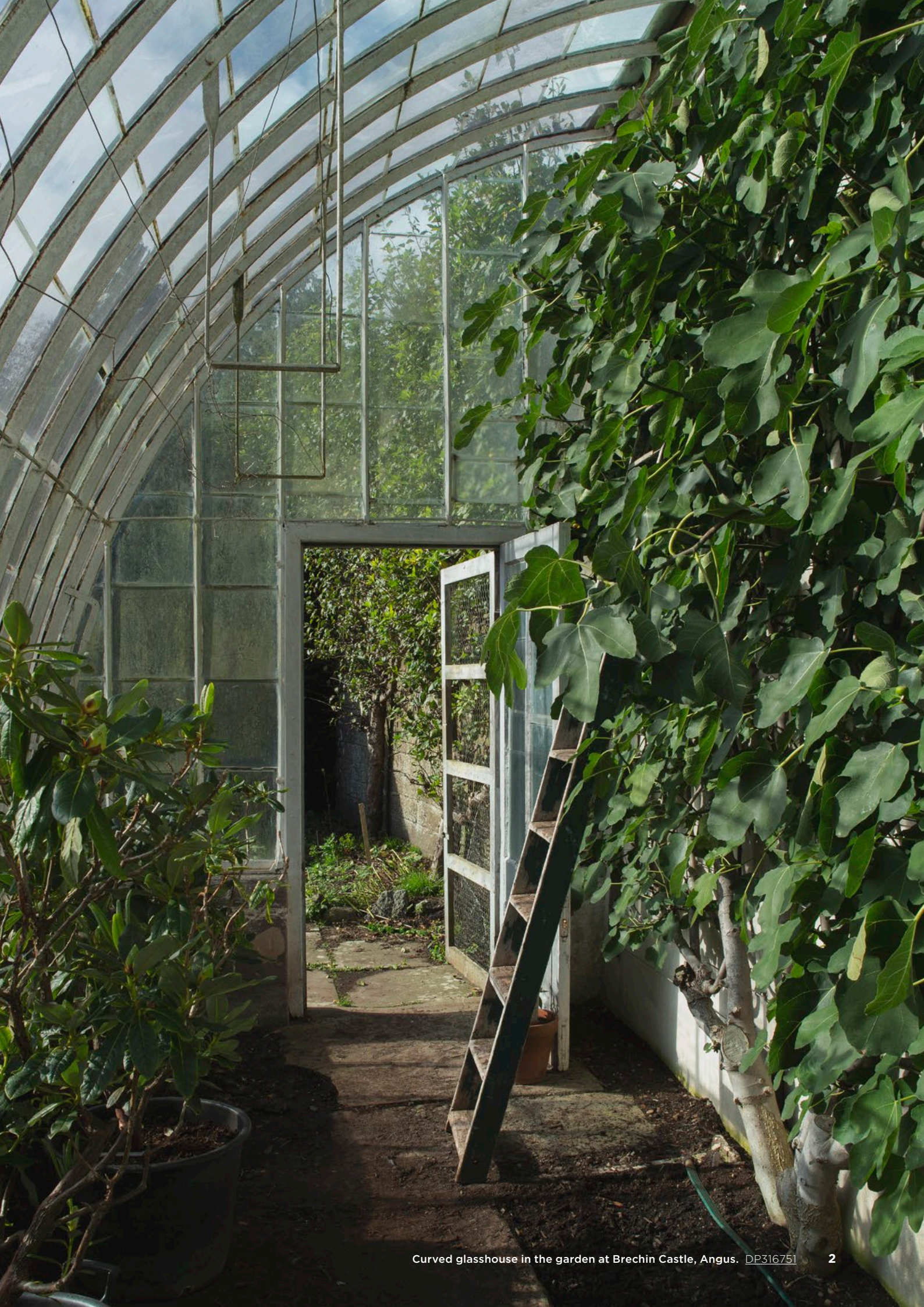
SURVEY & RECORDING ROUNDUP

2019–20

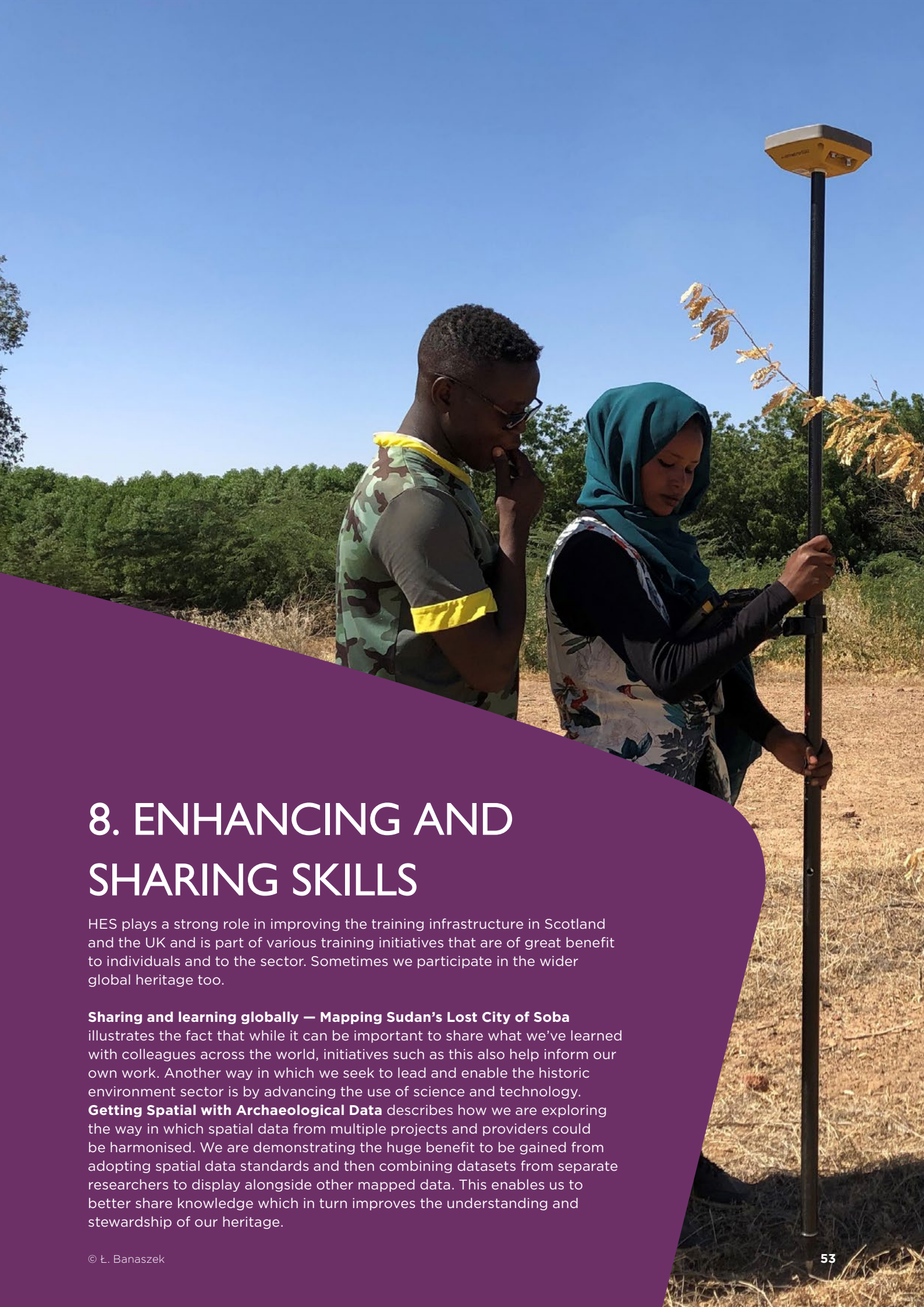
HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA



Curved glasshouse in the garden at Brechin Castle, Angus. DP316751

CONTENTS

COVER
Spiral staircase at the lower ground floor, 109 Dundas Street, Edinburgh. DP323318



8. ENHANCING AND SHARING SKILLS

HES plays a strong role in improving the training infrastructure in Scotland and the UK and is part of various training initiatives that are of great benefit to individuals and to the sector. Sometimes we participate in the wider global heritage too.

Sharing and learning globally — Mapping Sudan's Lost City of Soba illustrates the fact that while it can be important to share what we've learned with colleagues across the world, initiatives such as this also help inform our own work. Another way in which we seek to lead and enable the historic environment sector is by advancing the use of science and technology. **Getting Spatial with Archaeological Data** describes how we are exploring the way in which spatial data from multiple projects and providers could be harmonised. We are demonstrating the huge benefit to be gained from adopting spatial data standards and then combining datasets from separate researchers to display alongside other mapped data. This enables us to better share knowledge which in turn improves the understanding and stewardship of our heritage.

8.1 MAPPING SUDAN'S LOST CITY OF SOBA

The team of participants from Poland, Sudan and Scotland. © M. Drzewiecki

Sharing expertise and knowledge is invariably rewarding. Seeing how other people do things and working alongside others is a great way to learn and make new contacts, something that is as true here in Scotland as it is in the wider world. HES, in support of the Scottish Government's international ambition, works to understand, protect and celebrate our global heritage. In November 2019 and January 2020, Łukasz Banaszek, our Remote Sensing Mapping Manager, joined participants from Poland, Sudan and Scotland in an international project that has helped map the lost African city of Soba. Not only is it important to share what we've learned with colleagues across the world, but it also helps inform our own work. Building international networks in this way is also increasingly important in the face of global threats, such as climate change, that require a co-ordinated international response.

Sudan has an incredibly rich history. In the medieval period the northern and central parts of the country, together with southern Egypt, were known as Nubia. The city of Soba, studded with verdant gardens, churches and monasteries, was the royal centre and capital of the Kingdom of Alwa (Alodia). In the early 1500s the city was destroyed and then abandoned, since when the site has suffered from robbing for building material, the suburban encroachment of modern Khartoum, extensive cultivation along the Blue Nile valley, and large-scale infrastructural projects. Soba originally extended over an estimated area of 275 hectares but only 1% of this has been subject to detailed archaeological investigation. An ongoing project, undertaken by international partners, aims to improve our understanding of the site through archaeological, geophysical, and anthropological surveys and research, with the aim of supporting the improved protection of the site in the future.

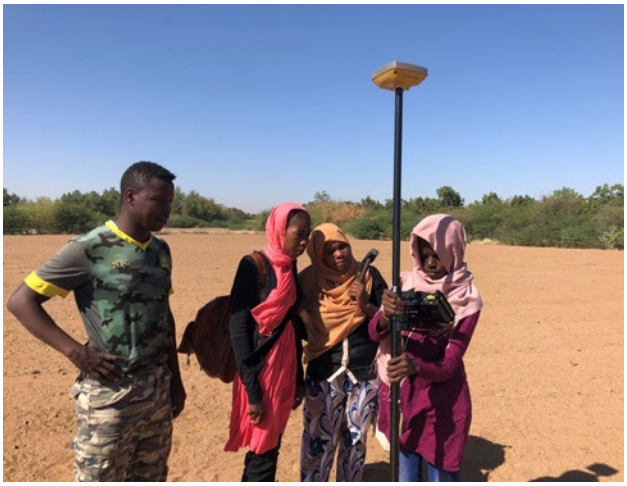
Exploring medieval Soba requires a range of archaeological methods and skills. Łukasz teamed up with a group of Sudanese students and graduates to help develop their ability in using high-accuracy Global Navigation Satellite System

(GNSS) devices and archaeological mapping. He also drew on his expertise in spatial data management to ensure that the survey data was integrated in a geographic information system (GIS) environment. This was used to document agricultural expansion within the protected site and prevent further land conversion.

Other members of the team undertook geophysical surveys and targeted excavation, while cultural anthropologists interviewed local residents to discuss relations between the past and the present. Beyond sharing his skills, Łukasz' participation in this integrated, multi-disciplinary project also represents a learning opportunity for HES. His experiences in Sudan will undoubtedly help us think through how we develop integrated, multi-disciplinary survey at HES as we start to bring geophysics into our archaeological survey practices in 2020.

The project at Soba is funded by the National Science Centre, Poland (UMO-2018/29/B/HS3/02533).

Robert Ryndziewicz from the Institute of Archaeology and Ethnology, Polish Academy of Sciences, explains the principles of a magnetic survey to students from al-Neelain University, Khartoum. © Ł. Banaszek



RIGHT
Students from al-Neelain University, Khartoum, surveying and marking out a grid for geophysical survey using a satellite survey system. © Ł. Banaszek

BELOW
An aerial view of the excavations as the sun rises; taken with an Unmanned Aerial Vehicle (UAV). It's possible to see the encroaching cultivation in the middle foreground. The suburbs of Khartoum are on the horizon. © M. Drzewiecki