



For 2026

Fifty-sixth Edition

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FOREWORD TO THE FIFTY-SIXTH EDITION

It was a surprise and an honour to be asked to write this foreword. I have been a regular reader of the Pocketbook since it was first published in 1966 and whichever was the latest annual copy has sat on the corner of my desk for reference ever since. Whether seeking information to help manage our own farm or to remind me of crucial facts when writing one of my columns, it has been a constant companion for most of my farming life.

I knew John Nix as a friend and colleague for many years. We shared a few platforms and he always spoke with passion mixed with humour as he explained the gross margin concept and the difference between fixed and variable costs. Remember, they were the early days of such terms that have now become commonplace. I also interviewed him several times for both radio and TV. He was the most likeable economist I ever came across.

Authorship has now passed to Andersons, which has maintained and developed its scope in line with the complexity of current farm management. And it's never been more important to have the facts to hand and presented in an understandable way, whether the reader is a farmer, a student, an adviser or simply an interested bystander.

In the early years of John Nix's Pocketbook, improving yields and controlling costs were the main measures of efficiency in farm management. Today it's not quite so simple. The environment has to be considered alongside production and its associated emissions, energy use, carbon capture and so on. A wide range of diversifications must be evaluated. All this notwithstanding the volatility and rapid reduction of government support.

Indeed, it is difficult to imagine trying to manage a farm without the latest Pocketbook beside you. I commend this 56th Edition.

A handwritten signature in black ink that reads "David Richardson". The script is fluid and cursive, with the first letters of "David" and "Richardson" being capitalized and prominent.

David Richardson

July 2025

CONTENTS

I.	GENERAL	1
1.	Introduction to the Farm Management Pocketbook	1
2.	The Use of Gross Margins	3
II.	ENTERPRISE DATA	7
1.	Crops	7
2.	Forage Production	48
3.	Grazing Livestock	53
4.	Non-Grazing Livestock	101
5.	Organic Farming	109
6.	Forestry	113
7.	Renewable Energy	123
8.	Other Enterprises	133
9.	Summary of Gross Margins	151
III.	GOVERNMENT SUPPORT	154
1.	Introduction	154
2.	The Basic Payment Scheme	154
3.	Market Support	157
4.	English Farm Support	161
5.	Welsh Farm Support	172
6.	Scottish Farm Support	178
7.	Northern Ireland Farm support	183
8.	Direct Payments to Farmers by Country	186
IV.	LABOUR	187
1.	Labour Cost	187
2.	Seasonal Labour Requirements	192
3.	Standard Work Days	206
V.	MACHINERY	208
1.	Agricultural Machinery Prices	208
2.	Contractors' Charges, Farmers' Costs and Work Rates	214
3.	Tractor Hours	221
4.	Tractor Costs	222
5.	Estimating Annual Machinery Costs	226
6.	Precision Agriculture	232
7.	Other Machinery Costs	234
VI.	OTHER FIXED COSTS	241
1.	Whole Farm Fixed Costs	241
2.	Rents	246
3.	Land Prices	248

4.	Professional and Legal fees.....	251
5.	Buildings.....	252
VII.	TAXATION.....	261
1.	Income Tax.....	261
2.	Private Company Taxation	262
3.	Agricultural Businesses: Other Items	262
4.	Capital Gains Tax.....	264
5.	Stamp Taxes.....	266
6.	Inheritance Tax	267
7.	Value Added Tax	268
8.	National Insurance.....	269
VIII.	FARM BUSINESS MANAGEMENT.....	270
1.	Definitions of Farm Management Terms	270
2.	Capital Requirement and Return	273
3.	Interest Rates.....	278
4.	Financial Ratios	280
5.	Financial Tables.....	280
6.	Farm Records	290
IX.	WHOLE FARM COSTINGS	292
1.	Comments on Whole Farm Costings.....	292
2.	Combinable Crop Farm	294
3.	Dairy Farm.....	295
4.	Lowland Grazing Beef & Sheep Farm.....	296
5.	Upland Grazing Beef & Sheep Farm.....	297
X.	EMISSIONS AND THE ENVIRONMENT	298
1.	Section Introduction	298
2.	Greenhouse Gas (GHG) Emissions	298
3.	Ammonia Emissions	305
4.	Food Waste	305
5.	Carbon and Nature Credit Markets.....	307
XI.	MISCELLANEOUS DATA	312
1.	Farm Maintenance and Conservation Costs	312
2.	Field Drainage	316
3.	Fertilisers & Soil Improvers	317
4.	Agrochemicals.....	322
5.	Seeds.....	325
6.	Feed	327
7.	Agricultural Statistics	329
	INDEX	345

I. GENERAL

1. INTRODUCTION TO THE FARM MANAGEMENT POCKETBOOK

DATES AND FIGURES IN THE BOOK

The Pocketbook is used widely throughout agriculture and allied industries. As the Editor, I continue to be amazed how many different uses and applications it has. The primary use it is designed for is assisting decision making on farm, but is also used in education, pricing contracts, negotiations, and other purposes. It contains lots of figures and facts that describe many aspects of British agriculture in 2026, being as representative of a commercial average as possible.

Figures and facts in this book are projected for 2026 unless otherwise stated. Thus, the crops data relate to the 2026 harvest. The livestock data relate mostly to the 2026/27 year (e.g. for winter-finished beef or the milk year). The yields and prices assume a 'normal' or average season, based on trends. Looking 6-18 months ahead to 2026/27, no one can know what the yield and price for that particular year will be for any commodity. For this reason, we cannot refer to the figures in this book as forecasts, rather sensible forward prices for budgeting and planning purposes. It is not the intention of The Pocketbook to include 'historical data', except to contextualise the future and some of the material in the Agricultural Statistics section.

For many of the figures quoted, single figures are used to represent what is a very large range of possibilities. The range of performance (physical and financial) in agriculture is immense, something this book, and others that quote typical figures, do not capture. Always be mindful of this hidden variation and that averages can be deceptive. This variation is because of many factors including farmer's ability, farm resources such as soil type and field layout, environmental conditions (e.g., weather), (local) market prices, enterprise size, level of mechanisation and many others. This means that the figures should be adapted for personal situations to accommodate local conditions. When using the figures, they can be adjusted as appropriate according to circumstances (personal historic performance, soil fertility, livestock genetics for examples), and price and cost differences.

SOURCES OF DATA

The sources of data used to produce this book are wide and multiple, totalling over 50 separate contributors. Data sourced and used in this book are interpreted ahead of publication: it is not simply a matter of reciting data sourced from elsewhere. The interpretation might be to consider it for the forthcoming year rather than historic years, cross examine it against other data sources, test it against economic principles or historic performances, particularly when it is from sources potentially with a bias or commercial interest. It might also be to test it against the practicalities of farming. The contributions are considered according to their reliability, validity, relevance, and suppliers' commercial interests. The following list categorises into groups, the information sources used in this book. They are not in order of relevance; all are very important, and the author is exceedingly grateful for the support of each source, without which, this book would not be possible.

- Published material such as Farm Business Survey, Pesticide Usage Survey

- Defra statistical publications such as June Survey of UK Farming, British Survey of Fertiliser Practice and RB209
- Published price data from impartial sources, including AHDB
- Commercial quotes for some goods such as fertiliser and spray prices
- Expertise from consultants and other specialists focussed on their own fields for example seed specialists, dairy consultants, niche enterprise farmers and suppliers.
- Historic data, with analysis to identify forward trends
- Industry surveys, such as NAAC contractors' rates

SMALL FARMS

The Nix Pocketbook is written with 'commercially sized' farm businesses in mind. There are many farms that do not fit that description for one or other reason. Farming is a commodity industry, which is, in part defined by volatile markets, but overall, tight margins. Profit is therefore raised by increasing the volume of output as the opportunity to add value through branding or differentiation is limited without stepping beyond the strict definition of 'farming'. This means that farm businesses grow, to retain profitability.

Scaling up farm systems is difficult, some enterprises more than others. For example, there is a growing number of 1,000-head dairy farms, but few suckler herds exceeding 100 head. Even with dairying, beyond a certain level, enterprises tend to 'bud-off' into separate herds or outsourcing operations such as youngstock or dry cow management.

The definition of 'commercial' is also vaguely interpreted. Many farms are currently viable only with government support, or relying on diversified or non-farming income to continue. Whilst the overall business has been profitable, the farming component has been supported by other enterprises or support. With the loss of as-of-right support, this may change. In this context, a commercial farm refers to farms who 'set out' to make a return from their farming enterprise. This is not necessarily a done deal, with so many uncontrollable variables in farming, plus many businesses having mixed objectives. This inevitably costs money. Non-financial objectives become dominant in some operations.

Some farmers believe that growth is necessary to chase the margin of profit. Others realise that operating an increasingly efficient operation can outperform some of the largest businesses in the country. This book is relevant to most.

There are thriving businesses that occupy a very small amount of land or other resources. These could be 'lifestyle farms' (farms enabling people to 'live the lifestyle') but could also be community or agroecological farms. There is considerable overlap in these two farm types. Here, the economics of farming are rather different to the 'mainstream' larger farms. It is these farms that this book is, in part, less relevant for. The phrase 'commercially sized' can be challenged here, as there are several very small farm businesses that financially outperform those with many times more resources at their disposal. Large-scale agriculture can learn a lot from them.

The gross margins are broadly the same for small units as large ones as they are measured on a per unit basis, such as per hectare or per head. It simply means multiplying them by different amounts as farm size varies. However, the overhead structures vary considerably. Agroecological community farms probably have a large amount of labour per hectare, but possibly a majority proportion of which is voluntary. This sounds like a free resource but with also it brings with it management challenges.

Small-scale (up to 5 hectare) urban farms often have a considerable community role in supporting mental health and welfare issues as much as cultivating land for food production. In most cases this is a service that is not paid for but is highly valuable in the community. Other amenities are also provided by such small pockets of urban farming such as space and provision of wildlife havens in otherwise concrete spaces.

Machinery schedules vary on small farms. Firstly, where there is considerable labour per hectare, less machinery is required. Secondly, on very small areas, machinery becomes less useful or relevant. Forks and small rotavators might suffice on a few hectares where a tractor-pulled cultivator is necessary for larger areas.

Land ownership, rent and occupation is likely to vary on particularly small farms, but this is not inevitable. Few operators of very small (especially urban) farms are land owners. Indeed, the land in these locations is probably, in pure retail values, worth considerably more than pure agricultural, but its removal from farming might decrease the amenity value of the local area. Private, very small farms are generally owned by the occupier.

Some very small farms are making as much money (or losing considerably less) than many large farms. Whilst it is logical that the theoretical upside might be smaller, the ability to arrange resources in a productive manner and waste less is just as relevant on a few hectares as a large estate.

2. THE USE OF GROSS MARGINS

DEFINITION

The data on the crop and livestock enterprises in the Pocketbook are laid out as gross margins. The gross margin of an enterprise is its output less its variable costs. Enterprise output includes the market value of production retained on the farm. The variable costs must (a) be specific to the enterprise and (b) vary in proportion to the size of the enterprise, i.e., number of hectares or head of stock. The main items of variable costs are as follows: Crops: fertiliser, seed, sprays, casual labour and contract work specific to the crop. Non-Grazing Livestock: concentrate feed, vet. and med., marketing expenses. Grazing Livestock is as for non-grazing livestock, plus forage crop variable costs.

POINTS TO NOTE

1. The gross margin is not a profit figure. The 'fixed costs' (labour, machinery, rent, finance and general overheads) have to be covered by the total farm gross margin before arriving at a profit. For whole farm costings and net margins, see chapter IX.
2. The gross margin of an enterprise differs from season to season, because of yield and price differences affecting output and also because variable costs vary, e.g., the number and type of sprays required. Different soils and other natural factors, as well as level of management, will also cause differences between farms.
3. Variable costs vary from farm to farm, e.g., some farmers have greater weed control costs than others, livestock farms have varying feeding regimes and health issues. Some farmers employ a contractor to harvest their potatoes (a variable cost), others use their own equipment (a fixed cost). These differences must be borne in mind in making inter-farm comparisons.
4. Provided points 2 and 3 are borne in mind, comparison of gross margins (particularly averages over several seasons) with standards are a very useful check on technical performance.

5. The other main use of gross margins is in farm planning. This is not simply a matter of substituting high gross margin enterprises in place of low ones. The gross margin is only one feature of an enterprise. It says nothing about the call the enterprise makes on the farm resources - labour at different times of the year, machinery, buildings, working capital, etc. All these factors and more have to be considered in the planning process.
6. Complete allocation of many farm expenses is generally only arbitrary, being shared by all enterprises. Allocation can hence be misleading. The same can be true when regular labour and machinery are employed on specific enterprises. This is because when enterprises are substituted, expand, contract or are deleted, the variable costs for each enterprise vary in proportion to the size of that enterprise, but other costs may not, except fuel and some repair costs. 'Fixed' costs may change at a different rate to the enterprise size - and often not smoothly in small steps. Either the same regular labour force will cope with a new enterprise size or revised number of workers will be needed. The same is true of tractors, other machines and buildings. The only point of making such calculations is for efficiency comparisons, e.g., labour cost per cow.
7. Allocating fixed costs at a flat rate (e.g., per hectare) between enterprises is misleading. It ignores the whole problem of enterprise inter-relationships, differences between enterprises in total and seasonal requirements for labour, machinery and capital, and other factors such as different quality land on the same farm.
8. Changes in the scale of an enterprise will affect its gross margin per unit, e.g., increasing the area of winter wheat from 30% to 55% on a farm will mean more second and third crop wheats being grown, and a smaller proportion of the crop being drilled in the best conditions; hence yields may fall. Even if yields remain the same, variable costs (e.g., fertiliser) may be higher.
9. Gross margins used for planning future changes should also take account of possible changes in price, and the effect of changes in production techniques.

LOW, AVERAGE AND HIGH LEVELS

The levels of production given for many enterprises indicate differences in natural factors, soil productivity etc., and particularly managerial skill. They refer to an average (mean) for each level. Higher variable costs do not necessarily generate greater output but depend on other factors too such as choice of and timing of applications. This is not the case for overheads. Farms with low gross margins but exceptionally low overhead costs may outperform those with high gross margins and high overheads, and probably with lower downside risks.

Some variable costs in the arable schedules are calculated according to output (P and K fertiliser is based on the average yield taken off the land and haulage and packaging are linked to output). But for the most part, variable costs demonstrate minimal change between high yielding and low yielding fields or farms. Hence the majority of costs do not vary according to yield, which is true in many sectors of farming. In livestock farming, performance varies more according to other variables including stocking rates, parturition intervals, feed regimes and grassland management.

The book is written with the progressive and business-orientated farm manager in mind, those wanting to improve their businesses both technically and commercially. It therefore has high performance figures for most gross margins. We do not simply take Defra's published average yields but seek more evidence where possible or necessary. These figures are achievable in most farm businesses.

COMPLETE ENTERPRISE COSTINGS

Gross margins are extremely useful for benchmarking and comparative tests. However, more than half of the variation in performance between farms (of all sectors) is in their overheads so will not show up on gross margin schedules. This means examining farm structure and overhead costs is crucial, and understanding full costs of production is useful for business planning.

Almost everybody calculates the cost of production of a farm system differently thereby giving different answers to the same question. Much arbitrary allocation of 'joint costs' is required to attempt fully costed net margins, and the results are often of limited use in making farm decisions. Another problem in 'complete enterprise costing' is where to stop. For example, should interest on capital be included, whether borrowed or not? If so, further problems of asset valuation and allocation are involved. Variations between farms in their financial situations are considerable as, ranging from the farmer who owns all her land without any mortgage and has no other borrowings to the one with both a rent to pay for all the land and heavy borrowings in addition.

It is natural to want to know 'unit costs' to compare, for example, with prices received. Sometimes these calculations clarify particular costs and therefore efficiency gains that could be made. For these reasons costs per litre of milk are included, although the calculation of some of the 'fixed cost' items is difficult. If a farm has only one enterprise such calculations on that farm are obviously straightforward. But these farms are rare; even dedicated dairy farms usually have youngstock and home-grown forage, which are separate enterprises to milk production.

If required, a cost per tonne of combinable crops can be calculated by adding the fixed costs per hectare of mainly cereals farms (according to size range, given on page 243) to the variable costs per hectare given in the enterprise gross margin data and dividing by the selected yield. Such calculations need to be interpreted with caution because the allocation of fixed costs per hectare is inevitably crude. At The Andersons Centre (the Pocketbook's owner), allocation of labour and machinery is made according to fuel use per hectare. This makes the resulting margins more comparable, for example, grass seed with potatoes. This is not a perfect science but attributes the various costs more accurately than per hectare or per unit of yield.

The allocation of specific labour (e.g., a full-time cowman), machinery (e.g. a potato harvester) and buildings (e.g. a grain store) is relatively simple to allocate and can provide useful information both for efficiency comparisons and partial budgeting. For some enterprises on many mixed farms, there are few such specific items and the question of the other so-called fixed cost items remains if a full costing is attempted.

GROSS MARGIN MAIN ASSUMPTIONS

Budgeting future prices, by necessity requires making assumptions about how they are likely to move in the future from current levels (July 2025). This Edition of the Pocketbook uses the following key assumptions for 2026:

- Performance levels are not empirically or academically measured, but as a guide, one would normally expect the 'high' and 'low' performers to be at roughly the 10% and 90% performance levels. Long tails on either side will exceed these figures.
- Arable variable costs do not change between performance levels unless they are based on the crop yield, so usually post-harvest expenses such as grading,

packing and so on. Variable costs vary widely between field and farm, although there is not much evidence that the variation is proportional to crop yield. Thus, only the crop yield is changed to determine performance levels (notwithstanding the point directly above). This is mostly 15% above or below the average yield. This is not the case for livestock as so many more variables affect gross margin performance, typically concentrate fed, stocking rates, and calving/farrowing intervals.

- *Wheat Price:* Feed wheat price (from which some other commodity prices are benchmarked), is £185/tonne. This is an ex-farm price for grain harvested in 2026, and delivery averaged throughout the year and typical marketing dates.
- *Straw:* Straw is included in the combinable cereal gross margins. The proportion of baled cereal hectares has been rising and is now baled on the majority of cereal hectares. This is costed as sold in the swath to save additional costs in the farm's overheads. Some organic matter and minerals are removed in the straw from the fields which are accounted for in the fertiliser costings.
- *Fertiliser prices:* Prices for nitrogen (N), phosphate (P) and potash (K) are the same throughout and are detailed in a full schedule of fertiliser valuations on page 317. To calculate the gross margins, the following are used:
 - N: 98.6p/kg (£340/t 34.5% N) (UK Ammonium Nitrate)
 - P₂O₅: 105p/kg (£485/t 46% P₂O₅) (Triple Super Phosphate)
 - K₂O: 57.5p/kg (£345/t 60% K₂O) (Muriate of Potash)

Standard fertiliser recommendations from RB209 (e.g., table 4.3) have been used, assuming an average soil type with mineral and nitrogen indexes of 2 unless otherwise stated. Each gross margin accounts for the replacement of the minerals taken off the field by the harvested crop, including straw which is costed as removed for cereal crops.

- *Seed:* In the gross margin data, HSS refers to Home Saved Seed, C2 refers to certified (merchant bought) seed. Hy refers to Hybrid seed. Seed rates vary according to soil, season, variety, weather conditions and drilling date. HSS cost includes grain value, cleaning, dressing, testing and BSPB (British Society of Plant Protection) levy (refer to page 326).
- *Sprays:* Refer to Agrochemical Rates on page 322. PGR refers to Plant Growth Regulators
- *Purchased Bulk Feeds:* used in the livestock gross margins refer to non-concentrate feeds bought into the farm in bulk. These could include brewers' grains for example.
- *Beef Prices:* The pricing of beef sales has changed from liveweight to deadweight, in recent Editions to reflect the majority of finished beef sales. In the margins, Lwt. refers to liveweight and Dwt. refers to deadweight.
- *Tractor Diesel:* Farm machinery fuel price (red diesel) is taken to be £0.75/l. The contractor's prices include fuel at £0.70/l (page 214).

2. FORAGE PRODUCTION

FORAGE VARIABLE COSTS

These costings are per year, so seed costs are spread over the term of the ley.

<i>Grass/land</i>	<i>1-2 year Ley</i>	<i>Intensive 3-5 yr Ley</i>	<i>Long Term 7-yr Ley</i>	<i>Improved Permanent Pasture</i>	<i>Low Input P. Pasture</i>	<i>no Input P. Pasture</i>	<i>Herbal 4-yr Ley</i>	<i>Clover 5-yr Ley</i>
<i>Yield t/ha (ac)</i>	50 (20)	45 (18)	40 (16)	32 (13)	25 (10)	12 (5)	30 (12)	35 (14)
<i>Stock capacity GUU/ha(ac.)</i>	2.0 (0.8)	1.8 (0.7)	1.5 (0.6)	1.2 (0.5)	0.9 (0.4)	0.4 (0.2)	1.1 (0.4)	1.4 (0.6)
<i>Kg/ha (units/acre)</i>								
N	250 (199)	200 (159)	150 (120)	100 (80)	50 (40)	50 (40)	0 (0)	50 (40)
P	35 (28)	32 (25)	28 (22)	22 (18)	18 (14)	8 (7)	21 (17)	30 (24)
K	120 (96)	108 (86)	96 (77)	77 (61)	60 (48)	29 (23)	72 (57)	30 (24)
Costs £/ha (£/ac)								
Seed per year	61 (25)	36 (15)	25 (10)	8 (3)	4 (2)	2 (1)	57 (23)	45 (18)
Fertiliser	352 (143)	292 (118)	233 (94)	166 (67)	102 (41)	0 (0)	51 (21)	98 (40)
Sprays	15 (6)	10 (4)	5 (2)	2 (1)	0 (0)	0 (0)	3 (1)	10 (4)
<i>Total £/ha/Yr</i>	428 (173)	338 (137)	262 (106)	177 (71)	106 (43)	2 (1)	111 (45)	153 (62)
cost £/t fresh weight	8.57	7.52	6.55	5.52	4.25	0.17	3.69	4.36
<i>Other Forages</i>	<i>Maize</i>	<i>Kale</i>	<i>Swedes</i>	<i>Fodder Beet</i>	<i>Forage Rape</i>	<i>Maincrop Turnips</i>	<i>Stubble Turnips</i>	<i>Lucerne (4-yr ley)</i>
<i>Yield t/ha (t/acre)</i>	37 (15)	45 (18)	70 (28)	70 (28)	35 (14)	65 (26)	35 (14)	35 (14)
<i>Kg/ha (units/acre)</i>								
N	70 (56)	90 (72)	60 (48)	150 (120)	90 (72)	60 (48)	100 (80)	20 (16)
P	26 (21)	27 (22)	25 (20)	50 (40)	30 (24)	50 (40)	30 (24)	60 (48)
K	81 (65)	113 (90)	84 (67)	90 (72)	30 (24)	125 (100)	35 (28)	60 (48)
Costs £/ha (£/ac)								
Seed	240 (97)	85 (34)	270 (109)	284 (115)	48 (19)	44 (18)	27 (11)	55 (22)
Fertiliser	143 (58)	182 (74)	133 (54)	252 (102)	138 (56)	184 (74)	150 (61)	117 (48)
Sprays	77 (31)	15 (6)	15 (6)	154 (62)	20 (8)	15 (6)	15 (6)	15 (6)
<i>Total £/ha (£/ac)</i>	460 (186)	282 (114)	419 (170)	690 (280)	206 (83)	243 (98)	193 (78)	187 (76)
Cost £/t fresh weight	12.44	6.27	5.98	9.86	5.87	3.74	5.51	5.35

Forage Variable Cost Notes

1. **Stocking Rate Capacity:** In GLSU/Ha (Grazing Livestock Units). This is a guide for forage types. It will vary between farm and field, but should help to identify stock carrying capacity of the land.
2. **Seed costs:** costs per year vary according to the length of leys.
3. **Fertiliser.** Minerals are costed to come partially from manure and bagged fertiliser (50:50). Bagged fertiliser is often less on permanent pasture, depending on management style which also affects stocking rates and productive levels per animal.
4. **Contract work** on maize, silage and cultivations; refer to page 214.
5. **Labour:** forage and conservation labour, pages 193
6. **Conservation machinery:** page 208.
7. An appropriate combination of these *forage Variable Costings* is used to calculate the forage costs of all the grazing livestock margins throughout the book. For simplicity, only the grasses, maize and stubble turnips are used. Each livestock gross margin explains which forage crops are used.
8. It is easy to identify arable land use, such as wheat production, potatoes or fallow. For forage, it is difficult. There may be several options for using that pasture, with various livestock enterprises grazing the grass or consuming the conserved forage in winter. For much of the grass-growing time, the field may be unstocked, allowing pasture to grow. This makes it difficult to identify the enterprises it feeds, stocking rates, pasture utilisation and indeed fallow grassland. There is a significant amount of under or unutilised grass in the UK. This is not identified by survey or statistics. The stocking rates used here are for typical commercial enterprises, rather than the average UK pasture stocking rate.
9. An interest in a broader mixture of varieties within leys is increasing. These 'Herbal Leys' have several benefits from extending the growing season, evening the growth periods, providing deeper rooting swards to improve soil structure and drought resilience as well as increased environmental benefits over single or double variety leys. Careful management is required to prevent more competitive plants outcompeting other species, and prevent undesired weeds.
10. Sources of data; Key Farm Facts, Agro Business Consultants. Ex-farm market values for 2026 at the point of editing.

TOTAL COSTS OF FORAGE

<i>Cost of Preserved Forage Grass - 2 cuts</i>	Clamped Grass Silage *	Wrapped Grass Silage *	Hay *	Grazed Grass	Clamped Maize	Clamped Wheat
Variable Costs £/ha	338	338	338	338	460	679
Operational Costs						
Land Preparation	46	46	46	46	184	46
Drilling	13	13	13	13	61	52
Fertilising & Spraying	65	65	65	65	32	65
Mowing		77	77			
Turning		48	95			
Raking		48	48			
Harvest, Clamp/Gather	417		66		230	230
Land based Costs £/ha	879	635	749	462	967	1072
Forage not Used Est.	15%	15%	20%	15%		
Total Costs £/fresh t	23	17	21	12	24	49
Fresh DM	18%	18%	18%	18%	28%	35%
Preserved DM %	25%	30%	85%	18%	32%	44%
Preserved weight t	27.5	23.0	7.6	38.3	32.4	35.8
Sub-total £/t preserved	32	28	98	12	28	61
Round Baling £/bale		4.16	4.16			
Wrap x4 £/bale		2.07				
sheet £/t	1.60				1.60	1.60
Innoculant £/t						1.50
Bale Weight		600	400			
Total Costs £/t Preserved	34	38	109	12.1	29	64
Total Costs £/t dry weight	134	127	128	67	91	146
<i>MJ per kg DM</i>	<i>10.9</i>	<i>10.9</i>	<i>8.8</i>	<i>11.5</i>	<i>11.0</i>	<i>11.0</i>
£/MJ kg DM	1.23	1.16	1.45	0.58	0.83	1.33

Total Forage Cost Notes:

1. *Variable Costs:* Linked to previous schedule, with 47 tonnes per hectare from the 'Intensive 3-5 year' margin and a 4-year ley.
2. *Conserved Grass (*)* figures are based on 2 cuts.
3. *Operational Costs:* Taken from contractor's charges, page 214, (supported by NAAC) land preparation and drilling divided by length of rotation.
4. *All costs* are charged to the forage, despite possible late season grazing.
5. Neither *land rental costs* or the *income from the Basic Payment Scheme* or environmental grants are included in this schedule. Depending on its use, will depend on whether you should include them in your costings. But if one is in, the other should be unless grazing licences are used.
6. Sale value of hay and (far less common because of its bulk) silage vary widely according to the region and season (supply/demand situation), quality and time of year: *Hay in small bales* has an average ex-farm sale value of £120 to £150/t, average £135/t (British Hay & Straw Merchants' Association). Seed hay £135/t and £120/t for meadow hay; prices are higher in the West than East and more after a dry summer or long winter. Prices are higher for horses as quality is higher and for small quantities. Big bale hay (including round bales) is £25 to £30/t cheaper and 90% of hay crop.

7. To sell wrapped grass silage or maize silage delivered for 2026 at cost plus margin (10% used here), see schedule above. Include delivery cost (£8/tonne here). Grass silage calculates at £50.70/t delivered, maize silage about £41/t (higher when forage is very short in an area and vice versa).

WHOLE CROP COSTINGS

This schedule has costs laid out for purchasing entire fields of unharvested forage. It then also gives indicative figures for ensiling the crops.

Costs of Purchasing Standing Crops to Ensil (Whole Crop)

		Standing Maize	Standing Wheat
Forage Yield	t/Ha (Ac)	37 (15)	25 (10)
Standing Crop DM	%	28%	35%
Conserved DM	%	32%	44%
Grain Yield	t/ha (Ac)		8.0 (3.2)
Value	£/t Whole crop		185
Variable Costs	£/Ha (Ac)	460 (186)	
seedbed/drill/fert	£/Ha (Ac)	277 (112)	
Rent less BPS	£/Ha (Ac)	210 (85)	
Harvest, Cart & Store	£/Ha (Ac)		212
standing cost	£/Ha (Ac)	947 (384)	1268 (514)
Harvest & Clamp	£/Ha (Ac)	230 (93)	230 (93)
Total to Conserve	£/Ha (Ac)	1177 (477)	1498 (607)
Cost Fresh Wt.	£/t	32	60
Cost Conserved Wt.	£/t	36	75
Cost Dry Matter	£/t	114	171
Harvest Date		October	1st week July

Whole Crop Notes:

- These costings are calculated in two ways, maize on the costs of production, wheat on its market value at the time of the trade less harvesting costs (COP in schedule on previous page).
- Whole Crop Wheat.* Variable costs are as for combined crop (page 7) plus contract harvesting and clamping at £230 per ha (£93/ac.). See contractors' charges on page 214.
- Some farmers use silage additives such as urea, particularly with whole crop wheat. Being higher dry matter, it is more difficult to reach anaerobic conditions. Costs range from £2.00 to £5.00 per tonne of silage.
- Benefits to arable systems for selling whole crops include an early field clearance, allowing time for weed control and seed bed preparation. Some arrangements include a 'FYM swap' within the price. More is cut as wholecrop in years with low anticipated grain yields such as very dry years such as in 2025 and when hay is sparse.
- Some maize growers use plastic covering to accelerate the crop. This facilitates earlier drilling, more Northerly cultivation and potentially higher yields or earlier harvest.

RELATIVE COSTS OF GRAZING, CONSERVED GRASS, AND FEEDS

	£/t Fresh Weight	Yield DM tonnes/ha (acre)	Cost per tonne DM (£)	MJ per kg DM	Pence per MJ of ME in DM
Grazed Grass	12	7.2 (2.9)	£67	12.8	0.52
Grass Silage	34	7.2 (2.9)	£134	10.9	1.23
Big Bale Silage	38	7.2 (2.9)	£127	10.8	1.17
Hay	109	7.2 (2.9)	£128	8.8	1.45
Kale (direct drilled)	16	6.8 (2.7)	£105	11	0.95
Forage Turnips (d.d.)	10	6.8 (2.8)	£98	10.2	0.96
Brewer's Grains	50	-	£208	11.7	1.78
Concentrates	305	-	£355	12.8	2.77

1. In interpreting the above figures for use in planning feed use on farm, own land, labour and capital for equipment are included (as per previous pages) for home-produced fodder but not for purchased feed, and more expensive storage is required.
2. The consumption of fodder is limited by its bulk and its quality/digestibility.
3. The cost of forage varies enormously depending on growing conditions, soil fertility and type, intensity of farming practice and management ability.

GRAZING LIVESTOCK UNITS (GLU)

Large, high-yield dairy cow	1.60		
Small, low yield dairy cow.....	1.00	Lowland ewes.....	0.11
Beef cows (excl. calf)	0.75	Upland ewes	0.08
Heifers in calf (rearing)	0.80	Hill / LFA ewes.....	0.06
Bulls	0.65	Breeding ewe hoggets:	
.....		½ to 1 year	0.06
Other cattle (excl. intensive beef):		Other sheep, over 1 year.....	0.08
0-1 year old.....	0.34	Store lambs, under 1 year	0.04
1-2 years old	0.65	Rams	0.08
2 years old and over	0.80	Cocks, hens, pullets in lay.....	0.017
Average Heifer; 0-24 month ...	0.50	Pullets, 1 week to point of lay .	0.003
Breeding sows	0.44	Broilers.....	0.0017
Gilts in pig.....	0.20	Other table chicken.....	0.004
Maiden gilts	0.18	Turkeys.....	0.005
Boars.....	0.35	Ducks, geese, other poultry	0.003
Other pigs	0.17	Horses	0.80
Breeding nanny goats	0.16	Other goats	0.11

Source: as advised by DEFRA for the Farm Business Survey.

1. *Total livestock units on a farm* should be calculated by multiplying the above ratios by the monthly livestock numbers averaged over the whole year.
2. *The ratios are based on feed requirements.* Strictly speaking, when calculating stocking density, allowances should also be made for differences in output (e.g., milk yield per cow or liveweight gain per head), breed (e.g., Friesians v. Jerseys) and quantities of non-forage feed consumed.

3. GRAZING LIVESTOCK

DAIRY COWS

Dairy Business Outlook for 2026

The dairy sector is currently buoyant, one of the more profitable sectors of UK agriculture. Commodity values can change without notice and sharply so there is no space for complacency. Very high perishability means the global balance between supply and demand is inevitably tight. Consumption of dairy goods is relatively inelastic. Prices therefore move sharply when imbalances occur. It takes 3 years for dairy farms to adjust structurally to market signals (breed new cows and bring into milk) but can tweak systems (more feed per cow, keeping culls longer) to capture the added market value.

When output prices are good, it is easy to lose sight of costs. Variable costs are currently subdued (feed and fertiliser primarily). Overheads continue to creep up though, and these will bite when milk price declines again (which it inevitably will, we just don't know when). However, now is arguably the best time to invest for tomorrow.

Securing good labour is a challenge for many dairy farms. As dairy farms grow, the transition to managing people, rather than cows requires a whole new set of skills. Wages are inevitably rising but other benefits are also necessary; e.g. flexible hours, good working conditions, work responsibility and autonomy, adequate time off, great training and so on.

Grass growth in early summer 2025 was short. Feeding bulk feed and forage in summer is expensive, and the chance of missing a silage cut for some also pushes costs up for the following year (2026). Dairy farmers are having to build hay and forage stores to accommodate the increasingly extreme UK weather. This adds costs to the system but builds resilience. Other environmental considerations include the spreading of slurry in Nitrate Vulnerable Zones, with loading limits, particularly in Wales, effectively limiting stocking rates.

Livestock keepers, are facing increasing moral pressures to demonstrate their 'social licence to operate'. It is operating in a way that society, consumers, lobbyists and potential employees find most acceptable. The dairy industry is leading this, for example having ended the euthanasia of bull calves. Clearly, the environmental footprint of goods is now on that agenda too and the use of additives to reduce methane production might be the next as might cow-calf separation procedures. Dairying is capital intensive, much of which does not demonstrate an immediate return. For example, slurry lagoon replacement to prevent environmental spillages does not generate additional income but retains the business's licence to farm.

Dairy farmers require a close relationship with their milk buyers and switching is complex and often not logistically possible. A good milk contract makes a considerable difference to farm performance.

Overall, the outlook for dairy farming is positive for the coming year. This sector is less reliant on the Basic Payment and agri-environmental schemes than other sectors, being quite intensive, so are less impacted by current policy changes. Herd numbers might decline slightly, but herd sizes are tending to compensate for this, so cow numbers in the UK are steady at about 1.8 million.

General Notes on Gross Margins:

These notes detail the general points that are pertinent to completing costings for all dairy enterprises. A number of gross margins are then presented with specific detail relating to each production system.

1. *Yield per cow:* Increases in this are usually (though not necessarily) associated with more 'intensive' farming operations. 'Intensification' generally focuses on higher gross margins per hectare, higher yields per cow and cows per hectare, although more intensive systems incur higher variable and overhead costs (specifically machinery and labour requirements). Higher milk yields require different cow genetics (usually Friesian / Holstein's) and more concentrate feeding (kg/litre), as well as other inputs. Higher yielding cows often have fewer lactations, see page 59.
2. *Yield:* The yield is annual herd production divided by the average number of cows and calved heifers in the herd. The average yield given for each type of production system is an estimated national figure for sizeable herds.
3. *Milk Price:* the average milk price for the 2026/27 milk year (April to March) is budgeted at **42.5p** for a standard litre (ppl). This is based on an assessment of the current milk price, futures markets, historic trends and global market conditions. Markets are volatile and buoyant.
4. The prices used for each gross margin are averages for the year, after deducting transport & levy costs. They incorporate adjustments for milk composition and seasonality assuming a 1 million litre per year herd (the volume standard litres are calculated despite the average herd producing 1.4 million litres).

Milk price variations between contracts are about 3.3ppl. Milk supply contracts and the pricing of the milk is notoriously complicated with many variables, of varying importance depending on end-use of the milk.

Delivery Volume; Smaller herds receive smaller volume bonuses and pay higher transport charges per litre. The average price received by individual producers also depends on seasonality of production and compositional quality.

Seasonality Price Adjustments: These vary between milk buyers and many involve complicated formulae. Some have payment formulae that encourage a level monthly production, with deductions and bonuses related to the individual producer's spring and autumn deliveries. Others have simple monthly adjustments per litre or on a percentage basis. A typical adjustment is shown below for a selection of companies operating conventional adjustments are as follows in 2025/26 in pence per litre:

April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan– Mar
–5	–7	–6	+1	+3	+5	+4	+3	+1	–1

Some buyers also offer a premium for a level delivery option if supplies in a calendar month are within 10% of an agreed daily volume.

Some milk buyers have an 'A' and 'B' production payment system, where deliveries greater than an agreed volume (perhaps based on the previous year's deliveries) are paid the open market price for milk rather than the contracted price.

Paying for Milk Solids: Milk price calculations depend on the buyer and its end market. For example, cheesemakers mostly pay for butterfat and protein whereas a liquid processor pays largely base price per litre with small adjustments for butterfat. As a result, constituent values vary widely between buyers. More buyers are moving to this payment system.

A standard litre is typically 4-10% butterfat and 3-30% protein. A typical cheesemaker might calculate milk price summarised as follows:

	% Content	Pence per 1%	Price paid
Butterfat	4.16	4.85	20.2
Protein	3.35	5.65	18.9
Total ppl			39.1*

* Other adjustments are made to this price such as delivery volumes, volume payments, collection rates, haulage hygiene and cleanliness and seasonality.

Within Breed Quality Variation: For Holstein Friesians, without going to extremes, the range can easily be: 3.5% to 4.1% butterfat and 3.1% to 3.4% protein. The difference in value between these levels combined can be 5p per 1% of milk solids depending on milk contract. This is achieved by both breeding and feeding for milk quality to meet varying contractual requirements.

Proportional Split of Dairy Breeds and milk Compositions typical for 2026:

	Cows %	Butterfat %	Protein %
Holstein / Friesian	82	3.95	3.3
Cross Breeds	10	4.6	3.6
Jersey	3.9	5.4	3.9
Guernsey	0.5	4.7	3.6
Ayrshire	2.4	4.1	3.3
Others	1.2	3.9	3.3
All Breeds		4.0	3.3

Hygiene Price Adjustments: Consumers rightly demand increasingly clean food. Penalties are applied for high bacterial and cell counts in milk. They vary between milk buyers. Typical examples are as follows:

Bactoscan (bacteria measure ppl) and Somatic Cell Count (Mastitis ppl)

Bactoscan reading	Price Adjustment	Count	Price Adjustment
0- 30,000	0.0	0-225,000	0.0
30,001-50,000	-0.25	225,001 – 250,000	-0.25
50,001-75,000	-1.25	250,001-300,000	-1.75
75,001-100,000	-2.00	300,001 - 400,000	-6.0
100,001-250,000	-4.00	Over 400,000	-20.0
> 250,000	-8p		

Top-quality milk is expected as the norm in order to receive the standard litre price.

Antibiotics. Milk in a consignment that fails an antibiotics test is commonly charged 125% to 200% the value of the milk plus costs in excess of £400.

5. *Concentrate Price:* An average of £305/t is used for dairy concentrate. This includes blends and straights which are typically lower cost than compounds by £10 to £20/t. Spring calving herds have lower protein concentrate as grazed grass has more protein than conserved feeds; conversely, autumn calvers receive higher protein concentrate. An average of £290/t has been used for spring calving herds.

All-Year-Round Calving Friesian/Holsteins (per cow per year)

	Average		High	
<i>Yield Per Cow (litres)</i>	8,000		9,500	
	<i>£/Cow</i>	<i>ppl</i>	<i>£/Cow</i>	<i>ppl</i>
Milk Output @ 42.5 ppl	3,400	42.5	4,038	42.5
Calf Value	216	2.7	216	2.3
Cull Value	229	2.9	257	2.7
Less, Replacement Cost @ 25% & 28% per year	-540	-6.8	-617	-6.5
Total Output	3,305	41.3	3,893	41.0
Variable Costs:				
Concentrate £305/t @ 2.6t & 3.5t/cow	793	9.9	1,068	11.2
Purchased Bulk Feed	33	0.4	33	0.3
Vet & Med	103	1.3	106	1.1
Bedding	114	1.4	134	1.4
AI	77	1.0	79	0.8
Recording, Parlour Consumables, Sundries	110	1.4	131	1.4
Total Variable Costs	1,230	15.4	1,550	16.3
Gross Margin per cow Before Forage Costs	2,075	25.9	2,343	24.7
Forage Costs @ 2.1 Cows Per Forage Hectare	174	2.2	174	1.8
Gross Margin per Cow After Forage Costs	1,901	23.8	2,169	22.8
Gross Margin Per Forage Hectare	3,992		4,554	
Margin of Milk Over Concentrates	2,607	32.6	2,970	31.3
<i>Sensitivity Analysis per cow</i>				
Concentrate Price +/- £10/tonne	+ 26.0		+ 35.0	
Milk Price +/- 0.50 ppl	40.0		47.5	

All-year-round calving herds have higher costs of production than seasonal producers and generally sell their milk on a liquid (supermarket supply) contract. Both vet. and med. and A.I. costs tend to increase with higher milk yield due to greater pressure on the cow and poorer fertility. As a result, herd replacement rates are also higher. About 65% of the UK dairy herd calves all year round.

See notes on page 59.