VULTURE SYSTEMS MOBILE APPLICATION
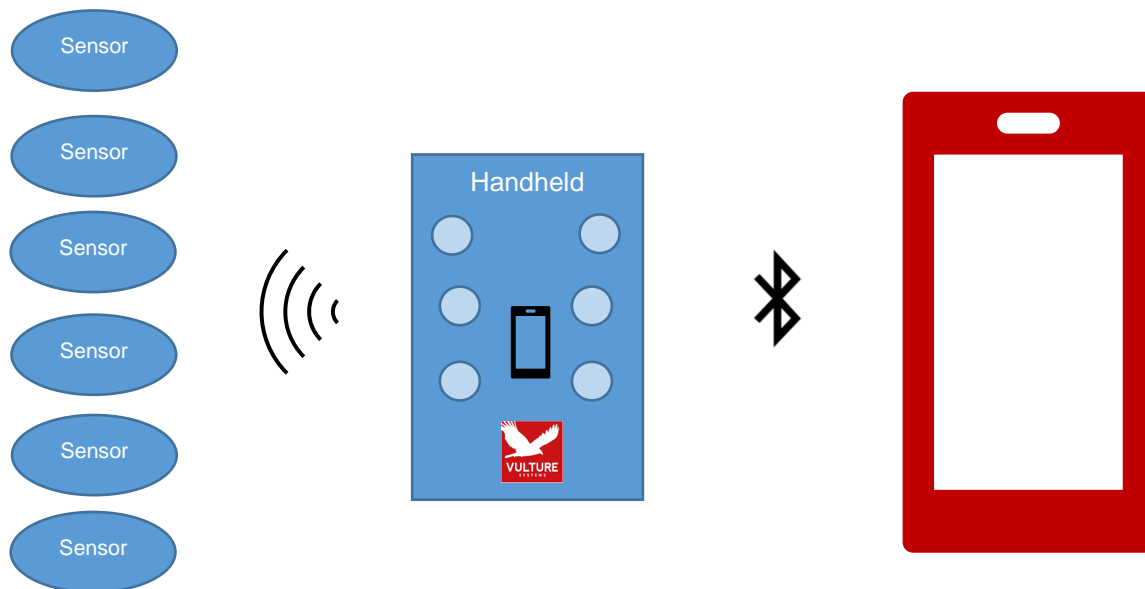
VERSION 1.0

09/01/2022

Contents

Features of the Vultures Systems Mobile Application

Your Vulture Systems mobile application provides the following features:

- Connects to the Vulture Systems Handheld and displays alerts when a sensor is triggered. Alerts include display, sound, and phone vibrating.
- Sensor Indicators can be named to indicate their location and other relevant information such as the bait used.
- Each sensor can play a different distinct sound from the mobile application.
- Users can log their catch and indicate the type of fish caught, weight, length, GPS location, notes and a photograph of the catch!
- Each log entry includes a weather report.
- Users can easily share their catch via a text message, email, or through popular social media platforms.
- Sensors can be polled individually to ensure they are within range and properly communicating with the handheld. A poll sensor feature allows you to poll all the sensors with a single selection from the phone.
- A sound plays if the handheld is disconnected or goes out of range of the phone.
- Sensor white lights can be turned on from the phone so they can be found.
- Easy clean-up at night – a single button press will turn all the sensor white lights on.
- Users can view information about the handheld such as firmware version numbers.
- Users can update the handheld firmware from the phone.
- Users can add their own sound files to be played when an alert occurs.
- Users can add their own fish species type for logging their catches.
- Users can select a large text size option.
- Application supports light and dark mode themes based on phone settings.
- Large buttons provided to make navigation easy while wearing gloves.

Introduction

The Vulture Systems Mobile application requires a handheld and sensors to monitor your ice fishing or traps. The mobile application extends the functionality of the handheld allowing users to assign different sounds to each sensor and to control the sensor white lights and polling from an easy-to-use mobile application. The handheld communicates with the sensors using a long-range radio signal. The handheld then relays the signals to the phone using Bluetooth LE. Please refer to the Handheld user guide to setup the communications between the sensors and the handheld.

Main Page

Each sensor on the handheld is associated to a sensor item in the application. Users will be able to individually configure the sensor display and notifications to readily identify the sensor in alert.

Light Gray sensors indicate that the handheld has not been connected to the handheld. Set the handheld into discovery mode (see handheld user guide). Use the **Scan for Handhelds** button to discover nearby Vulture Systems handhelds.
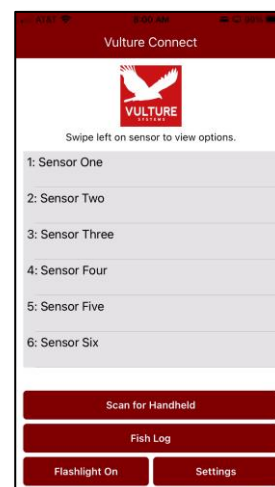

Buttons provided to perform the following operations:

Scan for Handhelds – discover handhelds and then connect to one.

Fish Log – After making that big catch, record the catch and share the results with your friends.

Flashlight On – Select the button to turn the phones flashlight on.

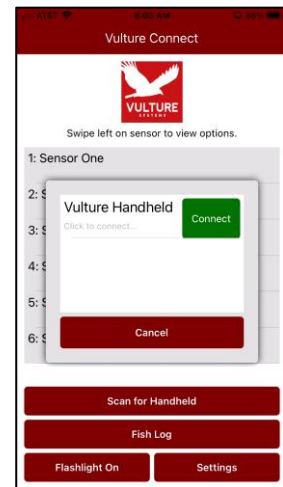**Settings** – View and edit the applications settings.

Scanning for Handhelds

Turn on the Handheld Device so that it can be discovered by the application. When the 1 and 2 buttons on the handheld are pressed at the same time for ten seconds, a solid blue light will illuminate, and the handheld will be in discovery mode for the next three minutes. Once connected the handheld will flash the blue light for 10 seconds.

Press 1 and 2 buttons simultaneously for ten seconds to place handheld in discovery mode

Select **Scan for Handhelds** to search the area for Vulture System handhelds. A progress indicator will appear during the scan. The scan can take up to ten seconds to complete.

Once the scan is complete, a list of discovered handhelds in the area will appear in a dialog.

Select the green **Connect** button to connect to the handheld.

A prompt will appear confirming you want to connect to the handheld. Once you connect to the handheld the blue LED will change from solid to a slow blue flash indicating a connection to the phone has been made.

A progress dialog will appear indicating that the mobile application is connecting to the handheld. This process can take up to 30 seconds to complete.

Note: If the scan detects a device that it has previously connected to it will automatically re-connect to that handheld. You can clear the list of previously connected devices in Settings – Disconnect Device and Close App.
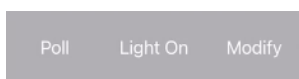
Tip: It is best to perform your first connection to the handheld prior to arriving at your favorite fishing site. There is less chance of discovering neighboring handhelds on the lake. The identified handheld will be kept in a list and will automatically connect when discovered again.

Handheld Connected

Once the handheld is connected, the enabled sensors will turn green.
Sensors disabled in the application will appear in dark gray.

There are several sensor actions you can perform by swiping to the left on
the sensor in iOS, or in Android by pressing and holding the sensor item:
- **Modify** – modify sensor display name, sound settings and disable
  sensors not in use.
- **Poll** – send a poll message to the sensor.
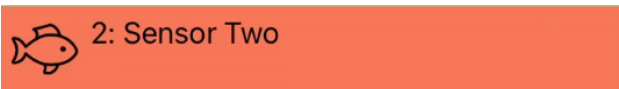- **Light On/Off** – turn the sensor white light on or off.

Additional buttons will appear at the bottom of the page:
- **All Lights On** – turns all the sensors white lights on.
- **Poll Sensors** – detect if any sensors are currently out of range.
- **Fish Log** – record and share your favorite catches!
- **Flashlight On** – turn the phones flashlight on.
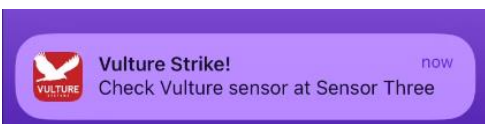- **Settings** – view and modify the applications settings.

Handling Sensors Alerts

When an alert is triggered at the sensor the sensor display item will turn red and a fish icon will appear on the sensor. A sound will begin playing.

If the application is not active or the phone is locked, then a notification will be displayed on the Home or Lock screen and a sound will play one time.
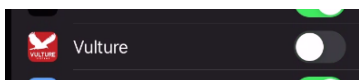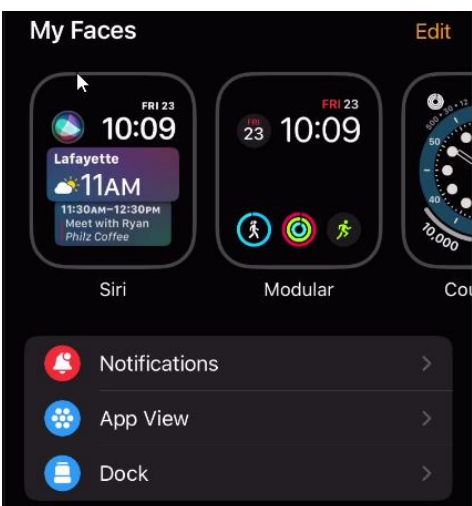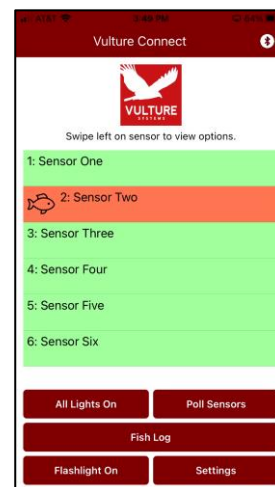

You can reset the alert by tapping on the sensor item in the sensors list. This will return the sensor item to green and stop the sound from playing.

You can also reset the alert by selecting the corresponding button on the handheld which will signal the application and reset the indicator and stop the sound. This means you don't need to handle your phone while on the ice and can use the large handheld buttons as the primary means of clearing the alerts.

Note: There are many settings on a phone that can prevent the sounds from playing. Please check the ringer volume, media volume, focus feature and do not disturb settings of the phone.

Note: On iPhones, if you have an **Apple Watch** the sound will not play on the phone. This is an Apple feature that assumes if you have the watch that it will be your primary notification device. If you want the phone to display the alert and play a sound, you must go into your phones Watch application and select **Notifications** and then turn off notifications for the Vulture Systems.
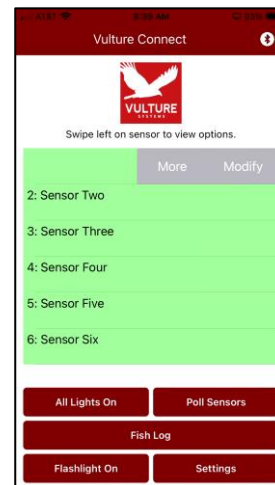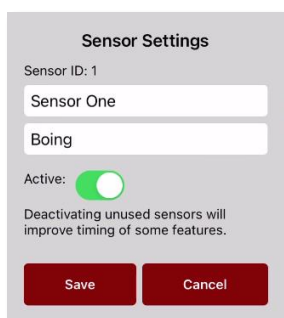

Modify Watch Notifications

Sensors Actions

On iOS, swipe left on the sensor item in the list to view actions. On Android, press and hold the sensor item to view the actions. With Android the actions will appear at the top of the application.

The sensor actions include:

Modify – Displays the **Sensor Settings** dialog that allows you to rename the sensor, select a sound specific to that sensor alerting, and enable/disable the sensor in the application.

Poll – Sends a single poll to the sensor which will flash the white light at the device. When a poll is started, the sensor display item will turn yellow as it awaits a response from the sensor. Once the response is received the sensor item will return to green indicating a successful poll.

Light On – Turns the white light on at the sensor so you can find the sensor at night. A light bulb will appear in the sensor indicator showing that the message was received by the sensor.

Note: On iOS, depending on display size, you may need to select **More** to see the Poll and Light On options for each sensor. The options will appear in a menu at the bottom of the screen.

Sensor Settings

The **Sensor Modify - Sensor Settings** dialog allows you to modify the applications sensor settings.

> **Sensor ID** – The sensor ID as recognized by the handheld; these correspond to the button numbers on the handheld. Each sensor is assigned one of six positions on the handheld.
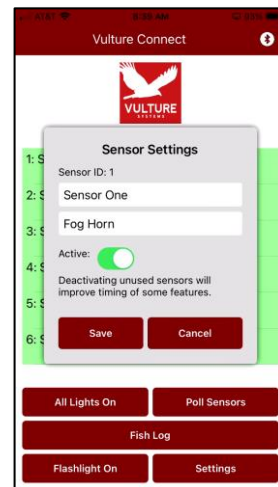
> **Sensor Name** – you can rename each sensor. By default, they are named Sensor One, Sensor Two, etc. However, you could rename them as North Sensor, South Sensor, or the name of your favorite ice fishing location and the type of bait you used! Once saved, this name will then appear in the Main Page Sensors List.

> **Sound** – Select a sound to play when the sensor is triggered. Select from a list of available sounds. You can add custom sounds from the application **Settings** using the **Sound Setup** setting. When selecting a sound, a preview of the sound will be played.

> **Active** – You can disable a sensor that is not in use by sliding the switch to the off position. Disabling sensors can make the Poll All and All Lights On features faster as it doesn't have to try and communicate with devices that are not available. Disabled sensors will appear in the Sensors List as dark gray items.

> 6: Sensor Six

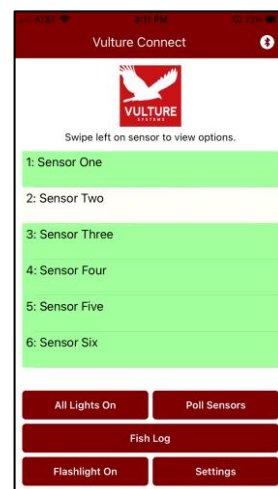Once you have modified the sensor settings, select **Save**.

Poll a Sensor

The sensor **Poll** feature allows you to poll a single sensor. When polled, a sensor will flash its white light and respond back to the handheld. The sensor display item in the list will turn yellow during the poll and will then return to green when a response is received.

> 2: Sensor Two

During the poll the sensor battery level is checked. If a low battery is detected at the sensor a low battery icon will appear in the sensor item in the list.
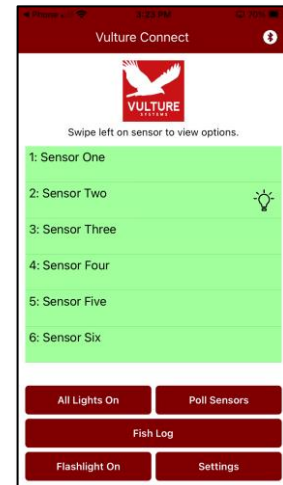
Turn on Sensor White Light

The sensor **Light On** feature allows you to turn the white light on at a single sensor. The sensor display item in the list will indicate the light has been turned on by displaying the light bulb icon on the sensor item.

To turn off the light, swipe left on the sensor or on Android press and hold to see the action items for the sensor. Select the **Light Off** menu item to turn off the light at the sensor.
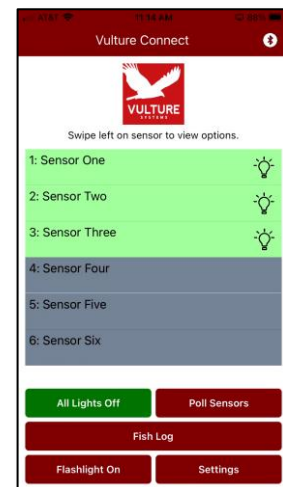
All Sensor Lights On

At the end of the day, you can turn all the sensor lights on so you can easily find and put away your fishing equipment.

On the Main Page, select the **All Lights On** button to sequentially turn each of the sensor lights on. The handheld will relay the message to the sensor and beep the handheld when the light has been turned on. The sensor display item will then indicate the light is on by displaying the light bulb icon.

To turn all the lights off, select the **All Lights Off** button. The sensor display item will then indicate the light is off by removing the light bulb.

Note: The All Light On feature will work much faster if you disable unused sensors as it doesn't have to try and communicate with devices that are not available.
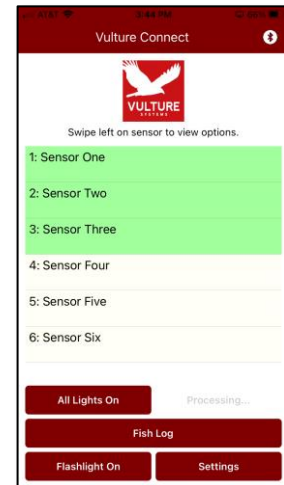
Poll All Sensors

To verify that all your sensors are within range of the handheld, you can sequentially poll each active sensor using a single button. Sensors that have successfully responded to the poll will turn green in the list. Sensors out of range will remain yellow in the list.

On the Main Page select the **Poll Sensors** button to sequentially poll each of the sensors. The sensor display list item will turn yellow during the poll. The handheld will relay the message to the sensor. The sensor display item will then turn green indicating a successful poll.

If a sensor does not respond to the poll its indicator will remain yellow.

During each poll the sensor battery level is checked. If a low battery is detected at the sensor a low battery icon will appear in the sensor item in the list.

Note: The Poll Sensors feature will work much faster if you disable unused sensors as it doesn't have to try and communicate with devices that are not available.
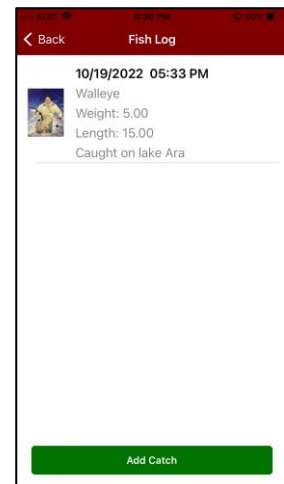
Fish Log List

When you make that big catch, you want to record it and share the occasion with all your friends.

Select the **Fish Log** button on the main page to open the Fish Log List.

To record a new catch select **Add Catch**.

To **Edit** the details of a catch, select the item in the list.

To **Delete** a catch, swipe left on iOS or press and hold on Android.

Fish Log Entry

The fish log entry page is used to create or edit details about your catch. The **Weather** on the day of the catch is also recorded. You can view the weather by selecting the weather tab at the top (Android) or bottom (iOS) of the page.

Enter the details of the catch:

- **Select a species** – select the type of fish that was caught. Custom fish species can be added in Settings-Fish Species.

- **Enter weight** – enter the weight of the fish.

- **Enter length** – enter the length of the fish.

- **Date/Time** - the date and time are automatically entered but can be changed.

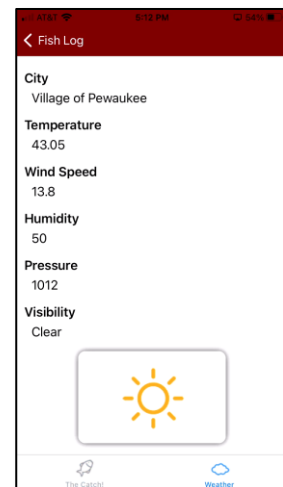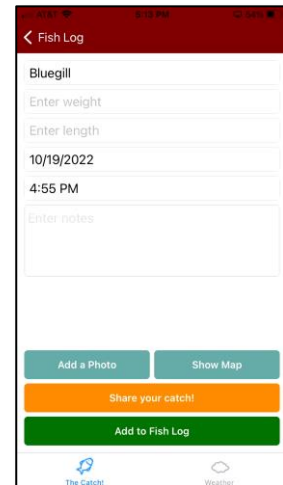- **Enter notes** – enter any additional notes about the catch.

Add Photo – opens the camera and allows you to take a picture of the big catch! When done taking the photo, it may take a few moments to return to the Fish Log Entry page as it saves the photo and adds it to your gallery. Note that you can choose not to save the photos to your phones photo gallery.

Show Map – Displays a GPS located map of where you caught the fish. For best accuracy when recording the catch, open the map and verify your location. It may take a few moments for the GPS to accurately detail your location.

Share your catch! – allows you to share your catch using SMS text messages, email, or your favorite social media platform such as Facebook or Instagram. The Vulture Systems hash tag is included in your catch details.

Add to Fish Log – remember to add your catch to the local Vulture Systems database included with your application. The catch will now appear in your Fish Log List.

Note: When editing a catch, you will not be able to take a new photo.

Settings

You can view and modify the settings in the application.

> **System Information** – display the System Information page.
>
> **Update Firmware** – allows users to update the firmware in the handheld.
>
> **Play Sound on Alert** – plays the selected sound for sensor on a sensor alert.
>
> **Vibrate on Alert** – vibrates the phone on alert.
>
> **Play alert in a Loop** – the sound will play in a loop during an alert. This only works if the application is the foreground application, it does not work on the Home or Lock screens.
>
> **Save Photos to Gallery** – when a fish log entry is created, and a photo is taken, the photo will appear in the phone's photo gallery.
>
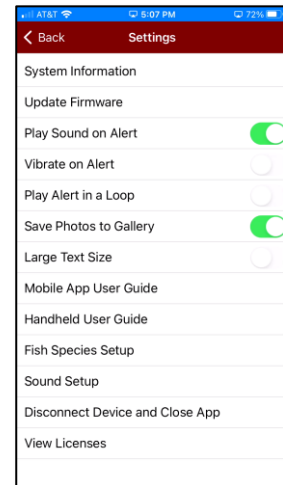> **Large Text Size** – the text size will be increased throughout the application.
>
> **Mobile App User Guide** – opens the applications user guide in a web browser.
>
> **Handheld User Guide** – opens the handheld QuickStart Manual in a web browser. The QuickStart guide provides information specific to the handheld and sensors.
>
> **Fish Species Setup** – allows users to create custom fish species.
>
> **Sound Setup** – allows users to add custom sound files that can then be selected as alert sounds for the sensors.
>
> **Disconnect Device and Close App** – the current handheld device will be disconnected and removed from the list of previously connected devices. The app will be closed, and the user will need to reopen the app and reconnect to a handheld.

System Information

You can view system information:

> **Manufacturer Name** – name of the handhelds manufacturer.
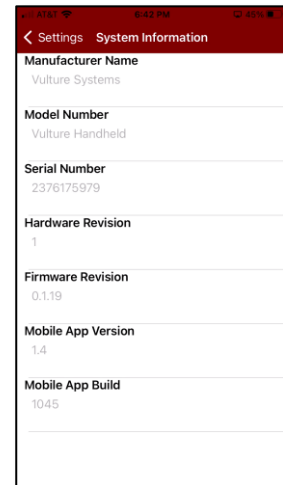>
> **Model Number** –model number of the handheld device.
>
> **Serial Number** – serial number of the handheld device.
>
> **Hardware Revision** – the hardware revision of the handheld.
>
> **Firmware Revision** – firmware revision of the handheld.
>
> **Mobile App Version** – mobile application version number.
>
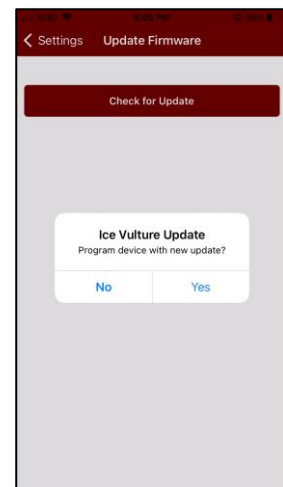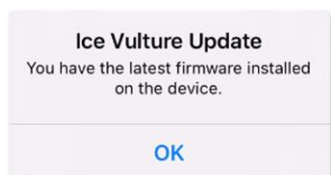> **Mobile App Build** – mobile application build number.

Note: Please try to have this information available when calling support.

Update Firmware

You can update the firmware on the handheld device using the **Update Firmware** page. Verify that the handheld device is connected to the phone via Bluetooth before attempting a firmware update.

Select **Check for Update** to see if a newer version of the firmware is available. If you have the latest version a dialog will appear indicating, you have the latest version installed.

If a newer version is available, you will be prompted to program the device with the new update. A progress indicator will appear and the device with update the firmware, verify the firmware, and then re-connect the application to the handheld. This process can take a few minutes to complete.

Note: An internet data connection is required to update firmware.

Note: Android 10 devices are currently unable to update the handheld firmware. There is a known issue with the ability to update handheld firmware with Android 10 devices. We recommend finding a friend with a phone that is not Android 10 and have them download the Vulture application and assist you with updating the firmware.
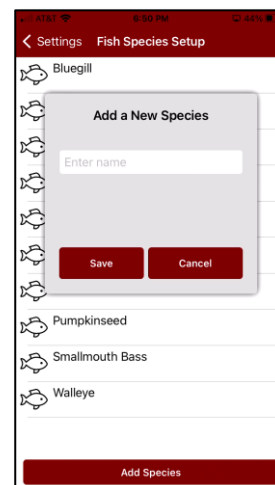
Fish Species Setup

A pre-defined list of fish species is included for recording catches in the fish log. The fish species setup allows users to create custom fish species types.

Select **Add Species** button to create a new fish species type. Once selected, the **Add a New Species** dialog will appear.

> Enter the **Name** of the new fish species.
>
> Select **Save** to enter the fish species to the list. The new species will be added to the list and will be available when adding a new fish log entry.

Sound Setup

A pre-defined list of sounds that can be played to indicate a sensor alert is included with the application. The sound setup allows users to create and select custom sounds.

Select **Add Sound** button to select and create a new sound file. Once selected, the **Add a New Sound** dialog will appear.
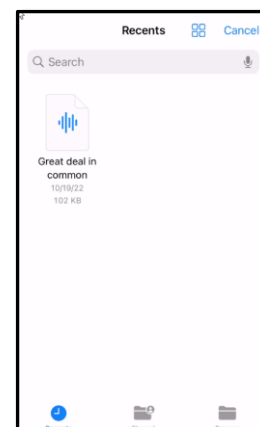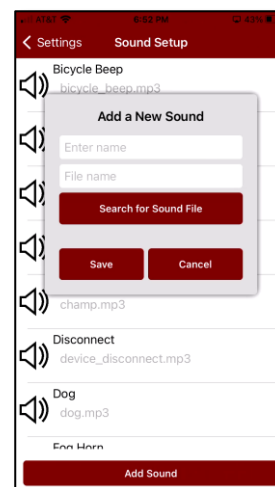
> Select the **Search for Sound File**. The file browser will open, and you can search for a new sound file to be added to the sounds list. Select the sound file.
>
> Enter a new **Name** for the sound that will be visible when selecting the sound in the Sensor Settings dialog.
>
> Select **Save** to enter the sound to the list.

Note: Keep the sound length less than 30 seconds to ensure it can be played as a notification on the Home and Lock screens.

Note: You can search for mp3 files on the internet and then download them to your phone. Once the files are on your phone you can use the file browser to select the sound. In the file browser you can select **Browse** to see the downloads folder. Valid sound files will be selectable all others files will not be selectable.
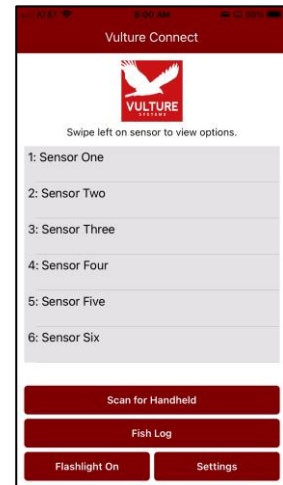
Flashlight On

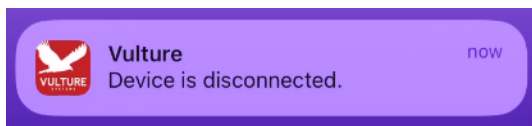The ability to quickly turn the phones flashlight on has been provided.

Select the **Flashlight On** button to turn the phones flashlight on.

To turn the flashlight off select the **Flashlight Off** button.
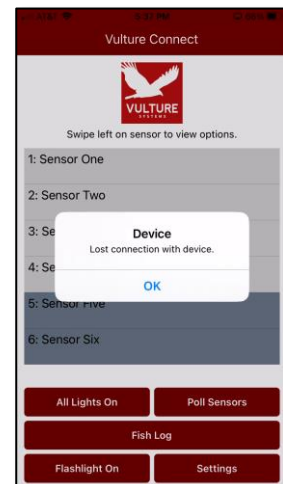
Handheld Disconnect

If the connection between the handheld and the phone is lost a notification will be issued. The sensor items will turn to gray. The handheld will beep rapidly indicating a lost connection. The phone will play the lost connection sound and display a dialog. If the phone is on the Home or Lock screens, then a notification will be displayed.

If the handheld connection is re-established, then the application will automatically reconnect, and the sensor items will return to their green color.
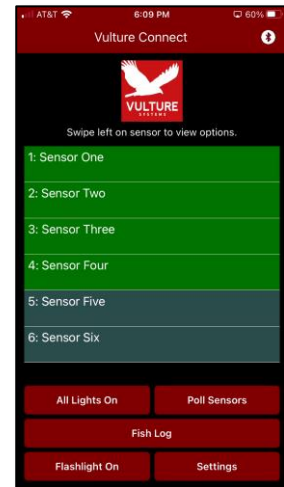
Note: If the connection between the handheld and phone is lost, the handheld will still work normally in standalone mode. You do not need the phone to utilize the features of the handheld.

Dark/Light Mode

The application supports the Light and Dark OS Themes. Please see your phones user guide to set your phone into Light or Dark mode.

Note: It is best if you <u>restart the application</u> after setting the phone into Dark Mode.

Frequently Asked Questions (FAQ)

I cannot update the handheld firmware with my Android device, what should I do?

Android 10 devices are currently unable to update the handheld firmware. There is a known issue with the ability to update handheld firmware with Android 10 devices. We recommend finding a friend with a phone that is not Android 10 and have them download the Vulture application and assist you with updating the firmware.

Why am I not receiving notifications on my iPhone when a sensor alert occurs?

On iPhones, if you have an **Apple Watch,** the sound will not play on the phone. This is an Apple feature that assumes if you have the watch that it will be your primary notification device. If you want the phone to display the alert and play a sound, you must go into your phones Watch application and turn off notifications for the Vulture Systems.

Additionally, there are many settings on a phone that can prevent the sounds from playing. Please check the ringer volume, media volume, focus and do not disturb settings of the phone. Verify that notifications are enabled for Vulture Systems on your phone.

Verify that the sound file you are playing as an alert is less than 30 seconds in length.

Why is my phone not detecting any handhelds in the area?

Verify that the handheld device is in discovery mode; there should be a blue light in the center of the handheld device. Verify that Bluetooth is enabled in settings on your phone. Verify that the Vulture Systems application has permissions to use Bluetooth on the phone.

The Share My Catch feature is not showing all my social media options.

Please note that the share my catch uses operating system features to communicate with the social medium platforms. We have noticed some issues where certain platforms don't appear properly or will not work correctly. We are working on resolving these issues in future releases.

Why do I see inconsistent operations of the sensors, handheld, and mobile application?

The most common cause of inconsistent operation is low batteries in the sensors or the handheld. Sometimes, the handheld can communicate with the sensors, but the sensors do not have enough power to respond. If you are experiencing inconsistent operation, try replacing the batteries in the sensors and at the handheld.