



## Poultry Litter: an alternate and effective natural fertiliser

At Pedersen Contracting Services, we provide a reliable and cost-effective supply of high-quality poultry litter for use as fertiliser across the UK. Poultry litter can provide a portion of all the major nutrients required by the crop along with valuable trace elements to enhance crop growth and soil health. It is one of most valuable manures available in terms of direct fertiliser replacement value.

Integrating the use of poultry litter into the farm's nutrient management plan is a sustainable and environmentally friendly means of boosting the health of your crops and the productivity of your business.

The commercial poultry industry is thriving in the UK, constituting a significant part of the agricultural sector. British poultry farmers produce around 160 million tonnes of poultry products each year, mostly meat and eggs.

This comes from a huge stock of birds that far outnumber the country's human population:

- 94.2 million commercial broiler (meat) chickens
- 0.8 million commercial breeding chickens
- 3.9 million egg laying chickens
- 2.1 million turkeys

A key part of our contracting service is to regularly clean out sheds and remove poultry litter for commercial poultry farmers. This gives us access to a substantial amount of high-quality poultry litter. We can supply our agricultural clients with poultry litter in high volumes, at a competitive price and in a form that can immediately be spread to land.

## Poultry Litter Value

### Nitrogen

The current energy crisis is contributing to unprecedented fertiliser prices which present a significant challenge to UK farmers. Poultry litter can give a significant cost saving when used alongside bag fertiliser to balance crop need. Prices of ammonium nitrate (AN) fertiliser reached £700/t in November 2021 and may go higher if it is available. Below we have compared the crop available nitrogen which may be provided by poultry litter to an AN fertiliser price of £638/t (based on imported AN, AHDB Market values, November 2021).

The values calculated below assume poultry litter is applied and soil incorporated. The nutrient management guide (RB209) estimates the percentage of total nitrogen (N) available to the next crop from a spring application of poultry manure to be 40% of total N on all soils.

Poultry litter (60% dry matter) typically contains 28 kg total N/t. If applied in spring, this could supply 11 kg N/t which is currently worth £20.35/t in crop available nitrogen fertiliser replacement value.

The nutrient content of poultry litter may vary, so it is regularly tested by Pedersens. For example, a recent analysis of a poultry litter (61% dry matter) we supply, contained 35 kg total N/t worth £25.90/t.

For accuracy in use, we recommend using an actual poultry litter analysis and the [MANNER-NPK tool](#) to calculate nutrients provided from your planned application.

## Phosphate, Potash and Sulphur

Poultry litter is a balanced fertiliser, often anecdotally referred to as “a bag of 20:10:10”, as the nutrients it contains are in a similar ratio. We assume 60% of the total phosphate (P<sub>2</sub>O<sub>5</sub>) and 90% of the total potash (K<sub>2</sub>O) applied may be readily available to the crop, though total nutrients added to soil are used to value the material below as they will benefit the soil in successive years.

Table 1 Typical value of a 60% dry matter poultry manure (fresh weight basis)

Nutrient		Kg/t	Value*
Nitrogen (kg N/t)	Crop-available (spring)	11.0	£20.35/t
	Total	17.0	£19.38/t
Phosphate (kg P <sub>2</sub> O <sub>5</sub> /t)	Available	10.2	
	Total	21.0	£18.69/t
Potash (kg K <sub>2</sub> O/t)	Available	19.0	
	<b>Total Value per tonne</b>		<b>£58/t</b>

\*Based on AHDB Market values November 2021, 185p/kg N, 114p/kg P<sub>2</sub>O<sub>5</sub>, 89p/kg K<sub>2</sub>O

Sulphur availability will vary from 10-15% from an autumn application to 60% in spring. Typically, a 60% dry matter poultry litter contains 8.2 kg SO<sub>3</sub>/t, so could provide 5 kg SO<sub>3</sub>/t in spring, adding further to the above values. The spreading cost of poultry manures is higher than artificial fertilisers but generally manures can be applied for £2-£4/t more than artificial fertiliser giving an overall comparative value pf £55/t.

Poultry litter is also a good source of organic matter and will contribute to meeting the Sustainable Farming Incentive (SF122) Soil Standard requirements to add organic matter to 33% (i.e., 1 year in 3) of arable and horticultural soils as manures.

## Using poultry litter with fertiliser

Poultry litter can be used to supply up to 50-60% of required N to the crop. This will ensure a balanced N supply to the crop. The phosphate index of the receiving soil and crop phosphate requirement should also be considered carefully when planning an application.

- Step 1** Please get in touch today for a free quote.
- Step 2** Calculate the crop available N from the analysis provided.
- Step 3** Calculate the nutrients required by the crop on a field-by-field basis using P & K soil analysis, decide on an application rate in compliance with FRfW and NVZ rules.
- Step 4** Apply with calibrated spreading equipment and soil incorporate within 12 hours.

## Get a quote

If you would like to purchase poultry litter as an intensive soil treatment, or as part of a regular fertiliser program, please get in touch today for a free quote. We offer regular poultry litter deliveries at some of the best prices per unit in the industry. Please fill out the enquiry form on this page and one of our team will get back to you as soon as possible.