An informational interview with

Dr Lauren Gardiner
Curator of Cambridge University Herbarium

Lauren Gardiner is the current Curator of the Cambridge University Herbarium, part of the Department of Plant Sciences. She is responsible for the curation of an estimated 1.1 million plant specimens, which are housed in the basement of the Sainsbury Laboratory, Cambridge University. The collection is hugely important: it has one of the finest collections of British flora; possesses many type specimens (“types” being the original specimens upon which a new species name is based) and its historic collections include plants collected by renowned natural historians, including Charles Darwin, Alfred Russel Wallace and John Lindley. Much of the collection has not been studied at all for decades and contains many forgotten treasures. We discussed what her current role entails; her ambitions for the Herbarium; the career path that led her to the role and the skills and experience it demands.

What does being a Herbarium Curator entail?

The day-to-day job is very varied. Even more so for Lauren because when she was appointed a year ago, the collection had been without a full Curator since 2010. Therefore, initially, she has focused on getting the collections into a more secure and usable state for researchers and students. This involves all the “unsexy” infrastructural jobs, such as ensuring that climate and pest control are up to proper standards. She has also spent a lot of time spreading the word about the Herbarium: she has welcomed over 500 visitors and delivered around 50 tours in the last year, and attended conferences, meetings and workshops. She hopes that in the coming year things will settle down, allowing her to do more curation and more collaborative research with students and visitors. Curation, at its core, is making sure collections are preserved, mounted with labels, accurately named and arranged in the right systematic order, all of which ensures that specimens are easier to find, extract and do research on.

Lauren’s main goal is to make the Herbarium much more active: a resource that is part of the Plant Science department’s day-to-day activities, embedded in its teaching and research. She believes other departments can benefit as well: the rich cultural history that is associated with many of the specimens makes them of interest to researchers and students from many disciplines. To showcase this, she has plans to hold exhibitions in collaboration with other collections in the university.

For Lauren, the best part of the job is the discovery. Because so much of the collection remains unknown, it is not unusual to find something exciting: an undiscovered Darwin specimen or type specimen, for example. She likens it to opening Tutankhamun’s tomb and seeing, for the first time, all the wonders inside that have lain untouched for many years. The role is not without its challenges, however. Her biggest difficulty at present is the lack of staffing; she is the only person employed to look after all 1.1 million specimens. By contrast, London’s Royal Botanic Gardens, Kew has around 50 staff (including curators and researchers) who care for its 7 million or so specimens. Whilst students and volunteers provide valuable help, she believes that even one extra member of staff would enormously help the Herbarium achieve much more.
Lauren’s career path: from work experience student to Curator

By taking on this position at CU Herbarium, Lauren has returned to the collection where it all began. Although she had originally started her Natural Sciences degree planning to pursue research in medical sciences, she discovered a passion for plant sciences during the course of her studies. In her final year, she took a plant evolution class with the then Curator of the Herbarium and Director of the Botanic Gardens, John Parker, and this was conducted in the Herbarium itself (then housed in the same building as the Plant Sciences department). Curious to learn more about this collection, she undertook a week’s work experience, during which time she learned to prepare specimens and curated unprocessed specimens. She followed this with a summer work placement in the Herbarium at Kew Gardens, London. These two experiences cemented her desire to pursue a career in plant sciences, leading her to embark on a taught Masters degree in Plant Diversity at the University of Reading and subsequently a PhD in orchid phylogenetics at the University of East Anglia and Kew.

Whilst writing up her thesis, Lauren returned to Kew to work in orchid micro-propagation, utilising some of the lab skills she had picked up during her PhD. From here she progressed to a role in Science Policy before moving on to a Botanist position and, later, a Career Development Fellowship, during which she focused on palm and orchid conservation in Madagascar. However, not wanting to pursue an academic research career long-term, she leapt at the chance to apply for the role in Cambridge when the opportunity arose, and return to working with collections and a wider range of researchers and interdisciplinary projects.

Useful skills and experience

Most of the steps that have led Lauren here were not strictly planned out in advance: although she always had an idea of where she wanted to be a few years down the line, she was always flexible about how that might change over the years. She emphasises the importance of “not being fixed on one particular specific goal in the future”, describing how, for her, as new opportunities arose, one opportunity would lead to another quite serendipitously.

Through her various jobs she gained lots of skills that have been incredibly useful for her current role. She highlights her experience in science policy as particularly valuable. This involved a lot of report writing, grant proposals, government policy experience that she recommends for someone coming from a research background: it allows you to see how your work fits in with the bigger picture, in terms of the funding and strategic priorities that people in different sectors have.

Whilst her research background and PhD are not essential for a curatorial position, Lauren feels that this causes her to interpret and connect with the collections differently compared with someone coming to the role through the museums/ collections sector. Having done fieldwork to collect her own specimens, she has first-hand experience of the “blood, sweat and tears” that has gone into making each and every specimen, and this affects the way she-curates them. She thinks these skills and experience (of collecting and using specimens in research) are particularly pertinent for the Cambridge Herbarium, since an important part of her role is to make the collections more relevant to the Plant Sciences Department as a resource for its research, teaching, and public engagement.
A number of **personal skills** are sought-after for curatorial or digitisation position – more so than a PhD. First and foremost is **enthusiasm** for the work. Some people find repetitive tasks like databasing specimens somewhat tedious, however Lauren says (quoting her own mother) that “only boring people get bored”. If someone is open-minded and understands the broader significance of the work they are doing (after all, some of these specimens are of huge scientific and historical value) they will find the work much more stimulating. An enquiring mind and ability to **think laterally** are also useful: some of the earlier specimens have limited information attached and it can require some detective work to spot and make connections between what clues are provided and the information that is available from wider resources. Finally, **attention to detail** is absolutely key. A simple mistake in a database or a misplaced specimen can make specimens very difficult to find. She cites an example from her time at Kew, when she by chance stumbled across several specimens that had been inadvertently “lost” for thirty years after a visitor accidentally put them back in the wrong place.

**Why work in natural history collections?**

Many biology students complete university and realise that the academic, tenure-track career trajectory is not for them. Natural history collections (whether that’s in herbaria, museums or other collections) are options very much worth considering. They provide a brilliant opportunity to make a valuable contribution to the scientific community, and make your own exciting discoveries, without necessarily being in an academic role yourself.