

# Flokk

## User reference manual

Version 0.38

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## Introduction

This is the user reference manual for Flokk, a system for herd management and traceability reporting for beef cow/calf herds.

Your Flokk will:

- collect and maintain core animal records
- collect calving records
- record the results of pregnancy testing
- record and track animal weights
- record the administration of vaccinations and medications
- record and report movements of animals to other premises (for example, community pastures)
- process additions, dispersals, and losses from the herd
- record animal condition such as illness, neutering, and culling decisions
- generate the files required to complete CLTS (Canadian Livestock Tracking Systems) submissions

## About this manual

This is version 0.38 of this manual. This manual is updated with each version of the Flokk software. Please refer to the version of the manual which matches the software version displayed when your Flokk is started.

The current version of this manual can be found in the file “Flokk user reference manual.pdf” on your Flokk. To access the current version of the manual:

1. Connect your Flokk to your computer using a cable between the USB port on the bottom of the Flokk and a USB port on your computer.
2. Press the “OPTIONS” function button on your Flokk.
3. Press the left and right function buttons on your Flokk until the “File” option is displayed
4. Press the “Done” button
5. Your Flokk will now appear as a USB storage device on your computer.
6. Open the USB storage device on your computer.
7. Open the file “Flokk user reference manual.pdf”
8. When done reading, close your pdf reader program.
9. Eject the USB device from your computer.
10. Press the “Done” button on your Flokk.

## What you will need

Your Flokk collects and maintains herd records stand alone. It does not require data connectivity or a supporting device to collect and maintain herd records.

To configure your Flokk and read and use your herd records you have two options:

1: You can use the online Wizard, which requires:

- Access to a WiFi network which:
  - provides Internet access
  - does not have any port restrictions
  - does not require anything beyond the SSID (network) password for access
- A device capable of web browsing

2: Internet access is not required if you have a computer with:

- a spreadsheet program which can work with Excel Open XML (.XLSX) worksheet files. Either Excel version 2007 or later, or LibreOffice (which is available as a free download) 4.3 or later is sufficient.
- a free USB 2.0 port
- a USB A-Male to B-Male cable (USB “printer” cable), which will have been provided with your Flokk.

You will also need:

- Your Canadian Livestock Tracking System (CLTS) account ID. This is the eight character long account name you use to log on to the CLTS.
- Your Premises ID (PID). This is the seven character code provided by the appropriate agency in your province or territory that identifies your primary premises, i.e. the premises your calves will originate from.

## Backing up your Flokk

While your Flokk maintains your herds records, it should not be relied upon as the primary or only record of this information. A current copy of the files on your Flokk will be required to restore it to full functionality if the Flokk fails, is lost, or is damaged.

For an annual subscription, your Flokk can be automatically backed up daily to private and secure storage at flokk.ca (see page 123 for complete information). Otherwise you will need to copy the files from your Flokk to secure and reliable storage on a regular basis.

**It is your responsibility to ensure that the files on your Flokk are regularly copied to another secure and reliable storage location.**

## Conventions

Flokk documentation and the Flokk device will consistently use these terms when referring to animal tags:

- The term “**CCIA Tag**” will be consistently used to refer to the round tag containing an RFID transceiver, coded to a unique number by the CCIA, which is applied to the animals ear.
- The term “**Hang Tag**” will be consistently used to refer to a tag applied to an animal with an owner defined identification.

The term “**herd record**” refers to your record of Hang Tag, CCIA Tag, description, birth date, gender, and dam which are maintained for each animal in the herd. The record is maintained, at your choice, either in the CSV (Comma Separated Variable) files herd.csv, or in the Herd tab of the spreadsheet file

flokk.xlsx. Please see page 19 for more information.

The term “**calving tags**” refers to an optional list of Hang Tag and CCIA Tag pairs which pre-define the tag pairs you will apply to newborn calves. These pairs, at your choice, are stored either in the CSV file calvingtags.csv, or in the Calving tags tab of flokk.xlsx. Please see page 77 for more information.

## Safety

### Livestock safety

This device will be used in the vicinity of livestock. Management of the hazards related to livestock handling, and the safety of the operator, is of paramount importance.

1. This device should be used only by individuals who are trained in, and familiar with, livestock handling.
2. To ensure that the operator's attention is focused on livestock movement and related hazards, any operator of this device must be trained to use, and be comfortable with, operation of the device prior to using it in the vicinity of livestock.
3. An animal must be restrained prior to attempting to scan its CCIA Tag.
4. Only use animal restraint facilities and methods that have the capacity and integrity to ensure both animal and operator safety.
5. Do not enter any constrained space when attempting to scan a CCIA Tag.
6. When attempting to scan a CCIA Tag **DO NOT** place the device in such a position that any movement of the animal could result in injury.
7. This device **MUST NOT** be attached, bound, hung on, tied, or otherwise connected to an individual in such a way that it cannot break away without injury.

### Battery safety

This device uses a high capacity lithium ion or lithium polymer battery. While these batteries offer high capacity, light weight, and long life, **damage to or overcharging of these batteries can result in high temperatures and/or combustion, which may result in personal injury and/or property damage.**

When using this device:

1. Do not pierce, drill into, or attach any fittings to, the device's case.
2. Do not expose the device to temperatures exceeding 30°C
3. Use only the charging and battery management control circuitry provided with the device.
4. Do not modify the hardware or software of the device related to battery management.
5. If the device has been subject to shock, impact, piercing, crushing, excessive temperature, or other exceptional circumstances, **DO NOT** leave the device unattended in an enclosed space, or in a location where the device is exposed to combustible materials.
6. If damage to the battery is suspected:
  1. **Immediately** discontinue use of the device.

2. Locate the device in an open space, away from combustible materials, for 24 hours before taking any further action. **DO NOT** open the case, or attempt to retrieve data from the device, during this time.
7. If the event of battery failure, avoid exposure to any fumes or liquids coming from the device.
8. Ensure that any applicable laws, regulations, or carrier policies related to lithium ion or lithium polymer batteries are followed when shipping or transporting the device.
9. When replacing the battery in the device, use only batteries with correct polarity and integral thermal and overcharge protection.
10. Do not retain any batteries removed from the device.
11. Use appropriate waste practices when disposing of any batteries removed from the device. Batteries removed from the device **MUST NOT** be disposed of in any recycling or waste facility unless said facility explicitly accepts lithium ion or lithium polymer batteries

## Personal information collection

Save for the exception documented here, the Flokk service and Flokk device collects and maintains personal information only as necessary for delivery of services requested by the operator.

No personal information is submitted to a third party without the operators knowledge and consent.

Personally identifiable information collected includes:

- owner-supplied owner, farm or ranch name
- owner-supplied physical address
- owner-supplied phone number
- Internet addressable Internet Protocol (IP) address being used by the device

Each day, your Flokk submits the following data to Flokk Systems Inc at flokk.ca, regardless of any Flokk services you may or may not be subscribed to:

- hand held device identifier
- Internet addressable IP address being used by the hand held device
- operator provided farm or ranch name
- operator provided CLTS account id
- SSID of the WiFi network the Flokk is using
- operating version of the Flokk device software
- number of animals in the herd

These records are retained in secure storage and are not available to other Flokk customers. Access to this information is restricted to Flokk Systems Inc. personnel and processes that have legitimate need to monitor access to the flokk.ca server and use of Flokk devices for the purposes for product development, market development, and copyright assertion.

All data related to the Flokk system is physically stored in Canada. Flokk operates within, and is subject to, the privacy legislation and regulation of Alberta, Canada.

## Licensing

The underlying operating environment of a Flokk is covered by the GNU General Public License, version 2.

The Flokk application (flok.py, flokkservice.py, Configuration.py, Display.py, Release.py, setstorage, startflok, flokksplash, and any other artifact associated with the system) and any associated documentation (“Flok user reference manual.pdf” and other files) is Copyright © 2022 Flokk systems Inc., all rights reserved.

The software is licensed to you exclusively for use on a single instance of a Flokk device. Distribution, reverse engineering, or publication in any form is explicitly prohibited.

## Controls and features



<b>Feature</b>	<b>Description</b>
Alert light	<p>Is lit when the operators attention is required. This can either be a significant error condition, an animal that has been identified for culling or included in the find.txt table (page 53), or other condition.</p> <p>This light will be flashed once every time the system is started to ensure that it is working correctly.</p>
Done button	Press to complete the current value input, or to select the option or value currently being displayed.
Function buttons	<p>These buttons are used to select values or initiate functions.</p> <p>The current function of the button will displayed on the screen immediately above the button.</p>
Power switch	<p>Used to switch the Flokk’s power on or off.</p> <p>Before switching the Flokk’s power off, either:</p> <ol style="list-style-type: none"> <li>1. From the "Flokk Ready" screen, press the DONE button.</li> <li>2. Select the “POWER OFF” option from the Shut down menu</li> <li>3. Wait until the message “Safe to turn power off.” is displayed.</li> </ol> <p>Or:</p> <ol style="list-style-type: none"> <li>1. Select the “SHUT DOWN” option from the Start menu</li> <li>2. Select the “POWER OFF” option from the Shut down menu</li> <li>3. Wait until the message “Safe to turn power off.” is displayed.</li> </ol> <p>Information on your Flokk can be lost if you switch the power off without first selecting the “POWER OFF” option and then waiting until the “Safe to turn power off.” message is displayed.</p>
Selection toggle	<p>Used to select between individual items in selection lists. Specifically, used when you need to select a particular Hang Tag, or enter a date or time value.</p> <p>Can also used to move between information items for an animal, or status messages on the “Flokk Ready” screen.</p>
Tag scan light	This light flashes when the RFID reader has successfully read a CCIA Tag.
USB connector	Use a USB cable plugged into this connector to charge the Flokk, or connect the flock to a computer to read and/or update the flock’s data files.

## Quick start

These minimal steps will prepare your Flokk for the collection of herd and calving records. **However this is not recommended.** Much of the functionality of your Flokk will **not** be available to you, and you will need to complete extra steps when adding calving records, if you do not add your herd information and calving tags to your Flokk (see page 17).

Step by step tutorials for learning how to use your Flokk can be found in the file “Getting started with Flokk.pdf”, which can be found on your Flokk.

1. Turn on your Flokk using the power switch
2. After a short delay, the software version and copyright notice will be displayed.
3. Additional notifications may be displayed. Disregard these for the moment
4. Until you have set your Flokk up for WiFi access, or if WiFi service is not available, you will need to enter the current date and time:

To set the date, press the function buttons immediately below the display to add or remove a week from the displayed date. Click the toggle switch up and down to add or remove a day from the date.

Press the Done button when the correct date is displayed.

To set the time, press the function buttons immediately below the display to add or remove an hour from the displayed time. Click the toggle switch up and down to add or remove a minute from the time.

Press the Done button when the correct time is displayed.

5. Wait until “Flokk Ready” is displayed on the top line of the screen.
6. Connect the USB port on the Flokk to a USB port on your computer
7. Press the “OPTIONS” (right) function button
8. Use the left and right function buttons to move between options until the “File” option is displayed
9. Press the “Done” button
10. Your Flokk will now appear as USB device on your computer named “Flokk”.
11. Open the storage device on your computer.
12. Open the “flokk.xls” worksheet file.
13. Select the “Setup” workbook.
14. In the “Owner” section, add your CLTS account id.
15. In the “WiFi passwords” section, you will find an entry for every WiFi networks your Flokk has detected. Add the WiFi passwords for the network(s) you wish to use.

16. In the “Add animal” section, select the default colour for your Hang Tags.
17. In the “Add animal” section, select the default template for new Hang Tags.
18. Select the “Premises” worksheet.
19. Add the Premises ID, and a description, for your premises, i.e. the premises where your calves will be born.
20. Save the workbook and quit your spreadsheet program.
21. Eject the Flokk USB device from your computer.
22. Press the Done button on the Flokk.
23. If you added more than one Premises to your Flokk, use the “Premises” option to set the premises of the Flokk.

### **To add an animal that is already on your premises to your herd records:**

**The “Add animal” function must be used only to add to your Flokk animals that are already on your premises. It does not report these animals to the CLTS, and should not be used when you bring animals to your location from another premises. Use the “Move in” function ( page 85 ) to add animals to your herd that originate from a different premises.**

1. From the “Flokk Ready” screen, press the “Start” button.
2. Press the left and right function buttons until the option “Add animal” is displayed.
3. Press the Done button.
4. Use the left and right functions to select between the items that need to be provided for the animal; Birth date, Hang Tag, and Gender.
5. For each item, press the Done button to select the item, then use the left and right function buttons, and the toggle, to input the value you want. Press the Done button to enter the item and return to the calving menu.
6. To assign a CCIA Tag number to the animal, scan the animals CCIA Tag.
7. Once values have been provided for all of the items, select the “COMPLETE” option.

### **To collecting a calving record:**

1. Press the “Start” button on the ready menu.
2. Press the left and right function buttons until the option “Add calf” is displayed.  
If the “Add calf” option is not offered to you:
  - a) You have not provided a premises on the Premises worksheet of herd.xlsx, or
  - b) You have not provided a CLTS account on the “Setup” worksheet of herd.xlsx.
3. Press the Done button.
4. Use the left and right functions to select between the items that need to be provided for the calf; Birth date, Hang Tag, and Gender.

The Dam option will be offered to you only if you have cows in your herd records.

5. For each item, press the Done button to select the item, then use the left and right function buttons, and the toggle, to input the value you want. Press the Done button to enter the item and return to the calving menu.
6. To assign a CCIA Tag number to the calf, scan a new CCIA Tag before applying it to the calf.
7. Once values have been provided for all of the items, select the “COMPLETE” option.

For detailed information on calving record collection, see page 68.

## Preparing your Flokk

Your Flokk is designed so that operation at the chute or squeeze, on the range, or in the yard or barn, is quick and simple. To achieve this, information needs to be loaded into the Flokk prior to taking it to the range or yard.

### WiFi setup

Setting up your Flokk to access to a WiFi network is optional. However if provided with WiFi access to the internet, your Flokk will:

- set and maintain the current date and time whenever it has access to the WiFi network. If WiFi access is not provided, you will have to enter the date and time every time you turn on your Flokk (see page 14)
- be able to update its software automatically
- be able, with purchase of an annual subscription, to:
  - back up it's files to secure storage at flokk.ca
  - submit events to the CLTS

See page 55 for instructions to set up your Flokk to access a WiFi network.

### Using a Flokk as a CCIA RFID tag reader

If you do not provide a Premises ID and CLTS account, your Flokk acts as a CCIA RFID tag reader. Each CCIA Tag scanned is stored on the device, and can be retrieved by entering file mode.

### Using a Flokk at a temporary commingling site

A Flokk can be used to manage the CLTS requirements for a temporary commingling site, i.e. any location where animals from various locations come in contact with each other on a temporary basis, such as an auction mart, veterinary clinic, stable, community pasture or fair ground.

In this situation, obviously, no permanent record of animals is required.

All that is required to set up a Flokk for a commingling site is:

1. Add your PID (Premises ID), and a description of it, to premises.csv (see page 40)
2. Add your CLTS account id to the "CLTS Account ID" value in the [User] section of flokk.ini (see page 41)
3. Select the "Sighted" option from the Options menu (see page 158)

From then on, every time a CCIA Tag is scanned, the appropriate record will be added to the CLTS\_SIGHTED.csv file (see page 116). This file can then be uploaded to the CLTS.

### Using your Flokk for herd management

You can start with no herd records and use the "Add animal" and "Add calf" options of the Start menu

to build your herd file in the yard or on the range.

You must provide at least one premises ID and your CLTS account id in order to collect calving records, so that the CLTS Birth date events can be submitted.

However this approach eliminates much of the value of using Flokk. It is recommended that existing records be used to prepare your Flokk as completely as possible.

A complete set up of your Flokk for herd management would include:

1. Providing your CLTS Account ID
2. Providing your Premises ID
3. Adding any premises where you may locate or ship cattle to, or receive cattle from.
4. Define any medications that you will administer
5. Add the license plates of any trailers or trucks you use to move animals
6. Adding your current herds records

There are three options available to you to complete this:

1. The recommended method is to connect your Flokk to a WiFi network and use the configuration Wizard at [flokka.ca](http://flokka.ca)
2. You can connect your Flokk to a computer with a spreadsheet program, and edit the `flokka.xls` worksheet.
3. You can connect your Flokk to a computer with a spreadsheet program or text editor, and edit the files `flokka.ini`, `premises.csv`, `products.csv`, `administrations.csv`, `plates.txt` and `herd.csv`.

## Preparing your Flokk for use using the configuration Wizard

If you have access to a WiFi network that:

- Provides a connection to the Internet
- Does not require anything other than the WiFi network password to access
- Does not do any port filtering

you can use the online configuration Wizard at [flokka.ca](http://flokka.ca).

To use the configuration Wizard:

1. Place your Flokk into Service mode by:
  - If your Flokk is turned off, press and hold any button on the Flokk, then turn the power on. Release the button when the message "Starting service" is displayed.
  - If your Flokk is turned on, from the "Flokk Ready" menu, press the "Done" button, then select "Service mode".
2. Select "WiFi" from the "Options" menu.
3. Select the WiFi network you want to use.
4. If requested, provide the password for your WiFi network.

5. Select "Wizard" from the "Action" menu.
6. Enter the four digit code displayed on your Flokk into the Wizard.

The Wizard provides extensive instructions for it's use, so is not documented here.

## Preparing your Flokk for use by editing the files on your Flokk

The files on your Flokk are accessed by attaching your Flokk to your computer with a USB cable, and putting your Flokk into file mode by selecting "File" from the "OPTION" menu.

Once your Flokk is in file mode, the Flokk behaves like a USB storage device. Files can be opened from, and saved directly to, the Flokk.

As with any USB storage device, it should be ejected from your computer before either the cable is unplugged or the Done button is pressed on the Flokk. Failing to do so can result in the loss or damage of the data files.

### Herd file options

Your Flokk allows you to maintain your herd records in two different ways:

1. By loading the file flokk.xlsx into a spreadsheet program, and editing the contents of the Herd and Calving tags worksheets.
2. By loading and updating herd.csv and calvingtags.csv with a text editor or spreadsheet program.

The CSV files are best opened and modified with a spreadsheet program. Flokk was developed and tested using LibreOffice ([libreoffice.org](http://libreoffice.org)) which is available at no cost for Windows, Macintosh, and Linux based systems. The CSV files can also be maintained with any text editor, but the user must be cautious to maintain the correct field counts, field separators, and formatting.

The herd and calving tag records are also provided as an Excel XML based workbook file. This file can be opened, modified, and saved by current versions of Microsoft Excel and LibreOffice.

When the Flokk exits file mode, it will look at the files and will update its herd information from whichever set of files have been changed:

- If none of flokk.xlsx, herd.csv, or calvingtags.csv have been changed, the Flokk's information will not be updated.
- If the flokk.xlsx file has been changed, it will update it's herd and calving tag records from flokk.xlsx.
- If herd.csv or calvingtags.csv have been changed, it will update it's herd information from herd.csv and calving tag records from calvingtags.csv.

**If both flokk.xlsx and herd.csv have been changed, your Flokk will read it's information from herd.csv and calvingtags.csv, and any changes to flokk.xlsx will be ignored and lost.**

If you prefer to exclusively use herd.csv and calvingtags.csv to maintain your herd records, setting the option "save to flokk.xlsx" to 0 in the "Operation" section of flokk.ini will stop the creation of this file, speeding up the operation of your Flokk.

As flokk.xlsx is used primarily for the initial set up of your Flokk, if you enter and leave file mode

several times without making any changes to flokk.xlsx, your Flokk assume you have completed the setup of the device and will stop generating the flokk.xlsx file.

If you wish your Flokk to begin generating flokk.xlsx again, select the flokk.xlsx option from the Options menu.

Flokk can generate a herd.csv file that, when opened in Microsoft Excel, will ensure that the CCIA Tags are loaded as text rather than numbers. This can be enabled by setting the option “generate excel herd.csv file” in the “Operation” section of flokk.ini to 1.

You can download your “Animal On-Farm Inventory” file from the CLTS to provide a starting point to prepare your herd file. However your Flokk cannot use this file directly as it likely does not contain Hang Tag values.

## File details

The files that need to be prepared are:

Name	Type	Description
Either:		
flokk.xlsx	XLSX (Excel 2010 excel spreadsheet)	<p>The workbook contains six worksheets; Setup, Premises, Vehicles, Products, Group administrations, and Herd.</p> <p>The Setup worksheet is used to provider owner information, WiFi network passwords, and your preferences when adding calves and animals to the herd records.</p> <p>The Premises worksheet contains all of the premises that calves will be born on or where you will move animals to.</p> <p>The Vehicles worksheet contains the license plate numbers of any trailers or trucks that will be used to move animals.</p> <p>The Products worksheet is used to describe medications that will be administered to animals in the herd.</p> <p>The “Group administrations” worksheet is used to provide the prescription that was applied to groups of animals.</p> <p>The Herd worksheet contains all of the animals currently in your herd, including calves, dams, and bulls.</p>

or all of:

herd.csv	CSV (Comma Separated Variables)	All of the animals currently in your herd, including calves, dams, and bulls.
calvingtags.csv	CSV	<p>The Hang Tags and CCIA Tags that will be applied to calves as they are born.</p> <p>Use of this file is optional. See page 77 for more information.</p>
premises.csv	CSV	The descriptions, associated Premises ID (PID), and any pens for all locations that are part of your operation, where your animals are regularly located (i.e. community pastures), or where they may be shipped to.
group_administrations.csv	CSV	Used to describe the medications that have been administered to groups of animals.
products.csv	CSV	This file is used to describe the products (biotics, pharmaceuticals, supplements, etc.) that will be administered to animals

---

plates.txt	Text	The license plate numbers, one per line, of any vehicles that will deliver or remove animals from your premises.
flokk.ini	Text	The configuration file that controls the behaviour of the system.

---

## herd.csv

The herd.csv file describes all of the animals currently in the herd.

Your Flokk uses the Hang Tag and CCIA Tag values in herd.csv as references to other internal files used to record and report herd information. While you can provide these values for new animals added to the Flokk, **for animals already in your herd records you should not change these values in herd.csv, as these references will no longer be valid and this information will be lost for the animal.**

If you need to correct or replace an animals CCIA Tag, exit file mode, scan the new CCIA Tag, and use the “Replacement tag” option. In addition to completing any CCIA reporting required, this function will also update the Flokk’s internal references so that all information for the animal is retained.

If an animal loses it’s Hang Tag, place the animal in a head gate and scan it’s CCIA Tag. Your Flokk will display it’s record of the correct Hang Tag. Prepare a replacement tag with this number and apply it to the animal.

The first line of the file is a header that describes the fields that are in the remainder of the file. The standard header for herd.csv is:

Hang\_tag,CCIA\_tag,Display,Dam,Birth\_date,Gender

The specifics of the fields in the file are:

Field name	Type	Description	Required	Example
Hang_tag	Text	<p>The hang tag applied to the animal.</p> <p>Hang Tags values consist of a three letter colour code, a space, and an animal identifier.</p> <p>The animal identifier can either be any number of characters followed by digits, digits followed by any number of characters, or all digits, and can be at most eight characters long.</p> <p>All Hang Tag values in the herd must have a consistent format. See page 62.</p> <p>If the value in the file consists of a valid animal identifier, but no tag colour, the Flokk will add the default tag colour.</p> <p>If the tag contains a single letter, than that letter is interpreted as the animals birth year, and will be used if the actual birth date is not recorded for an animal.</p> <p>Unless you are adding a new animal to the file, DO NOT change this field in the herd.csv file. To change an animals Hang Tag, select the animal with the Flokk, and use the “Edit” option of the “Action” menu to change the animals Hang Tag.</p>	Yes	Yel F23 Gre 45G Bla 234

Field name	Type	Description	Required	Example
CCIA_tag	Text, 15 characters, digits only	<p>The CCIA Tag number on the animal. In Canada, these tags will all start with the three digits “124”.</p> <p>The entire 15 digit number must be supplied.</p> <p>The initial two characters “01” which are often printed on CCIA Tags should <b>not</b> be included.</p> <p>With the exception of adding a new animal to the file, DO NOT change this value in the herd.csv file. To change an animals CCIA Tag, scan a new tag for the animal and use the “Replacement tag” function.</p>	Required to move an animal to another premises, record a Pen location, or record pregnancy test results.	124000999999999
Display	Text	Any text you want displayed whenever the animal has been selected.	No	Red white face
Dam	Text	The Hang Tag of the dam of the animal.	No	Gre F72 Pin 87G
Birth_date	Date as text in YYYY-MM-DD format	Date of birth of the animal.	Yes for calves. For older animals, birth year will be determined from the Hang Tag letter if birth date is not provided.	2013-03-09
Gender	Text, F or M	The gender of the animal.	Yes, if animal is to be recorded as a dam during calving.	M

Field name	Type	Description	Required	Example
Premises	A PID (Premises ID)	The current premises of the animal. Premises can only be assigned to animals who have a CCIA Tag value in their herd record. If an animals record in herd.csv does not have a CCIA Tag value, the premises field will be ignored.	No	A1234567
Pen	Text, maximum 13 characters	The current pen the animal is in. Animal can only be assigned to a Pen that have a CCIA Tag value in their herd record. If an animals record in herd.csv does not have a CCIA Tag value, the Pen field will be ignored.	No	West

The first few lines of a typical herd.csv file would be:

```
Hang_tag,CCIA_tag,Display,Dam,Birth_date,Gender,Premises,Pen
Yel F1,124000251931113,Grey,R71,2018-03-12,F,SE 26-4-W3,West
Yel F2,124000251931112,Black,R52,2018-03-09,F,SE 26-4-W3,West
```

While complete values for all fields are recommended to make the best use of your Flokk, as a minimal starting point a herd.csv file consisting of only the Hang\_tag is sufficient to begin using your Flokk as:

- the Flokk can assign scanned CCIA Tags to existing animals, allowing CCIA Tag numbers and gender to be collected over time when the animals are being handled. (see Adding a CCIA Tag to an animal, page 111)
  - the Flokk will determine the birth year for an animal from the Hang Tag number, as long as the tag either:
    1. has a single character, and
    2. that character is allowable for standard year designations (i.e. is not I, O, Q or V)
- or:
1. is all digits, and the first two digits resolve to a year in the last 20 years.

The **CCIA\_tag** field **must be set** for an animal for the Flokk to record pregnancy results for the animal. However, the CCIA Tag attached to an animal can be scanned and assigned to an animal while it is on the scale or in the squeeze, followed immediately by recording a pregnancy test result for that same animal.

Flokk can generate a herd.csv file that, when opened in Microsoft Excel, will ensure that the CCIA Tags are loaded as text rather than numbers. This can be enabled setting the option “generate excel

herd.csv file” in the “Operation” section of flokk.ini to 1.

### Optional fields

Additional fields can be added to herd.csv. The contents of these fields will be displayed when the animal has been selected.

To add an optional field, include the field in the header (first) line and add the desired values in each line of herd.csv.

For example, to record an owner for each animal, the herd.csv file would be:

```
Hang_tag,CCIA_tag,Display,Dam,Birth_date,Gender,Premises,Pen,Owner
Yel F1,124000251931113,Grey,R71,2018-03-12,F,SE 26-4-W3,West,FWW
Yel F2,124000251931112,Black,R52,2018-03-09,F,SE 26-4-W3,West,OWD
```

To record an owner and breed for each animal, the herd.csv file used would be:

```
Hang_tag,CCIA_tag,Display,Dam,Birth_date,Gender,Premises,Pen,Owner,Breed
Yel F1,124000251931113,Grey,R71,2018-03-12,F,SE 26-4-W3,West,FWW,SM
Yel F2,124000251931112,Black,R52,2018-03-09,F,SE 26-4-W3,West,OWD,SM
```

### Optional field defaults

If you have a default value for an optional field that you want the Flokk to record every time it adds an animal to the herd file (typically, when a calving record is completed) you can specify it in the “Optional field defaults” section of flokk.ini by adding an entry of the form:

field = value

For example, if you wanted an owner of OWD to be the default for all new calves, the “Optional field defaults” section of flokk.ini would read:

```
[Optional field defaults]
owner = OWD
```

With the exception of “Breed” and “Nurse”, other than displaying them when an animal is selected, optional fields are not used by Flokk.

### Breed codes

If an optional field named “Breed” is added, your Flokk will recognize the CCIA standard breed codes (see page 168) to:

- request and record calving ease codes specific to the breed of the calf, based on the breed of the dam
- record the actual breed of an animal in any relevant CLTS submission files

This functionality will, of course, only be of value in multi-breed herds. For a single breed herd, setting the “default breed” option in flokk.ini is sufficient.

### Owner

If an optional field name “Owner” is added, your Flokk will allow you to record an owner for each individual animal. This would typically be used when a group of animals is managed as a single herd,

but there are different owners for each animal.

An owner description must be limited to a short descriptor with no spaces. You **must** be consistent with the spelling and capitalization of your owner descriptions.

An Owner field can be created and edited with the Wizard when the “Animal owner” option on the “Add animal” page is set to Yes.

After the initial set up of the herd records with the Wizard, the Wizard will restrict future Owner field values to those that have already been used. If you need to use a new owner description, add it using the “Add owner” field on the “Add animal” page of the Wizard.

When a calf is added with your Flokk, if an owner is defined for the Dam, that owner is recorded for the calf as well.

### **Note field**

If an optional field named “Note” is added, this field will be recognized and be editable and viewable in the Flokk Wizard and in reporting tools at flokk.ca. The Note file is not viewable or editable on your Flokk.

### **Nurse cow**

If an optional field “Nurse” is added, Flokk will use any Hang Tag value provided here instead of the Dam field when it needs to find the Cow for a calf. The typical application of this is when a twin is transferred to another cow that has lost it’s calf.

### **calvingtags.csv**

The calvingtags.csv file records the tags that will be applied to calves as they are born.

The use of this file is optional, but recommended. See page 77 for a detailed explanation of your options when collecting calving records.

The calvingtags.csv file contains two standard fields:

Field name	Type	Description	Required	Example
Hang_tag	Text	<p>The hang tag to be applied to the calf.</p> <p>Hang Tags values consist of a three letter colour code, a space, and an animal identifier.</p> <p>The animal identifier can either be any number of character followed by digits, digits followed by any number of characters, or all digits, and can be at most eight characters long.</p> <p>If the field contains a valid animal identifier, but no tag colour, the Flokk will add the default tag colour.</p> <p>If the tag contains a single letter, than that letter is assumed to indicate birth year, and will be used if the actual birth date is not recorded for an animal.</p>	No	<p>Yel F23</p> <p>Ora 45G</p> <p>Blu 234</p>
CCIA_tag	Text, 15 characters, digits only	<p>The CCIA Tag number to be applied to the calf. The entire 15 digit number must be supplied.</p> <p>The initial two characters “01” which are often printed on CCIA Tags should <b>not</b> be included.</p>	No, but recommended.	124000123456789

and two optional fields that will be included if you have used your CLTS Unused Tag Inventory file to add calving tags to your Flokk:

Field name	Type	Description	Required	Example
Purchased	Date	The date that the tag was recorded as purchased by you in the CLTS.	No	2019-20-26
Source	Text	The source of the tag, as recorded in the CLTS	No	UFA OLDS

The Purchased and Source fields **can not** be edited. Any changes you make to these fields will be lost.

A typical calvingtags.csv would start as follows:

```
Hang_tag,CCIA_tag  
Yel H1,124000251931111  
Yel H2,124000251931112  
Yel H3,124000251931113  
Yel H4,124000251931114  
Yel H5,124000251931115  
Yel H6,124000251931116  
Yel H7,124000251931117  
Yel H8,124000251931118
```

You have the option to prepare a calvingtags.csv file that consists of only Hang Tag values. The CCIA Tag can then be added to the calves by scanning a CCIA Tag while the calving menu is being displayed. However this approach will require that the Hang Tag be manually selected to initiate scanning. If the CCIA Tag values are added to calvingtags.csv, then calving can be initiated by scanning the CCIA Tag.

You can also prepare a calvingtags.csv file that consists only of CCIA Tag values. In this case, you will need to input or confirm the Hang Tag value for each calf. You can optionally configure the Flokk to provide a default Hang Tag that is the same numeric value as the dam, but with the current year or Year letter. (see page 80)

Most spreadsheet programs have a function to automatically generate a sequence of values. This can be used to quickly generate both the Hang Tag and CCIA Tag values.

You can also add calving tags by scanning the first and last tag in a sequential series of CCIA Tags, and having the Flokk generate the associated Hang Tag. See page 77.

Alternatively, you can download your Unused Tag Inventory from the CLTS and have your Flokk create calvingtag.csv entries, including Hang Tag values. See page 117.

Entries are removed from calvingtags.csv once both the Hang Tag and CCIA Tag value in any row have been assigned to an animal in the herd.

If you have set the value of “assign CCIA Tag” to 0 in flokk.ini, this can result in the situation where the Hang Tag value in a row has been assigned to an animal in the herd, but the CCIA Tag has not. In this situation, the entry will remain in calvingtags.csv. If the Hang Tag for this entry is selected, regardless of the selected Hang Tag value remaining in calvingtags.csv, the Flokk will display the animal's herd record. If the CCIA Tag value is scanned, the Flokk will have you select a Hang Tag from the calves in the herd for which a CCIA Tag has not yet been assigned, to which the Flokk will assign the CCIA Tag value.

## flokk.xlsx

The flokk.xlsx file is an Excel XML workbook that allows you to provide the basic information required to use your Flokk.

You have the option to maintain your herd records either by updating flokk.xlsx, or updating the files herd.csv, calvingtags.csv, premises.csv, vaccinations.csv, products.csv, plates.txt and flokk.ini.

Your Flokk uses the Hang Tag and CCIA Tag values in flokk.xlsx as references to other internal files required to maintain your herd's information. While you can provide these values for new animals being added to the Flokk, **for existing animals you must not change these values in flokk.xlsx, as these references will no longer be valid and this information will be lost for the animal.**

If you need to correct or replace an animal's CCIA Tag, exit file mode, scan the new CCIA Tag, and use the "Replacement tag" option. In addition to completing any CCIA reporting required, this function will also update the Flokk's internal references so that correct information for the animal is retained.

If an animal loses its Hang Tag, place the animal in a head gate and scan its CCIA Tag. Your Flokk will display its record of the correct Hang Tag. Prepare a replacement tag and apply it to the animal.

If you need to correct an incorrect Hang Tag, select the animal, then use the Edit option of the Action menu to update the Hang Tag. This will ensure that all internal records related to the animal are updated to the new tag value.

### When does your Flokk create flokk.xlsx

Generation of flokk.xlsx causes most of the delay when your Flokk enters file mode.

As flokk.xlsx is used primarily for the initial set up of your Flokk, if you enter and leave file mode several times without making any changes to flokk.xlsx, your Flokk assumes you have completed the setup of the device and will stop generating the file.

If you wish your Flokk to begin generating flokk.xlsx again, select the flokk.xlsx option from the Options menu.

Your other option is to use your spreadsheet program to load, make changes to, and save the files that end in .CSV. These files contain, and can update, the same information that the worksheets of flokk.xlsx do.

The setting "save to flokk.xlsx" in the Operation section of flokk.ini overrides this behaviour. If you set "save to flokk.xlsx" to 1, the Flokk will always create flokk.xlsx. If you set "save to flokk.xlsx" to 0, the Flokk will never create flokk.xlsx.

The number of times that you enter and leave file mode without making changes to flokk.xlsx, after which the Flokk will stop creating flokk.xlsx, is set using the "stop flokk.xlsx after not used count" setting in the Operation section of flokk.ini.

The flokk.xlsx workbook contains five worksheets:

### Setup worksheet

The Setup worksheet allows you to set the core configuration items required for your Flokk's operation. Each option has hints and validity checks to guide you in setting the option.

The field names, values, and functions are exactly the same as in flokk.ini (see page 41).

Only the basic setting required for your Flokk's operation are included here. There are many configuration items that can only be updated by editing the flokk.ini file. See page 41 for complete information.

### Premises worksheet

The Premises worksheet contains the PID (Premises ID) and a description of the premises where your herds animals may originate from, be located, or be moved to, and any pens at each premises.

Field name	Type	Description	Required	Example
PremisesID	Text	A provincially assigned PID (Premises ID). Premises ID's are always nine characters long, and begin with the letter "A", or a two character provincial code.	Yes	AA1234567 SK1234567
Description	Text	A description of the PID that will help you to easily identify and select the correct premises.  This value should be meaningful to others, as it will be used on transport manifests. For this reason, a legal land location, rural address, or farm name is recommend.	Yes	SE 24-23-3-W3 30523 RR 41 Leduc county
Pens	Text	The name of any pens at the location.  The first pen is included under the "Pens" column header. Any number of additional pens at the premises can be added by placing the pen names in the cells immediately to the right of the initial pen.		North

If there is only a single entry in the premises worksheet, that premises will be used for all purposes, and the "Premises" option will **not** be presented within the OPTIONS menu.

### "Group administration" worksheet

The entries on the "Group administrations" worksheet are created when, with your Flokk, you:

1. Turn the “Group administration” option on by selecting the “Group administration” option from the “Options” menu.
2. Either:
  - Select a medication product and a dose, or
  - Choose the “SET LATER” option
3. Repeat as required:
  1. Select an animal by it’s Hang Tag or CCIA Tag
  2. Click the “Complete” button when presented the “Group Med.” prompt.
4. End the “Group administration” by selecting the “Group administration” option from the “Options” menu.

When each “Group administration” session is complete, the Flokk will add an entry to the Group administrations worksheet with the following entries:

Column	Type	Description	System generated	Editable	Example
Start	Date and time	The date and time the session started.	Yes	No	2020-03-15 08:35
End	Date and tie	The date and time the session ended.	Yes	No	2020-03-15 14:21
Head	Number	How many animals were in the age group.	Yes	No	125
Age	Text	The age group for the animals.	Yes	No	Mature
Administer 1	Text	One of the products that was administered.	No	Yes	Penicillin
Dose 1	Number	The dose of the first product	No	Yes	25.5

When you update an “Administer” and “Dose” column from a blank value, the value provided will be added to the the history of each animal that was included in the “Group administration”.

You can add up to five products to the “group administration” using flokk.xlsx. Any number of products can be added to a “group administration” if you use the configuration Wizard.

You **can not** add additional group vaccination records to the worksheet.

See page 92 for complete information.

### Products worksheet

The Products worksheet contains the inventory of medications (biotics, vaccinations, supplements, etc.) that you will administer to animals.

The columns in the medication worksheet are:

<b>Column</b>	<b>Type</b>	<b>Description</b>	<b>Editable</b>	<b>Example</b>
Abbreviation	Text	A sixteen character, meaningful, abbreviation of the medication. You will use this value to select the medication at animal side.	Yes	Penicillin
Full name	Text	A complete description of the medication that does not include the dose. This description will used to record administration of the medication in the animals history.	Yes	Procaine Pen G
Type	Text	The type of medication.	Yes	Vaccination
Dose	Number	The dosage of the medication, in the units described in the “Dosage unit” column.	Yes	1.5
Dose unit	Text	The units of dosage. Must be one of: Injectable medications: <ul style="list-style-type: none"> <li>• ml/100 lbs: millilitres per 100 pounds of animal weight</li> <li>• ml/100 kgs: millilitres per 100 kilograms of animal weight</li> </ul> Ingestible medications: <ul style="list-style-type: none"> <li>• bolus/100 lbs: boluses per 100 pounds of animal weight</li> <li>• bolus/100 kgs: boluses per 100 kilograms of animal weight</li> </ul>	Yes	ml/100 lbs
Withdrawal	Number	The number of days after administered after which the animal cannot be slaughtered.	Yes	15

You can add additional entries to the medication worksheet as required. The order of entry is ignored; your Flokk will present you medications based on how recently and how often each medication has been used.

### Vehicles worksheet

The vehicles worksheet contains the license plates for vehicles that either bring animals to, or take animals away, from your herd. These are required to report CLTS “Move In” and “Move Out” events.

While it is possible to add a new license plate at animal side with your Flokk, you will find it easier, when practical, to add the plate to this file in advance of processing animals in the yard.

The plates should be entered one per row. As you Flokk remembers when, and how often, you use each

plate, and offers plates for you to pick on based on currency and frequency of use, the order of entries in this file is ignored.

Plates entered into this worksheet do not need to correspond to any of the templates that are used to enter new plates in the yard.

## Herd worksheet

The Herd worksheet describes all of the animals currently in the herd. The first line of the worksheet is a header that identifies the fields that are in the remainder of the worksheet.

You have the option with your Flokk of having Hang Tag's presented in flokk.xlsx in one column (i.e. "Yel 23R") or as two separate columns (i.e. "Yel" and "23R"). The advantage of the two column approach is you do not have to remember the tag colour abbreviations, and cannot accidentally enter an incorrect tag colour. The advantage of the single column approach is Hang Tag's can be easily copied and pasted from one location to the next, but you will need to remember to add the tag colour when entering new tags.

You can switch between the two options by changing the "Split Hang\_tag colour and value" option in the Setup worksheet of flokk.xlsx.

The specifics of each column are:

Field name	Type	Description	Required	Example
Hang_tag	Text	<p>The hang tag applied to the animal.</p> <p>Hang Tags values consist of a three letter colour code, a space, and an animal identifier.</p> <p>The colour code is the first three letters of the colour, and must be one of Bla, Blu, Gre, Ora, Pin, Pur, Red, Whi or Yel.</p> <p>The animal identifier can either be any number of characters followed by digits, digits followed by any number of characters, or all digits, and can be at most eight characters long.</p> <p>If the cell contains a valid animal identifier, but no tag colour, the Flokk will add the default tag colour.</p> <p>If the tag contains a single letter, than that letter is assumed to indicate birth year, and will be used if the actual birth date is not recorded for an animal.</p> <p>Unless you are adding a new animal to the file, <b>DO NOT</b> change this field in the herd worksheet. To change an animals Hang Tag, select the animal with the Flokk, and use the “Edit” option of the “Action” menu to change the animals Hang Tag.</p>	Yes	<p>Yel F23</p> <p>Yel 45G</p> <p>Ora 234</p>

Field name	Type	Description	Required	Example
Hang_tag colour	Text	<p>The colour of the hang tang applied to the animal.</p> <p>The tag colour code is the first three letters of the colour, and must be one of Bla, Blu, Gre, Ora, Pin, Pur, Red, Whi or Yel.</p> <p>If the tag colour is left blank the Flokk will add the default tag colour.</p> <p>Unless you are adding a new animal to the file, <b>DO NOT</b> change this field in the herd worksheet. To change an animals Hang Tag, select the animal with the Flokk, and use the “Edit” option of the “Action” menu to change the animals Hang Tag.</p>	No	Yel
Hang_tag value	Text	<p>The numeric and/or character values of the hang tang applied to the animal.</p> <p>Hang Tags values consist of a three letter colour code, a space, and an animal identifier.</p> <p>The animal identifier can either be any number of characters followed by digits, digits followed by any number of characters, or all digits, and can be at most eight characters long.</p> <p>If the tag contains a single letter, than that letter is assumed to indicate birth year, and will be used if the actual birth date is not recorded for an animal.</p> <p>Unless you are adding a new animal to the file, <b>DO NOT</b> change this field in the herd worksheet. To change an animals Hang Tag, select the animal with the Flokk, and use the “Edit” option of the “Action” menu to change the animals Hang Tag.</p>	Yes	<p>F23</p> <p>45G</p> <p>234</p>

Field name	Type	Description	Required	Example
CCIA_tag	Number between 124000000 000000 and 124999999 999999	<p>The CCIA Tag number on the animal. In Canada, these tags will all start with the three digits “124”.</p> <p>The entire 15 digit number must be supplied.</p> <p>The initial two characters “01” which are often printed on CCIA Tags should <b>not</b> be included.</p> <p>Unless you are adding a new animal to the file, <b>DO NOT</b> change this field in the herd worksheet. To change an animals CCIA Tag, scan a new CCIA Tag, then use the “Replacement tag” function.</p>	Required to record pregnancy test results.	124000123456789
Display	Text	<p>Any text you want displayed whenever the animal has been selected.</p> <p>Existing values in the Display field will be used to establish a pick list of values for this field.</p> <p>If less than 20 animals are in the herd, a standard set of animal colours are provided to choose from.</p>	No	Red white face
Dam	Text	The Hang Tag of the dam of the animal.	No	Yel F72 Bla 87G
Birth_date	Date	Date of birth of the animal.	Yes for calves. For older animals, birth year will be determined from the Hang Tag letter if birth date is not provided.	2013-03-09
Gender	Text, F or M	The gender of the animal.	Yes, if animal is to be recorded as a dam during calving.	M

Field name	Type	Description	Required	Example
Location	Text, consisting of “Premise description :Pen” pairs	The current location of the animal. The premises and pen combination must be defined in the Premises worksheet. Locations can only be assigned to animals who have a CCIA Tag value in their herd record.	No	SE 26-4-W3:West

While complete values for all fields are recommended to make the best use of your Flokk, as a minimal starting point a Herd worksheet file consisting of only Hang Tags is sufficient to begin using your Flokk, as:

- the Flokk can assign scanned CCIA Tags and gender to animals in the herd, allowing CCIA Tag numbers to be collected over time when the animals are being handled. (see Adding a CCIA Tag to an animal, page 111)
- the Flokk will determine the birth year for an animal from the Hang Tag value as long as the tag:
  1. has a single character, and
  2. that character is allowable for standard year designations (i.e. is not I, O, Q or V)

The `CCIA_tag` field **must be set** for an animal for the Flokk to assign a location or record pregnancy results for an animal. However, the CCIA Tag attached to an animal can be scanned and assigned to an animal while it is on the scale or in the squeeze, followed immediately by recording a pregnancy test result for that same animal.

### Optional fields

Additional fields can be added to `flokk.xlsx`. The contents of these fields will be displayed when the animal has been selected.

To add an optional field include the field in the header in the first row of the Herd worksheet, and add the desired values in the columns below.

### Optional field defaults

If you have a default value for an optional field that you need the Flokk to record every time it adds an animal to the herd file (typically, when a calving record is completed) you can specify it in the “Optional field defaults” section of `flokk.ini` by adding an entry of the form:

`field = value`

For example, if you wanted an owner of OWD to be the default for all new calves, the “Optional field defaults” section of `flokk.ini` would read:

[Optional field defaults]

owner = OWD

With the exception of “Breed” and “Nurse”, other than displaying them when an animal is selected, optional fields are not used by Flokk.

### **Breed codes**

If an optional field “Breed” is added, Flokk uses the CCIA standard breed codes (see page 168) to:

- request and record calving ease codes specific to the breed of the calf, based on the breed of the dam
- record the actual breed of an animal in any relevant CLTS submission files

This functionality will, of course, only be of value in multi-breed herds. For a single breed herd, setting the “default breed” option in flokk.ini will be sufficient.

### **Note field**

If an optional field named “Note” is added, this field will be recognized and be editable and viewable in the Flokk Wizard and in reporting tools at flokk.ca. The Note file is not viewable or editable on your Flokk.

### **Owner**

If an optional field name “Owner” is added, your Flokk will allow you to record an owner for each individual animal. This would typically be used when a group of animals is managed as a single herd, but there are different owners for each animal.

An owner description must be limited to a short descriptor with no spaces. You **must** be consistent with the spelling and capitalization of your owner descriptions.

An Owner field can be created and edited with the Wizard when the “Animal owner” option on the “Add animal” page is set to Yes.

After the initial set up of the herd records with the Wizard, the Wizard will restrict future Owner field values to those that have already been used. If you need to use a new owner description, add it using the “Add owner” field on the “Add animal” page of the Wizard.

When a calf is added with your Flokk, if an owner is defined for the Dam, that owner is recorded for the calf as well.

### **Nurse cow**

If an optional field “Nurse” is added, Flokk will use any Hang Tag values provided here instead of the Dam field when it needs to find the Cow for a calf.

## premises.csv

The premises.csv file contains the PID (Premises ID) and a description of where your herds animals may originate from or be located, and any Pens at that premises.

Field name	Type	Description	Required	Example
PremisesID	Text	A provincially assigned PID (Premises ID). Premises ID's always begin with two characters, followed by seven digits.	Yes	AA1234567 SK1234567
Description	Text	A description of the PID that will help you to easily identify and select the correct premises.  This value should be meaningful to others, as it will be used on transport manifests. For this reason, a legal land location or farm name is recommended.	Yes	SE 24-23-3-W3 30523 RR 41 Leduc county
Pens	Text	The name of any pens at a premises.  The first pen is included under the "Pens" header. Any number of additional pens at the premises can be added following the initial pen, separated by commas.		North,East,South

A typical premises.csv file would be:

```
PremisesID,Description,Pens  
AA1234567,SE 24-23-3-W3  
AA1233234,SW 24-23-3-W3,North,East,South
```

If there is only a single entry in the premises.csv file, that premises will be used for all purposes, and the "Premises" option will **not** be presented within the OPTIONS menu.

If there is only a single Pen for a premises, that Pen will be used for all purposes.

## plates.txt

The file plates.txt contains the license plates for vehicles that either bring animals to, or take animals away, from your herd. These are required to report CLTS "Move In" and "Move Out" events.

While it is possible to add a new license plate with your Flokk, you will find it easier, when practical, to add the plate to this file in advance of processing animals in the yard.

The plates should be entered one per line. As you Flokk remembers when, and how often, you use each plate, and offers plates for you to pick on based on currency and frequency of use, the order of entries in this file is ignored.

Plates can be added into this file that do not correspond to any of the templates used to enter new plates with the Flokk at the loading chute.

## **flokk.ini**

The flokk.ini file is used to set or record permanent changes in operation for your Flokk.

It is a text file that can be opened and edited by any text editor, such as Notepad in Windows.

The file consists of sections, which are indicated by the section name being surrounded in square brackets (i.e. “[” and “]”). Within the sections are actual values, which take the form of:

option = value

Where the “option” is the option you want to set, and “value” is the value you wish to take.

Some options are set and used by the Flokk software, and others are intended for the operator to change. The following table indicates which fields are editable by the operator, and which are set by the Flokk and should not be changed.

For example, to set the name of the farm you want displayed on system start up, you would go to the [User] section of the file and change the lines that reads:

```
[User]
owner = Wingfield Farm
```

to:

```
[User]
owner = Green Acres
```

The core configuration items that you need to set can also be changed using the Setup worksheet of flokk.xlsx. This is the easiest place to make these changes, and is how you should initially set up your Flokk. However there are many configuration items that can only be set in flokk.ini.

If an error is encountered when loading flokk.ini your Flokk will display a failure message, then will display the "Flokk Ready" menu. However only “File” will be available as a function. Connect your Flokk to a computer, select the “File” option, and use a text editor to edit flokk.ini and correct the problem.

The following sections and values may be found in flokk.ini:

<b>Section</b>	<b>Option</b>	<b>Editable</b>	<b>Default</b>	<b>Description</b>
[Add animal]	create numeric tags with birth year	Yes	0	If your Hang Tags are numeric, i.e. they are all digits, then the first two digits of the tag will be set to the last two digits of the birth year of the animal whenever a new tag is created.

Section	Option	Editable	Default	Description
[Add animal]	default age in months	Yes		<p>The age, in months, that will be used to determine the birth date provided as the default for the first animal being moved into the herd with the “Move in animal” function.</p> <p>If not set, March of the previous year is provided as the starting birth date.</p>
[Add animal]	default tag colour	Yes	Yel	<p>The default colour that will be added to Hang Tags when either no colour has been provided, or when an animal or calf is added to the herd.</p>
[Add animal]	default tag template	Yes	CCC 9999A	<p>The template to use when entering a new Hang Tag when there are no entries in either the herd file or the calving tags to provide guidance as to how tags should be formatted.</p> <p>If there are entries in the herd records or calving tags, then then the tag template will be set from the first entry encountered, and this setting will be ignored.</p> <p>The template <b>MUST</b> start with “CCC”, as all Hang Tags begin with a three character tag colour code.</p> <p>If you are going to collect all animals entries using the Flokk, rather than adding them to the herd file, and you want to use a tag format other than “CCC 9999A”, you will need to set this value before you begin adding animals.</p>
[Add animal]	first weight in kg	Yes	0	<p>The initial value to use as a starting point when collecting an animals weight when it’s age is not known or cannot be estimated, in kilograms.</p>

Section	Option	Editable	Default	Description
[Calving]	assign CCIA Tag	Yes	0	<p>If this value is set to 0, and collection of a calving record is started by selecting a calving Hang Tag rather than scanning a calving CCIA Tag, the Flokk will not assign a CCIA number to the calf, and the CCIA Tag number will need to be assigned to the calf at a later date.</p> <p>This allows Hang Tags to be applied at birth, and the CCIA Tag scanned and applied later. This is <b>not</b> recommended.</p> <p>If this option is set to 1, and collection of a calving record is started by selecting a calving Hang Tag rather than scanning a calving CCIA Tag, and a CCIA Tag value is included on the same line in the calvingtags.csv file, that tag number will be assigned to the calf. It is up to the operator whether they wish to apply the CCIA Tag to the calf a birth, or at weaning.</p> <p>When collection of a calving record is started by scanning a CCIA Tag, that CCIA Tag number is assigned to the calf regardless of this setting.</p> <p>See page 77 for more information.</p>
[Calving]	collect calving ease	Yes	0	<p>Whether to collect calving ease for calves.</p> <p>See page 82 for more information.</p>
[Calving]	collect weight	Yes	0	<p>Whether to collect a birth weight for calves.</p> <p>See page 82 for more information.</p>

Section	Option	Editable	Default	Description
[Calving]	default Hang Tag from dam	Yes	0	<p>When set, the default Hang Tag for calves is the numeric value of the Hang Tag of the calf's dam, with either the current birth year letter (if Hang Tags with year letters are being used) or with the first two digits of the tag the birth year (if numeric Hang Hang Tags are being used) as long as the new tag value is neither already in the herd nor is among the calving tags.</p> <p>For example, if in 2020 a calf was born to cow 234C, the default calf tag offered would be 234H.</p> <p>In the case of twins, the second calf's default tag would have to be 235H. The operator has the option of setting whatever alternative tag number they wish, again as long as the new tag value is not already being used.</p>
[Calving]	default tag colour	Yes	"default tag colour" from [Add animal]	<p>The default Hang Tag colour when adding calves.</p> <p>Is set if a tag colour other than the system default tag colour is used for a calf.</p>
[Calving]	first weight in kg	Yes	30	<p>The initial weight to use as a starting point when collecting calving weights, in kilograms.</p> <p>The Flokk can have only one of "first weight in kg" or "first weight in lb" options set.</p>
[Calving]	first weight in lb	Yes	70	<p>The initial weight to use as a starting point when collecting calving weights, in pounds.</p> <p>The Flokk can have only one of "first weight in kg" or "first weight in lb" options set.</p>

Section	Option	Editable	Default	Description
[Calving]	maintain tag year letter	Yes	1	<p>If set to 1, your Flokk will ensure that the year for the Hang Tags in calvingtags.csv remains correct and, if it is no longer correct, will re-create all Hang Tag values in order to include the correct letter year.</p> <p>If you do not set a value for this option, this option will be set to “1” when:</p> <ul style="list-style-type: none"> <li>- tags are created by importing your CLTS Unused tag inventory</li> <li>- tags are created by scanning the first and last CCIA Tag in a sequential series of tags.</li> </ul> <p>See page 117 for more information.</p>
[Calving]	offer stillborn option	Yes	0	If set to “1”, the Stillborn option will be offered when adding calves.
[Calving]	PREMISES new calf pen	Yes	Default pen of current premises	<p>The Pen assigned to a calf and its Dam when a new calf is added to the system.</p> <p>A pen is recorded for each Premises, so that if the devices Premises is changed, the appropriate Pen is used.</p> <p>Is set every time the “Pen” option is used when adding a calf to the system.</p>
[CLTS]	generate in-herd id	Yes	1	Generate a CLTS_IN-HERD_ID.csv file. This file can be uploaded to maintain the contents of the In-Herd id field in the CLTS.
[CLTS]	report sighted events as cow-calf pairs	Yes	1	When a CLTS sighted event is recorded for a calf, or cow with a current calf, also report a sighted event for the dam of the calf or the current calf of the cow.
[CLTS]	report sighted events	Yes	0	<p>Whether to add an event to CLTS_SIGHTED.csv whenever a CCIA Tag is scanned.</p> <p>This option will be set when the “Sighted” option is selected from the “Options” menu.</p>
[CLTS]	species	Yes	BOV	The species to include in CLTS upload files when required.

Section	Option	Editable	Default	Description
[Device]	SERIAL	No		The hardware serial number of the device that Flokk is running on.
[Device]	version	No		Current version of the Flokk software.
[Device]	battery capacity	Yes	2500	Capacity of the devices battery in milliamp hours. Used to determine how long the Flokk can operate after a low battery has been detected.  Capacities recognized are 2500, 5000, 6600, and 11000.
[Device]	LCD type	Yes	Lumex	The type of LCD display module being used. Options are “Lumex” and “OSEPP”.  Change this setting if unreadable characters, rather than arrows, are displayed when selecting or inputting an item.
[Device]	monitor low battery	Yes	1	If set to zero, device will not attempt to monitor for a low battery. This should never be required in normal circumstances.
[Display choices]	Placeholder (e.g. 1, 2, 3)			If values are included in this section, they will be presented to the operator as the options whenever a Display value is input for an animal.  If this section is empty, the Flokk will use any existing entries in the “Display” field in herd.csv to build the list of options for the operator to select from.  If this section is empty, and there are less than 50 animals in the herd, a set of standard animal colours will be added to any existing display values to provide the list of display values to choose from.  For more information, see “Display” under “Calving” on page 81.

Section	Option	Editable	Default	Description
[Herd]	default breed	Yes		<p>The two letter standard CCIA breed code to use if a "Breed" code has not been added to herd.csv.</p> <p>The allowed codes are:</p> <p>AN: Angus  SM: Simmental  HH: Hereford  HP: Polled Hereford  AR:Red Angus</p> <p>This value can be blank.</p>
[Herd]	weaning age in days	Yes	200	Age, in days, after which an animal is no longer considered to be a calf.
[Hidden WiFi networks]	SSID = PASSWORD	Yes		<p>It is possible to set up a WiFi network that does not broadcast it's presence.</p> <p>In these cases, the Flokk cannot add it's name to flokk.ini automatically.</p> <p>Flokk will attempt to connect to any network whose names and passwords are added to this section.</p>
[Move out]	allow add animal	Yes	1	<p>If set to 0, the addition of animals to a move out by selecting their Hang Tag is prevented. Animals can only be added to the Move out by reading their CCIA Tag.</p> <p>This prevents the possibility of an animal being shipped without a CLTS tag.</p>
[Move out]	allow add group	Yes	1	If set to 0, the addition of groups of animals to a move out is prevented.
[Move out]	cow calf pairs	Yes	1	When set to true, if you are moving cow-calf pairs to another premises you need only read the CCIA Tag of either the calf or the cow. The other animal(s) in the pair will be automatically added to the move out.
[Operation]	add Breed column to flokk.xlsx	Yes	0	Add a column to the herd worksheet of flokk.xlsx so that a breed can be recorded for each individual animal. The column will contain verification to ensure only standard herd codes are placed in this column.

<b>Section</b>	<b>Option</b>	<b>Editable</b>	<b>Default</b>	<b>Description</b>
[Operation]	calculate average daily gain	Yes	1	Calculate the average daily gain of the animal, using the earliest and latest weightings for the animal, and add it as a column to weights.csv.
[Operation]	echo display to telnet	Yes	0	Enable echo of the display to a telnet client. See page 124 for more information.
[Operation]	flokk.xlsx not loaded count	No		The number of times that the Flokk has exited file mode without changes having been made to flokk.xlsx.
[Operation]	generate excel herd.csv file	Yes	0	Direct the Flokk to generate a herd.csv file that will force Microsoft Excel to accept CCIA Tag numbers as text rather than convert them to a large number.
[Operation]	Hang Tag components in separate columns in flokk.xlsx	Yes	1	Present the Hang Tag components in two columns in the Herd worksheet of flokk.xlsx, one for the tag colour, and a second for the tag value.
[Operation]	last birth date	Yes		The last birth date entered by the operator. Used as the starting point for any future birth date entries.
[Operation]	last current date	No		The date the Flokk was last turned off. Used as the starting point if the date has to be manually entered.
[Operation]	last file mode date	No		The last date that the Flokk was placed into file mode. Used to remind the operator to regularly back up the files on the Flokk.
[Operation]	last file save date	No		The last date that the Flokk files were saved internally. Used to remind the operator to regularly back up the files on the Flokk.
[Operation]	maximum sessions retained	Yes	10	The maximum number of session related NNNNscans.csv and NNNNweights.csv files to retain. To maintain this number of sessions, session files will be deleted, oldest first.

Section	Option	Editable	Default	Description
[Operation]	replace start with tag on ready screen	Yes	0	<p>If set to “1”, the Start function button (the left button on the Ready screen) will be replaced with a “Tag” function button.</p> <p>If you:</p> <ul style="list-style-type: none"> <li>• have added all your cows into the Flokk</li> <li>• are using the “calving tags.csv” file (see page 27)</li> </ul> <p>then you have no need for the “Start” menu, as the only way animals will be entering the herd are:</p> <ul style="list-style-type: none"> <li>• through calving, which is initiated by selecting a calving tag</li> <li>• through animal “move in” events, which is initiated by scanning an unrecognized CCIA tag</li> </ul> <p>In this case, setting “replace start with tag on ready screen” to “1” removes access to the Start menu.</p> <p>The advantage of this is that</p> <ol style="list-style-type: none"> <li>1. it avoids an inexperienced operator from inappropriately using the “Add animal” option, which should only be used for the initial loading of animals into the Flokk's herd record</li> <li>2. it makes it quicker to start the process of selecting an animal by it's hang tag</li> </ol>
[Operation]	save raw CLTS tag scans	Yes	0	Create files containing the CCIA Tag, Ear tag, whether the animal was flagged, and the Premises ID for all scans completed.
[Operation]	save raw weights	Yes	0	Create a file containing the CCIA Tag, Ear tag, and weight of all weightings completed.

Section	Option	Editable	Default	Description
[Operation]	save to flokk.xlsx	Yes		<p>Save the herd information to an Excel XML spreadsheet file as well as to CSV files. Either the Excel spreadsheet file <b>or</b> the CSV files can be edited to update herd information.</p> <p>If set to a true value, flokk.xlsx will be created every time the Flokk is put into file mode.</p> <p>If set to a false value, flokk.xlsx will never be created.</p> <p>If not set, creation of flokk.xlsx will stop if the file is not being updated. See page 30 for complete information.</p>
[Operation]	session	No		The current session used to record scan and weight results.
[Operation]	stop flokk.xlsx after not used count	Yes	2	The number of times that the Flokk has exited file mode without any changes being applied to flokk.xlsx, after which the Flokk will no longer create the file.
[Operation]	weight unit	Yes	lb	<p>The units used when weights are input or included in outputs. Allowed values are kg or lb.</p> <p>Can be changed by selecting the “Unit” choice from the “Options” menu.</p>
[Optional field defaults]	FIELD NAME = VALUE	Yes		Default values for any optional fields in the herd file. These values will be added to any animals that the Flokk adds to the herd file, typically as a result of completing a calving record.
[Pregnancy checking]	result collection method	Yes	due	<p>Sets how pregnancy test results are collected. Can have one of three values; simple, due, or term.</p> <p>See page 96 for complete information.</p>
[Premises]	last	No		<p>The last selected premises.</p> <p>This setting will be updated when the Premises option is selected from the Options menu.</p>

Section	Option	Editable	Default	Description
[Premises]	PREMISES current pen	No		The default Pen for a premises.  A separate Pen is recorded for each premises, and will be used as the default whenever that Premises is selected.  This setting is updated when the Pen option is selected from the Options menu.
[User]	CLTS Account ID	Yes		Your CLTS account id.  Added to CLTS upload files as required.
[User]	mailing address	Yes		Your mailing address, for inclusion on livestock manifests.
[User]	owner	Yes	Wingfield Farm	The name of the farm or ranch to be displayed, and used on livestock manifests.
[User]	phone	Yes		Your phone number, for inclusion on manifests.
[User]	rural address	Yes		Your rural address, for inclusion as the origin point of shipments on manifests.
[Vaccination]	calf	Yes		The vaccination description that will be added to individual vaccinations recorded at birth.
[Vaccination]	mature	Yes		The vaccination description that will be added when individual vaccinations are recorded for a mature animal (2 years or older).
[Vaccination]	weaning	Yes		The vaccination description that will be added when individual vaccinations are recorded at weaning (less than 1 year old).
[Vaccination]	yearling	Yes		The vaccination description that will be added when individual vaccinations are recorded for yearlings.
[Vaccination]	years retained	Yes	3	Number of years that Vaccination records will be retained by the Flokk.

Section	Option	Editable	Default	Description
[WiFi passwords]	NETWORK NAMES	Yes		<p>For WiFi networks that are accessible by your Flokk and require a password to access, the password required to join network can be provided here as an entry for the network name.</p> <p>For example, if your WiFi network was named "mynet", then flokk.ini would have the entry:</p> <pre>[WiFi passwords] mynet =</pre> <p>If the password for this network was "password", then you would edit this lines to read:</p> <pre>WiFi passwords] mynet = password</pre> <p>To protect your WiFi password, once the password has been confirmed correct, it will be recorded in the Flokk's internal storage and will <b>not</b> be provided in flokk.ini.</p> <p>Note that you can also directly enter your WiFi password into the flokk using service mode (see page 55).</p>
[Wizard]	display entry	Yes	"CCIA colours" if less than 50 head in herd, otherwise "From current"	<p>Controls how entries in the "Display" field in the herd file are limited.</p> <p>Can be one of three options:</p> <p>From current: restricted to display values which have already been provided for animals</p> <p>CCIA colours: the standard CCIA animal colour codes</p> <p>Freeform: No restrictions on the values that can be provided.</p> <p>Unless you are careful to limit the number of unique values you provide, this is not recommended, as display values can only be selected from a list with the Flokk.</p>

Section	Option	Editable	Default	Description
[Wizard]	test that hangtag year letter matches birthdate year	Yes	1	On completion of the Wizard session, check that if a single letter is in a hangtag, it is the correct year letter for the birth date provided.

## find.txt

The file find.txt is a simple text file. It consists of a list of Hang Tag values, CCIA Tag numbers, or any other non-date value in any field, one per line.

When animals are selected by Hang Tag or by scanning their CCIA Tag, the Flokk will provide a message and flash the alert light if a value related to the animal is in find.txt.

For more information, see page 98.

## products.csv

The file products.csv contains the inventory of products (biotics, pharmaceuticals, anti-parasitics, etc.) that you will administer to animals, either individually (by selecting the “Medication” item from the “Action” menu) or in groups (by selecting the “Group administration” option from the “Options” menu).

The fields in the products.csv are:

Fields	Type	Description	Editable	Example
Abbreviation	Text	A sixteen character, meaningful, abbreviation of the medication. You will use this value to select the medication at animal side.	Yes	Penicillin
Type	Text	The type of medication. The allowable types are "Antibiotic", "Vaccination", "Anti parasitic", "Supplement", "Corticosteroid", "Analgesic", "Tranquilizer" and "Other"	Yes	Antibiotic
Dose	Number	The dosage of the medication, in the units described in the “Dosage unit” field.	Yes	1.5
Dose_unit	Text	The units of dosage. Must be one of: Injectable medications: <ul style="list-style-type: none"><li>• ml/100 lbs: millilitres per 100 pounds of animal weight</li><li>• ml/100 kgs: millilitres per 100 kilograms of animal weight</li></ul> Ingestible medications: <ul style="list-style-type: none"><li>• bolus/100 lbs: boluses per 100 pounds of animal weight</li><li>• bolus/100 kgs: boluses per 100 kilograms of animal weight</li></ul>	Yes	ml/100 lbs
Withdrawal	Integer	The number of days after administered after which the animal cannot be slaughtered.	Yes	15
Full_name	Text	A long, complete, description of the medication, not including the dose. This description will used to record administration of the medication in the animals history.	Yes	Procaine Pen G

You can add as many entries to products.csv as are required. The order of entries in products.csv is ignored; the order your Flokk will present you medications is based on how recently and how often

each medication has been used.

## WiFi configuration

Your Flokk can, and should, be set up for Internet access via WiFi networks.

When WiFi access is set up for your Flokk, whenever a WiFi network is available it will:

- set and maintain its date and time
- be able to download and update the Flokk's software
- with maintenance of the required subscriptions:
  - be able to back up its files
  - be able to submit data to other services such as the CLTS
- be able to request remote service of the device by Flokk personnel

Unless operating in service mode, your Flokk constantly scans for WiFi networks in its vicinity. If the Flokk finds a WiFi network that does not require a WiFi password, it will automatically connect to that network.

If the WiFi networks available to you require a password, you have three options to set the password for these networks:

- Use the “WiFi password” option of the “Setup” menu in Service mode
- Edit the “WiFi” section of the “Setup” worksheet of flokk.xlsx
- Edit the entries in the [WiFi passwords] section of flokk.ini

### Setting up WiFi using Service mode

1. With your Flokk turned off, press and hold any of the Flokk's buttons.
2. Turn on the Flokk
3. Once the Flokk is displaying “Starting Service”, release the button.
4. When the Flokk displays “Service Ready”, press the “Setup” function button.
5. From the Setup menu, chose the “WiFi password” option
6. The Flokk will search for WiFi networks that are currently available, then will ask you to select a network name.
7. Select one of the network names.
8. Using the left and right function buttons to move the cursor, and the toggle to change the value at each letter position, enter the WiFi password for the network.
9. Once the password is complete, click the Done button.
10. The Flokk attempt to connect to the WiFi network, then inform you if the connection was successful.
11. If the connection was successful, the password will be stored in the Flokk's internal storage so that

you will not have to provide it again.

### Setting up WiFi in flokk.xlsx

While running the Flokk application, place your Flokk into file mode.

Open the file flokk.xlsx. If the file flokk.xlsx is not present, exit file mode, select “flokk.xlsx” from the options menu, then enter file mode again.

In the “Setup” worksheet of flokk.xlsx, you will find a “WiFi” section.

For each WiFi network that the Flokk has found that requires a password, the network name (SSID) will be displayed. To have your Flokk connect to any these networks, provide the WiFi password in the cell to the right of the network name.

### Setting up WiFi in flokk.ini

While running the Flokk application, place your Flokk into file mode. Using a text editor, open the file “flokk.ini”.

In the file flokk.ini, if your WiFi network was named “mynet”, and the WiFi password was “mypass”, the relevant lines in flokk.ini would read:

```
[WiFi passwords]
mynet = mypass
```

You will know that your Flokk has successfully connected to a WiFi network when an IP address (e.g. 192.168.0.10) appears among the status messages displayed when the Flokk is idle. If your current location has more than one WiFi network available, the Flokk will the display of the IP address it is has been assigned as well as the name of the WiFi network it is using.

If the Flokk finds a WiFi network that it has a password for, it will connect to that network. If the Flokk cannot find a WiFi network that it has a password for, but can find a WiFi network that does not require a WiFi password, it will automatically connect to that network.

Please note that in most cases your Flokk cannot connect to a WiFi network that requires an action in addition to, or other than, providing a WiFi password, e.g. a second password on a website, or a web page that requires acceptance of a terms of use, as is typical in hotels and convention centres. Support for these circumstances can be provided on a custom, case by case basis. Contact Flokk for more information,

# Using your Flokk

## Turning off your Flokk

When you are done using your Flokk, from the “Flokk Ready” screen press the Done button.

You will be offered a menu with four options:

CONTINUE: Return to the "Flokk Ready" screen

POWER OFF: Prepare the Flokk for it's power to be switched of.

Service mode: Enter Service mode (see page 119).

Restart: Restart the Flokk.

If you select the “POWER OFF” option, your Flokk will save all of it's data files. Once all of it's files have been safely saved and the Flokk is ready to be switched off, it will display the message “Safe to power off”.

Do **not** switch off your Flokk's power until the “Safe to power off.” message is displayed.

## Backing up your Flokk

While your Flokk maintains your herd records, it should not be relied upon as the only record of this information. A current copy of the files on your Flokk will be required to restore it to full functionality if it fails, is lost, or is damaged.

For an annual subscription, your Flokk will automatically maintain a backup copy of your herd records in private and secure storage at flokk.ca. Please see page 123 for complete information.

**It is your responsibility to ensure that the files on your Flokk are regularly copied to another secure and reliable storage location.**

## Battery management

Your Flokk monitors the charge of it's battery. When it detects a low battery condition, it will begin displaying the message “Battery left: NN minutes”, where NN is the number of minutes left before the the Flokk's battery is empty. When this value has reached 0, the Flokk will shut itself off.

It is recommended your Flokk be plugged into a USB power source whenever it is not in use so that the battery is always fully charged when you start using it. This does not need to be a computer; any USB charger and cable connection is sufficient, including a vehicle charger.

The Flokk will draw a small amount of power from the battery even when it is switched off. If the Flokk is to be stored for an extended period without being connected to a charging source the Flokk should first be fully charged, then the case opened and the battery disconnected.

## Status messages

While your Flokk is waiting for a Hang Tag to be selected or a CCIA Tag to be scanned, it will display a series of status messages. The complete list of messages which may be displayed can be found on page 135.

You can also move between these status messages by using the toggle switch.

Some messages indicate a significant situation that requires operator attention. The alert light will be flashed while these messages are being displayed.

## The Start menu

When you first start using your Flokk, the left function button on the “Flokk Ready” screen is labelled “Start”. When selected, you will be presented with a menu that may contain the options:

NONE	Select Hang Tag	Add calf	Add animal	Move in	SHUT DOWN
------	--------------------	----------	------------	---------	-----------

Some of these options will not be offered if the required configuration items have been set. Specifically, you must provide at least one Premises, and your CLTS Account id, before the “Add calf” and “Move in” options will be offered.

The purpose of this menu is to provide you the ability to initially collect animal records with your Flokk at the herd. If you have complete and accurate herd records, you can add them to your Flokk by either editing flokk.xlsx, (see page 22), using the online Wizard, (see page 18), or adding them to herd.csv. (see page 30).

However if you:

- do not have accurate records
- your records are on paper and you would prefer to collect them with the Flokk rather key them in at a computer
- you do not want to set up calving tags

you can use the “Add calf” and “Add animal” option of this menu to add animals to your herd file.

Once you have a complete record of your herd and your calving tags in your Flokk, the only way that animals should come into or leave your herd is by one of:

- a) a birth, which is handled by the calving function, which is initiated by choosing “Add calf” after scanning an unrecognized CCIA Tag, or selecting or scanning a calving tag (page 68 )
- b) arrival from another herd, which requires you complete a move in, and is initiated by scanning a CCIA Tag which is not recognized (page 85)
- c) shipping to market, or removal of animals to another premises, which requires you complete a move out, and is initiated by scanning the first animal and selecting “Move out” from the “Action” menu. (page 101)
- d) the animal died on farm, in which case you will set it’s condition to Dead (page 109)

and therefore you no longer require the functions of the “Start” menu. You edit the “replace start with tag on ready screen” in the [Options] section of flokk.ca and set it to “1”, the “Start” button on the Ready screen will be replaced with a “Tag” button. This will provide you quick access to selecting an animals Hang Tag, and prevents accidentally using the “Add animal” function when a “Move in” is actually required.

## Device options

There are a number of options that can be set while your Flokk is operating. These can be chosen and set by pressing the “Option” function button from the “Flokk Ready” menu.

Only relevant options will be offered to you. For example, if you have not defined any Pens, then the “Pen” option will not be displayed.

The options available are:

### File

This option places your Flokk into file mode, so that you can access and update your herd records and the configuration files for the device.

### Save

This option will be offered if you have added herd records, or are collecting weights or pregnancy test results. When selected, the Flokk will pause operation and save all data to permanent storage.

### “Group administration”, Weigh, and Pregnancy

These options toggle the administration of a medication, or the collection of a weight or pregnancy check result, for each animal selected going forward. The selected function continues until it is turned off by selecting the option again.

### Premises and Pen

These options allow you to select a current Premises and Pen for the device.

The devices Premises and Pen are used as:

- the location for any animals until either the “Move to Pen” function is used to move them to a Pen, or a Premises and Pen is added to the animals herd record
- the location for any animals that do not have a CCIA Tag set in their herd record
- the initial location of any animals added using the “Add calf” and “Add animal” functions
- the default destination for any animal move ins

### Sighted

This option toggles whether a CLTS sighted event is reported for every CCIA Tag scanned. Used primarily by commingling sites like exhibitions or shows.

### Units

Toggles whether imperial or metric units are used.

### flokk.xlsx

Restores generation of the flokk.xlsx file.

## Backup

If:

- you have subscribed to the handheld backup service at flokk.ca
- your Flokk is connected to a WiFi network

then you will be offered the Backup option. Selecting this option will copy your current herd records to secure and private backup storage at flokk.ca.

Your Flokk will attempt to complete a backup automatically every night as well.

See page 123 for complete information.

## Submit

If:

- you have subscribed to event or record submission service (e.g. CLTS submissions) at flokk.ca
- there are outstanding events to be submitted
- your Flokk is connected to a WiFi network

then you will be offered the Submit option. Selecting this option will cause any outstanding events to be submitted to the appropriate organizations.

Your Flokk will attempt to complete any outstanding submissions automatically every night as well.

## Remote service / End remote

Selecting the Remote service option will enable remote access to your Flokk to diagnose problems and resolve issues.

This option should be selected only after you have been in contact with a Flokk service personnel with your issue and he or she has asked you to make this selection.

Remote service access is available only when your Flokk is connected to a WiFi network. The item will not be offered to you when the Flokk is not connected to a WiFi network.

Remote access to your Flokk is:

1. Controlled by cryptographic keys unique to your Flokk
2. Limited to those Flokk personnel who are authorized to complete customer service
3. Not possible from other Flokk hand held devices.
4. Impossible by anyone other than the Flokk personnel noted above
5. Can only occur when you have enabled remote access by selecting the “Remote service” option.

When remote access to your Flokk is no longer required, select the “End remote” option to disable remote access.

## Update

Checks to see if updated software is available for the Flokk and, if it is, downloads it for installation.

## Lock

Lock the device to prevent accidental button presses.

## Working with your herd

Completing any task with your Flokk begins by one of:

- scanning a CCIA Tag
- selecting an animal from the herd by its Hang Tag
- selecting a Hang Tag or scanning a CCIA Tag in calvingtags.csv that is not yet attached to a calf

Your Flokk will use the information it knows about your herd to start the correct action.

### Scanning a CCIA Tag

If you are at the "Flokk Ready" display or are viewing an animal's information, and you scan a CCIA Tag with the RFID reader, your Flokk will proceed as follows:

1. If the CCIA Tag number is in an animal's record, it will display that animal's record.
2. If the CCIA Tag number is not in herd records, but is in the calving tags, it will assign the CCIA Tag to the calf and begin collection of calving information.
3. If the CCIA Tag number is neither in your herd records nor the calving tags your Flokk will offer the following options:

NONE: Take no action and return to "Flokk Ready" screen.

Apply to calf: Apply the CCIA Tag number to a calf that does not yet have one assigned to it, and complete the CLTS age verification for the calf.

Move in animals: The CCIA Tag is on an animal that you are adding to your herd that has come from another premises. Begin collecting the information necessary to add the animal to your herd records and report a "Move in" event to the CLTS.

Add calf: Add a calf to the herd, including completing CLTS age verification reporting.

Replacement tag: This is a new tag that is going to replace a CCIA Tag that has been lost from an animal that previously had a CCIA Tag. Select an existing animal's Hang Tag. The Flokk will then update the animal's herd record, and report the replacement tag to the CLTS.

On animal: The tag is on an animal in your herd. Enter a Hang Tag value. If tag provided is an animal in the herd, add or replace the CCIA Tag number for the animal, otherwise begin adding a new animal to the herd records.

Add calving tags: Begin adding calving tags to the system.

### Selecting a Hang Tag

When you press the Tag function button, you will be asked to select a Hang Tag from a list of all Hang

Tag values in herd.csv and calvingtags.csv.

Once you have selected a Hang Tag (page 64) your Flokk will proceed as follows:

1. If the Hang Tag is recorded for an animal in your herd, it will display what it knows about the animal.
2. If the tag is not in the herd file, but is among the calving tags, it will begin collection of calving information.

You, obviously, cannot select a Hang Tag that is neither in the herd record nor the calving tags.

## Hang Tag requirements

It is not always possible to scan an animals CCIA Tag. To make the selection of an animal using their Hang Tag quick and easy, your Flokk requires consistency in the layout of the tag.

Your Flokk requires that **all** the Hang Tags in the herd be at most 12 characters long, and to be laid out in one of three ways:

- A three letter colour, followed by any number of letters, followed by any number of digits
- A three letter colour, followed by any number of digits, followed by any number of letters
- A three letter colour, followed by up to five digits

The tag colour codes used by your Flokk are the first three letters of the colour name, and must be one of:

Tag colour code	Colour
Bla	Black
Blu	Blue
Gre	Green
Ora	Orange
Pin	Pink
Pur	Purple
Red	Red
Whi	White
Yel	Yellow

If your Hang Tags contain a single letter, that letter will be interpreted as a birth year indicator, and will be used by the Flokk when no birth date has been provided for an animal. The letters I, O, Q and V are never used to indicate cattle birth years, so a birth date will be required for the animal if you use one of these letters as the only letter in a Hang Tag.

If there are multiple letters in a Hang Tag, or no letters in a Hang Tag, then the Hang Tag cannot be used to determine a year of birth, and you will need to provide a birth date for each animal.

If your Hang Tags consist of just digits (i.e. they are all numbers), then if the tags are more than four

characters long, and the first two characters are a number within the last 20 years, then that will be interpreted as the birth year for an animal if the birth date for the animal has not been provided.

Your Flokk examines the first tag it loads from herd.csv or the Herd worksheet of flokk.xls to decide which of the three options noted will be used for all of the tags in the herd.

For example, the following sets of Hang Tags are allowable,

Yel A234  
Yel QR3234  
Ora X3234  
Gre SD3

or:

Yel 234T  
Yel 95X  
Blu 3923RT  
Yel 4G

(Note that for those tags where there is more than one letter in the tag, the birth date will have to be supplied for the animal)

or:

Yel 1231  
Grn 2546  
Pin 2452

However, the following set of tags is **not** valid and will result in some animals not being loaded into your Flokk:

T234  
Yel 323R  
Red 1X342  
R234J  
T234G5

## Hang Tag template

When it is necessary to select a Hang Tag, or enter a new Hang Tag, your Flokk requires a template in order to know what kind of value is located at each position in the tag.

Templates consist of one of three components:

CCC: a three character colour code (page 62)

A: a letter (A – Z)

9: a digit

If you have any entries in your herd records or you calving tags, your Flokk will use the Hang Tag's for these animals to set the template required.

If you have yet to add any animals to your Flokk, then you will have to specify your preferred Hang Tag template before you can add any animals with the Flokk at the animals side.

There are four ways to set the Hang Tag template:

1. By placing the Flokk into service mode and choosing the “Set tag template” option from the Setup menu.
2. By using the online configuration Wizard (see page 18)
3. By placing the Flokk into file mode and editing the “Default tag template” field on the Setup worksheet of flokk.xlsx
4. By placing the Flokk into file mode and editing the “default tag template” value of the [Add animal] section of flokk.ini.

If using option 1, 2., or 3., you will be offered four options for the default tag template:

CCC 9999A: Tag colour, followed by up to four digits and a single year letter

CCC A9999: Tag colour, followed by a single year letter and up to four digits

CCC 99999:Tag colour, followed by up to five digits

CCC 999999:Tag colour, followed by up to six digits

If you require a template different from this, you can set any template you require by directly editing the “default tag template” value of the [Add animal] section of flokk.ini.

## Selecting a Hang Tag

When you need to select a Hang Tag, you will use both the function buttons at the bottom of the screen and the toggle switch.

The function buttons are used to move the cursor to the left or right.

The up and down toggle is used to move forward to the next value in the list, or move backwards to the previous value in the list, based on increasing or decreasing the values at the cursor position.

To cancel the selection of a Hang Tag, use the function buttons to move the cursor past the left or right end of the tag selection until the word “CANCEL” is displayed, then press the Done button.

You will be presented with an initial Hang Tag value. The screen cursor will be turned on. If all you tags have the same tag colour, the cursor will indicate the left most character:

Yel A1

If you use more than one Hang Tag colour, the cursor will be on the Hang Tag colour:

Yel A1

To guide you as to which character the cursor needs to be on to select the tag you want, you Flokk will analyze all of your tags and come up with an indicator which will be displayed under the tag.

This indicator will be of the form:

CCC 999AAA

or:

CCC AAA999

or:

where a “CCC” indicates you will be selecting a three character colour code at that position, an “A” indicates that you will be choosing a letter at this position, and a “9” indicates you will be choosing a number at this position.

The specifics of selecting a Hang tag differ depending upon whether your Hang Tags begin with a letter (e.g. “F123”) or a number (e.g. “123” or “123F”) so two different sets of instructions are provided.

Selecting a Hang Tag when your Hang tags begin with a letter (e.g. “F123”,)

For our example, a herd has the following Hang Tags:

Yel F1  
 Yel F2  
 Yel I15  
 Yel I23  
 Yel J11  
 Yel J22  
 Yel K17  
 Yel K32

We want to select the cow with tag Yel J22

If you:

- press the “Tag” function button
- select the “Select animal” option from the “Start” menu
- select “Dam” when adding a calf

the display will show:

Yel F1  
 CCC 99

The cursor being under the “F” indicates that you will advance in the list based on the initial letter of the Hang Tag, which is typically the year letter. We want to move to the “J” tags, so we would click the toggle switch down. The display would now be:

Yel I15  
 CCC A99

Clicking the toggle switch down again would result in the display being:

Yel J11  
 CCC A99

If you click the toggle switch down again now, the Flokk would display tag Yel K17. But we now want to advance in the list based on the digit in the second place, not the letter.

Press the right function button. The display will now show:

Yel J11  
 Yel A99

Clicking the toggle switch up and down now will result in moving backwards and forwards in the list based on the first digit. The initial “J” will remain fixed.

Press the toggle key down. The display will now read:

```
Yel J22  
CCC A99
```

This is the animal we want. Press the Done button to select the animal and proceed.

Selecting a Hang Tag when your Hang tags begin with a number (e.g. “123”, or “123F”)

For our example, the following Hang Tags are used in a herd:

```
Yel 1  
Yel 2  
Yel 11  
Yel 15  
Yel 17  
Yel 20  
Yel 22  
Yel 23  
Yel 32  
Yel 200
```

We want to select the cow with tag Yel 23

If you:

- press the “Tag” function button
- select the “Select animal” option from the “Start” menu
- select “Dam” when adding a calf

the display will show:

```
Yel _ 1  
CCC 999
```

When you are selecting a Hang Tag from a set of Hang Tags that begin with a number, the Hang Tags are presented "right justified" with blanks instead of implicit leading zeros, so that the magnitudes align, e.g.:

```
200  
 20  
  2
```

The Hang Tag template “CCC 999” tells us that our Hang Tags consist of a colour code, followed by at most a three digit number.

The cursor being at the left most position of the tag number indicates that if you click the up or down toggle, your Flokk will present you the next tag based on the most significant digit of the animals number, which in our example is the “hundreds”. If you were to click the toggle switch with the cursor in this position, you Flokk would display tag values that do have a value in the “hundreds” position, i.e

“200”.

The Hang Tag we want to select, 23, does not have a “hundreds” value, so we want to leave the “hundreds” value blank. Click the right function button to move the cursor to the “tens” value. The display would now be:

```
Ye1  _1  
CCC 999
```

If you now click the toggle switch down, the Flokk will show you the first tag that does have a “tens” value. The display will now be:

```
Ye1  11  
CCC 999
```

The Hang Tag we want to select, 23, has a “2” in the “tens” position, so we would click the toggle switch down again, resulting in the Flokk showing us the first tag that does have a “2” in the “tens” position. The display will now be:

```
Ye1  20  
CCC 999
```

Now that we have the correct value in the “tens” position, click the right function button to move the cursor to the “ones” (right most) position. The display would be:

```
Ye1  20  
CCC 999
```

Clicking the toggle switch down now advances us through the tags that have no “hundreds” value, and a “2” for the “tens” value. The first click of the toggle switch down would result in the display being:

```
Ye1  22  
CCC 999
```

Another click of the toggle switch down would display:

```
Ye1  23  
CCC 999
```

This is the animal we want. Press the Done button to select the animal and proceed.

## Adding animals to the herd

Animals can be added to the herd through:

- calving
- the “Add animal” option of the “Start” menu
- the “Move in” option of the “Unrecognized CCIA” menu
- the “On animal” option of the “Unrecognized CCIA” menu

The difference between the “Move in” and “Add animal” options is the “Add animal” function **DOES NOT** prepare nor submit any CLTS updates. The “Add animal” option must be used **only** to build a record of animals in your Flokk that are currently owned by you.

Once your Flokk has acquired a complete record of the animals in your herd, you will no longer have a need for the “Add animal” function, and should consider configuring your Flokk to offer the “Tag” button on the "Flokk Ready" screen rather than the “Start” function button. (page 58)

The “Move in” option collects the additional information necessary, and generates the required records, to complete a CLTS “Move in” event. This should be used, with the exception of births, whenever animals are added to your herd.

## Calving

Your Flokk provides flexibility in how calving records are collected in order to accommodate your requirements.

In all cases, it is expected the Hang Tag will be assigned and applied to the calf at birth.

There are two key decisions you need to make:

1. Do you want to use the calving tags file to assign Hang Tag values and, optionally, CCIA Tag values, prior to calving?
2. Do you want to apply CCIA Tags at birth, or at weaning?

If you chose to prepare the calving tags file, this can either be done by editing the calvingtags.csv file, or the “Calving tags” tab of flokk.xlsx. There are several options to automatically add entries to the calving tags; see page 77.

There are seven different routes to completing record collection and traceability reporting for your calves. All of these routes result in a CCIA Tag being applied, and the required CLTS event reporting being completed, necessary for you to ship an animal to market.

Following are the actions that would need to be completed at each step of production for each alternative, and the implications of the approach:

Activities in preparation for calving:	Activities at Calving:	Activities at Weaning:	Implications
Option 1:			
1. Assign CCIA and Hang Tag pairs and record in calving tags.	1. Scan a calving CCIA Tag 2. Enter birth date 3. Enter gender 4. Enter dam 5. Apply CCIA Tag to calf 6. Apply Hang Tag to calf	None	Can use CCIA Tag reader for calf management.  Can move calf to another pen or premises.  Additional lost CCIA Tags.
Option 2:			
1. Assign CCIA and Hang Tag pairs and record in calving tags.	1. Select a calving Hang Tag 2. Enter birth date 3. Enter gender 4. Select dam 5. Apply Hang Tag to calf	1. Scan a CCIA Tag that is in calving tags 2. Select Hang Tag of calf 3. Apply CCIA Tag to calf	Cannot use CCIA Tag reader for calf management.  Cannot move calf to a pen or another premises.  Reduced loss of CCIA Tags.
Option 3:			
1. Assign and record only Hang Tags in calving tags.	1. Select a calving Hang Tag 2. Scan CCIA Tag 3. Enter birth date 4. Enter gender 5. Select dam 6. Apply CCIA Tag to calf 7. Apply Hang Tag to calf	None	Can use CCIA Tag reader for calf management.  Can move calf to another pen or premises.  Additional lost CCIA Tags.

Activities in preparation for calving:	Activities at Calving:	Activities at Weaning:	Implications
Option 4:			
1. Assign and record only Hang Tags in calving tags.	1. Select a Calving Hang Tag 2. Enter birth date 3. Enter gender 4. Select dam 5. Apply Hang Tag to calf	1. Select a calf's Hang Tag 2. Scan CCIA Tag 3. Apply CCIA Tag to calf	Cannot use CCIA Tag reader for calf management.  Cannot move calf to a pen or another premises.  No loss of CCIA Tags.
Option 5:			
1. Assign and record only CCIA Tags in calving tags.	1. Scan a CCIA Tag 2. Enter birth date 3. Choose default new Hang Tag value, or enter a Hang Tag that is not already in the herd. 4. Enter gender 5. Select dam. 6. Apply CCIA Tag to calf 7. Apply Hang Tag to calf	None	Can use CCIA Tag reader for calf management.  Can move calf to another pen or premises.  Additional lost CCIA Tags.
Option 6:			
None	1. Press "Start" button 2. Select "Add calf" option 3. Enter birth date 4. Choose default new Hang Tag value, or enter a Hang Tag that is not already in the herd. 5. Enter gender 6. Select dam. 7. Scan CCIA Tag 8. Apply CCIA Tag to calf 9. Apply Hang Tag to calf	None	Can use CCIA Tag reader for calf management.  Can move calf to another pen or premises.  Additional lost CCIA Tags.

	<b>Activities in preparation for calving:</b>	<b>Activities at Calving:</b>	<b>Activities at Weaning:</b>	<b>Implications</b>
Option 7:				
	None	<ol style="list-style-type: none"> <li>1. Press “Start” button</li> <li>2. Select “Add calf” option</li> <li>3. Enter birth date</li> <li>4. Choose default new Hang Tag value, or enter a Hang Tag that is not in the herd.</li> <li>5. Enter gender</li> <li>6. Select dam</li> <li>7. Apply Hang Tag to calf</li> </ol>	<ol style="list-style-type: none"> <li>1. Scan a CCIA Tag that is not known to the Flokk.</li> <li>2. Select the “Apply to calf” option.</li> <li>3. Choose Hang Tag of calf</li> <li>4. Apply CCIA Tag to calf</li> </ol>	<p>Cannot use CCIA Tag reader for calf management.</p> <p>Cannot move calf to a pen or another premises.</p> <p>No loss of CCIA Tags.</p>

The things you may wish to consider when choosing how you want to collect your calving records are:

<b>Do you want to?</b>	<b>Calving tags record should include</b>	<b>CCIA Tag application</b>	<b>Implication</b>
Minimize what needs to be done at the animals side while calving.	Hang Tag and calving tag		
Minimize what needs to be done at the animals side at weaning.	Hang Tag and calving tag	At birth	
Minimize the preparation that needs to be done prior to calving season.	Nothing		Need to scan CCIA Tag prior to application to calf.  Will have to manually update each Hang Tag if you do not want to use the Flokk's defaults.
Be able to scan a calf's RFID tag to simplify recording medications or replace lost Hang Tags		At birth	
Be able to move calves to a pen or a different premises.		At birth	
Minimize loss of CCIA Tags prior to shipping.		At weaning	Cannot use RFID reader to manage calves.  Cannot move calves to a pen or another premises.
Use Hang Tag values for my calves that are different than the defaults that the Flokk will provide.	Hang Tag alone		

Finally, the following table summarizes how CCIA Tag values are assigned, and the impact, depending upon how your Flokk is used:

<b>Calving tags contains</b>	<b>Calving record collection initiated by</b>	<b>“assign CCIA Tag” setting in [Calving] section of flokk.ini</b>	<b>CCIA number assigned to calf.</b>	<b>CCIA Tag applied</b>	<b>Hang Tag from</b>	<b>Impact</b>
CCIA Tag and Hang Tag pairs	Scanning CCIA Tag	Ignored	At birth	At birth	Calving tags	
CCIA Tag and Hang Tag pairs	Selecting Hang Tag	True	At birth	At birth	Calving tags	
CCIA Tag and Hang Tag pairs	Selecting Hang Tag	True	At birth	At weaning  Requires that Hang Tag be selected at weaning to confirm which CCIA Tag to apply.	Calving tags	Not recommended  Cannot use CCIA Tag reader to manage calf.  Cannot move calf to another premises.
CCIA Tag and Hang Tag pairs	Selecting Hang Tag	False	At weaning, by scanning new CCIA Tag and selecting “Apply to calf” option.	At weaning	Calving tags	Cannot use CCIA Tag reader to manage calf.  Need to select each calf’s Hang Tag at weaning.  Cannot move calf to another location.

<b>Calving tags contains</b>	<b>Calving record collection initiated by</b>	<b>“assign CCIA Tag” setting in [Calving] section of flokk.ini</b>	<b>CCIA number assigned to calf.</b>	<b>CCIA Tag applied</b>	<b>Hang Tag from</b>	<b>Impact</b>
CCIA Tag and Hang Tag pairs	“Add calf” option of Start menu.	Ignored	By scanning CCIA Tag that is not in herd record or Calving tags	At birth	Lowest numbered tag for current tag year letter that is neither in the herd records nor the Calving tag records.	
CCIA Tag and Hang Tag pairs	“Add calf” option of Start menu.	Ignored	By scanning CCIA Tag that is not in herd record or Calving tags and selecting “Add to calf” option.	At weaning	Lowest numbered tag for current tag year letter that is neither in the herd records nor the Calving tags.	CCIA Tag reader cannot be used to manage calf.  Need to select each calf’s Hang Tag at weaning.  Cannot move calf to another location.
Hang Tag only	Selecting Hang Tag	Ignored	At birth, by reading CCIA Tag	At birth	Calving tags	
Hang Tag only	Selecting Hang Tag	Ignored	At weaning	At weaning, by scanning CCIA Tag.	Calving tags	Cannot use CCIA Tag reader to manage calf.  Cannot move calf to another location.

<b>Calving tags contains</b>	<b>Calving record collection initiated by</b>	<b>“assign CCIA Tag” setting in [Calving] section of flokk.ini</b>	<b>CCIA number assigned to calf.</b>	<b>CCIA Tag applied</b>	<b>Hang Tag from</b>	<b>Impact</b>
Hang Tag only	“Add calf” option of Start menu.	Ignored	By scanning CCIA Tag that is not in herd record or Calving tags.	At birth	Lowest numbered tag for current tag year letter that is neither in the herd records nor the Calving tag records.	
Hang Tag only	“Add calf” option of Start menu.	Ignored	By scanning CCIA Tag that is not in herd record or Calving tags and selecting “Add to calf” option.	At weaning	Lowest numbered tag for current tag year letter that is neither in the herd records nor the Calving tag records.	Cannot use CCIA Tag reader to manage calf.  Need to select each calf’s Hang Tag at weaning.  Cannot move calf to another location.
CCIA Tag only	Scanning CCIA Tag	Ignored	At birth	At birth	Lowest numbered tag for current tag year letter, or dam’s number with current tag year.	
Empty	“Add calf” option of Start menu.	Ignored	At birth, by reading CCIA Tag.	At birth	Lowest numbered tag for current tag year letter, or dam’s number with current tag year.	

Calving tags contains	Calving record collection initiated by	“assign CCIA Tag” setting in [Calving] section of flokk.ini	CCIA number assigned to calf.	CCIA Tag applied	Hang Tag from	Impact
Empty	“Add calf” option of Start menu.	Ignored	At weaning, by reading CCIA Tag.	At weaning	Lowest numbered tag for current tag year letter, or dam’s number with current tag year	Cannot use RFID tag reader to manage calf.  Cannot move calf to another premises.

### Preparing the calving tags

If you have chosen to prepare your Calving tags prior to recording your calves, you need to either populate the calvingtags.csv file, or the Calving tags worksheet of flokk.xlsx.

This would typically done in preparation for the calving season after the tags for the season have been purchased.

The specifics of the contents of calvingtags.csv file can be found on page 27, but in brief the file consists of a header, and then pairs of Hang Tag and CCIA Tag values, e.g:

```
Hang_tag,CCIA_tag
Yel F1,124000251931111
Yel F2,124000251931112
Yel F3,124000251931113
```

If you are maintaining your herd records using flokk.xlsx, then the Calving tags worksheet would be of the form:

Hang_tag	CCIA_tag
Yel F1	124000251931111
Yel F2	124000251931112
Yel F3	124000251931113

Most spreadsheet programs have a function to automatically generate sequences of values. This could be used to quickly generate both the Hang Tag and CCIA Tag values in calvingtags.csv.

### Automatically adding calving tags

Your Flokk can populate the Calving tags by scanning the first and last CCIA Tags in a series.

To do this, scan the first CCIA Tag that you intend to use for calving. Your Flokk will not recognize the tag, so will offer a menu of options of what to do with the tag. Select the option “Add Calving tags”.

You will be asked to confirm that the tag scanned was the first in the series. Press the left function button to select “Yes”.

You will then be asked to scan the last CCIA Tag in the series. Scan the last tag, ensuring that you possess all the intermediary tags

Finally, you will be shown how many tags were in the series, and will be asked to confirm that the Flokk should proceed to add the tags.

The Flokk will add an entry to the Calving tags for each CCIA Tag in the series. If you have set the option to use the Dam’s tag number to set the default Hang Tag for the calf, only the CCIA Tag number will be added for each calving tag. Otherwise, a default tag consisting of the current year, and sequential numbers starting at the first unused tag number, will be set.

Your Flokk will create a Calving tag for every tag number from the first to the last CCIA Tags scanned. **It is the operators responsibility to ensure that there is a CCIA Tag available for each Calving tag created.**

You do not need to scan all of the CCIA Tags required for a calving season in one session. Tags can be scanned in multiple sessions as required. Every time you add a calf, your Flokk will warn you if there are less than 10 calving tags remaining.

You can also download your unused tag inventory from the CLTS, and have your Flokk use this file to create the calving tags. See page 117 for more information.

### **Using calving tags when assigning calf Hang Tag values from dam’s Hang Tag**

If you use the Dam’s Hang Tag value for the calf, you may want to consider using the calving tags file, rather than setting the “default Hang Tag from dam” option and using the “Add calf” option of the Start menu.

To set up the calving tags:

1. Set up the CCIA Tags, either by using the automatic calving tag generation features (page 77), or using the series generation function of your spreadsheet.
2. Copy your cows Hang Tag values from the herd records to the Hang Tag column of the calving tags, overwriting the system generated Hang Tag values if necessary.
3. Use the search and replace function of your spreadsheet to assign the colour and/or year letter you will use for this years calf tags.
4. Prepare the Hang Tag/CCIA Tag pairs, ensuring that each pair remains associated.

Once this is set up, you can initiate the collection of a calf’s record by scanning the CCIA Tag associated with the correct calf Hang Tag. When you go to set the Dam for the calf, the Flokk will offer the Dam’s Hang Tag as a default.

As a result, the only elements you will need to input at the animals side are the gender and birth date of the calf.

## Starting the collection of a calving record

The recording of a calves information is initiated by either scanning a CCIA Tag or selecting a Hang Tag that is in calvingtags.csv but not yet in herd.csv, or by using the “Add calf” option of the Start menu.

During your calving season, when the “Tag” function is selected, the default tag presented will be the first calving tag that has not yet been assigned to an animal in the herd.

Once you have selected a calving tag the Flokk will enter calving information collection mode, which will be indicated by prompting you to select from the calving menu which data item you wish to enter.

When the calving record has been completed, the Hang Tag/CCIA Tag combination used will be added to herd.csv, and selecting the Hang Tag or scanning the CCIA Tag of the calf will present the calves information from herd.csv.

## Entering calving information

Because the order of tasks will likely vary from one calf to the next, when entering calving records you must first select which item you want to provide a value for, then provide a value for the item.

The items to be recorded will be presented in a menu to select an item from. In the simplest case where the Hang Tag and CCIA Tag of the calf was set in the Calving tags, and there are no optional fields being collected, the list will initially be presented as:

Birth Date?	Dam?	Gender?	COMPLETE	CANCEL
-------------	------	---------	----------	--------

If you are not using the Calving tags file, then you will need to enter a Hang Tag as well, and the menu presented would be:

Birth Date?	Hang Tag?	Dam	Gender?	Display	COMPLETE	CANCEL
-------------	-----------	-----	---------	---------	----------	--------

If the item name is followed by a question mark (e.g. “Birth Date?”), you must provide a value for the item, but no value has yet been recorded for the item. If the item name is not followed by a question mark (e.g. “Birth Date”), then a value has already been recorded, or recording a value is optional, and you can correct or add the value by selecting the item.

Selecting the CANCEL item will cancel the recording of the calving information. No information will be retained, and if you are using Calving tags, the Hang Tag/CCIA Tag values will be available for assigning to another calf. The Flokk will return to the "Flokk Ready" menu.

Selecting the COMPLETE option will save all information items for the current calf. The Flokk will return to the "Flokk Ready" menu.

As each item is selected and a value is provided, the item will be moved to the end of the menu and the question mark after the name will be removed. So when the record is complete, the menu will be presented as:

COMPLETE	CANCEL	Birth Date	Dam	Gender
----------	--------	------------	-----	--------

At this point the “COMPLETE” option can be selected and the calving record will be recorded.

You can review the values that you have provided by clicking the up and down toggle. This is

particularly helpful to do just before adding the calf to the herd by selecting the “COMPLETE” option.

### **Required items**

There are at least two items that **must** be recorded to complete a calving record.

#### **Birth date**

The birth date of the animal.

The Flokk tracks the average age of calves at the time they are added to the herd record, and will present the birth date for that age as the default. So if you typically process calves shortly after birth, the initial date presented will be close to the current date. If you typically process calves several weeks after birth, then initial date presented will be several weeks prior to the current date.

You must provide a birth date for calves. If you do not know the exact birth date, provide your best estimate.

#### **Hang Tag**

If you have defined your Hang Tags in the “Calving tags”, then you will not need to enter them at calving.

If you are entering your Hang Tags at calving, then you have two options for the default tag that is presented to you:

1. The tag with the lowest number, and current tag year letter, for the birth date of the animal. If the birth date for the calf is not set, the current year is used.
2. If the “default Hang Tag from dam” option is set, then the number of the dam’s tag, and the current tag year is offered as the default tag. (See page 44)

If you set a tag colour other than the system default tag colour for a calf, the Flokk will remember that colour and offer it as the default when adding the next calf.

#### **Pen**

If you have not yet selected a calving pen for the current premises, you will be prompted for, and required, to select a pen. After it has been initially set, the same pen will be applied to each calf, and the dam of the calf, unless a different pen is selected while recording the calving information.

Your Flokk will not allow a calving record to be completed until all required values have been provided. If the COMPLETE option is selected and a required value has not been provided, an error message will be presented and you will be returned to the calving menu. If you want to cancel collecting a calves information without providing one of the required values, select the CANCEL option.

### **Optional items**

There are optional items of calving information that can be recorded at the discretion of the operator.

## **Dam**

The dam of the calf. A list of Hang Tags for females in the herd more than 22 months old, who have not been recorded as dam for a calf, will be provided for the calf's dam to be selected from. If the dams CCIA Tag can be scanned while collecting calving information, that cow will be recorded as the dam.

## **Gender**

Either male or female.

## **Neuter**

If the gender of the calf is set to Male, then the “Neuter” option will be offered. If Neuter is selected, then a Neutered condition will be recorded for the calf.

If the “Neuter” option has been selected for a calf, then the “Intact” option will be offered and, if selected, will cancel the recording of the Neuter condition for a calf.

If you set the “neuter males at birth” option in flokk.ini to 1, set the “Neuter males at birth” option on the “Add animals” page of the configuration Wizard to “Yes”, or set the “Neuter” option in the calving section of the Setup worksheet of flokk.xls to “Y”, every male calf will have a neutered condition recorded at birth.

## **Display**

A description of the calf selected from a list of pre-defined options. These options can either be defined as entries in flokk.ini, taken from the existing descriptions of animals in the herd, or a set of standard colour descriptions.

To provide your own set of display items that you wish to choose from for calves, add the selections as options with the keys 1, 2, 3, etc. in the [Display choices at birth] section of flokk.ini (see page 46).

For example, to choose between a set of colours to use as the display value for calves, the [Display choices at birth] section would be:

```
[Display choices at birth]
```

```
1 = Black  
2 = Red  
3 = White
```

If the [Display choices at birth] section is left blank, then the existing Display values for all animals in the herd will be used to build a list of options to select from.

If neither [Display choices at birth] is set, nor any animals have a Display value, then the CCIA standard set of animal colour options will be provided.

## **Stillborn**

To record a calf as stillborn (i.e. dead at birth), select the Stillborn option.

The Stillborn option will offered to you only if the configuration option “offer stillborn option” in the [Calving] section of flokk.ini has been set to “1” and a Birth date and Dam have been provided for the calf.

If only the Birth date and Dam has been provided, then the only information that will be recorded is a

“Lost calf” condition against the Dam.

If a “Hang Tag” has been provided, then the calf will be recorded in the herd\_archive.csv file, as well as recording a “Lost calf” condition against the Dam.

### **Medication**

You can record that a calf had a vaccination administered during it’s initial processing.

### **Birth weight**

The weight of the calf at birth.

To collect birth weight for calves, set the “collect birth weight” option to 1 in flokk.ini file or set “Collect weight” to “Y” in the Calving section of the Setup worksheet of flokk.xlsx.

To deal with the possibility that conditions may not be conducive to collecting a weight at the time a calf’s data is being collected, the collection of a birth weight is not required to complete the addition of the calf to the herd record. To weigh the calf at a future date, select the calf with the Flokk. A “Weigh” option will be offered in the “Action” menu if the Flokk is set to collect birth weights, and no weight has yet been collected for the calf.

### **Calving ease**

A calving ease code. If the optional breed code (see page 26) for the dam is set to AN, HH, or SM, then the breed specific calving codes will be presented to select from. If the breed code is not set for the dam, and the default breed set in flokk.ini is AN, HH, or SM, again the breed specific codes will be presented to select from. Otherwise the NAAB standard calving ease codes will be used.

Because the dam's breed is required to know which type of breed code to use, the Flokk will not present the option to set Calving ease before the dam has been set for the calf.

To collect calving ease for calves, set the “collect calving ease” option to 1 in flokk.ini, or set “Collect calving ease” to “Y” in the Calving section in the Setup worksheet of flokk.xlsx.

### **Calvingease.csv file**

If calving ease is recorded, the results are reporting in the file calvingease.csv. This file is of the form:

```
Dam,Date,Calf,Type,Ease  
P23,2018-03-12,NAAB,S12
```

If the ease was recorded for a stillborn calf, the Calf field will be “Lost calf”

The Type field is the type of calving ease code used.

### **Adding animals**

**The “Add animal” function is intended for the initial collection of herd records for animals already in your herd and at your premises. It DOES NOT generate any CLTS update records, and should NEVER be used to add animals to the herd that have come from another premises.**

When the “Add animal” option has been selected, you will be presented a menu of items that must or could be provided to when adding an animal to the herd:

Birth date	Hang Tag?	Gender?	COMPLETE	CANCEL	Display
------------	-----------	---------	----------	--------	---------

Items that are followed by a question mark (“?”) are required, but have not yet been provided.

Once a value has been provided for an item, it will be moved after the COMPLETE option, without a question mark. For example, once you have provided the “Birth date” for the first animal, the menu would be:

Hang Tag?	Gender?	COMPLETE	CANCEL	Birth date	Display
-----------	---------	----------	--------	------------	---------

This allows you to, if necessary, to select an item again to correct its value.

You can review the values that you have provided by clicking the up and down toggle. This is particularly helpful to do just before adding the calf to the herd by selecting the “COMPLETE” option.

The items related to adding animals to the herd are:

Item	Required	Default	Comment
Birth date	No	<p>If the “default age in months” value is set in the [Add animal] section of flokk.ini, then the birth date for this age.</p> <p>Otherwise, if a “Hang Tag” value has been provided, and it includes a valid birth year letter, March of the birth year specified by the tag.</p> <p>Otherwise, March of two years previous.</p>	<p>You must provide either:</p> <ul style="list-style-type: none"> <li>• a Birth date, or</li> <li>• a Hang Tag that indicates a birth year</li> </ul> <p>An error message will be displayed if you choose the COMPLETE option and have not provided one of these items.</p>
Hang Tag	Yes	<p>The first available tag value for the year of the Birth date, if provided.</p> <p>If a “Birth date” has not been set, the first available tag value for the previous year.</p>	
Gender	Yes	None	
Dam	No	None	<p>This option will only be presented when:</p> <ul style="list-style-type: none"> <li>- the birth date has been set for an animal</li> <li>- the animal is younger than the herd weaning age (see page 47)</li> <li>- there are cows in the herd that are more than 22 months old that have not calved</li> </ul>

Item	Required	Default	Comment
Display	No	As per collecting calving records (see page 46)	
Pen	No	Default Pen for current premises	
Replacement CCIA	No	No	Allows you to specify if the CCIA Tag recorded for the animal is replacing a lost tag, (and should be reported to the CLTS) or is the original tag for the animal.  Offered only if a CCIA Tag has been scanned for the animal.
Medication	No	None	Add a medication event to the animals history.
Weight	No	As per collecting animal weights (see page 90)	Only offered if “Weight” has been set to on using the “Options” menu.

### Entering a Hang Tag

A “Hang Tag” value **must** be provided before an animal can be added to the herd. However, the “Birth date” is requested first because once the birth date for an animal has been set, your Flokk can provide a default Hang Tag value with the appropriate year letter.

The Hang Tag provided:

1. Must not already be assigned to an animal in the herd
2. Must not be included in the calving tags
3. Must be of the same format as the other tags in the herd, e.g. if the existing tags start use three digits, followed by a single letter, then the new tag must contain one to three digits, followed by a single letter.

You can use the Hang Tag already on the animal as long as it meets all of these conditions. Otherwise, a new Hang Tag will need to be applied to the animal.

When the “Hang Tag?” item is selected, your Flokk will present a default tag with the default tag colour and number with the lowest numeric value, and the correct birth year, that is not already being used. You can then move the cursor to any character you want to change, and use the up and down toggle to set a new value.

If you change the Tag colour, or a letter or number, which results in a Hang Tag value that is currently already in the herd record or the calving tags, the Flokk will briefly display an error message, then present the next available Hang Tag value that is not already in use.

If the existing tag on the animal cannot be used, either because it is of the wrong format, or is already in use in the herd, accept the default value. Scan the animals CCIA Tag to add it to the herd record. You

can then place the animal in a head gate when convenient, read the animals CCIA Tag to be reminded of the Hang Tag value assigned to the animal, and create and apply a new Hang Tag with the tag value.

### Setting a dam

If you are moving a calf into the herd, you can set the dam

The “Dam” option will be presented when:

- the “Birth date” has been set for an animal
- the animal is younger than the system weaning age (see page 47)
- females more than 22 months old, that have not calved this calving season, are in the herd

Selecting the “Dam” option will allow you to select from among the cows in the herd using their Hang Tag.

Alternatively, if you scan the CCIA Tag of an animal when:

- the Birth date has been set for the current animal
- the current animal is younger than the system weaning age (page 47)

And the animal whose tag has been read is:

- already in the herd
- female
- more than 22 months old
- has not calved this season

The animal whose CCIA Tag has been scanned (i.e. the cow) will be set as the Dam for the current animal (i.e. the calf).

### Completing the animal addition

Once the required items for the animal have been provided (“Birth date”, “Hang Tag” and Gender) you can add the animal to herd by selecting the COMPLETE option from the menu. You will then be returned to the “Flok Ready” screen.

You can review the values that you have provided prior to selecting COMPLETE by clicking the up and down toggle.

Selecting the CANCEL option from this menu will cancel the animal addition. No changes will be made to the herd records.

### Moving in animals

The “Move in” function is used when you are adding animals to your herd that have come from another premises.

The “Move in” process starts with scanning the CCIA Tag of one of the animals being moved in. Since your Flokk will not recognize the CCIA Tag, it will offer you a menu of options applicable to unrecognized tags. Choose the “Move in” option from this menu.

When the “Move in” option has been selected, you will be presented a menu of items that must or could be provided to when adding an animal to the herd and submitting the necessary CLTS update:

Birth date	Hang Tag?	Gender?	Vehicle?	NEXT ANIMAL	COMPLETE	CANCEL	Destination	Display
------------	-----------	---------	----------	-------------	----------	--------	-------------	---------

Items that are followed by a question mark (“?”) are required and have not yet been provided. Once a value has been provided for an item, it will be moved after the COMPLETE option, without a question mark. For example, once you have provided the “Birth date” for the first animal, the menu would be:

Hang Tag?	Gender?	Vehicle?	NEXT	CANCEL	COMPLETE	Birth date	Destination	Display
-----------	---------	----------	------	--------	----------	------------	-------------	---------

This allows you, if necessary, to select an item again to correct its value.

The items related to moving in animals in are:

Item	Required	Must be entered	Default	Comment
Birth date	No		<p>For first animal:</p> <p>The “default age in months” option of the [Add animal] section of flokk.ini, if set, is used to calculate the birth date.</p> <p>Otherwise, if a “Hang Tag” value has been provided, and it includes a valid birth year, March of the birth year specified by the tag.</p> <p>Otherwise, March of the previous year.</p> <p>For subsequent animals, the birth date of the previous animal.</p>	<p>If you do not provide a Birth date for the first animal, then you must provide either:</p> <ul style="list-style-type: none"> <li>• a Birth date, or</li> <li>• a Hang Tag that indicates a birth year</li> </ul> <p>for each animal moved in.</p> <p>An error message will be displayed if you choose the NEXT ANIMAL option and have not provided one of these items.</p> <p>If you do set a Birth date for the first animal, then the birth date of the first animal will be applied to all subsequent animals unless you select and set a different birth date.</p>
Hang Tag	Yes	For every animal	<p>The first available tag for the year of the birth date provided.</p> <p>If a “Birth date” has not been provided, then March of the previous year.</p>	<p>Addition of another animal to the Move In will be prevented until the “Hang Tag” for the current animal has been set.</p> <p>You can use the existing Hang Tag on an animal, as long as:</p> <ul style="list-style-type: none"> <li>• the format of the tag matches the format of the tags already in the herd</li> <li>• the value is not already among the Hang Tags in the herd or the Calving tags.</li> </ul>

Item	Required	Must be entered	Default	Comment
Gender	Yes	For first animal	For first animal, Female.  For following animals, the gender of the previous animal.	After the first animal has been entered, unless you select and set a gender for each subsequent animal, the gender of the first animal is applied.
Dam	No	For every animal	None.	This option will be presented when: <ul style="list-style-type: none"> <li>- the birth date has been set for an animal</li> <li>- the animal is younger than the system weaning age (see page 47)</li> <li>- cows more than 22 months old have already been added in the current "Move in"</li> </ul>
Vehicle	Yes	Once per move in	None.	The license plate number of the trailer or truck used to bring the animals to your location.  You will be presented with a menu of license plates provided or previously entered, sorted by how recently used, and how often used. You can add a new plate if necessary.  Completion of the move in is prevented until a Vehicle has been provided.
Destination	Yes	Once per move in	The current Premises as set from the Options menu.	The Premises the animal is being moved into.  The premises set here applies only to the current "Move in", and <b>does not</b> change the default premises for the system.
Pen	Yes	Once per move in	The default pen for the current premises.	The Pen at the Premises that the animal is being moved into.
Display	No	For every animal	As per collecting calving records (see page 46)	

Item	Required	Must be entered	Default	Comment
Vaccination	No	For first animal	For first animal, none.  For subsequent animals, the value set for the first animal.	Add a vaccination event to the animals history.  If you wish a specific vaccination description to be added whenever a vaccination is records as part of adding an animal to the herd, add the entry to the “weaning”, “yearling” or “mature” option of the [Vaccination] section of flokk.ini, or the “Individual vaccination” section of the Vaccination worksheet in flokk.xlsx.  Will only be offered after a Hang Tag has been set for the animal.
Weight	No	For every animal	As per collecting animal weights (see page 90)	Will be offered only if “Weigh” option has been set with the “Options” menu.

The net result of this is that a Birth date and Gender, and the Vehicle that the animals arrived in, need be entered only once for the first animal. Scanning the remaining animals CCIA Tag and confirming a Hang Tag value is all that is required to add subsequent animals to the herd, and report the animal movement to the CLTS, as long as the birth date and gender are the same for all the animals being received.

### Selecting a Hang Tag

“Hang Tag” is the only item that **must** be provided before an animal can be moved into the herd. However, “Birth date” is requested first because once the birth date for an animal has been set your Flokk can provide a default Hang Tag value with the appropriate year letter or birth year.

The Hang Tag provided for the animal to be added to the herd:

1. Must not already be assigned to an animal in the herd
2. Must not be included in the calving tags
3. Must be of the same format as the other tags in the herd, e.g. if the existing tags start with three digits, followed by a single letter, then the new tag must contain one to three digits, followed by a single letter.

You can use the Hang Tag already on the animal as long as it meets all of these conditions. Otherwise, a new Hang Tag will need to be applied.

When the “Hang Tag?” item is selected, your Flokk will present as a default the tag number with the

lowest numeric value, and the correct birth year letter, that is not already being used. You can then move the cursor to any character you want to change, and use the up and down toggle to set a new value. However if you attempt to toggle to a Hang Tag that is currently in use, the Flokk will skip that value and not present it to you.

If the existing tag on the animal cannot be used, either because it is of the wrong format, or it already in use in the herd, accept the default value. Scan the animals CCIA Tag to add it to the animals herd record. You can then place the animal in a head gate when convenient, scan the animals CCIA Tag to be reminded of the Hang Tag value applied, and create and apply a new Hang Tag with the correct tag value.

### **Entering a transport vehicle**

Completing a Move in submission to the CLTS requires reporting the vehicle that the animals were transported in. If a trailer was used, report the license plate number of the trailer. Otherwise, report the license plate number of the truck.

If you know in advance the license plate numbers of the vehicles you will be using to ship or receive livestock these can be added, one plate number per line, to the plates.txt file or the Plates worksheet of flokk.xlsx. (See pages 33, 40)

License plate numbers can be added to the Flokk at the loading chute. Any plate numbers entered into the Flokk are added to the Flokk's record of license plates, so that they can be selected in future and will not have to be re-entered.

Entering a new plate in the field requires that you identify the province of the plate, and a template for the plate, prior to entering it. This simplifies entry of the plates value, and helps ensure that valid plate values are collected.

### **Example**

A cattle liner with Alberta trailer plate "1AB2-34", which has not picked up animals from you before, is loading your animals.

You would select "Vehicle" from the "Move in" menu. As this plate will not be among the ones presented to you, you would select the "NEW" option.

You would then be presented with a list of two letter province codes to pick from. Select "AB".

The Flokk will now ask you to chose from a list of plate templates. The templates are of the form "AAA-999", where A is where a letter (A through Z) may be present on the plate, and 9 is where there will be a digit (0 through 9) on the plate.

The template for current Alberta trailer plates, "9AA9-99", will be presented as the first option, as that is the most likely type of plate that will be required. Select this option.

You can now enter the plate value. Use the left and right function buttons to move the cursor from one position to the next. Use the toggle to change the character at the cursor position. Press the DONE button when the plate is complete.

The plate will be added to the Flokk, and you will be able to chose this plate from the menu of plates in the future.

The menu of license plates is presented to you with plates that have been chosen recently, and those

that have been chosen the most often, first in the list, so the plate you need should typically be among the first few offered.

### **Setting the dam**

If you are moving cow-calf pairs into the herd, you can set the dam for each calf.

The “Dam” option will be presented when:

- the “Birth date” has been set for an animal
- the animal is younger than the system weaning age (page 47)
- cows more than 22 months old have already been added in the current “Move in”

Selecting the “Dam” option will allow you to select from among the cows in the current “Move in” event using their Hang Tag. The last cow added in the current “Move in” will be presented as the default.

Alternatively, if you scan the CCIA Tag of an animal when:

- the Birth date has been set for the current animal
- the current animal is younger than the system weaning age (page 47)

And the animal whose tag has been read is:

- among the animals that have already been processed in the current “Move in”
- female
- more than 22 months old

The animal whose CCIA Tag has been read (i.e. the cow) will be set as the Dam for the current animal (i.e. the calf).

### **Adding an animal**

Once the required items for the first animal have been provided (“Birth date”, “Hang Tag” and Gender) you can add the animal to herd and move on to the next animal. This can be completed by selection the “NEXT” option from the “Move in” menu, or by scanning the CCIA Tag of the next animal.

You must, at a minimum, provide a “Hang Tag” for each animal. Default values for the other items, as per the table on page 86, will be applied to every animal if you do not provide a value.

### **Completing the move in**

Once you have scanned all of the animals CCIA Tags, select the COMPLETE option from the menu to add the animals to your herd and prepare the CLTS “Move in” events record for submission. You will then be returned to the “Flok Ready” screen.

If you have not provided a Vehicle for the move in, an error message will be displayed and you will be returned to the “Move in” menu.

You can review the values that you have provided by clicking the up and down toggle prior to selecting the COMPLETE option.

Selecting the CANCEL option from this menu will cancel the entire move in.

## **Weighing**

Your Flokk can record the result of animal weightings.

To begin recording animal weights, from the Options menu select the Weigh option. The Flokk will confirm that weighing is on with the message “Weighing ON”.

Once weighing is on, every time a CCIA Tag is scanned, or a Hang Tag is selected, the Flokk will prompt you to enter a weight.

If an animal is being added to the herd, a “Weight” option will be added to the menu of items that you can input.

If no weights have recently been collected, or the animal has never been weighed, then a default weight, based on the animals estimated age, will be provided.

Once several weights have been collected, and if the animal has been weighed before, the Flokk will calculate the average gain of the last three weightings, add this to the last weight recorded for the animal, and present this as the default value. As a result the default presented should be within a few pounds of the actual weight of the animal.

After the weight has been collected, the Flokk will display the current herd information for the animal.

Weights collected are recorded on the Flokk in three ways.

First, if the value “save raw weights” has been set to “1” in flokk.ini, in a file with the name NNNNweights.csv, where NNNN is the current session number. This file will list the weight recorded for each animal in the following form:

```
CCIA_tag,Hang_tag,Weight  
124000210033031,Yel 2F,421
```

Second, your Flokk will also maintain a summary file weights.csv, which will display the weights and date of weighing that have been recorded for all animals currently in herd.csv. This file will be of the format:

```
Tag,Birth_date,Birth_weight,2018-06-12,2018-12-15  
2F,2018-03-03,63,125,221
```

and, optionally, an average daily gain column. This file, when imported into a spreadsheet, provides the data in a format conducive to calculating performance:

Tag	Birth_date	Birth_weight	2018-06-13	2018-12-03	Average Daily Gain
Yel 2F	2018-03-03	82	299	616	1.93

To eliminate the Average Daily Gain column, set the value of “calculate average daily gain” in the [Operation] section of flokk.ini to “0”.

If weights.csv is changed by you, rather than being prepared by the Flokk, the Flokk will read the file and add the contents of the file to its internal records. (See page 123)

Thirdly, every animal weighing is recorded in the animals history as a “Weight” event.

When animals are removed from the herd, either through applying the “Dead” condition to the animal, or including the animal in a “Market” move out, any weight records for the animal will be copied to the “weights\_archive.csv” file, and removed from the Flokk’s internal weight records.

## Group administration

The administration of the same product to a group of animals can be easily recorded by your Flokk.

### “Group administration” age groups

“Group administrations” are grouped into age groups, based on the age of the animal at the time of administration. The age groups are:

Birth	Vaccination was recorded while creating a calving recorded
Calf	A calf younger than 4 weeks before the system weaning age
Weaning	Aged between 4 weeks before, and 2 weeks after, the system weaning age
Yearling	More than 1 year old, but less than 2 years old
Mature	More than two years old

The default system weaning age is 200 days. You can set a different weaning age by changing the “weaning age in days” option in the [Herd] section of flokk.ini (see page 47).

### Recording medications for groups of animals

To begin recording administration of a medication to a group of animals, select the “Group administration” option from the “Options” menu.

When your are completing a “Group administration”, you have the option of either:

- selecting a product, and setting a dose, at the start of the session, or
- choosing the “SET LATER” option, in which case the prescription administered will have to be provided after the “Group administration” has been closed by using the configuration Wizard, editing flokk.xlsx, or editing administrations.csv.

When “Group administration” is on, every time an animal that has not been administered the current “group administration” is selected by it’s Hang Tag, or it’s CCIA Tag is scanned, your Flokk will flash the alert light and display either the medication being administered:

```
Triangle 10  
COMPLETE PASS
```

or the prompt

```
Group admin.  
COMPLETE PASS
```

if the medication was not specified when the group administration was started.

Selecting the COMPLETE option will record that the animal has received the current group administration.

If for some reason the “group administration” cannot be applied, select the PASS option. The Flokk will continue on with the current task without recording the group administration as completed.

The opportunity to record a “group administration” for an animal is offered **only** when an individual animal is selected to have its information displayed or when it is individually selected for inclusion in an animal move. Group administrations are **not** recorded when groups of animals are selected as part of a move, e.g. an entire pen, the entire herd, or by characteristic (e.g. all heifers).

Once an animal has been recorded as receiving the current “group administration”, selecting the animal will not cause the Alert light to be flashed, nor the “Group admin.” prompt to be displayed. This makes it easy to identify animal(s) that have not received the group administration, should it be necessary to run a group of animals through the chute a second time to administer a missed prescription.

To finish a “group administration”, select the “Group administration” option from Options menu. If not ended by the operator, “group administration”s are automatically ended two days after they were started.

When a “group administration” session has been finished, an entry with the starting and ending date of the session, the age group that was administered the prescription, and the number of animals in each group, will be available on the “Medication group administration” page of the Wizard and on the “Group administrations” tab of flokk.xlsx.

If the “SET LATER” option was chosen when the group administration was started, you will need to record a description of the “group administration” (i.e., the product and dosage administered) by either:

- editing it on the “Group medication administration” page of the online configuration Wizard (see page 18)
- editing on the “Group administration” worksheet of flokk.xlsx

after which the specifics of the group administration will be added to the history of each animal.

### **Example 1**

On March 15, 23 cows required vaccination.

The group administration session was started by selecting the “Group medication” selection from the “Option” menu.

The Flokk displayed a menu of different medications. The option “Vira Shield” was chosen.

The Flokk offered an estimated dose. This was updated to the actual dose.

Each cow's CCIA Tag was scanned, and the “Complete” function button pressed when the “Vira Shield” screen was displayed.

After all the cows were vaccinated, the “Group medication” selection from the “Option” menu was again selected. The Flokk displayed the message “Group med.: OFF”.

An entry similar to the following was added to the history of all 23 animals:

```
Hang_tag,CCIA_tag,Birth_date,Gender,Event_date,Event_type,Event  
Yel 1F,124000251931113,,F,2020-03-15T16:58:34,Vaccination,"Vira Shield"
```

### **Example 2**

On March 15, 42 cows required vaccination.

The group administration session was started by selecting the “Group medication” selection from the “Option” menu.

Because the vaccination to be administered had not been added to the products, the “SET LATER” option was chosen rather than a product abbreviation.

Each cow's CCIA Tag was scanned, and the “Complete” function button pressed when the “Vira Shield” screen was displayed.

After all the cows were vaccinated, the “Group medication” selection from the “Option” menu was again selected. The Flokk displayed the message “Group admin.: OFF”.

The vaccination administered was an “IBR, BVD, PI3, and BRSV” vaccine. To record this, the Flokk was connected to a WiFi network and the online configuration Wizard was used to add the product, and dose to the entry where the dates, head count, and age matched the vaccination just completed:

Start date	End date	Head	Age	Product	Dose
2020-03-15	2020-03-15	43	Mature	IBRPVD	25.5

After the Complete option is chosen in the Wizard, your Flokk adds a record similar to the following to the history of each animal:

```
Hang_tag,CCIA_tag,Birth_date,Gender,Event_date,Event_type,Event  
Yel 1F,124000251931113,,F,2020-03-15T16:58:34,Vaccination,"25.5 ml IBR, BVD, PI3,  
BRSV"
```

The Flokk will automatically end a group administration when either a) all animals in the herd have received the prescription, or b) more than two days have passed without any animals being added to the group administration.

## Medications

Your Flokk can record medications (antibiotics and pharmaceuticals) administered to animals in your herd.

Medications must be defined before they can be administered. You can add the medications that you will be administering to your herd either by using the configuration Wizard, editing products.csv, or the Products worksheet of flokk.xlsx.

The items that you need to provide for each medication are:

<b>Field</b>	<b>Description</b>
Abbreviation	An abbreviation, that is meaningful to you, that you will use to select the medication to be administered. The abbreviation can be at most 16 characters in length.
Type	The type of the prescription. Must be one of "Antibiotic", "Vaccination", "Anti parasitic", "Supplement", "Corticosteroid", "Analgesic", "Tranquilizer" and "Other"
Dose	The dosage of the medication, in the units specified in "Dosage units"
Dose unit	The units of dosage. Must be one of "ml/100 lbs", "bolus/100 lbs", "ml/100 kgs" or "bolus/100 kgs".
Withdrawal	The number of days after administration of the medication within which the animal must not be sold or slaughtered.
Description	The full description of the medication.

Recording a medication is started by selecting an animals Hang Tag, or scanning it's CCIA Tag, then selecting the "Medication" option from the "Action" menu.

You will be offered the "NONE" option, followed by the abbreviations of all medications that have been added to the system. The the order the medications are offered is based on how recently, and how frequently, each medication has been administered.

If you select the "NONE" option, you will be returned to the Animal screen, and no medication will be recorded.

If you select a medication, you will then be prompted for the dose to be administered.

The default dose offered is determined, or estimated, by (in order of precedence):

1. using the actual weight, if any, collected for the animal, as long as:
  1. for calves, the weight was collected in the previous 28 days
  2. for yearlings, the weight was collected in the previous 8 weeks
  3. for mature animals, the weight was collected since the animals second birthday
2. the last dose administered of the same medication for the same age category (calf, yearling, mature) of animal
3. using an estimated weight based on the animals age

Therefore the most accurate default, and an accurate dose based on animal weight, will be provided if you turn on the "Weigh" option and a collect a weight for each animal immediately before administering the medication.

Once you have selected a dose, an entry of type "Medication" will be added to the animals history record which includes the dose and medication administered.

## Example

The following medications are defined in the Flokk:

Abbreviation	Dosage	Dosage unit	Description
Penicillin	1.0	ml/100 lbs	Penicillin

You scan the CCIA Tag of animal “YEL 1F”, then select the “Medication” option from the “Action” menu.

Your Flokk will prompt:

None

You click the right function button until “Penicillin” is offered. You then press the “Done” button.

The animal is a three year old cow. It has not been recently weighed. Based on it’s age, the Flokk will estimate that the cow weighs 593 kilograms. The Flokk will offer the prompt:

13.0 ml

Based on:

$593 \text{ kg animal weight} * 2.2 \text{ lbs/kg} = 1304 \text{ lbs animal weight}$

$1304 \text{ lbs animal weight} / 100 = 13.0$

$13.0 * 1 \text{ ml dosage} = 13.0 \text{ ml dose}$

Clicking the “Done” button will add the following record to the animals history:

Hang\_tag,CCIA\_tag,Birth\_date,Gender,Event\_date,Event\_type,Event  
Yel 1F,124000251931113,,F,2020-03-24T14:58:34,Medication,"13 ml Penicillin"

## Pregnancy checking

Your Flokk can record the results of pregnancy checking.

To record pregnancy check results, select the “Pregnancy” option from the Options menu. You will be asked to select from the options “Due”, “Term”, and “Simple”. Select the result collection method you would like to use (see page 97). The last method of results collection used is offered as the default choice.

If Pregnancy checking is already in progress, an “Off” option will be added to the options for pregnancy checking.

The Pregnancy option will **not** be presented if there are no females in the herd more than 22 months old.

When pregnancy checking is on, your Flokk will prompt for pregnancy check results whenever a Hang Tag is selected, or a CCIA Tag scanned, for a female more than 22 months old. As well, when pregnancy checking is turned on, only females more than 22 months old will be presented to select from when the Tag button is pressed or the “Select Hang Tag” option is selected.

## Simple result collection

When the collection option is set to “Simple”, only two options are provided; Open and Pregnant, and the choice is made by pressing a function button.

## Due date result collection

When the “Due” collection option is set, a list containing Cancel, Open, and the months starting 10 weeks from the current date, and running through 34 weeks from the current date, are presented, from which the due date of the animal is selected.

For example, if the date is November 1, the options that would be presented would be:

CANCEL	Open	Jan	Feb	Mar	Apr	May	June
--------	------	-----	-----	-----	-----	-----	------

If the CANCEL option is selected, no changes are made.

If the Open option is selected, the value “Open” is recorded as the test result for the animal selected or scanned.

If one of the months is selected, the due date is recorded as the first day of the month selected, in the format “yyyy-mm-01”, e.g. 2019-01-01.

When recording pregnancy test results, the toggle switch can be used to move **only** between the due months. This provides a shortcut to data entry; if the animal is open, press the right function button once to move to the Open option, then press Done. If the animal is pregnant, press the toggle switch until the desired due month appears, then press Done.

## Term remaining result collection

When the pregnancy test result collection method is set to “Term” a list containing Open, and a list of alternate weeks running from 20 to 34 weeks, is presented, from which the remaining term of the pregnancy is selected.

Therefore the list of options to choose from is:

CANCEL	Open	20 weeks	22 weeks	24 weeks	26 weeks	28 weeks	30 weeks	32 weeks	34 weeks
--------	------	----------	----------	----------	----------	----------	----------	----------	----------

If the CANCEL option is selected, no results are recorded.

If the Open option is selected, the value “Open” is recorded as the test result for the animal selected or scanned.

If one of the remaining term durations is selected, the first day of the term week is recorded in the format “yyyy-mm-dd” ( e.g. 2019-01-07).

When recording pregnancy test results, the toggle switch can be used to move between **only** the remaining term weeks. This provides a shortcut to data entry; if the animal is open, press the right function button once to move to the Open option, then press Done. If the animal is pregnant, press the toggle switch until the desired term weeks remaining appears, then press Done.

## Pregnancy results reporting

Pregnancy results are recorded in three files; pregnancy.csv, opencow.txt, and history.txt.

The file pregnancy.csv contains the results of all pregnancy tests, and is of the format:

Hang\_tag,2018-12-15

Yel 2F,Open

Yel 5F,2019-02-01

Where the leftmost column is the Hang Tag number of the animal, and the remaining columns are the results of any tests completed on the date in the column heading.

If this file is changed, the Flokk will read the file and add any results not currently in its pregnancy test records to its internal records. (See page 123)

The opencow.txt file is a list of the Hang Tag value of all cows with a test result of open during the previous 240 days. This file can be added, or renamed, to find.txt to have the Flokk search for these animals. If there is no opencow.txt, then there are no open cows in the herd.

Finally, an event of type “PregnancyTest” is added to the history of the animal. Pregnancy test results are retained in the animals history for only one year.

## Finding animals

You can use your Flokk to help identify animals that need to be sorted out from the herd.

Copy the Hang Tag value, CCIA Tag number, or a value from any non-date field, for any animals you need to identify into the file find.txt, one tag to each line.

When you enter the Hang Tag, or scan the CCIA Tag, for any of these animals your Flokk will flash its alert light and display the message “-----FOUND-----”.

The typical use of this would be if a set of animals are to be sorted out of a group that will be moving through a chute. The animals to be sorted out of the group would have their Hang Tag added to find.txt. Each animals CCIA Tag would then be scanned, and a paint marking applied based on the results of the scan. The paint marking would then be used to guide sorting.

Another example would be if you have added the field “Owner” to the herd file. If you add the value “Joe” to find.txt, then your Flokk will alert you every time you scan the CCIA Tag, or enter a Hang Tag, of an animal belonging to Joe.

The specifics of the find function are:

- Date values cannot be included in find.txt, and date fields cannot be searched
- Case is ignored, i.e. placing “Joe” in find.txt will match to “joe”, “Joe” and “JOE”, with the exception of Hang Tags, where case does matter, i.e. “T004” will not match to “t004”.
- With the exception of case, the entry in find.txt must match completely and fully with the fields value.

## Weaning

Calves are considered weaned when they are older than the system weaning age, which by default is

200 days. You can set a different weaning age by changing the “weaning age in days” option in the [Herd] section of flokk.ini (see page 47).

When you select a calf whose age is +/- 14 days of weaning age, the Flokk will adjust it’s operation to facilitate weaning operations. Specifically:

- If a selected calf does not have a CCIA Tag, and a new CCIA Tag is scanned, the Flokk will assign the CCIA Tag to the calf immediately without offering you any of other actions related to unrecognized CCIA Tags.
- When completing a “Remove to Market”, if a new CCIA Tag is scanned, the Flokk will proceed directly to prompting you to select the Hang Tag of a calf without a CCIA Tag. The CCIA Tag will be assigned to the calf, and the calf will be added to the “Remove to Market”.
- Only calves eligible for weaning will be offered when selecting a calf to have a CCIA Tag assigned to it.
- The age category of “Weaning” is applied to any vaccinations recorded for animals.

If you sell your calves after weaning, you will use the “Remove to Market” option of the Action menu. As with any move involving a change in Premises, you cannot add calves to a “Remove to Market” until they have a CCIA Tag associated with them.

If you apply CCIA Tags at birth, this will not be an issue. If you have not applied CCIA Tags to your calves prior to weaning, you will need to apply and assign a CCIA Tag to each calf before you can add it to the “Remove to Market”.

Note that if all your calves have CCIA Tags applied to them prior to weaning, and you have no other processing requirement (e.g., recording a vaccination) then you can use the “ADD GROUP” option of the “Remove to market” menu, and do not need to handle each animal individually.

It is important to know that the “ADD GROUP” option only adds animals that have CCIA Tags assigned to them.

Details of the “Remove to market” function can be found starting on page 101.

The following table summarizes the options, and actions required for each option, to wean calves and ship them to market:

Process	Vaccination at weaning	CCIA Tags applied prior to weaning	CCIA Tags applied at weaning
Prior to starting		<p>Set your CLTS Account ID.</p> <p>Add the premises you will be shipping from and shipping to.</p> <p>Use the Option menu to select the premises you will be shipping from.</p> <p>Add the license plate of the vehicle you will be using to ship the calves.</p>	
Processing, and shipping, completed separately	Yes	<ol style="list-style-type: none"> <li>1) Set the Vaccination option on.</li> <li>2) Scan each calves CCIA Tag.</li> <li>3) Confirm each vaccination administered.</li> </ol>	<ol style="list-style-type: none"> <li>1) Set the Vaccination option on</li> <li>2) Select each calf by it's Hang Tag.</li> <li>3) Confirm each vaccination administered.</li> <li>4) Scan a new CCIA Tag</li> <li>5) Apply the new CCIA Tag to the calf.</li> </ol>
	No	No action required.	<ol style="list-style-type: none"> <li>1) Select each calf by it's Hang Tag.</li> <li>2) Scan a new CCIA Tag.</li> <li>3) Apply the new CCIA Tag to the calf.</li> </ol>
Shipping		<ol style="list-style-type: none"> <li>1) Scan a calf's CCIA Tag.</li> <li>2) Click the Action button</li> <li>3) Select the "Remove to Market" option.</li> <li>4) Provide the destination premises.</li> <li>5) Provide the transporting vehicle plate.</li> <li>6) Either <ol style="list-style-type: none"> <li>1. For each calf, scan it's CCIA Tag, or</li> <li>2. For each calf, select "ADD ANIMAL" and select it's Hang Tag, or</li> <li>3. Use the "ADD GROUP" option to add groups of calves.</li> </ol> </li> <li>7) Select the COMPLETE option.</li> </ol>	<ol style="list-style-type: none"> <li>1) Scan a calf's CCIA Tag.</li> <li>2) Click the Action button</li> <li>3) Select the "Remove to Market" option.</li> <li>4) Provide the destination premises.</li> <li>5) Provide the transporting vehicle plate.</li> <li>6) Either <ol style="list-style-type: none"> <li>1. For each calf, scan it's CCIA Tag, or</li> <li>2. For each calf, select "ADD ANIMAL" and select it's Hang Tag, or</li> <li>3. Use the "ADD GROUP" option to add groups of calves.</li> </ol> </li> <li>7) Select the COMPLETE option.</li> </ol>

Process	Vaccination at weaning	CCIA Tags applied prior to weaning	CCIA Tags applied at weaning
Processing and shipping completed together	Yes	<ol style="list-style-type: none"> <li>1) Set the Vaccination option on.</li> <li>2) Scan the first calves CCIA Tag.</li> <li>3) Confirm vaccination administered.</li> <li>4) Click the Action button.</li> <li>5) Select the "Remove to Market" option.</li> <li>6) Provide the destination premises.</li> <li>7) Provide the transporting vehicle plate.</li> <li>8) For each calf, scan it's CCIA Tag and confirm vaccination administered.</li> <li>9) Select the COMPLETE option.</li> </ol>	<ol style="list-style-type: none"> <li>1) Set the Vaccination option on.</li> <li>2) Select the first calf by it's Hang Tag.</li> <li>3) Confirm vaccination administered.</li> <li>4) Scan a new CCIA Tag and apply it to the calf.</li> <li>5) Click the Action button.</li> <li>6) Select the "Remove to Market" option.</li> <li>7) Provide the destination premises.</li> <li>8) Provide the transporting vehicle plate.</li> <li>9) For each calf: <ol style="list-style-type: none"> <li>1. Scan a new CCIA Tag</li> <li>2. Select a calf's Hang Tag</li> <li>3. Confirm vaccination administered</li> <li>4. Apply the new CCIA Tag to the calf</li> </ol> </li> <li>10) Select the COMPLETE option.</li> </ol>
	No	<ol style="list-style-type: none"> <li>1) Scan the first calves CCIA Tag.</li> <li>2) Click the Action button.</li> <li>3) Select the "Remove to Market" option.</li> <li>4) Provide the destination premises.</li> <li>5) Provide the transporting vehicle plate.</li> <li>6) Either: <ol style="list-style-type: none"> <li>1. For each calf, scan it's CCIA Tag, or</li> <li>2. For each calf, select "ADD ANIMAL" and select it's Hang Tag, or</li> <li>3. Use the "ADD GROUP" option to add groups of calves.</li> </ol> </li> <li>7) Select the COMPLETE option.</li> </ol>	<ol style="list-style-type: none"> <li>1) Select the first calf by it's Hang Tag.</li> <li>2) Scan a new CCIA Tag and apply it to the calf.</li> <li>3) Click the Action button.</li> <li>4) Select the "Remove to Market" option.</li> <li>5) Provide the destination premises.</li> <li>6) Provide the transporting vehicle plate.</li> <li>7) For each calf: <ol style="list-style-type: none"> <li>1. Scan a new CCIA Tag</li> <li>2. Select a calf's Hang Tag</li> <li>3. Apply the new CCIA Tag to the calf</li> </ol> </li> <li>8) Select the COMPLETE option.</li> </ol>

## Moving animals

The move process is used whenever animals change location.

An animals location always consist of a premises. If a move has never been recorded for an animal, the current premises of the Flokk, as set with the Premises selection in the Options menu, is used.

An animals location may optionally include a Pen. Every Pen is established within a Premises, and are defined in either premises.csv, or the Premises worksheet of the flokk.xlsx workbook.

All animals to be moved MUST have a CCIA Tag set in their herd record, even for a Pen move.

While the CLTS considers any movement of an animal away from a premises to be a “Move out”, from your perspective their are two distinct forms of animal movement:

- A move that, while the animal changes it’s location, you retain ownership, and you retain the animal in your herd records.
- A move that results in you releasing ownership of the animal and removal of the animal from your active herd records. This can be the result of either selling the animal (either through an Auction Mart, or directly to a feedlot or slaughterhouse) or a transfer (gift, donation, or movement out of a testing facility).

This results in four distinct animal movement types:

	<b>Move to Pen</b>	<b>Move to Premises</b>	<b>Remove to Market</b>	<b>Remove to Premises</b>
Typical use	Pasture rotation	Community pasture	Sale of calves at auction mart	Direct sale of replacement heifers to another producer.
The Premises ID of an animal changes, which is reported to the CLTS.	No	Yes	Yes	Yes
Must specify a destination Pen.	Yes	Yes, if defined for destination Premises	No	No
All members of a cow-calf pair/set are added to the move when any member of the pair is added.	Default Yes This can be disabled. See page 47.	Default Yes This can be disabled. See page 47.	No	No
Animal's record in the herd file (herd.csv, flokk.xlsx) are	Retained	Retained	Removed	Removed
Animals are added to the animal archive file (herd_archive.csv)	No	No	Yes	Yes
A "Transport only" livestock manifest is generated	No	Yes	No	Yes
Entire group moved to a destination on a particular day can, in future, be moved to another location by selecting a single animal from the group.	Yes	Yes	No	No

The move out process is started by reading the CCIA Tag, or selecting that Hang Tag, of the first animal that is going to be moved out. While the animals information is being displayed, press the Action function button, then select one of the options "Move to Pen", "Move to Premises", "Remove to Market", or "Remove to Premises" from the menu.

After one of these options has been selected, you will be presented a menu of items that must, or could, be provided when moving the animals:

Destination?	Vehicle?	ALONE	ADD ANIMAL	ADD PEN	CANCEL	COMPLETE
--------------	----------	-------	------------	---------	--------	----------

Items that are followed by a question mark ("?") are required and have not yet been provided. Once a value has been provided for an item, it will be moved after the COMPLETE option, without a question

mark. For example, once you have provided the “Destination” for the first animal, the menu would be:

Vehicle?	ADD ANIMAL	ADD PEN	CANCEL	COMPLETE	Destination
----------	------------	---------	--------	----------	-------------

This allows you, if necessary, to select an item again to correct its value.

The items related to moving animals are:

Item	Required	Default	Comment
Destination	Yes, except for “Move to Pen”	None	<p>The destination premises of the animals.</p> <p>Can be chosen from the list of premises in premises.csv, or from a selection of common destinations for your province.</p> <p>See page 105 for more information.</p>
Pen	For “Move to Pen, and if doing a “Move to Premises”, and there are multiple pens at the destination.	None	<p>The Pens at each location are defined in either premises.csv, or the Premises worksheet of the flokk.xlsx workbook.</p> <p>If Pens are defined at the destination premises, then one will have to be selected when doing a “Move to Premises”.</p>
Vehicle	Yes, except for “Move to Pen”	None	<p>You will be presented with a menu of license plates provided or previously entered, sorted by how recently used, and how often used. You can also add a new license plate if necessary.</p> <p>This process works the same as when completing an animal Move in.</p> <p>See page 89 for more information.</p>
ALONE	No	No	<p>When moving to a pen or a premises, by default all members of a cow/calf set are added to the move when any one of the members of the set are selected.</p> <p>If the “ALONE” option is chosen:</p> <ol style="list-style-type: none"> <li>1. only the original animal selected is included in the move</li> <li>2. all subsequent animal selections for the move will add only the animal selected, and not the other members of the cow/calf set.</li> </ol>

## Destination

You need to set a destination premises for the animals before you can complete a Move out.

When you select the destination option, you will be presented with the descriptions of the premises in your premises.csv file, plus an “OTHER” option. If the destination of the animals is one of the ones presented, select it. Otherwise, select the “OTHER” option.

When the “OTHER” option has been selected, you will first be asked for a province for the destination of the animals, then will be asked for type of destination. The types of destination are Auction mart, Feedlot, Exhibition, Slaughterhouse, or Other.

Once you have chosen the type of destination, you will be presented with a menu of destinations for the province and type selected.

For example, if you are shipping animals to the Gladstone Auction Mart, and you have never used your Flokk to ship out animals to that premises before, you would:

1. Pick “Destination” from the Move out menu
2. Select the “OTHER” option from the list of premises.
3. Select “MB” as the province.
4. Select “Auction mart” as the type of destination.
5. Select “Gladstone Aucti” from the list of premises.

The Destination premises for the Move out would be set to “MB1053258”, and the line:

```
Gladstone Auction Mart,MB1053258
```

would be added to premises.csv, and would be available to select from the list of premises the next time you are complete a Move out.

If the premises for the destination you require is not among the destinations offered, select “OTHER” option. You can then enter a destination premises id directly into the Flokk.

Any premises selected or entered from the “OTHER” options will be added to the Flokk’s premises records, and will be available for you to select from the next time you complete a Move out.

## Pen

If you are doing a “Move to Premises”, and you have defined multiple Pens at the destination Premises, then you will need to select a Pen as well.

## Transport vehicle

The specification of a transporting vehicle for a Move out is handled exactly the same as for a Move In. See page 89 for more information.

## Adding animals to the move

The animal whose information was being shown when the move option was selected is the first one included in the current move.

When moving to another premises, or moving to a pen, by default all animals in a cow/calf set are added to the move whenever any of the animals are added to move. This means that if you are moving

a set of cow/calf pairs to another pasture, or another pen, you need only add the cows or the calves to the move; the other animals will be added to move automatically.

Sometimes this is not desired; for example if you are taking a single calf to the vet without it's Dam. In this situation, select the calf, select the "Move to premises" option, then select the "ALONE" option. The cow will be removed from the move, and any additional animals added to the move will not have the other animals in the cow/calf pairs added.

Animals can be added to the move by reading their CCIA Tag, or by choosing the "ADD ANIMAL" option and selecting their Hang Tag.

A CCIA Tag is required to report a move out to the CLTS. Therefore, only animals that have a CCIA Tag in their herd record are offered to chose from when "ADD ANIMAL" is selected.

It is recommended that you avoid using the "ADD ANIMAL" option, and read the CCIA Tag of every animal added to a Move out, to ensure that all animals have a CCIA Tag. If you wish to enforce this, the "ADD ANIMAL" option can be disabled; see page 47.

**It is the operators responsibility to ensure that a CLTS tag is applied to all animals added to a Move out using the "ADD ANIMAL" function.**

If you encounter an animal that needs to be included in the Move out, but has lost it's tag, scan a new CCIA Tag which is not a calving tag. You will be prompted for the Hang Tag for the animal. Once you have provided the Hang Tag, the animal will be added to the move out, and any required CLTS cross reference or tag replacement events will be created.

### **Adding all animals in a Pen**

If you are doing a "Move to Pen" or "Move to Premises", have defined Pens at the source location, and if the initial animal was assigned a Pen, then you will be offered the "ADD PEN" option. Selecting this option will add all other animals in the herd that were assigned to the same Premises and Pen to the move.

Be aware that animals, and specifically calves, that do not have a CCIA Tag cannot be assigned a Pen, nor included into a move. **Adding the cows in a Pen to a move will not include the calves in the required CCIA reporting if the calves do not have CCIA Tags assigned to them.**

### **Adding groups of animals**

If you are doing a "Remove to Market", groups of animals can be added to the move.

The groups of animals that can be added are:

- Heifer calves
- Bull calves
- Steer calves
- All calves
- Yearling heifers
- Yearling bulls
- Yearling steers
- All yearlings
- Cull cows

If there are no animals currently in your herd that would fall into a group, that group is not included in

the options. For example, if you always sell your animals as calves it is unlikely you will ever have Yearling steers in your herd, in which case this group will never appear.

Once you have selected the group, all animals within that group will be added to the Move out, with the exception of female calves or yearlings which have had the “Replacement” condition applied to them.

It is recommended that you avoid using the “ADD GROUP” option, and read the CCIA Tag of every animal added to a Move out, to ensure all animals have a CCIA a tag. If you wish to enforce this, the “ADD GROUP” function can be disabled; see page 47.

**It is the operators responsibility to ensure that the CLTS tag is in place for all animals added to a Move out using the “ADD GROUP” function.**

**CFIA regulations require that animal Move out’s be reported on a per-load basis. It is the operators responsibility to ensure that this requirement is met when using the “ADD GROUP” function.**

### **Completing the Move out**

Once you have:

- identified the animals destination Premises and/or Pen
- provided a transport vehicle

and read the CCIA Tag of, or entered the Hang Tag of, all of the animals you want to move, you can then complete the Move out process by selecting the “COMPLETE” option.

If there are any information items missing, your Flokk will identify what is missing, and return you to the Move out menu.

If all of the items required have been provided, your Flokk will:

1. Add the required lines to the CLTS\_MOVEOUT.csv file.
2. Update it’s internal record of animal locations
3. If it was a “Remove to Market” or “Remove to Premises” move:
  1. Copy the records of the animals to herd\_archive.csv
  2. If the CLTS tag of the animal was in the calving tags, remove it.
  3. Remove the animal from the herd records.

### **Livestock manifest**

For “Move to Premises” and “Remove to Premises” move outs, your Flokk will produce a transport only livestock manifest that is ready for printing.

The manifest will be on your Flokk, with a name in format of:

Livestock\_manifest\_yyyy-mm-dd\_hhmm\_NUMBER\_HEAD\_head\_to\_DESTINATION\_PID.txt.

For example, if on November 16 of 2020 you shipped 20 head to the Gladstone auction mart, the file would be named:

Livestock\_manifest\_2020-11-16\_1325\_20\_head\_to\_MB105325.txt

You can then connect your Flokk to a computer, enter file mode, and use software on your computer to

load and print the file.

Transport manifest files more than two days old are automatically removed from the Flokk.

Livestock manifests for movement to sale require a multi-part form, and must be completed by hand.

### Animal archive

The record of any animals removed from the herd are copied to the file herd\_archive.csv. The columns in the file are the date and the reason the animal were removed, followed by the columns as they are presented in herd.csv.

### Return from move

Your Flokk keeps track of the last location for every animal moved as part of a “Move to premises” move.

If an animal is selected that in past was moved to a different location than the current premises set on the Flokk, an option “Return from move” will be included in the Action menu for that animal.

This option will automatically move all of the animals moved to the same location, on the same date, as the animal selected, to the current premises of the Flokk. This allows you to complete the required CLTS reporting without having to enter the Hang Tag, or read the CCIA Tag, of every animal.

When “Return from move” selected, you will be shown a screen like the following:

```
2020-05-03
  All   Select
```

The date is the date the animal was moved. The first line will alternate between the date the animal was moved, how many head were moved at the same time, the premises they were moved to, and the prompt “Return from move”.

If you press the “All” Button, you will be presented with the following menu:

Vehicle?	Pen?	CANCEL	COMPLETE	Destination
----------	------	--------	----------	-------------

All of the animals previously moved to the same premises on the same date as the animal selected have been included in a move to the current premises set on the Flokk. All you need do is provide the Vehicle that completed the move and select the COMPLETE option.

If you pressed the “Select” button, the menu presented will be:

Vehicle?	Pen?	ADD ANIMAL	CANCEL	COMPLETE	Destination
----------	------	------------	--------	----------	-------------

You can now select specific animals from the previous move to be returned back to the current premises. Once you have selected all the animals that need to be moved back, and have provided the vehicle which completed the move, select the COMPLETE option.

A “Transport only” livestock manifest will be prepared for the move.

### Example:

On May 12, three cow-calf pairs were sorted to be moved for the summer from your home quarter

(premises AB22332) to the Bearberry pasture (premises AB753884).

Tag	Dam	Description
Yel 23R		Cow
Yel 23G	Yel 23R	Heifer calf
Yel 45S		Cow
Yel 45G	Yel 45R	Bull calf
Yel 63P		Cow
Yel 63G	Yel 63P	Bull calf

AS22332 is set as the premises using the Premises option of the Options menu.

Calf “Yel 23G”’s CCIA was read, and the “Move to Premises” option selected from the action menu. The other two calves CCIA Tags were read while they were in the squeeze being vaccinated.

When the “COMPLETE” option was selected, the three calves, and their cows, were all recorded as, and reported to the CLTS as, moved to AB753884.

On October 15, calf “Yel 45S”’s tag was selected with the Flokk, and option “Return from Move” selected from the “Action” menu, and the “All” button pressed.

Once the vehicle that made the move was entered and the COMPLETE option selected, all six animals were recorded as, and reported to the CLTS as, moved back to AB22332.

## Applying a condition to an animal

When an animal has been selected by either scanning it’s CCIA Tag, or selecting it’s Hang Tag, after pressing the “Action” function button, one of the options you will be provided is “Apply condition”.

Conditions indicate the status of the animal, and are recorded for a specific date and time.

The conditions that may be recorded are Bloated, Ill, Injured, Lameness, Scours, Recovered, Rank, “Lost calf”, Cull, Retain, Neutered, Dead, Missing and Found.

The conditions offered will be relevant to the specific animal, so it is normal for some conditions to not be displayed.

### Bloated, Ill, Injured, Lameness, Scours and Recovered conditions

The conditions indicate general animal health. If any of these conditions have been applied to an animal, that condition will be displayed for the animal until the “Recovered” condition is applied.

### Rank condition and Lost calf conditions

These conditions can only be applied to animals more than 22 months old.

When a dead condition is applied to a calf, or the Stillborn option selected when adding a calf, a “Lost calf” condition is applied to the dam or nurse cow of the calf.

## Replacement and Market conditions

The Replacement condition can be applied to any female that is within two months of weaning or older.

Once the Replacement condition has been applied:

- if the heifer's Hang Tag is selected, or it's CCIA Tag scanned, the alert light will flash and a message will be displayed
- if the heifer's Hang Tag is selected for addition to a “Remove to Market”, a warning message will be displayed and the Flokk will refuse to add the heifer to the move.
- the animal will not be included in any group move outs (e.g. all heifer calves) to market.

Once a heifer has had the Replacement condition applied, the Market condition will be offered. Setting the Market condition cancels the Replacement condition.

## Cull and Retain conditions

The Cull condition can only be applied to animals more than 22 months old.

When the Cull condition has been applied, your Flokk will flash the Indicator light, and display the message “Cull”, every time the animal is selected. This simplifies sorting cull animals for shipping.

The Retain condition is only offered if the Cull condition has been previously applied to an animal. Once the the Retain condition has been applied, the animal will no longer be identified for culling.

## Dead condition

If an animals herd record **does** include a CCIA Tag number, the Dead condition is only offered, and therefore can only be applied, when the animal has been selected by scanning it's CCIA Tag.

This reduces the possibility of selecting the wrong animal for application of the Dead condition.

If the animals herd record **does not** include a CCIA Tag then the Dead condition is offered, and can be applied, when the animal has been selected by entering it's Hang Tag.

When the Dead condition is applied to an animal it's record is moved to the herd\_archive.csv file and removed from the herd records, and a Deceased event is reported to the CLTS.

When a dead condition is applied to a calf, a “Lost calf” condition is applied to the dam or nurse cow of the calf.

## Missing and Found condition

The Found condition is only offered if a Missing condition has been previously applied to an animal.

## Updating an animals information

If you select the “Edit” option from the “Action” menu, you will be presented a menu of the items that can be updated for the current animal.

If you scan a CCIA Tag that is not already known to the Flokk while editing an animals information, that CCIA Tag will be applied to the animal.

If you select the “CANCEL” option, none of your changes will be saved. If you select the “COMPLETE” option, your changes will be applied to the current animal.

If you need to change the Hang Tag for an animal, select the animal with the Flokk, choose the “Edit” option from the “Action” menu, and use the “Hang Tag” option to enter a new Hang Tag. **DO NOT** change the Hang Tag or CCIA Tag values for existing animals in herd.xlsx or herd.csv. This will result in associated records maintained by the Flokk still having the old tag values, and being permanently lost.

## Managing CCIA Tags

Whenever a CCIA Tag is read that is not found in either calvingtags.csv or herd.csv, your Flokk needs to be told if it is a CCIA Tag that:

- going to be assigned to a calf whose CCIA Tag was not applied at birth
- is on an animal that is being moved into the herd
- is being applied to an animal whose prior CCIA Tag has been lost
- is on an animal in the herd, but the CCIA Tag is not recorded in herd.csv
- is on an animal that needs to be added to the Flokk's herd records

Whenever a CCIA Tag is scanned that is not calvingtags.csv or herd.csv, the Flokk will briefly display the CCIA number read and a message, then present a menu which can contain up to four options; “Apply to calf, Move in animal, Replacement tag, and On animal.

- The “Apply to calf” option is used to assign a CCIA number to a calf that does not yet have one assigned. This option is not presented if there are no calves in the Flokk, or all calves have a CCIA number assigned.
- The “Move in animal” option is used to initiate the process of adding animals to the herd that are being moved in from another premises.
- The “Replacement tag” option is used to replace the CCIA number for an animal that has lost its CCIA Tag.
- The “On animal” option is used when the tag is on an animal.

## Adding a CCIA Tag to an animal

For an animal already in the herd record

Scan the CCIA Tag and select the “On animal” option. The Flokk will ask you to enter a Hang Tag. If the last animal selected using the “Tag” option did not have a CCIA Tag, that animal will be presented as the default.

If the Hang Tag you enter is for an animal already in the Flokk's herd record, the CCIA Tag scanned will be added to that animal's herd record, and an entry added to the CLTS\_REPLACE.csv file.

If the Hang Tag you enter is not for an animal already in the herd, then the Flokk will begin the process of adding a new animal. The Hang Tag you entered, and the CCIA Tag you scanned, will already be set for the new animal.

For an animal that you are adding to the herd records

When initially adding animals to your herd with the “Add animal” option of the “Start” menu, you can assign a CCIA Tag to the animal by scanning the animals CCIA Tag at any time prior to the “CANCEL” or “COMPLETE” options being accepted.

When you have done this, a “Replacement CCIA” option will be offered. If the animal was missing it’s CCIA Tag, and the one you scanned for the animal was a new replacement CCIA Tag, selecting the “Replacement CCIA” option, then selecting “Yes”, will result in the new CCIA Tag being reported to the CLTS.

## Replacing the existing CCIA Tag number for an animal

Scan the new CCIA Tag. Select the “Replacement tag” option. Your Flokk will present the Hang Tag values of all animals in the herd. Once you select a Hang Tag, the CCIA Tag scanned will replace the CCIA Tag currently in that animals herd record.

**DO NOT** directly edit the CCIA Tag value for existing animals in herd.xlsx or herd.csv. This will result in other records retaining the old CCIA Tag number and becoming unusable.

Your Flokk will add an entry to the CLTS\_CROSSREF.csv file whenever an existing CCIA Tag number is replaced.

## Correcting a wrong CCIA Tag

If you scan the CCIA Tag for an animal, your Flokk will display the animal's herd record.

If the wrong animal is displayed, press the Action function button. From the menu of options presented, select the “Wrong tag” option. This will remove the CCIA Tag from the animals record.

If the animal has a CCIA Tag, you can then scan the tag. You will be presented with the “Unrecognized tag” menu, which will include an “On animal” option. Select the “On animal” option. The tag of the animal will be provided as the default; press the Done button to select it. The correct CCIA Tag will now be associated with the animal.

If the animal is missing it’s CCIA Tag then secure a new tag, scan it, select and complete the “Replacement tag” function, and apply the tag to the animal.

## Animal history

Events in an animals history are recorded to the files history.csv and history\_archive.csv.

History events include:

- any conditions applied to the animal
- any vaccinations administered to the animal
- any medications administered to the animal
- results of any pregnancy test
- results of any weightings completed

## history.csv

For animals in the herd, all events in the animals history are recorded to the file history.csv.

The fields in history.csv are:

Field	Description
Hang_tag	The Hang Tag of the animal
CCIA_tag	The CCIA Tag of the animal.
Birth_date	The birth date of the animal
Gender	The gender of the animal
Event_date	The date and time of the event, in ISO format: YYYY-MM-DDTHH:MM:SS e.g.: 2020-03-07T11:13:20
Event_type	The event type. Will be one of Condition, ToDo, Vaccination, Medication, PregnancyTest or Weighing.
Event	The actual event.  If the Event_type is Condition, the Event field will be one of: Bloated, Ill, Injured, Lamé, Scours, Recovered, Rank, Lost calf, Replacement, Market, Cull, Retain, Neutered, Dead, Found or Missing  If the Event_type is PregnancyTest, the Event field will be one of: <ul style="list-style-type: none"><li>• Open</li><li>• Pregnant</li><li>• the projected due date, in the form “YYYY-MM-DD”</li></ul> If the Event_type is Medication or Vaccination, the Event field will contain the dose and item administered.  If the Event_type is Weighing, the Event field will contain the weight and units of the weight.

Events in history.csv are ordered by the Hang Tag of the animal. You can load the file into a spreadsheet to sort and analyze the file as required.

### Adding events to history.csv

You can add events to the history of an animal by appending records to history.csv. The easiest way to do this is to import history.csv into your spreadsheet program.

You need supply only one of the CCIA Tag or Hang Tag for each history event.

## Viewing an animals history

To view an animals history, select an animal, then choose the “History” option from the Action menu. Your Flokk will briefly display the following:

2020-03-15:Con ↑  
+Event -Event ↓

It will then will display the most recent event in the animals history:

2020-03-15:Cond  
Scours

In this example, the last event in the animals history was the application of a Condition of Scours on March 15, 2020.

The events that may be in the animals history, and the abbreviation that will be displayed for the event, are:

Event	Abbreviation
Condition	Cond
Medication	Med
Pregnancy test result	Preg
Vaccination	Vacc
Weighing	Wgt

Note that in order to provide the maximum screen space for information, the Flokk only displays the function buttons on the initial screen.

When the date is displayed before the Event type:

2020-03-15:Cond  
Scours

The Flokk is showing you all event types in the animals history in calendar order. Clicking the up and down toggle will move between all events in the animals history.

For example, if the previous event in the animals history was a vaccination on March 5, clicking the up toggle would result in the display:

2020-03-05:Vacc  
7 way Clostridia

The left and right function buttons toggle between the event types in the animals history. For example, clicking on the right function button would result in the following display:

Cond:2020-03-15  
Scours

The Flokk will now show you only Condition events from the animals history. You know this, because the Event type (Cond) is now displayed before the date. Clicking the up and down toggle will now move between only Condition type events. In this example, clicking the up toggle would result in the display:

Cond:2020-02-12  
Missing

as that is the previous Condition event in the animals history. As long as “Cond” is displayed first on the screen, the Flokk will **not** display any other event type.

Clicking the function buttons moves back and forth between the event types that are recorded in the animals history. Once you have clicked through all of the event types, the Flokk will return to display all event types, which is indicated by the date moving back in front of the event type:

2020-03-15:Cond  
Scours

## **history\_archive.csv**

When an animal leaves the herd, any history events that had been recorded for the animal are appended to the history\_archive.csv file.

The contents of this file are never loaded by the Flokk.

## **CLTS integration**

Your Flokk creates six files (CLTS\_BIRTHDATE.csv, CLTS\_CROSSREF.csv, CLTS\_IN-HERD\_ID.csv, CLTS\_MOVEIN.csv, CLTS\_SIGHTED.csv, CLTS\_IN-HERD\_ID.csv) that are formatted to be uploaded directly to the CLTS (Canadian Livestock Tracking System).

Your Flokk can also make use of your Unused Tag Inventory file, which can be downloaded from the CLTS.

The Flokk adds a line to the relevant file for any activity completed that requires an update to the CLTS. If the file does not exist, your Flokk will create it first.

The presumption is that once a file has been uploaded to the CLTS, it will be deleted from the Flokk. If the file is left on the Flokk, the Flokk will continue to add lines to it. If this file is uploaded, it will contain redundant entries that will cause issues with the CLTS.

While the CLTS upload files include the COMMENT field in it’s header, these fields are optional for CLTS upload files, and are currently not collected or supported by your Flokk, so will always be blank.

The COLOUR field in the CLTS files will be populated if the Display value for the animal matches the colour description for the CLTS colour codes.

Your Flokk does not make use of the CLTS group upload option, and will never generate a CLTS group upload file.

With a subscription at flokk.ca, these files will be uploaded to the CLTS and processed automatically.

The specifics of the six CLTS upload files generated are:

### **CLTS\_BIRTHDATE.csv**

If you initiate the collection of a calving record by using the “Add calf” option of the Start menu, and you assign a CCIA Tag to the calf by scanning an unrecognized CCIA Tag while collecting the calf’s information, an entry will be added to the CLTS\_BIRTHDATE.csv file.

If the collection of calving information is initiated by scanning a CCIA Tag in the Calving tags file, or the option “assign CCIA Tag” is set to 1, an entry is added to the CLTS\_BIRTHDATE.csv file when the calving record is completed.

If the option “assign CCIA Tag” is set to 0, and collection of a calving record is initiated by selecting a Hang Tag value that is in calvingtags.csv, then addition of the necessary line to CLTS\_BIRTHDATE.csv is delayed until a CCIA Tag value is assigned to the calf.

### **CLTS\_CROSSREF.csv**

An entry will be added to CLTS\_CROSSREF.csv when the “Replacement tag” function has been selected for an animal where a CLTS number was previously assigned to the animal.

### **CLTS\_IN-HERD\_ID.csv**

This file will be generated every time the herd records change. It (optionally) can be uploaded to the CLTS to maintain the “In-Herd ID” field in the CLTS.

### **CLTS\_REPLACE.csv**

An entry will be added to CLTS\_REPLACE.csv every time the “Replacement tag” function is selected for an animal where no CLTS number was assigned to the animal, or when “Yes” is selected for the “Replacement CCIA” option when adding an animal to the herd.

### **CLTS\_MOVEIN.csv**

An entry will be added to CLTS\_MOVEIN.csv for every animal added as part of an animal “Move in”. See page 85.

### **CLTS\_MOVEOUT.csv**

An entry will be added to CLTS\_MOVEOUT.csv for every animal included in an animal “Move out”. See page 101.

### **CLTS\_SIGHTED.csv**

A line or lines will be added to CLTS\_SIGHTED.csv after every scan of a CCIA Tag if the “Sighted” option has been set from the Options menu. The Sighted option will remain set, and the Flokk will continue to add entries to CLTS\_SIGHTED.csv, until the option is again selected from the Options menu.

In order to prepare any CLTS files a premises must be set, and a CLTS account name must be included, in flokk.ini. If either one of these values is missing the Sighted option will not appear in the Options menu.

### **CLTS\_IN-HERD\_ID.csv**

This file contains pairs of CCIA Tag and Hang values for all animals in your herd. When uploaded to

the CLTS, this will cause your Hang Tag to be included in your CLTS animal records.

## Unused Tag Inventory

Your Flokk can process your Unused Tag Inventory file from the CLTS to populate it's record of tags available for calving.

The instructions on how to download your Unused Tag Inventory from the CLTS can be found at [Inventory-Unused Tag and Animal On-Farm](#).

If your Flokk is in file mode and connected to the computer that you are using to download your Unused Tag Inventory, you can download the file directly to your Flokk.

Your Unused Tag Inventory file must be copied to your Flokk exactly as it comes from the CLTS, including retaining the same file name. Your Flokk uses the file name created by the CLTS to recognize that a file copied to it is an Unused Tag Inventory; if you change the file name, it will not be recognized as an Unused Tag Inventory and will not be processed by your Flokk.

When your Flokk exits file mode, if an Unused Tag Inventory file is found your Flokk will read it and create new calving tags as long as:

1. The tags were purchased by you and added to the CLTS either since the start of the previous years calving season or, if the Flokk cannot determine your calving season, in the previous 60 days.
2. The CCIA value for the tag is neither associated with an animal in your herd or already in the calving tag records.

Therefore the typical process will be:

1. Place your Flokk into file mode
2. Log into the CLTS.
3. Download your Unused Tag Inventory file to your Flokk.
4. Log out of the CLTS
5. Eject the Flokk drive from your computer
6. Press the “Done” button to have the Flokk leave file mode. Your Flokk will process the contents of the Unused Tag Inventory file and create matching calving tag entries.
7. Put your Flokk back into file mode.
8. Open calvingtags.csv or the Calving tags tab of flokk.xlsx and confirm that the Hang Tag values created are correct.

The Flokk will create a Hang Tag value for each CCIA Tag that it adds. The tag will consist of the current letter year and a sequential number, formatted the same way as the tags in your herd records. The Flokk will ensure that the tag number is not already in use. You can use these Hang Tags as created by your Flokk, or set your own by editing calvingtags.csv or the Calving tags worksheet in flokk.xlsx.

When a calving tag has been created from an Unused Tag Inventory download file, two additional fields will be including in calvingtags.csv and the Calving tags worksheet of flokk.xlsx. These fields are the date the tag was recorded in the CLTS, and the source of the tags. These fields can be used to

sort the calving tag records to your preference to simplify the creation of your own Hang Tag values.

Any errors encountered when loading an Unused Tag Inventory will result in a warning message being displayed on your Flokk, and the errors being documented in the file “tag-inventory\_load\_errors.txt”. Errors should not occur as long as you copy the original, unmodified, file provided by the CLTS to your Flokk.

### Maintenance of tag year letters

If you have used an Unused Tag Inventory file to create calving tags, your Flokk will check every time it is started to ensure that the year letter of the Hang Tag values for all calving tags is correct for the current year. If they are not, the Flokk will create new hang values for all calving tags with the correct year letter.

If you do not want this check to occur, i.e you want to maintain your own Hang Tag values for calving tags, then set the option “maintain tag year letter” in the Calving section of flokk.ini to “0”.

# Maintaining your Flokk

## Service mode

Your Flokk has a service mode. When in service mode you have access to tools for your Flokk's configuration and that will help you recover from device or software failure.

To enter service mode:

If your Flokk is turned off:

1. Press and hold down any of the Flokk's buttons
2. Turn your Flokk's power switch on
3. Once the Flokk is displaying "Starting Service", release the button.

If your Flokk is running:

1. From the "Flokk Ready" screen, press the "Done" button.
2. Select the "Service mode" item from the menu.

Your Flokk will automatically enter Service mode if there is a failure in the Flokk herd management software.

When in Service mode, the function buttons provide access to two menus; ACTION and SETUP.

## ACTION menu options

### File

Enter file mode so you can connect the Flokk to a computer with its USB port and access the files on the Flokk. This will allow you to investigate and correct any errors in the devices files.

### Backup

If you have subscribed to the Flokk backup service, (see page 123) selecting this option will back up your Flokk's files to your account at flokk.ca.

### Recover

If you have subscribed to the Flokk backup service, (see page 123) selecting this option will allow you to select a set of backup files from your account at flokk.ca and have them restored to your Flokk.

### Wizard

Connect your Flokk to the online Configuration Wizard at flokk.ca.

The Wizard will walk you step by step through the configuration of your Flokk, and allows you to edit your herd records.

When you select "Wizard", after a short delay you will be presented with a four digit Wizard Session Code.

Using any web browser, go to <https://flokka.ca/wizard>. Enter the four digit code in the input box with the prompt “Wizard session code”.

## Link

You can link your Flokk to an account at Flokk.ca.

Once this has been done, you can:

- Use the off-line herd viewer to view your herd records.

Note that the records will be current only to the last time that:

- the “Submit” option had been chosen from the “Options” menu in Flokk mode.
- the overnight maintenance operations completed
- a Wizard session was completed

When you select “Link”, after a short delay you will be presented with a four digit Link Code.

Using any web browser, go to <https://flokka.ca/link>. Enter the four digit code in the input box with the prompt “Flokk link code”

## Send logs

Copy recent logs of your Flokk’s activity to your account at flokk.ca so that they can be used to diagnose an issue.

## Remote service

Initiate a remote service session so that Flokk personnel can investigate and resolve any issues with your Flokk.

## Self test

Complete a test of all of your Flokk’s functions.

You will be asked to press each of your Flokk’s buttons, scan a CCIA Tag, and confirm that the alert light is working. The Flokk will also test it’s internal storage to ensure they are working and available.

After the test is done a screen like the following will be displayed:

```
-----  
LR UD D L R S F  
LR UD D L R S F  
-----
```

Where each column represents one of the tests completed:

- L: left button
- R: right button
- U: up toggle
- D: down toggle
- L: alert light

R: CCIA RFID tag reader  
S: Storage  
F: File mode

If all of the letters match in all columns, all tests were successful. If one or more of the characters are missing, e.g.:

```
-----  
LR UD D L R S F  
LR UD D L _ _ _  
-----
```

Then the indicated tests were not completed.

If one or more of the characters are an “X”, e.g.:

```
-----  
LR UD D L R S F  
LR UD D X R S F  
-----
```

Then one of the tests failed (e.g. in this example, the alert light) and you need to send your Flokk for service.

## SETUP menu options

### Connect WiFi

After you have selected this option, the Flokk will present a menu which contains the SSID’s (names) of all WiFi networks that are currently available to it.

Once you have selected a WiFi network, if your Flokk has been connected to the network in the past (so it has been provided the password for the network) or if the network does not require a password, your Flokk will connect to the network.

If the network requires a password, but the password has never been provided to the Flokk, you will be presented a screen like the following:

```
      ^  
_ Enter Passwordv
```

Using the toggle, select the character for each position of the password. Use the function buttons to move the cursor to the left and right. To cancel the entry without setting a password, move the cursor to the left or right until “Cancel” is displayed, then press the Done button.

When the correct password is displayed, press the Done button. Your Flokk will check if the password is correct, and then connect to the selected WiFi network. The password will be stored in the Flokk, so will not have to be provided again.

Please note that when your Flokk is in it’s normal herd management mode, it will automatically connect to WiFi networks that it has the password for whenever it is moved to a location where it can access the network. In Service mode this does not occur; you must select a WiFi network with the “Connect to WiFi” option to be connected to a WiFi network.

## Set tag template

If no animals have been added to the herd record, you can set the tag template. This will allow you to exit service mode and begin adding animals to the herd.

Hang Tag templates are fully explained on page 63.

## Wizard

Begin a session with the online configuration Wizard.

## Update

Update the software on your Flokk to the latest version.

## Set time zone

You can select the time zone that your Flokk is operating in. This will ensure that the event times for Actions required and update times applied to files are correct.

The Canadian time zone options available are Pacific, Mountain, Saskatchewan (Central time without daylight savings), Central, Eastern, and Newfoundland.

## Factory reset

Clear all device storage and return the Flokk to the state it was when it left the factory.

## Manually restoring your Flokk

If you have not subscribed to the Flokk backup service (see page 123) and it becomes necessary to recover your Flokk from a major failure, or you want to copy your herd files to a new Flokk, you should:

1. place the Flokk into file mode
2. delete all files on the Flokk
3. copy from your backup to the Flokk these files:
  1. calvingtags.csv
  2. flokk.ini
  3. herd.csv
  4. plates.txt
  5. pregnancy.csv
  6. premises.csv
  7. weights.csv
  8. vaccinations.csv
  9. products.csv

#### 4. exit file mode

Any of the files CLTS\_BIRTHDATE.csv, CLTS\_CROSSREF.csv, CLTS\_MOVEIN.csv and CLTS\_SIGHTED.csv should be uploaded to the CLTS, rather than being copied to the new Flokk.

### **Updating pregnancy.csv and weights.csv**

Your Flokk always uses the contents of calvingtags.csv and herd.csv as they are provided by you.

In normal operation, the contents of pregnancy.csv and weights.csv are generated by the Flokk from its internal record of pregnancy tests and animal weightings that have been completed using the Flokk. Records are removed from these files only when the associated animal cannot be found in herd.csv.

In normal operations, you will only read the contents of pregnancy.csv and weights.csv and will not change them.

However the Flokk will detect if either pregnancy.csv or weights.csv have been changed and will load the contents of these files and add them to its internal records of pregnancy tests and animal weightings. This allows you to restore historic test results to the Flokk, move them to a new Flokk, or add them to your Flokk if they are available from another data source.

If a problem is encountered during the loading of pregnancy.csv or weights.csv, a message will be displayed on the screen, and you will be directed to read the contents of a text file on your Flokk which describes the errors encountered (See page 155).

### **Manually updating your Flokk's software**

When connected to the Internet via WiFi, your Flokk's software can be updated by selecting the Update option from the Options menu.

If WiFi is not available, your Flokk's software can be updated by copying a file named flokk\_production.tar, provided by the developer, to your Flokk while it is in file mode. When you exit file mode this file will be examined and, if verified to contain a valid system update, will be installed to your Flokk. Your Flokk will then be updated to the new software the next time it is turned on.

The contents of this file are digitally signed by the Flokk developer, and the Flokk will only install software updates that are correctly signed. Your Flokk's software cannot be maliciously or accidentally altered by the use of this function.

### **Subscription features**

Your Flokk supports optional features which are available by annual subscription. To add these features to your Flokk, please go to flokk.ca.

### **Backup service**

Once you have subscribed to the device backup service, the information on your Flokk will be backed up to private and secure storage on the flokk.ca server:

1. Once nightly
2. Whenever the "Backup" option is selected from the "Options" menu.

## CLTS submission

With a subscription to the CLTS submission service, all CLTS events will be submitted and processed automatically.

Any outstanding events will be automatically submitted overnight as long as your Flokk is turned on and located where it has access to a WiFi network.

You can also initiate submission of CLTS events by selecting the “Submit” item from “OPTIONS” menu.

You will receive a confirmation e-mail for each batch of CLTS events submitted and processed.

## Demonstration and training features

These features facilitate a Flokk's use for training or demonstration, and will not be required by the typical user.

### Echo display to remote system

A Flokk can echo its display to a remote telnet client so that others can easily see what is being displayed during training or demonstrations.

To enable this feature, add the option “echo display to telnet”, with a value of “1”, to the “Operation” section of flokk.ini.

Once this feature has been enabled, use a telnet client to telnet to port 1024 of the Flokk, e.g.:

```
telnet 192.168.4.40 1024
```

### Demonstration file reset

If a directory named “DemoFiles” is created on the Flokk, the Flokk will offer a “Demo” selection in the “Options” menu.

When this option is selected, for the files flokk.ini, premises.csv, herd.csv, calvingtags.csv, find.csv, pregnancy.csv, weights.csv, CLTS\_BIRTHDATE.csv, CLTS\_CROSSREF.csv, CLTS\_MOVEIN.csv and CLTS\_SIGHTED.csv, if a version of the file is located in the DemoFiles directory, that version of the file will overwrite the version of the file being used by the Flokk. If the file does not exist in DemoFiles, the version of the file being used by the Flokk will be deleted.

After these files have been updated, the Flokk will reload from these data files. This will restore the Flokk to a known state for the commencement of a training session or demonstration.

If the DemoFiles directory is empty when the Demo option is selected, the Flokk will essentially be cleared to a factory reset state.

**These file overwrites and deletions will be completed without warning and without confirmation. Do NOT create a DemoFiles directory on a Flokk that is being used for the management of a herd.**

## Frequently asked questions

Question	Answer	Resolution	More information page
I have scanned the CCIA Tag of an animal that I want to add to my herd, but all the Flokk does is display the CCIA number.	If the herd record is empty, the Flokk assumes it is operating at a commingling site.	Press the “Start” function button, then select the “Add calf” or “Add animal” option.  While entering the animals information, scan the CCIA Tag.	82
When I try to select a Hang Tag, many animals are missing.	To make selecting animals easier, and avoid errors, when the pregnancy option has been set only females more than 22 months old are presented to select tags from.	Select the Pregnancy option from the Options menu, then select the “Off” option, to turn pregnancy checking off.	96
I am adding a calf, but the Dam option is not being offered.	You do not have any animals in your herd that are: <ul style="list-style-type: none"> <li>• female</li> <li>• more than 22 months old</li> <li>• have not had a calf recorded for them in this calving season</li> </ul>	Check the contents of you herd file to ensure that for all your cows: <ul style="list-style-type: none"> <li>• you have provided an accurate birth date, or the Hang Tag contains a single letter specifying a birth year at least two years previous.</li> <li>• you have set the gender to “F”</li> </ul>	

Question	Answer	Resolution	More information page
I am adding a calf, and selected the “Dam” option, but I cannot select the cow that is the Dam for this calf.	The list of animals that you can select from for Dam’s are all animals in the herd that are: <ul style="list-style-type: none"> <li>• female</li> <li>• more than 22 months old</li> <li>• have not had a calf recorded for them this calving season</li> </ul>	Check the contents of you herd file to ensure that the cow: <ul style="list-style-type: none"> <li>• has an accurate birth date, or the Hang Tag contains a single letter specifying a birth year at least two years previous.</li> <li>• has it’s gender set to “F”</li> <li>• there is not a calf recorded this calving season which has the cow set as it’s dam.</li> </ul>	
I accidentally selected an option that required entering or selecting an item, and I am stuck and can’t get back to the menu.	If you move the cursor past the left or right extreme of the value, you will be offered a “Cancel” option.	Use the left or right function buttons to move the cursor past the left or right edge of the value. The value will be replaced with the “Cancel” option. Press the Done button to cancel the entry and return to the menu.	
I have set my Flokk to collect calving ease, but the option does not appear on the calving menu.	In order to select the right calving ease codes to use, the Flokk needs to know the breed of the calf. It determines this by looking at the breed of the dam. Therefore the dam of the calf has to be set. Once the dam of the calf is set, the calving ease option will be offered.	Set the dam of the calf.	
My Flokk is only displaying a “File” button.	An error was encountered loading the Flokk’s configuration or data files. This needs to be corrected by returning the Flokk to file mode and correcting the problem.	Select the file option and correct the problem.	41, 153, 155, 156

<b>Question</b>	<b>Answer</b>	<b>Resolution</b>	<b>More information page</b>
“Move in” is not available when I read the tag for an animal I want to move into my herd.	Your premises and CLTS account must be set in flokk.ini before you can do any animal move ins.	<p>1) Edit flokk.ini and add your CLTS account id in the “CLTS account ID” option of the [User] section.</p> <p>2) Make sure that you have at least one premises in premises.csv.</p> <p>3) Select a premises using the “Premises” choice on the “Options” menu.</p>	
Sighted is not available on the options menu.	Your CLTS account must be set in flokk.ini before you can select the sighted option.	Edit flokk.ini and add your CLTS account id in the “CLTS account ID” option of the [User] section.	51
An animal has died, but the “Dead” option is not being presented in the “Apply condition” menu.	If the animal's herd record includes a CCIA Tag, then the Dead condition is only offered if the animal has been selected by scanning it's CCIA Tag. This eliminates the possibility of applying the Dead condition to the wrong animal.	Scan the animals CCIA Tag, press the “Action” button, then select the “Apply condition” option.	110
I am trying to move an animal out of my herd, but it's Hang Tag is not available to choose from when I select the “ADD ANIMAL” option.	An animal must have a CCIA Tag number before it can leave the premises of origin. The animal you are trying to select does not have a CCIA Tag in it's herd record.	Scan a new CCIA Tag that is not a Hang Tag. Select the “Add” option from the menu selected. Specify the tag of the animal you are trying to add.	111

Question	Answer	Resolution	More information page
The “Add calf” option is missing from the Start menu.	Your CLTS account ID, and a current premises, must be set in flokk.ini so that age verification reporting can be completed.	<p>1) Edit flokk.xlsx and add your CLTS account to the setup worksheet, or edit flokk.ini and add your CLTS account id in the “CLTS account ID” option of the [User] section.</p> <p>2) Make sure that you have at least one premises set in the Premises worksheet of flokk.xlsx, or in premises.csv.</p> <p>3) Select a premises using the “Premises” choice on the “Options” menu.</p>	41
The “ADD ANIMAL” option does not appear when I am trying to move out animals.	<p>Animals can be added to a move out only if they 1) have CCIA Tag value in their herd record, and 2) are not in the current move out.</p> <p>If all animals with CCIA Tags are in the current move out, then the “ADD ANIMAL” option is not provided.</p>	<p>If the animal has a CCIA Tag, scan the CCIA Tag and, and add the animal to the current move out.</p> <p>If the animal does not have a CCIA Tag, scan a new CCIA Tag, use the “Add” option to add the CCIA Tag to the animals herd record, then apply the tag to the animal.</p>	

Question	Answer	Resolution	More information page
The Backup item is missing from the OPTIONS menu.	<p>Either:</p> <ol style="list-style-type: none"> <li>1. Your Flokk is not connected to a WiFi network.</li> <li>2. Your Flokk is connected to a WiFi network, but cannot reach the flokk.ca server.</li> <li>3. You have never subscribed to the Flokk backup service.</li> <li>4. You were subscribed to the Flokk backup service, but your subscription has expired.</li> </ol>	<ul style="list-style-type: none"> <li>• With the the Flokk at the "Flokk Ready" screen, check that your Flokk is displaying an SSID and IP address among it's status messages.</li> <li>• With another device connected to the same WiFi network, see if you can access flokk.ca.</li> <li>• Log into your account at flokk.ca, and confirm that your backup service subscription is current.</li> </ul>	
The flokk.xlsx file is missing.	<p>You have entered and exited file mode several times without making changes to flokk.xlsx. The Flokk has assumed you no longer need the file, and has stopped creating it, which reduces the delay when entering file mode.</p>	<p>Select the "flokk.xlsx" choice from the "Options" menu.</p>	30
I want to move an animal to a different Pen. I have selected the animal, but the "Move to Pen" option is not being provided.	<p>An animal must have a CCIA Tag in it's herd record before it can be assigned to a Pen. The current animal does not have a CCIA Tag.</p>	<p>Scan a new CCIA Tag, use the "Apply to Calf" or "On animal" option to assign the CCIA Tag to the animal, then apply the tag to the animal.</p> <p>As long as the Cow has a CCIA Tag, calves without CCIA Tags will be assumed to be in the same pen as the Cow.</p>	

Question	Answer	Resolution	More information page
<p>When adding an animal, I get the message “Hang Tag with birth year, or Birth date, required” when I select the “Complete” option, even though I have provided a Hang Tag with a birth year.</p>	<p>The letters I, O, Q and V are never used to indicate a birth year. One of these values may have been mistakenly used in the tag.</p>	<p>Correct the letter in the tag to a valid birth year.</p>	
<p>I need to move a calf to another premises without it’s dam or nurse (e.g. to the vet), but when I select the calf and then chose “Move to premises” from the Action menu, the Flokk adds two animals to the move; the Cow and the calf.</p>	<p>When moving to a premises or a pen, your Flokk adds all members of a Cow/calf set to the move whenever any animal in the set is added to the move</p>	<p>Chose the “ALONE” option from the Move out menu.</p>	<p>This will remove the Cow from the move.</p>
		<p>Any further animals added to the move will add just the animal selected, not the cow/calf set.</p>	

## File descriptions

The files which you may find on your Flokk are:

File name	User editable	Description	More information page
0001scans.csv	No	The CCIA Tag scans completed in the current session.	
0001weights.csv	No	Any weights collected in the current session.	
calving_ease.bak	No	Backup copy of the calving_ease.csv file. Not to be used in normal operation as the contents may not be current.	
calving_ease.csv	No	The calving ease codes for every calf born to all cows currently in herd.csv.	98
calvingtags.csv	Yes	The Hang Tag and CCIA Tag values for the tags to be applied to calves during calving.	27
CLTS_BIRTHDATE.csv	No	Birth date records files for uploading to the CLTS.	115
CLTS_CROSSREF.csv	No	Tag replacement records for uploading to the CLTS.	116
CLTS_IN-HERD_ID.csv	No	In herd id file for uploading to the CLTS.	
CLTS_MOVEIN.csv	No	Tag addition records for uploading to the CLTS	116
CLTS_MOVEOUT.csv	No	Animal move out records for uploading to the CLTS	116
CLTS_REPLACE.csv	No	Tag replacement records for uploading to the CLTS.	116
CLTS_SIGHTED.csv	No	Animal location records for uploading to the CLTS.	116
CLTS_IN-HERD_ID.csv	No	Pairs of CCIA Tag and Hang Tag values for all animals in your herd for uploading to the CLTS.	116
find_errors.txt	No	Errors encountered when loading the find.txt file. If this file is not present, no errors occurred.	53
find.txt	Yes	A list of Hang Tags, CCIA Tags, or other non-date values of animals that you want to identify.	53
Flokk user reference manual.pdf	No	The current version of this manual	7
Flokk menu overview.pdf	No	An overview of the contents of all menus used by the Flokk.	
flokk.ini	Yes	Configuration file that customizes the operation of your Flokk.	41

<b>File name</b>	<b>User editable</b>	<b>Description</b>	<b>More information page</b>
flokk.ini.bak	No	Backup copy of the flokk.ini file. Not to be used in normal operations as the contents may not be current.	
flokk.xlsx	Yes	An Excel Open XML spreadsheet file containing herd records, calving tags, premises definitions, vehicle plates, and basic configuration settings.	30
Flokk_needs_correction .xlsx	No	Copy of the flokk.xlsx file made when errors were found loading items from the workbook. You can copy items from this workbook into flokk.xlsx and then correct any errors.	
Flokk_XLSX_LOAD_ER RORS.txt	No	Contains any errors found when loading the Herd, Calving tags, Premises, Vaccination, Medication or Plates worksheets in flokk.xlsx.	
GETTING STARTED.pdf	No	Detailed, step by step tutorials on how to set up your Flokk and perform basic operations.	
herd_archive.csv	No	Archive record of any animals removed from the herd.	
herd_load_errors.txt	No	Any errors which were encountered when loading herd.csv and/or calvingtags.csv. If not present, no errors were occurred.	153
herd.bak	No	Backup copy of the herd.csv file. Not to be used in normal operations as the contents may not be current.	
herd.csv	Yes	Records of all animals currently in your herd.	22
history.csv	Yes	All history events for your herd. History events include the application of conditions.	113
history_archive.csv	No	History events for animals that have been removed from the herd.	115
livestock_manifest.txt	No	A livestock shipping manifest generated as result of a pasture Move out or a return from Pasture.	
products.bak	No	Backup copy of the products.csv file. Not used in normal operations.	
products.csv	Yes	Definitions of the medications that you will administer to individual animals.	94
newRFID.txt	No	All CCIA Tags scanned that were not in herd.csv at the time of scanning	

<b>File name</b>	<b>User editable</b>	<b>Description</b>	<b>More information page</b>
opencow.bak	No	Backup copy of the opencow.csv file. Do not use in normal operations as the contents may not be current.	
opencow.txt	No	The Hang Tag of all cows with a pregnancy test result of open in the most recent gestation period. Not present if there are no open cows in the herd.	98
plates.txt	Yes	A list of license plate numbers for trailers or trucks used to bring or remove animals from the herd.	40
pregnancy_load_errors.txt	No	Any errors which were encountered when loading pregnancy.csv. Not present if no errors were encountered.	155
pregnancy_needs_correction.csv	No	A copy of pregnancy.csv that is created if errors are encountered when loading pregnancy.csv so that any errors can be corrected and pregnancy.csv loaded again.	155
pregnancy.bak	No	Backup copy of the pregnancy.csv file. Not used in normal operations as the contents may not be current.	
pregnancy.csv	Yes	Results of all pregnancy tests for all cows in the herd.	98
premises.csv	Yes	All of the premises where your animals may be held, from which you choose a current premises for Flokk operations.	40
vaccinations.bak	Yes	Backup copy of the vaccinations.csv file. Not used in normal operations.	
vaccinations.csv	No	The descriptions of all group vaccinations completed.	92
weights_load_errors.txt	No	Any errors which were encountered when loading weights.csv. Not present if there were no errors encountered.	155
weights_needs_correction.csv	No	A copy of weights.csv that is created if errors are encountered when loading weights.csv so that any errors can be corrected and weights.csv loaded again.	155
weights.bak	No	Backup copy of the weights.csv file. Not used in normal operations as the contents may not be current.	

<b>File name</b>	<b>User editable</b>	<b>Description</b>	<b>More information page</b>
weights.csv	Yes	The results of any weightings for all animals currently in the herd.	90
weights_archive.csv	No	Archived weightings for animals that have been removed from the herd.	

## Status messages

While your Flokk is waiting for a Hang Tag to be selected or a CCIA Tag to be scanned, it will display a series of status messages.

Status messages will also be displayed, and you can move between status messages, by using the toggle switch while the "Flokk Ready" menu is being displayed.

Status messages are displayed only when they contain relevant information, so all the messages in this table may not necessarily be displayed.

Some messages indicate a significant situation that requires operator attention. The alert light will be flashed while these messages are being displayed.

Typical message	Description
192.168.0.10	<p>The IP address on the current WiFi network that the Flokk has been connected to.</p> <p>The display of an IP address indicates that the Flokk has successfully connected to a WiFi network.</p>
2 head missing CCIA Tag number	<p>There are animals in herd.csv that do not have a CCIA Tag number. Either add the CCIA Tag numbers to the correct line in herd.csv, or scan the animals CCIA Tag and use the "Add" option to add the tag to the animal's record.</p>
Battery left: NN minutes	<p>A low battery has been detected. Indicates how much longer the Flokk will be allowed to run before it will be automatically turned off.</p>
Battery life exceeded	<p>The Flokk has run longer than should be allowed after a low battery has been detected. Should not appear in normal circumstances.</p>
Calving tags: 25	<p>How many tags remain in calvingtags.csv that have not been assigned to a calf now in the herd.</p> <p>In other words, how many new calves can be recorded before additional tags will be required in calvingtags.csv.</p>
Check WiFi passwords in flokk.ini	<p>A password was found for a WiFi network, but connection to the WiFi network was not successful. The most likely cause is the password entry is incorrect.</p> <p>Use file mode to correct the relevant password under the "WiFi passwords" section of flokk.ini.</p>
Connecting to WiFi	<p>An attempt to connect to a WiFi network is underway.</p>

Typical message	Description
Files have never been backed up.	<p>The Flokk does not have a record of the last time it was set into file mode, so must assume that the files in the Flokk have never been copied to another location.</p> <p>Use file mode to copy the Flokk's files to a secure and reliable storage location.</p>
Find: 3 head	There are Hang Tags and/or CCIA Tag numbers in find.txt that the Flokk is looking for.
Herd: 245 head	How many animals have been loaded from the herd.csv file.
Invalid battery capacity	The “battery capacity” in the [Device] section of flokk.ini is not recognized.
Last back up 3 days ago.	The Flokk was last set into file mode three days ago, so the files on the Flokk have not been backed up since then.
Mon, Mar 8 2022	The current date the Flokk is set to
New WiFi networks found	<p>A WiFi network was detected that requires a password to connect to, but there is no password for the network in flokk.ini.</p> <p>You have two options to gain access to the new network with your flokk:</p> <ol style="list-style-type: none"> <li>1. Switch your flokk to service mode, and use the “Connect WiFi” option (121) to select the network you want to access and provide the password.</li> <li>2. Use file mode to add the required password to the appropriate settings under the “WiFi passwords” section of flokk.ini.</li> </ol>
NO CLTS account	<p>No CLTS account ID has been provided.</p> <p>Either:</p> <p>Add your CLTS account ID to the “Owner” section of the “Setup” worksheet of flokk.xlsx.</p> <p>or</p> <p>Add your CLTS account ID after the “=” sign in the line “CLTS account ID” in the [Owner] section of flokk.ini.</p>
NO Pen	<p>There is no default pen selected.</p> <p>Use file mode to add your any pens require to flokk.xlsx or premises.csv. Then select the current Pen using the Pen option of the Options menu.</p>

Typical message	Description
NO premises	There is no premises set. Use file mode to add premises to flokk.xlsx or premises.csv. Then select the current premises using the Premises option of the Options menu.
No WiFi	No WiFi networks are currently available to the Flokk. The Flokk will reconnect to any WiFi network it has the password for, or any WiFi network that does not require a password, when it is brought back to a location where WiFi is available.
No wlan0 interface	The wireless network interface is not present. This message should never appear in normal operation, and indicates a system failure has occurred.
Power save	After 10 minutes of no activity, the Flokk will turn off the RFID reader to conserve battery power. Press any button to resume normal operation.
Pregnancy: OFF	Pregnancy checking mode is off. Select "Pregnancy" from the Options menu to turn it on.
Pregnancy: ON	Pregnancy checking mode is on. The Flokk will collect a pregnancy check result every time a cow is selected. Select "Pregnancy" from the Options menu to turn it off.
A1234567:1	The current Premises and Pen being used by the Flokk.
"Flokk Ready"	The Flokk herd management system is ready for use.
Remote service access: ON	You have requested remote access to your Flokk for service, and this function is currently active. Flokk service personnel can remotely access your Flokk when this status message is displayed.
"Service Ready"	The Flokk's service mode is ready for use.
Session: 0007	The current session number being used to record scans and weights.
Session: 5 head	How many head are in the current scanning session.
Sighted: OFF	CCIA Tag scans are not being recorded in CLTS_SIGHTED.csv. Select "Sighted" from the Options menu to start collecting CLTS sightings.

Typical message	Description
Sighted: ON	Recording of CCIA Tag scans in CLTS_SIGHTED.csv is being completed.  Select “Sighted” from the Options menu to stop collecting CLTS sightings.
SSID: wifissid	If more than one WiFi network is available, the Flokk will display the SSID of which WiFi network it has connected to.
Storage: NN%	Amount of user storage remaining on the system. Message will not appear if more than 25% storage is available. Alert light will flash if less than 10% of storage remains.
Update available	An update to the Flokk's software is available.  Select the “Update” option from the Options menu to download and install the update.
Group admin. need description	A group vaccination has been completed, but no description has been provided. Open flokk.xlsx, go to the Vaccination worksheet, and add any missing descriptions.
Group med.: OFF	Animals are not currently being added to a “group medication”. Select “Group medication” from the OPTIONS menu to begin recording administration of a medication to each animal selected.
Group med.: ON	A “group medication” is underway. Select “Group medication” from the OPTIONS menu to end the current “group medication”.
Weighing: OFF	Weighing mode is off.  Select “Weigh” from the Options menu to turn it on.
Weighing: ON	Weighing mode is on. The Flokk will collect a weight every time an animal is selected.  Select “Weigh” from the Options menu to turn it off.
WiFi never initialized	The WiFi system was never initialized.  This message should never appear in normal operation, and indicates a system failure has occurred.
WiFi starting	The WiFi network connection is in process of being set up.

## System messages

The messages that your Flokk will provide are of three types:

### Information

Information messages keep you informed about the normal operation of your Flokk.

### Warning

Warning messages describe a problem with the current operation, or a situation that may cause a problem with future operation of your Flokk, but will not impact the correct operation of the Flokk..

### Failure

Failure messages indicate urgent issues that will compromise the operation of your Flokk.

Message	Type	Description	Action
-----FOUND-----	Information	An animal whose tag is in find.txt and that you have been searching for has been found.	None
Connect USB now	Information	The system is now ready for file access.	If you have not already, connect your Flokk to a computer with a USB cable.
Add CCIA Tag to pregnancy test	Warning	Pregnancy is on, and a Hang Tag value was selected for an animal without a CCIA Tag recorded. Pregnancy test results cannot be recorded for animals without a CCIA Tag	Scan the animals CCIA Tag and use the “On animal” option to add it to the animals record. Then scan the animals CCIA Tag.
Added calf TAG	Information	The calf indicated has been added to the herd.	None
Added NN tags	Information	The Flokk is confirming the number of calving tags that have been added.	None

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Adding CCIA Tag to calf	Information	You have included CCIA Tags in calvingtags.csv, but have set “assign CCIA Tag” in flokk.ini to 0. You have now scanned a CCIA Tag that is not in herd.csv but is in calvingtags.csv. The Flokk will show you a list of calves that do not have CCIA Tags so that you can select one to apply the CCIA Tag to.	Select the calf you want to assign the CCIA Tag to.
Adding twin calf	Information	You have selected the “ADD TWIN” option from the Add animal menu. The initial calf has been added to the herd records, and the Flokk will now prompt you for the information for the twin.	Provide a Hang Tag and Gender for the twin calf, then select “COMPLETE”. The Birth date, Display value, and Dam of the first twin will be used for the second twin unless you provide a different value.
All animals in herd.csv have CCIA Tag	Warning	You have scanned a tag that is not in calvingtags.csv or herd.csv, then selected the Add option from the menu presented. However, all animals in herd.csv already have a CCIA Tag number.	Use the Tag option to select the hang tag of the animal. Then select the Action function. From the Animal menu, chose the “Wrong tag” option to remove the CCIA Tag value from the animal. Then re-scan the new tag and use the Add option.
All calves have CCIA Tag	Information	You have included CCIA Tags in calvingtags.csv, but have set “assign CCIA Tag” in flokk.ini to 0. You have now scanned a CCIA Tag that is in calvingtags.csv but is not in herd.csv. Normally in this case you would presented a list of calves without CCIA Tags so that you can assign the CCIA Tag to one of them, however all calves in herd.csv already have a CCIA Tag assigned.	This message should not appear in normal operations. It can be avoided by assigning and applying CCIA Tags at birth.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Already in herd	Warning	You have changed the colour, or a letter or number, in a Hang Tag that results in a tag value that is already in the herd records or among the calving tags.	Either choose a new Hang Tag number for the animal, or choose CANCEL to cancel the addition of the animal. You can then select the tag number to view the animal the tag number is associated, and use the Edit action to correct the Hang Tag number.
Animal at different premises	Warning	You have scanned an animals CCIA Tag to add it to the animals you are moving to a different pen. However the animal whose tag you have scanned is recorded at being at a different premises than the original animal. So you cannot include it in the Pen move; you need to do a pasture move to insure the appropriate CLTS events are reported.	Complete the pen change. Do a “Pasture move” for this, and any other animals, you want to move to the new Premises and Pen.
Animal scanned for dam not in herd.	Warning	After starting the collection of calving information by scanning a CCIA Tag that was in calvingtags.csv, you scanned a second, different, CCIA Tag number that is not in herd.csv.	Add the animal to herd.csv to assign as a dam to calves.
Apply tag HANG_TAG to calf	Information	You have scanned a CCIA Tag that is in calving tags. The system is telling you which Hang Tag is associated with that CCIA Tag in calvingtags.csv, and should be applied to the calf.	Apply indicated Hang Tag to calf.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Applying new CCIA Tag	Information	<p>You are adding animals to a “Move to Premises” or “Remove to Market”. You have scanned a CCIA Tag that is not among the calving tags nor is currently in the herd.</p> <p>The Flokk is assuming you have come across an animal that is missing its CCIA Tag. You will be prompted to select an animal's Hang Tag. The new CCIA Tag will be applied to that animal, and that animal will be added to the move.</p>	Select the Hang Tag of the animal who is missing its CCIA Tag.
Assigned CCIA CCIA_TAG	Information	The CCIA Tag scanned has been assigned to the calf.	None
Bad file Flokk.xlsx	Failure	Your Flokk attempted to load data from flokk.xlsx, but the file's contents were not readable.	Restore data from backup.
Birth Date missing.	Warning	The COMPLETE option was selected from the menu, but the birth date has not been provided.	Select the Birth Date option and provide the birth date for the calf.
Calving tag scanned for dam.	Warning	After starting the collection of calving information by scanning a CCIA Tag that was in calvingtags.csv, you scanned a second, different, CCIA Tag number that was also in calvingtags.csv.	Scan the tag of the cow to assign that animal as the dam of the calf.
Cannot pregnancy check. No cows with CCIA Tag in herd.csv	Warning	You have the Pregnancy option set, and then requested to select a tag, but there are no cows in the herd which have a CCIA Tag value, which is required to record pregnancy test results.	Either add CCIA Tag values to your cows, or turn off the Pregnancy option.
Cannot pregnancy test	Information	The Pregnancy option is on, but the animal scanned or selected is not female or is less than 22 months old.	No action

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
CCIA Tag already in herd	Warning	You are adding an animal with the “Add animal” option, and have scanned a CCIA Tag to assign to the animal.  However the CCIA Tag you scanned is already assigned to an animal in the herd, so cannot be used for this animal.	Scan a different CCIA Tag.
CCIA Tag already in use, cannot assign to calf.	Warning	You have selected a Hang Tag for a calf for which the associated CCIA Tag number is already associated with another animal in the herd.	Select a different Hang Tag.
CCIA Tag is calving tag	Information	You are adding an animal with the “Add animal” option, and have scanned a CCIA Tag to assign to the animal.  However, the CCIA Tag you have scanned is among the calving tags, and should be assigned to a calf, not a mature animal.	Scan a different CCIA Tag.
CCIA Tag not assigned; No CLTS account or Premises not set.	Information	You have scanned a CCIA Tag that was in the calving tags.  However since either your CLTS account or a device Premises has not been set, the device cannot complete the required CLTS birth date reporting, so it has not actually assigned the CCIA Tag to the calf.	Use file mode to add your CLTS account and a Premises to the device.
CCIA Tag required in calvingtags.csv to assign at birth	Warning	You have set the option to assign CCIA Tags at birth in flokk.ini, but you have not included CCIA Tag numbers in calvingtags.csv.	Either add CCIA Tag numbers to calvingtags.csv, or turn off the option to assign CCIA Tags at birth.
Checking server	Information	The Update option has been selected. The Flokk is checking if there is an update to its software.	No action

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
CLTS account and Premises required to record calving	Warning	You have scanned a CCIA Tag that is in the Calving tags, but is not currently in the Herd. Normally, your Flokk would begin the collection of calving information. However, the required CLTS birth date reporting cannot be completed without providing your CLTS account and a source Premises.	Use file mode to add a Premises and your CLTS account to your Flokk. Select a Premises using the “Premises” selection of the Option menu.
Created calvingtags.csv	Information	There was no calvingtags.csv file. A new one has been created with the correct header.	Populate calvingtags.csv with the tags you are going to apply to calves this calving season.
Created herd.csv	Information	There was no herd.csv file. A new one has been created with the correct header.	Populate the herd.csv file with your herd information.
Created premises.csv	Information	There was no premises.csv file. A new one, with the correct header, has been created.	Populate premises.csv with the premises that you are likely to use. If you use only a single premises, placing your PID into the Premises field in flokk.ini is sufficient, and no entries in premises.csv are required.
Dam missing	Warning	You have set a calf as stillborn, but have not provided a Dam for the calf.	Select the “Alive” option, or select a Dam, for the calf.
Dam set to HANG_TAG	Information	The cow noted has been set as the dam of the calf.	None
Deleted NUMBER sessions files	Information	Older sessions files have been deleted to retain the number of sessions files requested.	None
Destination missing	Warning	You have attempted to complete a Move Out, but have not specified the Premises the animals are moving to.	Select the “Destination” option and select or enter the Premises the animals are moving to.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Disposition missing	Warning	You have attempted to complete a Move Out, but have not specified whether the move is a Pasture or Market move.	Select the “Disposition” option and select the move type.
Duplicate option OPTION found in section SECTION on line LINE of flokk.ini'	Failure	More than one setting for an option has been found in flokk.ini.	Delete the incorrect or redundant line from flokk.ini.
Duplicate section SECTION on line LINE of flokk.ini'	Failure	The same section has been defined more than once in flokk.ini.	Delete the incorrect or redundant section from flokk.ini.
Eject Flokk from computer before exiting file mode	Warning	The Done button was pressed while the Flokk was in file mode before it had been ejected from the computer accessing the files on the Flokk.	Use the eject drive feature of your computer to eject the drive related to the Flokk before pressing the Done button.
Entered tag not found in herd	Failure	A Hang Tag was selected, but is not in the herd file.	This should not occur in normal operations. Send Flokk for service.
Error in Calving worksheet. Read file Flokk_XLSX_LOAD_ERRORS.txt.	Warning	Errors were found in the Calving worksheet in flokk.xlsx.	Enter file mode. Read the contents of Flokk_XLSX_LOAD_ERRORS.txt and make the corrections required.
Error in calvingtags.csv. Read file herd_load_errors.txt	Warning	An error was found while loading the contents of calvingtags.csv.	Use file mode to open the file herd_load_errors.txt, review the errors noted there, and correct as necessary.
Error in flokk.ini	Failure	An undefined error has occurred while parsing flokk.ini.	Review and correct the file.
Error in Herd worksheet. Read file Flokk_XLSX_LOAD_ERRORS.txt.	Warning	Errors were found in the Herd worksheet in flokk.xlsx.	Enter file mode. Read the contents of Flokk_XLSX_LOAD_ERRORS.txt and make the corrections required.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Error in herd.csv. Read file herd_load_errors.txt	Warning	An error was found while loading the contents of herd.csv.	Use file mode to open the file herd_load_errors.txt, review the errors noted there, and correct as necessary.
Error in Plates worksheet. Read file Flokk_XLSX_LOAD_ERRORS.txt.	Warning	Errors were found in the Plates worksheet in flokk.xlsx.	Enter file mode. Read the contents of Flokk_XLSX_LOAD_ERRORS.txt and make the corrections required.
Error in Premises worksheet. Read file Flokk_XLSX_LOAD_ERRORS.txt.	Warning	Errors were found in the Premises worksheet in flokk.xlsx.	Enter file mode. Read the contents of Flokk_XLSX_LOAD_ERRORS.txt and make the corrections required.
Errors in find.txt. See file find_load_errors.txt	Warning	An error was found when loading find.txt. Specifically, a value appeared to be either a CCIA Tag or a Hang Tag, but could not be found in the herd.	Use file mode to open the file find_load_errors.txt, review the errors noted there, and correct the contents of find.txt if necessary.
Gender missing.	Warning	The COMPLETE option was selected from the calving menu, but the gender has not been provided.	Select the Gender option and provide the gender for the calf.
Hang Tag with birth year, or Birth date, required	Warning	In order for the Flokk to be able to determine the age of an animal, you need to provide either: <ul style="list-style-type: none"> <li>• a Birth date</li> <li>• A Hang Tag that indicates the birth year, either by including a single character that is a valid birth year letter, or if the tag is all numeric, the first two digits need to indicate a year within the last 20 years.</li> </ul>	Provide a Birth date, or provide a Hang Tag that includes a birth year.  Note that the letters I, O, Q, and V are never used as birth year indicators. Including any of these characters in the Hang Tag will cause this error.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Heifer Hang Tag is replacement so can NOT be added.	Information	When using the “ADD ANIMAL” option of the “Remove to Market” menu, you have selected the tag of a heifer who has had the “Replacement” condition applied to it.	Either: <ul style="list-style-type: none"> <li>Sort the heifer out and do not include it in the shipment.</li> <li>Note the animals Hang Tag. After the “Remove to Market” is complete, select the animal and apply the “Market” condition to it. You can then do a second “Remove to Market”, including only this heifer.</li> </ul>
Herd file saved	Information	The updated herd.csv file has been saved.	None
Herd of NUMBER animals loaded.	Information	How many animals were loaded from herd.csv	None
Is calving tag	Warning	You have changed the colour, or a letter or number, in a Hang Tag that results in a tag value that is an unused calving tag.	Either choose a new Hang Tag number for the animal, or choose CANCEL to cancel the addition of the animal.
Loading herd.csv file failed at line	Failure	Error parsing the herd.csv file on the line noted.	Review the line and correct any errors.
Low battery detection not working	Warning	The Flokk is not detecting the batter status.	Send Flokk for service.
Low battery shutting off	Warning	The Flokk has exceeded the allowed operating time after low battery has been detected, so is shutting itself off.	Connect Flokk to a USB power source to recharge it's battery.
NN calving tags available	Information	The number of calving tags remaining in calvingtags.csv that have not yet been assigned to an animal in herd.csv.	None

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
NN head ready for move in.	Information	Indicates the number of head that have been successfully added to the Move In, and will be added to the herd when the COMPLETE option is selected.	None
NN premises loaded.	Information	The number of premises that were loaded from premises.csv.	No action
NNNNNNNNNNNN NNNN dead or sold.	Warning	The RFID tag scanned was assigned to an animal which had the Dead condition or applied to it, or was moved to Market, and has been removed from the herd..	None
NNNNNNNNNNNN NNNN not a CCIA Tag	Warning	The RFID tag scanned is not a CCIA Tag, and is not supported by the Flokk.	None
No animals in herd.	Warning	You scanned a CCIA Tag which was unrecognized. You then selected the “Replacement tag” option.  However, there are no animals in the herd.	Select the “Add animal” option and add the animal's herd record.
No animals in herd.csv with CCIA Tag	Warning	You have scanned a tag that is not in calvingtags.csv or herd.csv, then selected the Replace option from the menu presented. However, no animals in herd.csv have a CCIA Tag number.	Re-scan the tag and select the Add option instead.
NO calving tags available	Warning	All tags in calvingtag.csv have been assigned to animals in herd.csv, or the calvingtags.csv file is empty.	Add new tags to the calvingtags.csv file.
No CLTS account in flokk.ini	Warning	Your CLTS account name is not in flokk.ini.  Your CLTS account name is required in the files that are uploaded to the CLTS for birth, cross reference, herd addition, and sighted updates.	Edit flokk.ini and add your CLTS account name to the “CLTS Account ID” option.
No cows in herd to set as nurse	Warning	You have requested to set a Nurse for a calf, but there are no Females in the herd more than 22 months old.	Add the cow to the herd records.
No input method found	Failure	No input device was found in the programs operating environment.	Send Flokk for service.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
No mature animals without CCIA Tag in herd.	Warning	You scanned a CCIA Tag which was unrecognized. You then selected the “On animal” option. However, there are no mature animals in the herd which do not already have a CCIA Tag applied.	If the animal is a calf, scan the CCIA Tag again and select the “Apply tag to calf” option. If the animal is a cow, scan the tag again and select the “Replacement tag” option.
No updates	Information	The software on your Flokk is current.	No action
Not complete	Warning	You are entering a new Premises ID (PID) but it is not complete.	PID's are always 8 characters long. Please provide all 8 characters of the PID.  Scroll left or right until “CANCEL” is displayed, then press the Done button if you do not wish to provide a new PID.
Not recognized	Information	The CCIA Tag just read is not in the current herd, nor is among the unused CCIA Tag values in the calving tags.	Choose how you would like to proceed from the menu presented.
Not to be used if CLTS event required.	Warning	You have selected the “Add animal” option from the Start menu. The first two times you use this option, the Flokk will remind you that this option is only to be used to add animals already on your premises to your herd records. If you are adding animals to you herd from another premises, then use the “Move in” option.	Ensure you are using the correct option to add animals to your herd.
Overwriting file NUMBERscans.csv	Warning	The scan number has cycled back from 9999 to 0001, and and is now overwriting existing files.	Set the “maximum sessions retained” in flokk.ini low enough to avoid overwriting old scan files.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Pen missing	Warning	You have tried to complete an animal addition. However the Premises you have provided has more than one Pen, and you have not selected a Pen for the animal.	Chose the “Pen” option and select the Pen the animal will be moved into.
PID is source	Warning	The new Premises ID (PID) you have supplied is the source premises for the move.	Press the right or left function button until “Cancel” is displayed. Press the “Done” button. Use the “Source” option to select a different premises.
Safe to power off.	Information	You have selected the “POWER OFF” option from the Shut down menu. The Flokk has saved all of it’s data files and prepared the system to be shut off.	Turn the power switch off.
Premises is PREMISES	Information	The current premises set in the system.	None
Preparing files	Information	After you have selected the file option, the system is updating the data files before enabling the device for file access.	None
Removing CCIA CCIA_TAG from animal HANG_TAG	Information	You have requested removal of a CCIA Tag record from an animal.	Scan the new CCIA Tag to be assigned to the animal, and use the “Add” option to assign it to this animal.
Reported NN birth dates.	Information	Your Flokk found animals in the herd that were younger than the weaning age, but for whom the Flokk did not have a record that the animals birth date had been reported to the CLTS. The Flokk has generated CLTS birth date events for each of these animals.	Upload the CLTS_BIRTHDATE.csv file to the CLTS.
RFID error	Warning	The RFID reader module provided an expected result.	If error is frequent, send Flokk for service.
RFID initialization failed	Failure	The initialization of the RFID reader module was not completed.	Send Flokk for service.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
RFID timeout	Warning	A response expected from the RFID reader module was not provided.	If error is frequent, send Flokk for service.
Scan FIRST CCIA	Information	You are adding calving tags by scanning the first and last CCIA Tags in a series. You responded “No” to the prompt “Was first CCIA?”.	Scan the first CCIA Tag in the series of tags you want to add as calving tags.
Scan LAST CCIA	Information	You are adding calving tags by scanning the first and last CCIA Tags in a series. You have scanned the first in the series, and the Flokk is waiting for you to scan the last one.	Scan the last CCIA Tag in the series of tags you want to add as calving tags.
Scan new CCIA Tag to wean calves without CCIA Tag.	Information	You have selected a calf that is eligible for weaning, assigned a CCIA Tag to it, and then selected the “Move to Market” option from the Action menu. However, none of the other calves have CCIA Tags assigned to them, so the Flokk cannot offer you the “ADD ANIMAL” option.	To add a calf to the “Move to Market”, scan a new CCIA Tag with the Flokk and apply it to the calf. The Flokk will prompt you for the Hang Tag of the calf. It will then add the calf to the “Move to Market”.
Scans saved	Information	The outstanding CCIA Tag scan files have been saved.	No action
Restart menu to update to version VERSION	Information	The updated software has been downloaded, and will be installed the next time the Flokk is restarted.	When convenient, select the “Restart” option from the Power off menu.
Source missing	Warning	You have attempted to complete a Move Out, but you have not specified a Source premises.	Select the “Source” option and select the originating premises.
Tag scanned is not a cow	Warning	After starting the collection of calving information by scanning a CCIA Tag that was in calvingtags.csv, you scanned a second, different, CCIA Tag that was in herd.csv but is not a female more than 22 months old.	Scan the tag of the cow to assign that animal as the dam of the calf.
Tag TAG in find.txt but not in Herd	Warning	A CCIA or Hang Tag value was found in find.txt that is not in herd.	Edit find.txt and correct.

<b>Message</b>	<b>Type</b>	<b>Description</b>	<b>Action</b>
Too many tags to add	Warning	When adding calving tags by scanning the first and last CCIA Tag in a series, your Flokk will not add more than 10,000 calving tags	Confirm your new tags truly are sequential.
Unrecognized button	Warning	A button value was generated that the system does not recognize.	Report to the product provider.
Update not successful	Warning	The software update down load did not complete, or was corrupt.	Try again
Updated animal HANG_TAG from CCIA CCIA_TAG to CCIA CCIA_TAG	Information	You have scanned a CCIA Tag that was not know to the system, selected the “Replace” option, then selected the Hang Tag of the animal you want the CCIA Tag assigned to.	None
Updated calving tags to current year	Information	Your Flokk has updated the Hang Tags in the calving tags to reflect the current year.	None
UUID file corrupt	Warning	The Flokk was able to find a UUID (Universally Unique Identifier) file on startup, but the file did not load correctly. This will not impact day to day operations, but may impact some lesser used functions.	Send the Flokk for servicing when convenient.
UUID not found	Warning	The Flokk was not able to find it's UUID (Universally Unique Identifier) on startup. This will not impact day to day operations, but may impact some lesser used functions.	Send the Flokk for servicing when convenient.
Vehicle missing	Warning	You have tried to complete an animal Move In or Move Out. However you have not specified the license plate of the vehicle that was used to move the animals.	Chose the “Vehicle” option and select or add the license plate of the animal transport.
Was first CCIA?	Information	You are adding calving tags by scanning the first and last CCIA Tags in a series. The Flokk is confirming that you have scanned the first tag in the series.	Press the “Yes” or “No” function button.

Message	Type	Description	Action
Weight missing.	Warning	The COMPLETE option was selected from the calving menu, and the “Collect birth weight” option in flokk.ini has been set, but the weight has not been provided.	Either select the Weight option and provide the birth weight for the calf, or set the option “Collect birth weight” in flokk.ini to 0.
Weights saved	Information	The outstanding weighing results have been saved.	No action

## Errors in herd.csv, flokk.xlsx, and calvingtags.csv

Your Flokk will load herd information from flokk.xlsx or herd.csv and calvingtags.csv whenever it is turned on or exits file mode.

If errors are encountered loading the herd.csv and calvingtag.csv files, your Flokk will display a message on the screen instructing you to review the contents of the file herd\_CSV\_load\_errors.txt or Flokk\_XLSX\_load\_errors.txt.

You will need to connect your Flokk to a computer and turn on file mode to read the contents of this file and correct any errors in herd.xls, herd.csv, or calvingtags.csv.

After an error has been found in flokk.xlsx, the flokk.xlsx file on the Flokk will contain ONLY items that loaded without errors. The original file which contained the errors will be renamed to Flokk\_needs\_correction.xlsx, and the row numbers in the error messages will be correct for this file.

This give you the option to open both worksheets, copy any items missing from Flokk\_needs\_correction.xlsx to flokk.xlsx, and correct any errors noted

These files consists of several sections, one for file or worksheet. If no errors were encountered for a file or worksheet, the section will contain a single line reading “None”. If the file is not present, no problems were encountered loading information.

Most error messages indicate the line number or row number in the respective file where the error occurred.

### Resolution

#### Messages related to herd.csv or the herd worksheet of flokk.xlsx:

Birth date missing for calf “Hang Tag” on row NUMBER	An animal was add to the herd who, according to it's Hang Tag, was born this year, but no birth date was provided. Provide a birth date for the animal.
Both Hang_tag with birth year and Birth_date missing on line NUMBER	The animals age cannot be determined, because there is neither a Hang Tag which contains a single character which is a valid birth year, a numeric Hang Tag which starts with a birth year, nor has the birth date been provided for the animal.

## Resolution

Gender missing for mature animal TAG on row NUMBER.	A gender must be provided for all animals more than 22 months old.
Hang_tag value missing on line NUMBER	A record was found with no Hang Tag value. A Hang Tag value must be provided for each animal.
Invalid birth date for animal Hang Tag on line NUMBER	All dates in CSV files should be recorded in the form “YYYY-MM-DD”.  All values must have leading zeros, i.e. the month of January must be entered as “01”, not “1”.  Ensure you have not included an impossible date values, e.g. a month greater than 12, or more than 28 days in February.
Invalid CCIA Tag on line NUMBER	CCIA Tag values are always exactly 15 characters long, and consist only of digits.  Do <b>not</b> include the initial “01” value that is printed on CCIA Tags.
Invalid or missing breed code on line NUMBER	The Breed header has been included, but the breed value for an animal is blank, or is not one of AN, AR, HH, HP or SM.
Loading herd.csv file failed at line NUMBER	Parsing of the file failed at the line noted.  Ensure that there are enough separators for all the fields required on each line. Ensure that the separators are consistent. Make sure that a separator has not been included within a field value.
Missing required field FIELDNAME	One of the fields Hang_tag, CCIA_tag, Gender, or Dam is missing.  At a minimum, the header line of the herd.csv file should be as follows: “Hang_tag,CCIA_tag,Dam,Gender”
Nurse cow “COW_TAG” for calf “CALF_TAG” not in herd	A nurse cow was set for calf CALF_TAG, but that cow is not in the herd.
Second animal with CCIA Tag CCIA_TAG on line NUMBER	More than one animal was found with the same CCIA Tag value. Either correct the CCIA Tag value for a record, or remove the second line if redundant.
Second animal with Hang_tag “HANG_TAG” on line NUMBER	More than one animal was found with the same Hang Tag value. Either correct the hang tang value for a record, or remove the second line if redundant.

### Messages related to calvingtags.csv or the Calving tags worksheet of flokk.xlsx:

CCIA Tag CIA_TAG repeated on line NUMBER	The same CCIA Tag value was found on more than one line.
Hang_tag “Hang Tag” repeated on line NUMBER.	The same Hang Tag value was found on more than one line.

## Resolution

Missing required field  
FIELDNAME

The field Hang\_tag is missing.  
At a minimum, the first line of the herd.csv file should read:  
“Hang\_tag”

## Errors loading pregnancy.csv and weights.csv

Your Flokk will load the information from pregnancy.csv and weights.csv if these files are changed while the Flokk is in file mode.

If problems are encountered loading pregnancy.csv or weights.csv files, your Flokk will display a message instructing you to review the contents of pregnancy\_load\_errors.txt and/or weights\_load\_errors.txt.

If pregnancy\_load\_errors.txt or weights\_load\_errors.txt is not present, no problems were encountered loading the respective file.

You will need to connect your Flokk to a computer and set it to file mode to read the contents of these files and correct any errors by making changes to pregnancy.csv and/or weights.csv.

The version of pregnancy.csv and/or weights.csv that included the errors will be copied to pregnancy\_needs\_correction.csv or weights\_needs\_correction.csv. This is necessary because the Flokk will create a new version of pregnancy.csv and weights.csv based on it's internal records every time it enters file mode.

Please note that, regardless if the problems in pregnancy\_needs\_correction.csv or weights\_needs\_correction.csv are corrected, these files **will never** be loaded by your Flokk. Either overwrite pregnancy.csv and/or weights.csv and then make the required changes, or copy the corrected lines from pregnancy\_needs\_correction.csv or weights\_needs\_correction.csv to pregnancy.csv and/or weights.csv as required.

Most error messages indicate the line number in the respective file where the error occurred.

Message	Resolution
File with errors has been copied to file pregnancy_needs_correction.csv.	The version of pregnancy.csv that included errors has been copied to pregnancy_needs_correction.csv. Note that regardless if the problems in this file are corrected, the file will <b>never</b> be loaded by your Flokk
File with errors has been copied to file weights_needs_correction.csv.	The version of weights.csv that included errors has been copied to weights_needs_correction.csv. Note that regardless if the problems in this file are corrected, the file will <b>never</b> be loaded by your Flokk
Hang_tag value missing on line NUMBER.	A record was found with no Hang Tag value. Provide a Hang Tag value for the animal.

Message	Resolution
Invalid birth date DATE for animal HANG_TAG on line NUMBER.	<p>Birth dates should be recorded in the form “YYYY-MM-DD”.</p> <p>All values must have leading zeros, i.e. the month of January must be entered as “01”, not “1”.</p> <p>Ensure you have not included an impossible date values, e.g. a month greater than 12, or more than 28 days in February.</p>
Invalid test date TEXT in header.	<p>The TEXT in the file header could not be interpreted as a test date.</p> <p>Test dates should be recorded in the form “YYYY-MM-DD”.</p> <p>All values must have leading zeros, i.e. the month of January must be entered as “01”, not “1”.</p> <p>Ensure you have not included an impossible date values, e.g. a month greater than 12, or more than 28 days in February.</p>
Invalid weighing date TEXT in header.	<p>The TEXT in the file header could not be interpreted as a weighing date.</p> <p>All dates should be recorded in the form “YYYY-MM-DD”.</p> <p>All values must have leading zeros, i.e. the month of January must be entered as “01”, not “1”.</p> <p>Ensure you have not included an impossible date values, e.g. a month greater than 12, or more than 28 days in February.</p>
Missing required field Hang_tag in header	<p>The required field Hang_tag is missing.</p> <p>At a minimum, the header line should be: “Hang_tag,TEST_DATE”</p>
No CCIA Tag for animal HANG_TAG on line LINE.	<p>The animal with the Hang Tag value HANG_TAG does not have a CCIA Tag recorded in herd.csv.</p> <p>Add the animals CCIA Tag value to it's line in herd.csv.</p>
Tag HANG_TAG on line LINE not found in herd.	<p>The Hang Tag value provided does not have a corresponding animal in herd.csv.</p> <p>Either correct the HANG_TAG value, or add the animal, and it's CCIA Tag value, to herd.csv.</p>

## Errors loading premises.csv or the Premises worksheet of herd.xlsx

Premises and Pens are loaded either from premises.csv, or the premises worksheet of herd.xlsx.

The following errors may be reported in the Premises section of Flokk\_XLSX\_load\_errors.text, or premises\_CSV\_load\_errors.txt.

Message	Resolution
Colon : not allowed in pen name “Pen name” on line NN.	As the colon (:) character is used to separate the premises ID from Pen in some cases, Premises ID’s or Pen names with colons are not allowed.
Colon : not allowed in premises ID “PID” on line NN.	As the colon (:) character is used to separate the premises ID from Pen in some cases, Premises ID’s or Pen names with colons are not allowed.
Duplicate Premises description “Description” on line NN.	The description for each premises must be unique. Update the description so that it is different from all other premises descriptions.
Duplicate premises ID “PID” on line NN.	Premises ID’s must be unique. Remove or correct the duplicate Premises ID.
Invalid province code in Premises ID “PID” on line NN.	PID’s always start with the letter “A”, or one of AA, AB, BC, MB, NB, NL, NT, NS, NU, ON, PE, QC, SK, or YT.
Premises ID “PID” not 9 characters on line NN.	Premises ID’s are always 9 characters long. Correct the Premises ID.

## Menu options

### "Flokk Ready" screen

The Ready functions are available when the Flokk is first started, or when the system is waiting for an animal to be selected. To activate a function, press the function button below the label on the screen.

While waiting for a Ready function to be selected, or a CCIA Tag to be scanned, the system will display a number of status message (see page 135). These function buttons can be pressed at any time while these status messages are being displayed.

One of:	
Start	Select from options to select an animal already in the herd, move in animals to the herd, or add a calf or cow to the herd.
or:	
Tag	Enter a Hang Tag for an animal or a calving tag. Will not be offered if both the herd records and calving tags are empty.
and:	
Options	Display the options menu

### Shutdown menu

The Shutdown menu is reached by either:

- Clicking the Done button when the "Flokk Ready" screen is displayed
- Selecting the “SHUT DOWN” option from the “Start” menu

The menu provides you with three options to proceed:

CONTINUE	Take no action and return to the "Flokk Ready" menu.
POWER OFF	Save all files and prepare the Flokk for it's power switch to be turned off. Do <b>NOT</b> turn the power switch of your Flokk off until the message “Safe to turn power off.” is displayed.
Service mode	Save all files and start Service mode (see page 119)
Restart	Restart the Flokk

## Start menu

The start menu is accessed by pressing the left function button from the "Flokk Ready" display.

Options will not be presented if they cannot be completed. In particular, you must have a CLTS account and a premises set to have the “Add calf” and “Move in animal” options included in this menu.

The use of this menu is optional, and not recommended once all the animals in your herd have been added to your Flokk. See page 58 for more information.

The options on the Start menu are:

NONE	Take no action and return to the "Flokk Ready" menu.
Select Hang Tag	Select an animal by it's Hang Tag, or a calving tag.
Add calf	Add a calf to the herd.
Move in animal	Move an animal, or several animals, from another premises into your herd and complete the required CLTS reporting.
Add animal	Add a single animal to the herd <b>without</b> completing any CLTS reporting.  This function is to be used <b>only</b> to add a record of an animal already in your herd to your Flokk. It should never be used to receive an animal from another premises.
SHUT DOWN	Proceed to select whether to enter Service mode, restart your Flokk, or prepare your Flokk to have it's power switch turned off.

## Options menu

The Options menu is used to make changes to the Flokk's behaviour to accommodate current requirements. It is accessed by pressing the Option function button on the "Flokk Ready" menu.

To select an item from the menu, press the left or right function button to move from one option to the next. When the desired option is displayed, press the Done button.

Individual selections on this menu are not always presented; items will be added or removed depending upon whether they are appropriate given the current state of the Flokk.

NONE	Make no change to system options and return to the "Flokk Ready" menu.
Save	Pause all operations and save all data from memory to permanent storage.
Weigh	<p>Toggle weighing mode on and off.</p> <p>When weighing mode is on, a weight will be collected whenever a Hang Tag is selected or a CCIA Tag is scanned for an animal in the herd.</p>
Group medication	Toggle whether to record a "group medication" event for every animal selected.
Pregnancy	<p>Select the method of recording pregnancy check results, or turn pregnancy check recording off.</p> <p>When pregnancy checking is on, a pregnancy check result will be collected whenever a Hang Tag is selected or a CCIA Tag is scanned for a cow (female, at least 22 months old) in the herd.</p> <p>If there are no cows in the herd, this option is not offered.</p>
File	<p>Have the Flokk go into file mode, where the Flokk will behave like a USB storage device, allowing the files on the Flokk to be accessed and modified.</p> <p>Once all changes to the files are complete, file mode can be exited by pressing the Done button.</p>
Units	Select whether to use pounds or kilograms for weight recording and reporting.
Sighted	Toggle whether scanning of CCIA Tag scans are reported as CLTS sighted events in CLTS_SIGHTED.csv (see page 116).
Premises	<p>Display a menu of the premises in premises.csv, and select one for the system to use as the current premises.</p> <p>If there is only one PID in premises.csv, that premises is used for all operations and this option is not presented.</p>
Pen	If there is more than one Pen at the current premises, display a menu that allows you to select a default Pen.
Backup	If you have subscribed to the backup service, and if your Flokk is connected to a WiFi network, make a backup copy of your files to your private account at flokk.ca.
Submit	If you have subscribed to one or more data submission services, and if your Flokk is connected to a WiFi network, submit any outstanding records required.
Wizard	Start a configuration Wizard session.
Remote service	Select this option when directed by Flokk service personnel. This will enable them to remotely access your Flokk to diagnose and resolve issues.
End remote	When remote access to your Flokk is no longer required, select this option to disable remote service access.

Demo	Reset the Flokk to use the files in the DemoFiles directory. See page 124 for more information.  If the DemoFiles directory is not present, this option is not presented.
flokk.xlsx	Restore the preparation of flokk.xlsx when entering File mode, if generation of it has been cancelled because flokk.xlsx file was not being updated.
Update	Check to see if an update to the Flokk's software is available and, if available, download it to the Flokk for installation the next time the Flokk is turned on.
Lock	Lock the Flokk to avoid unintended activation of buttons while the device is not in use.  To unlock the device the left, then right, function buttons must be pressed.

## Animal screen

The animal function keys are displayed when an animal has been selected, either by selecting a Hang Tag, or by scanning a CCIA Tag..

Tag	Enter a Hang Tag for another animal or a calving tag. Will not be present if both herd.csv and calvingtag.csv are empty.
Action	Display a menu of actions that can be completed on the animal.

## Action menu

The Action menu is displayed when the Action function button has been pressed, and includes options that, with the exception of Lock, apply to the specific animal that has been selected.

The options available to you will change depending upon what is correct for the animal being displayed. For example, “Set nurse” will not be available if the animal is not a calf, i.e. is more than a year old.

NONE	Make no change to the animal and return to the animal functions.
Flag	Mark the animal as flagged in the current scans.csv file. Not offered if raw CLTS scan recording is not turned on.
Un-Flag	Clear the animals flag in the current scans.csv file.
Wrong tag	Clear the CCIA Tag associated with the animal from the system.  This option will only appear when the animal has been selected by reading a CCIA Tag.  It will typically be used when a CCIA Tag attached to an animal has been scanned, but the resulting information displayed, in particular the Hang Tag value, is incorrect, indicating that the wrong CCIA Tag number is in the animals herd record.  Use of this option will typically be followed immediately by reading the CCIA Tag on the animal again and using the “Replace” option of the “Unrecognized CCIA Tag” menu to record the correct CCIA Tag for the animal.

See dam or See nurse	If the current animal is less than a year old, and the Dam or Nurse of the calf is in the herd, selecting this option will display the information for the Nurse if defined, otherwise the Dam.
See calf	The current animal is a cow, selecting this option will either display the information for her calf, or provide a menu of calf Hang Tags to choose from if there is more than one calf for the cow (e.g. twins).
Apply condition	Set a condition for the animal.
Set nurse	If the current animal being displayed is a calf, select a cow to be a nurse for the calf. After this has been done, the Flokk will use the Nurse for the calf rather than it's Dam whenever it needs to find the cow associated with a calf.
Medication	Record a medication for the animal.
Weigh	Collect a weight for the current animal.
Move to Pen	Record a different Pen as the current location of the animal.
Move to Premises	Begin, with the animal currently displayed, to move animals to another premises, but retain them in the herd records.
Remove to Market	Begin, with the animal currently displayed, to remove animals out of the herd permanently and send them to market (Auction Mart or Feedlot).
Return from move	The animal was in past moved to a premises different that the current premises set in the Flokk. Move the animal and, optionally, all the other animals moved on the same date to the same premises, back to the current premises.
History	Display the animals history.
Edit	Update the herd record for the current animal.

## Move to Pen menu

The menu is presented when the “Move to Pen” option has been selected from the “Action” menu.

If you scan the CCIA Tag of an animal in the Herd while this menu is being displayed, that animal will also be moved.

Pen?	Select a Pen at the current Premises for the animals to be moved into.
ALONE	If the animal you had selected when you started the move was part of a cow/calf set, the Flokk has added all members of the set to the move. Selecting the ALONE option will remove the other animals from the remove, and retain just the animal that you initially selected.  For any additional animals added to the move, only the animal selected will be added, not the entire cow/calf set.
ADD PEN	Move all other animals currently in the same pen as the original animal selected to the new Pen

ADD ANIMAL	Add another animal by selecting it's Hang Tag.
CANCEL	Cancel the movement of all animals. No data is saved or modified.
COMPLETE	Move all animals selected to the Pen.

## Apply condition menu

This menu is presented when the “Apply condition” option has been selected from the “Action” menu, and includes the conditions that can be applied to an animal.

The conditions will be relevant to the current situation, so not all options will always be presented. In particular, the “Dead” option is only offered if the animal was selected by scanning it's CCIA Tag.

NONE	Apply no condition to the animal and return to the animal information screen.
Bloated	The animal is bloated.
Ill	The animal is ill.
Injured	The animal is injured.
Lame	The animal is lame.
Scours	The animal has scours.
Recovered	The animal recovered from being bloated, ill, injured, lame or scoured. Is only offered if one of these conditions has been previously recorded for the animal.
Rank	Animal displays dangerous or erratic behaviour. Only offered for animals more than 12 months old.
Lost calf	Cow lost it's calf. Only offered for females more than 22 months old.
Labour 1st clf	A cow lost it's calf due to labour related issues.
Weather 1st clf	A cow lost it's calf due to the weather.
Deformed 1st clf	A cow lost it's calf because it was deformed at birth.
Maternal 1st clf	A cow lost it's calf because of an issue with the Cow's maternity ability.
Replacement	The animal is a female that will be retained as replacement stock.
Market	The animal is a female that will be sent to market.
Cull	Animal will be culled.
Retain	Animal will be retained. Only offered if a cull condition has previously been recorded for the animal.
Neutered	Only offered for male animals.

Dead	Animal has died. When the condition is applied, the animal's record is moved to the herd_archive.csv file, and a Deceased event is reported to the CLTS.  If the animal has a CCIA Tag in it's herd record, will only be offered if the animal was selected by scanning it's CCIA Tag.
Missing	Animal is missing.
Found	Animal was found. Only offered if a Missing condition was previously reported.

## Edit menu

Select an item to update for the current animal. Reached by selecting the "Edit" option from the "Action" menu.

There is no option for CCIA Tag. A new CCIA Tag is set for the animal by scanning a new CCIA Tag, i.e. one not known to the Flokk.

Hang Tag	Change the Hang Tag value for the animal.
Birth date	Change the birth date for an animal.
Gender	Set a new gender for the animal.
Display	Select the display value to be displayed for an animal..
Dam	Select a different dam from the cows in the herd.
Nurse	Select a different cow to be the nurse cow for the calf.
CANCEL	Cancel updating the animals herd record and return to the Animal screen. No data is saved.
COMPLETE	Finish updating the animals record and return to the Animal screen.

## Calving menu

The calving menu is displayed when a tag in calvingtags.csv has been selected that has not yet been applied to a calf, i.e. is not in herd.csv, or the "Add calf" option is chosen from the start menu.

The fields will be displayed in one of two ways.

- If no value has been provided for the field, and the field is required, a question mark will be added to the field name, and it will be displayed before the Cancel and Complete options.
- If a value has been provided for the field, the field name will be displayed without a question mark, and it will be displayed after the Cancel and Complete options. This allows the field to be selected again to correct a value.

Birth date	Enter the birth date of the calf.
Dam	Select the dam from the cows in the herd.
Gender	Select the gender of the calf.

Neuter	Record a Neutered condition for the calf. Only offered if the Gender of the calf has been set to Bull.
Display	Select the value to be displayed for the calf..
Stillborn	Record the calf as dead at birth.
Pen	Set a pen for the calf and dam to be located to.
Ease	Collect the calving ease code. The collection of the Calving ease field is optional, and disabled by default. See the section on calving (page 82). The dam must be selected before the Ease option will be available.
Vaccination	Record a vaccination for the calf.
Weight	Collect the birth weight of the calf. The collection of the display field is optional, and disabled by default. See the section on calving (page 82).
CANCEL	Cancel the collection of records for a calf and return to the "Flokk Ready" menu. No data is saved.
ADD TWIN	Complete the addition of the current calf to the Herd record, then begin collecting information for it's twin. The Birth date, Display, and Dam for the first twin will be used as the default values for the second twin. You will need to provide a Hang Tag and Gender for the second twin.
COMPLETE	Complete the collection of records for a calf and add the calf to herd.csv. Return to the "Flokk Ready" functions. Some fields are required (Birth date, Dam, Gender, and, if optionally selected to be collected, Weight). If an input has not been provided for these fields, an error message will be displayed and the Flokk will return to the Calving menu.

## Move in menu

The move in menu is displayed whenever the “Move in” option is selected from the “Unrecognized CCIA Tag” menu.

The items that require input will be displayed in one of two ways.

- If no value has been provided for the field, a question mark will be added to the field name, and it will be displayed before the NEXT, CANCEL and COMPLETE options.
- If a value has been provided for the field, the field name will be displayed without a question mark, and it will be displayed after the NEXT, CANCEL and COMPLETE options. This allows the field to be selected again to change a value.

Birth date	Enter the birth date of the animal.
Hang Tag	Select a new Hang Tag for the animal.
Gender	Select the gender of the animal.
Vehicle	Select the license plate number of the vehicle used to move the animals.
Display	Select the value to be displayed for the animal.
Vaccination	Record a vaccination for the animal.
Weight	Collect the birth weight of the animal.
NEXT	Complete adding this animal, and begin recording the next animal.
CANCEL	Cancel the collection of records for all animals being moved in and return to the Ready functions. No data is saved.
COMPLETE	Complete the collection of records for the move in. Add all animals to the herd, and create the required CLTS “Move In” events. Return to the "Flok Ready" functions. Some fields are required (Hang Tag and Vehicle). If an input has not been provided for these fields, an error message will be displayed and the Flokk will return to the “Move in” menu.

## Move out menu

The move out menu is displayed whenever the “Move out” option is selected from the “Action” menu.

The items that require input will be displayed in one of two ways.

- If no value has been provided for the field, a question mark will be added to the field name, and it will be displayed before the ADD ANIMAL, CANCEL and COMPLETE options.
- If a value has been provided for the field, the field name will be displayed without a question mark, and it will be displayed after the ADD ANIMAL, CANCEL and COMPLETE options. This allows the field to be selected again to change a value.

Disposition	Provide the disposition of the animals.
Destination	Specify the destination for the animals.
Pen	If the move is a Pasture move out, and there is more than one Pen at the destination location, then select a Pen for the animal to be moved into.
Vehicle	Select the license plate number of the vehicle used to move the animals.

ALONE	<p>If the animal selected when you started the move was part of a cow/calf set, the Flokk has added all members of the set to the move. Selecting the ALONE option will remove the other animals from the remove, and retain just the animal that you initially selected.</p> <p>For any additional animals added to the move, only the animal selected will be added, not the entire cow/calf set.</p>
ADD ANIMAL	Add another animal to the Move out by selecting it's Hang Tag.
ADD PEN	Add all animals in the same pen as the original animal selected to the Move out.
CANCEL	Cancel the collection of records for all animals being moved out and return to the "Flokk Ready" functions. No data is saved or modified.
COMPLETE	<p>Complete the collection of records for the move out. Delete all animals from the herd, and create the required CLTS "Move out" events. Return to the "Flokk Ready" functions.</p> <p>Some fields are required (Disposition, Destination and Vehicle). If an input has not been provided for these fields, an error message will be displayed and the Flokk will return to the "Move out" menu.</p>

## Unrecognized CCIA Tag menu

This menu is displayed when a CCIA Tag has been scanned that is neither in the herd or among the unused CCIA Tags in the calving tags.

Apply to calf	Apply the tag to a calf that currently does not have a CCIA Tag assigned to it. You will be prompted to select the Hang Tag of a calf that does not have a CCIA Tag assigned to it.
Move in animal	Begin the process of moving new animals into the herd. Prepare a "Move in" event for submission to the CLTS for each animal.
Replacement tag	Replace the CCIA Tag for an animal that had a CCIA Tag which has been lost.
Add calving tags	Add a range of CCIA Tags, and a system generated Hang Tag value, to the Calving tags.
On animal	Provide a new Hang Tag value. If the Hang Tag is for an animal already in the Flokk's herd records, then update that herd record with the scanned CCIA Tag and report it to the CLTS. If the Hang Tag is not among the herd records, begin adding a new animal, using the Hang Tag entered and the CCIA Tag scanned.

## Menu options in Service mode

When your Flokk is in Service mode, the following screens and menus are available.

## Service Ready screen

When the Flokk is ready to use in Service mode, two function buttons are offered:

ACTION	Access the Action menu
SETUP	Access the Setup menu (see page 168)

## Shut down menu

If the Done button is clicked from the “Service Ready” screen, or the “SHUT DOWN” option is selected from the “Action” menu, the following menu is offered:

CONTINUE	Return to the “Service Ready” menu.
POWER OFF	Turn off your Flokk.
Start Flokk	Exit Service mode and start the Flokk herd management software.
Restart	Restart your Flokk.

## Action menu

Actions you can take while in Service mode.

NONE	Return to the “Service Ready” menu
File	Enter file mode so that the files on the Flokk can be accessed by connecting the Flokk’s USB port to a computer.
Backup	Back up the Flokk’s files to your account.ca. Only offered if you have subscribed to the Flokk backup service.
Recover	Restore the Flokk’s files from a set of back up files stored in your account at flokk.ca. Only offered if you have subscribed to the Flokk backup service and a set of backup files is available.
Wizard	Start a configuration Wizard session.
Submit logs	Copy recent operation logs from your Flokk to your account at flokk.ca so they can be used to investigate an issue.
Remote service	Enable Flokk service personnel to access your Flokk remotely to investigate and resolve problems.
Stop remote	Disable Flokk service personnel from being able to access your Flokk remotely
Self test	Complete a self test of your Flokk’s hardware.
SHUT DOWN	Go to the “Shut down” menu.

## Setup menu

Changes to the Flokk's configuration that you can make while in Service mode.

NONE	Return to the "Service Ready" menu.
Connect WiFi	Select a WiFi network, provide a password for that network if necessary, then connect to the network.
Set tag template	Set the template to use to create the initial "Hang tag". Only offered if there are no animals in the herd record.
Update	Update your Flokk to the current version of the Flokk software.
Set time zone	Select the time zone that your Flokk is operating in.
Factory reset	Clear all files from the Flokk and return it to its initial state.

## Terminology and abbreviations

CCIA	Canadian Cattle Information Agency. The Canadian national agency charged with providing the location information required for animal traceability.
CCIA breed code	The standard codes used by the CCIA to report cattle breeds: AN: Angus SM: Simmental HH: Hereford HP: Polled Hereford AR: Red Angus
CCIA Tag	The round, yellow, tag containing an RFID transceiver coded to a unique number by the CCIA which is required on all animals in Canada when they leave their premises of origin.
CLTS	Canadian Livestock Tracking System. The system used by the CCIA to record livestock location and movement in Canada.
Hang Tag	A tag applied to an animal which displays a number or code assigned by the producer.
NAAB	National Association of Animal Breeders
PID	Premises ID. The provincially assigned code for the locations where your cattle originate or may be located.