

Managing Seaweed through More than Maps

Mapping and social sciences workshop for A-level students

Overview of the workshop

“Managing Seaweed through More than Maps” is a co-development project that fosters transferable skills for college students. This free workshop explores seaweed management as a climate change adaptation case study. Two hours are spent on coding skills using remotely sensed data, and two hours focus on the role for social science methods in adaptation.

Using seaweed as a unique example, the researchers aim to learn from the students what skills are useful in ground-level climate change adaptation and how skills are best transferred. The students gain coding and data analysis skills, with possible future support for their EPQ.

Who would this benefit: target audience

A-level students studying subjects that include a focus on climate change, hazard management, and/or remote sensing. This includes:

- **Geography** – case study of climate change hazards
- **Politics** – evidence-based policy development
- **Physics** – the science of remote sensing and using wavelengths
- **Maths** – application of mathematical algorithm
- **Computer science** – developing coding skills
- **Design and technology** – developing coding skills, use of satellite sensors
- **Biology** – climate change and changing ecosystems

Because of the advanced nature of the workshop content, it is recommended students are selected based on their interest in the content matter.

What is in it for the students and teachers: learning outcomes

1. **Case study:** of sargassum for curriculum case studies, such as climate change adaptation or hazard mitigation.
2. **Coding:** in basic JavaScript.
3. **Social data analysis:** social sciences frameworks for future research or adaptation.
4. **EPQ opportunity:** possibility for further researcher-student interaction to support development of an EPQ.

What is in it for us: the motivation behind the workshops

The SARTRAC research project¹ at the University of Southampton is researching how vulnerable communities in the Caribbean and West Africa can effectively adapt to the massive influx of the seaweed *Sargassum* washing up on their beaches since 2011.

We want to share mapping and social science methods and skills with your students, and in turn learn from your students what format of content and delivery works best.

¹ SARTRAC: “Teleconnected SARgassum risks across the Atlantic: building capacity for TRansformational Adaptation in the Caribbean and West Africa”

Details and further information

Resources

Please ensure your students have a computer for the virtual workshop, please see footnote²

Please ensure your students have access to reliable internet

We will provide workshop booklets, mailed out 1 week in advance of the workshop

Format and dates

The maximum number of participants in one session is 30 students. If you have 30 college students interested in the topic and skills, we can run the workshop for your college exclusively. If not, we hope to coordinate between multiple interested colleges.

Virtual workshop that will run for two sessions of two hours.

Wednesday 11 Nov 16.00-18.00 Part 1: mapping to adapt to climate change

Thursday 12 Nov 16.00-18.00 Part 2: social sciences to adapt to climate change

This event is running for the Festival of Social Sciences. If your classes are not available on these dates, please let us know your interest, and we may be able to run the workshop independently for you another time.

Contact details

This workshop is being developed by a team based at the University of Southampton.

Please contact Ms Sien van der Plank for further information, at s.vanderplank@soton.ac.uk.



Sargassum on a beach in Tobago, 2015 (by rjsinenomine, [CC BY 2.0](https://creativecommons.org/licenses/by/2.0/))

² We want to ensure the workshop delivery suits your available resources. Is it more feasible for (a) students to follow the workshop individually, or (b) students to take part in the workshop sharing a communal computer?