

THORFeed®

USER'S MANUAL

August 2018



By THORFarm and THORFeed -
ThroughPoint Solution's companies.

USER'S MANUAL

Table of Contents

1	GENERAL INFORMATION	1
1.1	Authorized Use Permission.....	1
1.2	Organization of the Manual.....	1
1.3	Acronyms and Abbreviations.....	1
2	SYSTEM SUMMARY	2
2.1	System Configuration.....	2
2.2	Data Flows.....	2
2.3	User Access Levels	2
3	THORFeed – Start Here	3
3.1	Plan.....	3
3.2	Download.....	4
3.3	Setup.....	4
3.4	Activate	4
3.5	Updating.....	4
4	THORFeed Download & Startup	5
4.1	Software Download	5
4.2	Install	5
4.3	Uninstall Steps.....	7
4.4	Initial Program Startup.....	8
4.5	Logging On.....	9
5	THORFeed operations	10
5.1	System Slide-Out Menu.....	10
5.2	Dashboard: Projections.....	11
5.3	Feed Setup – Describe Your Feed Inventory	12
5.4	Inventory.....	17
5.5	Pre-Pay.....	24
5.6	Reports.....	25
5.7	Entity Selector	28
5.8	Synchronize	29
5.9	Log Out.....	29

THORFeed Inventory Manual

5.10 Changing Username and Password 29

6 Messages, indicators and Solutions 30

6.1 Confirm Class Deletion (Feed Setup – Class)..... 30

6.2 Confirm Vendor Deletion (Feed Setup – Vendor)..... 30

6.3 Confirm Expense Type Deletion (Feed Setup – Expense Type)..... 31

6.4 Select A Class (Pending Inventory – Class)..... 31

6.5 Select A Lot (Pending Inventory - Lot) 32

6.6 No Forms Applied (Pending Inventory - Forms) 32

6.7 Assign A Length (Pending Inventory - Forms) 33

6.8 Requested Density Too High or Too Low (Pending Inventory - Forms)..... 33

6.9 “_x_” Forms Received the Distribution” (Pending Inventory - Forms)..... 34

6.10 Form Name – No Default Name Allowed (Pending Inventory - Form)..... 34

6.11 Reduce the Number of Forms (Pending Inventory – Forms) 35

6.12 Move To Current Inventory from Pending Inventory 35

6.13 Invalid Measurement (Current inventory - Form)..... 36

6.14 Prepay Sell Off Confirmation (Prepay – Sell Off) 36

6.15 Zero Out Explanation (PrePay – Zero Out)..... 37

6.16 Too High Prepay Sell Off (PrePay – Sell Off)..... 37

6.17 Accounts Payable Not Valid (Reports – Margin Report) 38

6.18 Feed Note Not Valid (Reports – Margin Report) 38

6.19 Report has Been Saved (Reports – Inventory or Margin) 39

6.20 Feed Change Direction (Current Inventory) 39

6.21 “Feature Not Implemented” (Any point)..... 40

7 Appendix 41

7.1 Planning Your THORFeed Setup..... 41

7.2 Pending Inventory Setup Process..... 42

7.3 Completion of the Feed Inventory Planning Sheet..... 43

8 Index 8-44

1 GENERAL INFORMATION

This section contains general information regarding this manual. This manual is a general user guide and will change from time to time as THORFeed strives to develop, grow and meet customer needs. Should you find an error, have a question or idea, please contact THORFeed Solutions immediately. Graphics, directions and exact descriptions are a “picture” showing the software solutions when this document was published.

1.1 Authorized Use Permission

WARNING: unauthorized usage of the software, technical information, customer information, and making unauthorized copies of data, software, reports, and documents, will be dealt with directly and swiftly. If waiver use or copy permissions need to be obtained, contact THORFeed Help Desk or at www.THORFeed.com.

1.1.1 Help Desk

Help can be reached by emailing support@THORFeed.com or calling 833.846.7333

1.2 Organization of the Manual

This manual has multiple sections. Section 1.0 is general information. Section 2.0 is System Information. Section 3.0 is Getting Started. Section 4 is Operations information. Section 5.0 is messages and system indicators.

1.3 Acronyms and Abbreviations

Provide a list of the acronyms and abbreviations used in this document and the meaning of each.

ADJ Tons: Adjusted Tons

DM%: Dry Matter Percentage

Identifier: Tag which identifies the form and is not used in measurement(s).

Max: Maximum

Min.: Minimum

Offset End: Last tag in a series of offset tags (i.e. 200)

Offset: Distance between tags, normally in feet (i.e. 20)

Sync – Short for synchronization

THOR – Short for Threats, Hazards, Operational Risks or THOR

2 SYSTEM SUMMARY

THORFeed Inventory enables highly accurate feed inventory recording, tracking and reporting from mobile devices and laptop computers. A key feature is the ability to calculate an estimated feed depletion date which provides farmers with time and flexibility to replenish feed.

2.1 System Configuration

The system configuration may be a standalone device or multiple devices using networked wireless systems. Generally, mobile users will have a device with Android, iOS (Apple) or Windows operating system installed. Note: Windows Mobile Operating System is not a supported operating system for THORFeed Inventory. Devices are required to have at least 500 MB free processing memory and 50MB program hard drive space. Users wishing to share their data will need wireless communications able to sustain data communications via WIFI or Wireless communications (Mobile providers) or other systems. Users will need a keyboard to enter data. A camera feature on a mobile device will be necessary if user desires to implement the “Tag” feature.

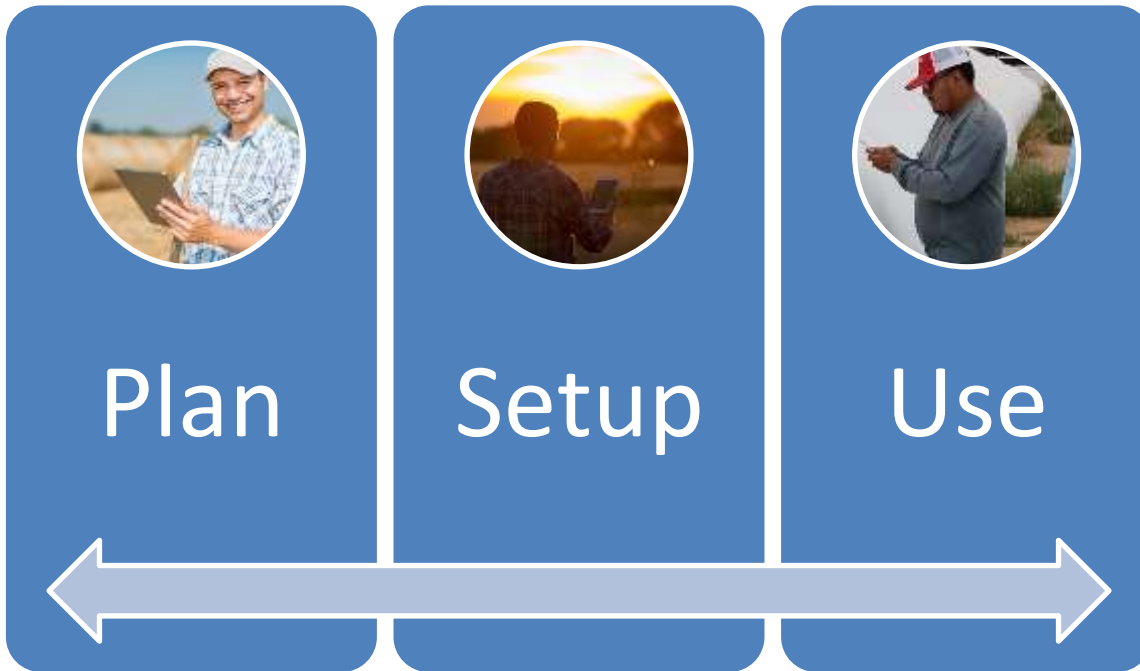
2.2 Data Flows

Users will enter Data into the feed inventory system and data will be displayed in the system dashboard and presented in the reports. Data will also flow out of the device and be shared via a cloud server. Based upon user level and entity permissions, other users and devices will receive and send the data.

2.3 User Access Levels

User level access is defined by the customer administrator. The administrator will have defined which features and capabilities each user will see and can use.

3 THORFEED – START HERE



Sequence of Activities for THORFeed Solutions Start-up and Processing

3.1 Plan

- For first-time users, it is recommended that initial planning of feed storage forms be completed before actual system entry. Plus, assistance from the THORFeed Solutions team is recommended.
- Feed should be defined in 1 of 3 major Classes: Hay, Silage or G/C/S (Grains, Commodities, Supplements). THORFeed allows users to describe their own Feed Classes, but we have found that the 3 major classes make internal and external reporting easier.
- To further categorize feed, THORFeed includes a Lot descriptor. The Lot Name is used to describe unique aspects of the feed; for example: May 2018 Milk Cow (in the Hay Class); West Mill Pregnant Heifer 50# (in the G/C/S Class); Field 81 Corn (in the Silage Class), etc.
- Feed storage forms are the individual shape or container in which feed will be stored on your farm(s). Examples of feed storage forms are: bag; pit; pile and stack (ie: haystack).
- Each form has physical dimensions (length, width). Stacks can have a count (number of bales) or length (number of feet of stack laid end to end).
- A form will also have a tonnage value. Tonnage can be entered as Dry Matter (DM) Tons; Adjusted (ADJ) Tons or As Is (As-is) Tons.
- Forms can be named to further define uniqueness. Using the Lot names above, forms could be: Stack 15 (May 2018 Milk Cow in Hay Class); Bag 3 (Field 81 Corn in Silage Class), etc. THORFeed encourages uniquely named lots and forms, making forms easy to recognize by the farming staff.
- Appendix 6.1 contains all the initial information on **Planning for THORFeed Setup**

3.2 Download

- To download the T.H.O.R Feed Software go to [Software Download](#)
- For T.H.O.R Program Startup and Login go to [Initial Program Startup](#)

3.3 Setup

- Once the Feed Forms are decided and put into the Feed Inventory Worksheet, the user can now log into the system and begin to describe the forms in Pending Inventory. As mentioned previously, first time users should consult with THORFeed Solutions team members to load initial forms into THORFeed. Consult Appendix A, **Planning Your THORFeed Setup**.
- Complete these next steps:
 - Log On: directions in [4.5 Logging On](#)
 - Select the Slide Out Window: directions in [4.1 System Slide Out Window](#)
 - In the Slide Out Window, click on **Setup Feed**, and go to [4.3 Feed Setup](#) for instructions
 - After the Feed Setup is completed in Pending Inventory and the form is ready to be claimed as inventory, the form can be marked as complete. See [4.4.2.2 Mark as Complete](#) which moves the feed form from Pending Inventory to Current Inventory

3.4 Activate

- To activate your form for utilization, first ensure that your form is in Current Inventory.
- The second step is to complete an initial measurement which will include an initial start date and confirm the form total quantity. For further instructions, see [4.4.3 Current Inventory](#).

3.5 Updating

- To calculate feed usage and depletion dates, frequent (weekly or monthly) measurement of the feed forms is required. Measurements can be made by the following methods:
 - Scanning tags placed on the forms
 - Manual length updates
- For further instructions, see: [4.4.3.1 Measurement Updates](#)

4 THORFEED DOWNLOAD & STARTUP

This section provides a general application walkthrough and feature description. Features and descriptions are arranged the way a user is likely to see these in the application. “Screen Shots” or screen images are used and should be helpful to users with questions. Each feature will be organized using the following general points. Not every point will apply to each feature.

- Feature/Function
- Quick Start directions
- Text Description
- Note
- Image

4.1 Software Download

THORFeed Application software may be downloaded based upon the operating system.

Android users may download the software at the Google Play Store. Search THOR and THORFeed for most accurate search. You may also [click here!](#)

iOS users may download the software at the Apple App Store in Apple iTunes. Select your Apple App icon or search “THOR” and “THORFeed” for most accurate search. You may also [click here!](#)

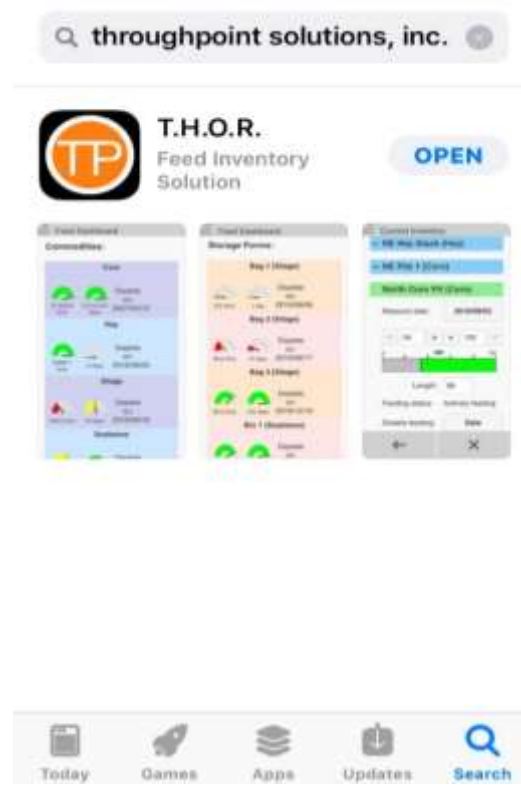
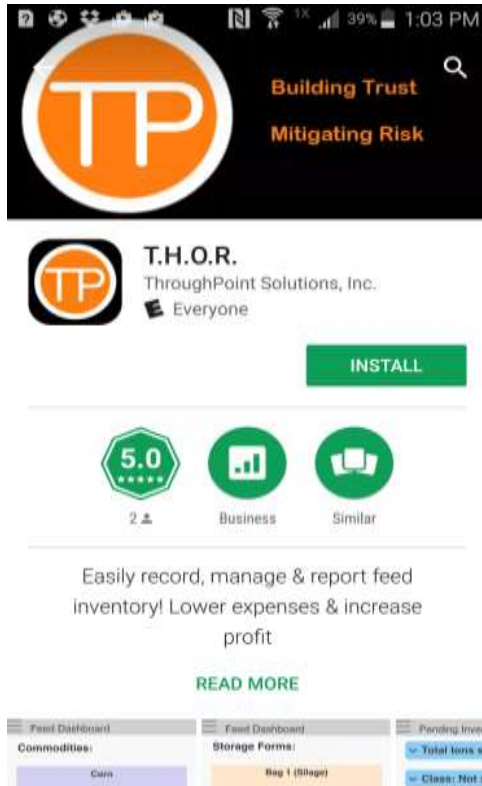
Windows users may download the software at THORFeed’s web site. Specifically, at the Support Page, [click here!](#)

4.2 Install

Software install occurs upon the initial download and install steps; also when updates are developed and ready for installation. The installation process varies by operating system.

4.2.1 Android and iOS Install Steps

THORFeed Inventory Manual



Android: Through the internet go to [Google Play Store](https://play.google.com/store/apps/details?id=com.thorfeed) → Search THOR THORFeed → Install → Accept device access

iOS: Through the internet go to [AppStore](https://www.apple.com/app-store/) → Search THOR THORFeed → Get → Install → Open

Note: Android and iOS installations are automated once the user selects the software at the respective online store (Google Play of Android or iTunes for iOS). Updates are automatically done and should not require user interaction.

4.2.2 Windows:

Through the internet Go to www.THORFeed.com/support --> download THOR Installer → Yes – Install → Select Desktop icon → Select OK

THORFEED for Windows follows standard windows software installation process. The program is downloaded from the THORFeed website.

4.3 Uninstall Steps

Software uninstall will vary depending upon operating system. Here are the general guides for each operating system.

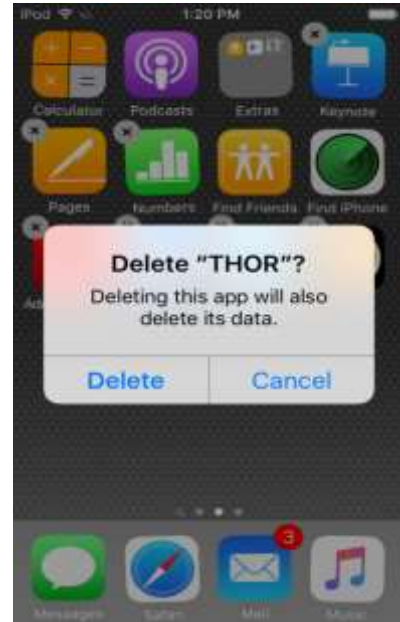
4.3.1 Android

Select "APPS" Icon → Select THOR(TP) icon and drag it to the trash can labeled Uninstall. Or
Go to Settings → Application Manager → THOR → tap Uninstall

iOS

Start your device and go to your screen with the THOR icon.

Locate THOR (TP) app icon → Push down until "vibrating" → tap the X (top left) of the icon → tap Delete → Tap the Home Button



Delete an Android Installation

4.3.2 Windows

Start your device. Windows is a dynamic operating system providing numerous ways to uninstall an application. Here are two ways to uninstall your application.

Right Click on the THOR (TP) icon → Select Uninstall → Scroll down to THOR → Double Click

→ select Yes to uninstall.

OR

Open the Start menu → Click Settings → Click System on the Settings menu → Select Apps & Features from the left pane → Select the THORFeed app you wish to uninstall → Click the Uninstall button that appears.

4.4 Initial Program Startup

Once THORFeed Inventory is downloaded, press or click on the THOR Icon to start the program. Once the program starts, a THORFeed Landing screen is presented.

The landing screen is designed for ease and secure access to your feed information. There is a Username, Password, Log In and Re-Sync Data features.

NOTE: some versions may have a 60-day trial, which has the Eval Entity plus number above the username. Username is “thor eval entity number— “. Here it would be “thor930464”. Password is “thor”

NOTE: Initial paid version setup will require calling to get an authorization code.

NOTE: Username and Password are not case sensitive and may be made of alpha and numeric characters.



THORFeed Landing Page

4.5 Logging On

Users will need to have a username and password assigned. These will be automatically provided if using the trial software. Paid customers will be provided a unique ID and password. Users will need to sign in each time the application is started.

4.5.1 Username

The Username is either unique (paid customers) or (“THOR____” plus numbers) if one is using the demo software. Your demo software username will be THORXXXXX (numbers on top of your log in screen on the demo software).

4.5.2 Password

Your password is either unique (paid customers) or (“THOR____” plus number) if one is using the demo software.

4.5.2.1 Log In button

Selecting or tapping on the Log in button on the landing page will submit your username and password, verifying you are a registered user.

4.5.2.2 Re-Sync Data button

Selecting the re-Sync Data Button will synchronize ALL the device data with a cloud-based server. The synchronization process may take between 5 seconds to three minutes, depending upon database size, device processing, device internet connection quality and internet traffic/speed. During the synchronization process an indicator such as a “spinning ball” with a TP in the center will be present. This synch process must complete before any further activity can begin.

4.5.3 Trial Software Users

Trial or Demo Software will have a temporary username and authorization code and will be functional for only a set number of days and may only have certain features and capabilities.

4.5.4 Paid Software Users

Paid software will have a defined username and password and will have full functions unless otherwise defined by the customer administrator.

5 THORFEED OPERATIONS

5.1 System Slide-Out Menu

The THORFeed software menu is direct and easy to navigate.

The slide-out menu is opened by selecting the three horizontal lines in the top left side of your screen.

The slide out menu may have more or fewer features depending upon those features defined by the customer administrator for this user. Only the system administrator can add or remove menu options.

Menu options may include: Dashboard, Feed Scan, Feed Inventory, Feed Prepay, Feed Report, Feed Setup, Entity Selector, Synchronize, Log Out, Dev Options (only in specialized cases) and the version number.

Each of these menu options are explained in detail in this manual.



THOR Slide-Out Menu

5.2 Dashboard: Projections

How to Get There: Slide Out Menu → Feed Dashboard

The feed dashboard has **remaining tonnage** and **depletion projections** for Classes (haylage, sorghum silage etc.) and Forms (bags, pits etc.), providing **current** information on feed inventory,

Classes will be shown on the top of dashboard and in alphabetical order. Each class is in summary form showing: the total Class Tons Remaining; Days Until Depletion; Depletion Date.

Forms are shown below the classes and are also in alphabetical order. Forms describe a type of storage used for the feed (pile, pit, stack or bag). Each form displays: the Form Name with class; Tons Remaining; Days Until Depletion from the current date; Depletion Date and date last measured. The last measured date will be in red if the form has not been measured within 30 days.

NOTE: The dial or ‘speedometer’ reflects the Green, Yellow or Red colors. Each color represents a multiple of 33.3%. Green is 100-67%, Yellow is 66-34% and Red is 33-0%. These are quick color indicators to represent the Tons or Days remaining until feed depletion.

NOTE: Projections are based upon feed usage rates. THORFeed has two usage rate categories: **last two (2) non-same** measures or **class average** (30 days; 60 days; 90 days; 180 days or past year). The two categories may be further defined as follows:

- Last Two (2) Non-Same Measures: Depletion date is calculated using the amount of feed used between the two most recent measurements that are not at the same point. An example is measurement 1 is 100 feet and measurement 2 is at 90 feet.
- Class Average: Depletion rate is the **average** usage rate for an **entire** feed class over a ‘selected’ time-period. The ‘selected recent’ period can be the last: 30 days; 60 days; 90 days; 180 days or past year.
- THORFeed has a default projection calculation is Class Average: 180 days
- The projection approach can be changed by going to Slide Out Menu → Setup → Depletion Rate.



Dashboard Class



Dashboard Forms Projections

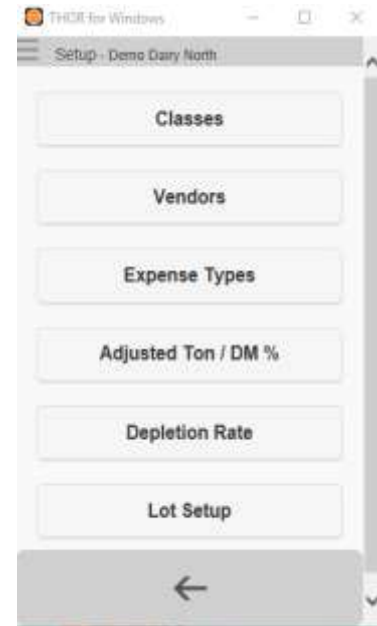
5.3 Setup – Describe Your Feed Inventory

Setup is where a general description of feed and other farm features are described. These features will be used later to assist with calculations and reporting in the use of THORFeed.

How to Get There: Slide Out Menu → Setup → select option from list (Class, Vendors, Expense Types, Adjusted Ton / DM%, Depletion Rate). Lot Setup may be available with some configurations.

Note: A Class can only be added from the Feed Setup area. **A Class must be set up before adding inventory.** Class identifies the type of feed. THOR Feed recommended classes are Hay, Silage, and G/C/S (Grains, Commodities, Supplements) for ease of reporting. Users may also add their own classes. Once a Class is entered it will be visible on the Class Dashboard.

Details: Feed Setup includes feed class, vendors, expense type, adjusted ton / DM%, depletion rates and, in some cases, lot setup.

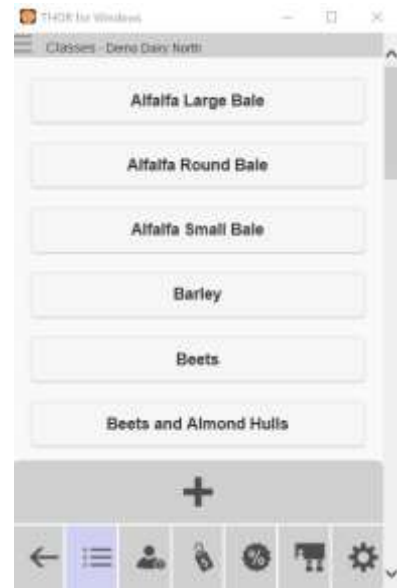


Setup Menu

The picture to the right shows the setup feature icons on the bottom of the screen. The Setup area selected is highlighted in light blue.

The general page functions include:

- Menu icon (top left),
- Add (+)
- Back ← ,
- Class
- Vendor
- Expense Type
- Adjusted Ton / DM%
- Lots (may not be available on some systems)
- Depletion Rate



Setup Feature Icons

5.3.1 Adding a Feed Class

How to Get There: Slide Out Menu → Setup → Class → Add (+).

Adding a feed class will require you to enter the Feed Class Name, Select a Feed Class Family and Minimum Density and Maximum Density.

Feed Name will need to be unique. You will be notified that your class name is not unique upon exiting. Once the Class is entered it will be visible on the Feed Class list.

Class Family is a means to further define feed and is pertinent to the reporting by family class. The default is G.C.S.

Min and Max Density are very critical numbers used in the advanced calculations THORFeed seamlessly performs. The min and max are guides when creating pending feed. Forms with feed below or above the density limits will need to be adjusted. Density is measured in pounds per cubic foot (lbs./ft³) for pits and piles. Bag density is calculated per linear foot.

Feed Class Setup

5.3.2 Adding Vendors

How to Get There: Slide Out Menu → Setup → Vendor → Add (+).

Vendor information includes:

- Vendor Name
- Address
- City
- State
- Zip
- Phone
- Point of Contact (POC)
- Driver(s)

Users will also be able to select the back arrow ← to add another vendor. To delete a vendor, select the trash can.

Vendor Setup for Class

5.3.3 Adding Expense Type

How to Get There: Slide Out Menu → Setup → Expense Type → Add (+).

An expense type is a general expense a vendor may have (gas, storage, bags, maintenance etc.). If vendors are setup, expense types may be added in the Feed Inventory → Cost area.

NOTE: Must have a vendor to add itemized expenses

5.3.4 Adjusted Tons / DM%

How to Get There: Slide Out Menu → Setup → DM% → Add (+).

Dry matter percentage (DM%) refers to material remaining after removal of water from the feed. Moisture content reflects the amount of water present in the feed ingredient. Feed types can have different DM% and different loads of the same feed can have differing DM%. **This number is critical in almost all feed inventory calculations. Changing or improper DM % will significantly change the feed inventory, projected depletion dates and financials.** When the “percentage” field is selected, a keyboard will appear. The Setup Area selected is highlighted in blue.

The number is a percentage (%)

NOTE: This one input can change your farms entire feed inventory and if done improperly, cost hundreds and even tens of thousands of dollars.



Dry Matter Setup for Class

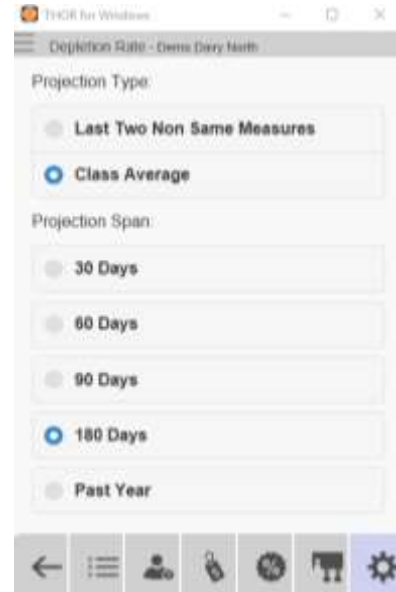
5.3.5 Depletion Rate

How to Get There: Slide Out Menu → Setup → Depletion Rate

Goal: select how the dashboard will calculate the rate of feed usage to estimate: remaining tonnage; days remaining and depletion date for both feed class and forms. There are two different approaches to measure feed usage and depletion projections:

- Last Two (2) Non-Same Measures: Depletion dates are calculated using the amount between the two most recent measurements to determine the daily usage rate(s).
- Class Average: Depletion dates are calculated using the average usage rate for an entire feed class over a 'most recent' time-period. The 'most recent' period can be the last: 30 days; 60 days; 90 days; 180 days or past year.
- THORFeed has a default projection calculation is Class Average: 180 days

See the main screen has a back arrow. What you type is immediately saved.



Depletion Rate Setup

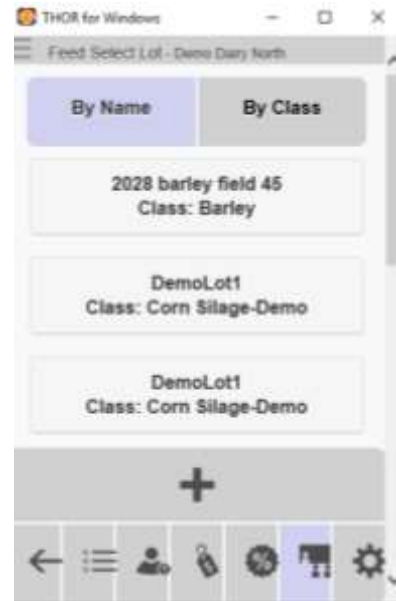
5.3.6 Lot Setup (not available to all users)

How to Get There: Slide Out Menu → Setup → Lot Setup → Add (+).

Lot Setup is also available in Pending Inventory Setup.

The main Lot screen shows the lots which have been setup. They may be sorted two ways:

- Name (alphabetically)
- Class (class)



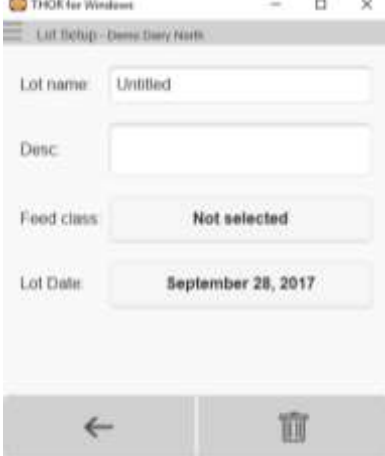
Lot Setup

THORFeed Inventory Manual

Selecting the **+** button to add a class will bring up a screen requiring:

- Lot Name
- Description
- Feed Class
- Lot Date (when harvested or purchased are most used dates).
The default Lot Date is 6 months prior to the current date.

See the main screen has a back arrow and trash. Select the Trash to delete the lot setup. With the back arrow, what you type is immediately saved.



THOR for Windows

Lot Setup - Dairy Milk

Lot name: Untitled

Desc:

Feed class: Not selected

Lot Date: September 28, 2017

←

🗑️

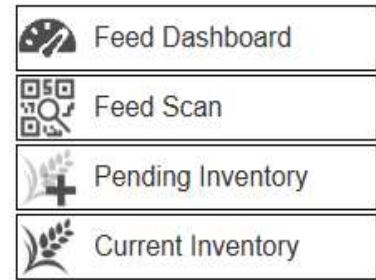
Lot Setup - Sort By Name

5.4 Inventory

THORFeed has 2 main types of feed inventory: **Pending** (planning) and **Current** (ready for use or using).

How to Get There:

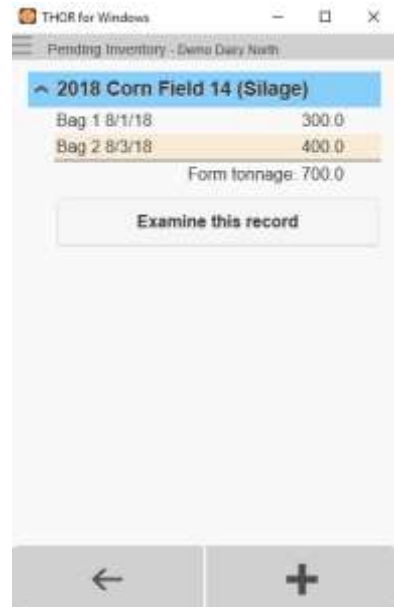
Slide Out Menu → Pending Inventory
or Slide Out Menu → Current Inventory



Feed Inventory Option

5.4.1 Pending Inventory

Pending Inventory is where users can define the details of a storage form. This will include selecting class, lot, prepay (if applicable), expenses and form type with details. Once inventory is setup and ready to be officially recorded and used, the form is moved to Current Inventory. Pending Inventory may be reached by scanning an active tag assigned to the form.



Pending Inventory Quick View

5.4.2 Pending Inventory: Quick View

How to Get There: Slide Out Menu → Pending Inventory

Pending Inventory List View shows the list of pending inventory items. The pending list shows the Lot and class in brackets: 2015 Fall Hay (Bedding). Pending Inventory will be listed in alphabetical order based upon the Lot name.

Expanding the Quick View reveals:

- Form Name
- Form Tonnage
- Lot Total Tonnage
- Examine Record Button

Examine record button takes user to the form in the Pending Inventory Setup for that lot.

NOTE: Page will display “Inventory has not been added yet.” When there is no pending inventory. Options will include the back arrow ← and the add button +.

5.4.2.1 Pending Inventory Setup

How to Get There: Slide Out Menu → Pending Inventory Quick View → Add (+) button

Pending Inventory is where users will assign a lot to specific forms (bag, pit, pile, stack). Each form may be named and form specifics defined. Setting up a pending inventory is quick and easy. There is only one screen and users can scroll up and down (see sample screen to right >).

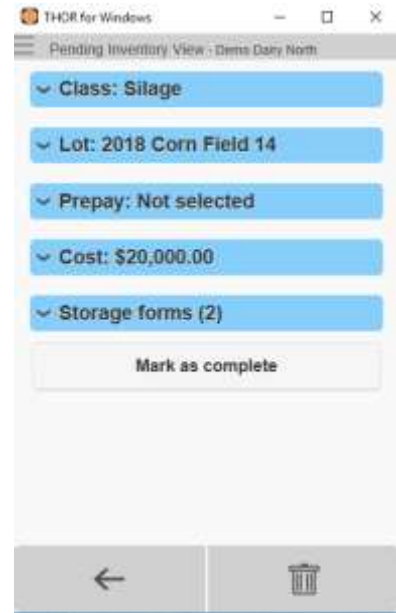
Each functional area expands or contracted “accordion” style selecting the header or the v icon in the header.

Form areas in the Pending Inventory Setup area are:

- Total Dry Tons
- Class
- Lot
- Prepay
- Cost
- Storage forms

Total Dry Tons will show the current dry tons assigned to each storage form. This can be expanded to see tonnage entered in Dry Tons, Adjusted Tons and As-is-Tons.

Class allows the user to select the lot feed class. Feed Class is setup in the Setup menu.



Pending Inventory Setup View

Lot allows the user to select an existing or add new lot. This option should always be present and is normally at the bottom of the list of Lots.

The main Lot screen shows the lots which have been setup. They may be sorted two ways:

- Name (alphabetically)
- Class (class)

Selecting the + button to add a class will bring up a screen requiring:

- Lot Name
- Description
- Feed Class
- Lot Date (when harvested or purchased are most common dates). The default Lot Date is 6 months prior to the current date.

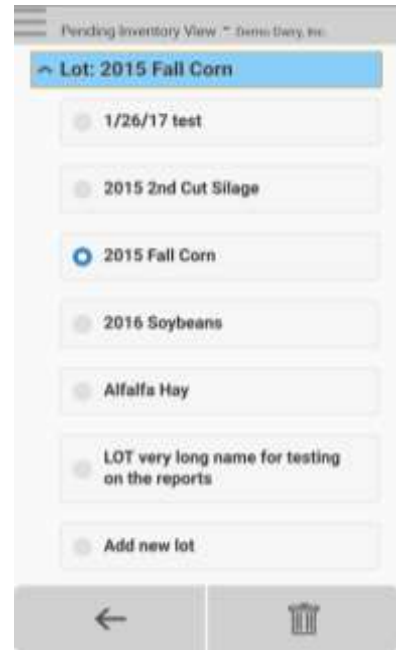
See the main screen has a back arrow and trash. Select the Trash to delete the lot/setup. With the back arrow, what you type is immediately saved.

Prepay allows users Prepay (normally to a vendor such as a feed mill) to be connected to a lot.

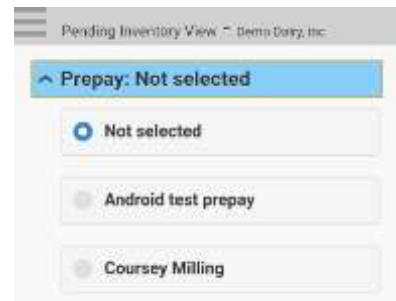
Prepay header will say “Prepay: Not selected” if a prepay has not been selected. If a prepay is selected, the header will show “Prepay: _XXXXX_” x being the prepay entity. An example would be “Prepay: Coursey Milling”.

NOTE: Prepay setup is accessible from the main menu (Slide Out Menu → Feed Prepay → Add (+) button).

NOTE: Prepay can only be modified in the Pre-pay area (Slide Out Menu → Feed Prepay → select prepay)



Pending Inventory Lot Selection



Pending Inventory Prepay Option Screen

THORFeed Inventory Manual

Feed Cost may be reported one of Three ways: *Value, Vendor and Price Per Ton*.

By Value is one cost for all items associated with the lot. No detail is necessary.

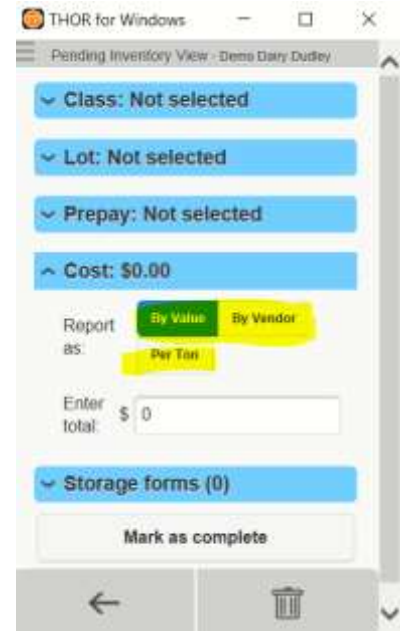
By Vendor shows the vendors as established in the Feed Setup – Vendors. Specific vendor expenses may be added by selecting the Add Expense Type button. After selecting the Add Expense Type button, user will enter the expense type. User can delete the expense type by selecting the trash can or keep the expense type and select the back arrow, returning the user to the Vendor expense screen.

By Price Per ton is the total cost divided by the total tons. The software will calculate the total cost.

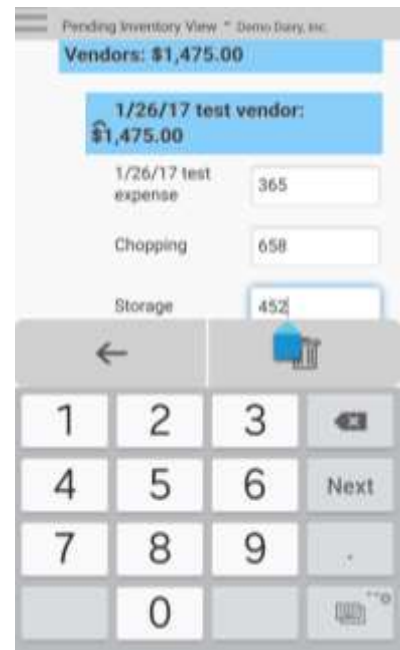
When a field is selected, the number keyboard will appear and the cell highlighted in blue.

NOTE: Only the selected cost reporting (i.e. By Value or By Vendor) will be shown in the Cost header (Cost: \$32,000).

NOTE: Only the selected cost reporting and details will be recorded when the Lot and forms are moved to Current Inventory, even though user may have entered data into the other cost reporting area.



Feed Inventory



**Pending Inventory
Cost Screen**

Storage form or commonly called **Form** is likely the most dynamic user area. Users can distribute feed tonnage among forms that are setup. A form is selected, the quantity entered and form template is generated. Users enter details for each form.

There are four main storage Form Types: **Bags, Piles, Pits, Stacks and Replenishable.**

Form details include:

- Form Name
- Dimensions (Length and or width or bales depending upon form type).
- Report As: DM, ADJ or As-Is
- DM Tons
- ADJ Tons
- As-is Tons
- See the Dry Tons per foot
- RFV - Relative Feed Value (comparative value of feed)
- Setup Tags

NOTE: Selected field will be highlight in blue and keyboard or number pad will appear.

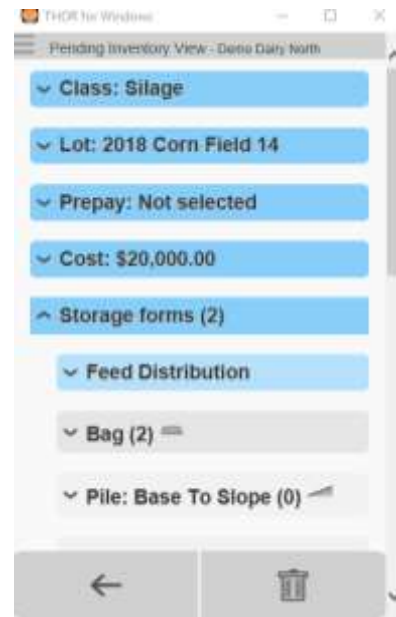
NOTE: Fields not entered properly will be highlighted in pink before being moved to current inventory.

NOTE: Report As tonnage format will be the format tonnage is reported in, regardless if tonnage values are entered in another format. Example: Selecting Report As DM, and entering 200 ADJ Tons, the calculated DM Tons will be reported, NOT ADJ Tons.

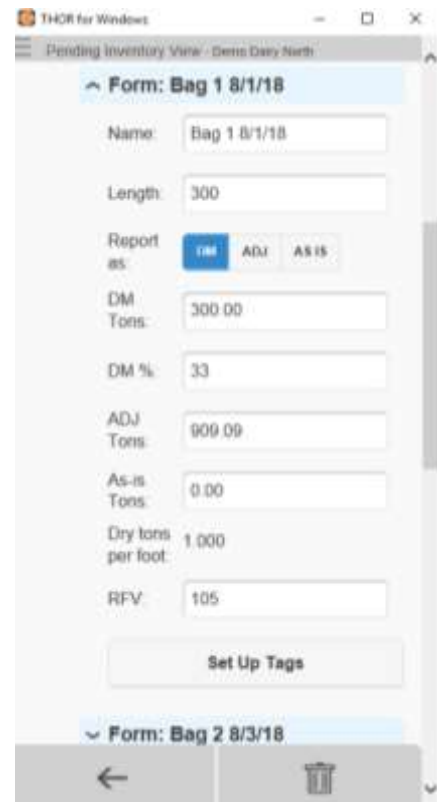
NOTE: Entering DM Tons or ADJ Tons will calculate the other tonnage.

NOTE: Entering AS-IS-Tons will cause an Act DM % field to appear. User will need to add the actual Dry Matter Percentage before the DM Tons and ADJ Tons will automatically calculate.

NOTE: Feed Distribution evenly distributes total tonnage across all identified forms at the same density. It is not recommended to distribute across different form types. If using the same lot of feed, create new form types using the desired/same lot.



Form Quantity Setup View



Storage Form Setup

THORFeed Inventory Manual

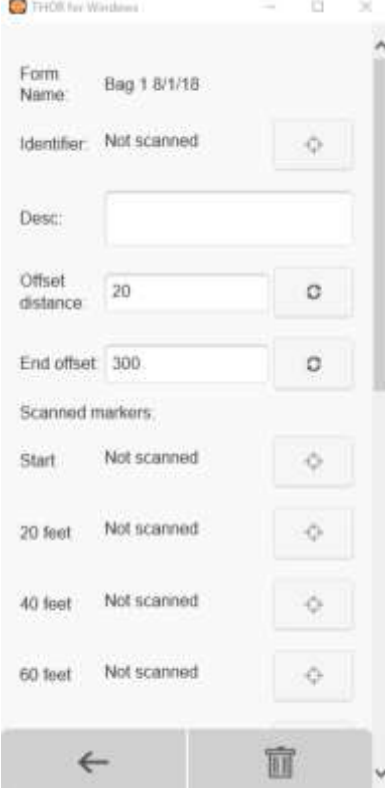
Setup Tags is direct, easy and will save time. Tag setup has the following components:

How to Get There: Slide Out Menu → Feed Inventory → Pending Inventory → Form, Setup Tag → select tag point → scan tag

- Identifier (tag which will identify the form. Normally at the end of a form).
- Desc. (description of the form or unique information)
- Offset Distance (distance between tags)
- End Offset (form length or length where offsets are to stop)
- Scanned Markers

Tags are attached by selecting the button to the right of the Identifier or feet distance. The tag reader window will appear and automatically scan for tags providing a message confirming the tag is either assigned or is not valid.

NOTE: Valid Tags are tags which have been registered by THORFeed Solutions and assigned to your entity. Security and integrity is maintained this way.



Marker / Tag Setup

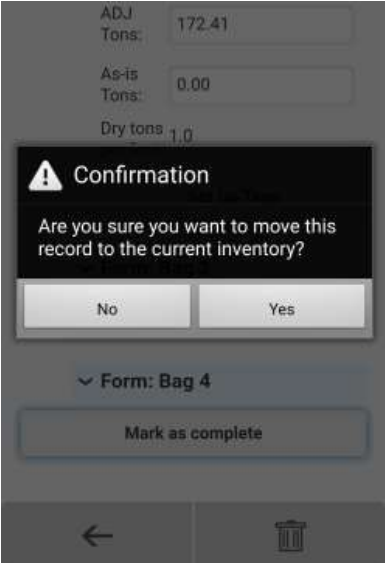
Mark as Complete

Mark as Complete commits the class, lot, prepay, expenses and form details are properly entered. If form details are **incorrect**, a message will appear and the fields necessary will be highlighted in pink.

A confirmation window will appear, asking “Are you sure you want to move this record to current inventory?”

NOTE: Once the form has been moved to current inventory, it cannot be edited, only zeroed.

Note: Tag Setup is only able to be done in Pending Inventory.



Move To Current Inventory

5.4.3 Current Inventory

How to Get There: Slide Out Menu → Current Inventory, or
Slide Out Menu → Feed Scan (takes user to specific current inventory form IF tag was setup)

Current inventory contains a list of all active forms (bags, pits, piles, stacks, etc.). Each form will have the same four key parts: **Measure Date**, **Start Length** (left side), **End Length** (right side) and the form **Length** (bottom). Feed forms that are highlighted in **green** are currently being started and depleted, or Active (Note the A on the right side for the form.) Feed forms that are inactive but moved to Current Inventory will be highlighted in **blue**.

Measure Date: The first measure date should be the date the form is ready for use. For periodic measure updates: select the date button which will activate a calendar. Select the date of the measure. The default date is the current date.

Start and End Length: These lengths were specified during the form setup while in Pending Inventory. These lengths change when the **Length** field is changed during periodic measurement updates.

Length: this field can be modified during the periodic measurement updates. After a measure date is entered, a user can update this **Length** field.

Tag symbol: The tag symbol allows you to scan a tag and have the length and measurement date entered automatically.



Current Inventory Screen

5.4.3.1 Measurement Updates:

Scanning: Users may update the form by scanning the tag which will automatically select the current day as the measurement date, plus reduce the form tonnage and length based on the location of the tag on the form. Users can modify this length manually; see below **Manual Length Update**.

Manual Length Update: Users may manually input the length in the **Length** field. To update the feed inventory information, click on the date in the Measure Date area, select a date from the opened calendar. Once a date is selected the Current Inventory Screen will return so that a new **Length** can be entered on the screen.

Users may change the feeding direction by selecting the direction arrow → .

5.5 Prepay

How to Get There:

Slide Out Menu → Feed Prepay → List Page → Add (+) →

Or

Current Prepay - Update

Slide Out Menu → Feed Prepay → List Page → Select Prepay → Sell Off → Enter Quantity → Select check box (☑) or back arrow

Or

Current Prepay – Zero Out

Slide Out Menu → Feed Prepay → List Page → Select Prepay → Zero Out → Enter Reason → Select check box (☑) or back arrow

Prepay is a feature which allows user to track and update prepay for a specific class assigned to a specific lot. The prepay is reduced as the form, lot and class is depleted.

The main prepay screen will display the current prepay and these may be sorted by name or class.

New prepay will require the Prepay name, feed class, As-Is-Tons and any comments to be entered.

Current prepay will show the name, class, remaining As-Is-Tons, Tonnage remaining, Total Cost remaining, Cost Per Ton and the Comment information.

Sell Off allows the user to update the prepay if part or all the prepay is sold off. Tonnage and cost will be adjusted accordingly.

Zero Out allows the user to “zero out” or reduce the total cost to zero.

NOTE: Comments section has unlimited text that may be entered.

NOTE: Confirmation will be required when Selling Off or Zero Out

NOTE: Zeroing Out will require user to enter an explanation regarding the action.

The screenshot shows a mobile application interface for a 'Prepaid' entry. At the top, it says 'Prepaid - Denn Dairy, Inc.'. Below this, the following information is displayed:

- Name: Coursey Milling
- Class: Corn
- As-Is Tons: 10000.00
- Tonnage Remaining: 5740.65
- Total cost: 8547560.00
- Cost Per Ton: \$854.76
- Comment: Type information here.

At the bottom of the screen, there are two buttons: 'Sell Off' and 'Zero Out'. A back arrow is visible at the very bottom of the screen.

Feed Inventory Prepay

5.6 Reports

Several reports are available to users. These reports can be exported into .PDF, .RTF or .HTML formats. The .RTF can be directly opened in Microsoft Excel and the .HTML file may be opened in Microsoft Word or any browser program. Each

5.6.1 Feed Inventory Report

How to Get There: Slide Out Menu → Feed Report → Feed Inventory Report

The feed inventory report is very direct. The report displays the following:

- Date of Report
- Depletion Rate
Projection: Last Two Non-Same Measures or Class Average of 30, 60, 90, 180 days or the past year
- Dairy
- Class
- Storage Form
- Tonnage
- DM Tons Use Per Day
- Depletion On Date
- Last Measured Date
- Tonnage per form
- Tonnage Grand Total

Feed Inventory Report							
Date of report: 2018/08/22							
Projection Type: Last Two Non Same Measures							
Demo Dairy North							
						Section Total:	0.00
G/C/S	Storage form	Tonnage measurement	DM Tons per day	Deplete on	Last measured	Tonnage	
2018 Spring Supplements	Maxxer	DM	1.1	2018/11/20	2018/08/03	117.84	
2018 Spring Supplements	Maxxer Pallets	DM	0.0	N/A		2.00	
						Section Total:	119.84
Hay	Storage form	Tonnage measurement	DM Tons per day	Deplete on	Last measured	Tonnage	
Milk Cow	2018 Summer Alfalfa Field #2	DM	12.5	2018/10/12	2018/08/05	850.00	
Dry Cow	2018 Winter Alfalfa Ajax Milling	DM	0.0	N/A		920.00	
						Section Total:	1,770.00
Silage	Storage form	Tonnage measurement	DM Tons per day	Deplete on	Last measured	Tonnage	
2018 Corn Field 14	Bag 1 8/1/18	DM	5.0	2018/09/30	2018/08/03	290.00	
2018 Corn Field 14	Bag 2 8/3/18	DM	0.0	N/A		400.00	
						Section Total:	690.00
						Grand Total:	2,579.84

Feed Inventory Report

NOTE: The feed inventory report is a report which shows the **inventory as of the last date of measure** in a direct table format. Inventory report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.

NOTE: The report icon and facility name may be customized per entity.

NOTE: Android and Window devices save reports to the Documents\Android folder.

5.6.2 Feed Margin Report

How to Get There: Slide Out Menu → Feed Report → Feed Margin Report

Feed Margin report is a report showing the margin, or percentage based upon inventory value, prepay value, accounts payable and feed note(s). The Feed Margin Report shows feed margin based upon inventory at the time of last measure, NOT NECESSARILY THE DAY THE REPORT WAS GENERATED. This report has complex calculations and is instantly completed when data is added. The Feed Margin Report has five sections: summary; days left; feed summary; feed detailed report; and prepay detail.

Feed Margin Report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.

NOTE: The report icon and facility name may be customized per entity. NOTE: Android and Window devices save reports to the Documents\Android folder.

5.6.2.1 Summary

Summary shows the date of report, payable value, expenses, total feed value, accounts payable, feed note(s) and Feed Margin percentage.

5.6.2.2 Days Left

Days left shows the days remaining for each class which are listed.

5.6.2.3 Feed Summary

Feed summary is a simple Feed Inventory Report showing the feed class, lot name, storage form, tonnage, feed cost and tonnage measurement type (DM, ADJ or As-Is)

5.6.2.4 Feed Detailed Report

Feed Detail report is the Feed Inventory Report. The Detail Report includes Storage Form, Tonnage, Use Per Day, Depletion On Date, Last Measured, Tonnage per form and Tonnage Grand Total

5.6.2.5 Prepay Details

The Prepay detail section contains Prepay name, class, As-Is-Tons remaining, Cost per ton and Total Cost Remaining.

Demo Dairy North								
Date of report: 2018/08/22								
Feed Margin Report								
Summary								
Prepay Type:	Last Two Non Same Measures							
Prepay value:	\$1,190,211.02							
Expenses:	\$0.00							
Total feed value:	\$06,273.48							
Account payable:	-\$0.00							
Feed note:	-\$0.00							
Feed margin:	0.00%							
Days Left								
119	G/C/S							
141	Hay							
138	Stage							
Feed Summary								
Feed Class	Lot Name	Storage Form	Tonnage	Current Value	Measurement			
G/C/S	2018 Spring Supplements	Pile	117.8	\$48,295.00	DM			
		Stack	2.0	\$819.67	DM			
Hay	Dry Cow	Stack	920.0	\$8,000.00	DM			
	Milk Cow	Stack	850.0	\$8,444.44	DM			
Stage	2018 Corn Field 14	Bag	690.0	\$19,714.25	DM			
Feed Detailed Report								
Lot name	Storage form	Farm name	Measure type	Tonnage	Price per ton	Tons per MRC	DM Tons per Day	Current value
2018 Spring Supplements								
	Pile		DM	117.8				\$48,295.00
			Maxcor	117.8	\$409.84	0.07	1.1	\$48,295.00
	Stack		DM	2.0				\$819.67
			Maxcor Pallets	2.0	\$409.84	0.00	0.0	\$819.67
\$49,114.75								
Dry Cow								
	Stack		DM	920.0				\$8,000.00
			2018 Winder Alfalfa Apex Milling	920.0	\$8.70	0.00	0.0	\$8,000.00
Milk Cow								
	Stack		DM	850.0				\$8,444.44
			2018 Summer Alfalfa Field #2	850.0	\$11.11	0.00	12.5	\$8,444.44
\$17,444.88								

Feed Margin Report – Family

5.6.3 Feed Master Report

How to Get There: Slide Out Menu → Feed Report → Feed Master Report

The Feed Master Report provides information on tonnage, cost per ton and total value of feed classes and forms. It also provides a summary of the format of the Bank Report that will go to financial organizations.

Feed Master Report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.

5.6.4 Feed Executive Report

How to Get There: Slide Out Menu → Feed Report → Feed Executive Report

The Feed Executive Report provides tonnage, average price/ton and total value summary of each feed class and active forms with a roll-up total value of all feeds.


Feed Executive Report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.

5.6.5 Feed Expanded Report

How to Get There: Slide Out Menu → Feed Report → Feed Expanded Report

The Feed Expanded Report provides information on feed classes, feed lots and feed forms providing tonnage, average price/ton, total feed value and relative feed value as entered for the form.

Feed Expanded Report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.



Date of report: 20180805
Total Value: \$6,744,683.79

Feed Class	Tonnage	Av. \$/Ton	Value
G/C/S	909.60	\$27,885.62	\$361,326.51
31% PELLET	3.57	\$650.02	\$2,320.08
Beet Pulp	10.78	\$226.10	\$4,446.10
Coke or Mtr	1.08	\$1,119.39	\$1,209.70
Cracked	37.82	\$311.11	\$11,796.46
DV Yeast	1.16	\$1,285.31	\$1,252.80
Far Off Mineral	2.80	\$1,180.45	\$3,311.85
Golden Sands for Cot Hay	232.58	\$545.85	\$80,395.04
Hay Straw 8 2018	371.79	\$100.00	\$37,179.00
Megalin	48.01	\$1,229.22	\$59,011.06
Mineral	6.06	\$637.52	\$3,862.74
Molasses	39.74	\$290.07	\$11,529.27
Palmit	41.88	\$1,897.79	\$79,500.44
Rollad Corn Calves	18.15	\$1,595.47	\$28,763.00
Rollad Corn Calves	31.28	\$222.35	\$6,955.71
Rumenin	1.32	\$15,399.38	\$20,329.01
Sodium Borate	6.06	\$360.00	\$2,181.50
Soymeal	48.28	\$385.39	\$17,837.08
Soyplus	12.48	\$460.57	\$5,743.99
Hay	6,309.57	\$6,210.40	\$1,713,865.55
Mix. Cow Hay 1 2018 Barn 1	1,389.73	\$272.75	\$384,470.88
Mix. Cow Hay 5 2018 Barn 2	2,163.86	\$272.75	\$590,190.58
Mix. Cow Hay 6 2018 Barn 3	1,795.32	\$272.75	\$491,836.00
Mix. Cow Hay June 2018 Barn 6	1,148.84	\$296.88	\$340,129.00
Stlage	18,443.14	\$2,671.75	\$4,669,391.72
Alfalfa Haylage Feb 2018 Pile 8	1,088.00	\$200.00	\$217,200.00
Beets 6 2018 Pile 2	1,794.40	\$1,949.99	\$3,501,400.00
Corn Stlage and Beets 2017	7,774.23	\$205.00	\$1,593,716.14
Golden Sands Corn Stlage 2018 Pile 8	1,074.00	\$205.00	\$444,670.00
Haylage 2017 Pile 1	639.00	\$205.00	\$130,995.00
Haylage Jan 2018	769.00	\$205.00	\$156,645.00
Haylage Jan 2018 Pile 4	884.00	\$205.00	\$181,220.00
Hygrass Stlage	845.23	\$205.00	\$173,271.84
Wheatlage	2,844.40	\$2.15	\$6,110.00

Feed Executive Report

THORFeed Inventory Manual

5.6.6 Feed Bank Report

How to Get There: Slide Out Menu → Feed Report → Feed Bank Report

The Feed Bank Report prepares summary feed information required by financial organizations. The format is setup so that the feed information from THOR Feed is prepared as requested. Additional required information regarding other farm assets and liabilities may be added by the farmer. The format was developed so that the farmer takes the monthly Bank Report from THOR Feed, add the other required information, produce a PDF of the form and email it to their financial institution.

Feed Executive Report may be viewed instantly and exported as a .PDF, .RTF or .HTML file.

Bank Report	Tons	Cost / Ton	Total Cost
Silage			
Alfalfa Haylage Feb 2018 File 8	1,086.00	\$200.00	\$217,200.00
Beets 6 2018 File 2	1,754.40	\$1,049.59	\$1,841,400.00
Corn Silage and Beets 2017	7,774.53	\$205.00	\$1,593,779.14
Golden Sands Corn Silage 2018 File 6	1,974.00	\$205.00	\$404,670.00
Haylage 2017 File 1	\$30.00	\$200.00	\$106,000.00
Haylage Jan 2018	769.00	\$200.00	\$153,800.00
Haylage Jan 2018 File 4	864.60	\$200.00	\$172,920.66
Ryegrass Silage	846.20	\$205.00	\$173,471.84
Wheatlage	2,844.40	\$2.16	\$6,150.09
TOTAL:	18,443.14		\$4,669,391.72
UDA LBS			
Pool Quota 1	0	30	0
Pool Quota 2	0	30	0
Pool Quota 3	0	30	0
Pool Quota 4	0	30	0
Total UDA LBS	0	30	0
PREPAID FEEDS			
Dealer 1	\$0.00	\$0.00	0.00
Dealer 2	\$0.00	\$0.00	0.00
Dealer 3	\$0.00	\$0.00	0.00
Dealer 4	\$0.00	\$0.00	0.00
HERD INVENTORY			
	# Head	\$ / Head	Total Cost
Mature cows	\$0.00	\$0.00	\$0.00
Milk Cows 1	\$0.00	\$0.00	\$0.00
Milk Cows 2	\$0.00	\$0.00	\$0.00
Milk Cows 3	\$0.00	\$0.00	\$0.00
Dry Cows 1	\$0.00	\$0.00	\$0.00
Dry Cows 2	\$0.00	\$0.00	\$0.00
Springers	\$0.00	\$0.00	\$0.00
TOTAL	\$0.00	\$0.00	\$0.00
HEIFERS			
	# Head	\$ / Head	Total Cost
Bred Heifers (15-20 mo)	0	0	0
Heifers (12-15 mo)	0	0	0
Heifers (6-12 mo)	0	0	0
Heifers (4-6 mo)	0	0	0
Heifers (2-4 mo)	0	0	0
Heifers (0-2 mo)	0	0	0
TOTAL	\$0.00	\$0.00	\$0.00
OTHER			
	# Head	\$ / Head	Total Cost
Cows/Heifers/Steers	0	0	0
Exotic Livestock	0	0	0
Bull Calves	0	0	0
Other	0	0	0
TOTAL	\$0.00	\$0.00	\$0.00
ACCOUNTS PAYABLE			
Hay Farmers			\$0.00
Silage - Farmers			\$0.00

Feed Bank Report

5.7 Entity Selector

How to Get There: Slide Out Menu → Entity Selector → Select Entity

Entity selector is a simple option that allows user to select which entity they wish to view. Entities are shown in alphabetical order.

5.8 Synchronize

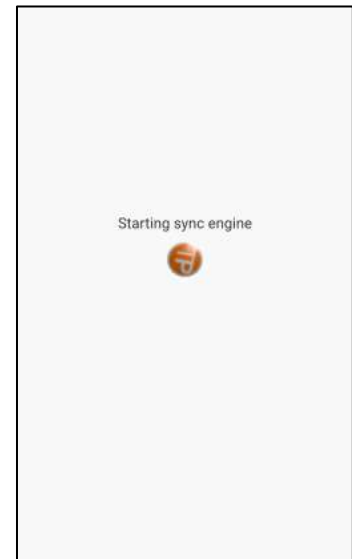
How to Get There: Slide Out Menu → Synchronize

The Sync button will synchronize ALL the device data with a cloud-based server. The synchronization process may take between 5 seconds and three minutes. Factors impacting synchronization time include: database size, device processing, device internet connection quality and internet traffic/speed. During the synchronization process an indicator such as a “spinning ball” with a TP in the center will be present.

The Sync process is clearly displayed. Process steps include:

- Starting Sync Engine
- Getting Local Data
- Sending to Server
- Working on Server
- Building Server Data
- Pulling from Server
- Processing Server Data
- Cleaning Up

Once the synchronization process is completed the user will be directed to the sign in page.



Synchronization Screen

5.9 Log Out

How to Get There: Slide Out Menu → Log Out → Confirm/Select Log Out

The log out menu option allows user to confirm they wish to leave the program. When the user logs out, the program is closed.

5.10 Changing Username and Password


Users will need to contact THORFeed Technical Support to change Username or Passwords. Call 833.846.7333 or email support@THORFeed.com and ask Technical Support to contact you regarding Username or Password changes or questions.

6 MESSAGES, INDICATORS AND SOLUTIONS

THORFeed Inventory is a powerful solution with advanced calculations and dynamic user inputs. Users set up and input pertinent details and don't want to enter the information again nor accidentally delete this vital information. Helping to assure accuracy and limiting work, helpful messages in popup windows provide messages and solutions. Additionally, visual indicators may also appear allowing instant and clear issue identification. The messages, indicators and solutions are from the feed setup, pending inventory, current inventory, prepay and reports.

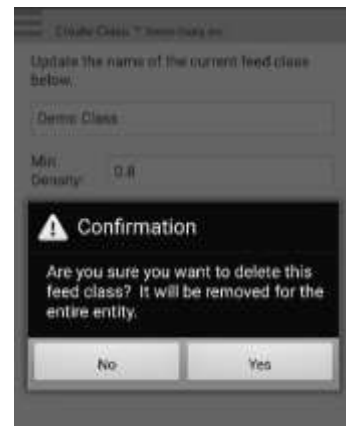
6.1 Confirm Class Deletion (Feed Setup – Class)

Feed classes may be deleted. Before completing this action, this message will popup:

“  **CONFIRMATION**
Are you sure you want to delete this feed class? It will be removed from the entire entity “

Solutions steps:


- Verify the feed class is not being used
- Select No if this is incorrect or if you have doubts
- Select Yes if this is correct



Feed Class Deletion

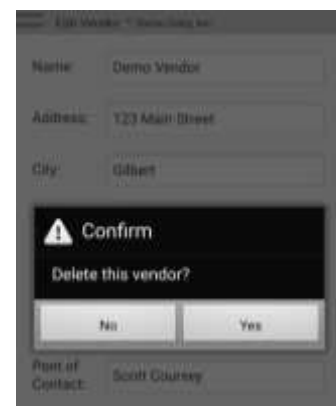
6.2 Confirm Vendor Deletion (Feed Setup – Vendor)

Vendors may be deleted. Before completing this action, this message will popup:

“  **CONFIRMATION**
Delete this vendor?

Solutions steps:


- Verify the vendor is not being used
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Delete Vendor

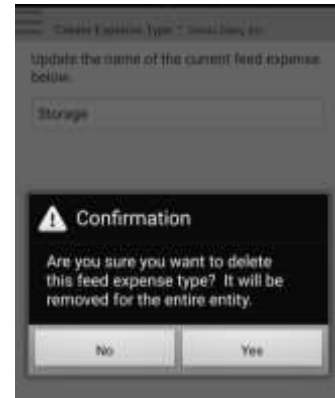
6.3 Confirm Expense Type Deletion (Feed Setup – Expense Type)

Expense types may be deleted. Before completing this action, this message will popup:

“  **CONFIRMATION**
Are you sure you want to delete this feed expense type? It will be removed for the entire entity.

Solutions steps:

- Verify the expense type is not being used
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Delete Expense Type

6.4 Select A Class (Pending Inventory – Class)

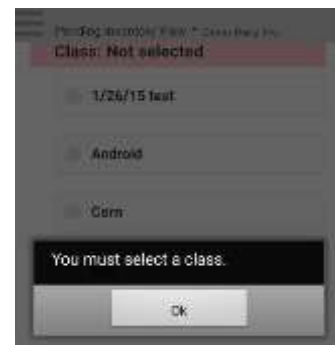
A proper form setup requires a feed class be selected. This message will appear when no feed class is selected.

“You must select a feed class”

Making this even easier, the FORM and Feed Class is highlighted in pink!

Solutions steps:

- Select a current feed class
- Add a feed class and select that feed class



Select a Class

6.5 Select A Lot (Pending Inventory - Lot)

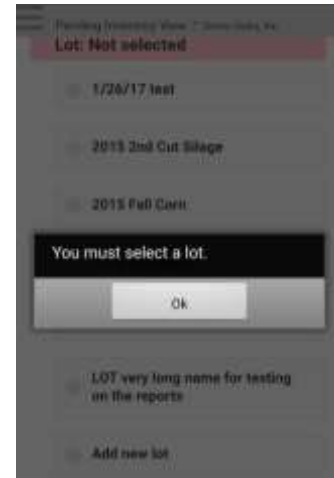
A proper form setup requires a feed lot be selected. This message will appear when no feed lot is selected.

“You must select a lot”

Making this even easier, the FORM and Feed Lot is highlighted in pink!

Solutions steps:

- Select a current feed lot
- Select the “Add New Lot” Button, complete information
- Select the new feed lot



Select a Lot

6.6 No Forms Applied (Pending Inventory - Forms)

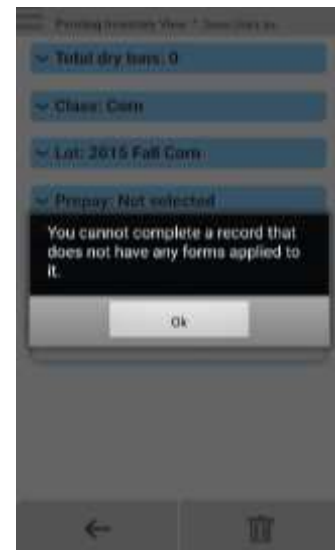
A proper form setup requires class, lot and completed storage form. Should the storage form not be completed and the user selects the Mark as Complete button, this message will appear.

“You cannot complete a record that does not have any forms applied to it.”

Making this even easier, the STORAGE FORM feature is highlighted in pink!

Solutions steps:

- Select a storage form
- Add/Update the quantity
- Complete the storage form particulars
- Select Mark as Complete button



No forms applied

6.7 Assign A Length (Pending Inventory - Forms)

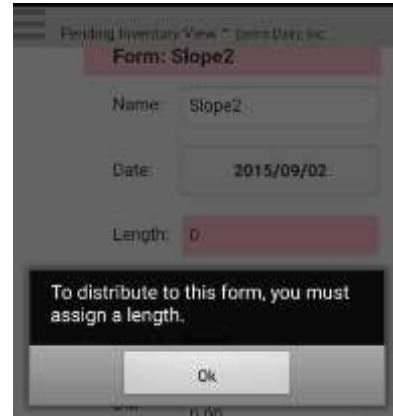
This message will appear when a form length is not entered. The message is:

“To distribute to this form, you must assign a length.”

Making this even easier, the FORM and exact LENGTH FILED are highlighted in pink!

Solution steps:

- Verify form length
- Enter form length



Assign a length message

6.8 Requested Density Too High or Too Low (Pending Inventory - Forms)

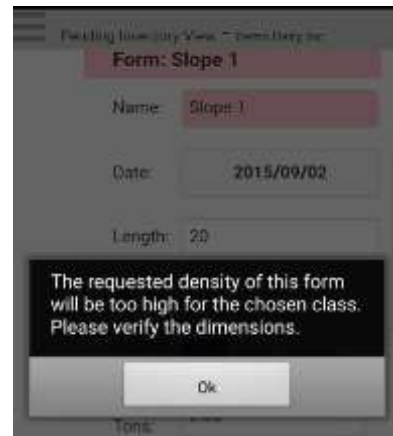
A class density range is established when setting up each class in the Feed Setup feature. This message will appear when a form density is too high.

“The requested density of this form will be too high or (too low) for the chosen class. Please verify the dimensions”

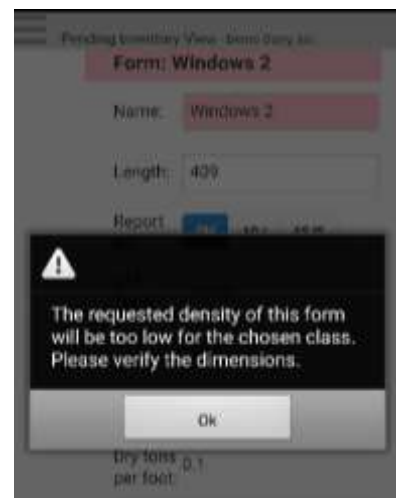
Making this even easier, the FORM and exact LENGTH FILED are highlighted in pink!

Solutions steps:

- Verify form dimensions
- Verify class tonnage
- Correct the form dimensions
- Modifying the form density ranges



Density too high

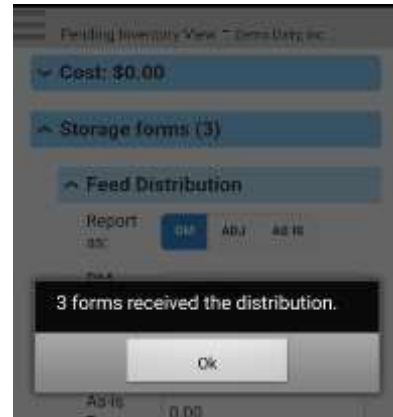


Density Too Low

6.9 “_x_” Forms Received the Distribution” (Pending Inventory - Forms)

After tonnage is properly distributed among forms, this confirmation popup message will appear. This message is a confirmation the operation worked properly. x in this case represents the number of forms receiving tonnage distribution. This message will popup:

“_x_ forms received the distribution”



Form Distribution Confirmation

6.10 Form Name – No Default Name Allowed (Pending Inventory - Form)

This message will appear when user has not entered a form unique name. The default “Untitled” is not acceptable. This message will popup:

“The form must have a non-default name:”

Solutions steps:

- Change Form Name
- Do not move form to current inventory



Form Distribution Confirmation

6.11 Reduce the Number of Forms (Pending Inventory – Forms)

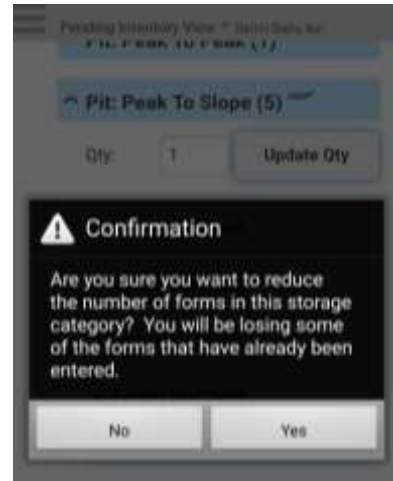
The Pending inventory allows users dynamic form addition or removal via the Quantity feature. If too many forms are added user may delete them individually or using the Update Qty (quantity) feature, remove multiple forms. Enter the desired form number and select the Update Qty button. The software will reduce the number of forms, deleting from the bottom up, only after confirming the user understands some forms will be deleted and user will lose any information in the form. This message will popup:

“  **CONFIRMATION**

Are you sure you want to reduce the number of forms in the storage category? You will be losing some of the forms that have already been entered. “

Solutions steps:

- Verify number of forms
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Reduce Number of Forms

6.12 Move To Current Inventory from Pending Inventory

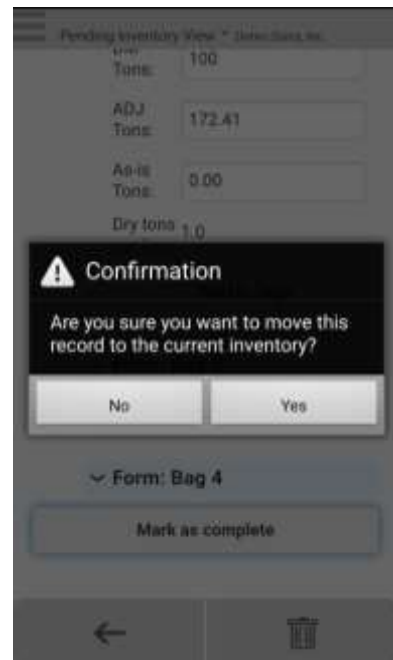
Your form(s) are complete and you select the Mark as Complete button. THORFeed will confirm this is what you want to do. Once this is done, form cannot be brought back into pending status. This message will popup:

“  **CONFIRMATION**

Are you sure you want to move this record to the current inventory? “

Solutions steps:

- Verify forms are correct
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Move Form(s) to Current Inventory

6.13 Invalid Measurement (Current inventory - Form)

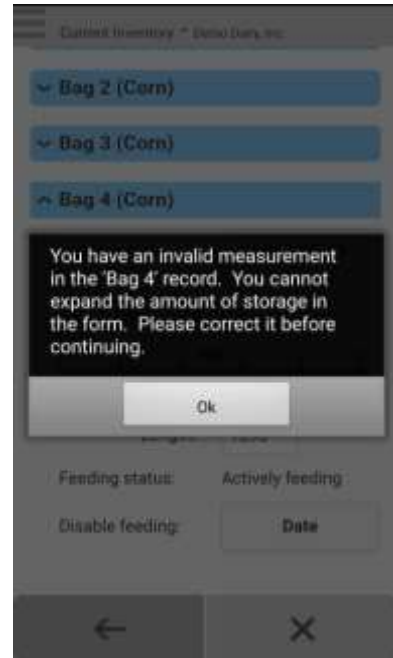
A proper active form measurement requires proper steps be completed. This message will appear when active form length is extended beyond the predetermined length (i.e. 130 feet is entered vs. the 100 feet predetermined). This message will popup:

“You have an invalid measurement in “_XXXXXX_” record. You cannot expand the amount of storage in the form. Please correct it before continuing.”

Making this even easier, the FORM and Feed Lot is highlighted in pink!

Solutions steps:

- Verify the form is being updated is the form measured
- Select the proper form and enter measurement
- Input the proper measurement



Invalid measurement

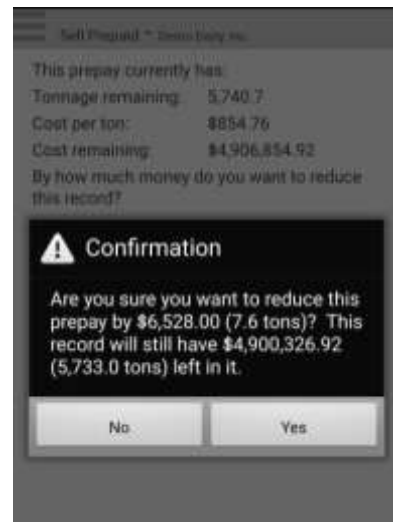
6.14 Prepay Sell Off Confirmation (Prepay – Sell Off)

Changing a Prepay value is a critical action. Before the action is completed, this message will popup:

! CONFIRMATION
“Are you sure you want to reduce this prepay by “\$ XXXX” (XXXX Tons)? This record will still have a “\$XXXXX” (XXXXX tons) left in it. “

Solutions steps:

- Verify prepay and tons are correct
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Prepay Sell Off Confirmation

6.15 Zero Out Explanation (Prepay – Zero Out)

Zeroing Out a Pre-Pay is a critical action. This action can be accomplished however a description needs to be entered.

If no description is provided, this message will popup:

“You must provide more of an explanation of why you’re zeroing this prepay.”

Solutions steps:

- Enter at detailed description that is at least 150 characters.
- Select the back arrow and exit screen.



Prepay Zero Out Explanation

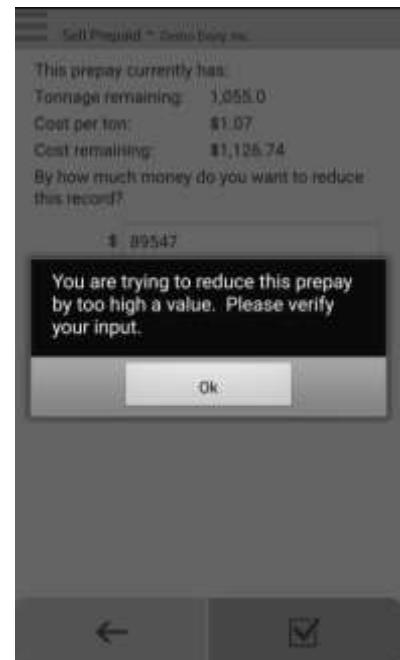
6.16 Too High Prepay Sell Off (Prepay – Sell Off)

Users may inadvertently try to sell off a prepay for more money than is the current calculated value. Before the action is completed, this message will popup:

“You are trying to reduce this prepay by too high a value. Please verify your input “

Solutions steps:

- Verify prepay and tons are correct
- Select No if this is incorrect or you have doubts
- Select Yes if this is correct



Too High Prepay Sell Off

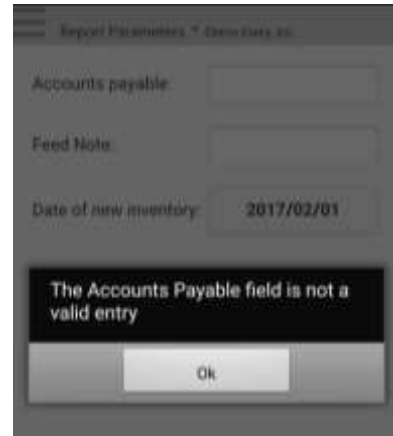
6.17 Accounts Payable Not Valid (Reports – Margin Report)

The Feed Margin Report requires the accounts payable field has a valid entry. If this is not completed, this message will popup:

“The Accounts Payable field is not a valid entry “

Solutions steps:

- Verify the Accounts Payable field is completed
- Verify the Accounts Payable number is correct
- Select No if this is incorrect or if you have doubts



Accounts Payable Not Valid

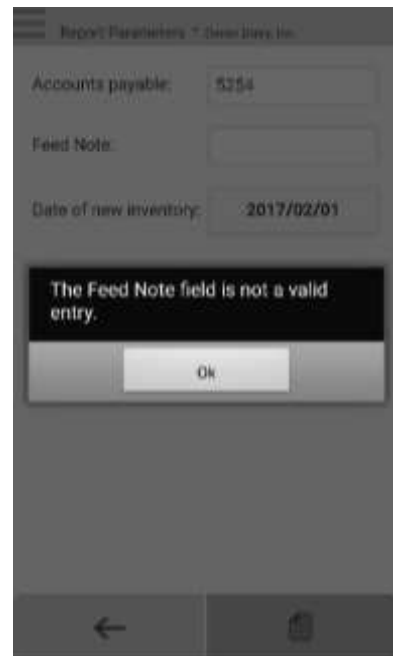
6.18 Feed Note Not Valid (Reports – Margin Report)

The Feed Margin Report requires the feed note field has a valid entry. If this is not completed, this message will popup:

“The Feed Note field is not a valid entry “

Solutions steps:

- Verify the Feed note field is completed
- Verify the Feed Note number is correct
- Select No if this is incorrect or you have doubts



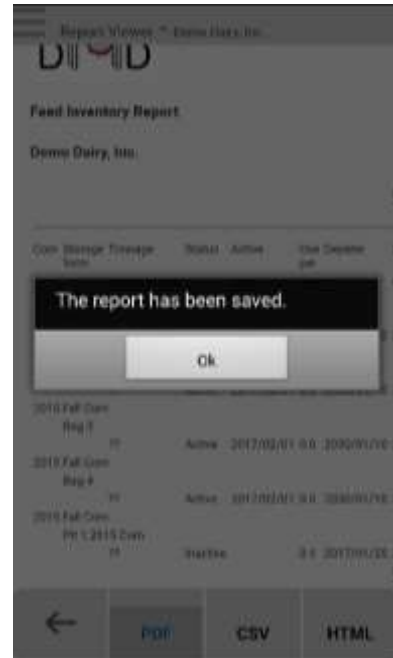
Feed Not Valid

6.19 Report has Been Saved (Reports – Inventory or Margin)

Users may export reports into as a .csv, .html and .pdf format. Users select a button representing the format desired and when the operation is successfully completed, this message will popup:

“The report has been saved”

Congratulations, you may view, work with or share your report.



Report has been saved

6.20 Feed Change Direction (Current Inventory)

Users may change the direction a feed form is being fed. **USE CAUTION!** Changing the feed direction can significantly impact the usage rate. When the user selects the change feed direction arrow the following message will appear:

“Are you sure you want to change directions of this form? “

Solutions steps:

- Verify the feeding direction
- Confirm the change – Yes or No
- Feed direction change will be completed
- Arrow will change



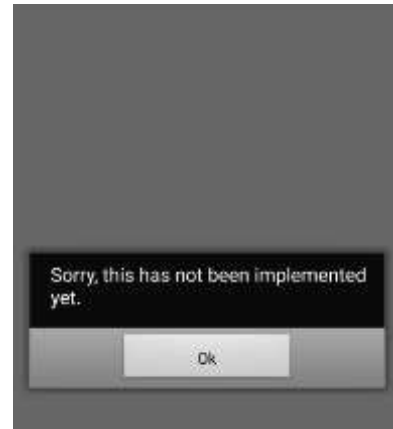
Feed Direction Change Confirmation

6.21 “Feature Not Implemented” (Any point)

Should you select an operating system or device feature the software solution has not been programmed to process, this message may popup:

“Sorry, this has not been implemented yet.”

iOS, Android and windows operating systems and different device have special capabilities such as a back button, multiple cameras, screen rotation and more.



Feature not implemented

6.22 “All measurements for this class are outside of the chosen range.”

A Depletion Rate Projection Span of 30, 60, 90, 180 days or the last year have been specified through Setup. This message is reporting that there are NO measurements of any storage forms in this entire feed class that fall with the projection span.

There are 2 solutions to address this problem:

1. Begin measuring forms immediately so THORFeed can start recording and reporting the measurements and projections.
2. Go back to Depletion Rate Projections in Setup and change the projection span to a larger number of days.



Feature not implemented

7 APPENDIX

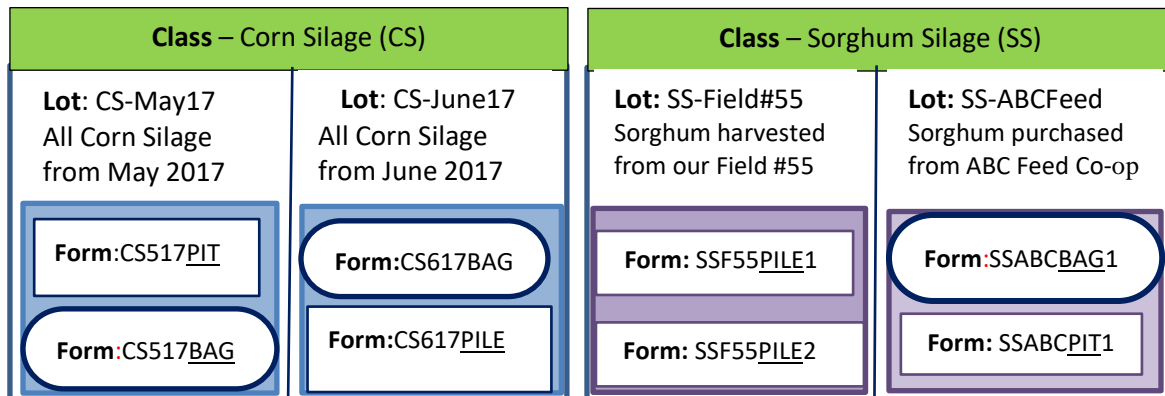
7.1 Planning Your THORFeed Setup

7.1.1 Introduction:

The major objective of THORFeed is to **help farmers organize, measure and manage their entire feed inventory**. The organize step starts the process and is critical to ensure that the measure and manage steps can be effectively executed. As an overview, there are 3 steps to start the organize process:

1. Define Feed Types into **Classes** that the farm will continue to use for the future
2. Separate the deliveries of feed classes into **Lots** for further uniqueness (see Lot examples below)
3. Define the **Forms** that will hold the feed until the feed is readied for herd consumption.

Note: when defining the Form, additional details such as: form measurements, tonnage, dry matter percentage, costs and other items can be included to help future utilization calculations. Further instructions on additional details will be provided in a later section.



To help the initial planning for THORFeed Setup, a Feed Inventory Planning Sheet can be downloaded from the following link: xxxx. The first organization steps that make the implementation of THORFeed successful are listed below and can be found on the downloaded planning sheet:

7.1.2 Identify Feed Classes:

- Farmers usually have a limited and generally consistent combination of feeds that are used to provide sustenance to their herd. THORFeed uses the term – **Class** to identify these feeds.
- A class can be stored in various storage forms (pits, piles, silage bags, silos, etc.) and the feed is considered the same class, regardless of storage type.
- Examples of classes are: corn silage, sorghum silage, barley, beets, almonds hulls, soybeans, haylage, oatlage, alfalfa, wheat bran, straw, and many others and combinations of classes.
- The important points are: farm management must define classes that are:
 - Consistently Identifiable for THEIR farm (so that everyone understands this farm’s feed terminology)
 - Uniquely Specific so that the various classes can be individually measured
 - Once farm leadership decides on Classes, we can proceed to the next step – **Lots**.

7.1.3 Define and Setup of Lots

- Definition: In THORFeed, the term **Lot** is used within a Class to further define feed that was acquired and/or stored for any of the following reasons:
 - Feed that was harvested from a certain location (for example: a known feed vendor or a specific field)
 - Feed that was harvested and stored at a certain time (such as spring or fall harvest of a certain feed)
 - Any other quality or feature of the feed that farm management wants to uniquely identify within a feed Class
 - Note: Some farms use lots to differentiate feeds in the same class that might have different nutritional values. These farms measure the milk output from each LOT to determine if a significant benefit can be gained by using feed from a specific combination of lots.
- Examples of Lots are: June 2017 Alfalfa; Jones Feed Co-op; a certain feed that was harvested from a specific field on the farm
- Lot Date: Lots should be defined and setup with a date of harvest or purchase to enable proper tracking within THORFeed.
- Lots can also be setup in the Pending Inventory Setup process.

7.2 Pending Inventory Setup Process

- Feed Classes and Lots **should be established before the feed arrives for storage onsite at the farm**. Once the feed has been loaded into storage containers (bags, pits, piles, silos, etc.), but **before** the feed is distributed to the herd; detailed information on the feed in storage forms should be compiled. In THORFeed, detailed information on the stored feed is handled through the **Pending Inventory Process**. The above-mentioned Feed Inventory Planning Sheet contains all the information in columns that will be needed for input into THORFeed to define the feed and forms for ongoing feed management. Below is a list of the detailed information to be inserted on the planning sheet for the stored feed:
 - **Class** – what is the farm specified class of this feed?
 - **Lot** – What Lot does this feed in the form belong? If there is no lot, a new lot can be defined during the Pending Inventory Setup process.
 - **Prepay** – this is an optional entry to align a feed to a certain vendor (mill or feed coop). Again, it is optional but can be useful for some farmers
 - **Cost** – once the feed is placed in a storage form, a good practice is to enter the cost of the feed into the system for later margin and cost summary calculations. Cost can be listed as the entire value of the feed or can be split by vendor. Some farms separate costs by vendors in the areas for general feed cost, transportation, chopping, stuffing, etc.
 - **Storage Form** - Users can distribute feed tonnage among forms that are setup. A form type is selected (pit, pile, bag, bale count or length of bale storage). (Note: pits and piles have slope-to-slope, peak-to-slope and slope-to-peak qualifications). The quantity of forms for each type of form is entered and a form template is generated. Users enter the following details for each form:

THORFeed Inventory Manual

- Form Name
 - Dimensions (Length and or width or bails depending upon form type).
 - Report Tonnage As: Dry Matter Tons, Adjusted Tons DJ or As-Is Tons Note: it is recommended that Dry Matter Tons are used
 - Actual DM Tons
 - Actual ADJ Tons
 - Actual As-is Tons
 - Dry Tons per foot (if known, this occur for Adjusted Tons)
- Optional Information that can be added when entering pending inventory information
 - **Vendor:** if there are vendors that need to be described for feed or other related expenses, the details of each vendor can be added. Details include:
 - Vendor company name, address, phone, contact names, drivers
 - Vendor is an optional feature
 - **Expense Types:** Some farms prefer to define related feed expenses to determine the total cost of feed.
 - Examples of feed expense types are: delivery charges, storage charges, bags & tarps costs, chemical additives and others
 - Expense Type is an optional feature
 - **Farm Default Dry Matter Percentage (DM%):** This figure will set a default DM% for **all feed classes throughout the farm**. DM% refers to material remaining after removal of water from the feed. This value will have a significant impact on all inventory calculations and should be carefully considered.

7.3 Completion of the Feed Inventory Planning Sheet

Once the above activities have been completed on the planning sheet, the information can be entered in THORFeed. **Note:** for first time THORFeed users, it is recommended that a THORFeed team member assist with the initial loading of class, lot and form information after the planning step are complete.

8 INDEX

+

+ · 12, 13, 14, 15, 17, 18, 19, 23

A

Adjusted Tons · 12, 14, 17
administrator · 2, 8, 9
 Android · 2, 4, 5
Are you sure · 32
 As-is-Tons · 17
 Assign a length · 30, 37
 Authorized · 1

B

By Value · 19
By Vendor · 19

C

Class · 12, 13, 14, 15, 16, 17, 18, 27, 28, 29, 33
 Commodities · 10
 commodity · 10
Cost · 17, 19, 23, 24, 25
 Current Inventory · 22, *See Inventory*

D

Dashboard · 9, 10
 Data Flows · 2
 date last measured
 measurement date · 10
 Days Until Depletion · 10
 demo · 8
 Demo Software · *See Trial* or *Trial Software*
 Density · 30
 density range · 30
 Depletion Date · 10
 distributed · 31
 Distribution · 31
 DM · 1, 12, 14
 DM% · 12, 14
 Download · 4
 Dry Tons · 17, 20, 40

E

Entity · 9, 26
 Entity Selector · 9, 26
 Examine Record Button · 16
 Expense · 12, 13
 Expense Type · 12, 13

F

Feature · 4
 feed class
 class · 12, 13
 feed lot · 29, 33
 Feed Setup · 9, 12, 19, 30
 Feed Set-up · 12
 Form Name · 10, 16, 20
 Form Tonnage · 16
Forms · 10, 27, 28, 31, 32
 Function · 4
 functions · 8, 12

H

Help Desk · 1

I

Initial Program Launch · 7
 Install · 5
 Inventory · 2, 9, 16, 17, 19, 21, 22, 27
 Inventory Report · 24
 iOS · 2, 5

L

Landing Screen · 7
 Log In · 7, 8
 Log Out · 9, 26
 Logging On · 8
 lot · 12
 Lot · 12, 14, 15, 16, 17, 18, 19, 29
 lot setup · 12
 Lot Set-up · 14, 15

THORFeed Inventory Manual

M

Margin Report · 25, 35
Mark as Complete · 29, 32
Menu · 9, 10, 12, 13, 14, 15, 16, 17, 19, 21, 22, 23, 24, 25, 26

N

Note · 4, 12, 21, 25
NOTE · 7

P

Paid Software · 8
password · 8
Password · 7, 8, 26
Passwords · 26
pending inventory · 15, 16, 17, 27
Pending Inventory · 16, 17, 18, 19, 21
Pending Inventory Set-up · 17
Permission · 1
pink · 28, 29, 30, 33
Pre Pay · 23
Prepay · 9, 17, 19, 23, 33, 34

Q

Quantity · 23, 32

R

Reduce · 32
remove · 9
Reports · 24
Re-Sync · 7, 8

S

Sell Off · 23, 33, 34
setup · 7, 12, 28, 29, 33
Sorry · 37
Storage · 17, 20
synchronization · 1, 8, 26
synchronize · 8, 26
Synchronize · 9, 26
System Configuration · 2
System Menu · 9

T

Tag · 2, 21
Tons Remaining · 10
Total Dry Tons · 17
Trial · 8

U

User Access Levels · 2
Username · 7, 8, 26

V

Vendors · 12
version · 7, 9

W

WARNING · 1
Windows · 2, 5, 6