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# Albert Russell Nichols (1859-1933) and bryozoan research in Ireland during the late 19th and early 20th centuries

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## 1. Introduction

Ireland is home to a varied coastline of over 5500km in length. Within this vast coastline is a large number of marine habitat types which makes it the ideal location for a large number of species to live and survive. Bryozoa have been recorded from Ireland since 1755 when John Ellis mentioned he had been sent a specimen of the bryozoan *Bugula avicularia* from Dublin Bay and included it in his book *An essay towards a Natural History of the Corallines*.<sup>1</sup>

Albert Russell Nichols (1859-1933) (Figures 1 and 3) was an English-born naturalist who spent much of his life in Dublin, Ireland. During his career he published just 6 papers on bryozoans, but these are some of the most valuable and comprehensive contributions to Irish Bryozoa records to date. These include his "*Polyzoa* from the coasts of Ireland" published in 1911<sup>2</sup> and the Bryozoa part of the "Clare Island Survey" series of papers published by the Royal Irish Academy published the following year.<sup>3</sup>

This paper will present an account of A.R. Nichols' personal life, professional career and his bryozoological work. Naturalists such as Arthur Hill Hassall, Laura Thornley, J.E. Duerden and Nathaniel Colgan also made important contributions to research on Ireland's



*Figure 1. Albert Russell Nichols (1859-1933) at opening of the Museum of Science and Art, Kildare Street building in 1890. (Photograph NMINH-PP-777.xy © National Museum of Ireland, all rights reserved)*

marine bryozoans.<sup>4</sup>

One publication by A.R. Nichols included a list of Bryozoa from many locations around the Irish coast—his was the last national scale comprehensive survey of marine bryozoans from Ireland. Since then other publications have concentrated on specific locations with much work being carried out along the west coast in particular.<sup>5</sup>

## **2. Personal Biography**

Albert Russell Nichols was born in January 1859 in Stowmarket, Suffolk to parents Arthur and Sarah Nichols. His father is listed in the census of England and Wales from 1851-1901 as being an Ironmonger (retired in later years).<sup>6</sup> Albert was christened on the 9th December 1859 in Stowmarket where his family lived on Market Place until they are recorded in the 1881 census as residing at 22 and 23 Nelson Street, Greenwich. Albert's family was small for the time, he had one brother Ernest Russell Nichols who was 2 years his younger and one sister who was 5 years younger. It was interesting to find that as a child Albert Russell was only called 'Albert' in the 1861 Census, on all subsequent censuses from his English addresses he is listed as 'Arthur Russell'. Once he moved to Ireland he

is listed as Albert again. Unlike his brother, Albert did not follow in his father's footsteps as an ironmonger, but rather attended university. In January 1878<sup>7</sup> he entered Clare College, Cambridge to study Mathematics, where he gained a Gold Medal and was a Scholar. He graduated B.A. in 1882 with a first class degree in the subject and was ranked 16<sup>th</sup> Wrangler.<sup>8</sup> In 1902 he took his M.A. from Clare College.

It was at the age of 24 that Albert's life as a Naturalist began. One can only imagine that job opportunities for mathematicians at the time were scarce and this may have prompted his career change. As was the norm at the time, Albert took an examination (on 23rd January 1883) used to determine the most suitable candidate for the appointment of Assistant Naturalist in the Natural History section of the Museum of Science and Art (now the National Museum of Ireland), Dublin.<sup>9</sup> He was ranked first and was offered the position<sup>10</sup> and entered museum service in March 1883.<sup>11</sup> Thus was the beginning of his new life in Dublin where he remained for the rest of his life.

Nine years after arriving in Dublin he married Letitia Anne Perry of Cambridge House, 12 Montpelier Hill, in Matthias Church, Adelaide Road on 20th July 1892.<sup>12</sup> At the time of his marriage Albert was living at 20 Charlemont Place, Dublin<sup>13</sup> which was within walking distance to his place of employment. However, by 1901 the married couple were living in a fashionable southside suburb at 30 Grosvenor Square, Rathmines (Figure 2) with their daughter Beryl (age five) and their two domestic staff.<sup>14</sup>

In May 1905 Albert was promoted to assistant keeper at the museum and remained in

this position until August 1921 when at the age of 62 he succeeded Robert Francis Scharff as the Keeper of Natural History (Figure 3). Albert did not remain in this position for a long period as in January 1924 he reached the statutory retirement age of 65 and retired from his position at the museum. Aside from his research on various zoological groups, Nichols "did much work in the classifying and arranging of the invertebrates".<sup>15</sup>

Before his second promotion to Keeper of Natural History Albert Nichols, his family and their general servant were recorded as still living at 30 Grosvenor Square, Rathmines, Dublin<sup>16</sup> in the 1911 census of Ireland. This is the address at which Albert would live out his remaining years. On 21st February 1933 Albert Russell Nichols died at the



*Figure 2. 30 Grosvenor Square, Rathmines, Dublin.*



Figure 3 (left). A.R. Nichols towards the end of his working life. (Photograph NMINH-PP-741-Nichols © National Museum of Ireland, all rights reserved)

Figure 4 (right). Burial place of A.R. Nichols, his wife and daughter. Section 17, Mount Jerome Cemetery, Harold's Cross, Dublin.

age of 75. He was buried close to his home at Mount Jerome Cemetery, Harold's Cross, Dublin (Figure 4), which was the prominent burial ground at the time of the Protestant population.<sup>17</sup> In his obituary Nichols is described as being very secretive about himself and as always being a perfect gentleman. He was also described as “his harmless and undisguised curiosity about the doings of others”<sup>18</sup> which sounds like a polite way to say he was unashamedly nosy.

Albert's wife and daughter also lived out their remaining years in the same house in Rathmines. Letitia Anne Nichols died on 7 March 1955, outliving her husband by 22 years. Their daughter, who never married, studied History and Political Science at Trinity College, Dublin.<sup>19</sup> She was later, in 1921, conferred with a doctorate in Canon and Civil Law,<sup>20</sup> and remained closely associated with her alma mater as an active committee member of the TCD Association. She became a noted actress and appeared in a number of radio plays and musical events broadcast by RTE, the Irish national broadcaster between the 1920s and 1940s. From a young age she was interested in animals and in 1909 presented the Royal Zoological Society a rocking horse for the use of the chimpanzees in Dublin Zoo. A contemporary newspaper reported that: “The “Chimps” have not yet become accustomed to the inanimate horse, and look on it with much greater awe than living creatures. The youngest chimpanzee will only *touch* it very gingerly, ...”<sup>21</sup> Much later, in the 1960s she served as a committee member of the St Francis Dispensary, a charity in Dublin that cared for animals.<sup>22</sup> Beryl died in 1976, a spinster who until shortly before her death lived in her family home.

Of Albert's siblings in England and Ireland neither his sister nor brother left children. His sister Emily Grace Nichols lived out her life in Liverpool with their brother Ernest Nichols and died in 1930 as a spinster. Ernest married quite late in life at the age of 65 years to a Roberta Cowie and died at the age of 93, his wife Roberta Nichols died in 1951. There is a possibility of Albert's father Arthur Nichols having 10 siblings, this is still under investigation and not confirmed as of yet.

### 3. Nichols as a naturalist and bryozoologist

It was not long after his appointment at the museum that Nichols started to produce publications on Ireland's fauna. The earlier years of his career was a time when there was an increased interest in Ireland's flora and fauna due to the recent *Challenger* cruises and Nichols undertook a great deal of his fieldwork during this time. The late 1880s saw the first three marine biology survey cruises conducted by the Royal Irish Academy which were directed by William Spotswood Green<sup>23</sup> with more expeditions to follow by other groups in the 1890s.<sup>24</sup> A number of these expeditions were undertaken by The Flora and Fauna Committee which was established through the efforts of Edward Perceval Wright. In 1886 Nichols took part in a dredging trip on the *Lord Bandon* off southwest Ireland. This trip led to him writing a publication on Hydrozoa in South-West Ireland.<sup>25</sup> In 1895 Nichols took part in a trip to Rockall and from this trip described the molluscs collected around this isolated rock.<sup>26</sup> Nichols continued to publish papers on Ireland's fauna but it wasn't until a year after his promotion to assistant keeper in 1905 that he published a paper describing the occurrence of the bryozoan *Hypophorella expansa* from Ireland.<sup>27</sup> These specimens had been dredged by Alexander Goodman More (1830-1895) from off Broadhaven, Mayo in July, 1873. In this publication Nichols mentions that he had recently started to study Ireland's bryozoans.

During 1906 and 1907 Nichols seemed to be very active in writing up his research, in addition to his papers on Lambay Island (see below) he published on the tufted duck,<sup>28</sup> shrimp,<sup>29</sup> the Canadian crane,<sup>30</sup> and Irish gephyrean worms.<sup>31</sup> During the spring of 1907 the Dublin Marine Biological Committee was established with Nichols as a member of the committee. It regularly reported their findings in the monthly journal *The Irish Naturalist*.<sup>32</sup> The Dublin Marine Biological Committee was one of a number of organisations which Nichols was involved in. He was also elected as a Member of the Royal Irish Academy (RIA). He served as vice-president of the Dublin Naturalists' Field Club in 1908 but did not become President in 1909 as was the normal successional scheme.<sup>33</sup> Between 1910-1912 he was President of Dublin Microscopical Club.<sup>34</sup>

#### *Lambay Island (1907)*

During the early 1900s there was also an increased interest in the island biota of Ireland. In an initiative started by Robert Lloyd Praeger, Lambay Island, off the coast of Co. Dublin was targeted and the flora and fauna surveyed, as a result of this survey Nichols published

a list of 35 bryozoans which had been collected over 3 days of shore collecting.<sup>35</sup> Each species was accompanied by a short note which may list the location, association with other species or the substrate it was found on. The majority of these specimens are now housed in the Natural History Museum with 22 of the listed samples represented; the whereabouts of the other specimens are unknown to the author at present. Nichols was also responsible for publishing a list of echinoderms from Lambay resulting from the same survey trip.<sup>36</sup>

### *Clare Island Survey (1912)*

Robert Lloyd Praeger was also responsible for organising a biological and scientific survey on Clare Island, Co. Mayo in which Nichols took part from 1909-1911. Praeger had persuaded a large number of naturalists to survey the flora and fauna of both the island and coastal waters and also, the immediate districts on the mainland, and this remains one of the major scientific contributions in twentieth century biological sciences in Ireland.<sup>37</sup> In Nichols' paper on the marine bryozoans (Figure 5) he notes that Clew Bay, Westport Bay and Blacksod Bay were also included.<sup>38</sup> This survey resulted in an enormous amount of papers, with each of the 68 papers dedicated to a different flora or fauna type. Nichols was responsible for the papers on bryozoans (number 53 in the series) and echinoderms (number 57).<sup>39</sup> Specimens collected by Nichols were from both dredged rocks collected from the fisheries research vessel *S.S. Helga* and from shore collecting. He notes that specimens were mainly found on stones and of the sub-order (now order) Cheilostomata. In total Nichols recorded 75 marine Bryozoa from Clare Island with 2 of these being first records for Ireland, *Stomatopora fungia* (now *Tubulipora penicillata*) and *Eucratea chelata* var. *gracilis* (now *Scruparia ambigua*).

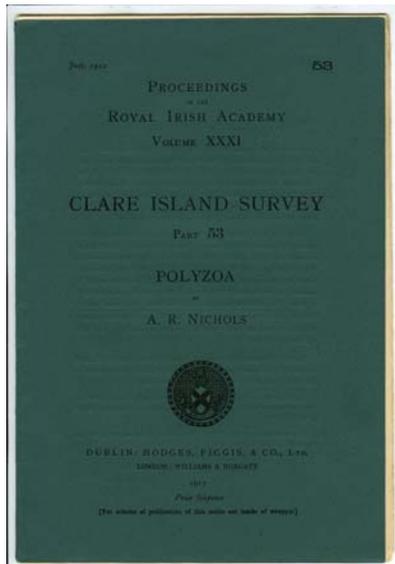
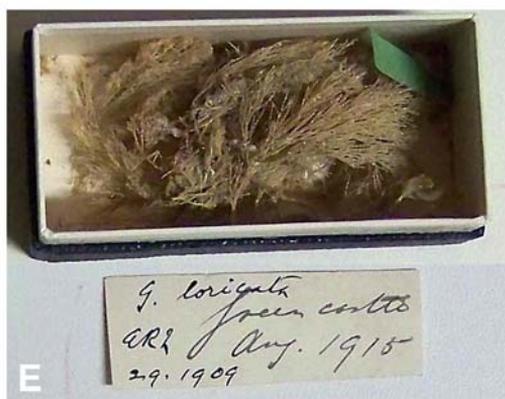
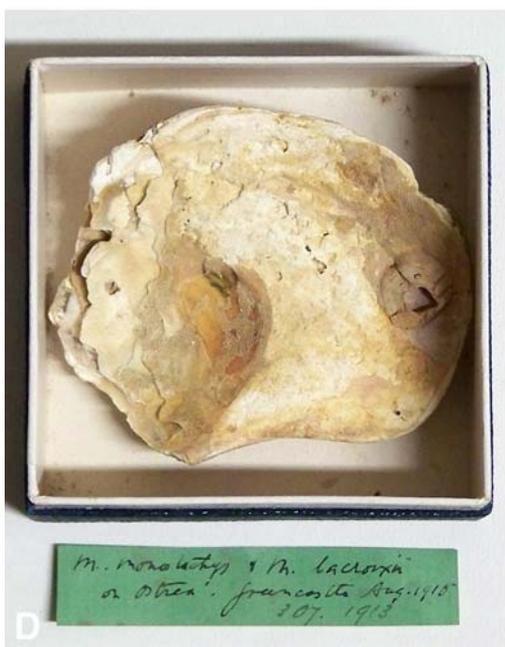
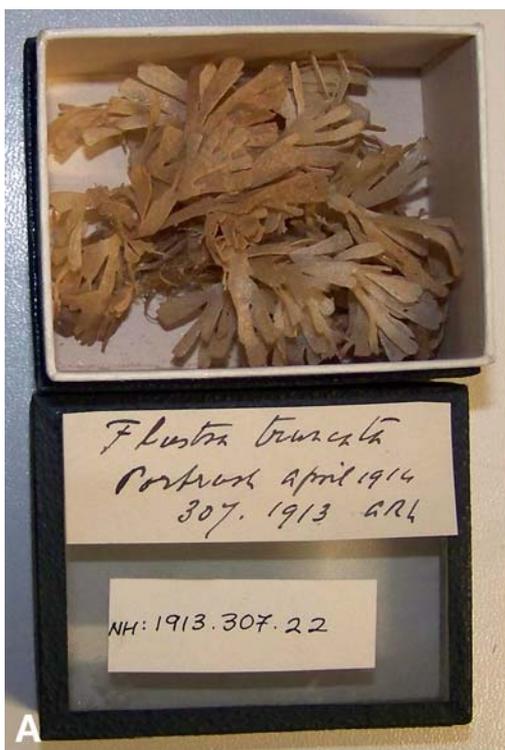


Figure 5 (left). Cover of Nichols' contribution on bryozoans to the Clare Island Survey (1912).

Figure 6 (opposite). Bryozoans collected or examined by A.R. Nichols. These are contained in the collections of the Natural History Museum, Dublin. A. *Flustra truncata* (L.) (= *Securiflustra securifrons* (Pallas, 1766)), Portrush, Co. Antrim, collected 1914 (1913.307.22); B. *Beania mirabilis* Johnston, 1840, Greystones, Co. Wicklow, collected 1914 (1914.218.3), and Co. Mayo, collected 1909 (1911.404.12); C. *Turbicellepora avicularis* (Hincks, 1860), Co. Mayo, collected 1886 (1911.404.1). D. *Membranipora lacroixii* (Audouin, 1826) (= *Conopeum reticulum* (L.)) and *Membranipora monostachys* Busk, 1854 (= *Electra monostachys* (Busk, 1854)), Greencastle, Co. Donegal, collected 1915 (1913-307); E. *Gemellaria loricata* (L.) (= *Eucratea loricata* (L.)), Greencastle, Co. Donegal, collected 1915 (1909-29).



### *Handbook to the City of Dublin and the surrounding district (1908)*

Nichols contributed a number of sections including that on 'Polyzoa' to a handbook published by the British Association for the Advancement of Science (BAAS) to coincide with the meeting in Dublin in 1908.<sup>40</sup> In the article he noted the contribution that Dr Arthur Hill Hassall made to bryozoan research collected in and around Dublin, and discussed the progression of Bryozoa collections conducted to date by him and others. He also listed species which have been recorded from the Dublin district only. Nichols also contributed articles to a similar BAAS guidebook for the Belfast area.<sup>41</sup>

### *'Polyzoa from the coasts of Ireland' (1911)*

In what is undoubtedly the last most comprehensive survey carried out on Irish bryozoans, Nichols published 'Polyzoa from the coasts of Ireland' in 1911.<sup>42</sup> This publication was based on specimens collected by the Fisheries Branch of the Department of Agriculture and Technical Instruction for Ireland. They were collected off the Irish coasts between 1899 and 1907 during both dredging and shore collecting trips. Specimens were collected mainly from encrusted rocks and Nichols notes that more specimens on shells may have increased the species list. The entire species list identified by Nichols totals 101 species with a large percentage of these being found at depths of 50 fathoms (about 90 meters) or more. His paper lists 23 species as first records for Ireland and Nichols provides good location information for each species found and a number of precise species descriptions.

## **4. Collections**

The specimens which were collected or identified by Nichols are now housed mainly at the National History Museum, Dublin (Figure 6). One specimen of *Brettia pellucida* var. *gracilis* that was included in his 1911 publication is currently unlocated in the National History Museum, London and is part of the type material for *Bugulella gracilis* (Nichols, 1911). The majority of the specimens are held in the dry collections with a small number held as wet specimens.

## **5. Acknowledgements**

We thank Nigel Monaghan (National Museum of Ireland, Dublin) for providing photographs from the collections of the National Museum of Ireland. Mary Spencer Jones (Natural History Museum, London) and Sylviane Vaucheret (National Museum of Ireland, Dublin) kindly supplied information on Nichols' collections in the Natural History Museum, Dublin.

## Endnotes

- 1 Ellis, J. 1755. *An essay towards a Natural History of the Corallines*. Printed for the author, London.
- 2 Nichols, A.R. 1911a. Polyzoa from the coasts of Ireland. *Scientific Investigations Fisheries Branch, Ireland, 1910*, 1: 1-37.
- 3 Nichols, A.R. 1912a. Clare Island Survey 53: Polyzoa. *Proceedings of the Royal Irish Academy*, 31 (53): 1-14.
- 4 Wyse Jackson, P.N. 1991. Distribution of Irish marine Bryozoa, together with biographical notes relating to the chief researchers in the group. *Bulletin of the Irish Biogeographical Society* **14** (2), 129-184.
- 5 See Wyse Jackson, note 4.
- 6 Census of England and Wales 1851-1901.
- 7 Venn, J.A. (ed.) 1922-1958. Nichols, Albert Russell. *Alumni Cantabrigienses* (10 volumes). Cambridge University Press.
- 8 A Wrangler is a student who gained a first-class degree in Mathematics from Cambridge. In any one year the highest ranked student is termed the 'Senior Wrangler' and all other first-class students are ranked consecutively.
- 9 For background information on the National Museum of Ireland see Crooke, E. 2000. *Politics, archaeology and the creation of a National Museum of Ireland: an expression of National Life*. Irish Academic Press. For the Natural History Museum see O'Riordan, C.E. n.d. *The Natural History Museum Dublin*. The Stationary Office, Dublin.
- 10 *The Competitor* 1883, p. 253.
- 11 Nichols' success in this examination is remarkable, as there is no evidence of his having an interest in natural history on graduating from Cambridge. It must be assumed that he used at least a portion of the period between September 1882 and January 1883 studying for this examination. It is unknown if he applied for other positions in other professions at the same time.
- 12 Information from <http://churchrecords.irishgenealogy.ie/churchrecords/details/1092640556371> [accessed: 7.5.2013, and marriage certificate.
- 13 Information from marriage certificate.
- 14 Irish census records 1901. 30 Grosvenor Square is a three-story red-brick Victorian house in the north-west corner of the square.
- 15 Praeger, R. Ll. 1949. *Some Irish Naturalists*. Dundalgan Press, Dundalk, p. 136.
- 16 See note 10 about the changing numbering scheme of houses on Grosvenor Square.
- 17 [www.igp-web.co](http://www.igp-web.co)
- 18 Stelfox, A.W. 1933 Albert Russell Nichols, M.A. (Cantab.), M.R.I.A. *Irish Naturalists' Journal* 4: 190-191.
- 19 *Dublin University Calendar* (1918), p. 28.
- 20 *Irish Times*, 21 December 1921, p. 6. She was conferred *Doctores in Utroque Jure* (Doctor in Canon and Civil Law)
- 21 *Sunday Independent*, 31 January 1909, p. 1.
- 22 *Irish Press*, 9 July 1963, p. 7.
- 23 Whyte, N. 1999. *Science, Colonialism and Ireland*. Cork University Press; Moriarty, C. 1995. *The Rev. W.S. Green: explorer and fishery scientist*. Royal Irish Academy, Dublin.
- 24 See O'Riordan, C.E. 1969. *A catalogue of the collection of Irish marine Crustacea in the*

- National Museum of Ireland*. Stationary Office, Dublin: ix-x for a summary of these.
- 25 Nichols, A.R. and Haddon, A.C. 1886. Hydrozoa. In Haddon, A.C., 1st Report on the marine fauna of the south-west of Ireland. *Proceedings of the Royal Irish Academy*, 4 (2): 615.
- 26 Nichols, A.R. 1896. On the mollusca. In Notes on Rockall Island and Bank. *Transactions of the Royal Irish Academy*, 31: 77.
- 27 Nichols, A.R. 1906b. A new Irish Polyzoon *Hypophorella expansa* Ehlers. *Irish Naturalist*, 15: 87.
- 28 Nichols, A.R. 1907c. Tufted duck breeding on Lough Mask. *Irish Naturalist*, 16: 184.
- 29 Nichols, A.R. 1907d. The well-shrimp in Co. Clare. *Irish Naturalist*, 16: 208.
- 30 Nichols, A.R. 1907e. The Canadian crane in Co. Cork. *Irish Naturalist*, 16: 209-211.
- 31 Nichols, A.R. 1907f. Some Irish gephyrean worms. *Irish Naturalist*, 16: 223.
- 32 Colgan, N. 1908. Dublin Marine Biological Committee: general account of dredging operations, 1907. With special notes on the Mollusca. *The Irish Naturalist* 17: 105-114.
- 33 In 1908 for the first time since its establishment in 1886 the Committee of the Dublin Naturalists' Field Club was decided on following an election. However a problem arose in that proper procedures were not followed, and this may have be the reason why Nichols (through no fault of his own) didn't ever serve as President (see Bailey, G.W.D. 1986. History of the Dublin Naturalists' Field Club, pp. 6-29. *Reflections and Recollections*. Dublin Naturalists' Field Club, Dublin).
- 34 Albert Russell Nichols was first recorded as the president of the Dublin Microscopical Club on 9<sup>th</sup> November 1911, *Irish Naturalist*, 20(1): 12 and last recorded on 10<sup>th</sup> April 1912, *Irish Naturalist*, 21(6): 117. This group met monthly during the winter months for "social and microscopic purposes", and was active between 1849 and the mid-1920s (Praeger 1949, see note 15, p. 187).
- 35 Nichols, A.R. 1907a. Contributions to a natural history of Lambay: Polyzoa. *Irish Naturalist*, 16: 82-83.
- 36 Nichols, A.R. 1907b. Contributions to a natural history of Lambay: Echinodermata. *Irish Naturalist*, 16: 84-85.
- 37 Guiry, M.D. 1997. No stone unturned: Robert Lloyd Praeger and the major surveys, pp. 299-307 In Wilson Foster, J. (ed.) *Nature in Ireland: a scientific and cultural history*. Lilliput Press, Dublin; Collins, T. 2009. The Clare Island Survey of 1909-1911: participants, papers and progress, pp. 16-19. In Jones, R. and Steer, M. (eds) *Darwin, Praeger and the Clare Island Surveys*. Royal Irish Academy, Dublin.
- 38 Nichols, note 3. In 1915 he published a listing of bryozoans from Blacksod Bay (Nichols, A.R. 1915a. Polyzoa. In Farran, G.P. (compiler) Results of a Biological Study of Blacksod Bay, Co. Mayo. *Scientific Investigations Fisheries Branch, Ireland, 1914*, 3: 51).
- 39 See Nichols, note 3, and Nichols, A.R. 1912b. Clare Island survey 57: Echinodermata. *Proceedings of the Royal Irish Academy*, 31 (57): 1-10. Prior to this James Edwin Duerden had collected bryozoans extensively around Ireland's coasts, but he took up a position in Jamaica in 1894 (see Wyse Jackson and Maderson, this volume) and the group remained largely understudied until Nichols' interest.
- 40 Nichols, A.R. 1908a. Molluscoidea: Gephyrea, Brachiopoda, Polyzoa. In Cole, G.A.J. and Praeger, R.Ll. (eds) *Handbook to the Dublin District*. Dublin University Press, Dublin, pp. 200-204. Although a contributor to this handbook for the BAAS meeting Nichols did not join the Association nor are any possible scientific contributions to the Dublin meeting recorded in the official report of the meeting, although he may have attended unofficially, and hosted visitors

to the Natural History Museum.

- 41 Nichols, A.R. 1902. Echinoderma (pp. 231-233), Coelenterata (pp. 233-236), Porifera (pp. 237-238). In Bigger, F.J., Praeger, R. Ll. and Vinycomb, J. (eds) *A Guide to Belfast and the counties of Down & Antrim*. M'Caw, Stevenson & Orr, Limited, Belfast.
- 42 Nichols, note 2.

### Appendix 1. Bibliography of Albert Russell Nichols

- Nichols, A.R. and Haddon, A.C. 1886. Hydrozoa. In Haddon, A.C., 1st Report on the marine fauna of the south-west of Ireland. *Proceedings of the Royal Irish Academy*, 4 (2): 615.
- Nichols, A.R. 1893. *Pleurophyllidia loveni* Bergh in Ireland. *Irish Naturalist*, 2: 176
- Nichols, A.R. 1895. The stridulation of *Corixa*. *Irish Naturalist*, 4: 79
- Nichols, A.R. 1896. On the mollusca. In Notes on Rockall Island and Bank. *Transactions of the Royal Irish Academy*, 31: 77.
- Nichols, A.R. 1902. A list of the Echinoderms of Ireland. *Proceedings of the Royal Irish Academy*, 24B: 231-267.
- Nichols, A.R. 1900a. A list of the marine Mollusca of Ireland. *Proceedings of the Royal Irish Academy*, 5 (28): 477-662.
- Nichols, A.R. 1900b. Review: 'The fauna and flora of Valencia Harbour on the west coast of Ireland'. *Irish Naturalist*, 9: 265
- Nichols, A.R. 1902. Echinoderma (pp. 231-233), Coelenterata (pp. 233-236), Porifera (pp. 237-238). In Bigger, F.J., Praeger, R. Ll. and Vinycomb, J. (eds) *A Guide to Belfast and the counties of Down & Antrim*. M'Caw, Stevenson & Orr, Limited, Belfast.
- Nichols, A.R. 1903. A list of Irish echinoderms. *Proceedings of the Royal Irish Academy*, 24 B (5): 231-267.
- Nichols, A.R. 1904a. Exhibits. *Journal of Conchology*, 11: 21.
- Nichols, A.R. 1904b. Review: 'Snipe and woodcock' by L.H. De Vismes Shaw. *Irish Naturalist*, 13: 38
- Nichols, A.R. 1905a. A peculiar case of necrosis in a lapwing's foot. *Irish Naturalist*, 14: 32-33
- Nichols, A.R. 1905b. On some Irish specimens of a large squid, *Sthenoteuthis pteropus* (Steenstrup). *Irish Naturalist*, 14: 54-57
- Nichols, A.R. 1906a. Dotterel in Donegal Bay. *Irish Naturalist*, 15: 45
- Nichols, A.R. 1906b. A new Irish Polyzoon *Hypophorella expansa* Ehlers. *Irish Naturalist*, 15: 87.
- Nichols, A.R. 1906c. Little owl in Ireland. *Irish Naturalist*, 15: 112.
- Nichols, A.R. 1907a. Contributions to a natural history of Lambay: Polyzoa. *Irish Naturalist*, 16: 82-83.
- Nichols, A.R. 1907b. Contributions to a natural history of Lambay: Echinodermata. *Irish Naturalist*, 16: 84-85.
- Nichols, A.R. 1907c. Tufted duck breeding on Lough Mask. *Irish Naturalist*, 16: 184.

- Nichols, A.R. 1907d. The well-shrimp in Co. Clare. *Irish Naturalist*, 16: 208.
- Nichols, A.R. 1907e. The Canadian crane in Co. Cork. *Irish Naturalist*, 16: 209-211.
- Nichols, A.R. 1907f. Some Irish gephyrean worms. *Irish Naturalist*, 16: 223.
- Nichols, A.R. 1908a. Molluscoidea: Gephyrea, Brachiopoda, Polyzoa. In Cole, G.A.J. and Praeger, R. Ll. (eds) *Handbook to the Dublin District*. Dublin University Press, Dublin, pp. 200-204.
- Nichols, A.R. 1908b. Echinodermata. In Cole, G.A.J. and Praeger, R. Ll. (eds) *Handbook to the Dublin District*. Dublin University Press, Dublin, pp. 207-209.
- Nichols, A.R. 1908c. Admiral Sir F.L. McClintock, K.C.B., F.R.S. *Irish Naturalist*, 17: 42-43.
- Nichols, A.R. 1909. Proceedings of Irish Societies: Dublin Microscopical Society. *Irish Naturalist*, 18: 2.
- Nichols, A.R. 1910a. Proceedings of Irish Societies: Dublin Microscopical Society. *Irish Naturalist*, 19: 6.
- Nichols, A.R. 1910b. The well-shrimp in Co. Westmeath. *Irish Naturalist*, 19: 103.
- Nichols, A.R. 1910c. Review: 'A monograph of the British nudibranchiate Mollusca' supplement by C. Eliot. *Irish Naturalist*, 19: 234-236.
- Nichols, A.R. 1911a. Polyzoa from the coasts of Ireland. *Scientific Investigations Fisheries Branch, Ireland, 1910*, 1: 1-37.
- Nichols, A.R. 1911b. American blue-winged teal in Ireland. *Irish Naturalist*, 20: 16.
- Nichols, A.R. 1911c. The Irish dipper, jay and coal titmouse. *Irish Naturalist*, 20: 44-45.
- Nichols, A.R. 1911d. Barnacle goose in Co. Wexford. *Irish Naturalist*, 20: 220.
- Nichols, A.R. 1912a. Clare Island Survey 53: Polyzoa. *Proceedings of the Royal Irish Academy*, 31 (53): 1-14.
- Nichols, A.R. 1912b. Clare Island survey 57: Echinodermata. *Proceedings of the Royal Irish Academy*, 31 (57): 1-10.
- Nichols, A.R. 1912c. Little auks in Co. Dublin. *Irish Naturalist*, 21: 63.
- Nichols, A.R. 1913a. Common eider duck in Co. Wexford. *Irish Naturalist*, 22: 20.
- Nichols, A.R. 1913b. Squacco heron in Co. Mayo. *Irish Naturalist*, 22: 81.
- Nichols, A.R. 1914a. Waxwing in Co. Armagh. *Irish Naturalist*, 23: 104.
- Nichols, A.R. 1914b. Long-finned tunny on shore of Achill Island, Co. Mayo. *Irish Naturalist*, 23: 227.
- Nichols, A.R. 1915a. Polyzoa. In Farran, G.P. (compiler) Results of a Biological Study of Blacksod Bay, Co. Mayo. *Scientific Investigations Fisheries Branch, Ireland, 1914*, 3: 51.
- Nichols, A.R. 1915b. Floating barnacles on the coast of Antrim. *Irish Naturalist*, 24: 189-190.
- Nichols, A.R. 1916a. (Velvet scoter). *Irish Naturalist*, 25: 31.
- Nichols, A.R. 1916b. List of the late Robert Warren's more important writings. *Irish Naturalist*, 25: 41-44.
- Nichols, A.R. (ed). 1920. *Catalogue of the Birds in the Barrington Collection*. National Museum, Dublin. John Falconer, Dublin.

- Ussher, R.J. and Nichols, A.R. 1924. *A list of Irish Birds, showing the species contained in the National Collection*. Second edition. Stationary Office, Dublin.
- Colgan, N. (edited and with notes by Nichols, A.R.) 1930. The marine mollusca of the shores and shallow waters of County Dublin. *Proceedings of the Royal Irish Academy*, 39: 391-424.

## Appendix 2. Timeline of Albert Russell Nichols' life

- January 1859:** (0 yrs old) Albert Russell Nichols was born in Stowmarket, Suffolk, England to father Arthur Nichols and mother Sarah.
- 9 December 1859:** (11-12 months old) A.R. Nichols was christened in Stowmarket, Suffolk, England.
- January 1878:** (19 yrs old) A. R Nichols went to Clare College to study maths.
- 1882:** (23 yrs old) Graduated Clare College with 1<sup>st</sup> class degree.
- 23 January 1883;** (24 yrs old) Sat examination for appointment to Assistant Naturalist in the Natural History section of the Museum of Science and Art (now National Museum of Ireland).
- March 1883:** (24 yrs old) Began position in museum.
- 1886:** (27 yrs old) Took part in *Lord Bandon* dredging trip off southwest Ireland (Nichols 1886).
- 20 July 1892:** (33 yrs old) Married Letitia Anne Perry.
- 1895:** (36 yrs old) Trip to Rockall. Described the molluscs in Nichols, 1896.
- 1896:** (37 yrs old) Daughter Beryl Nichols born.
- 1901:** (42 yrs old) 1901 Irish census has Nichols living at 30 Grosvenor Square, Rathmines, Dublin with his wife and child Beryl, along with one nurse and a cook. A visitor Mary Perry (probably his wife's aunt) was also present on the night of the census.
- May 1905:** (46 yrs old) Promoted to Assistant Keeper.
- Easter 1906:** (47 yrs old) Spent time on Lambay Island and published lists of bryozoans and echinoderms (Nichols 1907a, b).
- 1906:** (47 yrs old) Nichols publishes note on *Hypophorella expansa*.
- 1907:** (48 yrs old) Dublin Marine Biological Committee established. Nichols was a committee member.
- 1908:** (49 yrs old) Served as Vice-President of the Dublin Naturalists' Field Club.
- 1908:** (49 yrs old) Nichols publishes section on Bryozoa in Dublin Handbook.
- 1910-1912:** (51-53 yrs old) President of Dublin Microscopical Club.
- 1911:** (52 yrs old) 1911 Irish census has Albert, his wife and daughter and one general servant living at 30 Grosvenor Square, Rathmines, Dublin.
- 1911:** (52 yrs old) Clare Island Survey work. Nichols publishes on bryozoans (1912a) and echinoderms (1912b).
- 1911:** (52 yrs old) Irish coastline survey published (Nichols 1911)

**1915:** (56 yrs old) Blacksod Bay survey published (Nichols 1915)

**August 1921:** (62 yrs old) Succeeded Robert Francis Scharff as Keeper of Natural History.

**29 January 1924:** (65 yrs old) Reached statutory retirement age.

**21 February 1933:** (75 yrs old) A. R. Russell dies and is buried at Mount Jerome Cemetery, Harold's Cross, Dublin.