

ROBERT H. COWIE - CURRICULUM VITAE

Name: Robert Hulin Cowie

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Date of Birth: 29 January 1954

Place of birth: Cheshire, U.K.

Degrees: B.A. (Cambridge), M.A. (Cambridge), Ph.D. (Liverpool)

Nationality: British, naturalized U.S. citizen (dual citizenship)

9 May 2014

EDUCATION

B.A. 1972-1975, University of Cambridge (Natural Sciences: Zoology) (Honours) (M.A. taken 1979)

Ph.D. 1976-1982, University of Liverpool (Zoology). Advisor: Prof. A.J. Cain

Postdoctoral 1982-1985, Dept. of Genetics and Biometry, University College London. Advisor: Dr. J.S. Jones

PROFESSIONAL APPOINTMENTS

- 2007-2013 Chair, Ecology, Evolution and Conservation Biology Graduate Program, University of Hawaii
- 2006- Research Professor, Pacific Biosciences Research Center, University of Hawaii
- 2001-2006 Associate Research Professor, Pacific Biosciences Research Center, University of Hawaii
- 2001- Graduate Faculty, Ecology, Evolution and Conservation Biology Graduate Program, University of Hawaii
- 2001- Graduate faculty, Department of Zoology, University of Hawaii
- 1999-2001 Research Biologist, Department of Natural Sciences, Bishop Museum, Honolulu
- 1990-1999 Associate Research Biologist, Department of Natural Sciences, Bishop Museum, Honolulu
- 1985-1989 Head, Termite Ecology & Control Section, Overseas Development Natural Resources Institute UK
- 1982-1985 Postdoctoral fellow, Department of Genetics & Biometry, University College London, UK
- 1975-1982 Research assistant, Department of Zoology, University of Liverpool, UK

AFFILIATE, HONORARY AND OTHER POSITIONS

- 2006 Foreign Specialist Research Fellow, Forestry and Forest Products Research Institute, Tsukuba, Japan
- 2005-2013 Visiting Professor, Muséum national d'Histoire naturelle, Paris, France
- 2001- Research Affiliate, Bishop Museum, Honolulu
- 1992-2001 Affiliate Graduate Faculty, Ecology, Evolution and Conservation Biology Graduate Program, University of Hawaii
- 1991-2001 Affiliate Graduate Faculty, Department of Zoology, University of Hawaii
- 1985-1988 Honorary Research Fellow, Department of Genetics & Biometry, University College London, UK

MAJOR GRANTS AND CONTRACTS (since 1992)

- 2014 Japan Society for the Promotion of Science, Postdoctoral Advisor (\$107,600). Clarification of the invading process of freshwater apple snails in the genus *Pomacea*.
- 2013 National Science Foundation, Co-PI (\$25,000). Hawaiian land snail biodiversity: systematics, phylogenetics and conservation status of a vanishing fauna. ROA (Research Opportunity Award) Supplement.
- 2013 National Science Foundation, PI (\$6,250). REVSYS: A revision of New World Ampullariidae: an emerging model system in evolutionary biology and systematics training. REU (Research Experience for Undergraduates) Supplement.
- 2012 US Department of Agriculture, Co-PI (\$109,955). Post-harvest management of slugs and snails potentially carrying rat lungworm (*Angiostrongylus cantonensis*) on Hawaii's farms and gardens.
- 2012 National Science Foundation, PI (\$19,815). REVSYS: A revision of New World Ampullariidae: an emerging model system in evolutionary biology and systematics training. ROA (Research Opportunity Award) Supplement.
- 2012 National Science Foundation, PI (\$7,500). REVSYS: A revision of New World Ampullariidae: an emerging model system in evolutionary biology and systematics training. REU (Research Experience for Undergraduates) Supplement.
- 2012 National Science Foundation, Co-PI (\$7,500). Hawaiian land snail biodiversity: systematics, phylogenetics and conservation status of a vanishing fauna. REU (Research Experience for Undergraduates) Supplement.
- 2011 National Science Foundation, Co-PI (\$150,000, University of Hawaii portion \$77,877). Collaborative Research: U.S.-Uruguay-Brazil: IRES AMPLIFIED: Ampullariidae Model using Phylogeography, Laboratory Integration with Field Investigations into Ecology and Diversity.
- 2011 US Army Garrison Oahu, PI (\$49,684). Alien snail control.
- 2011 National Science Foundation, Co-PI (\$650,000). Hawaiian land snail biodiversity: systematics, phylogenetics and conservation status of a vanishing fauna.

- 2011 National Science Foundation, PI (\$7,500). REVSYS: A revision of New World Ampullariidae: an emerging model system in evolutionary biology and systematics training. REU (Research Experience for Undergraduates) Supplement.
- 2011 US Department of Agriculture, PI (\$48,000). Understanding and managing health risks associated with the nematode *Angiostrongylus cantonensis* – the rat lungworm.
- 2010 US Army Garrison Oahu. Co-PI (\$58,813). Assessment of the current distribution, potential for continued spread, and population density of *Oxychilus alliarius* on Oahu, Hawaii.
- 2010 National Science Foundation, PI (\$499,999). REVSYS: A revision of New World Ampullariidae: an emerging model system in evolutionary biology and systematics training.
- 2009 US Department of Agriculture, PI (\$64,624). Invasive alien species of terrestrial snails and slugs in Hawaii (year 6).
- 2008 Japan Society for the Promotion of Science, Postdoctoral Advisor (\$100,990). Impacts of alien ants and flatworms on native land snails in the Hawaiian Islands.
- 2008 US Department of Agriculture, PI (\$72,999). Invasive alien species of terrestrial snails and slugs in Hawaii (year 5).
- 2007 US Department of the Interior, PI (\$33,193). Feeding ecology, microhabitat utilization, population size estimates, and possible control of the introduced predatory snail *Euglandina rosea* on Oahu (year 3).
- 2007 National Science Foundation EPSCoR REAP, Co-PI (\$29,325). Phylogeography of the endemic Hawaiian achatinellid land snails.
- 2007 National Science Foundation, PI (\$11,980). Dissertation research: Ecosystem services provided by terrestrial Mollusca in Hawaiian rainforests.
- 2007 US Department of Agriculture, PI (\$63,778). Invasive alien species of terrestrial snails and slugs in Hawaii (year 4).
- 2006 US Department of the Interior, PI (\$45,892). Feeding ecology, microhabitat utilization, population size estimates, and possible control of the introduced predatory snail *Euglandina rosea* on Oahu (year 2).
- 2006 US Department of Agriculture, PI (\$54,187). Invasive alien species of terrestrial snails and slugs in Hawaii (year 3).
- 2005 US Department of the Interior, PI (\$27,613). Feeding ecology, microhabitat utilization, population size estimates, and possible control of the introduced predatory snail *Euglandina rosea* on Oahu (year 1).
- 2005 US Department of Agriculture, PI (\$35,000). Invasive alien species of terrestrial snails and slugs in Hawaii (year 2).
- 2004 US Department of Agriculture, PI (\$35,000). Invasive alien species of terrestrial snails and slugs in Hawaii (year 1).
- 2004 US Department of Agriculture, PI (\$22,000). Economic impacts of apple snails on taro culture in Hawaii.
- 2003 National Science Foundation , PI (\$400,086). Revision and phylogeography of Pacific island succineid land snails.
- 2002 US Department of Agriculture, PI (\$118,329). Identity and origins of apple snail pests.
- 2002 State of Hawaii, PI (\$95,580). Development of a Safe Harbor Agreement in conjunction with restoration of Waahila Ridge, Oahu.
- 1999 CH2MHill, Co-PI (\$15,480). Invertebrate survey—Wa‘ahila Ridge powerline installation EIS.
- 1999 Okamoto, Inc., Co-PI (\$45,025). Invertebrate survey—Stainback Highway.
- 1999 New Moon Corporation, PI (\$17,009). Environmental assessment—Bond Historic District, Kohala.
- 1998 US Geological Service, PI (\$18,705). Evaluation of development impacts to endangered snails (American Samoa).
- 1998 Okamoto, Inc., Co-PI (\$92,000). Invertebrate survey—New Hawai‘i Island Correctional Facility EIS.
- 1997 National Science Foundation , PI (\$96,606). Non-marine Mollusca of Samoa.
- 1997 US Geological Service, PI (\$30,768). The land snails of the National Park of American Samoa.
- 1996 National Science Foundation , PI (\$265,829). Rehousing Bishop Museum’s marine shell collection in acid-free conditions.
- 1996 Wil Chee Planning, Co-PI (\$147,541). Impacts of Construction of the Palau Compact Road: survey of the non-marine fauna of the island of Babeldaob.
- 1996 Rust Environment and Infrastructure, Co-PI (\$95,330). Saddle Road Project: assessment of the impacts on invertebrates (land snails, insects, and other arthropods).
- 1995 National Biological Service (now part of USGS), PI (\$42,000). A database of non-indigenous land and freshwater molluscs in Hawaii.
- 1992 National Science Foundation , PI (\$493,445). Rehousing Bishop Museum’s land snail collections.

1992 The Nature Conservancy, PI (\$44,975). Land snail survey of the Pohakuloa Training Area, Hawaii. Also, I have received numerous small grants and contracts (under \$10,000 each; total c. \$70,000), most in relation to snails as agricultural pests, for surveys of snails in relation to development projects, and for identification and analysis of snail shells from archaeological sites.

AWARDS AND RECOGNITION

Ph.D. dissertation won the 1982 Annual Award of the Malacological Society of London
Recognized by the University of Hawaii as a 2003-2004 leading researcher

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Malacological Society, Conchological Society of Great Britain and Ireland, Malacological Society of London, Pacific Science Association, Unitas Malacologica, Western Society of Malacologists.

Formerly British Ecological Society, Genetical Society, International Society for the Study of Social Insects, Society for the Study of Evolution, Sigma Xi, Systematics Association.

RESEARCH

Statement of research interests

The over-arching theme of my research is to understand the origins and determinants of non-marine biodiversity, both native and alien, primarily in the Pacific. Systematics provides the essential framework and conservation underlies all aspects of the research, which integrates a range of subdisciplines and approaches, including taxonomy, phylogenetics, genetic diversity, biogeography, invasion biology, and ecology. DNA sequencing and cladistic analyses are important techniques in much of this research. The four main focuses are:

- **Biodiversity** – Understanding the ecological determinants and evolutionary origins of the immense native Pacific island diversity. Systematics of apple snails.

Current projects: Nomenclature, systematics, phylogenetics, biogeography, and origins of land snails throughout the Pacific. Evolution of shell size and shape in Pacific island land snail faunas. Systematics, phylogenetics, and biogeography of apple snails globally.

- **Invasion biology** – Documenting the spread and impacts, understanding the invasion dynamics, and ascertaining the origins, both phylogenetic and anthropogenic, of alien species, primarily in the Pacific.

Current projects: Ampullariid snails as model invaders. Molecular and morphological diversity of invasive subulinid land snails and veronicellid slugs in Hawaii. Distribution and impacts of alien snails in Hawaii.

- **Emerging disease ecology** – Eosinophilic meningitis in Hawaii.

Current project: Geographic distribution of rat lungworm and its prevalence in native and alien snail/slug vectors in Hawaii.

Selected research presentations

- World Congress of Malacology (Ponta Delgada, 2013 [4 presentations, 1 invited], Phuket, 2010 [7 presentations, 1 invited], Antwerp, 2007, Vienna, 2001 [invited])
- 11th International Congress on Medical and Applied Malacology (Rio de Janeiro, 2012 [invited plenary, invited regular presentation])
- Instituto Oswaldo Cruz (Rio de Janeiro, 2012 [invited])
- The Wildlife Society (Waikoloa, 2011 [invited])
- Direcion Nacional de Recursos Acuaticos (Montevideo, 2010 [invited])
- AAAS (Hawaii, 2008, 3 presentations [invited])
- University of Nottingham (2008, invited)
- Japanese Ecological Society (Niigata, 2006 [invited])
- American Malacological Society (Seattle, 2006, Sanibel, 2004 [invited], Ann Arbor, 2003 [3 presentations, 1 invited], Charleston, 2002)
- 1 Simpósio Nacional de Coleções Científicas (Rio de Janeiro, 2005 [invited])
- Universidade Federal de Mato Grosso do Sul (Campo Grande, Brasil, 2005 [invited])
- Sociedade Brasileira de Malacologia (Rio de Janeiro, 2004 [invited])
- Expanding the Ark (American Museum of Natural History, New York, 2004)
- International Biogeography Society (Mesquite, Nevada, 2003)
- Society for Conservation Biology (Sydney, Australia, 1998 [invited]; Hilo, Hawaii, 2001)
- Malacological Society of Japan (Yamaguchi, 2000 [invited])
- Ecological Society of America (Utah, 2000)

Invited workshop participation

- Third international workshop on rat lungworms (Guangzhou, China, 2013)
- Rat lungworm disease - a scientific workshop (Honolulu, Hawaii, 2011)
- 4th International Workshop on the biology of Ampullariidae (San Miguel de Tucumán, Argentina, 2010)
- Forestry and Forest Products Research Institute: Introduced species in Ogasawara (Tsukuba, Japan, 2006)
- Asia-Pacific Economic Cooperation: Management of the golden apple snail (Taiwan, 2004)
- US Department of Agriculture: Apple snails and other alien snails (Sacramento, California, 2001)
- National Science Foundation: Biotic Surveys and Inventories (Orcas Island, Washington, 2000)
- Committee for Conservation of Natural Resources of Nagashima: The nature of Nagashima (Japan, 2000)
- Global Invasive Species Program: Invasion pathways (Edgewater, Maryland, 1999)
- World Wildlife Fund: Biodiversity and conservation of the Galápagos (Galápagos Islands, Ecuador, 1999)
- International Rice Research Institute: Ecology and management of the golden apple snail (Thailand, 1997)

Expedition and overseas research experience

- 1976 Kenya, Tanzania - termite ecology and distribution (Oxford University)
- 1983, 1984 Spain, Andorra, France - land snail ecology and population genetics
- 1985 France - grasshopper hybrid zone
- 1986, 1987 Ethiopia - termites in crops, forestry and rangeland; training in termite biology/control
- 1986-1989 Sudan - termite ecology and control (University of Khartoum)
- 1987, 1988 Yemen - termites in crops
- 1989 Zimbabwe - termites in crops
- 1989 Malawi - soil pests of crops
- 1992 Samoa [formerly Western Samoa] - land snail biodiversity
- 1992, 1998, 2001, 2008 American Samoa - land snail biodiversity, research and training, endangered species
- 1995 Cambodia - nonindigenous "apple snails" as rice pests
- 1996 Palau - land snail biodiversity
- 2004, 2005, 2012 Brasil - freshwater snail systematics/phylogenetics
- 2008, 2009 UK - land snail population genetics

I have also traveled widely in Europe, Turkey, Egypt, India, the Philippines, Japan, Thailand, Taiwan, China, Australia, New Zealand, Argentina, Uruguay and USA. I have undertaken overseas museum research in France, UK, Australia and Uruguay.

INSTRUCTION

Courses taught

- Zoology field course (University of Liverpool, 1976-82 [every year])
- Environmental Biology field course (University of Liverpool, 1978)
- Population Genetics field course (in Spain) (University College London, 1984-5)
- Termite Biology and Control (in Ethiopia) (ODNRI, 1987)
- Advanced Systematics and Evolution (ZOOL 691I) (University of Hawaii, 1995-9 [8 consecutive semesters])
- Biological Invasions (ZOOL 691E) (University of Hawaii, 1996)
- Proposal Writing (ZOOL 691E) (University of Hawaii, 2003, 2006)
- Mechanisms of Evolution (ZOOL 719) (University of Hawaii, 2005)
- Foundations of Ecology (ZOOL 739) (University of Hawaii, 2009)

Guest lectures

- Evolutionary Biology (University College London, 1983)
- Ecological Genetics (University College London, 1984)
- Pest Management (Imperial College London, Silwood Park, 1986)
- Applied Entomology (Imperial College London, Silwood Park, 1987)
- Storage of Durable Agricultural Products in the Tropics (ODNRI, 1988)
- Environmental Studies (University College Cardiff, 1988)
- Biogeography (ZOOL 485) (University of Hawaii, 1996)
- Invasion Biology (BOT 651) (University of Hawaii, 1997, 1999, 2001, 2003, 2005, 2007, 2009)
- Conservation Biology (BOT/ZOOL 690) (University of Hawaii, 1997, 1999, 2002, 2003, 2012)
- Ecology, Evolution and Conservation in Hawaii (ZOOL 750) (University of Hawaii, 1998)
- Focus on Agriculture (Ag 194) (distance learning on public tv; University of Hawaii, Hilo, 1999)
- Natural History of the Hawaiian Islands (BOT/ZOOL 450) (University of Hawaii, 2001-13 [except 2007])
- Foundations in Plant and Environmental Protection Services (PEPS 690) (University of Hawaii, 2002)

- Biocontrol of Invasives (PEPS 422) (University of Hawaii, 2002)
- Invasive Pest Species (PEPS 345) (University of Hawaii, 2004, 2006, 2008, 2010, 2012, 2014)
- Environmental Problem Solving (NREM 491) (University of Hawaii, 2005)
- Biology of the Invertebrates (ZOOL 475) (University of Hawaii, 2005, 2006, 2007, 2008)
- Interdisciplinary Studies (IS650/651) (University of Hawaii, 2007)
- Grant Writing and Your Career in Science (BOT 698) (University of Hawaii, 2010)
- Foundations of Conservation and Natural Resources (NREM 691) (University of Hawaii, 2010)
- Introduction to Research (HON 495) (University of Hawaii, 2010)
- Infectious Disease Micro I (TRMD 603) (University of Hawaii, 2011)

Students and postdoctoral researchers

- Undergraduate student advised (University of Liverpool):
 - L.R. Noble, 1980-1
- Undergraduate student advised (University College London):
 - D. Johnson, 1984-5
- Undergraduate students advised (University of Hawaii):
 - S. Arnasson, 2007-2008
 - J. Bedrosian, 2007-2008
 - C. L. Brown, 2006
 - J. R. Kim, 2008-2009
 - A. Kong, 2011-2013
 - J. Léon, 2012-2014
 - T. J. Skelton, 2008-2010
 - C.T. Tran, 2005-2007
 - M. Wood, 2009
 - K.L. Coleman, 2011-2012
 - T. Durkan, 2011-2012
 - D. Ressler, 2011-2014
 - E. Rogers, 2012-2013
 - T. Takebayashi, 2011-2012
 - B. Wilson, 2012
 - C. Yee, 2011-2012
 - E. Yokote, 2013-2014
- Graduate students advised (ODNRI/University of London):
 - H.I.J. Black, Ph.D., 1986-9
 - J.W.M. Logan, M.Sc., 1985-9
 - M.J. Pearce, Ph.D., 1985-9
- Graduate students advised (University of Hawaii)
 - D.K. Britton, 1998-2000 (transferred to and gained Ph.D. from the University of Texas at Arlington, US Fish & Wildlife Service)
 - R. Callan, 2002-3 (transferred to and gained Ph.D. from the University of Georgia, Assistant Professor SUNY-ESF)
 - P.A. Curry, graduated 2012, M.S. Zoology
 - D. Gary, expected graduation 2015, M.S. Zoology
 - K.A. Hayes, graduated 2009, Ph.D. Zoology (Assistant Professor Howard University)
 - A.F. Johnson, 2007-8 (transferred to Ph.D. program at Washington State University)
 - J.R. Kim, graduated 2013, M.S. Zoology
 - W.M. Meyer, graduated 2009, Ph.D. Zoology (Assistant Professor Pomona College)
 - R.J. Rundell, graduated 2001, M.S. Zoology (Assistant Professor SUNY-ESF)
- Graduate student committees (University of Hawaii)
 - J. Birch, graduated 2011, Ph.D. Botany
 - R. DeFelice, 1998-2003, Zoology (withdrew from Ph.D. program)
 - P.A. deMoura, 2009-2012, Zoology (withdrew from Ph.D. program)
 - L.L.Z. Durand, 2000, Botany (withdrew from Ph.D. program)
 - J.E. Garb, graduated 1998, M.S. Zoology
 - L. Gutierrez, graduated 2000, Ph.D. Zoology
 - L. Hadway, graduated 1998, M.S. Zoology

- W. Haines, 2004-2006, M.S. Entomology (transferred to Ph.D. program)
- A.T. Handler, graduated 2005, M.S. Zoology
- A.L. Heddle, graduated 1998, M.S. Zoology
- S. Joe, graduated 2006, M.S. Botany
- T. Koehler, graduated, 2007, M.S. Botany
- C. Lohr, graduated 2012, Ph.D. Natural Resources and Environmental Management
- M. Lurie, expected graduation 2014, Ph.D. Botany
- T. Male, graduated 2001, Ph.D. Zoology
- G. Roberts, graduated 2001, Ph.D. Zoology
- R. Rhodes, expected graduation 2014, Ph.D. Zoology
- L. Rodman, graduated 2004, Ph.D. Zoology
- S. Shaw, 2009-2012, Botany (withdrew from Ph.D. program)
- B.D. Smith, 1996-2000, Zoology (withdrew from Ph.D. program)
- J. Taylor, graduated 2007, M.S. Natural Resources and Environmental Management
- K. Tice, graduated 2009, M.S. Zoology
- A.Y. Yoshinaga, expected graduation 2014, Ph.D. Botany
- Visiting graduate student advised
 - L. Lach (Cornell University), graduated 2004, Ph.D.
- Postdoctoral researchers advised (University of Hawaii)
 - B.S. Holland, 2003-2007
 - S. Sugiura, 2008-2010
 - K.A. Hayes, 2010-2013
 - S. Matsukura, 2014
 - N.W. Yeung, 2010-2014
 - C. Régnier, 2012-2014

SERVICE

Professional organization activities

- Council, Malacological Society of London: 1983-1986
- Director, Hawaiian Malacological Society: 1992-1995 (President: 1993, 1994)
- Mollusc Specialist Group, International Union for Conservation of Nature: 1994-present
- American Malacological Society Conservation Committee: 1994-present (Chair: 1995-2004)
- Council of Systematic Malacologists (Councilor, Western U.S.): 1995-1998
- Council, American Malacological Society: 1997-1999
- Invasive Species Specialist Group, International Union for Conservation of Nature: 1998-present
- President, Sigma Xi, University of Hawaii Chapter: 2005-2008

Editorial activities

- Editor, *Newsletter of the IUCN/SSC Mollusc Specialist Group*: 1994-present
- Associate Editor, *Biodiversity and Conservation*: 2006-present (Editorial Board 2003-present)
- Associate Editor, *Diversity and Distributions*: 2007-present (Editorial Board 2003-present)
- Associate Editor, *Biological Invasions*: 2009-present
- Assistant Editor, *Journal of Conchology*, and *Conchological Society Special Publications*: 1979-1980
- Science Advisor, *Hawaiian Shell News*: 1990-1997
- Editorial Board, *Malacologia*: 1991-present
- Editorial Board, *Malacological Review*: 1991-present
- Editorial Board, *Journal of Medical and Applied Malacology*: 1991-present
- Editorial Board, *Journal of the Malacozoological Association of Yamaguchi, Japan*: 1997-2008
- Editorial Board, *Oryx*: 1998-present
- Editorial Board, *The Nautilus*: 2001-present
- Editorial Board, *Zoological Science*: 2003-2009
- Editorial Board, *American Malacological Bulletin*: 2003-present
- Editorial Board, *Pacific Science*: 2004-present

Symposia/Conferences

- Co-organized the “Third International Workshop on Rat Lungworms”, Guangzhou, China, 2013
- Organized and edited the proceedings of “Rat lungworm disease: an international workshop”, Honolulu, 2011 (published in the *Hawaii Journal of Medicine and Public Health*)

- Co-edited the Proceedings of the Asia-Pacific Economic Cooperation workshop on the “Management of the golden apple snail”, Taiwan, 2004 (published as a stand-alone proceedings volume)
- Organized and edited the proceedings of a symposium on “Non-marine alien mollusks – the future is a foreign ecosystem”, American Malacological Society, Ann Arbor, 2003 (published in *American Malacological Bulletin*)
- Society for Conservation Biology 2001 meeting (Hilo, Hawaii), Scientific Program Committee
- Organized and edited the proceedings of a symposium on the “Impact of alien species on island ecosystems”, 17th Pacific Science Congress, Honolulu, 1991 (published in *Pacific Science*)
- Co-organized and edited the proceedings of the “1st International Symposium on fungus-growing termites and the tropical environment”, Nairobi, Kenya, 1987 (published in *Sociobiology*)

Advisory panel/group

- Panelist, NSF Doctoral Dissertation Improvement Grants: 2012, 2013
- Technical Advisory Group, \$43 million UNDP project on “Invasive species in the Galápagos”: 2003-2007
- Panelist, NSF Research Collections in Systematics and Ecology: 1996, 1997

Committees at the University of Hawaii

- Ecology, Evolution and Conservation Biology graduate program, admissions committee (1995-7; Chair, 1996-7)
- Ecology, Evolution and Conservation Biology graduate program, graduate curriculum committee (1997-8, 2013-14)
- Ecology, Evolution and Conservation Biology graduate program, grants committee (1998-2006; Chair, 2000-6)
- Department of Zoology, diagnostic examination committee (1997, 1999, 2001, 2006)
- Department of Zoology, ad hoc committee on admissions (2002)
- University of Hawaii Hilo / University of Hawaii Manoa NSF EPSCoR grant working group (2002-2006)
- Department of Zoology/Biology, graduate admissions committee (2003, 2004, 2013, 2014)
- Pacific Biosciences Research Center, departmental personnel committee (2004-present, Chair, 2006-7, 2011-12)
- Tenure and promotion review committee (2007, 2011)
- Department of Botany, faculty search committee (2008)
- Manoa Faculty Senate, Committee on Administration and Budget (2009-2014, vice-chair 2010-11)
- Pacific Biosciences Research Center, senior faculty/staff team (2009-present)
- Department of Biology, Graduate Instruction Committee (2011)
- Pacific Biosciences Research Center, faculty search committee (2013-2014)
- Pacific Biosciences Research Center, director search committee (2014)

Grant proposals reviewed (18 agencies)

- American Philosophical Society, Australian Research Council, British Ecological Society, Environment and Conservation Fund (Hong Kong), Hawaiian Malacological Society, National Geographic Society, National Research Foundation (South Africa), National Science Foundation, Natural Environment Research Council (UK), Netbiome, Netherlands Organization for Scientific Research, Pennsylvania Department of Conservation and Natural Resources, Research Grants Council (Hong Kong), Sea Grant College Program, Smithsonian Institution Office of Fellowships and Grants, U.S. Civilian Research and Development Foundation, U.S. Fish and Wildlife Service, University of Hawaii (Edmondson Fund)

Journal articles reviewed (119 journals)

- Acta Oecologica, African Journal of Ecology, American Malacological Bulletin, American Naturalist, Animal Behaviour, Animal Conservation, Annals of Botany, Aquatic Ecology, Aquatic Invasions, Aquatic Sciences, Archiv für Molluskenkunde, Australian Journal of Experimental Agriculture, Biochemical Genetics, Biodiversity and Conservation, Biological Conservation, Biological Invasions, Biological Journal of the Linnean Society, Biology Letters, Biota Neotropica, Biotropica, Bishop Museum Occasional Papers, BMC Evolutionary Biology, Bulletin of Entomological Research, Bulletin of the Museum of Comparative Zoology, Caribbean Journal of Science, Cladistics, Conservation Biology, Conservation Genetics, Contributions to Zoology, Crop Protection, Current Biology, Diversity and Distributions, East African Agriculture and Forestry Journal, Ecologia Mediterranea, Ecological Entomology, Ecological Research, Emerging Infectious Diseases, Endangered Species Research, Estuaries and Coasts, Evolution, Freshwater Biology, Geography Compass, Geology, Global Change Biology, Global Ecology and Biogeography, Hawaii Journal of Medicine and Public Health, Heredity, Hydrobiologia, Iberus, Insects, Insect Science and its Application, Integrative & Comparative Biology, International Journal of Zoology, Invertebrate Biology, Invertebrate Reproduction and Development, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Arid Environments, Journal of Biogeography, Journal of Conchology, Journal of Experimental Zoology, Journal of Heredity, Journal of the Malacozoological Association of Yamaguchi, Journal of the Marine Biological Association, Journal of Medical and Applied Malacology, Journal of Molluscan Studies, Journal of the North American Benthological Society, Journal of Parasitology,

Journal of Pest Science, Journal of Soil Science, Journal of Thermal Biology, Journal of Tropical Ecology, Journal of Zoology, Limnologica, Malacologia, Malacological Review, Mitteilungen aus dem Museum für Naturkunde in Berlin (Zoologische Reihe), Molecular Ecology, Molecular Phylogenetics and Evolution, Molluscan Research, Natural Areas Journal, Nature Communications, Nemouria, Oecologia, Oryx, Pacific Science, Pakistan Journal of Agricultural Sciences, Palaeogeography–Palaeoclimatology–Palaeoecology, Paleobiology, Paleontological Research, Pedobiologia, Pesticide Science, PLoS One, Population Ecology, Proceedings of the Academy of Natural Sciences of Philadelphia, Proceedings of the Biological Society of Washington, Proceedings of the Royal Society of London B, Qatar University Science Journal, Revista Científica UDO Agrícola, Ruthenica, Sociobiology, Soil Biology and Biochemistry, South Pacific Journal of Natural and Applied Sciences, Symbiosis, The Festivus, The Nautilus, The Veliger, Trends in Ecology and Evolution, Tropical Pest Management, Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa, Turkish Journal of Zoology, Wetlands, Zoological Journal of the Linnean Society, Zoologia, Zoologia Neocaledonica, Zoological Science, Zoological Studies, Zoosystema, Zootaxa.

Ph.D. Dissertations reviewed as external examiner

- University of Tasmania (2003)
- University of Adelaide (2003)
- University of Nottingham (2008, 2009)
- University of the West Indies, Mona (2008)
- Muséum nationale d'Histoire naturelle, Paris (2011)

PUBLICATIONS

Books (4)

- Cowie, R.[H.]** 2014. *Journey to a Waterfall. A Biologist in Africa*. Lulu, Raleigh. x + 279 p.
- Staples, G.W. & **Cowie, R.H.** (eds.) 2001. *Hawai'i's Invasive species. A guide to invasive plants and animals in the Hawaiian Islands*. Mutual Publishing & Bishop Museum Press, Honolulu. xii + 116 p.
- Cowie, R.H.** 1998. *Catalog of the nonmarine snails and slugs of the Samoan Islands*. Bishop Museum Bulletin in Zoology 3. Bishop Museum Press, Honolulu. viii + 122 p.
- Cowie, R.H.**, Evenhuis, N.L. & Christensen, C.C. 1995. *Catalog of the native land and freshwater molluscs of the Hawaiian Islands*. Backhuys Publishers, Leiden. vi + 248 pp.

Journal articles (103)

- Kim, J.R., Hayes, K.A., Yeung, N.W. & **Cowie, R.H.** 2014. Diverse gastropod hosts of *Angiostrongylus cantonensis*, the rat lungworm, globally and with a focus on the Hawaiian Islands. *PLoS ONE* 9(5): e94969.
- Durkan, T.H., Yeung, N.W., Meyer, W.M., III, Hayes, K.A. & **Cowie, R.H.** 2013. Evaluating the efficacy of land snail survey techniques in Hawaii: implications for conservation throughout the Pacific. *Biodiversity and Conservation* 22: 3223-3232.
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