

CREATING A FARM

CLOUD WINDOW

FARMAX Cloud is the first screen which opens when starting FARMAX. This is where you will create farms and new files.

TO CREATE A FARM

1. Select 'New Farm'
 - Name your farm Waipa (your initials)
 - Region: Waikato
 - District: Waipa
 - Effective Area: 300ha
2. Select 'Create Farm'
3. Select 'Yes'

TO CREATE A FILE

1. Select 'New File'
 - Folder: Scenarios
 - Name: Base X/X (the current season)
2. Select 'OK'

You have now created a farm and a file, select 'Open'.

TREE-VIEW

The tree view is the first panel you see when in the Farmax application.



LAND

FARM PROPERTIES

The Properties screen is where you can view and adjust some features of the farm. The data in yellow will have to be adjusted by contacting the HelpDesk.

1. Adjust 'Farm Class' to NI Hill Country
2. Adjust 'Schedule' to Auto-NI Prices May 2018

BLOCK LEVEL

At block level we can adjust growth rates and enter crops and nitrogen applications.

APPLYING GROWTH RATES

1. Select Block 1 in the tree view
2. Click on 'Growth Rate'
 - Select 'Library'
 - Select 'Northern NI' -> 'Waikato/King Country'
 - Select 'Apply'

CREATING A NEW BLOCK

The farm we are creating has two blocks, one called 'Hills' the other 'Flats'.

1. Right click 'Block 1' and select duplicate.
2. In the pop-up screen adjust the area by clicking on the area column and changing Block 1 to 250ha and Block to 50ha.
3. Select 'Ok'. The growth rate we applied to 'Block 1' have carried over to the new 'Block'.
4. Select 'Block 1' and select the 'Growth Rate'
5. Adjust total pasture growth to 4000kg DM/ha

RENAMING BLOCKS

1. Right click on the block and 'Rename'
2. Change Block 1 to 'Hills' and Block to 'Flats'

ADDING A CROPPING EVENT

1. Select the 'Flats' block then select 'Crops'
2. Select 'New Crop' then 'Pasture Silage' from the drop-down menu.
 - a. As you can see, FARMAX has created a pasture silage event. The plot gives a visual representation of the area of the crop which can be clicked and dragged to adjust the dates and area. These can also be adjusted in the table below.
3. In the table, adjust the area to 30ha, 'Date In' 15th of October and 'Date Out' 30th of November.
4. Add 'Maize Grain'. 15ha is planted 14th November and taken out on the 13th of March, followed by new pasture.

ADDING A NITROGEN EVENT

1. Select 'Nitrogen' -> 'New Nitrogen'
2. In the table, adjust the area to 25ha and the duration to 51 days. This is applied on the 21st of August
3. Do the same for the 'Hills' block but set the area to 150ha

When looking at the 'Pasture Growth' report at the farm-level of the tree view you are able to see the impact of the Nitrogen applications. Selecting the 'table' view gives you exact values of the nitrogen boost.

ANIMALS

ADDING STOCK

1. Right click on the farm-level (Waipa XX – Base X/X)
2. Select 'Add Enterprise' -> 'Sheep'
3. Right click on 'Sheep' -> 'New Mob' -> 'Ewes'
 - a. This takes you to the Properties screen for the ewes. Here we can enter the number of ewes, adjust the breed and ownership of the stock.
4. Change the number of ewes to 950.
5. Repeat step 3 but add a 'Ewe Hogget' mob.

MATING

1. Select the 'Ewe' mob then select 'Mating'. Tick the 'Mated' box.
2. In this screen we can adjust the mating, lambing and weaning values for the season.
 - a. The yellow boxes display default values that FARMAX populates for the model. These can be changed in the override column.
 - b. At the bottom of the screen, click the drop-down menu for 'Ewe Lambs into' and select 'Create Ewe Lamb Mob'. For Ram Lambs select 'Create Mixed Sex Mob'
 - c. You will see these have appeared in the tree view under the sheep enterprise.
3. Next, the Ewe Hogget mob needs to be mated. Apply step one to this mob.

NUMBERS

Now we have created all mobs, added ewes and created a mating, we need to adjust the numbers and flow of stock in the lamb and ewe hogget mobs.

REPLACEMENTS

The farm keeps 220 replacement ewe hoggets, so we need to transfer the rest of the ewe lambs mob to the mixed sex mob.

1. Click on 'Ewe Lambs' in the tree view and select 'numbers'
2. In the 'Transfer Out' column, select the cell for December and in the bottom left of the screen select 'New Tr.Out'. Change the date to the 20th of December.
3. In the 'From' row select the 'heaviest' and in the 'Move' row select the plus box.
4. 'Keep' row has now appeared. Select 'Top' from the drop-down and enter '220'
5. In the 'Move' drop-down select 'All the Rest'
6. In the 'To' column select the ellipsis next to 'Off-Farm'

- a. This will bring a pop-out screen. Select Farm: Waipa XX, Enterprise: Sheep and Mob: Mixed Lambs

MIXED LAMB SALES

1. Click on Mixed Lambs in the tree view
2. In the Numbers screen you will see the transfer in of 487 ewe lambs, creating a total of 1194 lambs.
3. To sell the lambs, click the January cell in the sell column. Sell the heaviest 300 to the works.
 - a. To repeat this sale each month, select the 300 cell, hold the control key and press the down arrow on your keyboard and this will duplicate the event until all lambs are sold.

EWE HOGGETS

1. Click on the Ewe Hoggets mob
2. Go to the Properties screen
3. In the drop-down menu for 'Aged From' select 'Ewe Lambs'
 - a. Clicking in numbers, you will now see the mob opens with 220.

At the end of the season the Ewe Hogget Mob will be transferred to the Ewe mob therefore a transfer out event needs to occur.

1. Select the Numbers screen for the Ewe Hogget mob.
2. In the transfer out column select the cell in the June row
3. Select 'New Tr.Out' and select 'Move' then 'All' from the drop-down menu
4. Click the ellipsis next to 'To' and select Farm: Waipa XX, Enterprise: Sheep, Mob: Ewes.

BALANCING THE EWE MOB

To ensure the opening and closing numbers are balanced as the file is long term, we need to enter deaths and sales of the 220 ewes.

To enter a death:

1. Click on the Numbers screen for the Ewe mob.
2. Click on the 'Die' column and the August cell.
3. Select 'New Death' and enter 10 in the 'Died' row. Hold the Control button and press the down button on your keyboard and the event will duplicate for September.

To enter a sale:

1. Click on the 'Sell' column
2. Select the cell aligning with April and select 'New Sale'
3. Sell the lightest 100 to the works.
4. Duplicate this event for May

The ewe mob is now balanced.

For visual simplicity and further adjustments to the file, we need to rename our hogget and lamb mobs, so their birth year is in their name. For each mob, right click and select rename. In this example, the mobs will be 'Ewe/Mixed Lamb 18 and 'Ewe Hoggets 17'.

BEEF FINISHING ENTERPRISE

Repeat the above steps (where needed) but apply them to a beef finishing enterprise:

1. Purchase 170 R1 angus steer calves in September- rename the mob to include the birth year.
 - a. In the properties screen for the calves, adjust the birth month to July
2. Create a '1-Year Steers' mob and age them from the calf mob in the properties screen and add their birth year.
 - a. Sell 85 in December and 85 in April in the numbers screen

SHEARING

1. Select the Ewe mob in the tree view and then select 'Shearing'
2. Select 'New Shear'
 - a. This screen allows you to change the date, number shorn and specific weight and dollar values.
3. Enter new shearing events for the following:
 - a. Ewes are shorn 17th October and 7th of February. Hoggets are also shorn on the 7th of February.

LIVE WEIGHTS

Live weights of each mob can be adjusted to the weight gains the farm is achieving.

1. Select the Steer Calves 18 mob and view the 'Live Weights' screen.
2. Here you can manually enter gains in kg/day in the 'Body Wt. Gain' column.
 - a. Enter '0.6' in the October cell.
3. The other way to adjust live weight is by dragging the grey line in the graph.
 - a. Click and hold the May weight and drag it up. This adjusts the weight on the table.

This method can be applied to all mobs. Notice in the 1-Year Steers mob the line graph drops in December. This is due to the sale of 85 steers pushing the average live weight down. The same occurs in the Mixed Lambs mobs.

FEEDING

1. Click on the farm-level in the tree view.
2. Click on 'Supplements'
 - a. In this screen we can see the inventory of our crops produced/bought on farm. You can see the farm has Pasture Silage and that we produced 60tonnesDM in November. The farm feeds this out in May-August at 15tonnesDM per month.
3. Half of the silage is carried over to the next season, so we need to open the season with 30tonnesDM, so it is available to feed in July and August. Enter 30 into the open cell for July. We now open and close with 30tonnesDM.

SELLING A CROP

The cash crop 'Maize Grain' we planted now needs to be sold.

1. Click on 'Maize Grain' in the supplement screen
2. In March sell the 188tonnesDM produced by entering the amount into the cell correlating with 'March' and 'Sell'

PASTURE COVERS

Now we have adjusted our stock number, live weight gains, supplementary feeding and pasture growth rates, we can calibrate our pasture covers.

1. Click on the farm-level in the tree view
2. Select 'Pasture Covers'
3. Select 'Calibrate Pasture'
4. Tick each of the boxes, then enter the pasture covers below in the 'Pasture Cover' row below the graph

Jul	August	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun
2049	2000	2150	2250	2150	2000	1900	1850	1900	2000	2050	2049

When updating the pasture growth levels in the 'Calibrate pasture' pop-out, the 'Pasture Growth' updates in the 'Potential Pasture Growth for Waipa' graph below. This is because the growth rate changes with demand and cover levels.

You can also see that the end cover in June is our start cover. This is because the file is Long Term (indicated in the top right-hand corner of the screen) so is based on the model being able to repeat year after year.