New Zealand Pork Guide

Outdoor Pigs in OverseerFM

This guidance has been developed to support outdoor pork producers and their consultants to use OverseerFM. This guidance includes a number of screenshots that will become out of date as the software develops. Any significant impacts on outdoor pig data entry functions will be updated as needed.

New Zealand Pork holds a list of consultants who have received training in the development of outdoor pig nutrient budgets using OverseerFM. Any producers requiring assistance can contact the New Zealand Pork Office (phone 0800 697 675 or email environment@pork.co.nz).

Accessing OverseerFM

OverseerFM is very different to its pre-curser OVERSEER Nutrient Budgets. It allows easy sharing of farm data between different users and organisations through a permissions process attached to a single farm account. More information on creating a farm account and setting permissions can be accessed HERE . Once a farm account has been created and the subscription paid multiple analyses can be created for that farm to understand current state and test possible scenarios. OverseerFM also includes the function to submit a publication to a regional council for compliance reporting purposes. You can find out more about publications HERE

It is free to register for OverseerFM and only one subscription needs to be paid annually per farm account. For more information on registration click HERE

OverseerFM is available at https://fm.overseer.org.nz.

OverseerFM user guides and Knowledge base

OverseerFM provides users with guidance throughout the software with additional help available if you turn on Help in the top menu. Overseer Limited also provides a Knowledge base, via the "Quick Search" function (see page two), which takes users to information relating to their search criteria.
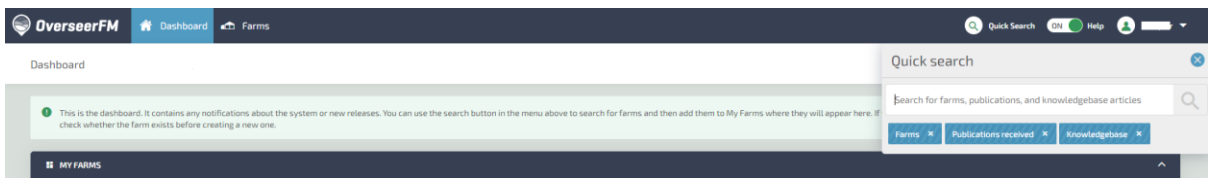
The user guide and Knowledge base articles provide users guidance for data inputs that consistently achieve the most meaningful results. Only pig specific input requirements are covered in this guide.

BLOCKS
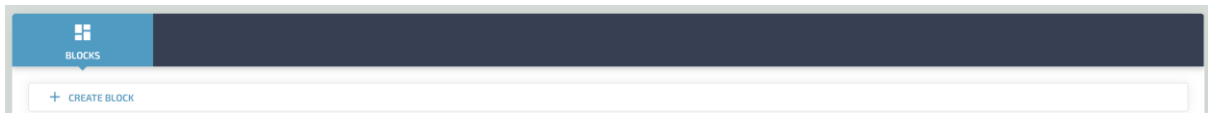
Creating outdoor pig blocks/setting up blocks

The first step when creating an analysis in OverseerFM is to define the blocks that make up the farm. After creating a new analysis, the only option available is to create a block. This launches a map on which you can draw the outline of the block. The map location is based on the address entered when creating the farm.

To add an outdoor pig block to the nutrient budget, draw the block and select *Outdoor pigs* from the block name drop down list. There may be more than one outdoor pig block created e.g. breeding herd and a grower herd. Input the effective area (ha) for the outdoor pig block(s).
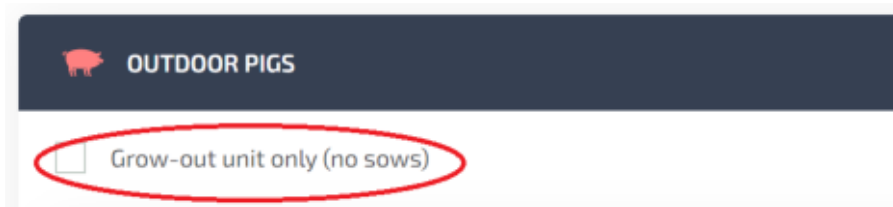
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ANIMALS

Once the outdoor pig blocks are created animals need to be added. To add outdoor pigs as an enterprise, select + *ADD OUTDOOR PIGS* under the *Animals* input tab.
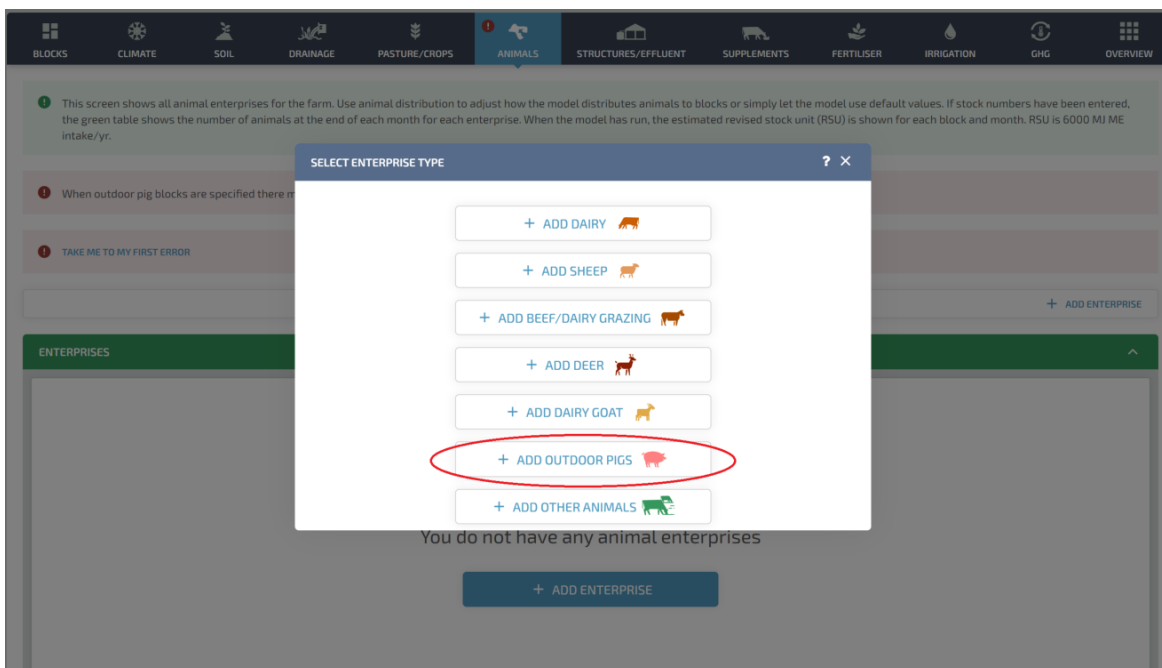
If there is a grow-out unit only (no sows) then select *Grow-out unit only (no sows).*

Numbers

Enter key information for sows, boars, unmated gilts, and outdoor growers and finishers.

Sows

- Number of sows and mated gilts
- Chopper (carcass) weight
- Replacement rate
- Litter per year
- Average weaned per litter OR average weaned per week
- Weaning age

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- Weaning live weight.

Boars

- Number of boars on hand

- Replacement rate.

Unmated gilts (replacements)

- Number on hand OR

- Days spent growing gilts.

Outdoor growers and finishers

Weaners added to outdoor blocks per week

- Weaned from farm AND/OR

- Brought in

- Average liveweight at purchase

- Average age at purchase

- Average carcass weight at sale OR average live weight at sale

- Average age at sale.

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Outdoor growers & finishers
Weaners added to outdoor blocks per week.

WEANED FROM FARM		BROUGHT IN		AVERAGE LIVE WEIGHT AT PURCHASE		AVERAGE AGE AT PURCHASE	
0	per week	10	per week	0.0	kg	0	days

AVERAGE CARCASS WEIGHT AT SALE		AVERAGE LIVE WEIGHT AT SALE		AVERAGE AGE AT SALE	
0.0	kg	0	kg	0	days

Feeding system

This screen requires a *feeding method* to be selected for each class of pig - the feed method and form is important as it affects the feed wastage and total feed used.

- Dry sows (mating)
- Dry sows (gestating)
- Lactating sows
- Replacements (gilts and boars)
- Growers and finishers (if this has been selected in the *Numbers* screen).

Choose the *feeding method* from the dropdown menu. The options include:

- On ground
- On a feed pad
- Trough on pad
- Trough on paddock
- Ad lib feeder
- Liquid Feeder
- Electronic sow feeder
- Feeding bails.

Then state if the feed is in *pellet form* (or if not, it assumes meal) and tick the box if *no bird loss occurs.* These are important because each feed type and feed system has a default feed wastage associated with it. As the model stands with the default feed levels, it assumes the wasted feed is added to sow intake so with less wastage the sow feed intake increases. The guidance notes suggest users manually input feed levels when a feed system changes. The same occurs when using pellets.

Feeding amount

This screen requires the *feed amount* to be entered for each class of pig. This is kg feed/animal/day.

The amount is the amount brought in through the farm gate. Feed for pigs (sows, gilts, boars, outdoor raised weaners) in villages or in barns or standoff pads for part of the year must be included. Feed to weaners (growers, porkers and baconers) raised in sheds should not be included.

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Feeding amount defaults are displayed. Select *Override Defaults* to enter farm specific data.

Note: Adjustments in feed amounts need to be manually undertaken in the nutrient budget when there is a change to a more efficient (or inefficient) feeding method when default feed amounts are being used. Those producers using actual data should see a reduction in feed amount due to less feed wastage.

When using default feed amount data use the table below to reduce the feed amount by the required percentage.

Feeding method	Wastage pellet %	Bird loss pellets %	Wastage meal %	Bird loss meal %
On the ground	10	7	20	5
On a feed pad	5	7	12	5
Trough on pad	5	3	12	**3**
Trough on paddock	5	3	12	3
Ad lib feeder	5	3	10	3
Liquid feeding	5	1	5	0
Electronic sow feeder	2	0	2	0
Feeding bails	5	3	5	0

Feed composition

Feed composition defaults are displayed which are specifications for a typical well formulated commercial diet. Select *Override Defaults* to enter farm specific data.

The data required is for Creep, Weaners, Growers, Finishers, Gilt developer, Sows late gestation, Sows lactating and Sows general. This information will be available from the farm nutritionist. The data and units needed if the farm specific data for diets used is:

- DM content (g/kg)
- Volatile solids (g/kg)
- ME content (MJ ME/kg)
- Crude protein (g/kg)

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- Ileal digestible protein (g/kg)

- P (g/kg)

- Digestible P (g/kg)

- K (g/kg)

- S (g/kg)

- Ca (g/kg)

- Mg (g/kg)

- Na (g/kg)

- Cl (g/kg).

Blocking allocations

For each outdoor pig block, enter the percentage of block area occupied by each class and the area taken by lanes and other areas. The total must equal 100%. All stock classes must be allocated to at least one block.

At least 1% must be in *lanes and other areas*.

Green cover

Enter the *Green Cover (%)* for each of the blocks for spring, summer, autumn, and winter.

Select + *ADD GREEN COVER*

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Enter the percentage of green cover for each season for each animal class.

Note: Please contact the New Zealand Pork Office (phone 0800 697 675 or email environment@pork.co.nz) if you require some more information on estimating % green cover on outdoor pig farms.

STRUCTURES/EFFLUENT

Outdoor pigs- straw disposal

This screen describes the management of straw bedding from huts. Data is inputted on the straw used per sow per year on the breeding unit. If farm specific data is not available there is a default of 140 kg/sow/year.

Select a *straw management* option for straw bedding in breeding area from the dropdown menu:

- Burnt
- Left in situ
- Spread on selected blocks
- And other (exported).

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If *Spread on selected blocks* or *Other (exported)* is selected, select a *composting method*:

- No storage

- Covered (from rain)

- Open (open to rain).

Provide the *time in storage* in months.

A second management option can be used for a portion of the straw. This option is required when for example, fire bans prevent the burning of straw in the summer.

Housing

There are two options for pig housing in OverseerFM:

1) *+ADD OUTDOOR PIG FARROWING VILLAGE* - which have an effluent management system

2) *+ ADD OUTDOOR PIG SHED/BARN* - which have either bedding material or an effluent management system. Note: a hut on a paddock is not a shed or barn.

Outdoor pig farrowing villages

A farrowing village is a purpose-built facility to remove sows off paddocks where the effluent can be contained and handled in a separate manner. The sows will enter the facility shortly before farrowing and remain for a period post farrowing.

Enter key information:

- Time in days that the sows spend in the village pre farrowing

- Time in days that the sows spend in the village post farrowing

- Select an effluent management system.

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Outdoor pig barns/sheds

If pigs are placed in shed or barns, the data required is % of pig days per month (pigs placed in sheds or barns). For each pig class, record the percentage of animals in that class that are housed off-paddock in a barn or housed. To account for movements at different times during the month, the best approach is to first calculate numbers on a housed day basis (number of pigs x days housed/days in month) before calculating the percentage of pigs housed. For sows, it is the percentage of pig days sows are not in the village.

Pig housing can be and is used as a mitigation method when the stocking rate is too high. For example, the nitrogen load could be reduced by putting pigs in a shed and exporting their nutrients.

Select how effluent managed:

- Concrete pad (no bedding) OR

- Straw bedding material.

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Housing effluent

An effluent management system can be selected as part of an *Outdoor Pig Farrowing Villages* or *Outdoor Pig barns/sheds.* Select from the dropdown list:

- 2 pond + discharge
- Spray from sump
- Holding pond - spray regularly
- Holding pond - stir and spray regularly
- Holding pond - spraying infrequently
- All exported (this is the usual option).

If *Straw bedding material* is used in barns, then this option should be selected. A bedding management system will then be selected:

- Spread on blocks
- Other (exported).

Note: If the spent bedding (compost) or effluent from housing is spread on other blocks on the farm then these blocks will be receiving this as a liquid or solid effluent. This is dealt with in the *Structures/effluent* input tab where the particular block(s) receiving the effluent is selected under *Liquid Effluent Applications* and *Pond Solid Applications*.

OVERVIEW

Results and key summary information about the analysis is presented in the *Overview* Tab.

Complete a sense check of the nutrient budget by checking the *Farm Details* report. In particular the Sow DM intake (tonnes/sow/year) should be within the range of 1.1 to 1.4. Remember this is dry matter per sow, as a check the dry matter will be 88-90% of the as fed feed quantity. The sows per ha value should match the outdoor pig stocking rate for the farm.

CONTACT

If you have any problems understanding the data required to be entered into OverseerFM please contact:

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If you have any queries or problems with OverseerFM contact our helpdesk.