Darwin's missing notebooks come to light

from Duncan M. Porter

IN early December 1980, Rita I'Ons, Assistant at the Cambridge University Herbarium, discovered two notebooks titled *C. Darwin's Plants from S. America* and *Darwin's S. American Plants* in a cupboard at the Herbarium. The notebooks, on the plants collected during the voyage of HMS *Beagle* (1831–1836) had been lost for more than a hundred years. Their long absence has caused many problems with the identification of Darwin's plants and has also prevented the botanical aspects of his voyage from being properly appreciated.

The notebooks are in the writing of J.S. Henslow, Professor of Botany at Cambridge and Darwin's mentor, who originally agreed to identify the plants. However, because of other commitments, Henslow was unable to identify more than a few, and the task fell to J.D. Hooker at Kew in the early 1840s. Henslow sent Darwin's notes to Hooker, and presumably they were later returned, but earlier searches at Cambridge and Kew failed to find them¹. Hooker and others identified a number of Darwin's plants, but the majority remain unclassified to this day. Tied with string into the back of the second notebook are 11 pages of notes titled 'Plants'. They are in the handwriting of Syms Covington, Darwin's servant and amanuensis on the *Beagle* and until 1839. A few notes and corrections have been added in Darwin's hand, as have a few notes by Henslow.

Notes on the plants vary in length from the terse 'Plant' to a page-long discussion on the Wild Potato of Chile's Chonos Archipelago (*Solanum tuberosum* var. *guaytecum*). The latter was used as the basis for the discussion in Darwin's *Journal of Researches*². Likewise, one can trace other notes to passages in the *Journal*. Some, such as that on the Dwarf Beech of Tierra del Fuego (*Nothofagus antarctica*), make more interesting reading than when published: "Jemmy Button said, 'when leaves yellow, snow all go'. — Captain FitzRoy states that in April the leaves of the trees which grow on the lower parts of the hills turn colour; but not those high up. — I recollect having read a paper to show that in England warm Autumns hastened the falling of the leaves; that the process is a regular part of the vegetation: This fact would seem to show the same law." When published in the *Journal*, Button's quote was excised.

A passage in the Plant Notes describing the forests of Tierra del Fuego seems to anticipate the 'tangled bank' of the *Origin*

The cover legend written by Darwin and part of the first page of the Plant Notes written by Covington with notes added by Darwin and by Henslow.

of *Species*: "The extreme dampness of the climate favours the course luxuriance of the vegetation: the woods are an entangled mass where the dead and the living strive for mastery." In the last paragraph of the first edition of the *Origin*³, Darwin writes: "It is interesting to contemplate an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each

other in so complex a manner, have all been produced by laws acting around us."

The Plant Notes follow the same format as the lists of notes on *Beagle* zoological specimens at the Cambridge University Library and the British Museum (Natural History). Each series of notes was compiled for the taxonomists who were to identify the various groups of organisms collected (plants, birds, fish, insects, mammals, molluscs, and reptiles and amphibians). As Darwin intended, the Plant Notes are proving quite useful in the identification of his *Beagle* specimens. □

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1. Porter, D. M. *J. Soc. Bibliophy nat. Hist.* 9, 515 (1980); *Bot. J. Linn. Soc., Lond.* 81, 79 (1980).
2. Darwin, C. *Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle, Between the Years 1826 and 1836, Describing Their Examination of the Southern Shores of South America, and the Beagle's Circumnavigation of the Globe*, Vol. 3, *Journal and Remarks, 1832-1836* (Colburn, London, 1839); second

- edn: *Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Round the World, Under the Command of Captain FitzRoy, R. N.* (Murray, London, 1845).
3. Darwin, C. *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, 489 (Murray, London, 1859).