



## **Housing Wizard**

### **Introduction**

Before you use the Housing Wizard you should read the guidance below. The report is best viewed by pressing F11 on your keyboard to view as full screen.

AHDB Dairy seeks to ensure that the information contained within this guide and the Housing Wizard is accurate. However, AHDB Dairy shall not in any event be liable for loss, damage or injury howsoever suffered directly or indirectly in relation to the information and reports provided, and no liability will be accepted for errors or omissions.

***Copyright, Agriculture and Horticulture Development Board 2016. All rights reserved. No part of this publication may be reproduced in any material form (including by photocopy or storage in any medium by electronic means) or any copy or adaptation stored, published or distributed (by physical, electronic or other means) without the prior permission in writing of the Agriculture and Horticulture Development Board, other than by reproduction in an unmodified form for the sole purpose of use as an information resource when the Agriculture and Horticulture Development Board is clearly acknowledged as the source, or in accordance with the provisions of the Copyright, Designs and Patents Act 1988. All rights reserved. All other trademarks, logos and brand names contained in this publication are the trademarks of their respective holders. No rights are granted without the prior written permission of the relevant owners.***

## Housing Wizard Start

You may need to adjust your Excel security settings for the Housing Wizard to work.

Save the Housing Wizard to your hard drive and always work from the saved version and save any changes with a new file name, so that you can go back to the original version if needed.

On opening the Housing Wizard you will see the screen below. You need to enter your own data in the white boxes as this will be carried forward to other pages. Enter your farm name or reference as this will be printed on each report, together with the date and time. Changing the depreciation rates could have a large impact on your results, so use the values shown unless you have a good reason to use a different value.

**Housing Wizard**

**Data start**

Farm name/reference	Test
Herd size	100 cows
Milk yield/cow	7000 litres
Depreciation buildings	5 %
Depreciation plant	10 %
Interest rate	5 %
Electricity cost	10.00 p/kW hr
Water cost	1.00 £m3
Labour cost	10 £/hr
Tractor + man cost	25 £/hr

Use the buttons to move around the wizard  
User guide - click on the button to link to the guide, which can be printed once open with a right click.

**EXCEL SECURITY**  
You may need to alter your excel security settings to enable the functions of the Housing Wizard to work.

Once you have entered your own data you can click on the 'Go to Housing Wizard' button on the right to take you to the next stage of data entry.

## The Housing Wizard

The 'Housing Wizard' is an interactive model which allows you to look at the cost implications of a range of housing options based on your own farm situation using typical housing cost data. The Housing Wizard only looks at the cost of housing and does not include any other costs associated with operating the dairy unit, i.e. it excludes the cost of the parlour, collecting yards, silage clamps. The housing wizard does allow the cost of slurry storage to be included to allow a comparison between straw yard and cubicle housing. The housing wizard does not include the cost of the cow. Where you are considering major dairy farm expansion and investment you should look at the full implications using whole farm budgets. The housing wizard is intended to provide a guide to the cost of investing in new cow housing and the cost implications for your business.

## Housing Data Entry

You can change the values in the white boxes or use the default values. Select the bedding type by clicking on a button on the right side of the screen. The housing period is the number of days when the cows are housed and bedded. To print the

data entry click on the 'Print' button. To go to the housing options click on the 'Go to Housing Options' button.

### Housing Data entry

Go to Housing Options
Print
Go to Start

Planned investment

Cow number for new house	100 cows
Annual yield/cow	8000 litres
Housing period	200 days
Period of heat stress	0 days
Depreciation buildings	5 %
Depreciation machinery	10 %
Interest rate	5 %
Electricity cost	10.00 p/kW hr
Water cost	1.00 £m3
Labour cost	10 £/hr
Tractor + man cost	25 £/hr
Straw cost	45 £/tonne
Sand cost	16 £/tonne
Sawdust cost	60 £/tonne

Bedding

Long Straw

Chopped Straw

Sand

Sawdust

This choice will set your housing options and is used in determining the operating costs of the housing system.

### Go to Housing Options

The housing options allow you to build your accommodation by selecting different options. Where options are not compatible you will not be allowed to select the option. You should select the system and then the bedding before making further selections. If you go back and change the system or the bedding then you will need to re select your building and cubicle options.

#### NEW HOUSING OPTIONS

Go to Housing Data Entry
Go to Housing Capital Costs
Go to Housing Operating Costs
Print

Select the System

Housing Only     Housing & Feeding     No Housing

Bedding Method

Manual     Straw Chopper

Straw Spreader     Dispenser

Bedding

Long Straw

Chopped Straw

Sand

Sawdust

Is the Slurry System Limiting?  
If ticked then brings in slurry cost below

							Milk sales/annum	800000
Cost £/cow	£ total	Interest	Depreciation	Operating costs £/annum		Other	Total	p/litre
				Bedding	Labour			
							0	0.0
							0	0.0
							0	0.0
897	89700	4485	4485				8970	1.1
							0	0.0
							0	0.0
							0	0.0
							0	0.0
							0	0.0
60	9000	450	600	4500	4167		9717	1.2
							0	0.0
							0	0.0
							0	0.0
							0	0.0

Building options

Straw Yard

Kennel - 2 Row

Kennel - 3 Row

Cubicles - 2 Row

Cubicles - 3 Row

Slats - 2 Row

Slats -3 Row

Slurry System

Cubicle bed options

Concrete

Concrete & Mat

Concrete & Mattress

Concrete & waterbed

Sand

**Select the system** ~ you need to select either 'housing only', 'housing & feeding' or 'no housing'. Housing & feeding is where the cows are to be fed inside the building where the cows are housed. No housing allows you to look at cubicle bed options and the additional features.

**Is the slurry system limiting?** ~ if the existing slurry system is fully utilised and the new building requires slurry storage then tick this option. This will bring in the capital cost for slurry storage.

**Building options** ~ you can select one of the 4 options for your new building which are a straw yard, kennel, cubicles or slatted cubicles.

**Cubicle bed options** ~ you can select any of the compatible options. Sand & long straw are not compatible with slats.

**Additional features** ~ you can select one or more of the additional features. You can select either Ventilation HS (high speed) fan or Ventilation HVLS (high volume low speed) fan. You can select either Climate Control Manual or Climate Control Auto.

**Total capital invested** ~ the total capital cost of the options that you have selected is given and this is compared with your budget. If you have exceeded your budget you could consider cheaper options.

**Annual building operating cost** ~ the annual operating cost is calculated from the capital cost of the building options that you have selected (depreciation & interest) plus the operating costs (bedding, labour & other costs). The annual cost is also calculated per litre. You need to consider whether the benefits to the business justify the increase in the operating cost per litre for the cows housed in the new building. It could be that you are spreading these additional costs over the whole herd.

Once you have examined one building option you can save by clicking on 'file', 'save as' and give a new file name. Then go back and consider alternative options to see how this will change the capital and operating costs.

You can view the capital and operating costs by clicking the buttons on the bottom right of the page below the table. You can change the values in the white cells.

Click on the 'Print' button to print this page.