



MARCH 2022 / ISSUE NO.8

WELCOME FROM THE GREATER LINCOLNSHIRE LEP CHAIR: PAT DOODY

Welcome to the latest UK Food Valley Bulletin. This month's edition has a strong focus on innovation as a companion edition to our core <u>LEP enews</u> for February, which also shines a spotlight on the same subject.

Innovation is at the heart of the UK Food Valley (UKFV) in Greater Lincolnshire and recent years have seen major investments by industry and the public sector in new technologies and products, and the skills and innovation base which underpin them.

The UKFV is focused on innovating in the core areas which drive food chain growth and sustainability including **low carbon food chains**; **naturally good for you foods**; and the rapid deployment of **digitally enabled technologies** from farm to fork.

As showcased in earlier newsletters, our businesses continue to invest heavily in innovation, with Saga Robotics, B-Hive, OAL, Jones Food Company, Worldwide Fruit and many others all being leaders in their field.

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SECTOR PROGRESS & HIGHLIGHTS

- WELCOME FROM PAT DOODY, LEP CHAIR
- THE SOUTH LINCOLNSHIRE FEZ & THE HUB
- ELSOMS STRAWBERRIES
- SEAFOOD GRIMSBY AND HUMBER ALLIANCE BOARD
- LIAT VIRTUAL BREAKFAST BRIEFING
- INSIDER BREAKFAST EVENT: TEAM LINCOLNSHIRE & INSIDER ECONOMIC FORUM LINCOLNSHIRE
- NATIONAL AGRI-ROBOTICS PROVING GROUND
- AGRITECH HOT FUNDING LIST





WELCOME FROM PAT DOODY

Continued...

For example, the Softripe system launched by Worldwide Fruit in 2021 is transforming the avocado business, with lower waste, less energy and a more consistent product, while Branston is developing plant proteins from lower grade potatoes, and Terrafarmer are spearheading sustainable agriculture. You can read about these updates here.

November 2021 also saw the first spinouts from the CERES AgriTech programme with two new companies emerging from the University of Lincoln: Fruitcast, which uses advanced vision systems and Al to predict crop yield to help harvest management, and Agaricus Robotics who are automating the harvesting of mushrooms. Read more here.

Meanwhile the Barclays Eagle Farm Lab at Riseholme ran their first accelerator programme for agritech spinouts in 2021, and in 2022 this programme will build on a larger programme supporting low carbon technologies as well as agritech.

Greater Lincolnshire now has Europe's largest team working on agri-food robotics and opened the UK's first 5G testbed in agriculture in summer 2021. It also has UK-leading projects on supply chain digitalisation, notably the Trusted Bytes project, which is addressing the administration paperwork needed for post Brexit trade with government partners. Greater Lincolnshire, which created the world's first tractor, is now leading on the next

industrial revolution in the food sector as the industry adopts digitalisation, a fact recognised in May 2021 with the award of High Potential Opportunity (HPO) status by DIT for food chain automation.



Our food industry is investing in plant proteins building on Lincolnshire historic expertise in the growing and processing of legumes and pulses. In 2021 Plant and Bean opened Europe's largest plant protein factory in Boston, Branston Potatoes began work on a new factory to extract potato protein, while Princes completed work on a £84m growth programme. Already in 2022 we have seen Naylor Nutrition receive planning permission for a new plant protein factory near Spalding to extract protein from vegetables in a world-leading factory, and we will have announcements to make on another protein development before Easter. We are also seeing major investment in the fish sector, with international investment cementing Grimsby's leadership in this naturally good for you protein.





WELCOME FROM PAT DOODY

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As well as industry, the public sector is actively supporting food chain innovation, with the University of Lincoln, Bishop Burton College and colleges across Lincolnshire investing in a wide range of new innovations and educational facilities and programmes. Since 2016, over £70m has been invested in the South Lincolnshire Food Enterprise Zone (FEZ), University of Lincoln Riseholme Campus, Bishop Burton Showground Campus and the Lincolnshire Institute of Technology. In addition, over £60m of new industry-linked innovation projects have been initiated over the same period, with more to come. In 2022 we will see the opening of the Centre for Food and Fresh Produce Logistics, part of the Boston Town Deal, and the new hub building at the South Lincolnshire FEZ with space for 30 SMEs to work alongside the university and industry cluster to accelerate their growth.



The development of the skills to underpin innovation is being driven by our universities and colleges. The Lincolnshire Institute of Technology aims to have 1,700 students per year focused on the food chain and the technologies to underpin it, for example in engineering.

The university is also rapidly expanding its postgraduate training in agrifood, with over 65 students now on its MSc in AgriFood Technology and a cohort of over 60 PhD students working with industry on agrifood challenges.

Finally, it was very pleasing to see the high-profile Greater Lincolnshire innovation work with the University of Lincoln showcasing advancements on the Robofruit robotic crop harvesting at COP26 in Glasgow; one of a very small number of UK universities accorded this honour. Across 2022, the UKFV remains focused on building on this to attract further investment from the UK and overseas as we use innovation to transform the UK food chain and drive investment.



In this edition of the newsletter, you can read about the new hub building at the South Lincolnshire FEZ which opens this spring, the pioneering work being carried out by Spalding-based Elsoms, and the commitments to innovation being made by our seafood cluster.

To be more involved in innovation, please <u>contact</u> the UK Food Valley team and we will be delighted to help make the right connections for you.

Pat Doody

Chair, Greater Lincolnshire LEP







THE SOUTH LINCOLNSHIRE FOOD ENTERPRISE ZONE AND THE HUB

Sitting at the heart of the UK Food Valley, the South Lincolnshire Food Enterprise Zone (FEZ) is a pioneering development which is being delivered by a partnership between the Greater Lincolnshire Local Enterprise Partnership, Lincolnshire County Council (LCC), South Holland District Council (SHDC), and the University of Lincoln.

Companies in the agri-food tech sector will use the development as a hub for creativity and innovation, to develop and explore new and exciting processes and sector methods by working with the food chain from end to end.

The South Lincolnshire FEZ is at the core of the UK's leading advanced manufacturing cluster for the food sector, adjacent to the agricultural, food processing and logistics cluster. With The Hub at the heart of the FEZ, this means it is ideally located to support and nurture the development and advancement of technology in these sectors by allowing businesses the space to be creative.

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The South Lincolnshire FEZ is gaining national recognition as it provides an ideal environment for companies involved in innovation within the food sector, providing bespoke facilities for R&D and collaboration. This is cementing South Lincolnshire's reputation as a major centre for agri-tech, boasting a high concentration of cutting-edge companies and cultivating innovation in areas such as robotics, automation, low carbon and packaging.

Phase I is progressing well; the University of Lincoln has completed its Agri-Food Centre of Excellence and Institute of Technology buildings, and significant investment is being attracted to development plots on the wider Phase I scheme. A further 28-acre site has been acquired jointly between LCC and SHDC, which is strategically important to safeguard the delivery of this prestigious development.

Future needs of the industry have highlighted a requirement to focus on the food chain automation and digitalisation to deliver productivity gains, including agri-food logistics and warehousing technology, as well as food analysis, marketing, and new product development. Alongside this there is a cross cutting pressure, and a growing need, to decarbonise the food chain and packaging process.



THE CLUSTER CONCEPT

The connections and support provided at The Hub by the public sector and the University of Lincoln will make The Hub the venue for industry to access the latest technology, skills, and services to support future growth. By working with the food chain from end to end, working on issues and focusing on priority technologies, a cluster of innovation and commercial partners can grow at The Hub and become an established cluster in their own right. We aim to assist with this goal by providing early-stage food companies and technology suppliers space to nurture collaboration, enable fast growth, maintain the benefits of being clustered on site, and retain the opportunity to expand.





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THE BUILDING

The building is due to open in the spring/summer of 2022. The Hub has been designed and developed in a way that encourages and promotes collaboration and innovation, while being flexible to suit the needs of all start-up businesses and SMEs in the agri-food tech sector. The building comprises of multi-use office and workshop space, as well as providing support services and networking opportunities.

It provides a flexible, cost-effective property solution that enables food industry participants to exchange knowledge, boost productivity, and maximise growth; it is purpose-built and designed to encourage collaboration.

Offices and workshops are available on flexible lease terms and inclusive rents. This includes onsite parking, EV charging, provision for a café, a fully managed reception and services including postal and telecomms.

If you would like more details on available space at The Hub, please contact the Economic Infrastructure Team at Lincolnshire County Council, by emailing simon.wright@lincolnshire.gov.uk and zoe.bursey@lincolnshire.gov.uk.





ELSOMS PIONEERS STRAWBERRIES GROWN FROM SEED

Spalding-based Elsoms Seeds are spearheading the commercial development of UK strawberries grown from seed, working with Dutch plant breeder Gé Bentvelsen from ABZ Seeds.

The UK soft fruit sector is growing quickly, with sales of UK soft fruit rising in value by 67% from 2014-20 to reach £653 million (DEFRA Basic Horticultural Statistics 2020). In strawberries the increase has been even higher with sales rising by 76% to £429m.

The UK Food Valley has seen new investments in the sector from Dyson Farms new unit near Boston, which opened in spring 2021, and Globalberry at Nocton, which is starting production in spring 2022.

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Soft fruit production is very well aligned with the UK Food Valley ambition to focus on naturally good for you foods, and we are keen to see this sector grow in the area.

Traditionally most new strawberry plants have been grown by propagating 'runners'; adventitious shoots which grow from the plants before rooting on the soil surface.

The varieties being developed commercially by Elsoms with ABZ Seeds are instead propagated from seed, which allows a higher level of cleanliness thus reducing the risk of soil borne and other diseases in the young plants. This higher health status benefits the crops and helps to ensure higher outputs of high-quality fruit.

Elsoms have launched three seed-grown varieties: Soraya, Estavana and Rowena, all of which are high-yield, everbearing F1 hybrids bred by ABZ Seeds, with Elsoms owning the exclusive distribution rights to these varieties.

The plants grown from seed are ready for planting 12 weeks after sowing which enables fast production throughout the year and multiple crops to be grown each year to give 12 months of the year UK domestic production. Soraya has been specifically bred to grow under LED lights in greenhouses of the type Globalberry are developing at Nocton.

The commercial partnership between Elsoms and ABZ Seeds allows UK growers to access ABZ's wider strawberry plant portfolio through Elsoms. All three of the varieties which have been launched are high-yielding, F1 hybrids which have been trialled in UK conditions by Elsoms over the last two years.

John Downes of Globalberry who are currently developing their first greenhouse production in Lincolnshire, with 3.6hectares (9 acres) of greenhouses at Nocton is one of the first UK growers to trial the new varieties at their site in Taunton.

Globalberry's new Nocton site will start production by Easter 2022. In 2022 Globalberry are continuing to trial the new varieties which are designed for year-round production using LED grow lights to give 12 months of the year domestic supply for the UK retail sector.

If you're interested in the new varieties or want to know more about strawberries grown from seed please contact <u>Claire.Taylor@elsoms.com</u>







SEAFOOD GRIMSBY & HUMBER ALLIANCE BOARD





Above: The board is chaired by Simon Smith (left), CEO of Young's Seafood, aided by Simon Dwyer of Seafox Management Consultants (right) who is key to delivering the group's strategic objectives and stakeholder engagement.

The Seafood Grimsby & Humber Alliance, formed in late 2020 to represent the regional seafood and trading processing cluster, held its AGM board meeting recently.

The board is chaired by Simon Smith, CEO Young's Seafood, and comprises the CEOs of Hilton Seafood, New England Seafoods, Andrew Marr International, Fishmongers' Company, Seafish Industry Authority and The Grimsby Fish Merchants Association.

Simon Dwyer, Seafox Management Consultants, is responsible for managing the activities of the board and engaging various stakeholders in delivering their key objectives. The agreed operational focus in 2021 was to engage a skills partner in the delivery of training, upskilling and research as well as, improving the sectors' competitiveness in laboratory testing services to the seafood cluster and maintaining competitiveness with trade related matters for inbound flows.

Simon Smith said: "The cluster comprises 5,500 direct jobs and over 10,000 jobs in the supply chain, so the board are committed and dedicated to a strongly performing seafood cluster in the region. One that is highly competitive, throughout the value-chain with the larger businesses that supply retailers, SME employers through to the 100+ independent mobile fishmongers.

"This past year we have made great strides in our key objectives and during the course of 2022 we'll see improvements in our skills and research capacity with our partner, The National Centre for Food Manufacturing (NCFM), and micro-biology laboratory and speciation testing with greater engagement with Eurofins Limited."

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Professor Val Braybrooks of the National Centre for Food Manufacturing (NCFM), a campus of the University of Lincoln, said: "It is a privilege to be engaged with the cluster board and we are indebted to Simon Dwyer and the board's members for aiding our understanding of the opportunities that exist for the university to support the seafood sector in our region and the national seafood processing sector more widely, in meeting the sector's skills and research needs.

"Our partnership aims to significantly improve employment opportunities, enhance the industry's skills and capability for innovation, and as such, The Greater Lincolnshire LEP is fully supportive of our shared vision and plans.

A factor in the success of the cluster board is the engagement with partners including Fishmongers' Company and Seafish Industry Authority, who both have an insight and reach at national level across the seafood sector."

Andrew Wallace, representing the Fishmongers' Company on the cluster board, said: "The involvement with the Grimsby and Humber seafood cluster is insightful and The Fishmongers' Company have benefited from the network reach the cluster has particularly overseas, with some businesses importing as many as 30 species from 25 countries.

"Last year we hosted an event at Fishmongers' Hall for the Icelandic Embassy and we'll host another event for them about co-product utilisation in May this year but unfortunately, an event due to be held for the Norwegian Seafood Council in January this year had to be postponed. The cluster board have great foresight when it comes to understanding policy and regulation issues and are well placed with local MPs, government ministers and DEFRA to discuss what matters for their overall competitiveness."

Marcus Coleman, CEO of Seafish Industry Authority, added: "For Seafish, it's refreshing to be part of a cohesive and well-structured group that is selflessly focused on the overall competitiveness of one of the largest processing clusters in the northern hemisphere.

"This group is an exemplar to other groups across the UK catching, processing and aquaculture sectors. The board's focus on certain key issues allows the Seafish team to dovetail into supporting the activities especially, with regulation, market insight and Brexit matters. In 2022 the board will have an agreed focus on carbon reduction, continuing the roll-out of a seafood skills and research programme along with partners abroad and monitoring trade related compliance and new regulations around physical checks and paperwork such as export health certificates for EEA and EU countries."

For further information on the Seafood Grimsby & Humber Alliance please contact Simon Dwyer on simon@seafront.no or 07866 508194.







LIAT VIRTUAL BREAKFAST BRIEFING

The Lincoln Institute for Agri-food Technology is holding a virtual breakfast briefing covering the electrification of farm technology.

Join the discussions on Friday 18th March at 08:30-10:00am.

Hosted by Professor Simon Pearson, Director of LIAT, audiences will also hear from Professor Mini C. Saaj, Global Chair of Robotic Engineering, School of Engineering, University of Lincoln, who will be covering 'Net-Zero Farming: Towards Intelligent Electric Vehicles'.

Dr. Stuart Bradley, Head of Power Electronics, Machines & Drives, Technical Authority, Automotive & Industrial, Ricardo UK Ltd will be discussing the 'Electrification of Agricultural Vehicles and their Impacts'.

To register for this **online** event please RSVP to Heather Smith: hesmith@lincoln.ac.uk





insider

YOUR NEWS

INSIDER BREAKFAST: LINCOLNSHIRE ECONOMIC FORUM 2022

Location: Lincolnshire Showground Grange-de-Lings, Lincoln, LN2 2NA

Cost: Free to attend

Date and time: 31st March 2022 09:00 – 10:45

Greater Lincolnshire is leading the way in sustainability, efficient food production and green energy.

<u>This Insider event</u> will look at the opportunities within the region, the investment needed in transport and how to benefit your business and sell Lincolnshire to the world.

Sponsored by Team Lincolnshire, Willmott Dixon and Shakespeare Martineau, the event will explore how new technology will help the sector, what more needs to be done to improve efficiencies and sustainability and the opportunities for businesses.

Hear about the challenges and opportunities involved and ask the speakers what prospects are available for businesses willing to embrace the opportunities. The discussion, before a live audience, will also be streamed live online.

Places will book up fast so make sure you register your interest! Register now.



#TogetherWeAreGreater





NATIONAL AGRI-ROBOTICS PROVING GROUND

The University of Lincoln would be delighted to have your expertise and input in an activity being organised by the Lincoln Institute for Agri-Food Technology (LIAT), aiming to establish the need for a National Agri-Robotics Proving Ground (NARPG) facility. The proving ground would support the development of robotics by providing test facilities for robots used in agriculture and the food sector, as well as potentially supporting training, events and innovations projects.

This exciting project is funded by SBRI/Innovate UK and is using interactive activities such as surveys, one-to-one interviews and virtual facilitated workshops to deliver a comprehensive feasibility report which considers the current and future challenges being faced by the agricultural sector to include:

- The expanding robotics expertise which could address challenges with labour supply or the need to expand production.
- The optimum design, resources, skills and business model for an Agri-Robotics Proving Ground.
- The relationship between important factors such as government policy, the environment and society to support the development and deployment of robotics.

You can contribute by participating in the following interactive activities:

- **Interview**, arranged at your convenience, between 28 February and 7 March 2022 (approx. 30-60 minutes), please register here.
- Online survey, complete online between 23 February and 4 March 2022 (approx. 20-30 minutes), available here.
- **Virtual workshop** on 7th March from 2-4pm, please register here.

This is a real opportunity to bring together the leading stakeholders in the agricultural industry and the roboticists working at the forefront of innovative agricultural solutions, to define what further support is needed to develop the role of robots in the agri-food sector.





FUNDING

AGRI-TECH 'HOT FUNDING' LIST – A REGULAR LIST OF FUNDING OPPORTUNITIES IN AGRI-TECH

Working in agriculture, farming or food production? Then these funds may help.

The agri-tech research teams at the University of Lincoln are expert at working with industry to build practical solutions to productivity, transportation and growing challenges for food and farming.

If you have a process, resource or technology challenge inside your farm or food business, then please get in touch with us at <u>LAR@lincoln.ac.uk</u>; or for Innovate UK enquiries at the University of Lincoln: <u>mvalls@lincoln.ac.uk</u>

POSTGRADUATE STUDENTSHIP DEPARTMENT OF AGRICULTURE, ENVIRONMENT AND RURAL AFFAIRS, GB

The Department of Agriculture and Rural Development of Northern Ireland invites applications for its postgraduate studentships. These enable students to conduct research leading to a PhD qualification at a university in the UK or the Republic of Ireland. Further information here.

Closing date: 28th March 2022

HORIZON-MISS-2021-SOIL-02: RESEARCH AND INNOVATION AND OTHER ACTIONS TO SUPPORT THE IMPLEMENTATION OF A MISSION IN THE AREA OF SOIL HEALTH AND FOOD, HORIZON EUROPE

Horizon Europe, under Horizon Europe: Missions, invites applications for HORIZON-MISS-2021-SOIL-02 research and innovation and other actions to support the implementation of a mission in the area of soil health and food. Further information here.

Closing date: 24th March 2022



FUNDING

INTERNATIONAL INNOVATION AWARD FOR SUSTAINABLE FOOD AND AGRICULTURE, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INT AND OTHER FUNDERS

The Food and Agriculture Organization of the United Nations, in collaboration with the government of Switzerland, invites nominations for its international innovation award for sustainable food and agriculture. This recognises innovators in the field of sustainable agriculture. The following awards are available:

- Award for digitisation and innovation for sustainable food systems for innovations that impact
 more than one level of supply chains and strengthen the links between farmers and consumers,
 worth USD 30,000.
- Award for innovations that empower youth in sustainable food systems for innovations that strengthen the role of youth under the age of 35, worth USD 30,000.
- Individuals, private companies and institutions may be nominated. Innovations must have already been successfully implemented and validated.

Further information here.

Closing date: 19th March 2022 (forecast)

LINCOLNSHIRE WILDLIFE TRUST: NATURAL ENVIRONMENT INVESTMENT READY FUND

The Natural Environment Investment Readiness Funding will help the trust to work with relevant stakeholders to establish a joint vision and strategic priorities for Green Investment in Greater Lincolnshire addressing the key issues that people and wildlife are facing. <u>Further information here.</u>

Contact GIGL@lincstrust.co.uk for more info.

Closing date: not yet known





FUNDING

COMING SOON:

Industry-led R&D partnerships fund – large partnership projects Department for Environment, Food & Rural Affairs

This opportunity will be available soon. The next call is expected to open in early 2022. The following
information is subject to change. This call supports businesses and academics who want to carry out
larger scale R&D for innovative solutions that have the potential to substantially improve overall
productivity, sustainability and resilience of the farming sector. Projects are worth between £3 million
and £5m for up to four years.

Further information here. Closing date: not yet known

Net-Zero and Agri-Tech Accelerator to Provide a Springboard for Start-ups

• This 10-week <u>accelerator programme</u> is set to advance technological innovation within the UK's agricultural industry by supporting agri-tech start-ups. Applications now open.

PRODUCTIVITY HUBS PROGRAMME

The Productivity HUBs programme is a University of Lincoln initiative, funded by the ERDF. The Programme is aimed at helping businesses in Scunthorpe, Boston and Grimsby to develop, grow and thrive. Eligible businesses will be provided with either or both of the following:

- <u>Business Development:</u> Access to a business development manager who will work with you to identify key challenges and opportunities and help you to develop a plan to drive your business forwards to increased productivity and profitability.
- <u>Business Acceleration:</u> Aimed at ambitious start-ups that are committed to accelerating the growth of
 their business. Eligible businesses will get a package of intensive support designed to improve
 performance and drive growth, and an opportunity to pitch for seed-funding grants of up to £10,000.

More information here. Contact Gary Mumby, Business Advisor: GMumby@lincoln.ac.uk | 07989 868 969















Greater Lincolnshire
Local Enterprise Partnership