



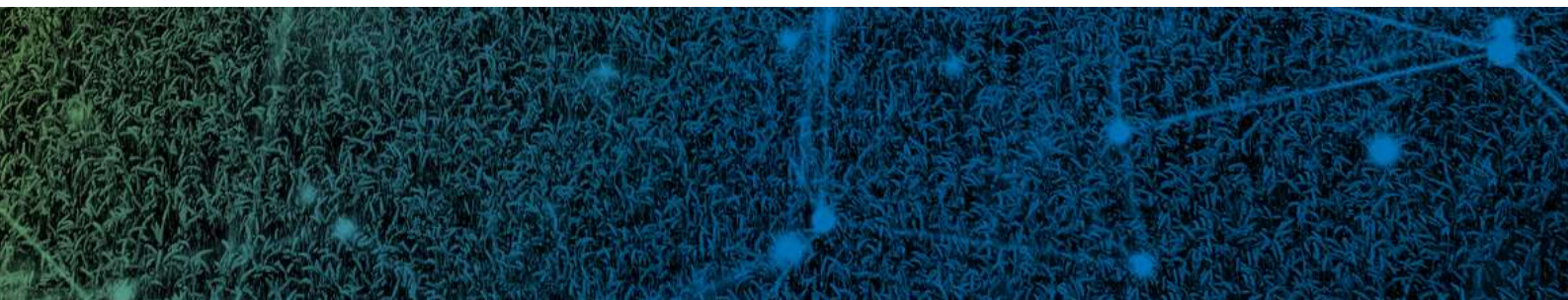
# Farmplan gatekeeper

# Produce



Using the produce module in Gatekeeper

 Proagrica



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# Introduction

## About the produce module

Produce allows you to assign products to specific storage locations, meaning Gatekeeper keeps track of how much product is stored in a specific place. It also allows you to record

- operations carried out on storage locations (e.g. grain store chemical applications),
- operations carried out on storage products (e.g. applications to stored grain), and
- observations of storage locations (e.g. grain temperature readings).

The produce module can be used for both input and output products but as the primary use of the module is to record information about stored harvest outputs, the text of this guide will refer to setup and procedures relevant to output products.

The basis of using the produce module for recording outputs is as follows:

- When you record a yield job against a field (either in the planning or recording modules), you record which store the outputs went into.
- When you record output sales (in the trading module), you record which store those outputs were taken from.

As long as every output job nominates a store, and every sale is associated with the correct store location, the produce module will then show the remaining grain in each store.

The produce module will also give a traceability overview of fields, products, and storage treatments for the product in store, ideal for where a greater reporting burden is required for crops.

## Using the produce module

*Please note before proceeding: The produce module cannot be used for any headings which use the price list stock mode.*

The produce module can also be useful to manage the pricing of output products to field records. Two primary examples would be:

- Where output sales will not be completed within a single harvest year, batches can be used to ensure that product prices are correctly allocated to their originating field records.
- Where output products are sold in small batches with variability in income (based on quality or characteristics), which needs to be reflected in field margin data.

Use of the produce module also enables outputs to be priced using the 'Full stock batch price' method if required. This is a more detailed mode for output prices, which may be useful where greater variety in field income exists based on produce quality or characteristics. For more details on full stock batch price, please see [Appendix 1](#) (p.21).

When you are creating jobs in the planning module you can only nominate one target store per job. However when recording it is possible to record multiple stores per job; so if grain from one field went into two stores you can record both locations without needing to split the job.

# Setting up stores

## Initial settings

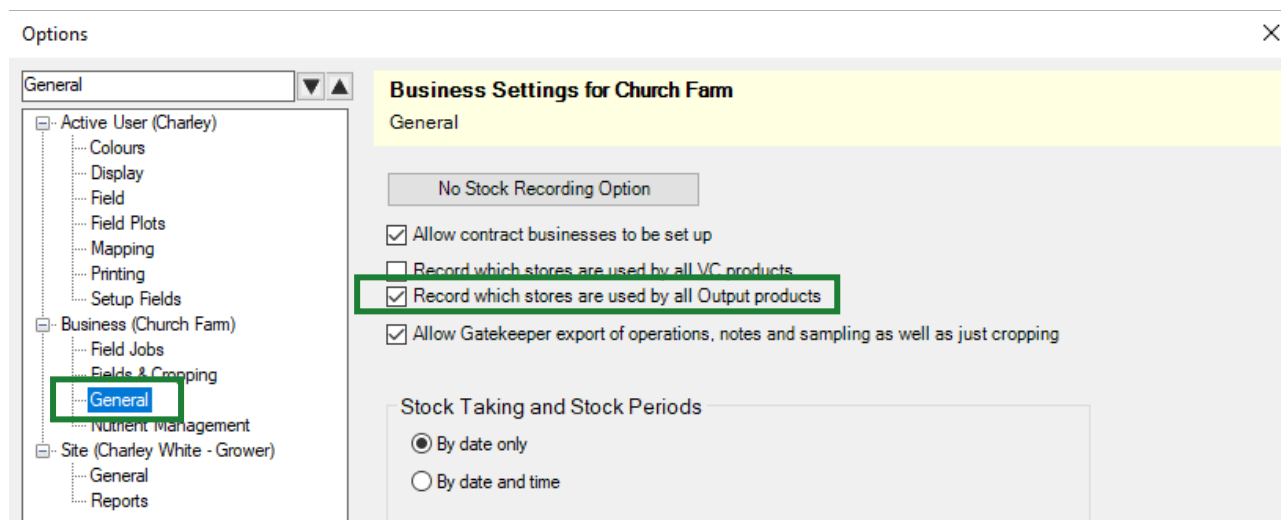
The produce module is opened from the main Gatekeeper screen with the icon shown below:



If you cannot see this icon, you will need to contact the support team so that they can activate the module for you. There is no additional charge for the module, but depending on your settings it may not be visible at first.

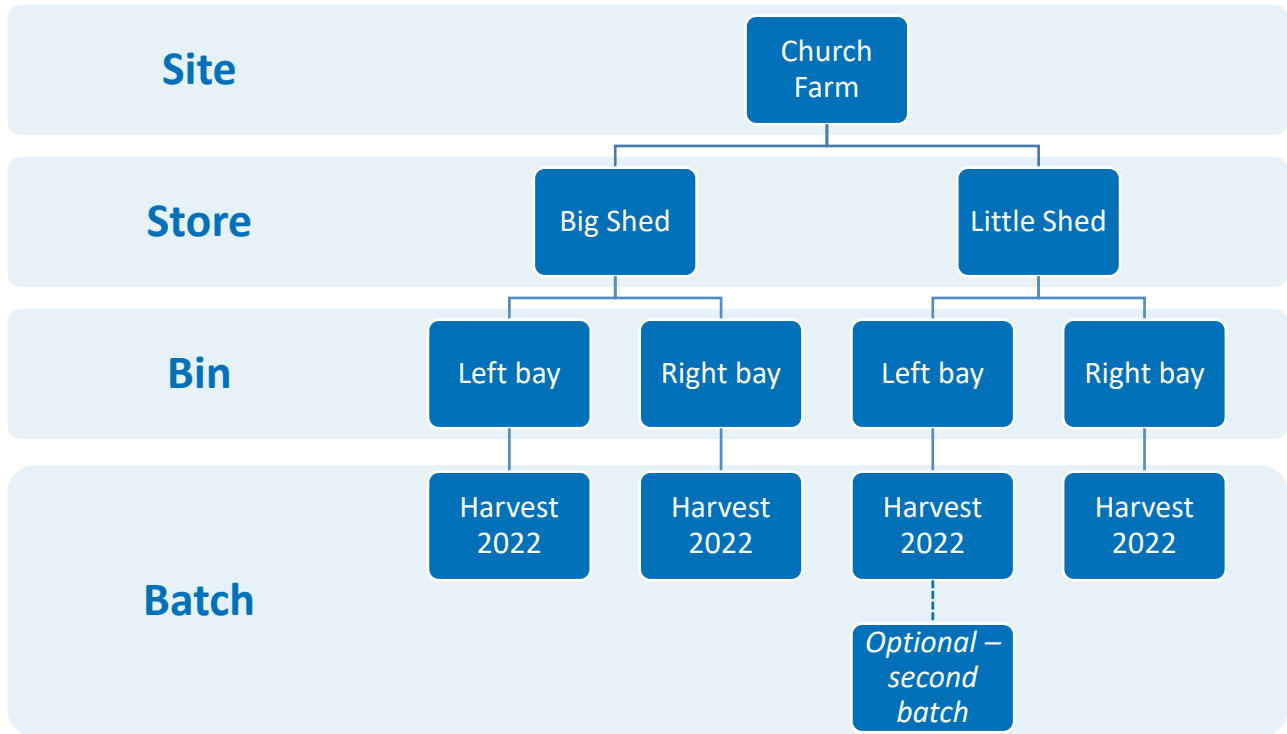
Once you can see the produce module icon, you will need to activate its use in your Gatekeeper settings. To do this, from the main Gatekeeper screen:

- Go to *Tools > Options*
- From the tree view on the left hand side, select 'General' under your business options
- Tick 'Record which stores are used by all output products'



## Setting up storage locations

The produce module uses the following structure for the storage of products:



Site, store, and bin are all geographic locations – different distinct places.

Batches are time-specific as well as geographic, to account for when a single location is used to store different products.

For example:

- At the start of harvest the left bay of 'Little Shed' has a pile of barley stored in it.
- This is created as a batch under *Church Farm > Little Shed > Left Bay*
- When the last of this barley is delivered off farm and that side of the shed is empty, this batch is made inactive
- When harvested beans start to be stored in the same place, this is created as a second batch in the same location.

It will be easier to manage your produce module records if your locations are set up to the minimum number of batches required. So for example, if Big Shed has two bays but they were both being used to store wheat with no distinction between them, it may be beneficial to consider having just one bin (and so one batch) in Big Shed.

To setup the storage arrangement, from the produce page:

1. Click 'Setup Storage'
2. Click 'Add Site' and enter site name
3. With the site selected on the left,
  - a. Click 'Add Store'
  - b. Enter store name
4. With the store selected on the left,
  - a. Click 'Add Bin'

- b. Enter bin name
  - c. Untick 'Stores input products'
5. With the bin selected on the left,
  - a. Click 'Add Batch'
  - b. Enter batch name
  - c. If necessary, change the batch start date to reflect when it will be used from.

For more information on pricing options available, please see [Appendix 1](#), (p.21).

Take care when creating batches to do so under the correct bin. Batches cannot be moved once created.

6. *Optional*: if you wish to record sensor readings from more than one place in a storage batch, tick 'Sensor records use multiple locations'. For more information, please see [Add store sensor measurements](#) (p.13)
7. *Optional*: if you wish to record times with sensor readings, tick 'Sensor records use time'.

By default, all users will have an option 'Unassigned Site'. This cannot be deleted but you may wish to make it inactive to remove it from dropdown lists in other areas of the program.

## Adding new batches in future years

Batches should be deactivated once emptied during the year (see [Deactivate a Batch](#), p.17). To add new batches for a new season, simply follow the steps above from step 5.

# Adding store records

Once stores have been setup with batches, the following actions are available:

Option	Action
<b>Move products into store</b>	When produce is harvested from a field, the store is selected at the same time as the harvest is entered. This moves produce into store and links the field to the store.
<b>Move products out of store</b>	When produce is delivered out from a field, the store is selected at the same time as the delivery is entered. This takes the produce out of store.
<b>Record a store treatment</b>	Records a treatment to the fabric of a store
<b>Record a stored crop treatment</b>	Records a treatment to the stored product
<b>Record a storage diary note</b>	Records a note against a storage location
<b>Add store sensor measurements</b>	To record a sensor or observation against a storage location; for example grain temperature, air temperatures, or pest presence.

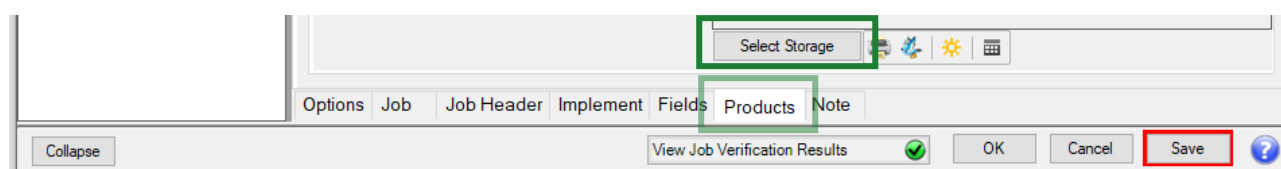
## Move products into store

To record which products went into which store, you will need to create a harvest record. This may be done in either the planning or recording modules; if you require further information on these processes please consult the [support centre](#) or contact the support team.

Both primary and secondary outputs can be allocated to stores if required.

The process for allocating products into stores is the same whether you use planning or recording. After you have recorded how much of a product came from the specific field(s) in a planning or recording job:

1. Go to the 'Products' tab
2. Click 'Select Storage'



3. Select the storage batch from the left hand side (this may be more than one location if required)  
If necessary, you can also record any wastage relevant to the job.
4. Click 'OK' twice to save and close.

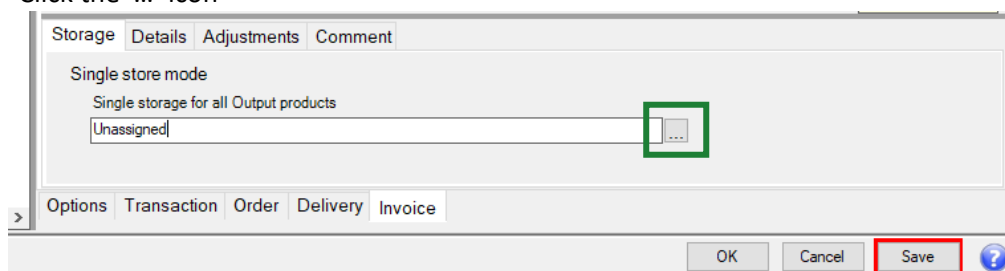
## Move products out of store

When products have been added into stores, they may be delivered off-farm to take them out of store, or transferred between batches to empty batches or stores. To move products out of a store, you will need to create a sales record in the trading module. If you require further information on this process, please refer to the [support centre](#) or contact the support line.

### *Recording ex-farm movements – single store deliveries*

When the entire delivery originates from the same store, after you have recorded how much of a product has been moved as a delivery, in the transaction itself:

1. Ensure the 'Storage' subtab is selected at the bottom of the screen
2. Click the '...' icon



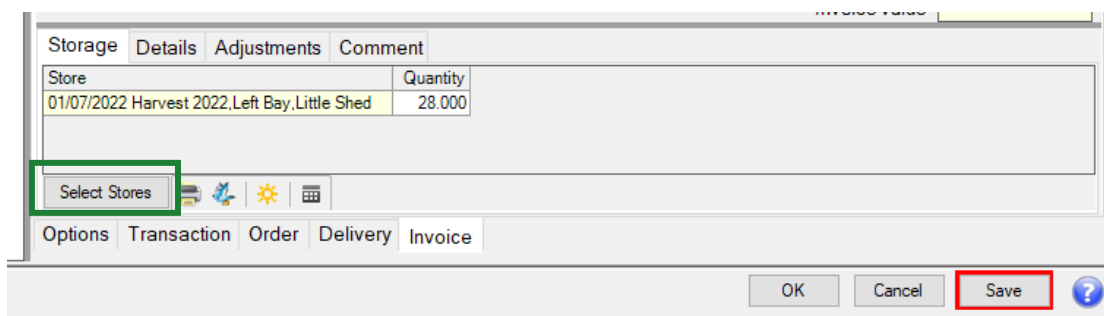
3. Select the correct batch for produce to be removed from.
4. 'OK' to save and close.

### *Recording ex-farm movement – multi store deliveries*

When the deliveries for one transaction come from more than one storage location, it is necessary to turn on the 'Multi store' option to be able to record more than one store in a transaction. Even if the different storage locations are entered as separate deliveries in a transaction, multi store mode must still be selected.

To record deliveries from multiple locations in a single transaction, add a delivery or invoice against a transaction as normal, and then:

1. Tick 'Multi store'
2. Ensure the 'Storage' subtab is selected at the bottom of the screen
3. Click 'Select Stores'

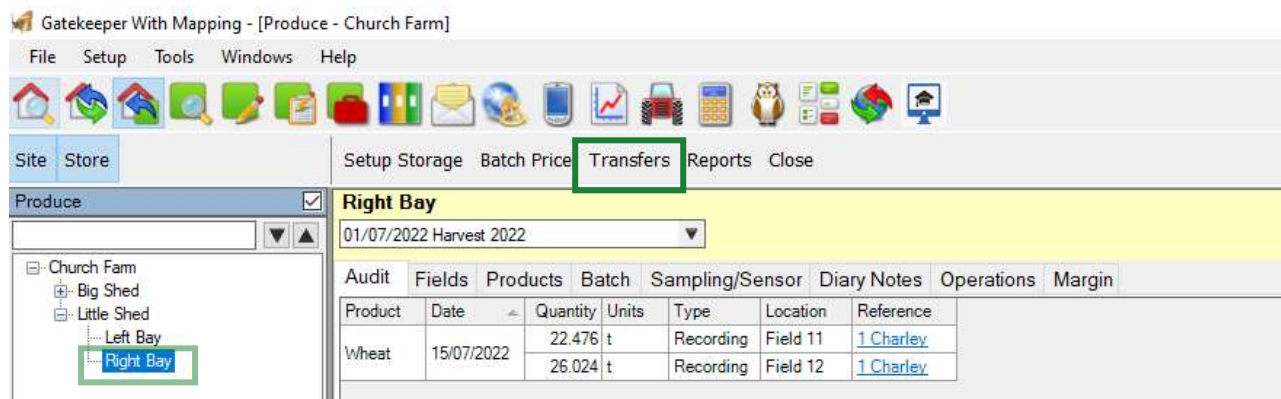


4. Select the required batches and click 'OK'
5. When you are returned to the delivery screen, enter totals for each store
6. Click 'OK' to save and close transaction

## Recording on-farm transfers

To move produce between existing batches, from the produce module screen:

1. Select the batch the product will be moved from on the left hand side
2. Click 'Transfers'



3. Either:
  - a. Click 'Add Transfer', or
  - b. *Customers with contract businesses only:* select the transferring business, and then click 'Add Transfer'
4. Enter the following information:
  - a. Transfer date
  - b. 'From' batch
  - c. 'To' batch
  - d. Quantity to move
  - e. *Optional:* transfer reference
5. Click 'OK' to save and close.

The transfer will now be visible against both batches. Be sure to [Deactivate a batch](#) (p.17) if it is has been emptied and is no longer required.

## Record a store treatment

*These steps are to record a treatment made to the fabric of a store location (e.g., sweeping, cleaning, empty store fumigation). To add a record of a treatment made to a stored crop, please see [Record a stored crop treatment](#), (p.11).*

1. Open the recording module
2. Click 'Add Job'
3. In the 'Add New Job' screen, change the new job type dropdown selector to 'Storage Fabric Operation'
4. Click 'Add Storage Fabric Operation Job'
5. Select the affected batch(es)
6. Select the store treatment product(s)
7. Enter the correct rate(s) or product total(s)
8. On the 'Job' tab, enter treatment details (time, date, shared used, operator, etc)
9. *Optional:* click on 'Job Header' tab to enter additional observations (health and safety procedures etc., or comments) on the 'Information' subtab.
10. *Optional:* if the cost of the job should be allocated only to secondary outputs that will be stored in the location:

- a. Click on 'Job Header' tab
- b. Click on 'Storage' subtab
- c. Tick 'This job for the purposes of store margins only contributes to the production of secondary output'.

If required, the planning module can be used to plan a store fabric treatment operation before it happens. The plan can then be completed using the same process as above to record the treatment taking place.

## Record a stored crop treatment

*These steps are to record a treatment made to a stored crop (e.g., to a grain pile, not an empty store). To add a record of a treatment made to the fabric of a store location, please see [Record a store treatment](#), (p10).*

1. Open the recording module
2. Click 'Add Job'
3. In the 'Add New Job' screen, change the new job type dropdown selector to 'Storage Contents Operation'
4. Click 'Add Storage Contents Operation Job'
5. Select the affected batch(es)
6. Select the treatment product(s)
7. Enter the correct rate(s) or product total(s)
8. On the 'Job' tab, enter treatment details (time, date, share used, operator, etc)
9. *Optional:* click on the 'Job Header' tab to enter additional observations (health and safety procedures etc., or comments) on the 'Information' subtab.
10. *Optional:* if the cost of the job should be allocated only to secondary outputs present in the location:
  - a. Click on 'Job Header' tab
  - b. Click on 'Storage' subtab
  - c. Tick 'This job for the purposes of store margins only contributes to the production of secondary output'.

If required, the planning module can be used to plan a stored contents treatment operation before it happens. The plan can then be completed using the same process as above to record the treatment taking place.

## Record a storage diary note

Diary notes may be used to make a note against a store location, in the same way that it is possible to make a diary note against a field during the cropping season.

Notes made against a storage location using this process can be queried using the analysis module. For this reason, if you are going to use the diary note function to record a repeating observation, it is recommended to use the comments library to select the observation, rather than typing in every instance. For more information on the comments library, please see [Appendix 2](#) (p.23).

*This method is not recommended to add sensor measurement records to a store location; please see [Add store sensor measurements](#) (p.13).*

To add a storage diary note:

1. Open the recording module

2. Click 'Add Job'
3. In the 'Add New Job' screen, change the new job type dropdown selector to 'Storage Diary Note'
4. Click 'Add Storage Diary Note Job'
5. Select the required batch(es)
6. Add the diary note or comment that you wish to store against the selected batch(es), remembering to use the comments library if appropriate. If required, enter a value.
7. Click 'OK' to save and close.

# Add store sensor measurements

The produce module will hold records of sensor measurements from a storage location. This function is useful for recording data such as grain temperature readings, air temperatures, or pest presence.

In addition, it is possible to specify a sensor location (to enable more than one reading per batch) or a reading time if required.

All users have the ability to import data readings from compatible file types rather than entering them manually. For this reason it is advisable to read the section on [importing sensor measurements](#) (p.15) before proceeding with manual entry, especially if the sensor system in place in storage locations is computerised.

## Store sensor measurement headings

Any observations made are stored against a 'heading', which is used to group items throughout Gatekeeper. The produce module has a default set of possible storage recordings for the most common requirements, but this list can be added to if required.

The default storage measurement headings are:

- average temperature (°C)
- max temperature (°C)
- min temperature (°C)
- moisture (%)
- other
- relative humidity (%)
- temperature (°C)
- weevil

It is possible to add more options into this list, but if you are planning to import your store sensor measurements using the devices module it is recommended to let these be created during the import process.

If you wish to manually add another heading (value you wish to record), either:

- Start from the main Gatekeeper screen and go to *Setup > Headings*, or
- While entering a record, on the sampling heading selector screen click 'Setup Sampling Heading'

Then:

1. From the tree view on the left hand side, select the most appropriate heading group from under the 'Storage Sampling/Sensor' category
2. Click 'Add Heading'
3. Enter your new heading name
4. Click 'OK' to save and close.

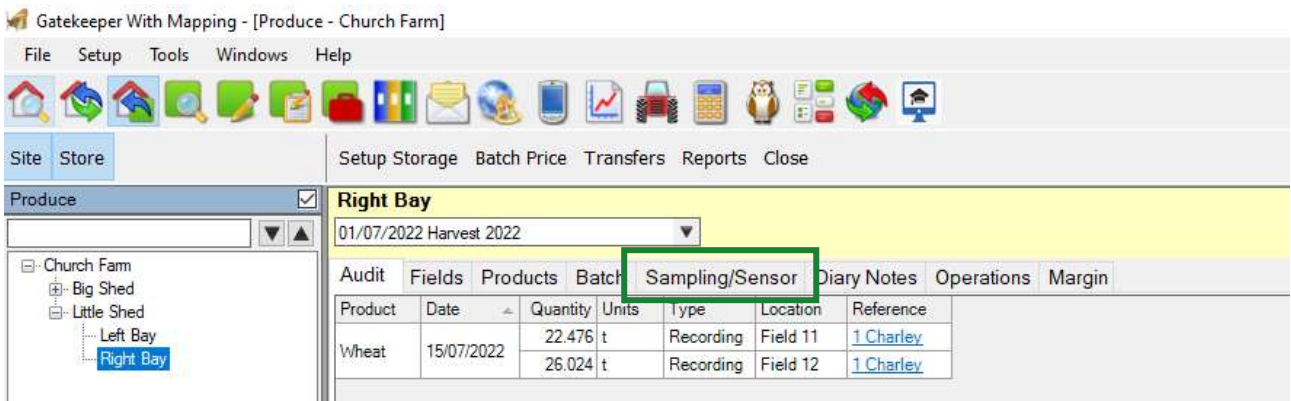
## Record store sensor measurements – manual entry

*These steps are to record sensor measurements where there is no opportunity to import a results file. To import results directly, please see [Record store sensor measurements – import data](#) (p.15).*

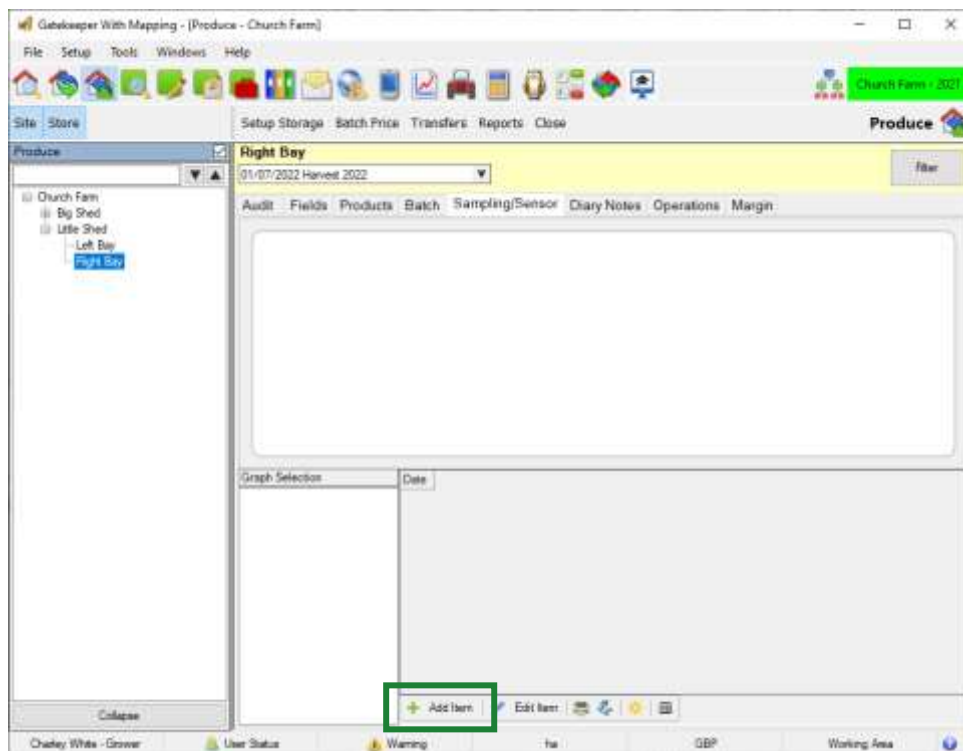
To manually enter records from a sensor against a store location:

1. Open the produce module

2. Select a bin from the list on the left hand side.
3. The current active batch for that bin will be shown in the dropdown list. If you have more than one active batch in that location, the most recently selected batch will be shown. For information on deactivating batches, please see [Deactivate a batch](#) (p.17).
4. Go to the 'Sampling/Sensor' tab



5. Click 'Add Item'



6. Select the required heading
7. Enter the recording data  
*Optional:* if you wish to record locations or times, use the tick box options at the bottom of the page to activate extra columns
8. Click 'OK' to save and close.

While manually entering store sensor measurements, using the return/enter key on your keyboard will automatically add a new row after the measurement entered, moving the date on by one day. This is to make it easier to add in multiple measurements. If a row is added by mistake, use the 'Delete row' button.

Once measurements are added to a batch, they will automatically display in a graph format on the 'Sampling/Sensor' tab. For more information about changing graph formats, please see [Display of store sensor measurements](#) (p.18).

## Record store sensor measurements – import data

These steps are to import data to the produce module. To manually enter measurements, please see [Record store sensor measurements – manual entry](#) (p.13).

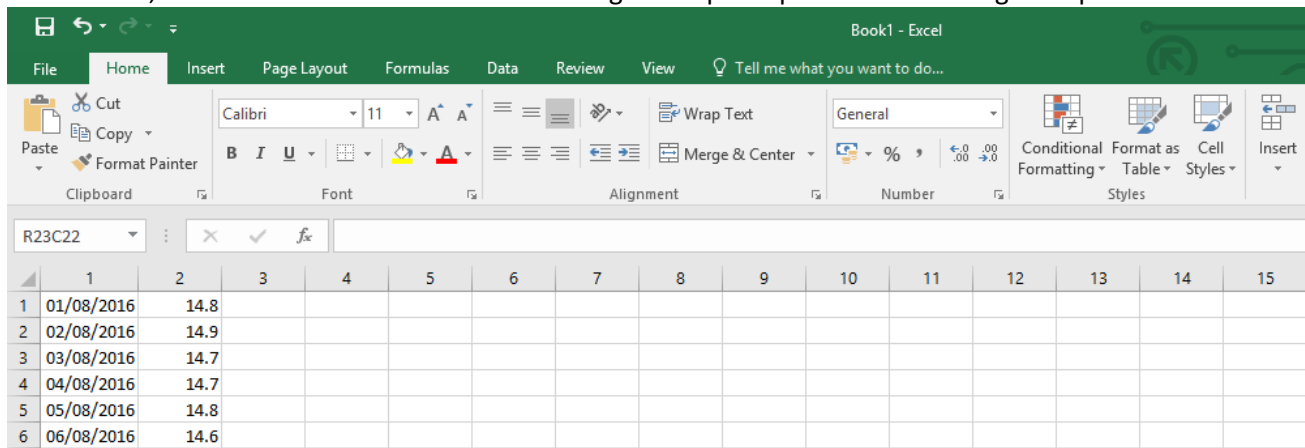
Sensor data may be imported through the devices module to prevent manual entry of data. There are two default options for importing data, and it is also possible to create custom import options where required. The correct import option will depend on the file produced by the sensor software.

Files must be in .csv format to use the default import options. However it is still possible to import files of other formats, so if you have any questions on file compatibility please contact the support team.

### Data file types

It is possible to open .csv files using Microsoft Excel or a similar spreadsheet software. To find out the correct import procedure it will be necessary to determine the .csv file layout and contents.

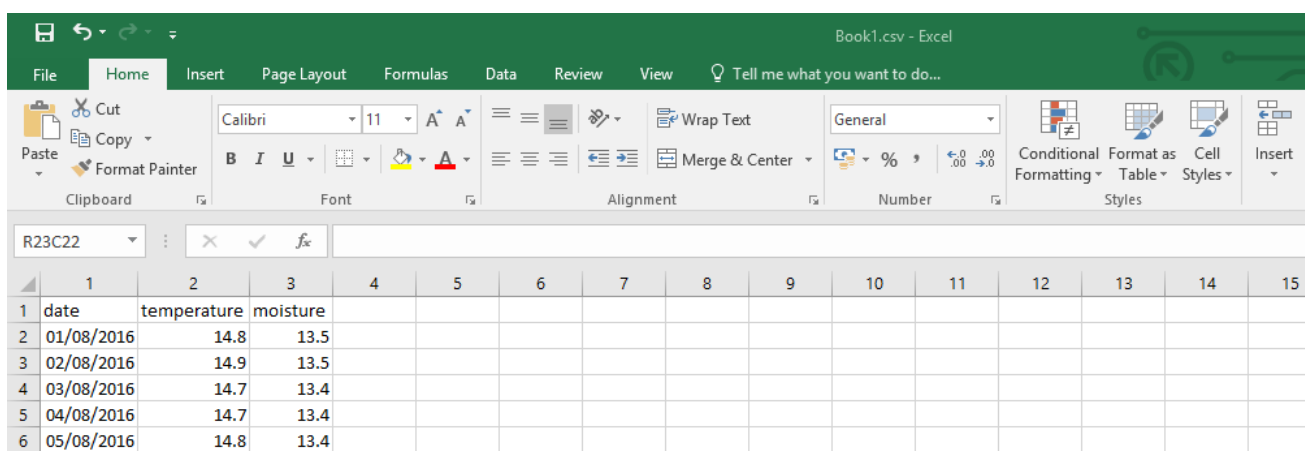
If the .csv file to import contains a reading date followed by a temperature measurement and no other information, follow the instructions below selecting the import option 'Dated storage temperature'.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	01/08/2016	14.8													
2	02/08/2016	14.9													
3	03/08/2016	14.7													
4	04/08/2016	14.7													
5	05/08/2016	14.8													
6	06/08/2016	14.6													

Example of a suitable file layout for the 'Dated storage temperature' import option

If the .csv file to import contains a reading date followed by more than one measurement (for example, temperature and moisture), follow the instructions below selecting the import option 'Storage sensor'.



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	date	temperature	moisture												
2	01/08/2016	14.8	13.5												
3	02/08/2016	14.9	13.5												
4	03/08/2016	14.7	13.4												
5	04/08/2016	14.7	13.4												
6	05/08/2016	14.8	13.4												

Example of a suitable file layout for the 'Storage Sensor' import option

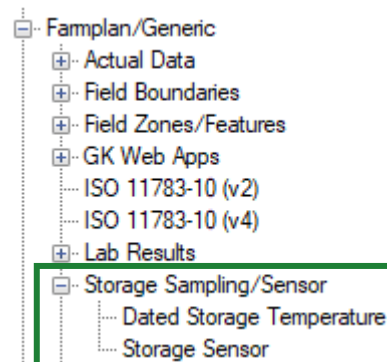
If you use the 'Storage Sensor' import option, Gatekeeper will automatically create data headings using the name of each column from the header line. In the example above, 'temperature' and 'moisture' would be created. The values which are imported are then stored under these headings.

If neither of these descriptions match the file created by your sensor system(s), please see [Appendix 3](#) (p.24) for more information on building a custom import option.

### The import process

To import sensor data from a .csv file:

1. Open the devices module
2. From the tree view on the left hand side, select the appropriate device import option (as explained above) from the *Farmplan/Generic > Storage Sampling/Sensor* option
3. Click 'Device Sync'. The 'Move source to archive after import' option box will be ticked by default; if left ticked, the .csv file will be moved after successful import into Gatekeeper's file structures. If you do not want the file to move after import, you may wish to untick this box.
4. Select the 'Local Exchange' tab
5. Select the file location
6. Double click in the 'Gatekeeper destination batch' column
7. Select the appropriate batch to assign the values to
8. Click 'Import with Preview'
9. The file contents will be shown as a preview. To accept, click 'OK'.



# Batch management & reporting

Once records have been entered into the produce module, the data may be viewed as required. It is also important to manage batches carefully to ensure data accuracy.

## View batch details

Once information is added to batches, the different tabs within the produce module itself display information about the batch:

Tab	Information
<b>Audit</b>	Product, date (of storage movement), quantity, job type, location (source field, storage location, haulier), job reference. Current batch stock levels are shown at the bottom of the page.
<b>Fields</b>	Fields products came from, and the latest date of movement into store.
<b>Products</b>	Variable cost products applied to fields, storage locations, or stored crops for the batch.
<b>Batch</b>	Overview of batch information, including pricing method and responsible business.
<b>Sampling/Sensor</b>	Sampling and sensor information recorded for the location (see below)
<b>Diary Notes</b>	Any notes assigned to the location
<b>Operations</b>	Operations carried out to the storage location
<b>Margin</b>	Field margin (variable costs) plus storage costs and output sales to give a batch margin.

Any text which appears as a blue hyperlink may be clicked to view the associated information. For example, clicking on a field name in the view below will open the field record for that field:

**Right Bay**  
01/07/2022 Harvest 2022

Audit Fields Products Batch Sampling/Sensor Diary Notes Operations Margin

Fields that have contributed products to this batch or any other batch that has been transferred to this one

Field	Latest Date
<a href="#">Field 12</a>	15/07/2022
<a href="#">Field 11</a>	15/07/2022

## Deactivate a batch

Once a batch is no longer required, it should be deactivated; this will often be after the last output delivery for a harvest year is completed. It is essential to start new batches for each harvest year.

To deactivate a batch:

1. Open the produce module
2. Click 'Setup Storage'
3. From the tree view on the left, select the batch in question
4. At the bottom of the screen, select the 'Inactive' option and click 'OK'

Once a batch has been emptied and finished with it should be made inactive so it minimises clutter and will not inadvertently be used again.

Active  Inactive

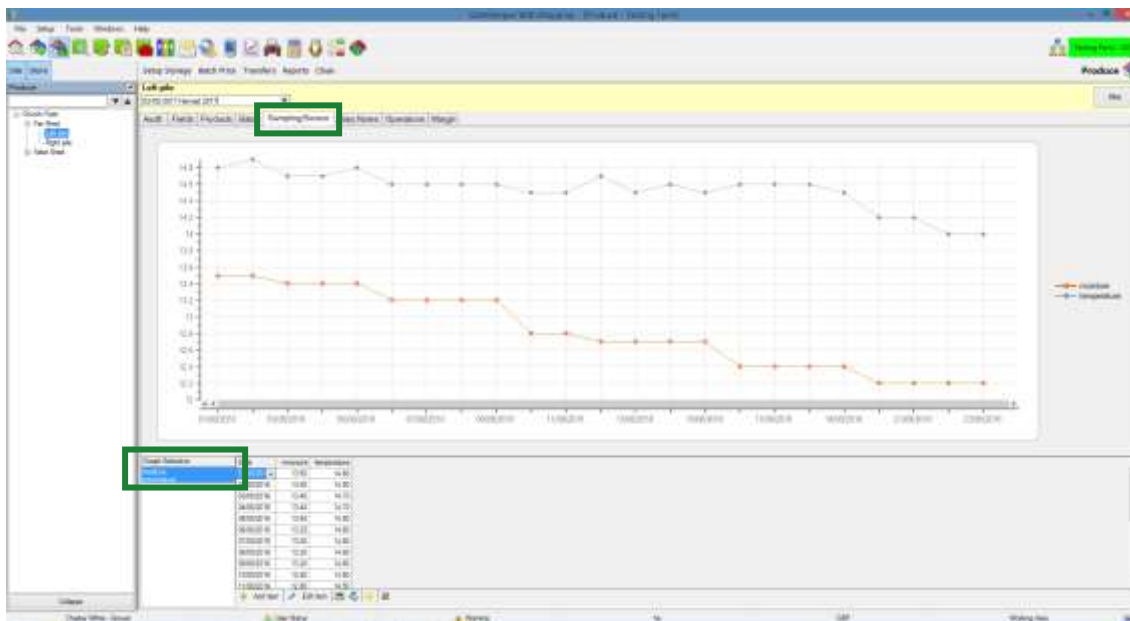
This item is not available for use

OK Cancel Save

## Display of sensor store measurements

To view sensor store measurements once they have been added or imported, from the produce module:

1. Select the appropriate bin and batch
2. Select the 'Sampling/Sensor' tab
3. To adjust which headings are displayed on the graph, select or deselect from the 'Graph selection' section.



It is possible to view sensor data as either a line graph or a bar graph. To change the display settings for a heading type, from the main Gatekeeper screen:

1. Go to *Setup > Headings*
2. From the tree view on the left hand side, navigate to *Sampling/Sensor/Nutrients > Storage Sampling/Sensor* and then select the heading from the appropriate group (e.g., 'Temperature (C)')
3. In the 'Graphing Options' box, select your preferred display option for the heading

## Product module reports

There are a number of standard reports available in the product module to assist with record keeping and traceability requirements.

### Batch record card report

The batch record card can display any combination of the information displayed below, depending on which tick box options are selected before the report is run.

<b>Option</b>	<b>Information displayed</b>
<b>Batch details</b>	Reference, batch location, responsible business, pricing method
<b>Audit</b>	Details of movement of product into or out of batch. Optional tick box to display details of every delivery load (including vehicle details)
<b>Storage fabric operations</b>	Product used, date, quantity, and units.
<b>Storage contents operations</b>	Product used, date, quantity, and units. Optional tick box to display cost.
<b>Storage diary notes</b>	Notes added with dates.

<b>Fields list</b>	Fields which contributed output products to the batch and the latest date of contribution.
<b>Applied products list</b>	Variable cost products applied to the batch; includes field applied products, storage fabric products, and storage contents products.

### Batch traceability

The batch traceability report displays detailed information relating to the selected batch. Before running the report, select a finish date for information to be displayed.

<b>Option</b>	<b>Information displayed</b>
<b>Field operations</b>	<i>Ticking 'Field operations' enables the following headings to be selected to display. It also breaks down the batch report field by field. When 'Field operations' is ticked, you can select whether the report should display the planned job rate or actual job rate.</i>
<b>Pesticides</b>	Job finish date, application conditions (water volumes, nozzle selection, spray quality), area sprayed, rate used, product name, MAPP, active ingredient(s), manufacturer.
<b>Seed/Plants</b>	Job finish date (and time if recorded), seed name (plus dressing and dressing active ingredient if recorded), area recorded and rate used.
<b>Nutrition</b>	Nutrition products applied, area recorded and rate used.
<b>HSE data</b>	Used in combination with pesticides, seed/plants, and nutrition options, adds operator, weather conditions, and temperature.
<b>Safe harvest date</b>	Used in combination with pesticides: earliest safe harvest date is displayed.
<b>Harvested date</b>	Harvesting dates.
<b>Field traceability notes</b>	Any traceability notes recorded against the field during the season.
<b>LERAP</b>	Used in combination with pesticides: product LERAP rating and percentage of target dose applied.
<b>Sentinel active ingredient concentration (%)</b>	Used in combination with pesticides: product active ingredient concentration.
<b>Storage fabric operations</b>	Job finish date (and time if recorded), product used name, MAPP number, active ingredient(s), manufacturer, quantity. Where 'HSE Data' is also ticked: operator, conditions, temperature.
<b>Storage contents operations</b>	Job finish date (and time if recorded), product used name, MAPP number, active ingredient(s), manufacturer, quantity. Where 'HSE Data' is also ticked: operator, conditions, temperature.
<b>Storage notes</b>	Any diary notes added with dates.

### Batch traceability summary

The batch traceability summary report displays a less detailed page than the batch traceability report. It also has a finish date selector which can be used if required.

<b>Option</b>	<b>Information displayed</b>
<b>Field operations - pesticides</b>	Pesticide products used on fields contributing to the batch and their heading (e.g. adjuvants: adjuvant oil).
<b>Field operations – seed/plants</b>	Seed products used on fields contributing to the batch

<b>Field operations - nutrition</b>	Nutrition products used on fields contributing to the batch and their heading (e.g. organic manures: Cattle FYM).
<b>Storage fabric operations</b>	Product used name.
<b>Storage contents operations</b>	Product used name.

### *Data collection sheets*

These reports will create a blank page to record information into. For all data collection sheet reports, the number of rows on the page can be edited using the number selector before running the report. Available data collection sheet options are:

- Cleaning
- Deliveries
- Harvest
- Sampling/Sensor
- Transfers
- Treatments

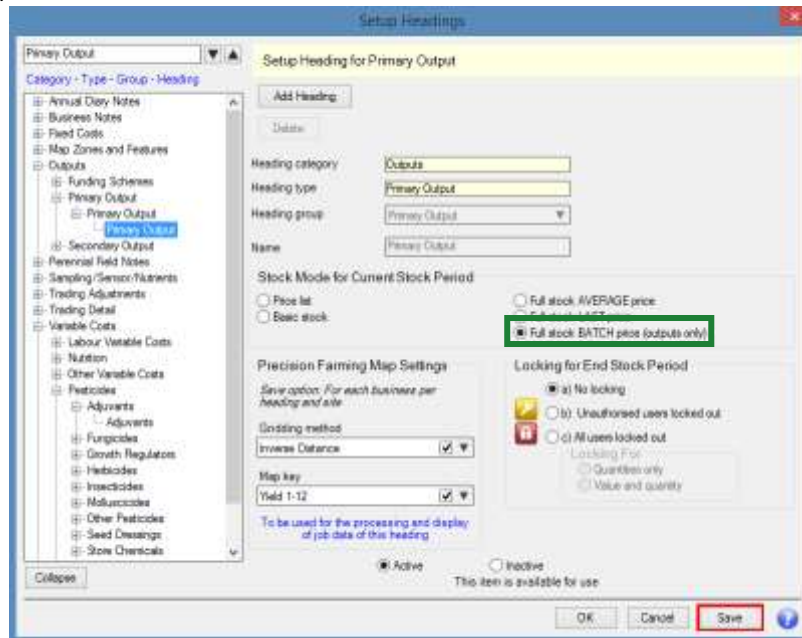
### *Analysis module reports*

Produce module users may also wish to explore the full range of reporting available through the analysis module, especially the 'Stores – Storage Location' default reports.

# Appendix 1 – batch pricing options

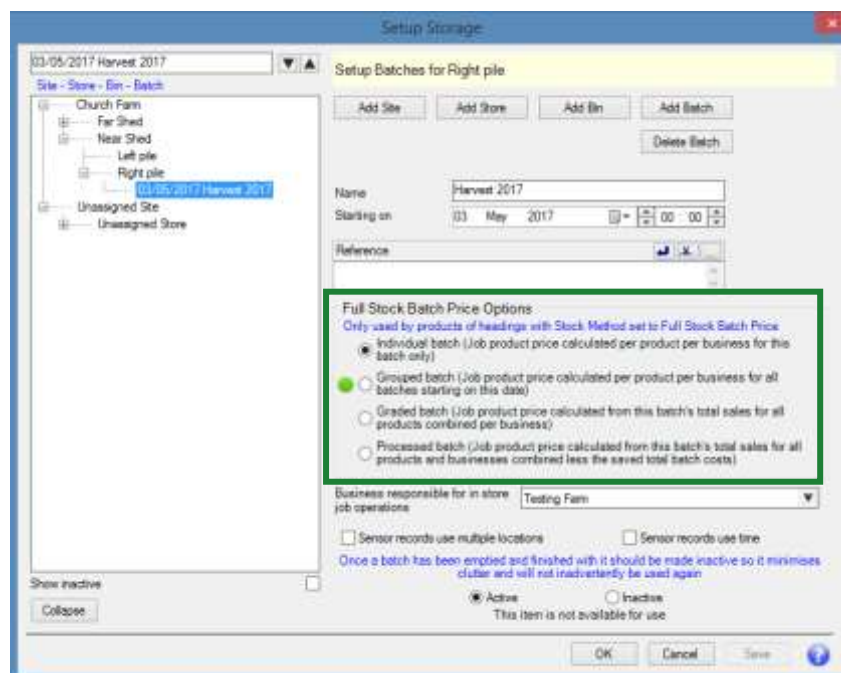
It is possible for Gatekeeper to calculate output values by batch, instead of by product. This enables more specific values to be assigned back to field records, based on output sales.

To use the batch pricing options, you will need to change the heading pricing method by going to *Setup* then *Headings* and selecting 'Primary Output'. You can then select the stock mode option 'Full stock batch price (outputs only)'.



To setup individual batch pricing methods:

1. Open the produce module
2. Click 'Setup Storage'
3. Select a batch from the tree view on the left
4. Select a batch pricing method from the 'Full Stock Batch Price Options' box
5. Save and repeat as required



## Batch pricing options

With all batch price stock methods, the unit price calculated stands outside the stock period structure; it is controlled by batch rather than stock period.

This means that even in a stock period that has been locked for quantity and value, if the batch unit price changes then the value of the output product will change. This is useful where the sale of a harvest product from last season is not completed before the next harvest begins; because both products are in separate batches, their sale prices remain specific to their batches.

### *Individual batch*

*Job product price calculated per product per business for this batch only.*

The default method. Unit prices are calculated as an average of all transactions linked to this batch, per business (main or contract).

### *Grouped batch*

*Job product price calculated per product per business for all batches starting on this date.*

This method is useful if you wish to achieve an average price for a product which has been stored in multiple bins. Unit prices are calculated as an average of all transactions linked to this batch and all other batches starting on the same date. Price calculations are per business (main or contract).

### *Graded batch*

*Job product price calculated from this batch's total sales for all products combined per business.*

This method is appropriate where the product recorded against the fields for harvest is not the same product as is sold. For example, when sugar beet is harvested you may know the total tonnage but not yet know the details of tonnage per quota. Alternatively, a potato harvest may be recorded against the fields in tonnes but sold in tonnes, boxes, or bags.

The unit price is calculated from the average unit price for all products across all transactions linked to this batch: the total value of all products sold in a batch divided by the total quantity of all products harvested in that batch. Price calculations are per business (main or contract). When using the graded batch method, the products sold are not the same as the products harvested. This means that once a batch is complete, it is necessary to use the stock adjustment discrepancy allocation method in a stock reconciliation to reconcile the stock levels.

### *Processed batch*

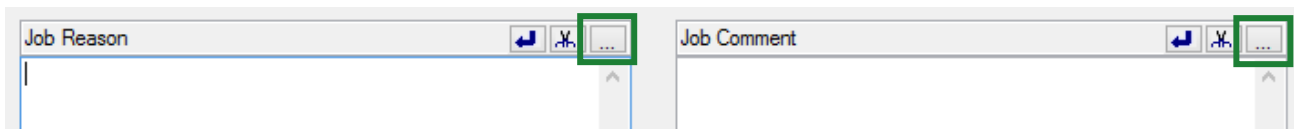
*Job product price calculated from this batch's total sales for all products and businesses combined less the saved total batch costs.*

This method is similar to graded batch, but any batch costs (storage, processing, and marketing) are totalled and then deducted from the total sale value of the batch. Batch costs are calculated from all storage jobs recorded for the batch, or can be added manually using the 'Batch Price' button. As with graded batches, you will need to reconcile stock levels once the batch is completed. This method is not calculated per business so is only appropriate for use when the batch contents are specific to a single main or contract business.

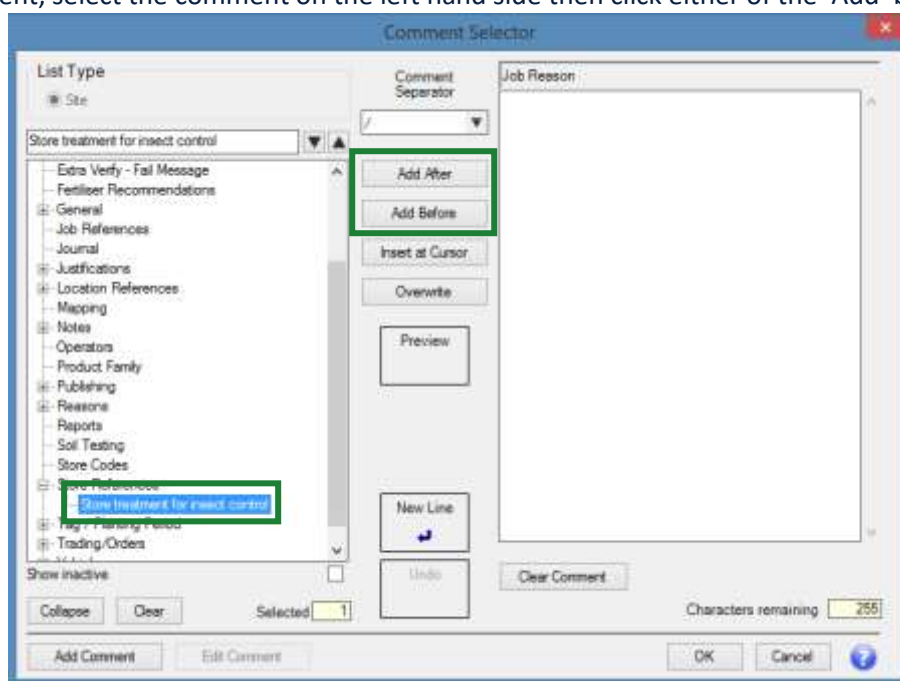
## Appendix 2 – comments library

The comments library allows you to build up a list of frequently used comments and then select them in future, instead of typing them out each time. It is particularly useful if you wish to use comments as a query in the analysis module.

To add a comment, from any comments box click on the three dot selector icon:



To use a comment, select the comment on the left hand side then click either of the 'Add' buttons:



If required you can add multiple comments from this screen. After adding the first comment, select a second comment then click 'Add After' or 'Add Before', depending on which order you wish the comments to appear. The comment separator determines what appears between the individual comments.

To add comments to the library, click 'Add Comment' in the bottom left corner of the window. Add the comment you wish to use, and if necessary change the type group it is allocated to.

You can also add new comments to the library from the main Gatekeeper screen by going to *Setup > Comments > Site*.

## Appendix 3 – custom import schemas

If you wish to import information (for example, store temperature readings) in a different file format or layout than the defaults available, it is possible to build a custom import option using the following steps:

1. Identify the file information and layout.

*Open the file so that you can see the information it contains. If your file is a .csv or similar spreadsheet file, you will need to identify the contents of each column. In the example below, column A contains reading date, column B contains reading time, column C contains temperature, and column D contains moisture readings:*

	A	B	C	D	E
1	03/05/2017	12:04:00	25	12	
2	04/05/2017	11:58:00	25	13	
3	05/05/2017	12:07:00	25	12	
4	06/05/2017	12:01:00	24	14	
5	07/05/2017	12:29:00	23	14	

2. Build a schema
  - a. Open the devices module
  - b. From the left hand side, select *User Defined > User Defined Actual Data* (if you cannot see these groups, make sure the filters 'Manufacturer' and 'Type' are both selected at the top of the list pane)
  - c. Click 'Setup Devices'
  - d. Click 'Add'
  - e. Keeping the option 'Adding a new device' selected, click 'Add device'
  - f. Name the import node (for example, 'Grain store data')
  - g. Click 'Setup Schemas'
  - h. Keeping the option 'Adding a new schema' selected, click 'Add schema'
  - i. Name the schema (it is recommended to use the same name as used in step f)
  - j. In the 'Fixed data' box,
    - i. Change the schema type to 'Storage sampling/sensor'
    - ii. In the option 'Valid File Extensions', add the file type you are working with (for example, .csv)
    - iii. If you wish, change the 'Sampling Heading Override'. When 'No' is selected, the heading name in the file (if present) will be created as a sampling heading. When 'Yes' is selected, the file data will be imported to the matched heading without changing any details.
  - k. Under 'Select Example File', navigate to a file from the sensor system so that you can preview it in the next steps.
  - l. If your file contains a header line, on the 'Header' tab click 'Add Header Line'
  - m. Go to the 'Data' tab
  - n. For each column that is present in your file, click 'Add column'. If you have selected an example file, you will be able to see the data in one line as a preview.
  - o. In each column, double click in the cell in the 'Import column as' row to match the value:

Column No	Line	1	2	3	4
Example Line	2	04/05/2017	11:58:00	25	13
Import Column As		Record Date (UK)	Ignore	Ignore	Ignore
		Ignore			
		Record Date (UK)			
		Record Date Time (UK)			
		Record Location Reference			
		Sample 01 Value			
		Sample 01 Value * 100			
		Sample 02 Value			
		Sample 02 Value * 100			
		Sample 03 Value			
		Sample 03 Value * 100			
		Sample 04 Value			

Header	Data
1	Header line 03/05/2017
2	Data line 04/05/2017
3	Data line 05/05/2017

For any data you do not wish to import, leave the selection as 'Ignore'.

For sample values, select 'Sample 01 Value' for the first value, 'Sample 02 Value' for the second value, etc. When you select a value option, another row called 'Additional Data' will appear below the 'Import Column As' line. Double click and select the heading for the sample values:

Column No	Line	1	2	3	4
Example Line	2	04/05/2017	11:58:00	25	13
Import Column As		Record Date (UK)	Ignore	Sample 01 Value	Sample 02 Value
Additional Data				Temperature (C)	Moisture (%)

p. Click 'OK' and 'OK' to save and close. You will be returned to the devices module page.

### 3. Import data

- In the devices module, select the import option you have now set up from the left hand side
- Click 'Device Sync'
- On the 'Device' tab, the option 'Move source to archive after import' will be ticked as a default. This option will move the file after it is imported into Gatekeeper if left ticked.
- Go to the 'Local Exchange' tab
- Select the correct path to the file to be imported
- Double click in the column 'Gatekeeper destination batch' and select the appropriate batch to import the data to
- Click 'Import with Preview'
- A preview of the data will be displayed. To accept and import, click 'OK'.

