

The byte stuff: tech training series SRUCBytes launches online for all

- **SRUCBytes episodes provide an explanation of the basics of the tech. The technology explanations give people insight into what they actually do and how they do it.**
- **Episodes showcase how tech is being deployed in the natural economy sector and the real benefits it achieves.**
- **Watch anytime, anywhere – the films are freely available online for everyone – from sector professionals to students.**

Following the announcement that SRUC is investing in a vertical farm, a series of online tech training films is now available to explain the exciting range of innovative technology being used in the sector. Tech training around new technologies is important for everyone, as digital transformation introduces it more into our everyday work and lives.

Episode one helps you learn the tech basics about distributed ledger technologies (DLT – aka blockchain), and its main benefits in the agri-food sector. In the episode, you find out how a group of Scottish farmers used DLT to provide more traceability and quality-assurance around their gluten free oats.

Episode two helps you learn the main concepts of machine learning and its relationship to deep learning, big data and AI. You get to hear about SRUC's machine learning

capabilities and some of the project's researchers are doing using deep learning techniques.

Other episodes explore drones, robots, satellites and their data, internet of things (IoT) sensors, VR, AR and multidimensional cameras, and total controlled environment agriculture (including vertical farming).

SRUCBytes was funded by a Universities Innovation Fund grant to SRUC, provided by the Scottish Funding Council. It is presented by Dr Hannah Rudman, Co-director of the Thriving Natural Capital Challenge Centre and was co-created with SAC Consulting colleagues.

Interestingly, new income generating opportunities emerging from restoring natural capital will increasingly require new digital measurement processes that create digital data evidence. There are interdependencies between the technical and scientific potential – what can the land and nature actually do – the market and policy mechanisms, and the willingness and ability of farmers and land managers to deliver new processes and measurement on the ground.

Hannah recently visited Bunloit, an estate outside Drumnadrochit, on the edge of Loch Ness for the Farm Advisory Service. There, the team have been busy gathering the data

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evidence that they need with digital devices.

Hannah found out about the practical work they've done in the last year to establish the baseline facts of their natural capital assets, and heard about the Bunloit team's plans for securing investment for improvement and restoration projects. They used digital (multispectral) camera traps and ultrasonic sensors and mobile apps to collect data, and **the 35 minute film is now available to watch on the FAS website.**

Top tips:

Check out SAC Consulting and SRUC's learning content around digital technologies:

- **watch one, or all of the 8, SRUCBytes episodes.**
- **see how digital technologies are being used to help measure the baseline of natural capital assets in landscapes in this FAS film.**

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