



The centre for Engineering Precision Innovation in farming

Aiming to revolutionise
farming & food systems
through precision technology

Thomas Slattery
Agri-Tech Sustainability & Marketing

www.agri-epicentre.com



Part of the family of Centres

- Agri-EPI Centre is one of UK's four Centres of **Agricultural Innovation**. Supported by Department for Energy Security and Net Zero (formerly Department for Business, Energy and Industrial Strategy) and Innovate UK.
- Agricultural Engineering Precision Innovation Centre (Agri-EPI Centre)
- Big Data Centre of Excellence (Agrimetrics)
- Crop Health and Protection (CHaP)
- Centre for Innovation and Excellence in Livestock (CIEL)

We work with
Innovate UK



Our purpose, vision and mission



Our purpose

A world where engineering and precision agriculture technologies, systems and eco-systems are optimised in order to maximise the agri-tech sector's contribution to sustainable food production and supply.



Our vision

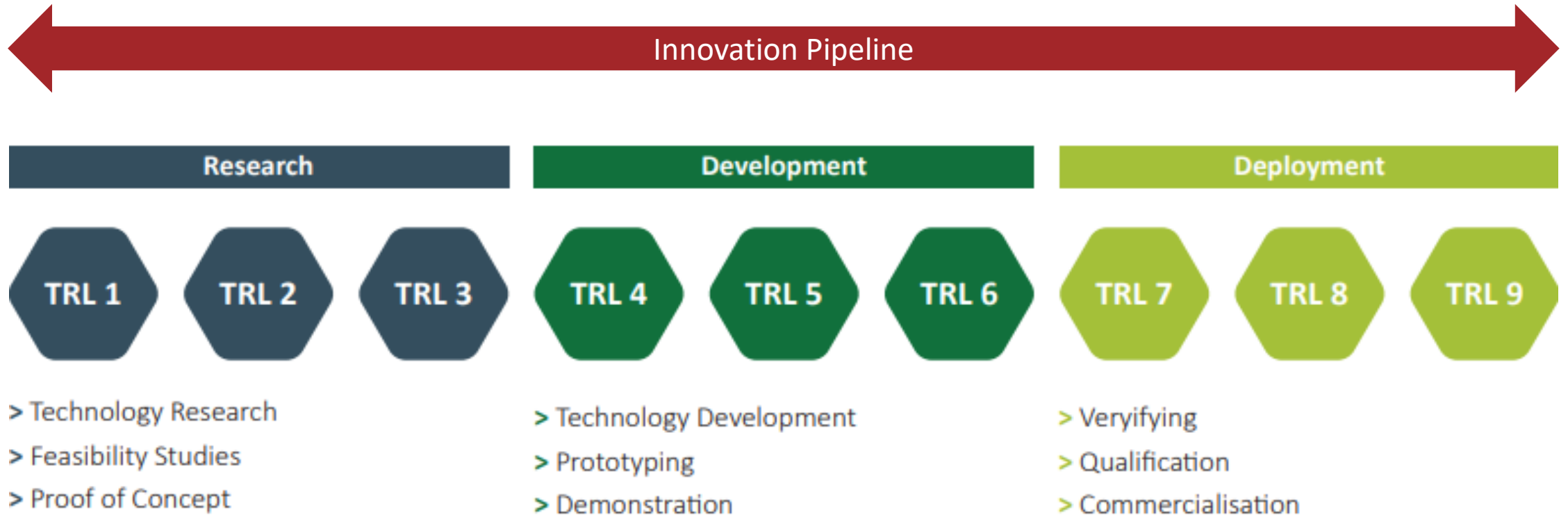
Transforming, driving growth and supporting innovative solutions to help farmers and agri-food businesses become more sustainable and profitable.



Our mission

Providing scientifically robust and commercially viable solutions to improve productivity and sustainability within the food production system using cutting-edge precision technologies, robotics and autonomous solutions and engineering technologies, and using data to reduce variance at producer level.

Facilitating opportunity across the Innovation Pipeline



Our UK Agri-Tech Innovation map

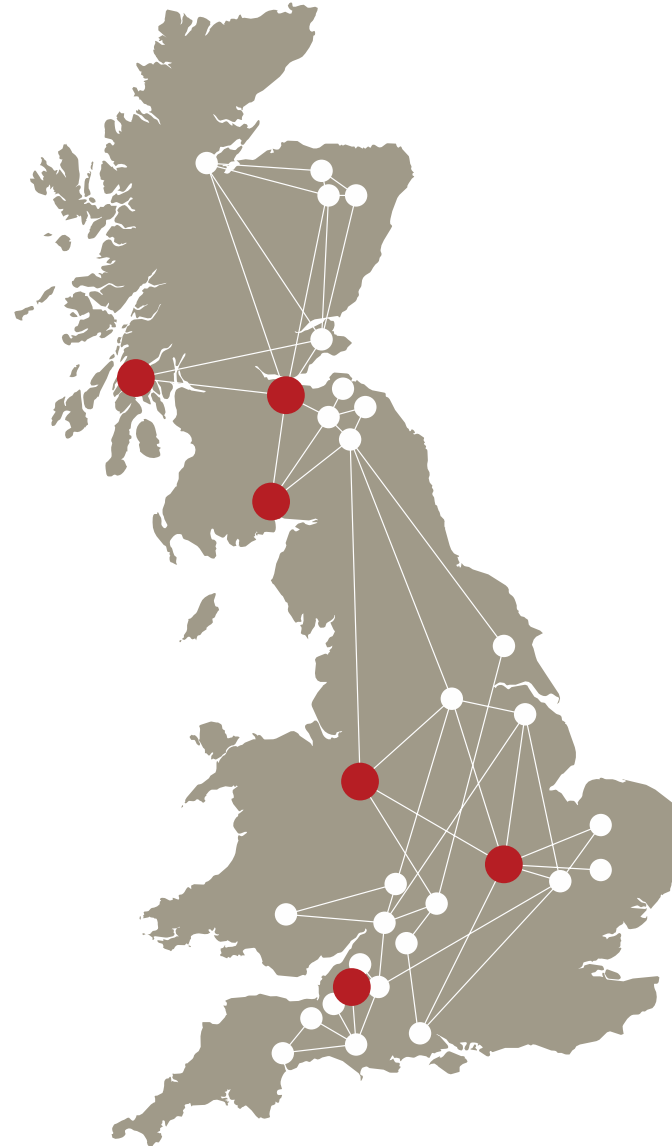
MIDLANDS AGRI-TECH
INNOVATION HUB

MIDLANDS DAIRY
RESEARCH CENTRE

MIDLANDS
PIGGERY

SOUTH WEST DAIRY
DEVELOPMENT CENTRE

Network Farms
24 Commercial Demo Farms



MARINE AQUACULTURE
INNOVATION CENTRE

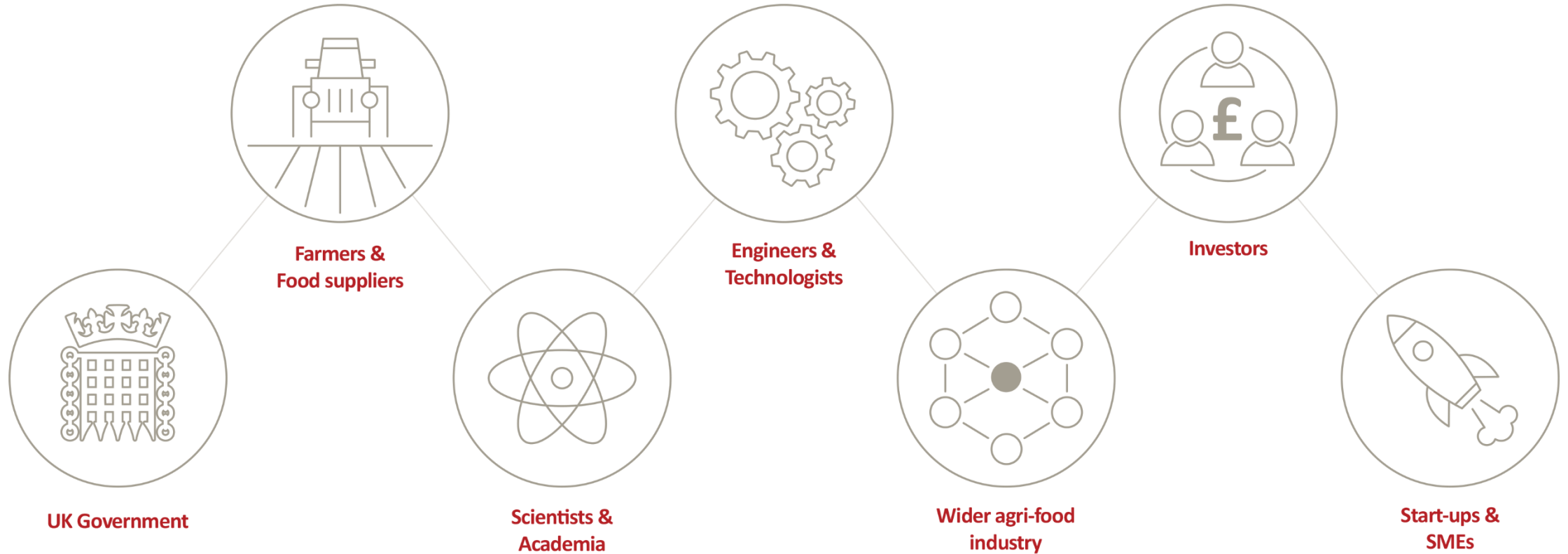
NORTHERN AGRI-TECH
INNOVATION HUB

AQUACULTURE GENETICS
RESEARCH FACILITY

CALF RESEARCH
& INNOVATION FACILITY

CROP TECHNOLOGY
SOUTHERN INNOVATION HUB

Collaborator Ecosystem



250+ members across stakeholder network



We host regular industry events, webinars and conferences which are available to view online



15 comprehensive video case studies of agri-technology and innovation projects available to view online



AGRIEPICENTRE Engineering • Precision • Innovation

Hoofcount
CASE STUDY



- Support from Agri-EPI Centre helps form partnerships and secure R&D funding
- Facilities on-site key to development of new tech and validating data capture
- Agri-EPI Centre network provides support throughout project

Background

Lameness is recognised as the primary animal welfare issue in dairy farming. Nationally, 25% of dairy cows are lame at any one time. Although it has multiple causes, the key factor in most herds is endemic diseases, such as digital dermatitis, sole ulcers, and white line disease. Early detection and prompt intervention is critical to effective control and treatment of lameness, which costs farmers in excess of £300 per case. Many hoof lesions, especially relating to digital dermatitis, are visible prior to lameness developing but can be difficult to see in practice and require specialist training to diagnose.

The Hoofcount footbath was developed and introduced to the UK market in 2012. Designed with simplicity in mind, it now has a sustained reputation in the UK as the Market leader in Effective and Reliable Footbathing.

The UWE academic team collaborating on the Hoofcount project is led by Dr Wenhao Zhang of the Centre for Machine Vision. Wenhao's team are



AGRIEPICENTRE Engineering • Precision • Innovation

On-Farm Impact: Rob & Jo Hodgkins
CASE STUDY



- Aiming to improve the efficiency of farmers through the use of technology
- Aiming to offer UK farmers the world's lowest carbon and most efficient sheep
- Agri-EPI able to tap into co-operative to discover future needs and concerns of growers

Background

Kalapiori Farm is an innovation farm for Agri-EPI, the centre for engineering, precision and innovation in farming. They collaborate with real farmers, start-ups and established companies to help develop profitable and productive agri-tech solutions to empower more sustainable farms.

Agri-EPI Centre's farm network is diverse, comprising of different farming systems, sectors, sizes and business structures. They provide a true representation of producers and growers across the UK and abroad to provide bespoke trial and research and development opportunities for agri-tech systems as a service, or grant project.

Meet Rob and Jo.

Kalapiori Farm, in North Hertfordshire, was set up by Rob and Jo Hodgkins in 2013 with 200 ewes on 60 rented acres of grass.

They have worked hard driving the



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NoFence
CASE STUDY



- Aiming to improve the efficiency of grazing animals on pasture and optimise the use of land
- Introducing the world's first virtual fencing for livestock
- Agri-EPI tapping into tech to discover future needs and concerns of farmers

Background

NoFence began in a small Norwegian town named Batnfjordsera, many years ago when their Founder and CTO, Oscar Hovde, set about making his idea of virtual fencing for livestock a reality. As the concept grew, so did the interest. The man with a plan soon became people with a purpose: getting animals out on pasture where they belong. And with the help of their customers whose input, innovation, and patience continue to be an integral part of their product development, Oscar's idea blossomed. Today, NoFence are a team of international professionals with a set of shared goals: to support



AGRIEPICENTRE Engineering • Precision • Innovation

On-Farm Impact: Ian Beecher-Jones
CASE STUDY



- Aiming to improve the efficiency of farmers through the use of technology
- Showing first-hand that precision viticulture is the future for wine growers
- Agri-EPI tapping into viticulture to discover future needs and concerns of growers

Background

Ian Beecher-Jones, co-owner of JoJo's Vineyard in Oxfordshire, has been a precision farming adviser for several years and is part of Agri-EPI Centre's innovation farm network. At JoJo's Vineyard, he is growing 6 different varieties of grapes to make still and sparkling wine and incorporates agri-tech at every level possible to enhance efficiency, sustainability and productivity.

JoJo's vineyard is situated in the Chiltern Hills, near Henley on Thames, Oxfordshire. At the vineyard, Ian utilises the latest technology from drones, robots, satellites and data, which helps the team at JoJo's make the best grapes possible.

We publish written case studies on new technologies and projects

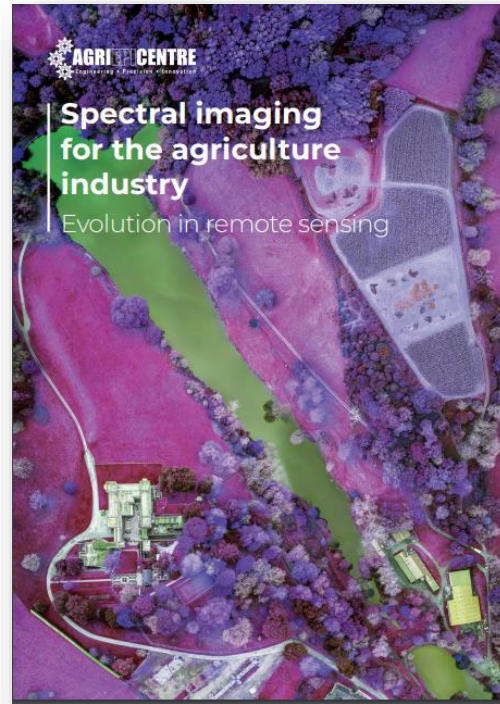
On Farm Demo Day Videos

[Resource Link](#)



We organise regular on farm demo days on our Innovation Farms for networking and learning – these are available to watch online

Agri-Tech Whitepapers



We publish regular white papers on key issues in the agri-tech sector

FARM TECH CIRCLE
Newsletter
Vol 2 Edition 1 | Keeping you up to date with the latest agri-tech developments



Cutting edge facilities supporting sustainable milk production

Dairy production innovators have a novel, state-of-the-art facility in which to test technology following the relaunch of Agri-EPI Centre's South West Dairy Development Centre (SWDDC)

FARM TECH CIRCLE
Newsletter
Issue 2: 2022 | Keeping you up to date with the latest agri-tech developments

What does 24 hours in farming look like for Agri-EPI network farmers?

Last month we celebrated #farm24 by showcasing a day in the life of the amazing farmers we work with in our Agri-EPI farm network.

We are thrilled to bolster the innovation and fantastic mindsets of the UK farmers we work with and we appreciate them endlessly for the work they do to help feed us in ways that are increasingly healthier for the planet, the animals, and our bodies.

With our farm network, we are able to collaboratively demonstrate the scientific validity of new on-farm technologies, support the commercial potential of new innovations, foster relationships between farmers and agri-tech developers, identify key issues in the real-world implementation of new technologies, and discover and share new opportunities in agri-tech.

Thank you farmers of Britain!

[Watch the video](#)

FARM TECH CIRCLE
Newsletter
Issue 3: 2023 | Keeping you up to date with the latest agri-tech developments

Pioneering precision agri-tech

Throughout 2022, Agri-EPI have been pioneering precision agri-tech. We're fostering collaboration with our partners and farm networks with funding from Innovate UK to develop a smarter, more secure food supply chain.

To celebrate our success we have produced a special year in review video which includes our On Farm conference, self-driving tech, Smart.Ear tags and much more.

If you know other members of the farming and growing community who you think would like to be kept up to date with the latest news and opportunities in agri-tech, please direct them to this publication.

If there's anything in here that you'd like to know more about, please get in touch.

Thank you farmers of Britain!

[Watch the video](#)

FUNDING COMPETITION
The Farming Innovation Programme Research Starter Round 3 opens on January 30th.
[Click here for further information](#)

FARM TECH CIRCLE
Newsletter
Issue 4: 2023 | Keeping you up to date with the latest agri-tech developments

Sustainable weeding technology: CLAWS

With increasing types of chemical-resistant weeds, a significant downturn in availability of hand labour plus a shift in society towards more organic options, now more than ever there is a need to change the way we farm.

A recent report by Rothamsted Research shows weeds "pose an unprecedented threat to our food security" and

highlights the need to diversify weed control as an urgent priority.

Earth Rover has developed the CLAWS rover (an acronym for Concentrated Light Autonomous Weeding and Sowing), with funding from Innovate UK as part of the Farming Innovation Pathways industrial research, and in collaboration with project partners Pollybell Farms and Agri-EPI Centre. The rover uses AI and robotics to accelerate crop growth by removing weeds, including herbicide-resistant weeds, without disrupting the soil, generating a more sustainable and effective alternative to other weeding techniques in the agriculture industry.




[Read the case study](#)

[Watch the video](#)

We publish a quarterly newsletter aimed at innovative farmers to keep them up to date on the latest tech and innovation




NEW PODCAST EPISODE

#34 Streamlining Livestock Management with iLivestock



NEW PODCAST EPISODE

#33 Advancements in Gas Analysis Technology for Managing Agricultural Emissions



NEW PODCAST EPISODE

#32 Innovative Technologies for Beef Sector Efficiency



NEW PODCAST EPISODE

#30 Agri-Tech and changing skill requirements in agriculture



NEW PODCAST EPISODE



#31 Connecting Farm Data to the Agri-Food Industry



#29 Transforming Animal Health with Actionable Data Intelligence



#28 Horticulture scouting and weeding with concentrated light



#27: Circular beekeeping technology for pollinator conservation



35 podcast episodes in conversation with agri-tech innovators

Our Team



Dave Ross - CEO



Trish Toop - CTO



**Rose Judeh-Elwell –
Dir. Business
Development**



**Claire Hodge –
Head of Crops**



**Eliot Dixon –
Head of
Engineering**



**Ross Robertson
– Head of Mixed
Farming**



**Robert Morrison
– Head of Dairy**



**Rebecca Lewis –
Head of New
Business**



**Wendy Hewitson
- Academic
Partnerships**

We have a team of experts across funding, technology and different agricultural sectors (inc. aquaculture)



Thank you

Contact details:

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