are placed upon the transport of goods, designed to prevent the spread of disease or pests for a certain period of time

Service Provider: A person who provides services to a farm property, such as a veterinarian or feed truck driver, who has access to only their own personal or staff's farm visits

XLS File: A file extension for a spreadsheet file format for use with Microsoft Excel

If you require any further assistance, please contact info@fencesapp.com.