

**Supplementary written evidence submitted by Marinet Limited**

***The Scale of intensive indoor livestock farming in the United Kingdom, and the impact of its related sewage disposal regime upon Water Quality in Rivers.***

We provide here tabulated data based on research undertaken by Compassion in World Farming (CIWM) published 2021, ref. <https://www.ciwf.org.uk/factory-farm-map/#pig/all>

The Tables below record the information for indoor reared pigs, meat chickens, egg chickens, and dairy cows. Specifically:

- Individual Levels for these livestock animals being reared intensively indoors in the counties of England, Wales, Scotland and Northern Ireland.
- Total Levels for these livestock animals being reared intensively indoors in the counties of England, Wales, Scotland and Northern Ireland.
- Total Levels for these livestock animals being reared intensively indoors in the United Kingdom as a whole.

**Note:** CIWM advise: “There is little publicly available information on the method of production system used on-farm. Therefore, the number of animals and farms are estimates of chickens, pigs and dairy cows that are permanently housed indoors in the UK.” It is also to be noted that in a large number of categories no data was available, so the figures cited are likely to be under-estimates of the total levels of indoor intensive livestock farming in the UK.

In England, the 40,000 dairy cows being farmed in this way occur across 70 farms; the 11 million egg laying hens occur across 60 farms and the 100 million broiler (meat) chickens occur across 800 farms; whilst in the UK as a whole the 1.3 million pigs occur in over 200 farms.

It is estimated that around 73% of farmed animals in the UK are kept in indoor factory farms, with a 26 per cent rise in intensive animal farming in the UK in the last six years. In the case of intensively reared chickens (egg laying and broiler) there are now approximately 1,400 factory farms (2017 figure) whereas in 2000 there were none. This intensive indoor farming of livestock is therefore a recent development in farming practices, ref. <https://www.thebureauinvestigates.com/stories/2017-07-17/megafarms-uk-intensive-farming-meat>

The specific issue that Marinet places before the House of Commons Environmental Audit Committee, with the request that it be asked of DEFRA and the UK farming industry, is:

- How is the animal livestock waste (sewage) disposed of at these animal intensive indoor farms to ensure that:
  - a/. All this animal waste is neutralised in terms of its pathogen content (viral, bacterial and parasitic) before disposal, given that it will contain antibiotic resistant bacteria (AMR) due to the husbandry regimes employed.
  - b/. None of this animal waste is released into rivers and watercourses.

Title: Individual and Total Levels for livestock animals being reared intensively indoors in the counties of England.

Source: CIWM, 2021.

<i>County</i>	<i>Pigs</i>	<i>Meat Chickens</i>	<i>Egg Chickens</i>	<i>Dairy Cows</i>	<i>All</i>
Norfolk	<b>130,000</b>	<b>12,231,000</b>	No data available	No data available	<b>12,363,000</b>
Suffolk	<b>140,000</b>	<b>5,623,000</b>	<b>15,000</b>	No data available	<b>5,779,000</b>
Essex	<b>10,960</b>	<b>2,163,000</b>	No data available	No data available	<b>2,174,000</b>
Cambridge	No data available	<b>1,903,000</b>	<b>75,000</b>	No data available	<b>1,978,000</b>
Kent	No data available	No data available	<b>1,652,000</b>	<b>280</b>	<b>1,652,280</b>
W. Sussex	<b>12,410</b>	<b>40,000</b>	<b>424,000</b>	No data available	<b>476,000</b>
E. Sussex	No data available	<b>153,000</b>	No data available	<b>180</b>	<b>153,180</b>
Hampshire	<b>13,370</b>	<b>1,152,000</b>	<b>187,000</b>	No data available	<b>1,352,000</b>
Dorset	<b>50,920</b>	<b>606,000</b>	<b>538,000</b>	<b>2,070</b>	<b>1,196,990</b>
Wiltshire	<b>18,050</b>	<b>2,237,000</b>	<b>634,000</b>	<b>200</b>	<b>2,889,250</b>
Somerset	<b>38,760</b>	<b>3,625,000</b>	<b>702,000</b>	<b>2,660</b>	<b>4,368,000</b>
Devon	<b>22,610</b>	<b>1,715,000</b>	<b>708,000</b>	<b>2,760</b>	<b>2,449,000</b>
Cornwall	<b>15,480</b>	<b>340,000</b>	No data available	<b>2,900</b>	<b>358,380</b>
Oxfordshire	<b>43,590</b>	<b>1,405,000</b>	No data available	No data available	<b>1,485,590</b>
Bedford	<b>6,550</b>	<b>210,000</b>	<b>59,000</b>	No data available	<b>275,550</b>
Buckingham	No data available	<b>1,537,000</b>	No data available	No data available	<b>1,537,000</b>
Hertford	No data available	<b>780,000</b>	No data available	No data available	<b>780,000</b>
Northampton	<b>15,570</b>	<b>247,000</b>	<b>114,000</b>	No data available	<b>376,570</b>
Warwickshire	<b>21,710</b>	<b>1,189,000</b>	No data available	No data available	<b>1,210,710</b>
Worcester	<b>6,200</b>	<b>1,292,000</b>	<b>72,600</b>	<b>190</b>	<b>1,370,990</b>
W. Midlands	<b>750</b>	<b>90,000</b>	No data available	No data available	<b>90,750</b>
Leicestershire	<b>29,620</b>	<b>1,775,000</b>	No data available	No data available	<b>1,804,620</b>
Gloucester	<b>10,670</b>	<b>3,535,000</b>	<b>285,000</b>	<b>1,180</b>	<b>3,831,850</b>
Hereford	<b>5,010</b>	<b>16,726,000</b>	<b>113,000</b>	No data available	<b>16,844,010</b>
Shropshire	<b>23,040</b>	<b>13,360,000</b>	<b>1,330,000</b>	<b>2,040</b>	<b>14,715,080</b>
Staffordshire	<b>12,050</b>	<b>2,707,000</b>	<b>650,000</b>	No data available	<b>3,369,050</b>
Derbyshire	<b>5,400</b>	<b>1,853,000</b>	No data available	<b>260</b>	<b>1,858,660</b>
Nottingham	No data available	<b>2,142,000</b>	<b>476,000</b>	No data available	<b>2,618,000</b>
Lincolnshire	<b>41,970</b>	<b>11,885,000</b>	<b>268,000</b>	No data available	<b>12,194,970</b>
Cheshire	<b>4,750</b>	<b>2,122,000</b>	<b>697,000</b>	<b>3,160</b>	<b>2,826,910</b>
Manchester	No data available	<b>462,000</b>	<b>120,000</b>	No data available	<b>582,000</b>
S. Yorkshire	<b>13,570</b>	No data available	No data available	No data available	<b>13,570</b>
W. Yorkshire	<b>48,020</b>	<b>1,585,000</b>	No data available	<b>490</b>	<b>1,633,510</b>
N. Yorkshire	<b>221,000</b>	<b>6,868,000</b>	<b>164,000</b>	<b>2,220</b>	<b>7,255,220</b>
E. Yorkshire	<b>144,000</b>	<b>2,884,000</b>	<b>344,000</b>	No data available	<b>3,372,000</b>
Lancashire	<b>11,560</b>	<b>1,879,000</b>	<b>498,000</b>	<b>3,070</b>	<b>2,391,630</b>
Cumbria	<b>14,710</b>	<b>3,228,000</b>	No data available	<b>680</b>	<b>3,243,390</b>
Durham	<b>4,400</b>	<b>40,000</b>	<b>132,000</b>	No data available	<b>576,400</b>
<b>Totals</b>	<b>1,136,700</b>	<b>103,558,000</b>	<b>10,257,600</b>	<b>24,340</b>	<b>114,976,640</b>

**Title: Individual and Total Levels for livestock animals being reared intensively indoors in the counties of Wales. Source: CIWM, 2021.**

<i>County</i>	<i>Pigs</i>	<i>Meat Chickens</i>	<i>Egg Chickens</i>	<i>Dairy Cows</i>	<i>All</i>
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Powys	<b>1,000</b>	<b>2,949,000</b>	<b>64,000</b>	<b>1,000</b>	<b>3,015,000</b>
Dyfed	<b>750</b>	No data available	No data available	<b>3,710</b>	<b>4,460</b>
Gwent	<b>5,350</b>	<b>1,920,000</b>	<b>60,000</b>	No data available	<b>1,985,350</b>
Clwyd	No data available	<b>810,000</b>	No data available	<b>250</b>	<b>810,250</b>
Glamorgan	No data available	No data available	<b>295,000</b>	No data available	<b>295,000</b>
Gwynedd	<b>1,520</b>	<b>1,430,000</b>	No data available	No data available	<b>1,431,520</b>
<b>Totals</b>	<b>8,620</b>	<b>7,109,000</b>	<b>419,000</b>	<b>4,960</b>	<b>7,541,580</b>

**Title: Individual and Total Levels for livestock animals being reared intensively indoors in the counties of Scotland. Source: CIWM, 2021.**

<i>County</i>	<i>Pigs</i>	<i>Meat Chickens</i>	<i>Egg Chickens</i>	<i>Dairy Cows</i>	<i>All</i>
Scot. Borders	<b>1,050</b>	<b>48,420</b>	No data available	<b>1,550</b>	<b>51,020</b>
Dumfries / Galloway	No data available	<b>615,000</b>	No data available	<b>6,350</b>	<b>621,350</b>
Strathclyde	<b>700</b>	No data available	<b>46,800</b>	<b>215</b>	<b>47,715</b>
Lothian	<b>3,370</b>	<b>2,862,000</b>	<b>100,000</b>	No data available	<b>2,965,370</b>
Fife	No data available	<b>878,000</b>	<b>492,000</b>	No data available	<b>1,370,000</b>
Central	No data available	<b>1,200,000</b>	No data available	No data available	<b>1,200,000</b>
Tayside	No data available	<b>2,755,000</b>	No data available	No data available	<b>2,755,000</b>
Grampian	<b>20,340</b>	<b>1,010,000</b>	<b>614,000</b>	No data available	<b>1,644,340</b>
<b>Totals</b>	<b>25,460</b>	<b>9,368,420</b>	<b>1,252,800</b>	<b>8,115</b>	<b>10,654,795</b>

**Title: Individual and Total Levels for livestock animals being reared intensively indoors in the counties of Northern Ireland. Source: CIWM, 2021.**

<i>County</i>	<i>Pigs</i>	<i>Meat Chickens</i>	<i>Egg Chickens</i>	<i>Dairy Cows</i>	<i>All</i>
Fermanagh	No data available	<b>65,000</b>	<b>415,000</b>	No data available	<b>480,000</b>
Tyrone	<b>24,920</b>	<b>8,210,000</b>	<b>316,000</b>	No data available	<b>8,550,920</b>
Londonderry	No data available	<b>1,576,000</b>	<b>91,000</b>	No data available	<b>1,667,000</b>
Antrim	<b>17,850</b>	<b>4,825,000</b>	<b>287,000</b>	<b>870</b>	<b>5,130,720</b>
Down	<b>26,770</b>	<b>2,382,000</b>	No data available	<b>300</b>	<b>2,409,070</b>
Armagh	<b>39,220</b>	<b>3,132,000</b>	No data available	<b>735</b>	<b>3,171,955</b>
<b>Totals</b>	<b>108,760</b>	<b>20,190,000</b>	<b>1,109,000</b>	<b>1,905</b>	<b>21,409,665</b>

**Title: Total Levels for livestock animals being reared intensively indoors in the United Kingdom as a whole. Source: CIWM 2021.**

<i>Country</i>	<i>Pigs</i>	<i>Meat Chickens</i>	<i>Egg Chickens</i>	<i>Dairy Cows</i>	<i>All</i>
England	<b>1,136,700</b>	<b>103,558,000</b>	<b>10,257,600</b>	<b>24,340</b>	<b>114,976,640</b>
Wales	<b>8,620</b>	<b>7,109,000</b>	<b>419,000</b>	<b>4,960</b>	<b>7,541,580</b>
Scotland	<b>25,460</b>	<b>9,368,420</b>	<b>1,252,800</b>	<b>8,115</b>	<b>10,654,795</b>
N. Ireland	<b>108,760</b>	<b>20,190,000</b>	<b>1,109,000</b>	<b>1,905</b>	<b>21,409,665</b>
<b>United Kingdom</b>	<b>1,279,540</b>	<b>140,225,420</b>	<b>13,038,400</b>	<b>39,320</b>	<b>154,582,680</b>