

EARTH SCIENCES HISTORY GROUP

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Tom Vallance Medal 2021 awarded to Barry Cooper

By now, if you have read the latest edition of TAG, you will be aware that the Tom Vallance Medal for 2021 was awarded to Professor Barry Cooper of the University of South Australia. He was awarded the medal in an online ceremony at the recent virtual Australian Earth Sciences Convention. The article in TAG contains a detailed account of Barry's career, concentrating particularly on his contributions to Earth Science History, and is reproduced here along with a list of Barry's significant publications.

Barry will be awarded his medal at a forthcoming meeting of the South Australian Division of GSA along with other South Australian medal winners.

I am sure all ESHG members will join with the ESHG Committee in congratulating Barry on this well-deserved award.

THE CONTRIBUTION OF BARRY COOPER TO STUDIES ON THE HISTORY OF GEOLOGY

Introduction

Barry was born in 1948 and raised in Melbourne and has been interested in history and geology since he was a child. He was introduced to both subjects at school and his parents supported this interest.

By Grade 4, Barry was fascinated by the voyages of explorers. By Year 9 he was being called "Mr History" by fellow students after achieving 100% in a history exam.

By Year 9, his best friend also encouraged him to join the "Hawthorn Junior Field Naturalist Club" based in Melbourne's suburb of Hawthorn. Within a short time, he was founding and editing the Club's Newsletter "The Junior Naturalist" and writing articles on rocks and fossils. When the Club celebrated its 25th birthday in 1968, Barry wrote an article on its history and had it published in "The Victorian Naturalist". Around the same time, Barry was appointed "Club Recorder" or Archivist. His historical records from this period are still kept today by the Field Naturalists Club of Victoria (FNCV).

In Year 12 Barry took the opportunity of studying geology in his final year at school. He gained First Class Honours and entered the University of Melbourne in 1967 graduating BSc (Hons) with First Class Honours in 1970.

On completing a Master's Degree in palaeontology he travelled to the United States where he graduated PhD at "The Ohio State University" in 1974 with research dealing with fossil conodonts.

On returning to Australia, he was appointed a palaeontologist with the Geological Survey of South Australia in 1975. He remained attached to the Geological Survey and in other various SA Government roles until retirement in 2009.

<u>Early years – South Australia</u>

In subsequent years, as well as geological investigations, Barry became active in professional Societies notably as Secretary of the Geological Society of Australia (SA Division), 1975-1978 as well as Secretary of the Royal Society of South Australia 1977-1978. His childhood experience in administration with the Hawthorn Junior Field Naturalists Club proved invaluable.

In the early 1980s, he became aware that celebrations were being planned to remember the bicentenary of European settlement in Australia 1988 and the 150th anniversary (sesquicentenary) of South Australia in 1986.

Consequently, Barry wrote a public letter in January 1983 to "The Australian Geologist", the national newsletter of Geological Society of Australia soliciting interest in establishing a new special interest group dealing with the history of geology.

The numerical response to this letter from around Australia was remarkable. With the production of the first newsletter in November 1983, more than 50 GSA members had positively responded. Quickly Barry was introduced to Tom Vallance and his links as Vice President Australasia to the "International Commission on the History of Geological Sciences" (INHIGEO). Also based at the University of Sydney was David Branagan.

The "Earth Sciences History Group" (ESHG) was formally established during the 7th Australian Geological Convention in August 1984. Barry became founding Chair of the new Group (1983-1986)

Barry also developed a good relationship with Tom Vallance who was readily accessible by telephone an excellent postal correspondence on all historical subjects and willing to accommodate Barry on visits to Sydney. Barry had no hesitation in recommending Tom as a keynote speaker for the bicentenary Australian Geological Convention in 1988.

Historical investigations and oral history with the Geological Survey

Quite unexpectedly, the letter to "The Australian Geologist" also led to a special request that Barry undertake historical investigations for the Geological Survey to support a sesquicentenary project that would consider the historical development of geology in South Australia over 150 years since 1836.

This project, which had been initiated by the Royal Society of South Australia, dealt with all natural sciences and was eventually published for South Australia 150th anniversary under the title, "Ideas and Endeavours -The Natural Sciences in South Australia"

With David Corbett working on the 19th century history of geology, Barry was asked to focus on 20th century history of geology whilst also supporting David's work.

Most notably as part of the joint investigation Barry arranged oral interviews of several eminent South Australian geologists. Prominent interviewees included Sir Ben Dickinson, Reg Sprigg, Lee Parkin and Eric Rudd.

Records of these interviews have since been stored in the oral history collection of the State Library of South Australia.

Earth Sciences History Group / Australian volumes of "Earth Sciences History"

Following its establishment ESHG, with Barry as Chair, actively promoted studies in the history of geology. Associated with ESHG Barry organized history sessions and posters at several geological conferences as follows:

- Adelaide Geosyncline Conference 1983
- 7th Australian Geological Convention, Sydney, August 1984
- 8th Australian Geological Convention, Adelaide, February 1986
- 12th International Sedimentological Congress, Canberra, August 1986

Most notably the 12th International Sedimentological Congress was also sponsored by INHIGEO following the recommendation of Tom Vallance and the History of Earth Sciences Society who provided eminent geologist/historian G. Friedman as international convenor.

The success of ESHG at conferences also attracted international interest and Barry was approached to organize a special Australia and New Zealand issue for the newly established international Journal "Earth Sciences History". All ESHG members were invited to participate, and the success of the response was such that two Australian volumes of "Earth Sciences History were ultimately published. Barry was primary editor but following the successful response Secretary Colin Gatehouse became the second editor.

"Rock Me Hard.... Rock Me Soft"

When the GSA reached its 40th anniversary, GSA President Peter Legge was determined to have a volume published on the history of the Society. Not surprising, Barry and David Branagan were chosen to compile and

write the volume, which was titled "Rock Me Hard.... Rock Me Soft...: A History of the Geological Society of Australia" and published in 1994.

Barry organized that every active GSA section prepared its own contribution, but he still had several sections to research and write personally. Barry also spoke on GSA history when INHIGEO held its conference in Sydney in 1994.

New GSA members received a free copy of the volume for several years after publication. A Special Historical Supplement was also prepared by Barry for the GSA 50th anniversary in 2002.

HSITG

During the mid to late 1990s, Barry became heavily committed to administrative responsibilities associated with mineral industry development. His research into history and geology declined but did not disappear.

He became involved with the local "History of Science, Ideas and Technology Group" (HSITG) which was established in Adelaide becoming its Vice President and a regular historical speaker on geology.

In 2000 he organised a conference in Adelaide involving ESHG and HSITG entitled "Geology over the past millennium". The meeting concluded with a delightful historical field trip to Hallett Cove.

Heritage Stone

Mineral industry development also introduced Barry to the building stone industry and its historical development as a heritage stone. In 2002, INHIGEO organised a conference with a heritage stone theme in Portugal. Barry presented a paper with a South Australian stone focus at this meeting.

Barry's heritage stone involvement expanded rapidly from 2007. Barry encouraged the International Union of Geological Sciences (IUGS) in establishing a "Heritage Stone Task Group" (HSTG) for the period 2012-2016, which formally recognised a "Global Heritage Stone Resource". Barry was founder and Secretary General of HSTG.

Portland Stone from the United Kingdom was the first to be recognised in 2015 as a "Global Heritage Stone Resource" whilst Sydney sandstone and Victorian Bluestone are likely to be the first Australian stones to be so designated following publication of citation papers.

In promoting HSTG (2008-2016), Barry participated through attendance and formal presentations at many international conferences including:

- International Geological Congress, Oslo, Norway 2008
- International Association for Engineering Geology & the Environment, Auckland New Zealand, 2009
- Global Stone Congress, Alicante, Spain, 2010
- International Geological Congress, Brisbane, Australia, 2012
- Global Stone Congress, Alentejo, Portugal, 2012
- European Geoscience Union conferences, Vienna, Austria 2013, 2015
- International Association for Engineering Geology and the Environment, Turin, Italy 2014
- Annual General Meeting, Geological Society of America, Baltimore, USA, 2015
- International Geological Congress, Cape Town, South Africa 2016

In supporting these meetings Barry also facilitated definitive reports in the IUGS journal: *Episodes* with the production of model citation papers. An HSTG website was also established, and a volume of papers was organised for publication by the Geological Society of London in 2015.

INHIGEO revitalised

In Barry's latter years at the Geological Survey, a revitalization of historical research took place with an initial focus on the history of Cambrian investigations in collaboration with Jim Jago as well as on the history of uranium investigations.

The history of uranium in South Australia was encouraged at the Geological Survey and it also excited much interest from the local mineral explorers. The latter were delighted for Barry to speak at the International Uranium Conference in Adelaide in June 2008 as well as and at the International Geological Congress in Oslo, Norway in August 2008.

His expanding historical research led to the suggestion from David Oldroyd, a previous Secretary General, that with retirement approaching, Barry may also be interested in the role. This led him to re-establish his interest in organising professional groups through holding the post of INHIGEO Sectary General 2008-2016 and INHIGEO President (2016-2020). Barry felt honoured to be considered and even obligated to become more involved.

With Barry's appointment as INHIGEO Secretary General there was much to work on even though the Commission was well organised by Barry's predecessors.

Achievements during his term of Secretary General and President included

- Establishment of the first INHIGEO website in 2009
- Creation of a quarterly Circular
- Appointment of a separate post of Editor in 2012 with associated transformation of the INHIGEO Newsletter into the INHIGEO Annual Record in 2013
- Organisation of successful Annual conferences, in particular the 50th Anniversary conference in 2017 in Armenia.
- Following an ad hoc review by IUGS, revised Terms of Reference were prepared which were approved by IUGS. Changes included:
 - o Removal of the 11 members per country rule
 - Introduction of Associate Membership and Affiliated Associations
 - Establishment of the "Vladimir V. Tikhomirov History of Geology Award" with an obsidian medallion.

With his term ending in 2020, Barry is currently Past-President of INHIGEO.

BARRY'S REPLY

In his reply, published in TAG, Barry expressed how greatly honoured he was to receive the award and his gratitude to those who supported him for it. He pointed out that the medal not only recognised (what he referred to modestly as) his humble contributions to the history of geology in Australia, but also acknowledged the pioneering historical research of Tom Vallance and many others in the ESHG. He related what had motivated him to first suggest in TAG that a Specialist Group dedicated to the history of geology should be established. He acknowledged how Tom Vallance and David Branagan had already cultivated an interest in the subject, and that without Tom's initial commitment over many years, much of his involvement would not have taken place. Tom was a foundation member of INHIGEO and pressed Barry to join him as the second Australian member of INHIGEO, which led on to Barry's deep involvement in the organisation in recent years as related above. Barry concluded by commenting that a knowledge of history is a natural study of interest in any well-defined subject or group of people, but that geology is a discipline whose focus is truly historical.

PUBLICATIONS DEALING WITH THE HISTORY OF GEOLOGY BY BARRY J.COOPER

(up to and including June 2020)

Editing of History of Geology books and journals

- 1. 1986. Earth Sciences History 5(1) Special Australian and New Zealand issue. (Co—edited with C.G. Gatehouse). 103pp.
- 2. 1987. Special Australian Issue, Earth Sciences History 6 (2) (Co—Edited with C.G. Gatehouse) 72pp.
- 3. 1994. "Rock Me Hard Rock Me Soft: A History of the Geological Society of Australia. Geological Society of Australia 194pp (Compiled and Co-Edited with D.F. Branagan).
- 4. 2015. Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones Geological; Society of London Special Publication 407 (Co-Edited with D. Pereira, B.R. Marker, S. Kramar & B.E. Schouenborg), 275pp.

Abstracts, Obituaries, Book Reviews and Peer-reviewed publications

- 1983. Historical Perspective. In: Symposium Adelaide Geosyncline—Sedimentary Environments and Tectonic settings. Abst. Geol. Soc. Aust. 10: 1—2.
- 2. 1984. Historical perspective: Australia's first geology book. Q. Geol. Notes. Geol. Survey. S. Aust. 90: 2.
- 3. 1984. South Australian Geology 1940—1970: A Preliminary Review. Abst. Geol. Soc. Aust. 12: 113—114.
- 4. 1984. Australian Geology: Some lessons from history. Abst. Geol. Soc. Aust. 12: 112—113.
- 5. 1984. Historical Perspective: Early Geophysical investigations in South Australia. Q. Geol. Notes, Geol. Sury. S. Aust. 91: 2—

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- 6. 1984.Historical Perspective: The search for coal before 1851. Q. Geol Notes. Geol. Surv. S. Aust. 92: 2—3.
- 7. 1985. History of Earth Sciences (Summary of development since 1975) In: Australian Geoscience 1984 Rep. Bur. Mineral Resour. Geol. Geophys. Aust. 268: 15.
- 8. 1985. Book Review: B. O'Neil, In Search of Mineral Wealth, The South Australian Geological Survey to 1944 (S. Aust. Mines & Energy, 1982). <u>Hist. Rec. Aust. Sciences</u> 6: 307—309.
- 9. 1986. Johannes Menge (1788-1852) South Australia's first geologist. <u>Abst. geol. Soc. Aust</u>. 15: 225 (with D. Corbett & P. Rogers).
- 10. 1986. A summary history of geology in South Australia. J. Mineralog. Soc. S. Aust. 6: 80-111.
- 11. 1986. Walter Howchin and the recognition of Late Proterozoic glaciation. <u>Abstract 12th International Sedimentolocrical Congress</u> p. 69.
- 12. 1986. Geology. In: Ideas and Endeavours. Roy. Soc. S. Aust. p. 29—68 and 251—277. (with D.W.P. Corbett & P. Mooney)
- 13. 1986. Mineralogy in 19th century South Australia. 9th Annual Seminar of the Mineralogical Societies of South Australia, Victoria and New South Wales. Abstract. p. 5.
- 14. 1987. Early Geological Mapping in South Australia. The Globe. 27: 11—33.
- 15. 1987. Historical Perspective: The Kyancutta Museum. Q. Geol. Notes. Geol. Surv. S. Aust. 103: 2—3.
- 16. 1988. Geological Surveys. In: <u>The Australian Encyclopaedia</u> (5th Edition) Vol 4 pp.1385-1386. Australian Geographic Pty Ltd. (with I.R. McLeod and E.P. Shelly).
- 17. 1988. Minerals in Australia. In: <u>The Australian Encyclopaedia</u> (5th Edition) Vol 5 pp.1955-1959. Australian Geographic Pty Ltd. (with R.O. Chalmers).
- 18. 1992. The Etheridge/Brown correspondence: An insight into South Australian geology in the late nineteenth century. Abstracts Geol. Soc. Aust. 32: 334-335.
- 19. 1992. Historical Perspective: The role of Sir Thomas Playford in petroleum exploration (1958 1965). <u>Quart. Geol. Notes.</u> <u>Geol. Surv. S. Aust.</u> 121 : 20-23.
- 20. 1994. The Geological Society of Australia. <u>In D.F. Branagan and G.H. McNally (Eds) Useful and Curious Geological Enquiries</u> beyond the World INHIGEO pp 275-285.
- 21. 1994. The Geology of South Australia Chapter 1 Introduction. <u>Bull. Geol Surv. S. Aust.</u> 54:1-8 (compiled by A.J. Parker with contributors including BJ Cooper)
- 22. 1995. Obituaries: Reg Sprigg (1919-1994 A legend in his own lifetime. The Australian Geologist 94:73-74 (also reprinted in a slightly reduced and revised version in Mineral Industries Quarterly South Australia)
- 23. 1995. Obituaries: Nelly Hooper Ludbrook (1907-1995) <u>The Australian Geologist</u> 95:48-49 (with R.K. Johns) (also reprinted in a slightly reduced and revised version in <u>Mineral Industries Quarterly South Australia</u>).
- 24. 1995. Some more GSA prehistory. The Australian Geologist 96:15-16.
- 25. 1995. Walter Howchin Geology's unsung hero. News and Views, City of Marion 25 (Autumn 1995): 13.
- 26. 2000. Perspective in geology from the end of the Millennium: Changes in the past century in South Australia. <u>ESHG Newsletter</u> 29: 8-11
- 27. 2001. The Use of Stone in South Australia. <u>Programme & Abstracts, Meeting International Commission on the History of the Geological Sciences</u>, Portugal 2001 2pp. (Reprinted in <u>ESHG Newsletter</u> 30: 6-8)
- 28. 2002. The GSA is 50 years old. Supplement to The Australian Geologist 123 (30 June 2002) 12pp.
- 29. 2002. Book Review: "Records and Reminiscences Geosciences at the University of Adelaide, 1875-2000" compiled by John Cooper <u>ESHG Newsletter</u> 30: 12-13.
- 30. 2002. The Geological Society of Australia is fifty years old. Episodes 25(3) 209-212.
- 31. 2005 Early Geological Maps of South Australia. Bulletin Field Geology Club of South Australia 34 (11): 8-9.
- 32. 2006 History of Cambrian studies in South Australia (1836-1990) with particular reference to the biostratigraphy. <u>Abstracts Geological Society of South Australia</u> 84: 8-9. (with J.B.Jago)
- 33. 2007 History of Cambrian Investigations in South Australia with particular reference to the biostratigraphy. <u>Memoir Association of Australasian Palaeontologists 33: 1-27. (with J.B.Jago)</u>
- 34. 2007 Mawson's earliest (1906) report on the geology of the Flinders Ranges <u>Trans. R. Soc. S. Aust.</u> 132: 169-177 (with J.B. Jago).

- 35. 2007 Sedimentary Uranium: How it was first discovered in the Frome Embayment. <u>Abstracts Geological Society of</u> Australia 87: 5-6.
- 36. 2007 Early Understanding of the Cambrian in South Australia. <u>Special Publication, Earth Sciences History Group, Geological Society of Australia</u> 1: 20-25 (with J.B. Jago)
- 37. 2008 An historical glimpse of Uranium Exploration in Australia. <u>Final Program/ Abstracts Volume AusIMM International Uranium Conference Adelaide 18-19 June 2008</u> p. 67-68.
- 38. 2008 Ross Grasso and Minoil Services, Geological Consultants 1962-1989 <u>Earth Sciences History Group Newsletter</u> 38: 11-15 (in collaboration with Ross Grasso)
- 39. 2008 Sedimentary Uranium in the Frome Embayment South Australia: A case history of the first discoveries, 1967-1974. Abstracts Geological Society of Australia 89: 73-74
- 40. 2008 Sedimentary Uranium in South Australia: A history of early exploration and discovery in the Frome Embayment. Applied Earth Sciences (Trans. Inst. Min. Metall. B) 117 (2): 37-50.
- 41. 2008 Geological investigations of uranium in South Australia through the 20th century. <u>Abstracts 33rd International</u> Geological Congress, Oslo, Norway, 6-14 August 2008
- 42. 2008 Recognition of a "World Heritage Stone Resource": A proposal. <u>Abstracts 33rd International Geological Congress,</u> Oslo, Norway, 6-14 August 2008 (compact disc reference only).
- 43. 2008 Geologists' Travel: A Review of "Four Centuries of Geological Travel" Geological Society of London. Special Publication 287. Metascience 17:517-521
- 44. 2008 Classic Paper: C.H. Pander's (1856) Introduction to Conodonts. Episodes 31: 431-436 (with W.C. Sweet).
- 45. 2008 Book Review Rock Star The story of Reg Sprigg an outback legend by Kristin Weidenbach. <u>MESA Journal</u>, Quarterly Journal of Primary Industries and Resources South Australia 51:38
- 46. 2009 An Extraordinary Australian Geologist INHIGEO Newsletter 41: 55-56.
- 47. 2009. The Discovery of the Emu Bay Shale Lagerstätte, a Burgess Shale-type biota from Kangaroo Island, South Australia. Program and Abstracts, Symposium 34: Fossils and Fuel, International Commission on the History of Geological Sciences, Calgary, Canada, 10-14 August 2009 pp. 28-30 (with J.B. Jago)
- 48. 2009. Arthur Wade and his 1915 report on petroleum prospectivity in South Australia. <u>Program and Abstracts, Symposium</u> 34: Fossils and Fuel, International Commission on the History of Geological Sciences, Calgary, Canada, 10-14 August 2009 pp.20-22.
- 49. 2009. Jenny Barnett 25 August 1947- 7 February 2009 Victorian Naturalist 126: 185-186.
- 50. 2009 Bragg, Mawson and Brown and the early uranium discoveries in South Australia. <u>Transactions of the Royal Society of South Australia</u>, 133 (2): 199-220.
- 51. 2009. Reg Sprigg and the Ediacara fauna: an extraordinary discovery <u>The Australian Geologist</u> 153: 18 (with David Oldroyd, Susan Turner and Pat Vickers-Rich).
- 52. 2010. Snowball Earth: The Early History from South Australia. Earth Sciences History 29:121-145.
- 53. 2010. Toward establishing a 'Global Heritage Stone Resource' designation. Episodes 33: 38-41.
- 54. 2010. Recognising a 'Global Heritage Stone Resource'. Extended Abstracts to the Proceedings of the 11th Congress of the IAEG Auckland, New Zealand 5-10 September 2010 page 499.
- 55. 2010. Book Review. R. Keith Johns, "A mirage in the desert? The discovery, evaluation and development of the Olympic Dam ore body at Roxby Downs, South Australia, 1975-1988". <u>Journal of Australasian Mining History</u> 8: 188-190.
- 56. 2011. Christiania (Chriss) McInnes, 5 January 1910- 7 September 2010. <u>Victorian Naturalist</u> 127(1): 22-24 (with A.V. Houghton).
- 57. 2011. The Emu Bay Shale lagerstätte: a history of investigations. <u>Australian Journal of Earth Sciences</u> 58: 235-241 (with J.B. Jago).
- 58. 2011. Building stone as part of a World Heritage site: "Piedra Pajarilla" Granite and the city of Salamanca, Spain. Geophysical Research Abstracts 13, EGU General Assembly 2011 (with D. Pereira).
- 59. 2011 Extraction and use of building and roofing stone Some sustainability issues <u>Geophysical Research Abstracts 13, EGU</u> <u>General Assembly 2011</u> (with B. Marker).
- 60. 2011. Geologists and the Burra Copper Boom, South Australia, 1845-1851. In: Ortiz, J.E., Puche, O., Rábano, I. and Mazadiego, L.F. (editors) <u>History of Research in Mineral Resources. Cuadernos del Museo Geominero, 13. Instituto Geológico y Mindero de España, Madrid pp.193-200. (Abstract published in INHIGEO Annual Conference Madrid Almadén–Iberian Pyritic Belt 1-14 July 2010 Book of Abstracts page 45-46).</u>

- 61. 2011. Book Review: Pioneering geology in remote Western Australia "The Forgotten Explorers: pioneer geologists of Western Australia 1826-1926, by John Glover with Jenny Bevan INHIGEO Newsletter 43: 74-76.
- 62. 2011. Reg Sprigg and the 1947 discovery of submarine canyons in Australian waters. INHIGEO 2011 Japan conference, 2-10 August 2011, Aichi University, Toyohashi, Japan, Abstract. pp. 38-41.
- 63. 2011. Johannes Menge (1788-1852): Abstracts: The South Australian Company's Mine and Quarry and Geologist.

 <u>Australian Mining History Association, Annual Conference, Hahndorf, South Australia, 12-18 September 2011</u>. p.23 (with B. O'Neil)
- 64. 2011 Book Review Natural Stone Resources for Historical Monuments. R. Přikryl and Á. Török (Eds). <u>The Australian Geologist</u> 161: 42 (December 2011)
- 65. 2012. The 1947 Discovery of Submarine Canyons in Australian Waters. In: Kato, H., Inomata, M. and Suzuki, Y. (Editors) "Visual Images and Geological Concepts: Proceedings of the INHIGEO 2011 Japan" pp 115-120.
- 66. 2012. Towards international designation of a heritage dimension stone. <u>Proceedings of the Global Stone Congress 2012, Portugal</u>, Alentejo (Borba) Wednesday 18 July Estremoz, Teatro Bernardim Ribeiro / Bernardim Ribeiro Theatre PO30 (with B. Marker and I. Thomas) 8 pages.
- 67. 2012. Ralph Tate (1840-1901): Pioneering Australian Geologist. Abstract #1336 34th International Geological Congress, Brisbane Australia, August 2012 (with B. Kidman) (Reprinted with commentary in <u>Geological Society of Australia, Earth Sciences History Group Newsletter 43: 16-17, December 2012).</u>
- 68. 2012. International designation of heritage dimension stones: the examples of Portland stone and Welsh slate from the United Kingdom. Abstract #3029, 34th International Geological Congress, Brisbane Australia, August 2012 (with B. Marker)
- 69. 2012. Using geology to conserve architectural stone heritage: the example of Salamanca, Spain. <u>Abstract #3030, 34th International Geological Congress, Brisbane Australia, August 2012</u>. (with D. Pereira Gomez)
- 70. 2012. The historical use and trading of building stone in South Australia, and support for the associated industry. South Australian Geographical Journal 110: 5-29.
- 71. 2012.The architectonic heritage: the best way of preserving it. <u>Abstracts 'Technoheritage' International Congress on Science and Technology for the Conservation of Cultural Heritage October, 2012, Santiago de Compostela, Spain.</u> (with D. Pereira & J.M. Batuille)
- 72. 2013. Towards international designation of a heritage dimension stone. <u>Key Engineering Materials</u> 548 (2013): 329-335 (with B. Marker and I. Thomas) (reissue of Paper 155)
- 73. 2013. Obituaries: Silvia Whitehead 1921-2012. The Australian Geologist 166: 50 (with R.K. Johns and C.R. Dalgarno).
- 74. 2013. Establishment of the "Heritage Stone Task Group" (HSTG). <u>Episodes</u> 36: 8-10 (March 2013) (with B.R. Marker, D. Pereira & B. Schouenborg)
- 75. 2013. The "Global Heritage Stone Resource": Past, Present and Future. <u>Geophysical Research Abstracts Vol. 15</u>, EGU2013-1410-2, 2013, EGU General Assembly 2013
- 76. 2013. Portland Stone: A nomination for "Global Heritage Stone Resource" from the United Kingdom. <u>Episodes</u> 36: 221-226. (with T. Hughes, G.K. Lott & M.J. Poultney)
- 77. 2014. Building stone as a part of a World Heritage Site: 'Piedra Pajarilla' Granite and the city of Salamanca, Spain. In: Cassar, J., Winter, M. G., Marker, B. R., Walton, N. R. G., Entwisle, D. C., Bromhead, E. N. & Smith, J. W. N. (eds) Stone in Historic Buildings: Characterization and Performance *Geological Society of London, Special Publication* 391: 7-16 First published online October 14, 2013; http://dx.doi.org/10.1144/SP391.3 (with D. Pereira).
- 78. 2014. The 'Global Heritage Stone Resource' designation: past. present and future. In Pereira, D., Marker, B.R., Kramar, S., Cooper, B.J. & Schouenborg, B.E. (Editors) *Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones* Geological; Society of London Special Publication 407: 11-20
- 79. 2014. Podpeč Limestone: a heritage stone from Slovenia. In Pereira, D., Marker, B.R., Kramar, S., Cooper, B.J. & Schouenborg, B.E. (Editors) Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones Geological; Society of London Special Publication 407: 219-231 (with S. Kramar, M. Bedjanič, B. Mirtič, A. Mladenović, B. Rožič, D. Skaberne, M. Gutman, N. Zupančič)
- 80. 2014. Sydney sandstone: Heritage Stone from Australia (with S. Kramar) Geophysical Research Abstracts Vol., EGU General Assembly 2013
- 81. 2014.The Dala (Älvdalen) Porphyries from Sweden (with A. Wikström, D Pereira and T Lundqvist) Geophysical Research Abstracts Vol., EGU General Assembly 2013
- 82. 2014. Book Reviews: "The Great Fossil Enigma: The Search for the Conodont Animal", Simon J. Knell. Indiana University Press 413pp (2013). <u>Earth Sciences History</u> 33(1): 179-181.

- 83. 2014. Changing Reflections on the History of Geology: An Australian Perspective. <u>Program, 39th INHIGEO Symposium,</u> Asilomar Conference Grounds, Pacific Grove,, California, USA, 6-10 July 2014, pp 38.
- 84. 2015. Some examples of heritage stones from Australia. In: Lollino, G. et al. (eds.), Engineering Geology for Society and Territory Volume 5 (Papers published for the 12th international IAEG conference Torino, Italy. September 2014), p.213-218.
- 85. 2014. A Global Heritage Stone Province in association with the UNESCO World Heritage City of Salamanca, Spain. In: Lollino, G. et al. (eds.), Engineering Geology for Society and Territory Volume 5 (Papers published for the 12th international IAEG conference Torino, Italy. September 2014) (with D. Pereira).
- 86. 2014. Hierarchical Approaches toward safeguarding heritage building stone resources in England and Wales In: Lollino, G. et al. (eds.), Engineering Geology for Society and Territory Volume 5 (Papers published for the 12th international IAEG conference Torino, Italy. September 2014 (with I. Thomas)
- 87. 2015. Ornamental Stones and Gemstones: The limits of heritage stone designation: The case for and against Australian Precious Opal. Geophysical Research Abstracts. Vol. 17, EGU2015-1291, 2015. EGU General Assembly 2015
- 88. 2015 Book Review: Hofmann, T., Blöschl, G., Lammerhuber, L. Piller, W.E. and Şengör, A.M.C. 2014. The Face of the Earth: The Legacy of Eduard Suess. L Edition Lammerhuber 104 pp., 60 images. INHIGEO Annual Record 47: 96
- 89. 2015. Geologists and the development of opal mining in Australia. 40th INHIGEO Symposium, Chinese University of Geosciences, Beijing 2015. Collections of Abstracts of papers, p.4.
- 90. 2015 Sydney sandstone: Proposed 'Global Heritage Stone Resource' from Australia. <u>Episodes</u> 38 (2):124-131 (With D.F. Branagan, B. Franklin, H. Ray)
- 91. 2015 The Dala (Älvaden) porphyries from Sweden. Episodes 38 (2): 79-84 (with A. Wikstrom, D. Pereira, T. Lundqvist)
- 92. 2015 The 25th International Geological Congress, Sydney, Australia (1976). Episodes 38: 208-217 (with D.F. Branagan).
- 93. 2015 Internationally supported Heritage Stone Designation: A Progress Report Paper No. 152-1 Annual General Meeting, Geological Society of America, Baltimore, November 2015 Session No. 152 T15. Dimension Stone and Heritage Stone: Quarries, Building Stones, Monuments, Sculpture, Utilitarian Stones, and More. Geological Society of America Abstracts with Programs. Vol. 47 (7) p.393
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- 98. 2016. Chapter 25. The Technological or Applied Science Museum. Pp. 318-324, <u>In Garnaut, C., Collins, J. and Jolly, B. (Eds.)</u> 2016. Adelaide's Jubilee International Exhibition, 1887-1888: The Event, the Building, the Legacy. Crossing Press 362pp.
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- 100. 2017. Changing reflections on the history of geology. In: <u>Mayer, W., Clary, R. M., Azuela, L. F., Mota, T. S. & Wołkowicz, S. (eds) History of Geoscience: Celebrating 50 Years of INHIGEO</u> Geological Society of London Special Publication 442: 63-67.
- 101. 2017. INHIGEO in recent times. In: Mayer, W., Clary, R. M., Azuela, L. F., Mota, T. S. & Wołkowicz, S. (eds) History of Geoscience: Celebrating 50 Years of INHIGEO Geological Society of London Special Publication 442: 29-39 (with K. Bork).
- 102. 2017. Obituaries: David Boyd 28 June 1926-2 November 2016. The Australian Geologist 182: 39 (with Jim Jago).
- 103. 2017. Obituaries: Colin Gordon Gatehouse 27 July 1934-3 January 2017 <u>The Australian Geologist</u> 183: 43 (with Jim Jago and Don Vinall).
- 104. 2017 The beginnings of INHIGEO. Abstracts of the 42nd INHIGEO Symposium, Yerevan, Armenia, p. 93-94
- 105. 2017. Robert Bedford (1874-1951): A unique contributor to international geology from the Australian outback. <u>Abstracts of the 42nd INHIGEO Symposium, Yerevan, Armenia</u>, p. 148 (with J.B. Jago).
- 106. 2018 The limits of heritage stone designation. From: Hannibal, J.T., Kramar, S. & Cooper, B.J. (eds) Global Heritage Stone: Worldwide Examples of Heritage Stones. Geological Society, London, Special Publications, 486

- 107. 2018. Armin Öpik's first links with Australia? The Australian Geologist 188: 41 (with Jim Jago)
- 108. 2018. Robert Bedford (1874-1951), the Kyancutta Museum and a unique contribution to international geology. <u>Earth Sciences History</u> 37: 416-443 (with J.B. Jago).
- 109. 2018. A History of Iron Ore mining in Australia. <u>General Program and Abstracts, International Commission on the History</u> of Geological Sciences, 43rd conference page 66.
- 110. 2019. Solnhofener Plattenkalk: a heritage stone of international significance from Germany (with M. Kölbl-Ebert): From: Hannibal, J.T., Kramar, S. & Cooper, B.J. (eds) Global Heritage Stone: Worldwide Examples of Heritage Stones. Geological Society, London, Special Publications, 486, https://doi.org/10.1144/SP486-2017-324.
- 111. 2019. Heritage stone in South Australia. Australian Journal of Earth Sciences 66 (6): 947-953.
- 112. 2019. Geological maps from South Australia: Their fundamental historic role in communicating geological information. Abstracts 44th INHIGEO Symposium, Varese Como, Italy, 2-12 September 2019.
- 113. 2020. Obituaries: John Ayliffe Cooper (1928-2020). <u>The Australian Geologist</u> 195: 41 (June 2020). (with RWR Rutland, LA Frakes, & VA Gostin)

Some minor publications

- 1. Cooper, B.J. 1968 Hawthorn Junior Field Naturalists Club 1943-1968 Victorian Naturalist 85: 232-237.
- 2. Cooper, B.J. 1983. Proposed History of Earth Sciences Specialist Group. Australian Geologist 43: 13
- 3. Cooper, B.J. 1983 Notices Newsletter Historical Society of South Australia 50:8-9
- 4. Cooper, B.J. 1983 Geosciences History Specialist Group. Bulletin Australian Historical Association 36: 6
- 5. Cooper, B.J. 1983 Geoscience History Report No.1 (First issue of the GSA Specialist Group Newsletter) 8 pages
- 6. Cooper, B.J. 1984. Why study the history of geology? Geological Society of Australia. Earth Sciences History Group Newsletter 3: 2-3.
- 7. Cooper, B.J. 1985. What lessons can we learn from studying the history of geology? Geological Society of Australia. Earth Sciences History Group Newsletter 4: 2-5.
- 8. Cooper, B.J. 1986. From the Chairman Earth Sciences History Group Newsletter 5:1-2
- 9. Cooper, B.J. 1986 Aborigines and Australian Geology Earth Sciences History Group Newsletter 5: 7-8
- 10. Cooper, B.J. 1986. From the Chairman Earth Sciences History Group Newsletter 6:1
- 11. Cooper, B.J. 1987 Early Gold discoveries in South Australia. Earth Sciences History Group Newsletter 8:3-4
- 12. Cooper, B.J. 1987 H.Y. L. Brown's petrological slide collection. Earth Sciences History Group Newsletter 8:7
- 13. Cooper, B.J. 1987. The archives of Walter Howchin Earth Sciences History Group Newsletter 9:6-8

About the Tom Vallance Medal

The Tom Vallance Medal was introduced in 2011 to recognise people who have made a significant contribution to researching, recording, investigating, documenting and/or publishing about people or places or events of historical importance to the geological sciences in Australia or Australasia. It is awarded biennially and presented at the biennial Convention of the Geological Society of Australia (or similar event).

Dr Thomas George Vallance (1928–1993), geologist and historian of science, was formerly Associate Professor at the University of Sydney. Originally a petrologist, his work tracing geological expertise in Sydney during the late 18th and early 19th centuries shed unexpected light on scientific activity in our young colony and ignited his interest in the history of geology and early workers in the earth sciences. He researched and published many articles and papers on famous, infamous and little-known early pioneers in this field. His legacy was in the form of 3000 index cards of information, memorabilia and jottings on miners, geologists, surveyors, prospectors and mining engineers, which was compiled over many years and gathered from a wide variety of sources - especially from 19th century mining journals. After his death, this rich resource was compiled into a database, which should prove invaluable for researchers. The 1994 meeting of INHIGEO was dedicated to the memory of Tom Vallance, a foundation member and for some years one of its Vice-Presidents. The ESHG is proud that its award should bear the name **Tom Vallance Medal.**

Past Tom Vallance Medal Recipients

- **2018**, Dr Susan Turner, announced at the AGC in Adelaide in October 2018, and presented privately to Susan in Brisbane
- **2016**, Tom Darragh, announced at AESC2016 in Adelaide and presented at a meeting of the Victorian Division on 28 July 2016;
- 2014, David Oldroyd, presented at AESC2014 in Newcastle;
- 2012, David Branagan, presented at the 34th IGC 2012.

INHIGEO News

The latest INHIGEO circular was received in January and will be forwarded, along with the September issue. separately to this Bulletin. It contains a review of the various INHIGEO publications which may be of interest to ESHG members and include:

<u>Conference Proceedings</u>: These are edited and published by the respective conference organizers as Geological Society Special Publications, special volumes in journals or as books. Collections of papers from INHIGEO conferences may appear as 'special issues' of *Earth Sciences History*, the journal of the History of Earth Sciences Society (HESS), an affiliated society of INHIGEO.

<u>Papers for the IUGS journal Episodes:</u> The journal is open access, has a wide distribution and a relatively fast publication time. Of interest to Earth Science history are issues dealing with or containing:

- a) The series on Classic Papers provides historical depth to modern geoscientific research.
- b) Series on the History of the IGC
- c) Individual articles on a diverse range of historical subjects
- d) Book reviews

IUGS e-Bulletin:

<u>INHIGEO Anniversary series</u>: a web series at http://www.inhigeo.com/anniversaries.html. These are short articles that focus on a particular event, person, theory or pivotal publication in Earth Sciences and related to a certain year. A recent example is:

MARIANNE KLEMUN: Adolphe von Morlot's (1820–1867) Quaternary and Pleistocene – points of confusion. The Swiss scholar Adolphe Morlot is credited in various contexts with the initial use of the term Quaternary. Morlot, however, was not the first to use the term, but he gave it a new direction, connecting it to glaciation and the concept of an ice-age.

Future INHIGEO Conferences (2021-2024)

The 36th International Geological Congress and its associated business and Council meetings originally scheduled for 2-8 March 2020 have now been postponed (still somewhat optimistically!) until 16-21 August 2021. IUGS has had significant troubles with the organizers of the 36th IGC, particularly because of the lack of reimbursements of fees but also concerning the potential for organizational success not just in light of the pandemic. Consequently, the IUGS has removed its support for the postponed 36th IGC. IUGS hopes to be able to organize a virtual themed meeting early in 2022 to replace the IGC. The INHIGEO Board is awaiting further information from the IUGS, which will be passed along as it becomes available.

2021 – 46th INHIGEO Symposium, Poland, Krakow: 18-24 July

Main themes of the conference:

- 1. History of geological surveys and biographies of their creators
- 2. History of geological societies
- 3. History and development of geological cartography
- 4. History of mineral extraction / Mining history
- 5. General contributions and biographies of famous geologists

The circular can be found using this link

https://www.dropbox.com/s/ejx6q4a5yzdqcf1/46TH%20INTERNATIONAL%20COMMISSION%20ON%20THE%20HISTORY%20OF%20GEOLOGICAL%20SCIENCES%20%28INHIGEO%29%20SYMPOSIUM.pdf?dl=0

At the time of the INHIGEO Circular, the Polish organisers had received a relatively small number of expressions of interest because of the pandemic and holding the meeting as a virtual event was in consideration.

INHIGEO Annual Conferences for 2022-24 are scheduled as follows:

2022 – 47th INHIGEO Symposium, France, Les Eyzies in Vézère Valley, 16th-20th September

2023 - 48th INHIGEO Symposium, Poland

2024 – 49th INHIGEO Symposium, South Korea, Busan (in association with the 37th IGC)

The 26th International Congress on the History of Science and Technology (25ICHST) – 25-31 July 2021 scheduled to take place in Prague will now be held online.

Australian Mining History Association News

The AMHA Conference, planned for 9-14 November 2020, was cancelled. The 2021 AMHA Conference will take place at Burra, South Australia, and the 2022 Conference at Bathurst.

The Burra Conference is scheduled for 27 September - 1 October 2021 in the Burra Town Hall. There will be local visits to the town, mines and smelters, and longer day trips to Kapunda and Moonta.

Planning the conference has been made difficult by the uncertainties surrounding the Covid-19 pandemic. The organisers are following Covid-19 developments such as border closures, distancing and catering rules closely, as they impose obstacles to conference management. There will be a cut-off date early in August when they will decide whether the conference can go ahead this year or not. An additional issue is that there is no convenient public transport to Burra. The only options are to drive there or fly to Adelaide and travel by conference minibuses. If you are interested in attending, see the AMHA website at https://www.mininghistory.asn.au/next-conference/

Contributions for the ESHG Newsletter

Articles for future editions are welcome and can be submitted to the Newsletter Editor, Mr John Draper at jdraper@hn.ozemail.com.au.

Australian Geology Hall of Fame

The ESHG webpages include short biographies of influential Australian geologists (see <u>ESHG Biographies</u> (<u>gsa.org.au</u>)) and has recently been expanded, but biographies of many other influential Australian geoscientists are yet to be included here, and a list of possible candidates is given below.

Members are welcome to submit short biographies (500-600 words plus a photograph or image and links or main references to more detailed information) of these or any others to the Secretary of the Earth Science History Group c/-<u>eshg.gsa@gmail.com</u>. Of course, we would also welcome more detailed biographies for inclusion in forthcoming editions of the newsletter as requested above.

- Edward de Courcy Clarke
- Richard Daintree
- Samuel Benson Dickinson
- Norman Henry (Doc) Fisher
- Charles Gould
- John Walter Gregory
- Dorothy Hill
- Edwin Sherbon Hills
- Terence D Hills

- Joseph Beete Jukes
- Clive Loftus-Hills
- Lyndon Charles Noakes
- Reginald Claude Sprigg
- William Harper Twelvetrees
- George Henry Frederick Ulrich
- Leonard Keith Ward
- Samuel Warren Carey

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