

Supplementary Material

Maxwell Frank Cooper Day 1915–2017

Libby Robin^{A,C} and *Jon C. Day*^B

^AFenner School of Environment and Society, Australian National University, Canberra, ACT 2600, Australia.

^BARC Centre of Excellence for Coral Reef Studies, James Cook University, Townsville, Queensland 4811, Australia.

^CCorresponding author. Email: libby.robin@anu.edu.au

File S1. Supplementary Material

Appendix 1: List of Publications	2–6
Appendix 2: Five species, and a genus, named after Max Day	7
Appendix 3: Summary of notable achievements—Dr Max Day	8
Figures (13–52)	9–48

Appendix 1: List of Publications

1. Davis, C, Day, M F and Waterhouse, D F (1938). Notes on the terrestrial ecology of the Five Islands. *Proceedings of the Linnaean Society of NSW*. **63**: 357–88
2. Day, M F (1938) Preliminary observations on the gaseous environment of *Endermes exitiosus* hill (Isoptera). *CSIR J* **11**: 317–327
3. Day, M F (1941) Pigment migration in the eyes of the moth *Ephestia kuehniella* Zeller¹. *Biol Bull* **80**(3): 275–291
4. Day, M F (1941) 'Concomitant Speciation in *Euspironympha* (*gen. nov.*) and its Host, *Stolotermes* (*Isoptera*)'. PhD thesis*² Harvard
5. Day, M F (1943) Report on mosquitoes collected in St Louis County during 1942. *Trans Acad Sci of Saint Louis* **XXXI**: 29–44
6. Day, M F (1943) The corpus allatum of the sheep ked, *Melophagus ovinus* L *Psyche* L: 1–8
7. Day, M F (1943) The homologues of the ring gland of *Diptera brachycera*. *Ann Entom Soc Amer* **XXXVI**: 1–10
8. Day, M F (1943) The function of the corpus allatum in Muscoid Diptera. *Biol Bull* **84**: 127–140
9. Day, M F (1948) Reference for an outline of insect histology. Canberra: C.S.I.R., Div. of Economic Entomology, 223 p.
10. Day, M F (1949) The distribution of alkaline phosphatase in insects. *Aust J Sci Res* **B2**: 31–41
11. Day, M F (1949) The distribution of ascorbic acid in the tissues of insects. *Aust J Sci Res* **B2**: 19–30
12. Day, M F and Powning, R F (1949) A study of the processes of digestion in certain insects. *Aust J Sci Res* **B2**: 175–215
13. Day, M F (1949) The occurrence of mucoid substances in insects. *Aust J Sci Res* **B2**: 421–427
14. Day, M F (1949) Midgut epithelial regeneration as a means of studying insect digestion. *Nature* **164**: 878–879
15. Day, M F (1950) The histology of a very large insect (*Macropanesthia rhinoceros* Blattidae). *Aust J Sci Res* **B3**: 61–75
16. Day, M F (1951) Studies on the digestion of wool by insects. I Microscopy of digestion of wool by clothes moth larva (*Tincola bisselliella* Humm.). *Aust J Sci Res* **B4**: 12–8
17. Day, M F and Powning, R F and Irzykiewica, H (1951) Studies on the digestion of wool by insects. II. The properties of some insect proteinases. *Aust J Sci Res* **B4**: 49–63
18. Day, M F (1951) Studies on the digestion of wool by insects. III A comparison between the tracheation of the midgut of *Tincola* larvae and that of other insect tissues. *Aust J Sci Res* **B4**: 64–74
19. Day, M F and Mckinnon, Anne (1951) A study of some aspects of the feeding of the jassid *Orosius*. *Aust J Sci Res* **B4**: 125–135

¹ This 1941 paper has been cited some 50+ times, most recently in November 2013 (source: Google Scholar, accessed December 2019).

² The 4-page summary Max's PhD thesis, published by Harvard in 1945, commenced with the following: 'Most of the flagellate parasites of the termites of the genus *Stolotermes* belong to the new subfamily, the *Euspironympinae*. Descriptions are given of the type genus, *Euspironympha*, and of its six species. There are at least seven species of *Stolotermes* and these exhibit a very interesting 'Gondwanan' distribution in New Zealand, Australia and South Africa. *Euspironympha* occurs only in the Australian species, of which collections have been studied from localities scattered over 2,000 miles of the east coast of the mainland and Tasmania....'

20. Day, M F (1951) The mechanism of secretion by the salivary gland of the cockroach *Periplaneta americana* L *Aust J Sci Res* **B4**: 136–143
21. Day, M F, Irzykiewicz, H and Mckinnon, A (1952) Observations on the feeding of the virus vector *Orosius argentatus* (Evans) and comparisons with certain other jassids. *Aust J Sci Res* **B5**: 128–142
22. Day, M F (1952) Wound healing in the gut of the cockroach *Periplaneta*. *Aust J Sci Res* **B5**: 282–289
23. Fenner, F, Day, M F and Woodroffe, G M (1952) The mechanism of the transmission of Myxomatosis in the European rabbit *Oryctolagus cuniculus* by the mosquito *Aedes aegypti*. *Aust J Exp Biology and Medical Science* **BO**:139–152
24. Fenner, F and Day, M F (1952) Contrasting methods of transmission of animal viruses by mosquitoes. *Nature* **170**: 204
25. Mercer, E H and Day, M F (1952) The fine structure of the peritrophic membranes of certain insects. *Biol Bull* **108**:384–39
26. Day, M F and Fenner, F (1953) Mechanical transmission of virus diseases by arthropods. *VI Inter Congress Microbiol Reass Commun* **2**: 286–7
27. Day, M F and Waterhouse, D F (1953) Structure of the alimentary system. In: K.D. Roeder (Ed.) *Insect Physiology*: 273–298. NY: John Wiley and Sons Inc, New York).
28. Day, M F and Waterhouse, D F (1953) Functions of the alimentary system. In: K.D. Roeder (Ed.) *Insect Physiology*: 299–310. NY: John Wiley and Sons Inc, New York).
29. Day, M F and Waterhouse, D F (1953) The mechanism of digestion. In: K.D. Roeder (ed.) *Insect Physiology*: 311–330. NY: John Wiley and Sons Inc, New York).
30. Waterhouse, D F and Day, M F (1953) Function of the gut in absorption, excretion, and intermediary metabolism. In: K.D. Roeder (Ed.) *Insect Physiology*: 331–49. NY: John Wiley and Sons Inc, New York).
31. Day, M F and Irzykiewicz, H (1953) Feeding behaviour of the aphides *Myzus persicae* and *Brevicoryne brassicae*, studied with radiophosphorus. *Aust J Biol Sci* **6**: 98–108
32. Fenner, F and Day, M F (1953) Biological control of the rabbit in Australia. *Science News* **28**: 7–22
33. Day, M F, Common, I F B, Farrant, J L and Potter, F C (1953) A polyhedral virus disease of a pasture caterpillar, *Pterolocera amplicornis* Walker (Anthelidae) *Aust J Biol Sci* **6**: 574–79
34. Day, M F and Bennetts, M J (1953) Healing of gut wounds in the mosquito, *Aedes aegypti* (L) and the leafhopper, *Orosius argentatus* (Ev). *Aust J Biol Sci* **6**: 580–585
35. Day, M F and Bennetts, M J (1954) A review of problems of specificity in arthropod vectors of plant and animal viruses. CSIRO Canberra. 172 pp. (mimeographed).
36. Day, M F and Irzykiewicz, H (1954) Physiological studies on thrips in relation to transmission of tomato spotted wilt virus. *Aust J Biol Sci* **7**(3): 274–281
37. Day, M F and Irzykiewicz, H (1954) On the mechanism of transmission of non-persistent phytophagoenic viruses by aphids. *Aust J Biol Sci* **7** (3): 251–273
38. Key, K H L and Day, M F (1954) A temperature-controlled physiological colour response in the grasshopper *Kosciuscola tristis* Sjost. (Orthoptera: Acrididae). *Aust J Zool* **2** (3):309–339
39. Key, K H L and Day, M F (1954) The physiological mechanism of colour response in the grasshopper *Kosciuscola tristis* Sjost. (Orthoptera: Acrididae). *Aust J Zool* **2** (3):340–363
40. Day, M F (1954) The mechanism of food distribution to midgut or diverticula in the mosquito. *Aust J Biol Sci* **7**:515–524
41. Day, M F (1955) A new sense organ in the head of the mosquito and other nematocerous flies. *Aust J Zool* **3**:331–5

42. Day, M F (1955) Mechanisms of transmission of viruses by arthropods. *Exper Parasit* **IV**:387–418
43. Day, M F (1955) The mechanism of the transmission of potato leaf roll virus by aphids. *Aust J Biol Sci* **8**: 498–513
44. Day, M F (1955) Factors influencing the transmissibility of myxoma virus by mosquitoes. *J Aust Inst Agric Sci* **21**: 145–151
45. Day, M F, Fenner, F, Woodroffe, Gwendolyn M, and McIntyre, G A (1956) Further studies on the mechanism of mosquito transmission of myxomatosis in the European rabbit. *J Hygiene* **54**: 258–83
46. Fenner, F, Day, M F and Woodroffe, Gwendolyn M (1956) Epidemiological consequences of the mechanical transmission of myxomatosis by mosquitoes. *J Hygiene* **54**: 284–303
47. Day, M F *et al.* (1956) Stages in the development of a polyhedral virus of Pterolocera (Abstract only). *J Appl Phys* **26**: 1396
48. Day, M F (1957) The relation of arthropod-borne viruses to their invertebrate hosts. *New York Acad Sci* **19**:244–251
49. Day, M F and Zaitlin, M (1958) Infectivity and electron microscopy of extracts of *Physalis floridana* plants infected with potato leaf roll virus. *Phytopathologische Zeitschrift* **34**:83–85
50. Day, M F, Farrant, J L and Potter, C (1958) The structure and development of a polyhedral virus affecting the moth larva, *Pterolocera amplicornis*. *J Ultrastructure Res* **2**:227–238
51. Day, M F (1958) Transmission of virus by mosquitoes. *10th Int Congr Ent Montreal* **3**:211–14
52. Day, M F and Briggs, M (1958) The origin and structure of brochosomes. *J Ultrastructure Res* **2**: 239–244
53. Day, M F and Grace, T D C (1959) Review of recent work on insect tissue culture. *Annual Rev Entomology* **4**: 17–38
54. Whitfield, P R, Day, M F, Helms, K and Venables, D G (1960) On the chromatographic evidence for the occurrence of an infective ribonucleic acid fraction in leaves infected with tobacco mosaic virus. *Virology* **II**: 624–631
55. Day, M F and Venables, D G (1960) Purification of cauliflower mosaic virus. *Virology* **II**: 502–505
56. Day, M F, Bailey, S W and Norris, K R (1961) Uses of radio-activity in Entomology and Insect-Pest control. *The Aust Museum Mag*: 291–294
57. Day, M F and Venables, D G (1961) The transmission of cauliflower, mosaic virus by aphids. *Aust J Biol Sci* **14**: 187–197
58. Kennedy, J S, Day, M F and Eastop, V F (1962) A conspectus of aphids as vectors of plant viruses. *Common Inst Entem Lond.* 114 pp
59. Day M F (1962) Preservation versus concentrated visitor use, pp. 149–158 In Proceedings of First World Congress on National Parks, June–July 1962, Seattle, Washington
60. Day, M F and Oster, I (1963) Physical Injuries. Chapter 2 in '*Insect Pathology, An Advanced Treatise*', Vol I: 29–63 (Ed) E A Steinhaus, Academic Press, N Y)
61. Grace, T D C and Day, M F (1963) Continuous culture of insect tissues. *Ann Epiphytes* **14**: 27–28
62. Day, M F and Grace, T D C (1964) The problem of viral 'latency' in insect tissue culture. *Entomophaga Memoire* **2**: 449–451
63. Day, M F and Mercer E H (1964) Properties of an iridescent virus from the beetle, *Sericesthis pruinosa*. *Aust J Biol Sci* **17**: 892–902
64. Nelson, D S and Day, M F (1964) Detection of Cauliflower Mosaic Virus by immune adherence. *Phytopathology* **54**: 395–398

65. Day, M F (1965) Sericesthis iridescent virus infection of the adult wax moth (*Galleria*). *J Ins Pathol* **7**: 102–105
66. Day, M F (1965) The role of insects in wildlife conservation. In *Wildlife Conservation in Eastern Australia*. Proc. UNE Seminar, pp. 17–20. January 1965
67. Day M F *et al.* (1965) The future of the Kosciusko Summit Area: A report on a proposed Primitive Area in the Kosciusko State Park. *Aust J Science* **23**(12):391–99
68. Day, M F (1965) Use of microbiological agents. In ‘New Perspectives in the Control of Insects’. *Aust J Science* **28**: 217–47
69. Browne W R, Day M F, Costin A B and Turner J S (1965) The Kosciusko Primitive Area. *Aust J Science* **27**(7):203–207
70. Day, M F and Dudzinski, M L (1966) The effect of temperature on the development of Sericesthis iridescent virus. *Aust J Biol Sci* **19**: 481–493
71. Day M F (1967) Foreword to CSIRO Conference ‘The Structure and Function of Water in Physical and Biological Systems’, Smiggin Holes, NSW, November 1967
72. Day, M F and Gilbert, N (1967) The number of particles of Sericesthis iridescent virus required to produce infections of *Galleria* larvae. *Aust J Biol Sci* **20**: 691–693
73. Day, M F (1969) The Ecology of Conservation. Chapter 1 in (Eds) Webb, LJ, Whitelock D, Le Gay Brereton J. *The Last of Lands*. Jacaranda Press
74. Day, M F (1970) The Frontiers of Science and their implications for the next 20 years. *Biology Science and Industry Forum Report* **3**: 5–19
75. Gilmour, D in association with Waterhouse, D F and Day, M F (1970). General anatomy and physiology. Chapter 2, In (CSIRO) *The Insects of Australia*. Carlton: Melbourne University Press.
76. Day M F (1971) Chapter 7: The Role of National Parks and Reserves in Conservation, In (Eds) Costin and Frith. *Conservation*, Penguin Books, Australia.
77. Filshie, B K, Day, M F and Mercer, E H (1975) Colour and colour change in the grasshopper *Kosciuscola fristis*. *J Insect Physiol* **21**: 1763–1770
78. Day, M F (1976) Forests and people. UNE Course for Foresters, August 1976.
79. Day, M F (1976) Land and Forest Products. *Proc R Soc Qld* **87**:105–108.
80. Day, M F (1977) The Relevance of the Research program of the Division of Forest Research to the Forest Products Industry. Proc. of 28th Forest Products Research Conference.
81. Day M F (1981) (Ed) Australia's forests: their role in our future. Papers presented to a meeting of the Science and Industry Forum of the Australian Academy of Science, 6–8 February 1981, Forum Report No 18, 123 pp, Canberra, A.C.T.
82. Day M F (1981) Review of the International Centre for Insect Physiology and Ecology (ICIPE), Report for CGIAR, Washington DC
83. Day M F (1983) *The Environment*. Chapter in the Australian Encyclopaedia, 1983 (revised and reprinted 1996)
84. Day M F (1984) The scientific and technical requirements of the Department of Primary Industry: a report /Committee of Inquiry
85. Campbell K S W and Day M F (1987) (Eds) *Rates of Evolution*: Allen and Unwin, London; Sydney, 314 pages
86. Day M F (1993) Brochosomes of Australian Cicadelloidea. *Proc 8th Auchenorrhyncha Congress*. Delphi, Greece. pp. 10–11
87. Day, M F and Fletcher, M J (1994). An annotated catalogue of the Australian Cicadelloidea (Hemiptera: Auchenorrhyncha). *Invertebrate Taxonomy* **8**: 1117–1288.
88. Day M F (1997) The effects of climate change on Australian Biota. *Proc 9th Auchenorrhyncha Congress*. Sydney. p. 61
89. Day, M F and Pullen, K R (1999). Leafhoppers in ant nests: Some aspects of the behaviour of Pogonoscopini (Hemiptera: Eurymelidae). *Victorian Naturalist* **116**: 12–15.

90. Day M F and De Deckker P (1999) Workshop on the effects of quaternary climate change on the Australian Biota. *Quaternary Australasia* **17**(1):8–9
91. Day, M F (1999). The genera of Australian Membracidae (Hemiptera: Auchenorrhyncha). *Invertebrate Taxonomy* **13**(4): 629–747.
92. Shcherbakov, D E, Fletcher, M J and Day, M F (2000). Ant attendance and nocturnal feeding of the leafhopper *Smicrocotis obscura* Kirkaldy (Hemiptera: Cicadellidae: Ledrinae). *Australian Entomologist* **27**(2): 39–43
93. Day, M F C, Whitten, M J and Sands, D (2001) *Douglas Frew Waterhouse 1916–2000*, *Historical Records of Australian Science* **13** (4): 495–519. Also available at <http://www.publish.csiro.au/paper/HR0011340495.htm>
94. Fletcher, M J, Day, M F and Humphrey, M (2003). The discovery of the Holotype of *Ledromorpha planirostris* (Donovan) (Cicadellidae: Ledrinae), with notes on other Australian *Auchenorrhyncha* species described by Edward Donovan. *General and Applied Entomology* **32**: 23–30.
95. Day, M F C; Rentz, D C F, (2004) *Kenneth Hedley Lewis Key, 1911–2002*. *Historical Records of Australian Science* **15** (1): 65–76. Also available at <http://www.publish.csiro.au/paper/HR04001.htm>.
96. Percy, D M and Day, M F (2005) Observations of unusual acoustic behaviour in two Australian leafhoppers (Hemiptera: Cicadellidae). *J Natural History* **39**(38): 3407–3417
97. Horak, M, Day, M F, Barlow, C, Su, Y-N, and Cameron, S L (2012) Systematics and biology of the iconic Australian scribbly gum moths *Ogmograptis* Meyrick (Lepidoptera: Bucculatricidae) and their unique insect-plant interaction. *Invertebrate Systematics*, **26**: 357–398. doi.org/10.1071/IS12022
<http://www.publish.csiro.au/paper/IS12022.htm>
98. Day, M F, Hewson H, Fagg, M, Doran, J, Turnbull, J, Ilic, J, Jeffrey, S, Last, P, Graham, A, Chesser, T and Bougher, N (2004) *The Biological Collections in CSIRO: a National Heritage?* *Historical Records of Australian Science* **15**(1) 1–19. Also available at <http://www.publish.csiro.au/paper/HR04002.htm>.
99. Robin, L and Day, M (2017) Changing Ideas about the Environment in Australia: Learning from Stockholm. *Historical Records of Australian Science*, 37–49. doi.org/10.1071/HR17004

Appendix 2: Five species, and a genus, named after Max Day (See: *All in a Day's Work*, pp. 97–98)

Inghamia dayi Evans, 1966, a leafhopper (Family Cicadellidae).

Murray Fletcher wrote ‘This is a strange beast with most specimens in collections being females although we have found a single male. Max was, of course, interested in why the females outnumbered the males in such a way. He was aware of species of Stenocotini which appear to occur only as females and presumed those species were parthenogenic. There is an image of the species at <http://www1.dpi.nsw.gov.au/keys/leafhop/species/dayi.htm>’

Chidaea dayi Emeljanov, 2000, a planthopper in the family Cixiidae.

Murray Fletcher wrote ‘Alexandr Emeljanov is an eminent leafhopper and planthopper taxonomist who lives and works in St Petersburg, Russia. He sidled up to me at a congress in Berlin (the one which followed our one in Sydney) in 2002 to give me a copy of his paper which not only included this tribute to Max but also included *Monomalpha fletcheri* Emeljanov. I don't have a specimen of this species in our collection so there is no image on our website’.

Daymfus Özdikmen & Demir, 2010, a horned treehopper (Family Membracidae)

Murray Fletcher wrote ‘This was a replacement name for the genus *Strzeleckia* Day, 1999 which had already been used by Cribb & Spratt, 1991 for a member of the Digenea, which are parasitic flatworms. The authors are two turks who seem to be making a living by finding preoccupied names and replacing them with new ones. They have upset a few people because the polite thing to do is to contact the original author to point out the duplication and give them the chance to replace the name themselves. There is an image, unfortunately still bearing the original name, at <http://www1.dpi.nsw.gov.au/keys/leafhop/species/strzelec.htm>’.

Ogmograptis maxdayi Horak, 2012, a scribbly moth (Family Bucculatricidae)

The formerly monotypic genus *Ogmograptis* Meyrick was revised and divided into three species groups. Eleven new species are described and figured, including *Ogmograptis maxdayi* Horak. Marianne Horak said this species occurred around Black Mountain, Canberra so she felt it was most appropriate to name it after Max. See Fig. 48, Supplementary Material (page 44).

Anagonia dayi Colless, 2012—one of the true flies or tachina flies (Family Tachinidae).

Donald Colless wrote ‘The species is named for my colleague Max Day, whose many contributions to entomology include the timely lodgement of a reared pair of this species. The correlation of the sexes, as so often the case in this genus, would otherwise remain obscure’. See p. 197 in http://australianmuseum.net.au/uploads/journals/27016/1590_complete.pdf

Xanthoparmelia dayiana Elix & J.Johnst, a lichen

Jack Elix wrote ‘The species was originally called *Parmelia dayiana* Elix & P.M.Armstr., *Australian Journal of Botany*, **31**: 468. 1983. [current name = *Xanthoparmelia dayiana* (Elix & P.M.Armstr.) Elix & J.Johnst.]. Max collected the type specimen in the vicinity of Kalgoorlie’.

Appendix 3: Summary of notable achievements—Dr Max Day

- University Medal (Sydney University), 1937
- PhD (Harvard) in 1941
- Fellow of the Australian Academy of Science (Elected 1956)—at the time of his passing, was the longest serving Fellow
- Appointed as an Officer of the Order of Australia (1977) for services to biological research
- Member of the Executive of CSIRO (1966–1976); during that period, was responsible for all CSIRO Divisions dealing with plant and animal sciences
- Inaugural Chief of the CSIRO Division of Forest Research (1976–80)
- Chairman of the Interim Australian Institute of Marine Science (AIMS) Council (1970–2); coordinated the report that led to the development and location of AIMS; and was subsequently a Member of the Council of AIMS (1972–8)
- Chairman, or member, of numerous committees for the Australian Academy of Science (especially the Science and Industry Forum, the Environment Committee; the Science Committee on National Parks and Reserves, the Botany Bay Project Committee and other committees involved in environmental issues e.g. Fenner Committee and Jacobs Committee)
- One of the founding members of the Australian Conservation Foundation and an ACF Councillor (1967–73)
- Member, Advisory Committee, Kosciusko National Park (and Trustee for its predecessor, Kosciusko State Park) (1966–79)
- Member of the ANU Council (and of several Committees of the Council) at the Australian National University (two terms of three years)
- Chairman of the Committee to establish the Bureau of Rural Resources (now Bureau of Rural Sciences) in the then Commonwealth Department of Primary Industry and Energy
- Helped establish the Centre for Resource and Environmental Studies (CRES) at the Australian National University; was a Member of the CRES Advisory Committee (1976–?)
- Member of the Australian delegation to the inaugural meeting of the United Nations Food and Agricultural Organisation (FAO) in 1945.
- Led the Australian delegation for the five year review of the Commonwealth Agriculture Bureaux in London (1975)
- Member of the International Commission on the Application of Science to Agriculture, Forestry and Aquaculture (CASAFSA)
- Member of the Board for International Council for Living Aquatic Resource Management (ICLARM) and Chairman of several of its committees.
- Honorary Research Fellow, Division of Entomology, CSIRO (1985–2017)
- Publications spanning 79 years. Max’s first paper was published in 1938, his last scientific paper on scribbly moths was published in 2012 at 97 years of age, and his final paper, a historical reflection, was published in this journal in 2017 (with Libby Robin), see Appendix 1: List of Publications.

Figures

Figures 1–12 are embedded within article HR19007; the remaining figures (Figs. 13–52) are shown on the following pages.

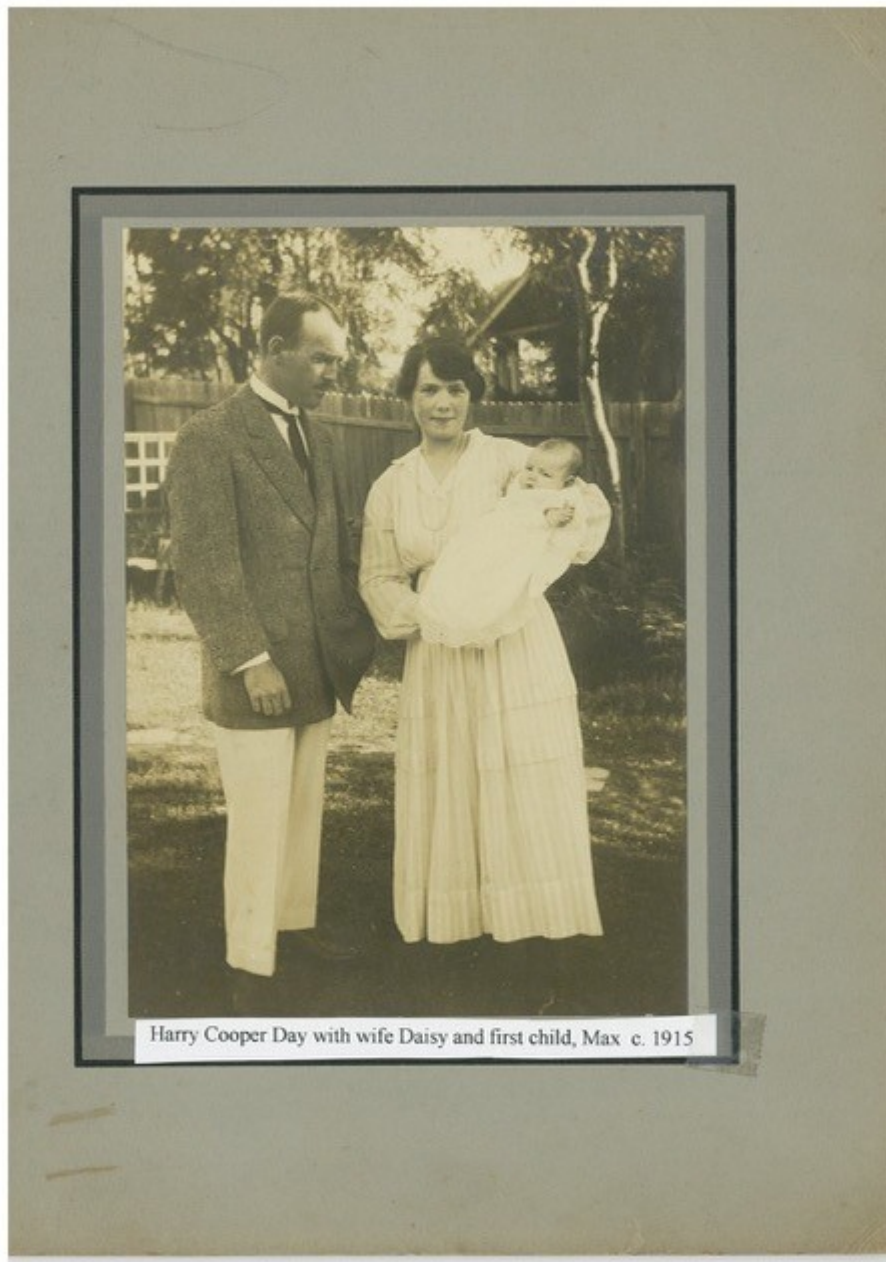


Figure 13. Harry Cooper Day with his wife, Daisy, and their first child, Maxwell, born 21 December 1915 (courtesy of Jon Day).



Figure 14. Max (aged four) with his sister Stephanie, about 1919 (courtesy of Jon Day).



Figure 15. Young neighbours in Vaucluse, about 1921. L–R: Stephanie Day, Bridget Wilkinson, George Wilkinson, Eve McGregor, Max Day (courtesy of Jon Day).

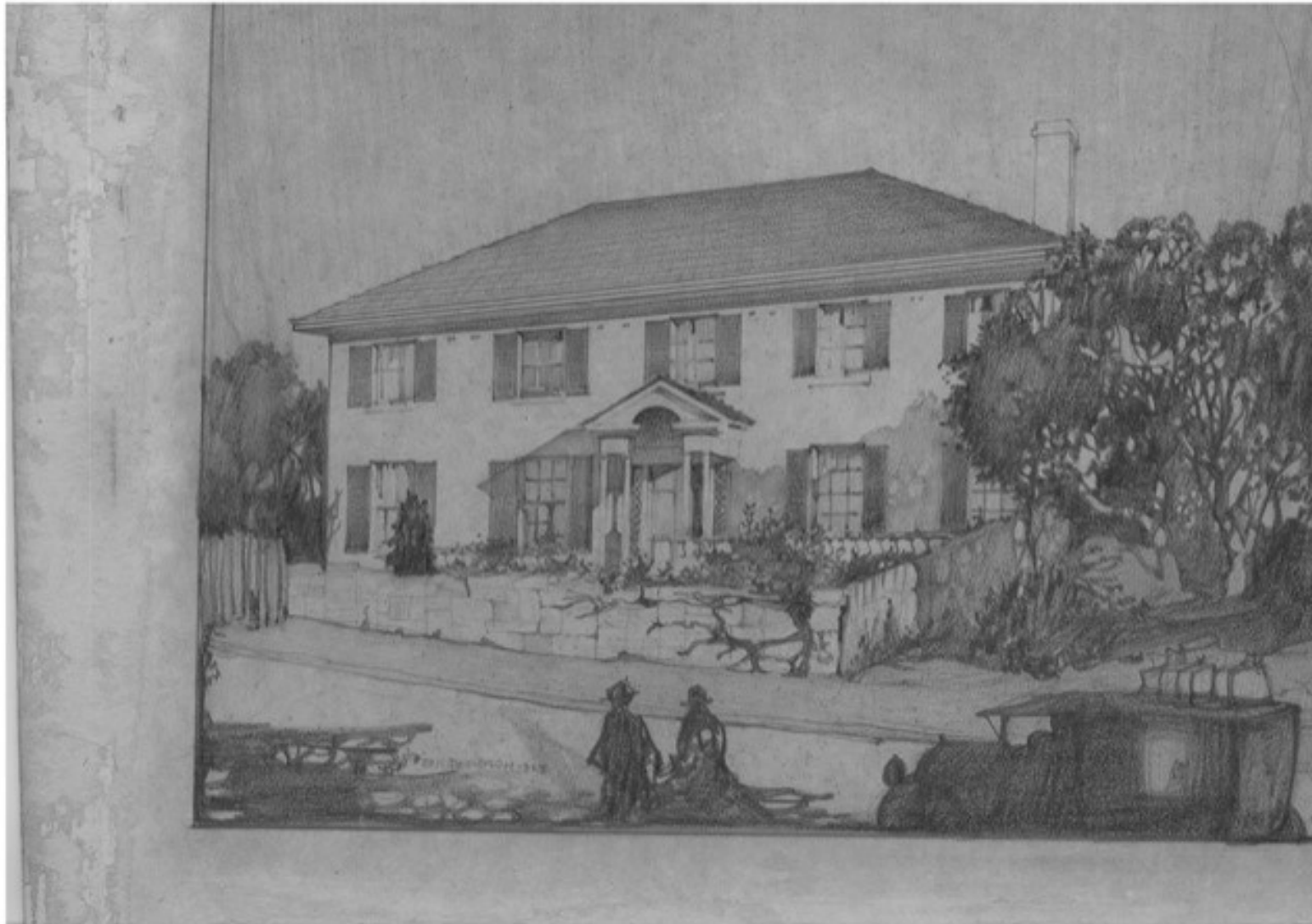


Figure 16. Pencil sketch of the original family home ('Virginia'), Wentworth Avenue, Vacluse, sketch by Eric Thomson, 1923 (courtesy of Jon Day).

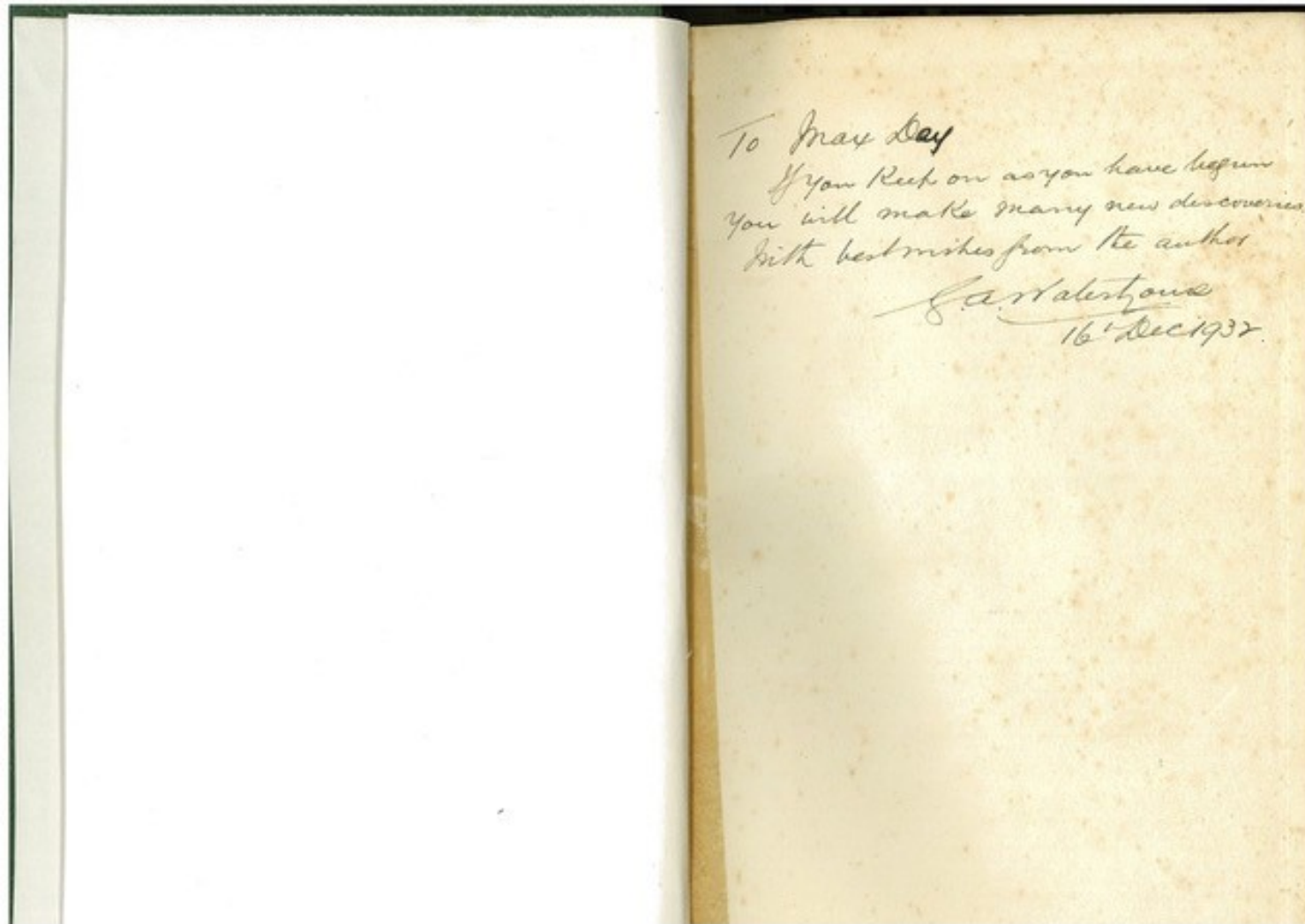


Figure 17. Inscription in a book given to Max by G. A. Waterhouse, 1932. ‘To Max Day, If you keep on as you have begun you will make many new discoveries. With best wishes from the author G. A. Waterhouse 16th Dec 1932’ (courtesy of Jon Day).



Figure 18. Early days in CSIR, about 1938. L–R: Margaret Cumpston, Dough Waterhouse, unidentified, Max Day (courtesy of CSIRO).



Figure 19. Max's first passport to travel to the USA, July 1938 (courtesy of Jon Day).

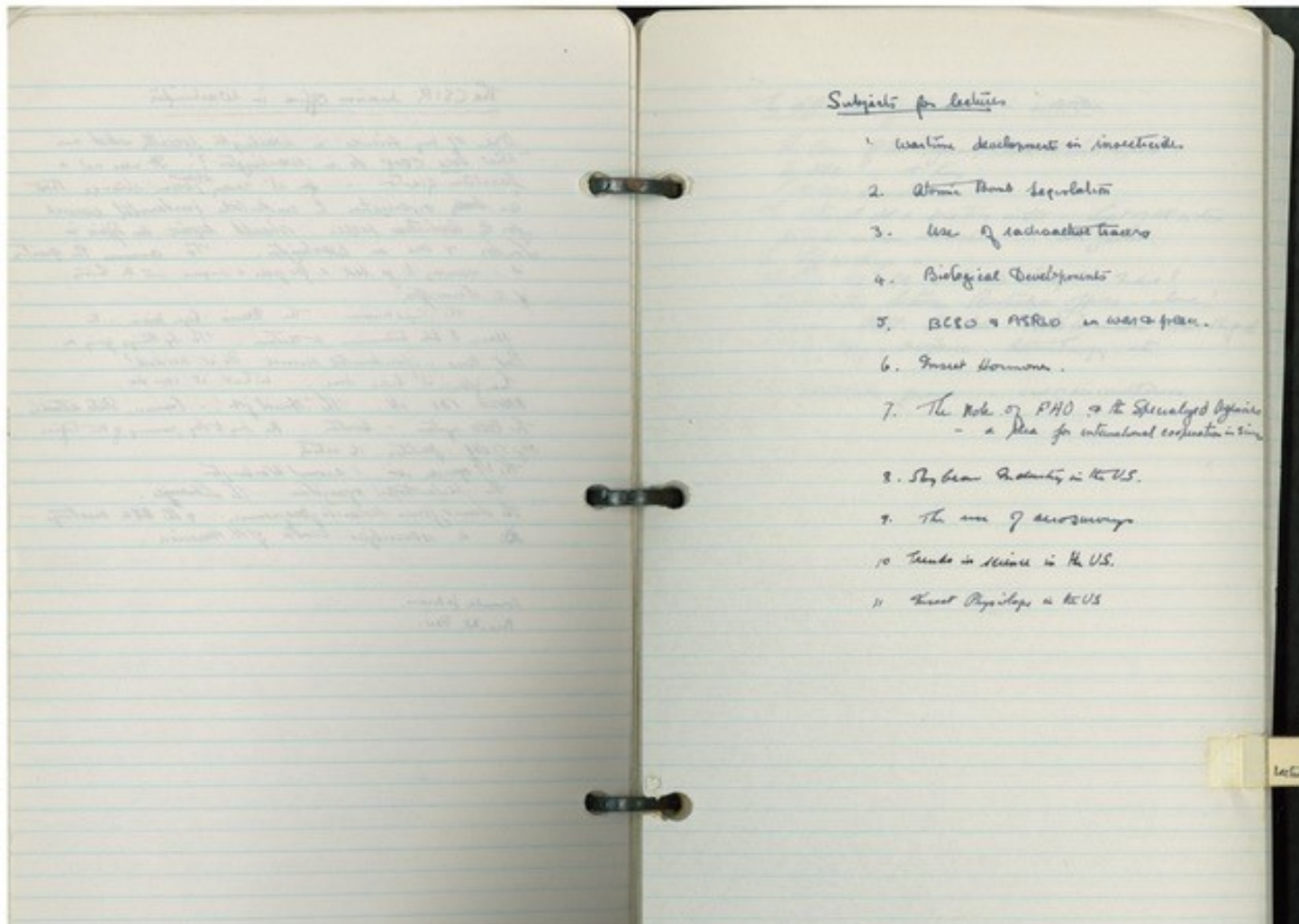


Figure 20. Excerpt from Max's notebook kept during the war while in Washington DC. The list (in Max's minute writing) includes: '1. Wartime development in insecticides | 2. Atomic Bomb legislation | 3. Use of radioactive tracers | 4. Biological Developments | 5. British Commonwealth Scientific Office and Australian Science & Research Liaison Office in war & peace. | 6. Insect hormones. | 7. The role of FAO & the Specialized Agencies—a plea for international cooperation in science | 8. Soy bean Industry in the U.S. | 9. The use of aerosurveys | 10 Trends in science in the US. | 11 Insect Physiology in the U.S' (courtesy of Jon Day).



Figure 21. Max and Barbara Day were married in Washington DC, 19 February 1944 (courtesy of Jon Day).



Figure 22. Australian delegation to the inaugural meeting of the Food and Agricultural Organisation (FAO) in Quebec City, Canada, October 1945. Max is standing second from right. J. G. ‘Jack’ Crawford is standing second from left (courtesy of Jon Day).

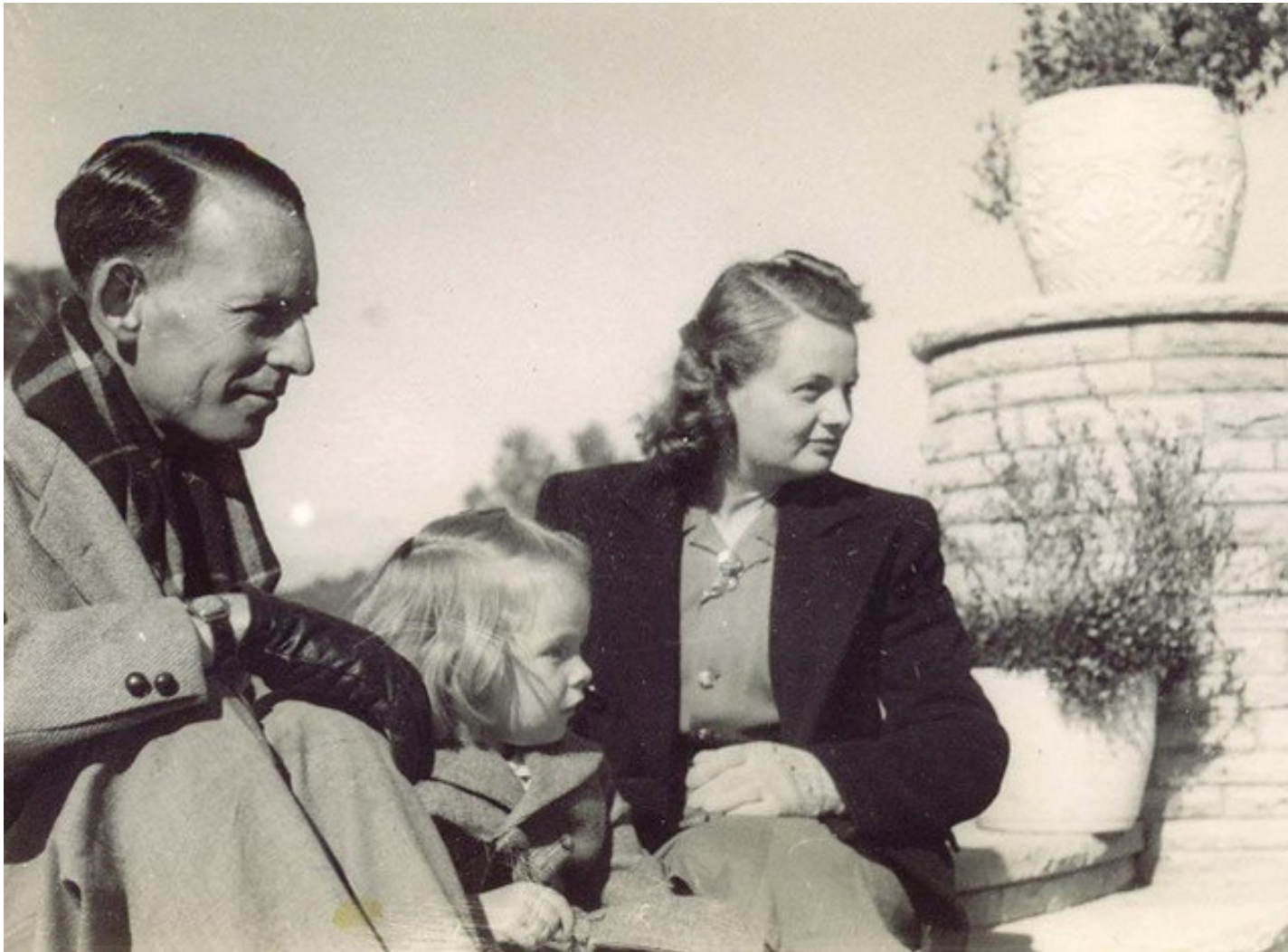


Figure 23. Max, Barbara and Pamela (aged 2) in Washington DC, 1947 (courtesy of Jon Day).



Figure 24. Insect Physiology Group, CSIRO, about 1948. L–R: Arthur Day (no relation), Norman Grylls, unknown, Max Day, Eric Reid (courtesy of Jon Day).

The screenshot shows the Australian Academy of Science website. At the top left is the logo and name 'Australian Academy of Science'. To the right are links for 'Donate', 'Contact us', 'Login', and 'Register', along with a search bar. Below this is a navigation menu with items: 'Home', 'About us', 'Fellowship', 'Supporting science', 'Education', 'News and events', and 'Videos and publications'. The main content area has a breadcrumb 'HOME / DR MAXWELL DAY'. On the left is a portrait of Dr Maxwell Day. Below the portrait is his name 'Dr Maxwell Day', his title 'AO FAA', and his dates 'Elected in 1956 | Died 2017' and 'Queensland, Australia'. To the right of the portrait is a text box titled 'Citation at year of election' containing the following text:

Citation at year of election

Dr Maxwell Day is distinguished for his fundamental contributions to two important aspects of insect physiology: 1) the sources of insect hormones; and 2) insect digestion, notably the digestion of keratin. More recently Dr Day has applied his knowledge of histological and histochemical techniques to a critical study of the mechanisms of transmission of animal and plant viruses by insects. Dr Day is recognised as an extremely learned and productive biologist. His competency in the field of microscopy led to his early mastery of the classical aspects of protozoology, histology and cytology. Day has shown a remarkable ability to combine older classical techniques with recent and forward-looking developments, as, for example, histochemistry and electron microscopy. His work in collaboration with Mercer on the peritrophic membrane has already opened new avenues of understanding. And, as is always the case in substantial scientific work, it has also revealed new and deeper mysteries.

Figure 25. Citation for Max’s appointment as a Fellow of the Australian Academy of Science, 1956 (courtesy of the Australian Academy of Science).



Figure 26. Max Day, Assistant Chief, CSIRO Entomology (courtesy of CSIRO).



Figure 27. Stalwarts of Australian entomology mid 1960s. L–R: back ‘Jo’ Mackerras, Francis Ratcliffe, Dick Norris, Max Day; front A. J. (‘Nic’) Nicholson, Doug Waterhouse, Ian Mackerras (courtesy of CSIRO).

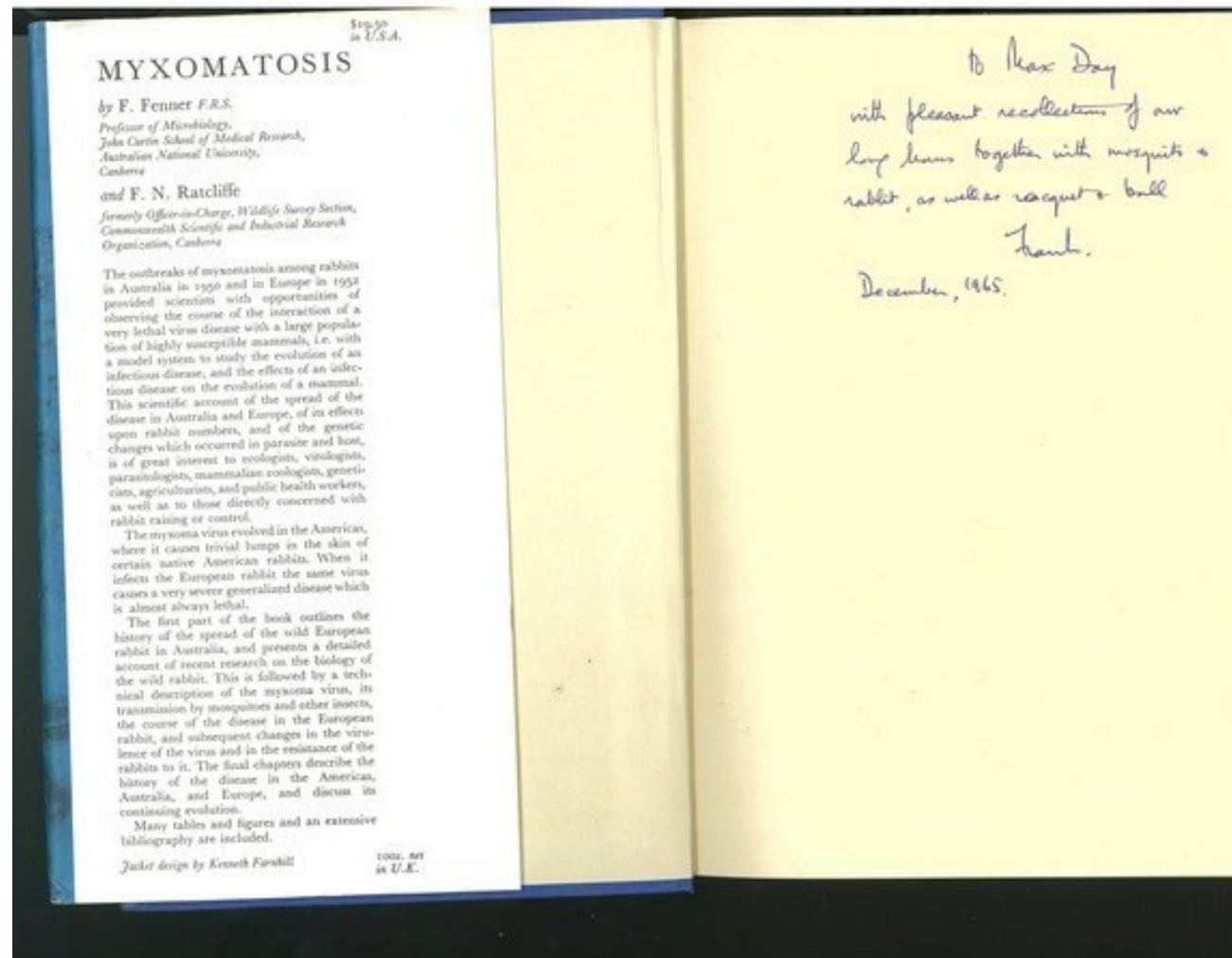


Figure 28. Inscription to Max written by Frank Fenner in Frank’s book *Myxomatosis*, December 1965: ‘With pleasant recollections of our long hours together with mosquito & rabbit, as well as racquet & ball’ (courtesy of Jon Day).



Figure 29. Max's farewell from the Division of Entomology to join the CSIRO Executive (February 1966). Doug Waterhouse (right) presented Max with various farewell gifts (courtesy of CSIRO).

CO RESEARCH

FOR CIRCULATION AMONG MEMBERS OF CSIRO STAFF — NUMBER 84, MELBOURNE, MARCH 1966

DAY FOLLOWS KNIGHT ON EXECUTIVE

Dr. M. F. Day, B.Sc., Ph.D., F.A.A., Assistant Chief of the Division of Entomology, has been appointed to the Executive. Dr. Day fills the vacancy created by the resignation of Sir Otto Frankel, who leaves for Rome shortly on an F.A.O. assignment.

After graduating B.Sc. with honours, at the University of Sydney, Dr. Day joined the Division of Entomology in 1938 to take part in research on termites.

A few months later he was granted leave to work at Harvard University where he subsequently obtained his Ph.D. He resigned from CSIRO in 1940 to become Lehman Fellow at Harvard. During 1941-42 he lectured at Washington University, Missouri.

Dr. Day then spent a year with Australian War Supplies Procurement in Washington where he assisted with the purchase of scientific equipment.

In 1944 he rejoined CSIRO as a member of its Scientific Liaison staff in Washington and two years later he returned to the Division of Entomology.

In 1955 he was seconded for two years to act as Liaison Officer in Washington and in 1963 he was appointed Assistant Chief of the Division.

Dr. Day, who was elected a Fellow of the Australian Academy of Science in 1956, is one of Australia's leading biologists.

His early work in entomology dealt with respiration, hormones and insect digestion.

In the early 1950's his interests shifted to the relationship of viruses with insects—the

Developing The North

Research was essential to establish priorities and sound policies for northern development, said Mr. C. S. Christian of the Executive, last month.

Mr. Christian, whose paper was read to the North Australia Development symposium in Sydney in his absence, said that work at northern research stations had shown generally that there was technically no reason why agriculture in north Australia should not be productive in selected localities, either under irrigation or natural rainfall.

But there had been disappointing results as well as promising ones—of which the most notable had been rice.

The economic environment in which agriculture developed could change rapidly and could be changed deliberately by government action.

"This is particularly true of undeveloped areas. The establishment of services can modify this environment by changing costs of supplies and by facilitating marketing", he said.

"Government policies can have a major influence on incentives and the development of complementary industries in a region can have major repercussions."

"Research for development in hitherto undeveloped regions proceeds for many years in most instances before development can proceed."

"It has been in progress on the Ord and at Katherine for 20 years."



Dr. M. F. DAY

mechanism of transmission and replication in the insect of plant and animal viruses and the occurrence, specificity and development stages of viruses that cause diseases of insects.

Dr. Day has made important contributions to the understanding of the transmission mechanisms of myxomatosis and of a number of plant viruses.



Sir OTTO FRANKEL

In addition to his research activities, Dr. Day is particularly interested in nature conservancy. He is Chairman of the Academy of Science Committee on National Parks and has played an active role in the establishment of the Australian Conservation Foundation.

Dr. Day is also interested in the general field of scientific publication and information retrieval.

He is Chairman of the Committee of the Adolph Basser Library for the History of Australian Science, and a member of the Board of Standards of the Australian Journals of Scientific Research.

Figure 30. Part of cover of the CSIRO newsletter *CoResearch*, March 1966 (courtesy of CSIRO).



Figure 31. Signing a formal agreement between the Australian Wheat Board and CSIRO, 1970. L–R: back unknown, unknown, Dough Waterhouse, Max Day; front Sir Allan Callaghan (AWB), Gratton Wilson (CSIRO) (courtesy of CSIRO).



Figure 32: Robert Ingpen's wall mural at the CSIRO Division of Entomology—depicting new perspectives in insect pest control techniques.



Figure 33. Max and Barbara, Sydney, 1974 (courtesy of Jon Day).



Figure 34. Max being presented with his Officer of the Order of Australia (AO) by Sir John Kerr, Canberra, 1977 (courtesy of Jon Day).



Figure 35. Barbara, Max and Max's mother ('Dais') in Canberra on the day Max received his AO, 1977 (courtesy of Jon Day).



Figure 36. Max with his grandchildren Philippa and Matthew Penfold, 1980 (courtesy of Jon Day).



Figure 37. Max enjoying the flora of the Sydney sandstone, about 1982 (courtesy of Jon Day).



Figure 38. Barbara accompanied Max on several overseas trips, 1984 (courtesy of Jon Day).



Figure 39. Five previous chiefs of the CSIRO Division of Forest Research, at Martin Benson's farewell, February 1993. L–R: Neil Cromer, Max Day, Joe Landsberg, Alan Brown, Glen Kile (courtesy of Jon Day).



Figure 40. Max became interested in lichens in his retirement, about 2000 (courtesy of Jack Elix).



Figure 41. In 2002, Max and Barbara visited Lord Howe Island (courtesy of Jon Day).

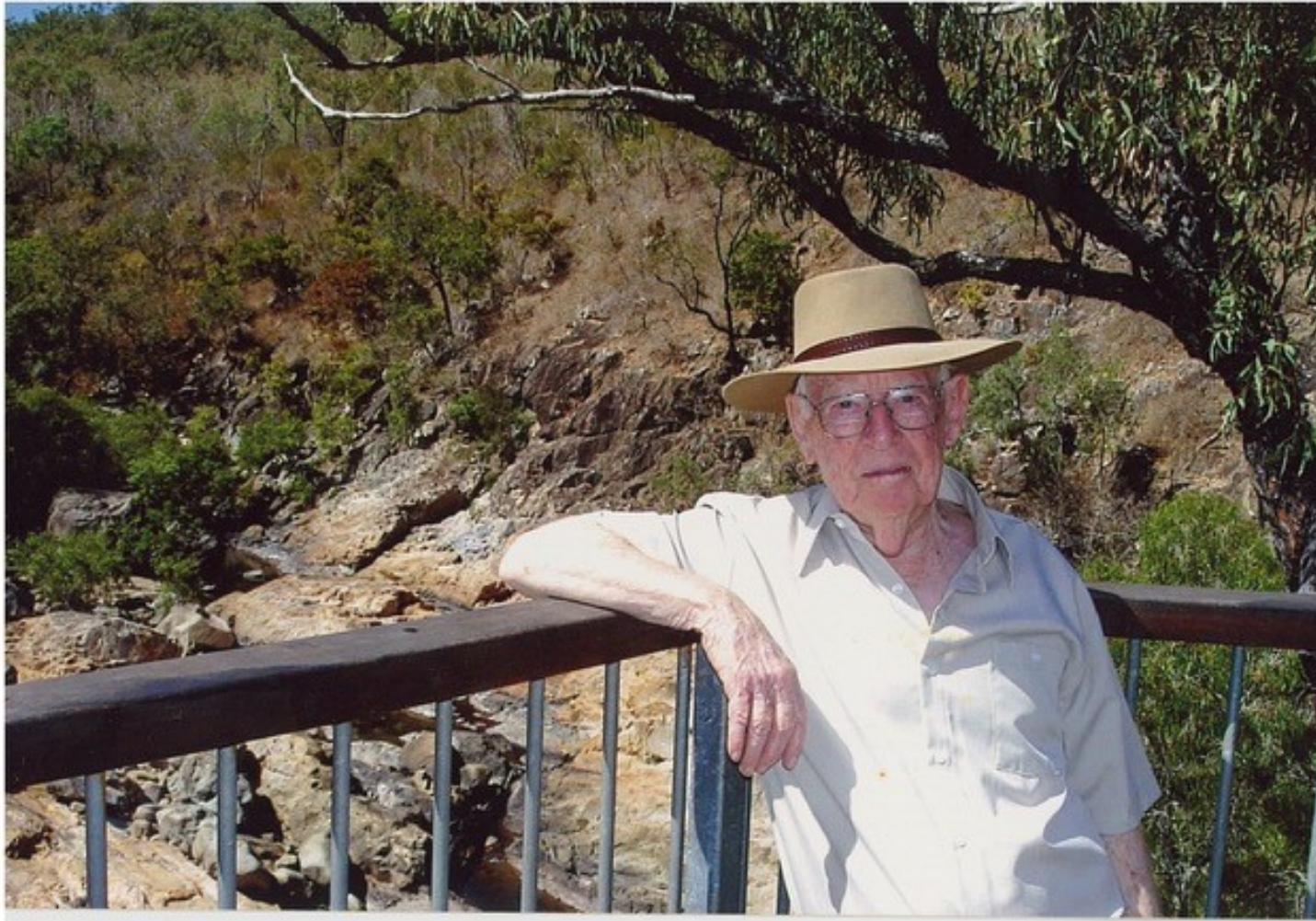


Figure 42. Max enjoyed seeing many parts of Australia after he retired, about 2000 (courtesy of Jon Day).



Figure 43. Members of the previous Saturday afternoon tennis group periodically visited Max in St Andrews, 2010. L–R: Max Day, Frank Fenner, Keith Powell, Malcolm Whyte (courtesy of Jon Day).



Figure 44. Max enjoying the Australian landscape near Tinderry Mountains, south of Canberra, December 2013 (courtesy of Jon Day).



Figure 45. Max outside Unit 21, St Andrew's Village, 2014 (courtesy of Jon Day).



Figure 46. Max in a reflective mood, Harrison House, St Andrews Village, 2015 (courtesy of Jon Day).



Figure 47. Max reading in the courtyard at Harrison House, St Andrew's Village, 2016 (courtesy of Jon Day).

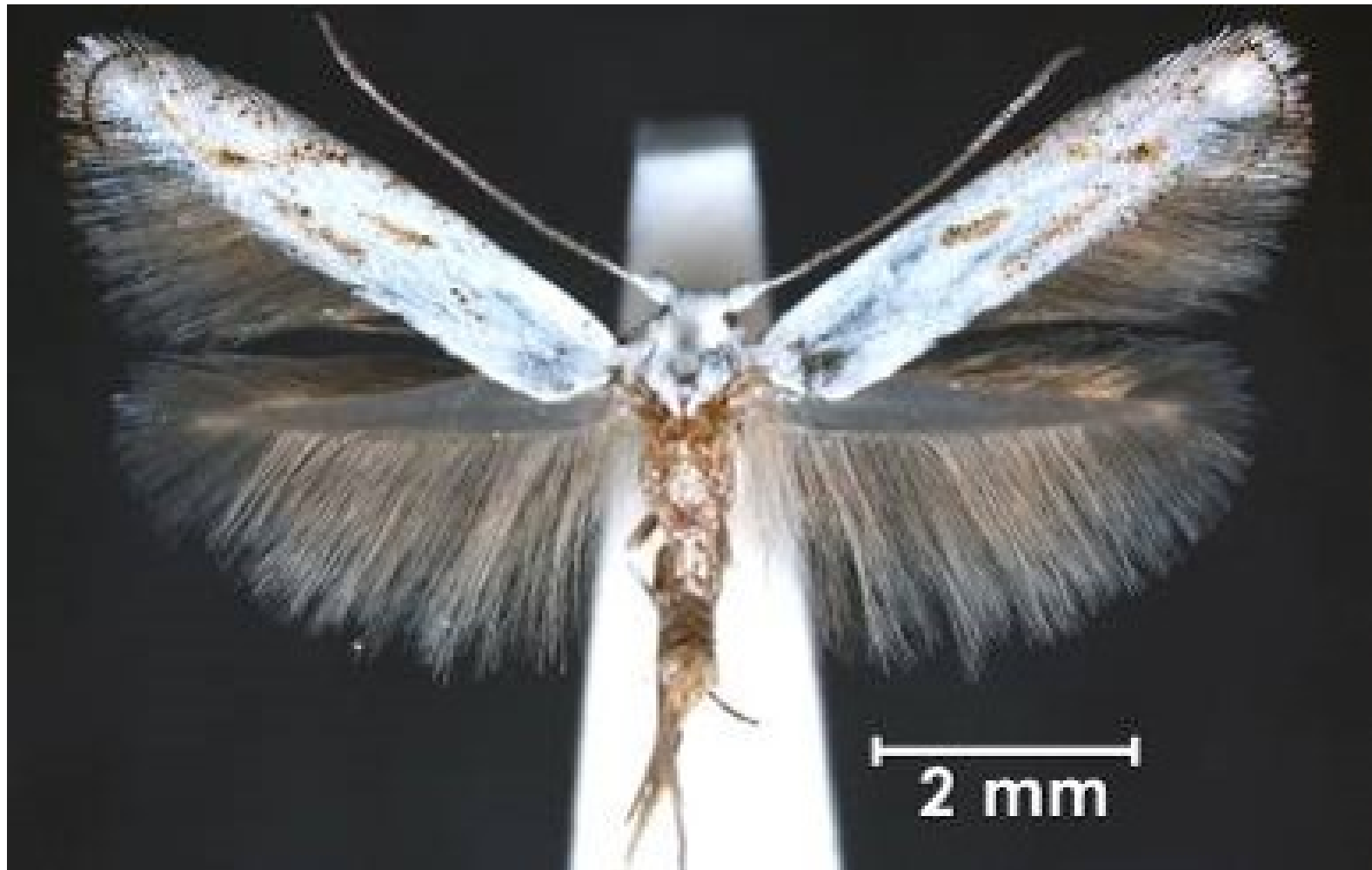


Figure 48. *Ogmograptis maxdayi* named after Max Day by Marianne Horak. This species occurs around Black Mountain, Canberra (courtesy of Marianne Horak).



Figure 49. Max enjoying a visit to the National Botanic Gardens, Canberra, 2015 (courtesy of Jon Day).



Figure 50. Max at the unveiling of an interpretive sign, National Botanic Gardens, Canberra, June 2016. The sign explains Scribbly moths and Max's research on the scribbles (courtesy of Jon Day).



Figure 51. Two of the tennis players who used to play Saturday afternoon tennis at the Day's visit Max at Harrison House, St Andrews, 2016. L–R: Max Day, Malcolm Whyte, Keith Powell (courtesy of Jon Day).



Figure 52. Max at the National Arboretum, Canberra, 2017. This was one of Max's favourite views of Canberra, a place where Max saw huge changes over 79 years (1938–2017) (courtesy of Jon Day).