

Professional

The Douglas
Bomford Trust

Landwards August 2024

It's been a busy few months for the Douglas Bomford Trust. Technical Secretary David White reports.

On 26th June, Professor Paul Miller (DBT Emeritus Trustee) attended the Cranfield University School of Water, Energy and Environment Prize Giving Ceremony.

Marine Perard was awarded The Douglas Bomford Trust Award for the best student on the Environmental Management for Business MSc. Marine was "honoured to receive such a prize."

Marine is planning on continuing her studies in continental Europe. Amala Tony was awarded the Douglas Bomford Trust Award for the best student on the Future Food Sustainability MSc. To quote Amala "I am delighted to know about the prize."

Amala is hoping to undertake a PhD in the UK.

Paul was impressed by both prize-winning students who were hosted by Professor Jane Rickson (DBT Trustee and ex-President of the IAgRE).

Young engineers course

From 30th July to 1st August, 17 Year 10 students (most of who were from non-agricultural backgrounds) attended a 3 full-day residential Smallpeice Trust Agri-Tech course at Harper Adams University. The event was sponsored by the Douglas Bomford Trust and the NFU Mutual Charitable Trust. The course was delivered by Harper Engineering Department staff Sam Wane and Tom Underhill (Senior Lecturers) and Tom Williamson (Technical Support).

The event started with a key note lecture by Kit Franklin (IAgRE President Elect and Harper Adams



Marine Perard receives the award from Professor Paul Miller



Professor Paul Miller presents the award to Amala Tony

University Senior Engagement Fellow) on precision agriculture and the need for autonomous systems. Other lectures included autonomous navigation and sensors.

The course was mainly a hands on activity, run in small teams, to programme an ATLAS Robot and trailed spot weeder so that the combination ran parallel to a wall and eliminated red coloured weeds

(but left green and yellow coloured crop) drawn on a piece of A4 paper. The ATLAS Robot was conceived and designed by Sam Wane as a low cost, hands on teaching and research platform. The spot weeder consisted of “flat pack” pre-cut panels (designed and made at Harper) that students had to assemble (and, if necessary, adjust) to produce a trailed spot weeder unit. On the final day, a competition was held to see how well each team’s combination eliminated red coloured weeds by drawing a line through them using a whiteboard marker pen (attached to the weeder) over a set course. The weeds were sensed by a miniature HuskyLens camera mounted on the front of the ATLAS Robot with inbuilt AI that the students had trained to recognise red coloured weeds. Everybody was impressed with the results.



Students programming the ATLAS robot

During the course, students received presentations by Gregor Belcher (NFU) and Richard Robinson (DBT Trustee). Richard has responsibility for selecting Arkwright Scholars funded by the DBT and being their Mentor.

Thank you to Smallpeice Trust staff Rachel Jenkinson (STEM Engagement

Specialist), Emma, Abi and Colin for making the course run smoothly and providing pastoral care throughout the course, and Georgina Hare, Smallpeice Trust Third Sector Partnerships Manager who co-ordinated arranging the course.



Tom Underhill showing students how to assemble the “flat pack” spot weeder.



ATLAS Robot towing spot weeder, and red coloured weed

The
DOUGLAS BOMFORD
SUPPORTING AGRICULTURAL ENGINEERING
Trust

For further information, see the Trust’s website: www.dbt.org.uk
or contact the Technical Secretary David R White via: enquiries@dbt.org.uk

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