

SUSTAINABILITY REPORT

October 2020



Bell Mills



Common Spotted Orchid
(*Dactylorhiza fuchsia*)
New establishment



Common Lizard
(*Zootoca vivipara*)
by the mill office



Aleppo Pine
Pinus halepensis
Part of the site tree planting project.



Dawn Redwoods
Metasequoia glyptostroboides
in a field by the mill



Managed Brown Trout
Salmo trutta
in the mill stream

by
E B BRADSHAW & SONS LIMITED
BELL MILLS, SKERNE ROAD
DRIFFIELD
EAST YORKSHIRE, YO25 6XL

E B Bradshaw & Sons Limited

E B Bradshaw & Sons Limited (ABradshaws®) is a wholly owned subsidiary of Bradshaw Driffield (Holdings) Limited, which is itself a family owned and run company.

The company traces its origins to William Bradshaw, who was apprenticed to a miller in Bedfordshire in the 1790's. Taking over the windmill at Upper Dean, he added windmills at Riseby and Old Weston. His son, Benjamin took a 60 year lease of Perio Mills in Cambridgeshire in 1851. Benjamin's eldest son, Eleazar, left the family business to seek a wider experience in the industry and was appointed mill manager for Richard Kirby's mill at Driffield in 1875. He was made a partner in the business and finally bought it from Mr Kirby's estate upon his demise in 1894. Eleazar's great grandson's Simon and Stuart continue to manage the business and are therefore 6th generation millers. By the very nature that the company is a family company, each successive generation wishes to leave the business and the 450 acres of land it owns "a little bit better than they found it".

Executive Summary

i. Milling Units

More than 4,000 tonnes of wheat passes each week through Bell Mills, the historic and picturesque Driffield home of E.B. Bradshaw & Sons Limited. Equivalent in weight to 13 fully loaded Boeing 747 Jumbo Jets, the wheat is carefully selected, cleaned, mixed and milled into the finest flour and bran for the nation's confectioners, bakers, biscuit makers and breakfast cereal manufacturers.

The main "A" mill, commissioned in January 1990, though considerably remodelled since then, is capable of more than 10 tonnes of flour an hour and has features incorporated into the design to allow a wide range of flours to be milled in thoroughly hygienic conditions. A particularly effective Hazard Analysis, Critical Control Points (HACCP) System which was developed specifically for the food industry is applied from intake, during milling through to final despatch. This system is independently annually audited to the British Retail Consortium's (BRC) Technical Standard (Food Issue 8), by which the company has achieved 'Grade A'. Complementing this is the Trade Assurance Scheme for Combinable Crops (TASCC) which again, by independent audit, reassures customers on safe transport and handling of wheat from farm gate to the mill, and consistent and accurate testing of grain and flour. Further assurance on mill co-products is achieved by FEMAS accreditation, whilst the Laboratory testing systems conform to the industry recognised nabim Accreditation Scheme.

Continual plant investment has always been a policy at Bradshaws, and this is still very much ingrained. Every year investment is made in the company's milling and ancillary operations. In the summer of 2003, the company commissioned a purpose-built flour warehouse incorporating a flour packing line and automatic bag palletising system. The packer is virtually dust free in its operation and is still one of only a few of this design in operation in the UK. Continued growth into the bread and stronger flours markets meant new "stand alone" cleaning, conditioning and milling equipment was commissioned as "B" Mill in December 2005. The machinery manufactured by Swiss engineer, Bühler AG, utilises the most advanced techniques to further enhance Bradshaw's range of flours. Additional grain storage was completed in the spring of 2010. Early 2011 saw new finished product silos and an enhanced wheat transfer and conditioning system commissioned. A major "A" Mill screenroom (wheat cleaning and conditioning plant) remodel was completed in July 2013, again utilising Bühler AG wheat cleaning machinery. September 2014 saw the completion of a further 4 X 75 tonne finished flour storage complex. In September 2015 there was the commissioning of a specialist pre-cleaning wheat plant using novel cleaning processes to remove admixture from wheat as it is tipped into the wheat silo. A further "C" mill was commissioned during the summer of 2018. It is one of the most technically advanced mills in Northern Europe, manufactured by Italian Millers OMAS srl. Parameters such as food safety, flour purity and energy consumption were all considered in its design. Continual monitoring of a number of milling parameters will ensure superb consistency of the resulting flour.

A Kosher for Passover milling unit was commissioned in December 2016. This completely isolated plant enables the company to mill flour under the direction of the London Beth Din. It complies with the strict Kosher for Passover requirements (over and above Kosher) and is also able to mill Wheaten and Shmurah flour, again under the stricter Kosher for Passover requirements. The company also achieved Halal Status for the full range of its flours, ground wheats and brans.

Additional grinding plant was installed in 2018, enhancing further the company's ability to produce a range of ground wheats at varying particle sizes in bulk, mini-bulk or bagged delivery.

ii. Raw Material Procurement

What makes the Company unique in the UK flour milling industry is that it also runs a successful Arable Division. It procures up to 80% of the required wheat, dependant on grade. Bradshaws have developed a strategic partnership with a local seed merchant, which enables them to have grown varieties it would like to buy back on formal or informal contracts. The Partnership greatly increases the coverage of farms within our catchment area. With superb traceability through the milling process, flour customers can be reassured about the origin of the wheats used in their grists. In many cases even field numbers, stock seed information and harvest dates can be provided.

Environment and Health & Safety

We are fully compliant with relevant legislation appertaining to our site for the above. In addition, we actively manage a Site of Specific Scientific Interest (SSSI), which involves additional measures for our registration under Integrated Pollution, Prevention and Control (IPPC).

i. Higher Level Stewardship

The company has received a Higher Level Standard Stewardship Agreement from Natural England to protect and manage adjacent wet meadow land to the mill. This area, called "Parks Field", amounting to 2.5 hectares, has been part of the SSSI since 1990. Annual careful grazing had increased the flora and fauna and it now is one of a very few wet chalk meadows in the area supporting a thriving Common Spotted Orchid population (*Dactylorhiza fuchsia*). A new establishment of this rare plant has been successful in an adjacent field to the south of the mill. There has also been the re-establishment of a small group of European Water Voles (*Arvicola amphibius*) upstream of the mill.

ii. Woodland Management

We have entered into a 20-year Woodland Management Agreement with the Forestry Commission and Natural England on a 2.08 hectare wood upstream from the mill. This was originally planted in 1921 and 1923 by Alfred Bradshaw, it has been managed since then. Careful thinning of the wood five years ago enabled more sunlight to reach the wood floor and vegetation responded. This supported widening the range of plant species. The British Trust for Ornithology continues to run a Bird Count every year to monitor the range of birdlife in the wood. This year's survey noted a total of 30 different species, including song thrush (*Turdus philomelos*), Great Spotted Woodpecker (*Dendrocopos major*) and common kingfisher (*Alcedo atthis*). The diversity of the bird species has now increased by more than 40% in the last five years.

iii. Specimen Tree Planting

There is a continuation of the tree planting project at Bell Mills. This has included specimen trees from around the World. These include Dawn Redwoods (*Metasequoia glyptostroboides*), Maidenhair Tree (*Ginkgo biloba*), Black Birch (*Betula nigra*), White Gum (*Eucalyptus viminalis*), Californian Redwoods (*Sequoia sempervirens*), Aleppo Pine (*Pinus halepensis*), Cedar Gum (*Eucalyptus gunnii*), English Oak (*Quercus rober*), Black Mulberry (*Morus nigra*), Keyaki Tree (*Zelkova serrata*) and White Ash (*Fraxinus Americana*). Trees planted this year include more Hazelnuts (*Corylus avellana*), Black Mulberries and Horse Chestnuts (*Aesculus hippocastanum*).

We are members of : UK Flour Millers (formally nabim),
The Agricultural Industry Confederation
Campden BRI
Food and Drink Federation
Sedex.

These organisations are used to keep the company updated in all general and specific regulations associated with our activities.

Reporting of Company Sustainable Targets and Initiatives

We have a genuine concern for the environment and although we do not consider any of our businesses to be inherently damaging, we have nevertheless identified several aspects of our operations where we can make changes for the better:

Our energy use. Our water use

Our packaging. Emissions from our buildings

Transporting our produce (eg SAFED training for our delivery drivers, route planning, Euro 6 engines across the delivery fleet, all drivers are CPC Qualified.)

Reducing waste. Controlling noise in residential areas.

The appearance of our premises.

To address these areas, we have developed a detailed Environmental Policy which is implemented and monitored at all levels throughout the business.

Some examples of the areas monitored include, but are not limited to, the following :

Primary Specific Energy Consumption per tonne of product	1.46% reduction on a 3-year average
% of organic, paper & non-Hazardous waste recycled*	100%
General Waste recycled*	99%
Renewable Energy Generation	36,865 kWh produced. (12 months to July 2020)
Mains water usage	Maintained a lower usage per tonne of processed product compared to a 5-year average.
Fugitive Emissions	Zero incidents.
Wheat Production Process Efficiency (Mass balance of main raw materials compared with quantity disposed)	99.58%.

* Part of a waste collection service by East Riding of Yorkshire Council with waste sorting and recycling.

We are members of Valpak for the recycling of paper packaging.

Broken wood and plastic pallets are collected and sent for recycling.

The site is continuing its project of rolling out LED light replacement.

“C” Mill operates on a “lights out” basis.

Community Engagement

As active members of the community, the company is involved in a number of initiatives within the locality. These cover social and educational activities. Unfortunately, due to the Covid-19 Pandemic, the first 2 projects had to be cancelled in 2020 and at the time of writing are unlikely to take place in 2021. There are plans to be involved in an online version of the Education Day, which may take place in 2021.

1. Provide administration and financial support to the Driffield Children's Outing Fund. This registered charity was set up in 1922 by a past Chairman of the Company to organise a day trip to Bridlington for the Children and young people of Driffield Parish. Driffield had suffered many casualties in the First World War as local farms had lost horsemen to the War effort. Many, Fathers, Sons, Uncles, and grandsons were lost, and the trip days were to offer some respite to grieving families. Approaching its Centenary Year, (though it was not run during the Second World War), it still offers travel, subsidised events, and pocket money to local families.
2. The company organises and runs a "Wheat to Bread" demonstration at annual Driffield Agricultural Show. This demonstration has been run since 2005. The Show is the largest one day Agricultural Show in UK, with typical attendances of 25,000+. The presentation runs throughout the day and explains the role wheat plays in the food industry as well as the story of bread. Dough pieces are prepared for the public to shape, which are then proved and baked. A "spin off" from this demonstration is the company's involvement in the Driffield Agricultural Society's Education Day run since 2016. This year it saw a record number of more than 1,500 School Children attend numerous agricultural related demonstrations. Participating Schools sent Key Stage 2 & 3 pupils from Hull, The East Riding of Yorkshire and North Yorkshire.
3. We host wireless broadband equipment connecting the Driffield Senior School & Sixth Form site to the internet.
4. We host an EE Communication Hub which in addition to a Public Phone Communication System, it also provides private communication for the three Emergency Services (Police, Ambulance and Fire).
5. The company hosts a Humberside Police private communication hub.

Wheat Procurement

As mentioned in the Executive Summary, Bradshaws operate its own wheat Procurement Division. This operates a "Bradshaws Grain Partnership" encompassing 173 farms with an aggregated area of more than 114,500 acres. The Partnership traces its origins back to the early 1990's when the company encouraged farmers to develop food safety systems for crop husbandry, storage and delivering grain to the mill.

An addition to this partnership is a group of farmers where we obtain extra sustainability information and use this for special projects with our flour customers. This group now has 60 members who collectively farm a total of 79,500 acres.

Our wheat supplies are procured from the following sources.

1. We purchase wheat from farmers who have undergone a third party, independent audit to trade approved standards, such as the Red Tractor. This primary source from farmers currently represents around 80% of our wheat supply on certain grades, and around 50% on all grades. We offer buy back contracts with some of these growers and must complete an additional supplier questionnaire, which now has a section on crop husbandry. This enhances the requirements of the

Red Tractor.

2. The balance of our wheat requirement comes from a small group of TASCC, (Trade Assurance Scheme for Combinable Crops), audited grain merchants. This is an externally audited standard, to which we ourselves are accredited to. These merchants have proved themselves reliable suppliers in the past. We regularly subject these merchants to traceability studies including crop husbandry, storage and haulage issues.
3. Across all our supplies, 100% of the wheat comes from farms which are independently audited to ACCS. Most, if not all will be in Entry Level Stewardship. Amongst our suppliers 56% are in LEAF or enhanced environmental schemes such as Mid-Tier, Higher Tier, Catchment Sensitive Farming or Woodland Management.

Traceability Exercise for Group 1 Wheat



The company continues to develop and build on local supply to keep chains as short as possible. A study of wheat deliveries for the months of January and February 2020 (halfway through the harvest year) tracked Group 1 bread making wheat from Farm to Mill.

The above map shows the farms that had supplied at least one load of wheat in this period. In total there were 389 deliveries, amounting to just over of 10,000 tonnes of wheat, 86% of which was from within North, South, East or West Yorkshire. The average distance travelled was 27.1 miles. We are one of very few millers able to operate such a large percentage of our wheat requirements from such a short supply chain.