

The Discovery Society Annual Report 2025

Report of the Trustees for the year ending 31st December 2025.

The Discovery Society was registered as a charity (Charitable Incorporated Organisation – CIO) on 21st November 2019. As such its first full year of operation should have been the year ending 31st December 2020. There was however no report for the year 2020, as this was not required by Charities Commission rules, and the majority of the society's activities were severely disrupted by lockdown measures related to the global COVID-19 pandemic. These restrictions commenced just 4 months after the charity's registration date. The first reporting year was therefore 2021, this being the fifth annual report

Our Aims

The charitable aims were amended by the charity commission on 28th November 2022 following a resolution at the meeting of 25th November 2022. The word 'scientific' was removed from the charitable aim, to broaden the scope and reach of potential charitable activities.

"The charitable object of The Discovery Society is to advance the education of the students at The Bewdley School by providing and assisting in the provision of facilities [not required to be provided by the local education authority] for understanding of and engagement in exploration and research."

Our Research Strategy

The Discovery Society is a Charitable Organisation attached to an 11-18 comprehensive Secondary School with the purpose of encouraging scientific exploration and research. We live in an era where the popular view is that the world is 'discovered' and the only 'new knowledge' is based around technologies that we create. The world for school age children is so technologically oriented that the fundamental principle which has driven the creation of this charity, is that children need to be encouraged to interact with the natural world and to view finding out how it works as a central component of their learning. Without such an impetus, we will always struggle, for example, to understand both the concept of climate change and the impact of human activity on the other species we share the planet with.

Research Interests

Students at the school follow the National Curriculum for Science for year 7 to 11 (age 11-16). In our Sixth Form students study Advanced Levels in Biology, Computer Science, Chemistry, Geology and Physics. The curriculum for all of these subjects is prescribed by the examination bodies under the regulation of the Joint Council for Qualifications (JCQ). The core elements of study are therefore determined beyond the institution:

- Learning materials are determined by these externally driven curriculum arrangements
 - Research interests are drawn from these materials and the themes from which they arise
- We are also partnered with the University of Birmingham Earth Sciences Department (School of Geography, Earth and Environmental Sciences) who will support us with our research, and many of the research interests will draw from the research areas they are currently focussing on. These will include postgraduate and postdoctoral researchers. In the event that any of our sixth form students

become co-authors in research papers, the drafting and publication processes will be carried out by the professional scientists at the University. This also includes the potential for students to engage in research through Operation Wallacea.

Member Benefits

Aside from the benefits offered by involvement in exploration and research, members will potentially have access to the following accreditations:

- Bronze, Silver and Gold Duke of Edinburgh Awards
- Bronze, Silver and Gold Crest Awards
- Involvement biannually in Operation Wallacea which offers PADI registration
- Kidderminster Beekeepers Society
- Tree people

It is anticipated that this initial menu will expand as the charity matures and hones its expertise.

Review of Activities

The principal activities planned for 2025 were:

1. Operation Wallacea – planning Operation Wallacea expedition to Mexico for a two weeks expedition 6/7/26 to 19/7/26 for 2 staff and 6 students
2. Duke of Edinburgh – planned offer of Bronze, Silver and Gold Awards. Current numbers enrolled in the various awards –
 - a. Bronze 84 (48% of Y10)
 - b. Silver 26 (15% of Y11)
 - c. Gold 15 (37% of Y13)
3. Development of Science Garden and links with local community to develop regular visitors to environmental club

Operation Wallacea Report – Plan for Mexico 2026

Calakmul Biosphere Reserve Forest Site

Research is completed at a series of forest camps across the Calakmul Biosphere Reserve. Arrivals on this programme first complete an introduction to the Ancient Maya and Mayan jungle ecology course alongside practicals in survey techniques. Following this you will be helping teams of field biologists completing standardised surveys on a series of key taxa. These surveys are aimed at assessing the importance of the unique aguada habitats for fauna (aguadas are the only water bodies in the reserve) and understanding the relationship between Ancient Mayan manipulation of the forest and current biodiversity. There are several thousand Ancient Mayan ruin sites in the reserve and the forest adjacent to these areas contains the remnants of 7th century agroforestry resulting in very high abundance and diversity of fauna. If you stay on site for multiple weeks you can travel to different forest camps to see how the forest changes and to assist with biodiversity surveys.

Key Activities:

- Bats: Mist netting long into the night for bats, where morphometric measurements and measurements relating to body condition and reproductive status of captured bats are taken and species identified. Additional data for insectivorous bats that cannot be caught in mist nets will be collecting using acoustic recorders at mist net locations

- Birds: Mist netting is also conducted early in the morning for birds to capture individuals so that morphological measurements and measurements relating to body condition can be taken and individuals marked for population studies. Student can also help collect bird recordings for development of the Calakmul bird vocalization library
- Large mammal surveys involve recording primate sightings (distance sampling) and terrestrial mammal tracks (patch occupancy sampling) encountered along forest transects during morning surveys accompanied by an afternoon session analysing camera trap data.
- Herpetofauna are surveyed using diurnal and nocturnal visual encounters surveys along line transect. As many herpetofauna aggregate around aguadas (the only water bodies in the forest) diurnal and nocturnal timed searches of for herpetofauna will be conducted at aguada habitats.
- Frugivorous butterflies are surveyed using baited traps in the canopy and understory of different forest types. Forest structure is an essential dataset for the project and you will also assist with carrying out quadrat samples.
- Habitat: Habitat plots will be carried out at set intervals along each survey transect to enable a better understanding of the forest structure and tree species composition across different locations in the reserve and to complement the data collected for all other taxonomic groups.
- Guided tour of the Calakmul archaeological site
- Maya forest ecology lecture series covering: Biodiversity monitoring in the Calakmul Biosphere Reserve, Forests of the Maya and their importance for primates, Aguadas and their importance for herpetofauna, Birds, bats and butterflies as indicators of ecosystem health in the Neotropics, Felids and ungulates of Calakmul, and Conservation Management.

Marine Site

The marine site is in Akumal, part of the Mexican Caribbean Biosphere Reserve. If you are not already dive trained, you can spend your first week at this site completing a PADI Open Water dive training course, before moving onto the Caribbean reef ecology course in your next week. This course consists of lectures, morning and afternoon in-water practicals, and trains you in some of the survey techniques used in the marine environment to assess the status of reefs and their associated fish communities. If you are already dive trained or are instead wanting to snorkel, your first week is on the Caribbean reef ecology course and the second would be spent working with different research projects on site. Projects you will join include monitoring of sea turtle abundance, sea turtle grazing of seagrasses and seagrass biomass in Akumal Bay and coral reef restoration and coral monitoring.

Key Activities

- PADI Open Water dive training course: This course involves a combination of theory lessons, confined water dives and Open Water divers to gain an official SCUBA qualification.
- Caribbean marine ecology course: This course consists of lectures and in water practicals either by diving (if a qualified diver) or snorkelling. The lectures cover an introduction to the Akumal and the Mexican Caribbean Biosphere Reserve, marine survey techniques, diversity of coral reefs, threats to coral reefs, mangroves and seagrasses, and the future of coral reefs
- PADI Open Water referral course; For this option, students need to arrive having already completed their theory and pool training components with PADI.
- Seagrass quadrat surveys: 1m quadrats are used to assess the coverage of the three different species of seagrass in Akumal Bay, assess turtle grazing and coverage of epiphytes growing on the seagrasses (indicators of water quality)
- Turtle and tourist abundance transects: a series of belt transects are used to assess the distribution of sea turtles in Akumal Bay in relation to tourists
- Reef monitoring: skills learned during the reef ecology course are used to monitor reef ecosystem health using transect surveys for coral, fish and invertebrates. For this option students need to be dive trained and have completed the Caribbean reef ecology course

Duke of Edinburgh Report

The Duke of Edinburgh Award is offered to:

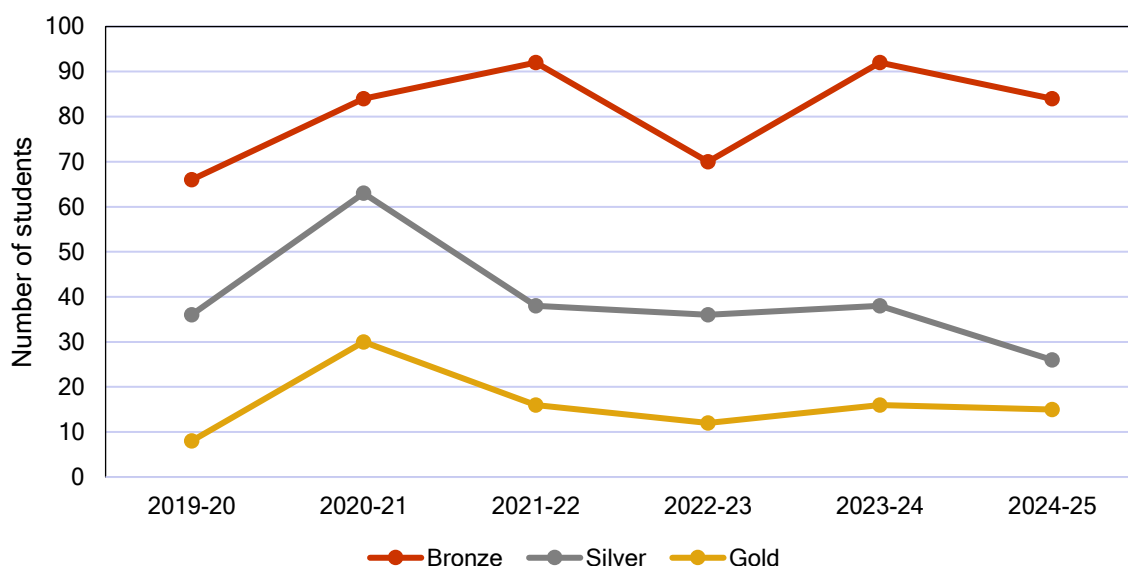
Year 10 – Bronze Award
Year 11 – Silver Award
Years 12/13 – Gold Award

Supported by a mixture of after school and weekend sessions, with some expeditions taking place during school time. For example, a typical Bronze expedition will mean 2 large groups each having a 2 day expedition on Friday/Saturday and Sunday/Monday.

Engagement with The Duke of Edinburgh Award scheme remain very high, with 697 students participating since 21/11/19:

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Bronze	66	84	92	70	92	84
Silver	36	63	38	36	38	26
Gold	8	30	16	12	16	15

Duke of Edinburgh uptake over time



Environmental Club Report

As part of our extra curricular offer in Science Anne Morgan (Second in Science) has spent the year running an environmental club. This has been centred around the Science department garden outside D block, where the space has been transformed with the introduction of raised beds where students have grown and harvested a variety of vegetables. The planting of fruit trees in the aim of developing a small productive orchard, and the planting of a small wildflower area around the pond to encourage a greater diversity of wildlife.

The development of this area has also provided the opportunity for us to offer students an 'in house' voluntary placement during their 'community action' days in Y10 with a three groups of students working as landscape gardeners for three days to make the raised beds, produce paths and manage the pond wildlife.

Our Finances

See our annual return, available online:

<https://register-of-charities.charitycommission.gov.uk/charity-search/-/charity-details/5148105/accounts-and-annual-returns>

The Discovery Society Accounts	Prepared by:	P Gillett, Finance Manager, The Bewdley School	
Year ending 31.03.25	Date prepared:	15.01.26	
	Income	Expenditure	
Opening balance (01.04.24)			£46.81
Domain charges in school fund for last 3 years		30	
Mexico funds	1679.98		
Domain - square space		12	
TOTAL	1679.98	42	£1,637.98
Closing balance (31.03.25)			£1,684.79

Policy Framework

As all of our trustees and activities fall within the operating environment of The Bewdley School – A Foundation School, all of our operations work within the policy framework of the school. The statutory policies which apply to our activities can be found at:

<https://www.bewdley.worcs.sch.uk/statutory-policies/>

Our Trustees

We currently have 3 trustees:

Name	Date first held	Term	Term Ends	Relationship to School
David Hadley-Pryce*	21/11/2019	4 years	20/11/2027	Head Teacher
Catherine McDougall	26/02/2020	3 years	25/02/2029	Deputy Head Teacher
Christopher Beech	11/1/2023	3 years	10/1/2029	Head of Science/DofE lead

* Chair of Trustees