

RICHARD SPRUCE: A MULTI-TALENTED BOTANIST

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Richard Spruce, one of the greatest of the Victorian traveller-naturalists, was born at Ganthorpe in 1817 and died at Coneysthorpe in 1893. Both places are situated on the Castle Howard estate in Yorkshire.

Spruce sailed for South America in June 1849. His task was to investigate the flora of the Amazon valley and send back collections of herbarium specimens to Kew Gardens. His journey took him up many of the tributary rivers of the Amazon, and from 1855 until his return to England in May 1864 he worked the head waters of the Amazon in the northern Andes of Peru and Ecuador. In addition to the many thousands of specimens of Angiosperms which he sent back to England he also made copious collections of ferns, mosses, liverworts and lichens.

Although no economic strings were attached to his mission, Spruce's achievements had some consequences of far-reaching economic importance. He laid the botanical foundations for an understanding of the genus *Hevea*, source today of most of our natural rubber. After he had reached Peru he was commissioned by the India Office to locate and collect seeds and young plants of *Cinchona*, the so-called Peruvian or Jesuit's-bark and source of the anti-malarial medicine quinine, and send these back to Kew. He succeeded in the face of formidable difficulties in procuring on the western slopes of Mt. Chimborazo 100,000 seeds and 600 seedling plants which were successfully shipped to England. It was from these shipments that the *Cinchona* plantations and industry of south-eastern Asia were developed—an economic venture which contributed substantially to the wealth of the countries concerned but which yielded Spruce only a modest annual pension of £100 on his return home with his health seriously and permanently undermined.

The identifications of Spruce's huge collections of specimens were made by the leading experts of the day. The liverworts, his own favourite group, he worked out himself in the cottages at Welburn and Coneysthorpe where, as a chronic invalid, he spent the remainder of his life. His monumental *Hepaticae Amazonicae et Andinae*, published in 1885, still remains the greatest work in South American bryology. No botanist specializing in tropical American floristics and monographic research can afford not to consult Spruce's specimens and botanical writings. It is unlikely that his contributions to knowledge of tropical South American botany will ever be equalled by any other one man.

Spruce was never a robust man, but his physical limitations were outweighed by his great strength of character. Few travellers have shown greater fortitude, endurance and unflinching dedication to their mission in the face of prolonged privations and hardships. The breadth of his interests, the detail and accuracy of his observations and the

meticulous recording of all that he saw were phenomenal. His collections ranged from the minutest liverworts to the loftiest forest trees; he recorded the uses to which plants were put by the native tribes amongst whom he stayed, the customs and languages of the tribes (he brought back vocabularies of 21 Amazonian dialects) and sketched their villages and the country through which he travelled making maps of previously unexplored rivers. Nothing appears to have escaped his attention and capacity for orderly documentation.

After Spruce's death his friend Alfred Russell Wallace edited from his journal, memoranda and voluminous correspondence *Notes of a Botanist on the Amazon and Andes* (1908).¹ This two-volume summary of Spruce's travels and botanical investigations in South America is preceded by a lengthy biographical sketch. Those familiar with this work will know that Spruce was not only a distinguished botanist; he was also a notable anthropologist, linguist, geologist and geographer, as well as a perceptive sociological observer of the political systems and customs of the Amazonian and Andean tribes amongst whom he journeyed.

Our present communication is intended to illustrate another and less known facet of Spruce's versatile talents. In the biographical sketch referred to above Wallace refers to him as "a musician and chess-player" and it is with the former capability that we are concerned. We have found no other contemporary references to Spruce's competence as a musician or allusion to what instrument or instruments he played. But when one of us [R.E.S.] first visited Spruce's house in Coneysthorpe in 1950, it was occupied by an elderly lady, Mrs. R. A. Calvert, who entertained him to tea and with whom he had a long conversation. Wallace (loc. cit. *xlii*) has recounted how Spruce "was carefully looked after and nursed by a kind housekeeper and a little girl attendant, who were also his friends and companions." Mrs. Calvert was the "little girl attendant." She described how her mother had been "Mr. Spruce's" housekeeper when she was a young girl and told, amongst many interesting anecdotes, how he suffered from the cold and in the winter months would often ask her to tighten the woollen fabrics in the window joints to keep out the draughts, and how he would have her bring him his slippers and fetch him his "fiddle," which he would then play for a while.

The present tenants of Spruce's cottage, Mr. and Mrs. William Cross, have become deeply interested in Spruce's life and work and Mr. Cross wrote to us some time ago that "A few days ago our head forester Mr. Hardesty brought me a small hymnal which was found in the personal effects of Mr. Hardesty senior who passed away recently. I have had the relevant pages photostated. You will see that Richard Spruce contributed hymn no. 84 which he named 'Raywood' which is the wood adjacent to the Castle. Did you know that Spruce was a composer of hymns?"

The small hymnal (Plate 1) is entitled *The Welburn Appendix of Original Hymns and Tunes*. Its compiler was the Rev. James Gabb B.A., Rector of Bulmer and Chaplain to Lord Lanerton and the music was edited by S. S. Wesley, Mus. Doc. The place and date of composition are cited in the Preface as "Welburn, Castle Howard: Easter 1875," and the acknowledgements include thanks to, amongst others, "Dr. R. Spruce the distinguished naturalist and resident of this village for Tune No. 84 written before he entered on his travels in South America." This statement indicates that the tune (Plate 2) was composed in or before 1849.

The *Welburn Appendix* is now a scarce work but since Bulmer, like Ganthorpe, Welburn and Coneysthorpe, is another satellite village on the Castle Howard estate, it seemed certain that the Rector of Bulmer would have sent one or more copies of his work to the great house. On enquiry to Mr. Eeyan Hartley, archivist at Castle Howard, we were informed that the hymnal was indeed in their library and the Chapel Clerk stated that it was in use in the Private Chapel following its publication. We are grateful

THE
WELBURN APPENDIX
 OF ORIGINAL
HYMNS AND TUNES.

BY THE

REV. JAMES GABB, B.A.,
 RECTOR OF BULMER, AND CHAPLAIN TO LORD LANERTON.

THE MUSIC EDITED BY

S. S. WESLEY, Esq., Mus. Doc.

"Speaking to yourselves in psalms, and hymns and spiritual songs, singing and making melody in your hearts to the Lord."

LONDON:
 NOVELLO, EWER AND CO.,
 1, BERNERS STREET (W.), AND 35, POULTRY (E.C.)

Plate 1.--Title page of *The Welburn Appendix*.

to Mr. Hartley and Mr. R. A. Robson for their helpful response to our enquiries and for sending us on loan the copy of the *Welburn Appendix* from which the accompanying illustrations were prepared.

Mr. John Montanus of Melrose, Massachusetts, a musicologist, has kindly submitted the following comments on Spruce's hymn.

"Dr. Spruce's tune is interesting and certainly as worthy to be preserved and sung as many of the better known nineteenth-century hymns. The time would

Hymns of the Way.

No. 84.

RAYWOOD.

The musical score consists of four systems, each with two staves. The first system begins with a treble clef on the upper staff and a bass clef on the lower staff. The music is written in a key with one flat and a 4/4 time signature. The melody is composed of eighth and sixteenth notes, often beamed together. The second and third systems continue the melody and accompaniment. The fourth system concludes with the text "A - men." written below the notes.

(126)

Plate 2.—Tune composed by Spruce for his hymn "Raywood."

be listed in a metric index as 8-7-8-7-8-7, referring to the number of syllables in each line; line 5 in each stanza is to be repeated. The melody of this is identical with that of the first, the only repetition found in this pleasantly varied tune. The two lines differ, however, in their closing harmonies, it would be interesting to ascertain whether this was Spruce's doing or that of S.S. Wesley.

"Wesley, who died at age 66 in 1876, was one of the most distinguished church musicians of his day. He was the natural son of composer Samuel Wesley and grandson of Charles Wesley, co-founder of the Methodist movement.

"The metrical scheme of Spruce's tune, Raywood, is identical *inter alia* to that of Regent's Square, sung usually to the words *Angels from the Realms of Glory*. In other words either set of words may be sung to either tune."

We have no other references to Spruce's love of music or capabilities as a composer or instrumentalist save in a work by the American writer on natural history Wolfgang von Hagen. In his book entitled *South America Called Them* (1945), dealing with explorers of that Continent, the opening paragraphs of the first chapter on Richard Spruce give a colourful picture of him playing "the spirited air of a Yorkshire jig" on bagpipes as he sailed up-river to Santarem. We dismiss this as literary licence, perhaps suggested by the well known photograph of Spruce as a young man wearing a Scottish glengarry-type head dress. Having regard to the severe restrictions imposed on all baggage other than that required for his collecting work and essential personal requirements, it is unlikely that a musical instrument would have been included in his luggage and least of all so cumbrous a one as bagpipes.

In 1970, we appealed in the international botanical journal *Taxon* for contributions to a fund wherewith to place a memorial plaque over the door of the cottage in Coneysthorpe in which Spruce spent the last 17 years of his life. The late Mr. George Howard of Castle Howard, our acquaintance, later to become Lord Howard of Henderskelf, was himself well aware of Spruce's history and achievements and kindly agreed to the project. The appeal was supported by donations from 12 countries and more than covered the cost of the grey-green Westmorland slate plaque with white lettering. The inscription reads:

Richard Spruce
 1817-1893
 of Ganthorpe, Welburn
 and Coneysthorpe
 Distinguished botanist, fearless
 explorer, humble man, lived here
 1876-1893

On September 3, 1971, a ceremony was held at Coneysthorpe presided over by Mr. Howard at which time Professor Schultes, who had come over from the United States primarily to attend this dedication, unveiled the plaque. Representatives of the Yorkshire Naturalists' Union, the Yorkshire Naturalists' Trust, the Yorkshire Philosophical Society and the British Bryological Society attended the ceremony.

We believe that this plaque, unveiled more than a century after Spruce's travels in South America, appropriately commemorates his memory and his love of the Yorkshire rural peace and tranquility to which, after years in the Amazonian wilderness, he returned to devote his remaining years working on his bryological collections.

We later secured the permission of the Reverend Canon W. Beswick of the parish of Terrington to employ the remainder of the fund in having Spruce's white marble scroll-tombstone cleaned and re-lettered. The renovated stone (Plate 3) with its simple inscription is an enduring memorial to an unassuming yet multi-talented man.



Plate 3.—Richard Spruce's gravestone in the churchyard of the parish church of Ter-
rington, Yorkshire. Photograph by Dr. James Zarucchi.

Editor's Note: See J. Ethnobiol. 3(2):139-147, December 1983, for another paper on Richard Spruce, an early ethnobotanist of the Amazon and northern Andes. Also, "Richard Spruce still lives," Northern Gardener 7 [1953] 20-27; 55-61; 89-93; 121-125. Reprinted in *Hortulus Aliquando*, No. 3 [Autumn, 1978] 1-47.

NOTES

¹Spruce, R. [Ed. A. R. Wallace] *Notes of a Botanist on the Amazon and Andes*, Macmillan and Co., Ltd., London. 2 vol. (1908). Reprinted edition with a new foreword by Richard Evans Schultes: Johnson Reprint Corporation, New York. 2 vol. (1970).