



DECOLONISING ECOLOGY UNEARTHING THE CONTRIBUTIONS OF BLACK BRITISH NATURALISTS

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Charles Darwin most certainly comes to mind when you read or hear ‘finches’. A Victorian naturalist, Darwin is arguably one of the most influential scientists, with his theory of evolution by natural selection. Less well-known is that one of his teachers, a former slave from British Guiana, John Edmonstone was instrumental in teaching Darwin the skills of taxidermy and South American flora and fauna. Darwin would go on to use these skills during his famous voyage aboard the HMS Beagle where he preserved specimens, including Galapagos finches.

THROUGHOUT HISTORY, ETHNIC MINORITIES HAVE MADE COUNTLESS CONTRIBUTIONS TO SCIENCE WITH LITTLE OR NO RECOGNITION OF THEIR EFFORTS

During the transatlantic slave trade between the 16–19th centuries, naturalists and collectors utilised this network of people and places to amass a vast array of plant and animal specimens. These naturalists participated in the “trade triangle”, a three-way exchange of weapons to Africa; slaves to the Americas; sugar back to Europe. Hitching a ride on the slave ships, naturalists had access to the flora and fauna of Africa and the Americas. Together with slave owners, they exploited the labour of slaves to collect samples, which would then be brought back to Europe.



An illustration believed to show John Edmonstone and Charles Darwin in Edinburgh

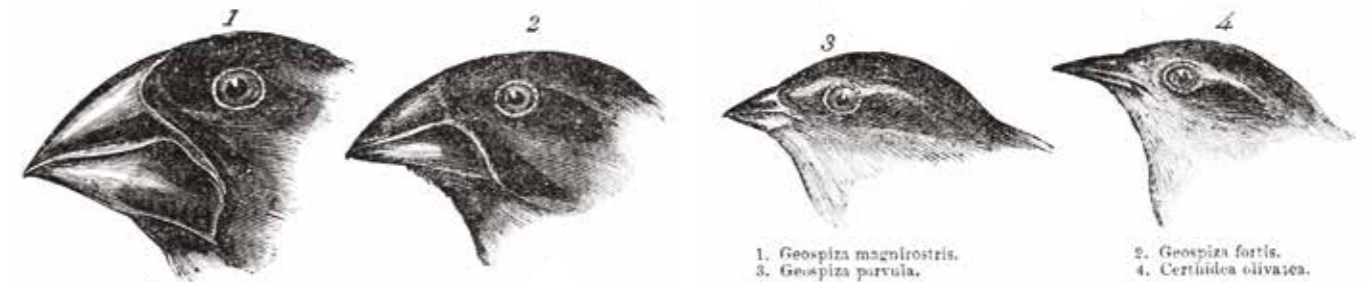
One of the most successful collectors and naturalists of this time was an Englishman that few have heard of, James Petiver. Although Petiver was thought to have never set foot on a slave ship, he orchestrated the largest collection of plant and animal specimens. Many of the specimens collected by enslaved Africans have ultimately ended up in cabinets in our prestigious museums like the Natural History Museum in London. Petiver’s collections were used by other naturalists including Carl Linnaeus, the founder of taxonomy. It is likely that without access to the slave trade, we wouldn’t have the known contributions from some of these influential scientists we cherish today.

JOHN EDMONSTONE, A FORMER SLAVE FROM BRITISH GUIANA, WAS INSTRUMENTAL IN TEACHING DARWIN THE SKILLS OF TAXIDERMY AND SOUTH AMERICAN FLORA AND FAUNA

Edmonstone was born into slavery in British Guiana, current day Guyana, and took his name after his slavemaster Charles Edmonstone, a plantation owner from Scotland. John Edmonstone learnt his taxidermy skills from a friend of his master, Charles Waterton, an English naturalist who worked in South America. Once freed, Edmonstone travelled to Scotland and earned a living through teaching the art of taxidermy to university students in Edinburgh, including Darwin. Darwin, in his late teenage years, received over 40 hours of tuition where he fine-tuned the craft of preserving animals. Despite Edmonstone’s important teachings, he was never mentioned by name in Darwin’s writings but more as a fleeting aside comment. This is just one documented example of the important contributions from Black people in the history of British natural sciences. How many are we yet to unearth?

Ecology has a diversity problem, not just the threats to biodiversity but also the lack of diversity of people who study it. Ecology as a discipline has traditionally been a white male pursuit and is reflected in our language when we refer to the founder of a new field as “the father of ...”.

Darwin’s finches drawn by John Gould



A LACK OF BLACK BRITISH NATURALISTS

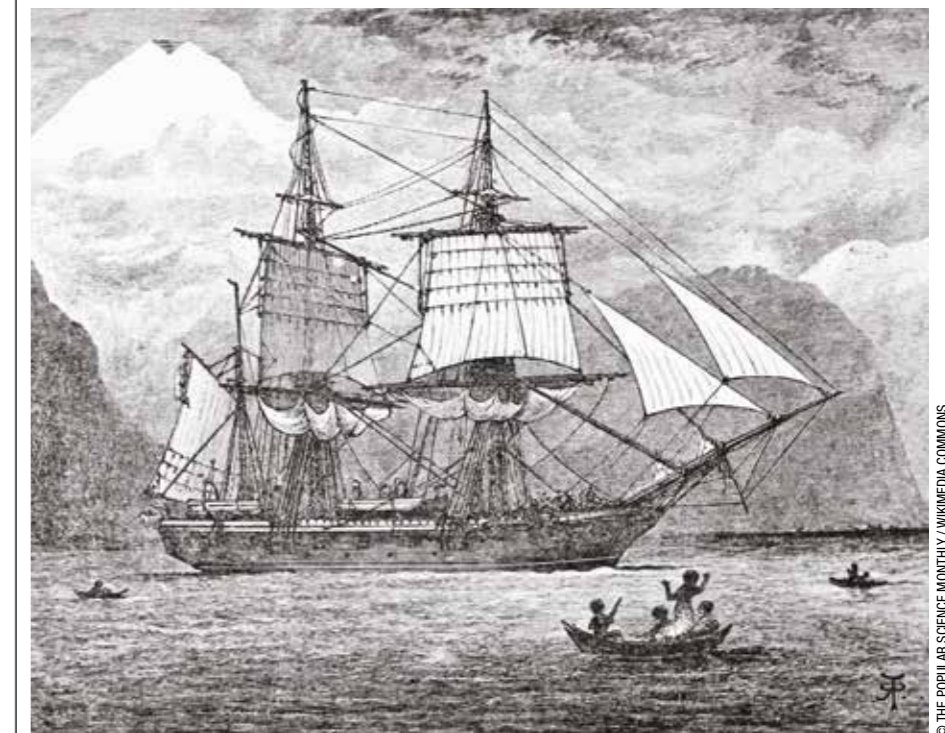
“No results found” would be the message one would see after pressing enter on the term “Black British Ecologists” in a search engine. Contrast this to omitting the word “Black” and you’d see countless lists of ecologists from a range of subdisciplines, implying that there has never been any recorded contributions of Black British ecologists. Today, ecology still remains one of the least ethnically diverse fields of science. The latest data from 2015–2016 from the Natural Environment Research Council indicates only 1% of researchers, including PhD students and principal investigators, identifies as Black. This low attainment can be attributed to the multiple barriers Black ecologists face along the career ladder, from lack of representation and recognition to racial discrimination, leading to low retention in institutions. These issues have entered a wider science sphere after the racial incidents in the US earlier this year. Social media initiatives like #BlackBirdersWeek, #BlackHikersWeek and #BlackBotanistsWeek has started a much-needed conversation about addressing diversity issues within the ecology community.

We have a collective responsibility, as members of the ecological community to re-educate ourselves and teach the next generation of ecologists the tainted legacy of slavery, colonialism and exploitation. A decolonised curriculum must include a diverse set of scientific voices both past and present if we are as a community to tackle the great challenges of our time. ✨

THE BLACK BRITISH BIOLOGY PROJECT

Sara has started a new project where she is documenting the role of historical Black Britons in biological sciences. She is leafing through buried archives, articles and biological collections to unearth the forgotten contributions of Black Britons and will share this resource with educators.

WE NEED TO ACKNOWLEDGE THAT NATURAL SCIENCES HAVE A COMPLEX ENTANGLED HISTORY



HMS Beagle in the Straits of Magellan

Reproduction of *The Voyage of the Beagle* frontispiece by Robert Taylor Pritchett from the first Murray illustrated edition, 1890.