

KENNETH A. HAYES, PHD

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EDUCATION

Postdoctoral 2009-2010	Smithsonian Institution , US National Museum of Natural History, Washington, DC Advisor: E.E. Strong
PhD 2009	University of Hawaii Manoa, Honolulu, Zoology with Ecology, Evolution, & Conservation Biology Specialization, Advisor: R.H. Cowie
MS 2003	University of South Florida, Tampa, Zoology, Advisor: S.A. Karl
BS 1999	University of South Florida, Tampa, Biology, Advisors: J.L. Simon & J.R. Garey
PROFESSIO	ONAL APPOINTMENTS
2018 - Present	Director - Pacific Center for Molecular Biodiversity, Bernice Pauahi Bishop Museum, Honolulu, HI
2022 - Present	Affiliate Graduate Faculty - Plant and Environment Protection Sciences, Entomology, University of Hawaii, Honolulu, HI
2022	Invited Lecturer - Department of Biology, Howard University, Washington, DC
2022 - Present	Curator of Marine Molluscs - Bernice Pauahi Bishop Museum, Honolulu, HI
2019 - 2022	Curator of Invertebrate Zoology - Bernice Pauahi Bishop Museum, Honolulu, HI
2017 - 2019	Invertebrate Molecular Biologist - Bernice Pauahi Bishop Museum, Honolulu, HI
2013 - 2018	Assistant Professor of Invertebrate Evolutionary Biology - Department of Biology, Howard University, Washington, DC
2012 - 2015	Cooperating Graduate Faculty - Plant and Environment Protection Sciences, Entomology, University of Hawaii, Honolulu, HI
2012 - 2017	Associate in Science - Bernice Pauahi Bishop Museum, Honolulu, HI
2010 - Present	Research Collaborator - Smithsonian Institution, US National Museum of Natural History, Washington, DC
2015-Present	Affiliate Assistant Research Professor - University of Hawaii, Pacific Biosciences Research Center, Honolulu, HI
2010 - 2014	Assistant Research Professor - University of Hawaii, Pacific Biosciences Research Center, Honolulu, HI
2010	Encyclopedia of Life Rubenstein Fellow (Mentor: Dr. Ellen E. Strong)
2009 - 2010	Postdoctoral Research Fellow - Smithsonian Institution, US National Museum of Natural History, Washington, DC (Advisor: Dr. Ellen E. Strong)

2003 - 2009	Graduate Research Assistant - University of Hawaii, Center for Conservation Research & Training, Honolulu, HI
2002 - 2003	Research Staff - Florida Marine Research Institute, St. Petersburg, FL.
1999 - 2002	Graduate Teaching Assistant - University of South Florida, Department of Biology, Tampa FL.

GRANTS, SCHOLARSHIPS AND FELLOWSHIPS (\$7,522,219)

Grants Pending

Hawaii Department of Agriculture. Statewide surveys, DNA barcode library development, education, and mitigation for invasive invertebrates. \$300,000

Grants as Principal Investigator (\$3,512,310)		
2023-2024	U.S. Department of Agriculture Plant Protection Act (PPA721). Enhanced mitigation and rapid response to introduced snails, earthworms, and flatworms in Hawaii. PIs: K.A. Hayes ; N.W. Yeung.	\$133,760
2023-2026	U.S. National Science Foundation: COLLABORATIVE RESEARCH: Addressing knowledge and capacity shortfalls to advance conservation science and action for endangered Hawaiian land snails. Pls: K.A. Hayes , N.W. Yeung, D.R. Sischo, K. Frank (Recommended 11/2022)	\$1,595,518
2022-2023	Disney Conservation: Manning the lifeboats – Conservation of the understudied majority. PIs: N.W. Yeung; K.A. Hayes .	\$50,000
2020-2023	U.S. Fish and Wildlife Service, Pacific Region, Prelisting. Hawaii freshwater snails: Understudied and unprotected. PI: K.A. Hayes , Co-PI: N.W. Yeung. (F20AC11607)	\$89,999
2018	Research Resources and Small Equipment Program: Howard University Graduate Studies Council of Research Officers – Internal equipment grant for Enduro GDS Touch Gel Documentation System.	\$8,329

2018	Research Resources and Small Equipment Program: Howard University	\$8,329
	Graduate Studies Council of Research Officers – Internal equipment grant	
	for Enduro GDS Touch Gel Documentation System.	

- 2017-2020 U.S. National Science Foundation: COLLABORATIVE RESEARCH: \$696,205 ARTS: Revisionary systematics of the highly threatened Achatinellidae: an integrative phylogenetic approach PIs: N.W. Yeung, K.A. Hayes, Co-PI: J. Slapcinsky. (DEB-1656231, 1837849 = \$216,327; DEB-1656254 = \$479,878)
- 2014-2017 U.S. Fish and Wildlife Service Endangered Species Conservation-Recovery \$106,047 Implementation Fund. Hawaiian Land Snails Extinction Prevention: Assessing a Vanishing Fauna. PIs: K.A. Hayes, N.W. Yeung, Co-PIs: R.H. Cowie, D.R. Sischo
- 2013 2014 U.S. National Science Foundation: Research Opportunity Award \$25,000 Supplement to DEB-1120906: PI: K.A. Haves
- 2012 2013 U.S. National Science Foundation: Research Experience for Undergraduates \$7,500 Supplement to DEB-1120906. PI: K.A. Hayes

2011 - 2015	U.S. National Science Foundation: Hawaiian land snail biodiversity: Systematics, phylogenetics and conservation status of a vanishing fauna. PI: K.A. Hayes , Co-PIs: R.H. Cowie, B.H. Holland, Senior Personnel: NW Yeung (DEB-1120906)	\$650,000
2011 - 2016	U.S. National Science Foundation: COLLABORATIVE RESEARCH: US-URUGUAY-BRAZIL IRES AMPLIFIED: Ampullariidae Model using Phylogeography, Laboratory Integration with Field Investigations into Ecology and Diversity PIs: K.A. Hayes , R.L. Burks; Co-PIs: R.H. Cowie, M. Meerhoff, S.C. Thiengo. Collaborators: F. Scarabino, C. Clavijo (OISE-1130297 = \$72,075; OISE-1130694, 1502853 = \$77,877)	\$149,952
Grants	as Co-Co-Principal Investigator or Senior Personnel (\$3,472,524)	
2021-2022	Jessie D. Kay Memorial Fund at the Hawai'i Community Foundation in support of Malacology Research. PI: N.W. Yeung, Co-PIs: K.A. Hayes , R. Kawamoto (Grant ID#: 21ADVC-112687)	\$79,819
2022-2025	Hawaii Competitive State Wildlife Grant: <i>Multi-Institution Hawaiian Land Snail Captive Propagation Network</i> PIs: D.R. Sischo (SEPP), K.A. Hayes (PCMB), N.W. Yeung (BPBM). \$500,000 Federal & \$166,667 match	\$666,667
2021-2023	Hawaii Competitive State Wildlife Grant: Addressing an emerging threat: pathogen and parasite infection in rare and endangered Hawaiian land snails. F21AP00558-00 PIs: D.R. Sischo (SEPP), K.A. Hayes (PCMB), N.W. Yeung (BPBM). \$415,210.95	\$415,210
2020-2021	Jessie D. Kay Memorial Fund at the Hawai'i Community Foundation in support of Malacology Research. PI: N.W. Yeung, Co-PIs: K.A. Hayes , R. Kawamoto (Grant ID#: 20ADVC-106713)	\$75,000
2019-2023	U.S. National Science Foundation: <i>Digitization TCN: Collaborative</i> research: enhancing access to taxonomic and biogeographical data to stem the tide of extinction of the highly imperiled Pacific Island land snails. DBI 1902328 PI: N.W. Yeung; Co-PI K.A. Hayes \$1,338,205	\$1,338,205
2019-2020	U.S. Department of Agriculture, Farm Bill, Plant Pest and Disease Management and Disaster Prevention Program (PPDMDPP): Detecting and reducing major agricultural pest snails in farms and gardens through community outreach and surveys. PI: N.W. Yeung, Co-PIs: K.A. Hayes, P. Sato (Malama Learning Center) \$143,510 requested	\$100,000
2018-2019	U.S. Department of Agriculture, Farm Bill: <i>Invasive terrestrial survey in Hawaii</i> . PI: N.W. Yeung; Co-PI: K.A. Hayes . \$125,078 requested.	\$70,000
2018-2019	Hawaii State Department of Land and Natural Resources: Identity and distribution of invasive land snails infected with Rat Lungworm in Hawaii: Surveys, identification guides, and taxonomic workshops. PIs: N.W. Yeung and K.A. Hayes	\$58,415

2018	U.S. National Science Foundation: Research Opportunity Award Supplement to DEB-1656231, 1837849, 1656254. PIs: N.W. Yeung, K.A. Hayes, Co-PI: J. Slapcinsky.	\$25,000
2017	Hawaii Community Foundation: <i>Reducing the spread of Rat Lungworm in Hawaii: Invasive land snail surveys.</i> PI: N.W. Yeung; Co-PI: K.A. Hayes	\$30,000
2016-2020	U.S. National Science Foundation. Division of Biological Collection. Biological Research Collection Program. CSBR: Natural History Collections: Housing, Databasing, Digitizing and Accessibility Upgrades to the Largest Pacific Island Land Snail Collection (Bishop Museum). PI: N.W. Yeung, Co-PI: K.A. Hayes. (DBI-1561774)	\$495,633
2012	U.S. National Science Foundation: Research Experience for Undergraduates Supplement to DEB-0949061. PI: R.H. Cowie Co-PI: K.A. Hayes	\$7,500
2011	U.S. National Science Foundation: Research Experience for Undergraduates Supplement to DEB-0949061. PI: R.H. Cowie Co-PI: K.A. Hayes	\$7,500
2010	U.S. National Science Foundation Planning Grant: IRES AMPLIFIED Ampullariid model using phylogenetics, laboratory inquiry and field investigations into ecology and distribution. PI: R.L. Burks, Research Partners: K.A. Hayes , R.H. Cowie, M. Meerhoff, S.C. Thiengo, F. Scarabino, and C. Clavijo. (OISE-1013316)	\$18,370
2010 - 2015	U.S. National Science Foundation: REVSYS: A revision of New World Ampullariidae – an emerging model system in evolutionary biology and systematics training. PI: R.H. Cowie, Co-PIs: K.A. Hayes , E.E. Strong, S.C. Thiengo. (DEB-0949061)	\$500,000
Fellows	thips (\$70,594)	
2011 - 2012	Fellowship - U.S. National Science Foundation FIRST IV: Faculty Institutes for Reforming Science Teaching: Focus on Postdoctoral Scholars. NSF CCLI - Phase III. PI: D. Ebert-May, Co-PI: Terry Derting (DUE-0817224)	\$1,094
2010	EOL Rubenstein Fellowship: Encyclopedia of life species pages for the Architaenioglossa (Gastropoda: Ampullariidae, Viviparidae, Cyclophoridae)	\$25,000
2009 - 2010	Smithsonian Institution Postdoctoral Research Fellowship	\$44,500
Travel g	grants (\$1,239)	
2010	University of Hawaii, University Research Council Faculty Research Travel Award to participate in the international apple snail workshop in Argentina	\$1,239
Gradua	te student grants and fellowships (\$50,757)	
2008	UH Dai Ho Chun Fellowship	\$10,000
2008	Ecology, Evolution and Conservation Biology Travel Grant	\$1,100
2007	UH Graduate Student Organization Travel Grant	\$1,477
2007	Ecology, Evolution and Conservation Biology Research Grant	\$2,500

2007	Unitas Malacologica Travel Grant for World Congress of Malacology	\$1,100
2007	Ecology, Evolution and Conservation Biology Research Grant	\$2,000
2006	Ecology, Evolution and Conservation Biology Research Grant	\$3,000
2006	Ecology, Evolution and Conservation Biology Travel Grant	\$1,000
2005	Ecology, Evolution and Conservation Biology Research Grant	\$4,000
2005	Unitas Malacologica Student Research Award	\$1,100
2005	Conchologists of America Research Award	\$1,500
2005	UH Graduate Student Organization Travel Grant	\$1,200
2005	Ecology, Evolution and Conservation Biology Travel Grant	\$1,500
2005	American Malacological Society Student Research Award	\$1,000
2004	Ecology, Evolution and Conservation Biology Research Grant	\$4,000
2004	Ecology, Evolution and Conservation Biology Travel Grant	\$1,500
2004	Western Society of Malacologists Student Research Grant	\$300
2004	Conchologists of America Research Award	\$1,500
2004	Maybelle Roth Scholarship	\$5,000
2003	USF, Biology Graduate Student Travel Award	\$180
2002	USF, Dept of Biology - Student Travel Award	\$250
2001	Conchologists of America Research Award	\$1,500
2001	USF, Dept. of Biology - Student Travel Award	\$250
2000	Sigma Xi Grants-in-Aid of Research	\$300
2000	Lerner Grey Fund for Marine Research	\$2,000
2000	American Malacological Society Student Research Award	\$1,500
Award	s and honors	
2020	Hawai'i Conservation Alliance Award for Innovation – Hawaii Land Snail Par between Bishop Museum and Hawaii's Snail Extinction Prevention Program.	tnership
2014	National Academies Education Mentor in the Life Sciences	
2013	Fleming Science Scholar, Southwestern University, Georgetown, TX	
2008	2nd Place AAAS Award of Excellence for Student Presentation – 89 th Annual of the AAAS Pacific Division	meeting
2007	Constance Boone Award for Best Student Presentation – Joint meeting of the American Malacological Society and the World Congress of Malacology	
2006	Constance Boone Award for Best Student Presentation – 72 nd Annual America Malacological Society Meeting	n
2004	Honorable Mention Student Presentation – 29 th Annual Tester Memorial Symp	osium

2003	Constance Boone Award for Best Student Presentation – 69 th Annual American Malacological Society Meeting
2002	Best Student Presentation – 16 th Annual Florida Association of Benthologists Meeting
2002	2nd Place Student Presentation – 68^{th} Annual American Malacological Society Meeting
2005	Sigma Xi Induction
2000	Phi Kappa Phi Honor Society Induction
1998	Golden Key National Honor Society Induction

PUBLICATIONS

Peer-Reviewed (57; *student co-author)

- Meyer, W.M., **K.A. Hayes**, N.W. Yeung, E.J. Crane III, A. Turvey, C. LeBlanc, A.R.O. Cavalcanti. 2023. The trail less traveled: Envisioning a new approach to identifying key food resources for threatened Hawaiian arboreal snails. *Nature Conservation* 51: 137-153.
- Goulding, T.C., N.W. Yeung, J. Slapcinsky, E.E. Strong, J.R. Kim, F. Brook, and **K.A. Hayes**. 2023. Tiny snails with large distributions: systematics and delimitation of the Pacific land snails Pacificella and Lamellidea (Stylommatophora: Achatinellidae: Pacificellinae). *Bulletin of the Society of Systematic Biology* https://doi.org/10.18061/bssb.v2i2.8873
- Meyer, W.M., L. Evans*, C. Kalahiki*, J. Slapcinsky, T. Goulding, D. Robinson, P. Kaniaupo-Crozier, J.R. Kim, **K.A. Hayes**, and N.W. Yeung. 2022. Plants critical for Hawaiian land snail conservation: arboreal snail plant preferences in Pu'u Kukui Watershed, Maui, and other Hawaiian Islands. *Oryx*, 1-6. doi:10.1017/S0030605320000873
- **Hayes, K.A.**, C.C. Christensen, J.R. Kim, C.M. Kishimoto, J.N. Matsunaga, and N.W. Yeung. 2023 First records in the Hawaiian Islands of the milk snail *Otala lactea* (Müller, 1774) and the Cuban brown snail *Zachrysia provisoria* (Pfeiffer, 1858) (Gastropoda: Helicidae, Zachrysiidae). *BioInvasions Records* 12(1): 513-534.
- Nguyen, L.*, J.R. Kim, H. Kulvicki*, T.C. Goulding, C.S. Hobbs, K.L. DeLeon, N.W. Yeung, and **K.A. Hayes**. 2022. *Angiostrongylus cantonensis* in Hawai'i: Updated Records and Distributions of Gastropod Hosts on Maui, Moloka'i and Lana'i. *Bishop Museum Occasional Papers* 142: 39-48.
- Barbosa, K.P.*, **K.A. Hayes**, R. Do V. Vilela, H.S. Barbosa, C.R. Marchi, and S.C. Thiengo. 2022. Phylogenetic systematics and distribution of *Pomacea sordida* (Swainson, 1823) and *Pomacea intermedia* (Férussac, in Quoy & Gaimard, 1825) (Caenogastropoda: Ampullariidae). *Malacologia* 65(1/2): 1-23
- Christensen, C.C., R.H. Cowie, N.W. Yeung, and **K.A. Hayes**. 2021. Biological control of pest non-marine molluscs: A Pacific perspective on risks to non-target organisms. *Insects*, 12: 583 https://doi.org/10.3390/insects12070583
- Goulding, T.C., N.W. Yeung, and **K.A. Hayes**. 2021 Historical DNA from museum shell collections: evaluating the suitability of dried micromollusks for molecular systematics. *American Malacological Bulletin* 38(2): 129-135.

- Christensen, C.C., **K.A. Hayes**, and N.W. Yeung. 2021. Taxonomy, Conservation, and the Future of Native Aquatic Snails in the Hawaiian Islands. *Diversity*, 13(5): 215. https://doi.org/10.3390/d13050215
- **Hayes, K.A.** 2021. Taxonomic shortcuts lead to long delays in species discovery, delineation, and identification. *Biological Invasions* 23(4): 1285-1292. https://doi.org/10.1007/s10530-020-02438-8
- Gerlach, J., G.M. Barker, C.S. Bick, P. Bouchet, G. Brodie, C.C. Christensen, T. Collins, T. Coote, R.H. Cowie, C. Fiedler, O.L. Griffiths, F.B. Vincent Florens, **K.A. Hayes**, J.R. Kim, J-Y. Meyer, W.M. Meyer, I. Richling, J. Slapcinsky, L. Winsor, and N.W. Yeung. 2021. Negative impacts of invasive predators used as biological control agents against the pest snail Lissachatina fulica: the snail *Euglandina 'rosea'* and the flatworm *Platydemus manokwari*. *Biological Invasions* 23: 997–1031
- Hayes, K.A., J. Slapcinsky, D.R. Sischo, J.R. Kim, and N.W. Yeung. 2020. The last known *Endodonta* species? *Endodonta christenseni* sp. nov. (Gastropoda: Endodontidae). *Bishop Museum Occasional Papers* 138: 1-15
- Goulding, T.C., E.E. Strong, **K.A. Hayes**, J. Slapcinsky, J.R. Kim, and N.W. Yeung. 2020. Type specimens of the Hawaiian land snails in the Paleontological Research Institution in Ithaca, New York, with lectotype designations. *American Malacological Bulletin* 38: 1-38
- Yeung, N.W., J. Slapcinsky, E.E. Strong, J.R. Kim, and **K.A. Hayes**. 2020. Overlooked but not forgotten: the first new extant species of Hawaiian land snail described in 60 years, *Auriculella gagneorum* sp. nov. (Achatinellidae, Auriculellinae). *ZooKeys* 950: 1-31 doi:10.3897/zookeys.950.50669
- Glasheen*, P.M., R.L. Burks, S.R. Campos*, and **K.A. Hayes**. 2020. First evidence of introgressive hybridization of apple snails (*Pomacea* spp.) in a native range. *Journal of Molluscan Studies*. doi:10.1093/mollus/eyz035
- Curry, P.A., N.W. Yeung, **K.A. Hayes** and R.H. Cowie. 2020. The potential tropical island distribution of a temperate invasive snail, *Oxychilus alliarius*, modeled on its distribution in Hawaii. *Biological Invasions* 22: 307-327 https://doi.org/10.1007/s10530-019-02091-w
- Sun, J., H. Mu, J.C.H., Ip*, R. Li, T. Xu, A. Accorsi, A. Alvarado, E. Ross, Y. Lan, Y. Sun, A. Castro-Vazquez, I.A. Vega, H. Heras, S. Ituarte, B. Van Bocxlaer, **K.A. Hayes**, R.H. Cowie, Z. Zhao, Y. Zhang, P-Y, Qian and J-W. Qiu. 2019. Signatures of divergence, invasiveness and terrestralization revealed by four apple snail genomes. *Molecular Biology and Evolution* 36: 1507-1520 https://doi.org/10.1093/molbev/msz084
- Yeung, N.W., W.M. Meyer, **K.A. Hayes**, J.R. Kim, T.J. Skelton* and R.H. Cowie. 2019. Non-native gastropods in high elevation horticultural facilities in Hawaii a threat to native biodiversity. *Biological Invasions* 21: 1557-1566 https://doi.org/10.1007/s10530-019-01916-y
- Kim, J.R., T.M. Wong, P.A. Curry, N.W. Yeung, **K.A. Hayes**, and R.H. Cowie. 2019. Modeling the distribution in Hawaii *Angiostrongylus cantonensis* (rat lungworm) in its gastropod hosts. *Parasitology* 146: 42-49
- Cowie, R.H., **K.A. Hayes**, J.R. Kim, K.M. Bustamente and N.W. Yeung. 2018. *Parmarion martensi* Simroth, 1893 (Gastropoda: Ariophantidae) present on Maui¹. *Bishop Museum Occasional Papers* 123: 7-10

- Yeung, N.W. and **K.A. Hayes.** 2018. Biodiversity and Extinction of Hawaiian land snails: How many are left now and what must we do to conserve them a reply to Solem (1990). *Integrative and Comparative Biology* 58: 1157-1169 https://doi.org/10.1093/icb/icy043
- Yeung, N.W., Kim, J.R. and **K.A. Hayes**. 2018. Rat lungworm (*Angiostrongylus cantonensis*) in Hawaii: Updated gastropod host records and distributions on Maui. *Bishop Museum Occasional Papers* 123: 19-24
- Yeung, N.W., K.M. Bustamente, D.R. Sischo, and **K.A. Hayes**. 2018. Rediscovery of *Newcombia canaliculata* (Baldwin 1895) (Gastropoda: Achatinellidae) and *Laminella venusta* (Mighels, 1845) (Gastropoda: Amastridae). *Bishop Museum Occasional Papers* 123: 31-36
- Cowie, R.H., E.E. Strong and **K.A. Hayes**. 2017. Types of Ampullariidae (Mollusca: Gastropoda) in the Academy of Natural Sciences of Drexel University, Philadelphia. *Proceedings of the Academy of Natural Sciences of Philadelphia* 165: 175-194
- Glasheen*, P.M., C.C. Calvo*, M. Meerhoff, **K.A. Hayes** and R.L. Burks. 2017. Staying alive: Desiccation tolerance and recovery in three *Pomacea* spp. following experimental dry down. *Freshwater Science* 36: 316-324
- Yeung, N.W., E.E. Strong, R.H. Cowie and **K.A. Hayes**. 2017. Type specimens of Hawaiian land snails in the Smithsonian Institution, Natural Museum of Natural History, with lectotype designations. *Smithsonian Contributions to Zoology* 647: 1-34
- Meyer, W.M., N.W. Yeung, J. Slapcinsky and **K.A. Hayes**. 2017. Two for one: inadvertent introduction of *Euglandina* species during failed bio-control efforts in Hawaii. *Biological Invasions* 19: 1399-1405.
- Matsukura, K., **K.A. Hayes**, and R.H. Cowie. 2016. Eleven microsatellite loci for two invasive freshwater apple snails, *Pomacea canaliculata* and *P. maculata* (Ampullariidae). *Biological Invasions* 18: 3397-3400
- Kim*, J.R., K.A. Hayes, N.W. Yeung and R.H. Cowie. 2016. Identity and distribution of introduced slugs (Veronicellidae) in the Hawaiian and Samoan Islands. *Pacific Science* 70 (4): 477-493
- Curry*, P.A., N.W. Yeung, **K.A. Hayes**, W.M. Meyer III, A.D. Taylor and R.H. Cowie. 2016. Rapid range expansion of an invasive predatory snail, *Oxychilus alliarius* (Miller 1822), and its impact on endemic Hawaiian land snails. *Biological Invasions* 18: 1769-1780
- Triantis, K.A., F. Rigal, C.E. Parent, R.A.D. Cameron, B. Lenzner, A. Parmakelis, N.W. Yeung, M.R. Alonso, M. Ibáñez, A.M. de Frias Martins, D.N.F. Teixeira, O.L. Griffiths, Y. Yanes, **K.A. Hayes**, R.C. Preece and R.H. Cowie. 2016. Discordance between morphological and taxonomic diversity: land snails of oceanic archipelagos. *Journal of Biogeography* 43: 2050-2061
- Cowie, R.H., V. Héros, N.W. Yeung and **K.A. Hayes**. 2016. Annotated catalogue of types of Hawaiian land and freshwater snails (Mollusca: Gastropoda) in the Muséum national d'Histoire naturelle, Paris, with lectotype designations. Addendum: lectotype designation for *Lymnaea affinis* Souleyet, 1852. *Zoosystema* 38 (3): 389-391
- Cowie, R.H., V. Héros, N.W. Yeung and **K.A. Hayes**. 2016. Annotated catalogue of types of Hawaiian land and freshwater snails (Mollusca: Gastropoda) in the Muséum national d'Histoire naturelle, Paris, with lectotype designations. *Zoosystema* 38 (2): 245-266

- Yeung, N.W. D. Chung, D.R. Sischo and **K.A. Hayes**. 2015. Rediscovery of *Auriculella pulchra* Pease, 1868 (Gastropoda: Pulmonata: Achatinellidae). *Bishop Museum Occasional Papers* 116: 49-51
- Régnier, C., P. Bouchet, **K.A. Hayes**, N.W. Yeung, C.C. Christensen, D.J.D. Chung, B. Fontaine and R.H. Cowie. 2015. Extinction in a Hyperdiverse Endemic Hawaiian Land Snail Family and Implications for the Underestimation of Invertebrate Extinction *Conservation Biology* 29: 1715-1723
- Cowie, R.H., **K.A. Hayes** and E.E. Strong. 2015. Types of Ampullariidae (Mollusca: Gastropoda) in the U.S. National Museum of Natural History, Smithsonian Institution, with lectotype designations. *Smithsonian Contributions to Zoology* 645: 1-12
- Hayes, K.A., R.L. Burks, A. Castro-Vazquez, P.C. Darby, H. Heras, P.R. Martín, J.-W. Qiu, S.C. Thiengo, I.A. Vega, T. Wada, Y. Yusa, S. Burela, M.P. Cadierno, J.A. Cueto, F.A. Dellagnola, M.S. Dreon, M.V. Frassa, M. Giraud-Billoud, M.S. Godoy, S. Ituarte, E. Koch, K. Matsukura, M.Y Pasquevich, C. Rodriguez, L. Saveanu, M.E. Seuffert, E.E. Strong, J. Sun, N.E. Tamburi, M.J. Tiecher, R.L. Turner, P.L. Valentine-Darby and R.H. Cowie. 2015. Insights from an integrative view of the biology of apple snails (Caenogastropoda: Ampullariidae). *Malacologia* 58:245-302 (Invited Review)
- Meyer, W.M., D.T.A. Gary*, N.W. Yeung, C. Dirks, K. Leung*, J.A. Leon*, D.T.B. Ressler*, P.A. Curry, and **K.A. Hayes**. 2014 Native arboreal land snails in the Mt Kaala Natural Area Reserve, Oahu, Hawaii, have similar plant preferences: implications for conservation. *Journal of Molluscan Studies*, 80:469-472, doi: 10.1093/mollus/eyu065
- Kim*, J.R., **K.A. Hayes**, N.W. Yeung and R.H. Cowie. 2014. Diverse gastropod hosts of *Angiostrongylus cantonensis*, the rat lungworm, globally and with a focus in the Hawaiian Islands. *PLoS One* 9(5): e94969 doi:10.1371/journal.pone.0094969
- Durkan*, T.H., N.W. Yeung, W.M. Meyer III, **K.A. Hayes** and R.H. Cowie. 2013. Evaluating the efficacy of land snail survey techniques in Hawaii: implications for conservation throughout the Pacific. *Biodiversity and Conservation* 22:3223-3232.
- Yeung, N.W., **K.A. Hayes** and R.H. Cowie. 2013. Effects of washing produce contaminated with the snail and slug hosts of *Angiostrongylus cantonensis* with three common household solutions. *Hawaiian Journal of Medicine and Public Health* Supplement 2. 72(6):83-85.
- Kim*, J.R., **K.A. Hayes**, N.W. Yeung and R.H. Cowie. 2013. Definitive, intermediate paratenic and accidental hosts of *Angiostrongylus cantonensis* and its Molluscan intermediate hosts in Hawaii. *Hawaiian Journal of Medicine and Public Health* Supplement 2. 72(6):10.
- **Hayes, K.A.**, R.H. Cowie, S.C. Thiengo and E.E. Strong. 2012. Comparing apples to apples: clarifying the identities of two highly invasive Neotropical Ampullariidae (Caenogastropoda). *Zoological Journal of Linnean Society* 166:723-753.
- Karl, S.A. and **K.A. Hayes**. 2012. Extreme population subdivision in the Crown Conch (*Melongena corona*): Historical and contemporary influences. *Journal of Heredity* 103:523-532.
- **Hayes, K.A.**, N.W. Yeung, J.R. Kim* and R.H. Cowie. 2012. New records of alien Gastropoda in the Hawaiian Islands: 1996-2010. *Bishop Museum Occasional Papers* 112:21-28.

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- **Hayes, K.A.**, R.H. Cowie and S.C. Thiengo. 2009. A global phylogeny of apple snails: Gondwanan origin, generic relationships and the influence of outgroup choice (Caenogastropoda: Ampullariidae). *Biological Journal of the Linnean Society* 98:61-76.
- Hayes, K.A., R.H. Cowie, A. Jørgensen, R. Schultheiß, C. Albrecht and S.C. Thiengo. 2009. Molluscan models in evolutionary biology: Apple snails (Gastropoda: Ampullariidae) as a system for addressing fundamental questions. *American Malacological Bulletin* 27(1/2):47-58.
- **Hayes, K.A.** and S.A. Karl. 2009. Phylogenetic relationships of crown conchs (*Melongena* spp.): the *corona* complex simplified. *Journal of Biogeography* 36:28-38.
- Holland, B.S., C.C. Christensen, **K.A. Hayes** and R.H. Cowie. 2008. Biocontrol in Hawaii: A response to Messing (2007). *Proceedings of the Hawaiian Entomological Society* 40:81-83.
- Cowie, R.H., **K.A. Haye**s, C.T. Tran* and W.M. Meyer. 2008. The horticultural industry as a vector of alien snails and slugs: widespread invasions in Hawaii. *International Journal of Pest Management* 54(4):267-276.
- **Hayes, K.A.**, R.C. Joshi, S.C. Thiengo and R.H. Cowie. 2008. Out of South America: Multiple origins of non-native apple snails in Asia. *Diversity and Distributions* 14(4):701-712.
- Tran*, C.T., **K.A. Hayes** and R.H. Cowie. 2008. Lack of mitochondrial DNA diversity in invasive apple snails (Ampullariidae) in Hawaii. *Malacologia* 50(1-2):351-357.
- Meyer, W.M., **K.A. Hayes** and A.L Meyer. 2008. Giant African snail, *Achatina fulica*, as a snail predator. *American Malacological Bulletin* 24:117-119.
- Cowie, R.H., **K.A. Hayes**, *C.T. Tran and P. Levin. 2007. Distribution of the invasive apple snail *Pomacea canaliculata* (Lamarck) in the Hawaiian Islands (Gastropoda: Ampullariidae). *Bishop Museum Occasional Papers* 96:48-51.
- **Hayes, K.A.**, *C.T. Tran and R.H. Cowie. 2007. New records of alien Mollusca in the Hawaiian Islands: non-marine snails and slugs (Gastropoda) associated with the horticultural trade. *Bishop Museum Occasional Papers* 96:54-63.
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- **Hayes, K.A.** and S.A. Karl. 2004. Characterization of microsatellite markers from the gastropod genus *Melongena*. *Molecular Ecology Notes* 4:755-757.

Book Chapters (8)

Cowie, R.H. and **K.A. Hayes** 2019. Ampullariidae. In: *Freshwater Mollusks of the World* (Eds. Lydeard, C. and K.A. Cummings). Johns Hopkins University Press, Baltimore.

- Cowie, R.H., **K.A. Hayes**, E.E. Strong and S.C. Thiengo. 2017. Non-native apple snails: systematics, distribution, invasion history, and reasons for introduction. In: *Biology and management of invasive apple snails*. (ed. R.H. Cowie, R.C. Joshi and L.C. Sebastian). Philippine Rice Research Institute, Muñoz, Nueva Ecija.
- Cowie, R.H., J.R. Kim and **K.A. Hayes**. 2014 Angiostrongyliasis: An emerging infectious disease in the Asia-Pacific region, with a focus on Hawaii. In: *Medical and Applied Malacology Crossing Boundaries: Integrative Approaches to Malacology* (Eds. de Toledo Piza, A.R., de Freitas Tallarico, L. Introíni, G.O. and dos Santos, S.B.), p. 115-128. Cambridge Scholars Publishing, Newcastle upon Tyne, UK.
- Cowie, R.H. and **K.A. Hayes**.2012 Apple snails. In: *A handbook of global freshwater invasive species* (ed. Francis, R.A.), p. 207-221. Earthscan, London and New York.
- Thiengo, S.C, **K.A. Hayes**, A.C. Mattos, M.L.A. Fernandez and R.[H.] Cowie. 2011. A Família Ampullariidae no Brasil: Aspectos Morfológicos, Biológicos e Taxonômicos, In: *Tópicos em Malacologia. XIX ENCONTRO BRASILEIRO EM MALACOLOGIA*. p. 95-111. Orgs. M.L.A. Fernandez, S.B. Santos, A.D. Pimenta, S.C. and Thiengo. Editora Technical Books Rio de Janeiro.
- Cowie, R.H., **K.A. Hayes** and S.C. Thiengo. 2006. What are apple snails? Confused taxonomy and some preliminary resolution In: *Global advances in ecology and management of golden apple snails*, (ed. R.C. Joshi and L.C. Sebastian), p. 3-23. Philippine Rice Research Institute, Muñoz, Nueva Ecija.
- Levin, P., R.H. Cowie, J.M. Taylor, **K.A. Hayes**, K.M. Burnett and C.A. Ferguson. 2006. Apple snail invasions and the slow road to control: ecological, economic, agricultural and cultural perspectives in Hawaii. In: *Global advances in ecology and management of golden apple snails*, (ed. R.C. Joshi & L.C. Sebastian), p. 325-335. Philippine Rice Research Institute, Muñoz, Nueva Ecija.
- Cowie, R.H. and **K.A. Hayes**. 2005. Invasive ampullariid snails: taxonomic confusion and some preliminary resolution based on DNA sequences. In: Chang, Y.-F. and Lai, P.-Y., eds. *Proceedings of the Asia-Pacific Economic Cooperation meeting on the management of the golden apple snail, National Pingtung University of Science and Technology, Pingtung, Taiwan, September 6-11, 2004. Pingtung: National Pingtung University of Science and Technology.*

In Prep

- Yeung, N.W., E.E. Strong, J. Slapcinsky, B.S. Holland, R.H. Cowie and **K.A. Hayes**. *In Prep*. Remnants of the Hawaiian Achatinellidae: evolutionary relationships within a highly threatened family. *Molecular Phylogenetics and Evolution*
- **Hayes, K.A.**, E.E. Strong, R.H. Cowie and S.C. Thiengo. Phylogenetics, anatomy and distribution of *Pomacea dolioides* (Reeve, 1856) and *Pomacea alempariabensis* (n. sp.).

Abstracts and Other (7)

- **Hayes, K.A.,** B.A. Derne, C. Earl, J. Kealoha, and N.W. Yeung. 2022. Hawaiian land snail conservation updates. *Tentacle* 30: 40-44.
- Yeung, N.W., **K.A. Hayes** and R.H. Cowie. 2013. Pacific Island land snails: Hawaiian land snail project. *Tentacle* 21:

- Cowie, R.H., **K.A. Hayes** and C.T. Tran. 2009. The horticultural industry as a vector of alien snails and slugs: results of surveys in Hawaii. The Western Society of Malacologists Annual Report 39 [2006]:12.
- **Hayes, K.A.** 2009. Evolution, molecular systematics and invasion biology of Ampullariidae. Ph.D. Dissertation. University of Hawaii, Department of Zoology. Honolulu, HI.
- Cowie, R.H., **K.A. Hayes**, C.T. Tran and W.M. Meyer III. 2008. Alien snails and slugs imported into Hawaii. *Aliens* 27:17.
- **Hayes, K.A.** 2007. Neotropical species diversity: Apple snails as an informative system. *Unitas Malacologica Newsletter* 24(1):13-14.
- **Hayes, K.A.** 2003. Phylogeography and Evolution of the Florida Crown Conch (*Melongena corona*). MS Thesis. University of South Florida. Tampa, FL.

TEACHING AND OUTREACH ACTIVITIES

Pedagogical training

- Facilitator for the Howard Hughes Medical Institute and the National Academies Summer Institute on Scientific Teaching. 22-27 July 2013. Honolulu, HI, USA
- 2011 2012 Faculty Institutes for Reforming Science Teaching (FIRST IV) postdoctoral fellow: A NSF-funded training program and national network for science educators to provide biology faculty long-term professional development in learner centered teaching approaches.

Courses taught as instructor of record

2022	Evolution, Department of Biology, Howard University (Virtual)
2017	Comparative Invertebrate Evolution, Department of Biology, Howard University
2016	Evolution and Systematic Biology, Department of Biology, Howard University
2014-2018	General Biology, Department of Biology, Howard University
2015-2017	Evolution, Department of Biology, Howard University
2015	Aquatic Ecology, Department of Biology, Howard University
2014-2017	Senior Seminar, Department of Biology, Howard University
2014-2017	Invertebrate Biology, Department of Biology, Howard University
2013	Biology and Society, Department of Biology, University of Hawaii
2012	Evolution for Everyone, Honors Program, University of Hawaii
2010 - 2011	Introduction to Research, Honors Program, University of Hawaii
2007	Population Genetics Primer, Graduate Student Seminar, University of Hawaii
2006	Molecular Systematics Primer, Graduate Student Seminar, University of Hawaii
Courses taught as guest lecturer	
2013	Evolution, Department of Biology, Howard University
2011	Conservation Genetics (HON491 Conservation Biology) University of Hawaii

2000 - 2002 Advanced Invertebrate Zoology, University of South Florida, Tampa, FL.

Outreach Activities

2020-2021	Introduction to biodiversity research – Native Hawaiian Education Program at Bishop Museum, Honolulu, HI. June 2020 and June 2021
2020-2021	Introduction to taxonomy and phylogenetics – Native Hawaiian Education Program at Bishop Museum, Honolulu, HI. June 2020 and June 2021
2020-2021	Introduction to DNA Barcoding – Native Hawaiian Education Program at Bishop Museum, Honolulu, HI. June 2020 and June 2021
2016	Hawaiian land snail taxonomic workshop – UH Maui College, Kahului, HI. 5 July 2016
2015	National Plant Diagnostic Network Malacology Workshop. Davis, CA. June 2015
2015	Hawaiian land snail taxonomic workshop – Bishop Museum, Honolulu, HI. July 2015
2015	Land snail biodiversity and conservation: Mrs. Carroll's 5 th Grade Class, Punahou School, Honolulu, HI
2015	Hawaiian land snail conservation – National Geographic Bioblitz 2015: Hawaii Volcanoes National Park. 15 May 2015

Laboratory courses taught as graduate assistant

1999 - 2002 University of South Florida, Tampa, FL; Biology (Cellular Processes, Biodiversity), Cell Biology, Genetics, Advanced Invertebrate Zoology, and Molecular Systematics.

MENTORING

MENT OILLI	
University of South Florida	<u>Undergraduates:</u> Mathew Moody (2001 - 2002)
University of Hawaii	<u>Undergraduates:</u> C.T. Tran (2004 - 2006), S. Arnasson (2007), J. Bedrosian (2007), J.R. Kim (2007 - 2009), C. Yee (2008 - 2011), .T.J. Skelton (2008 - 2010), K. Coleman (2011), T. Takebayashi (2011), D. Ressler (2011-2014), T.H. Durken (2011-2012), A. Kong (2011-2013), D.A. Gary (2012- 2013), B. Wilson (2012), J. Leon (2012-2013), E.J. Rogers (2012-2013), E. Yokote (2013-2014), C. Mekonnen (2013-2014), D. Dailey (2013-2014), J. Parvey (2013-2014).
University of Hawaii	<u>Graduate Students:</u> J.R. Kim (MS; 2009-2013), P.A. Curry (MS; 2010-2013), K. Podlacha (PhD; 2011), J. Davies (PhD; 2011), K. Leung (MS, 2013-2015), D.A Gary (MS; 2013-2015), B. Oliveira (MS: 2013). <u>Postdoctoral:</u> N.W. Yeung (2010-2014), C. Régnier (2012), K. Matsukura (2014-2016)

Howard University

<u>Undergraduates:</u> S. Lindsay (2014), Z.Z. Manusr (2014-2017), B.N. Galloway (2014-2016), K.P. Emanuel (2014-2015), L. Poisson (2015-2017), C. Garrick (2016), F. Hossain (2016), J. Lebi (2016), L. Ogwuazor (2016), N. Hodges (2017-2019), A. Boateng (2017-2018), U. Udoh (2017-2018)

<u>Graduate Students:</u> K.E. Scriber II (PhD; 2014-2017), Suwen Liu (2017)

<u>Postdoctoral:</u> Qian Qian Yang (2016-2017), Reham Fathey (Fulbright 2018)

Bishop Museum

High School: Hannah Hiraki (2018), Lily Evans (2018-2019), Connor Kalahiki (2018-2019)

<u>Undergraduates:</u> Lilly Thomey (2018), Lauren Nguyen (2018-2020), Hanna Kulvicki (2019), Pashyn Morimoto (2020) Sophia Egger (2020-2021), Laura Caser (2022)

<u>Graduate Students:</u> Olivia Stogner (2020-2021), Meagan Haubner (2022-)

Posdoctoral: Tricia Goulding (2018-2020), Christopher Hobbs (2019-2020), Chandra Earl (2020-2023), Bonnie Derne (2021-2023), Nidia Castillo (2022)

INVITED PRESENTATIONS (PRESENTER UNDERLINED)

<u>Hayes, K.A.</u> Hawai'i's Lymnaeidae: Understudied, underestimated, and endangered. USFWS Brown Bag Seminar, Honolulu, HI. 31 August 2022

<u>Hayes, K.A.</u>, K.M. Bustamente, D.R. Sischo, and N.W. Yeung. Conservation status of Hawaii's freshwater Lymnaeidae. American Malacological Society President's Symposium on Molluscan Conservation at the World Congress of Malacology, Munich, GR. 1 August 2022

<u>Yeung, N.W.</u> and K.A. Hayes Enhancing access to taxonomic and biogeographical data to stem the tide of extinction of the highly imperiled Pacific Island land snails. American Malacological Society President's Symposium on Molluscan Conservation at the World Congress of Malacology, Munich, GR. 1 August 2022

Yeung, N.W., D.R. Sischo, G. Blanchet, K.M. Bustamente, C.E. Hee, J. Kealoha, T. Maruno, S. Stiefel, K. Troumbley, and K.A. Hayes. Hawaiian land snail conservation efforts: from rediscovering species to manning the lifeboats. American Malacological Society President's Symposium on Molluscan Conservation at the World Congress of Malacology, Munich, GR. 1 August 2022

<u>Derne, B.T.</u>, D.R. Sischo, N.W. Yeung, and K.A. Hayes. Understanding snail symbionts and their role in conservation. American Malacological Society President's Symposium on Molluscan Conservation at the World Congress of Malacology, Munich, GR. 2 August 2022

<u>DeLeon, K.L.</u>, N.C. Treneman, J.R. Shipway, and K.A. Hayes. Taxonomic investigation of Teredinidae in the Hawaiian Islands: Resolving relationships needed to inform conservation American Malacological Society President's Symposium on Molluscan Conservation at the World Congress of Malacology, Munich, GR. 1 August 2022

- <u>Hayes, K.A.</u> Molluscan Conservation in the Anthropocene. Plenary Speaker at the 55th Annual Meeting of the Western Society of Malacologists, Pasadena, CA. 23-26 June 2022
- Yeung, N.W., J.R. Kim, and K.A. Hayes. Hawaii's Non-Marine Gastropod Invasion Stories: Frustrating Cryptic Species Complexes, Unknown Species Identifications, and New Introductions Invited speaker for invasive mollusks symposium at the 55th Annual Meeting of the Western Society of Malacologists, Pasadena, CA. 23-26 June 2022
- <u>Hayes, K.A.</u> Biodiversity and conservation of Hawaii's neglected majority: moving beyond species driven conservation. Smithsonian National Museum of Natural History, Invertebrate Zoology No Bones Seminar. 8 June 2021.
- <u>Hayes, K.A.</u> Natural History Museums in the 21st Century. KUPU teacher interns visit to Bishop Museum. 3 April 2021.
- <u>Hayes, K.A.</u> Biodiversity discovery, systematics and conservation. University of Hawaii West Oahu, Health Science Seminar. 26 February 2021.
- <u>Earl, C.</u>, K.A. Hayes, N.W. Yeung. Chronicling Pacific Island Land Snail Biodiversity and What We Can Do to Conserve What Remains. Bishop Museum Pau Hāna Seminar, 18 December 2020.
- <u>Hayes, K.A.</u> Natural history museums: Biodiversity discovery, systematics and conservation. KUPU teacher interns visit to Bishop Museum. 22 November 2020.
- <u>Hayes, K.A.</u> and N.W. Yeung. Freshwater snails of Hawaii. Snail Extinction Prevention Program Annual Meeting. 9 March 2020.
- <u>Hayes, K.A.</u> and N.W. Yeung. Biodiversity Discovery and Systematics in the Anthropocene. Iolani School, Yvonne Chan's Population Genetics Class. 11 February 2020.
- Yeung, N.W. and <u>K.A. Hayes</u>. Museum Collections for the Study of Ecology and Evolution. Iolani School. 11 February 2020.
- <u>Hayes, K.A.</u> Biodiversity Discovery and Systematics in the Anthropocene. University of Hawaii, Department of Natural Resources and Environmental Management. 6 November 2019.
- <u>Hayes, K.A.</u> and <u>N.W. Yeung</u>. Biodiversity Discovery and Natural History Collections in the Anthropocene. Australian Museum, Sydney, Australia. 1 September 2019.
- <u>Hayes, K.A.</u>, C.C. Christensen and N.W. Yeung. Biocontrol of land snails: unlearned lessons and non-target impacts. Novel Approaches to Managing Invasive and Pest Molluscs Thematic Session at the World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019
- <u>Hayes, K.A.</u> and N.W. Yeung. Not gone yet, but we're now well either: Update on Hawaii's remaining land snails. 26th Annual Hawai'i Conservation Conference. Symposium: Challenges and Successes of Conserving Hawai'i's Terrestrial Invertebrates: A Seven Year Update, Honolulu, HI. 10 July 2019.
- <u>Slapcinsky</u>, J., K.A. Hayes and N.W. Yeung. How has the Hawaiian endemic land snail genus *Auriculella* fared after a century of obscurity during an extinction crisis? 84th American Malacology Society and 51stWestern Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.

- <u>Yeung, N.W.</u>, E.E. Strong, J. Slapcinsky, B.S. Holland, R.C. Cowie and K.A. Hayes. Phylogenetics and biogeography informing conservation of Hawaiian Achatinellidae. 84th American Malacology Society and 51stWestern Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- Yeung, N.W., R.H. Cowie, J.R. Kim, C.C. Christensen and K.A. Hayes. Fifty-two species and counting invasive terrestrial snails in Hawaii. 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- Goulding, T.C., N.W. Yeung and K.A. Hayes. Molecular systematics of the Hawaiian Pacificellinae (Stylommatophora: Achatinellidae). 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- Yeung, N.W. and K.A. Hayes. Extinction of the hyperdiverse Hawaiian land snail fauna: What remains and what are we doing to save it? Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA, 3-7 January 2018.
- <u>Hayes, K.A.</u> Adapted for invasion: Evolution of Neotropical apple snails (Caenogastropoda: Ampullariidae). Third International Congress on Biological Invasions. Hangzhou, China, 19-23 November 2017
- <u>Hayes, K.A.</u> Pacific Island land snails: Changing perspectives for conservation. Zhejiang Provincial Key Laboratory of Biometrology and Inspection and Quarantine China Jiliang University, Hangzhou, China, 23 November 2017.
- <u>Hayes, K.A.</u> and N.W. Yeung. Pacific Island land snails: Changing perspectives for conservation. Mollusks in Peril Symposium at 83rd Annual American Malacological Society meeting, Newark, DE. 15-20 July 2017.
- <u>Yeung, N.W.</u> and K.A. Hayes. Impact of invasive species on Hawaii's land snail diversity and the development of a Pacific Island land snail consortium. Mollusks in Peril Symposium at 83rd Annual American Malacological Society meeting, Newark, DE. 15-20 July 2017.
- <u>Hayes, K.A.</u> The role of perceptions in the biodiversity crisis and extinction of Hawaiian land snails. Blandy Experimental Farm, Boyce, VA. 12 July 2017.
- <u>Hayes, K.A.</u> and <u>N.W. Yeung</u>. Invasive land snails and Rat Lungworm intermediate hosts in Hawaii. Hawaii Invasive Species Council, Department of Land and Natural Resources. 6 July 2017.
- <u>Hayes, K.A.</u> and <u>N.W. Yeung</u>. Rat Lungworm intermediate hosts in Hawaii. Hawaii Island Vector Control Conference. Kona, HI. 29 June 2017.
- <u>Hayes, K.A.</u> Invertebrate Evolution, Ecology, and Conservation Biology. Smithsonian Institution National Museum of Natural History, Washington, DC. 27 March 2017.
- <u>Hayes, K.A.</u> and N.W. Yeung. Invasive land snails and Rat Lung Worm intermediate hosts in Hawaii. Hawaii Department of Agriculture, Plant Quarantine, Honolulu, HI. 13 March 2017.
- <u>Hayes, K.A.</u> Apple Snails Phylogenetics, evolution and ecology of keystone species. Zhejiang Provincial Key Laboratory of Biometrology and Inspection and Quarantine China Jiliang Univesity, Hangzhou, China, 7 November 2016.
- <u>Hayes, K.A.</u> The other 99%, Invertebrate Conservation. Bernice Pauahi Bishop Museum, Honolulu, HI. 3 October 2016.

- <u>Hayes, K.A.</u> Pacific Island Land Snail Conservation: Case studies from the Hawaiian Islands. Mollusks in Peril Forum, Bailey-Mathews National Shell Museum, Sanibel Island, Florida. 22-24 May 2016.
- <u>Hayes, K.A.</u> Evolution, ecology, and conservation: Insights from the study of terrestrial and aquatic snails. Department of Biology Science Seminar at the University of North Carolina, Pembroke, Pembroke, NC. 19 April 2016.
- <u>Hayes, K.A.</u> Insights into evolution and ecology from the study of Mollusca. Hartweg Memorial Lecture. Ecology and Evolutionary Biology Program at the University of Michigan, Ann Arbor, MI. 17 March 2016.
- <u>Hayes, K.A.</u> S.C. Thiengo, E.E. Strong and R.H. Cowie. Phylogeny, morphology and species limits of Neotropical apple snails (Caenogastropoda: Ampullariidae) XXIV Encontro Brasileiro de Malacologia, Rio de Janeiro, Brazil. 14-18 September 2015.
- <u>Hayes, K.A.</u> and N.W. Yeung. Pacific Island land snail conservation: Case studies from the Hawaiian Islands. XXIV Encontro Brasileiro de Malacologia, Rio de Janeiro, Brazil. 14-18 September 2015.
- <u>Yeung, N.W.</u> and K.A. Hayes. Systematics and conservation of the Hawaiian orthurethrans. Pacific Island Land Snail Symposium at 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- Slapcinsky, J. N.W. Yeung, D.T.A. Gary and K.A. Hayes. Diversity of Hawaiian Microcystinae (Gastropoda: Stylommatophora: Helicarionoidea) 75 years after H.B. Baker. Pacific Island Land Snail Symposium at 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Leung, K.</u>, N.W. Yeung and K.A. Hayes. The phylogenetics and conservation status of the Hawaiian Helicinidae. Pacific Island Land Snail Symposium at 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Hayes, K.A.</u> and N.W. Yeung. Pacific Island land snail conservation: Case studies from the Hawaiian Islands. Pacific Island Land Snail Symposium at 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Hayes, K.A.</u> Phylogeny, morphology and species limits of Neotropical apple snails (Caenogastropoda: Ampullariidae). 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- Yeung, N.W., R.H. Cowie, B.S. Holland and K.A. Hayes. Phylogenetic systematics of Hawaiian Succineidae. 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Hayes, K.A.</u> W.M. Meyer, N.W. Yeung and J. Slapcinsky. Two for the price of one: inadvertent introduction of cryptic *Euglandina* species during failed biocontrol efforts in Hawaii. 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Hayes, K.A.</u> Conservation of invertebrates; The role of the 99%. United States Fish and Wildlife Service Pacific Division. Honolulu, HI, USA. 2 July 2015
- <u>Hayes, K.A.</u> Invasive land snails of Hawaii. National Plant Diagnostic Network Malacology Workshop. Davis, CA, USA. 16-18 June 2015.

- <u>Hayes, K.A.</u> Invasive Ampullariidae (Mollusca: Caenogastropoda). National Plant Diagnostic Network Malacology Workshop. Davis, CA, USA. 16-18 June 2015.
- <u>Hayes, K.A.</u> How many Hawaiian land snail species remain? Conservation status update on an imperiled fauna. Smithsonian Institution Center for Conservation and Evolutionary Genetics at the National Zoo, Washington, DC, USA. 13 March 2015.
- Yeung, N.W., K.A. Hayes, W.M. Meyer, C.T. Tran, J.R. Kim, T.J. Skelton and R.H. Cowie. Searching high and low: Invasive land snails in Hawaii. United States Fish and Wildlife Service Pacific Division. Honolulu, HI, USA. 11 February 2015.
- <u>Hayes, K.A.</u> and R.L. Burks. Systematics, biogeography and conservation of apple snails (Caenogastropoda: Ampullariidae) of the Río de la Plata Basin. Presented at Congreso Uruguayo de Zoologia, Montevideo, UR. 11 December 2014.
- <u>Burks</u>, R.L., S.C. Cochran, A.D. Plantz and K.A. Hayes. Not all apple snails are invasive: fecundity, life history, identity and distribution of native *Pomacea megastoma* (Ampullariidae) in Uruguay. Presented at Congreso Uruguayo de Zoologia, Montevideo, UR. 11 December 2014.
- <u>Hayes, K.A.</u> Evolution of Amphibiousness within the Ampullariidae (Mollusca: Caenogastropoda). Academy of Natural Sciences Philadelphia at Drexel University, 7 November 2014.
- <u>Hayes, K.A.</u> Apple Snails: Phylogenetics, evolution and ecology of keystone species. Howard University Biology Seminar, 20 November 2013.
- <u>Hayes, K.A.</u> Molecular insights into ecology, evolution and conservation. Fleming Science Scholar Lecture series at Southwestern University, Georgetown, TX, 12 November 2013.
- <u>Hayes, K.A.</u> Occupy Earth: The other 99% that rule the world. Fleming Science Scholar Lecture at Southwestern University, Georgetown, TX, 7 November 2013.
- <u>Hayes, K.A.</u> Assessing molluscan biodiversity through integrative taxonomy. Eleventh International Congress on Medical and Applied Malacology, Rio de Janeiro, Brazil, 25 29 September 2012.
- <u>Hayes, K.A.</u> Molecular systematic approaches to delineating gastropod species. Hawaiian Malacological Society Meeting, Honolulu, HI, 5 September 2012.
- <u>Hayes, K.A.</u> and N.W. Yeung. Hawaiian land snail biodiversity: Conservation status of a vanishing fauna. Presented during the Symposium entitled They are the 99%: Challenges and successes of conserving invertebrates, Hawaii's smallest majority at 2012 Hawaii Conservation Conference, Honolulu, HI, 31 July 2 August 2012.
- <u>Hayes, K.A.</u> Conchologists of America: fostering the future of Malacology and supporting student research through grants to Malacology. 78th Annual American Malacological Society meeting, Cherry Hill, N.J., 16-21 June 2012.
- <u>Hayes, K.A.</u> Caracóis como modelos na evolução e biologia da conservação. Instituto Oswaldo Cruz, Rio de Janeiro, Brasil. 21 December 2011.
- <u>Hayes, K.A.</u> Systematics and Evolution of the Ampullariidae. Dirección Nacional Recursos Acuáticos (DINARA), Montevideo, Uruguay. 22 November 2010.
- <u>Hayes, K.A.</u>, R.H. Cowie, S.C. Thiengo, and E.E. Strong. Systematics and evolution of Neotropical apple snails (Caenogastropoda: Ampullariidae). POMACEA 2010, 4th International Workshop on the Biology of Ampullariidae, San Miguel de Tucumán, Argentina, 16 -20 November 2010.

- <u>Cowie, R.H.</u>, K.A. Hayes and S.C. Thiengo. Invasive apple snails: a review of their identity, spread and distribution. POMACEA 2010, 4th International Workshop on the Biology of Ampullariidae, San Miguel de Tucumán, Argentina, 16-20 November 2010.
- <u>Thiengo, S.C.</u>, K.A. Hayes, A.G. Schilithz, P.M. Coelho, M.A. Fernandez and R.H. Cowie. Morphology, taxonomy and distribution of the *Pomacea canaliculata* group (Ampullariidae) Brasil. POMACEA 2010, 4th International Workshop on the Biology of Ampullariidae, San Miguel de Tucumán, Argentina, 16-20 November 2010.
- Cowie, R.H. and <u>K.A. Hayes</u>. Snails: Evolution, biodiversity and alien species. PBRC Biodiversity Seminar Series, Honolulu, HI, 5 April 2010.
- <u>Hayes, K.A.</u>, R.H. Cowie and S.C. Thiengo. Phylogeny, biogeography and morphology of Neotropical Apple Snails (Caenogastropoda: Ampullariidae). XXI Encontro Brasileiro de Malacologia, Rio de Janeiro, Brazil. 19-24 July 2009.
- <u>Hayes, K.A.</u>, R.H. Cowie, W.M. Meyer, N.W. Yeung, C.T. Tran and J.R. Kim. Introduction pathways, spread and impacts of alien snails and slugs in Hawaii. Presented as a workshop participant on snail and slug management in ornamentals in the Western U.S. at the 6th International Integrative Pest Management Symposium, Portland Oregon. 24-26 March 2009.
- <u>Hayes, K.A.</u> and R.H. Cowie. Molluscan taxonomy in the 21st century: Examples from New World Ampullariidae. 74th Annual American Malacological Society meeting, Carbondale, IL., 29 June 3 July 2008.
- <u>Hayes, K.A.</u>, R.H. Cowie, W.M. Meyer, C.T. Tran and J.R. Kim. Introduction pathways, spread and impacts of alien snails and slugs in Hawaii. 89th Annual meeting of the American Association for the Advancement of Science, Pacific Division. Waimea, HI 15-20 June 2008. (2nd Place AAAS Award of Excellence)
- <u>Hayes, K.A.</u>, S.C. Thiengo, R.C. Joshi and R.H. Cowie. Alien ampullariids: Introductions, impacts and identities. Instituto de Biologia, Universidade Estadual de Campinas, Campinas, SP. Brazil. 9 November 2006.
- <u>Hayes, K.A.</u>, C.T. Tran and R.H. Cowie. The horticultural industry as a vector of alien snails and slugs: results of surveys in Hawaii. Invasive Gastropod forum at the 14th annual Hawaii Conservation Conference 26-28 July, 2006.
- <u>Hayes, K.A.</u> and R.H. Cowie. Apple snail invasions in Asia and beyond. VI Latin American Malacological Congress, 4-7 July 2005.
- <u>Cowie, R.H.</u> and Hayes, K. A. Invasive ampullariid snails: taxonomic confusion and some preliminary resolution based on DNA sequences. Asia-Pacific Economic Cooperation meeting on the management of the golden apple snail, National Pingtung University of Science and Technology, Pingtung, Taiwan, 6-11 September 2004.
- <u>Hayes, K.A.</u> Systematics, phylogeography, and evolution of Apple Snails (*Pomacea* spp.). Brazilian Malacological Society Meeting held at Rio de Janeiro State University (UERJ), 12 May 2004.
- <u>Hayes, K.</u> The "Corona Complex": Evolution and Systematics. Monthly Meeting of Suncoast Conchologist Society. 1 April 2003.
- <u>Hayes, K.</u> Conservation in the Marine Realm What can molluses tell us? Innerspace Explorers Dive Club Monthly Meeting. Tampa FL. 2 April 2002.

<u>Hayes, K.</u> Phylogeography of the "Corona Complex": Evolution at a Snail's Pace. University of Tampa Department of Biology Seminar. Tampa, Florida. 15 November 2001.

CONTRIBUTED PRESENTATIONS (PRESENTER UNDERLINED)

- Barbosa, K.P., <u>K.A. Hayes</u>, R. do V. Vilela, C.R. Marchi, and S.C. Thiengo. Phylogenetic systematics and distribution of *Pomacea sordida* (Swainson, 1823) and *Pomacea intermedia* (Férussac in Quoy & Gaimard, 1825) (Caenogastropoda: Ampullariidae). Conservation at the World Congress of Malacology, Munich, GR. 4 August 2022
- <u>Haubner, M.L.</u>, K.L. DeLeon, and K.A. Hayes. Characterization and phylogenetic analysis of eleven apple snail (Ampullariidae) complete mitochondrial genomes. Conservation at the World Congress of Malacology, Munich, GR. 5 August 2022
- <u>Hayes, K.A.</u>, K.M. Bustamente, D.R. Sischo, and N.W. Yeung. Reassessing the conservation and taxonomic status of Hawaii's Lymnaeidae: Understudied, underestimated, and endangered. 55th Annual Meeting of the Western Society of Malacologists, Pasadena, CA. 23-26 June 2022
- Slapcinsky, J., C. Earl, K.A. Hayes, and N.W. Yeung. Pacific Island Land Snail Biodiversity Repository (PILSBRy); documenting an imperiled fauna. 55th Annual Meeting of the Western Society of Malacologists, Pasadena, CA. 23-26 June 2022
- Egger, S.R. L. Poisson, K. DeLeon, K.A. Hayes. Elevational distribution of Tardigrades on Ka'ala, O'ahu. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- Meyer III, W.M., N.W. Yeung, A.R.O. Cavalcanti, E.J. Crane III, <u>K.A. Hayes</u>. Plants and associated microbial communities critical to Hawaiian arboreal snail conservation. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- Yeung. N.W., E.E. Strong, J. Slapcinsky, K.A. Hayes. Towards a systematic revision of the Hawaiian Achatinellidae, a highly threatened land snail family. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- <u>Kealoha, J.A.N.</u>, K.A. Hayes, N.W. Yeung. Manning the Hawaiian land snail conservation lifeboats. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- Mukai, K.K., Y.L. Chan, J.A.K. Okumura, N.W. Yeung, K.A. Hayes. Developing an informative Hawaiian land snail identification mobile app. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- <u>Earl, C.</u>, N.W. Yeung, K.A. Hayes. Pacific Island Land Snail Biodiversity Repository (PILSBRy) Portal. 28th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- Maruno, T., J.R. Kim, N.W. Yeung, Y. Tsang, K.A. Hayes. Mapping the distributions of the invasive Rosy Wolfsnail, the *Euglandina rosea* species complex, in Hawai'i Conservation Conference, Honolulu, HI (Virtual). 27-29 July 2021.
- <u>DeLeon, K.L.</u>, N.C. Treneman, K.A. Hayes. Taxonomic Teredinidae turmoil and the effort to resolve shipworm relationships in the Pacific. 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.
- <u>Treneman, N.C.</u>, K.A. Hayes, K.L. DeLeon, R. Kawamoto. Brooding on dispersal: Shipworms in the Hawaiian Islands. 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.

- <u>Yeung. N.W.</u>, E.E. Strong, J. Slapcinsky, K.A. Hayes. Integrative systematics of the Hawaiian Achatinellidae. 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.
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- Maruno, T., J.R. Kim, N.W. Yeung, Y. Tsang, K.A. Hayes. Mapping the distributions of the invasive Rosy Wolfsnail, the *Euglandina rosea* species complex, in Hawai'i. 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.
- <u>Haubner, M.L.</u>, N.W. Yeung, K.A. Hayes. Hawaiian land snail gut microbiome sequencing: A review and proposed methodology. 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.
- <u>Huang, A.</u>, N.W. Yeung, J.R. Kim, C. Earl, K.A. Hayes. Current and historical distributions of *Amastra cylindrica* (Amastridae). 87th Annual Meeting of the American Malacological Society, Cape Breton, Nova Scotia (Virtual). 14-08 June 2021.
- Maruno, T., K.A. Hayes, N.W. Yeung. The Pacific Island Land Snail Biodiversity Repositor (PILSBRy) portal: Enhancing research and conservation management of this highly endangered fauna. 27th Hawai'i Conservation Conference, Honolulu, HI (Virtual). 1-3 September 2020.
- <u>Hayes, K.A.</u> Hawaii's freshwater snails: Understudied and unprotected. 86th American Malacological Society Annual Meeting, 13-14 July 2020 (Virtual).
- Yeung, N.W., <u>J. Slapcinsky</u>, J.R. Kim, D.R. Sischo and K.A. Hayes. The last of the *Endodonta*. 86th American Malacological Society Annual Meeting, 13-14 July 2020 (Virtual).
- <u>Yeung, N.W.</u>, J. Slapcinsky, E.E. Strong, J.R. Kim, and K.A. Hayes. A 100-year journey from discovery to description: A Hawaiian land snail finally gets its name. 86th American Malacological Society Annual Meeting, 13-14 July 2020 (Virtual).
- Meyer III, W.M., K.A. Hayes, N.W. Yeung, J.R. Kim and R.H. Cowie. Distributions of non-native terrestrial molluscs within and among Hawaiian Islands: Implications for statewide management. 8th American Malacological Society Annual Meeting, 13-14 July 2020 (Virtual).
- <u>Hobbs, C.A.</u>, N.W. Yeung and K.A. Hayes. Species delineation in highly threatened Hawaiian land snails (Achatinellidae: *Auriculella*) using geometric morphometrics. 86th American Malacological Society Annual Meeting, 13-14 July 2020.
- Slapcinsky, J., R. Fathey, R. Corlett, T.A. Pearce and K.A. Hayes. Is the Flamed Tigersnail, *Anguispira alternata*, a Species Complex or Complex Species? World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- <u>Thiengo, S.C.</u>, R.H. Cowie, M.A. Fernandez, K.H.P. Barbosa and K.A. Hayes. Ampullariidae of the Midwest Region of Brasil: Hydrographic Basin Tocantins- Araguaia and Paraguay River Basin World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.

- Goulding, T.C., N.W. Yeung and K.A. Hayes. Investigating Species Diversity and Endemism in Hawaiian Microsnails (Stylommatophora: Achatinellidae: Pacificellinae). World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- <u>Yeung, N.W.</u>, J. Slapcinsky, E.E. Strong and K.A. Hayes. From Three to Ten Species: High Cryptic Diversity Among Hawaiian Tornatellininae. World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- Barbosa, K.H.P., K.A. Hayes, R.H. Cowie, A.C. Mattos, M.A. Fernandez and <u>S.C. Thiengo</u>. *Pomacea sordida*, Species Complex or Single Species from Rio De Janeiro State, Brasil? World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- <u>DeLeon, K.L.</u>, E.E. Strong and K.A. Hayes. Redefining *Pila scutata*: A Pathway for Improving the Conservation of a Disappearing Species. World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- <u>Hobbs, C.S.</u>, N.W. Yeung and K.A. Hayes. Extraction of Shell DNA to Inform Conservation Biology. World Congress of Malacology, Pacific Grove, CA. 11-16 August 2019.
- <u>Hayes, K.A.</u> and N.W. Yeung. Not gone yet, but we're not well either: Update on Hawaii's remaining land snails. 26th Annual Hawai'i Conservation Conference, Honolulu, HI. 9-11 July 2019.
- <u>Kalahiki, C., L. Evans, N.W. Yeung, K.A. Hayes, C.C. Christensen. Designating a state snail for Hawai'i. 26th Annual Hawai'i Conservation Conference, Honolulu, HI. 9-11 July 2019.</u>
- Plentovich, S., K.A. Hayes, D.R. Sischo, N.W. Yeung, C. King, J. Graham, W. Haines, J. Boone, C. Johns, K. Magnacca, K. Konicek, K. Scheiner, J. Darley. Challenges and successes of conserving Hawaii's terrestrial invertebrates: A seven year update. Hawaii. 26th Annual Hawaii Conservation Conference, Honolulu, HI. 9-11 July 2019.
- <u>Evans, L.M.</u>, N.W. Yeung. and K.A. Hayes. The use of scientific illustration in educational outreach, research, and conservation. 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- <u>Ali, R.F.</u>, J. Slapcinsky, T.A. Pearce and K.A. Hayes. Phylogeny and evolution of *Anguispira* (Gastropoda: Discidae). 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- <u>Kalahiki, C.</u>, K.A. Hayes and N.W. Yeung. Historical geographic distributions of *Auriculella* (Achatinellidae), *Catinella* (Succineidae), *Succinea* (Succineidae) species on Maui. 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- <u>Kong, R.</u>, K.A. Hayes and N.W. Yeung. Historical distributions of *Auriculella* spp. and *Elasmias* spp. (Achatinellidae) on the Island of Oahu, Hawaii. 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.
- Norman, E.A., Goulding, T.C., Yeung, N.W. and K.A. Hayes Distribution of non-native slugs in the Hawaiian Islands. 84th American Malacology Society and 51st Western Society of Malacologists Annual Meeting 2018, Honolulu, HI. 19-23 June 2018.

- Meyer III, W.M., N.W. Yeung and K.A. Hayes. Rapoport's rule as a tool for understanding distributions of non-native species on tropical islands in multiple ecological contexts. 50th Annual meeting of the Western Society of Malacologists, Los Angeles, CA. 19-23 June 2017.
- Scriber II, K.E., M. Meerhoff, R.L. Burks, E.E. Strong and K.A. Hayes. Trophic ecology of *Pomacea* spp. in the La Plata Basin, Uruguay. Howard University Research Symposium, Washington, DC. 13 April 2017.
- <u>Poisson, Lydia</u> and K.A. Hayes. Investigating the indestructible: A sampling of Hawaiian tardigrades. Howard University Research Symposium, Washington, DC. 13 April 2017.
- Scriber II, K.E., M. Meerhoff, R.L. Burks, E.E. Strong and K.A. Hayes. Trophic ecology of *Pomacea* spp. in the La Plata Basin, Uruguay. Howard University Research Symposium, Washington, DC. 14 April 2016.
- Mansur, Z.Z., Galloway, B.N. and K.A. Hayes. The prevalence of multiple paternity within *Pomacea* spp. (Caenogastropoda: Ampullariidae) in the La Plata Basin, Uruguay. Howard University Research Symposium, Washington, DC. 14 April 2016.
- <u>Galloway, B.N.</u>, Z.Z. Mansur and K.A. Hayes. Multiple paternity within *Pomacea canaliculata* (Caenogastropoda: Ampullariidae). Howard University Research Symposium, Washington, DC. 14 April 2016.
- Mansur, Z.Z. and K.A. Hayes. Microsatellite analysis of apple snail egg clutches from Laguna del Sauce, Uruguay. 2016 Mid-Atlantic Malacologists Meeting. Wilmington, DE. 02 April 2016.
- Scriber II, K.E., M. Meerhoff, R.L. Burks, E.E. Strong and K.A. Hayes. Trophic ecology of *Pomacea* spp. in the La Plata Basin, Uruguay. 2016 Mid-Atlantic Malacologists Meeting. Wilmington, DE. 02 April 2016.
- <u>Campos, S.R.</u>, C.M. Clavijo, F. Scarabino, R.L. Burks and K.A. Hayes. A tale of two species: Comparative phylogeography and genetic diversity of *Pomacea canaliculata* and a putative cryptic congeneric in the Rio de la Plata Basin. 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Glasheen, P.,</u> C. Calvo, M. Meerhoff, K.A. Hayes and R.L. Burks. The snail also rises: Desiccation tolerance of *Pomacea* spp. (Gastropoda: Ampullariidae). 81st Annual American Malacological Society meeting, Pellston, MI. 28-31 August 2015.
- <u>Segrest, A.</u>, C. Clavijo, K.A. Hayes and R.L. Burks. Sex despite the cost: Attachment of *Limnoperna fortunei* (Dunker, 1857) alters apple snail activities in native *Pomacea* species (Lamarck, 1822). Society for Freshwater Science, Milwaukee, WI, USA. 17-21 May 2015.
- <u>Hayes, K.A.</u> and N.W. Yeung. Two For the Price of One: Taxonomy of a Failed Biocontrol. 17th Mid-Atlantic Malacologists Meeting, Delaware Museum of Natural History, Wilmington, DE. 7 March 2015.
- Yeung, N.W. and K.A. Hayes. Systematics of the Hawaiian Succineidae 17th Mid-Atlantic Malacologists Meeting, Delaware Museum of Natural History, Wilmington, DE. 7 March 2015.
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- <u>Campos, L.S.</u>, C. Clavijo, F. Scarabino, R.L. Burks and K.A. Hayes. A tale of two species: Comparative phylogeography and genetic diversity of *Pomacea canaliculata* and a putative cryptic congeneric in the Rio de la Plata Basin. Texas Academy of Science, Systematics and Evolutionary Biology, University of the Incarnate Word, San Antonio, TX, USA. 6-8 March 2015.
- Segrest, A., C. Clavijo, K.A. Hayes and R.L. Burks. Cling on me: Impacts of settlement of invasive Limnoperna fortunei (Dunker, 1857) on the native *Pomacea* spp (Lamarck, 1822) in Uruguay. Texas Academy of Science, Freshwater Science, University of the Incarnate Word, San Antonio, TX, USA. 6-8 March 2015.
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- Meyer III, W.M., N.W. Yeung, <u>J.S. Slapcinsky</u> and K.A. Hayes. Two for the price of one: inadvertent introduction of cryptic *Euglandina* species during failed biocontrol efforts in Hawaii. Island Biology 2014, Honolulu, HI, USA. 7-11 July 2014.
- Yeung, N.W., E.E. Strong, B.S. Holland, R.H. Cowie, J. Slapcinsky and K.A. Hayes. Systematics of the highly threatened Hawaiian Achatinellidae. Island Biology 2014, Honolulu, HI, USA. 7-11 July 2014.
- Gary, D.T.A., N.W. Yeung, J. Slapcinsky and K.A. Hayes. Biogeography and diversity of Hawaiian Helicarionidae. Island Biology 2014, Honolulu, HI, USA. 7-11 July 2014.
- <u>Leung, K.</u>, N.W. Yeung and K.A. Hayes. The phylogenetics, conservation status and distribution of the imperiled Hawaiian Helicinidae land snails. Island Biology 2014, Honolulu, HI, USA. 7-11 July 2014.
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- <u>Yeung, N.W.</u>, E.E. Strong, J. Slapcinsky, B.S. Holland, R.H. Cowie and K.A. Hayes. Remnants of the Hawaiian Achatinellidae: Systematic of a highly threatened family. Mollusca 2014, Mexico City, Mexico. 22-27 June 2014.
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- <u>Gary, D.T.A.</u>, N.W. Yeung, J. Slapcinsky, R.H. Cowie and K.A. Hayes. Biogeography and diversity of Hawaiian Helicarionidae: Origins and colonization patterns in the Hawaiian Islands. Mollusca 2014, Mexico City, Mexico. 22-27 June 2014.

- <u>Léon, J.A.</u>, K.A. Hayes and R.H. Cowie. Ampullariidae revisionary systematics: Clarifying the taxonomic status of *Asolene platae* (Maton, 1811) and *Asolene pulchella* (Anton, 1838). Mollusca 2014, Mexico City, Mexico. 22-27 June 2014.
- <u>Hayes, K.A.</u> and N.W. Yeung. Hawaiian land snail conservation. 16th Mid-Atlantic Malacologists Meeting, Delaware Museum of Natural History, Wilmington, DE. 29 March 2014.
- <u>Yeung, N.W.</u>, T.H. Durkan, W.M. Meyer III, R.H. Cowie and K.A. Hayes. Evaluating land snail sampling techniques: To sieve or not to sieve? 16th Mid-Atlantic Malacologists Meeting, Delaware Museum of Natural History, Wilmington, DE. 29 March 2014.
- Oliveira, B., K.A. Hayes, and R.H. Cowie. Stable isotopes of carbon and nitrogen in the study of ampullariid trophic ecology. 39th Annual Albert L. Tester Memorial Symposium, Honolulu, HI. 12-14 March 2014.
- <u>Léon, J.A.</u> and K.A. Hayes. Ampullariidae revisionary systematics: Clarifying the taxonomic status of *Asolene platae* (Maton, 1811) and *Asolene pulchella* (Anton, 1838). 39th Annual Albert L. Tester Memorial Symposium, Honolulu, HI. 12-14 March 2014.
- <u>Yokote, E.</u> and K.A. Hayes. Distribution of infective Angiostrongylus cantonensis larvae within intermediate gastropod hosts. 39th Annual Albert L. Tester Memorial Symposium, Honolulu, HI. 12-14 March 2014.
- Schilithz, A.G., K.A. Hayes, R.H. Cowie and S.C. Thiengo. Taxonomy of *Asolene meta* (Ihering, 1915) and *Asolene spixii* (d'Orbigny, 1838) (Caenogastropoda, Ampullariidae) from Brazil. World Congress of Malacology, Ponta Delgada, Azores. 21-28 July 2013.
- <u>Leung, K.</u>, N.W. Yeung and K.A. Hayes. A preliminary phylogeny and biodiversity assessment of the Hawaiian Helicinidae. World Congress of Malacology, Ponta Delgada, Azores. 21-28 July 2013.
- Hayes, K.A. <u>R.H. Cowie</u>, S.C. Thiengo and E.E. Strong. (Poster) Comparing apples to apples: Clarifying the identities of two highly invasive Neotropical Ampullariidae (Caenogastropoda). World Congress of Malacology, Ponta Delgada, Azores. 21-28 July 2013.
- Yeung, N.W., <u>K. Leung</u>, D.A. Gary, D.T.B. Ressler, R.H. Cowie and K.A. Hayes. (Poster) Hawaiian land snail biodiversity: Systematics, phylogenetics and conservation status of a vanishing fauna. World Congress of Malacology, Ponta Delgada, Azores. 21-28 July 2013.
- <u>Hayes. K.A.</u>, E.E. Strong and R.H. Cowie. Comparing apples to apples: Clarifying the identities of two New World ampullariids, *Pomacea canaliculata* and *Pomacea insularum*. 77th Annual Meeting of the American Malacological Society, 23-28 July 2011.
- <u>Hayes. K.A.</u>, E.E. Strong and R.H. Cowie. Comparing apples to apples: Clarifying the identities of two New World ampullariids, *Pomacea canaliculata* and *Pomacea insularum*. World Congress of Malacology, Phuket, Thailand. 18-24 July 2010.
- Yeung, N.W., K.A. Hayes, W.M. Meyer III, C.T. Tran, J.R. Kim, T.J. Skelton and R.H. Cowie. Searching high and low: Alien snails and slugs in the horticultural industry of Hawaii. World Congress of Malacology, Phuket, Thailand. 18-24 July 2010.
- <u>Kim, J.R.</u>, K.A. Hayes, N.W. Yeung and R.H. Cowie (Poster) Invasive veronicellid slugs in the main Hawaiian Islands. World Congress of Malacology, Phuket, Thailand. 18-24 July 2010.

- <u>Kim, J.R.</u>, K.A. Hayes, N.W. Yeung and R.H. Cowie. The prevalence of *Angiostrongylus* cantonensis in the Main Hawaiian Islands. 17th annual Hawaii Conservation Conference 28-30 July 2009.
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- <u>Cowie, R.H.</u>, K.A. Hayes, W.M. Meyer, C.T. Tran, J.R. Kim, T.S. Skelton and N.W. Yeung. Introduction pathways, spread and impacts of snails and slugs in Hawaii. 2nd Annual Pacific Biosciences Research Center's Symposium on Biodiversity, 7 May 2009.
- <u>Thiengo, S.C.</u>, K.A. Hayes, A.C. Mattos, M.A. Fernandez and R.H. Cowie. South American Ampullariidae: Morphology and taxonomy of the genus *Pomacea*. 2007 Ampullariidae Workshop, Mendoza, Argentina. December 2007.
- <u>Hayes, K.A.</u> Molecular Systematics and Evolutionary Patterns of Diversification in New World Ampullariidae. World Congress of Malacology, Antwerp, Belgium. 15-20 July 2007. (Constance Boone Award)
- <u>Thiengo, S.C.</u>, K.A. Hayes, A. Mattos, M.A. Fernandez and R.H. Cowie. On the identity of two New World ampullariids, *Pomacea lineata* and *Pomacea figulina*. World Congress of Malacology, Antwerp, Belgium. 15-20 July 2007.
- <u>Hayes, K.A.</u> Genetic characterization of invasive apple snail populations: evidence of multiple introductions to SE Asia. 72nd Annual Meeting of the American Malacological Society, 29 July 3 August 2006. (**Constance Boone Award**)
- <u>Cowie, R.H.</u>, K.A. Hayes and C.T. Tran. The horticultural industry as a vector of alien snails and slugs: results of surveys in Hawaii. 72nd Annual Meeting of the American Malacological Society, 29 July 3 August 2006.
- <u>Hayes, K.A.</u> Molecular systematics and comparative phylogeography of apple snails (*Pomacea* spp.): Misidentifications, multiple introductions and patterns of Neotropical diversification. University of Hawaii Ecology, Evolution, and Conservation Biology Evolunch seminar, 18 November 2005.
- <u>Hayes, K.A.</u> Preliminary phylogenetic assessment of invasive apple snails in Asia and beyond. 71st Annual Meeting of the American Malacological Society, 26-30 June 2005.
- <u>Hayes, K.A.</u> Once, twice, three times or more: Apple snail introduction(s) to S.E. Asia and the Pacific. 30th Annual Tester Memorial Symposium. 16-18 March 2005.
- <u>Hayes, K.A.</u> Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). 70th Annual Meeting of the American Malacological Society, 31 July 4 August 2004.
- <u>Hayes, K.A.</u> Phylogeography and Evolution of the Florida Crown Conch (*Melongena corona*). World Congress of Malacology, Perth, Australia. 11-16 July 2004.
- <u>Hayes, K.A.</u> Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). World Congress of Malacology, Perth, Australia. 11-16 July 2004.
- <u>Hayes, K.</u> Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). 29th Annual Tester Memorial Symposium. 11-12 March 2004.

- <u>Hayes, K.</u> Phylogeography and Evolution of the Corona Complex (*Melongena corona*). 29th Annual Tester Memorial Symposium. 11-12 March 2004.
- <u>Hayes, K.</u> Evolution of the "Corona Complex" in the genus *Melongena* (Gastropoda: Melongenidae). 69th Annual Meeting of the American Malacological Society. Ann Arbor, Michigan. 25-29 June 2003. (Constance Boone Award)
- <u>Hayes, K.</u> Evolution of the "Corona Complex" in the genus *Melongena* (Gastropoda: Melongenidae). 16th Annual Meeting of Florida Association of Benthologists. St. Augustine, Florida. 21 November 2002. (Best Oral Presentation by Student)
- <u>Hayes, K.</u> Evolution of the "Corona Complex" in the genus *Melongena* (Gastropoda: Melongenidae). 68th Annual Meeting of the American Malacological Society. Charleston, South Carolina. 3-7 August 2002. (2nd Place Best Student Presentation)
- <u>Hayes, K.</u> and S.A. Karl. Evolution of the "Corona Complex" in the genus Melongena (Gastropoda: Melongenidae). 14th International Congress of UNITAS MALACOLOGICA (World Congress of Malacology). Vienna, Austria. 19-25 August 2001.
- <u>Hayes, K.</u> and S.A. Karl. Evolution of the "Corona Complex" in the genus *Melongena* (Gastropoda: Melongenidae): Preliminary microsatellite data. 9th Annual Florida Ecological and Evolutionary Symposium. Archbold Research Station, Lake Placid, Florida. 31 March 2001.
- <u>Hayes, K.</u> and S. Karl. (Poster) Evolution of the Corona Complex in the genus *Melongena* (Gastropoda: Melongenidae): Evidence from internal transcribed spacer regions and microsatellite data. Evolution 2000, Bloomington, Indiana. 23-27 June 2000.

PROFESSIONAL SERVICE

2021-2022	President American Malacological Society
2020-2021	President-Elect American Malacological Society
2020 - Present	Chair of Systematics Committee for American Malacological Society
2019 - 2020	Vice-President Elect for American Malacological Society
2020 - Present	Advisory Editor of Aquatic Invasions
2020	NSF Evolutionary Biology and Systematics Reviewer
2020	NSF Graduate Research Fellowship Program Panelist
2018	Organizing Committee for American Malacological Society annual meeting
2018	Co-Organizer and instructor for invasive land snail workshop and symposium at the 84 th Annual American Malacological Society Meeting, Honolulu, HI
2018	Co-Organizer for <i>Stemming the tide of extinction</i> Pacific island land snail symposium at the 84 th Annual American Malacological Society Meeting, Honolulu, HI
2017 - Present	Deputy Editor-in-Chief BioInvasions Records
2017	National Science Foundation Evolutionary Processes Grant Panel
2016	Panelist and reviewer for Conchologist of America Research Awards
2016	National Science Foundation Doctoral Dissertation Improvement Grant Panel

2015	National Science Foundation International Research Experience for Students Panel
2015	Panel member and instructor for National Plant Diagnostic Network Malacology Workshop. Davis, CA, USA.
2015	Co-Organizer and instructor for Hawaiian Land Snail taxonomic workshop, Bishop Museum, Honolulu, HI
2015	Co-Organizer of Pacific Island Land Snail Symposium at 81st American Malacological Society Meeting, Pellston, MI
2015	Ad hoc reviewer for Carriker Grants from American Malacological Society
2014 - 2020	Member of Systematics Committee of American Malacological Society
2014, 2015	Ad hoc reviewer for Czech Science Foundation
2013, 2014	Ad hoc reviewer for the Research Grants Council of Hong Kong
2013 - Present	Subject Editor for Biodiversity Data Journal
2013 - 2020	Associate Editor of Aquatic Invasions
2013 - 2017	Associate Editor of BioInvasions Records
2013	Faculty facilitator for the Howard Hughes Medical Institute and National Academies Summer Institute on Scientific Teaching
2013	Ad hoc reviewer: California Sea Grant
2011 - 2012	Member of Scientific Committee of the International Congress of Medical and Applied Malacology (ICMAM)
2011	National Science Foundation Phylogenetic Systematics Panel
2011, 2012, 2015 <i>Ad hoc</i> reviewer: National Science Foundation Dimensions of Biodiversity, Phylogenetic Systematics and Population and Community Ecology Programs	
2011 - Present	Associate Editor Biological Invasions
2010 - Present	Editorial Board of Malacologia
2007 - 2009	Counselor-at-large for American Malacological Society
2006	Chair of organizing committee for student workshop at 72 nd Annual Meeting of the American Malacological Society. 29 July - 3 August
2006	Ad hoc reviewer: Australian Government Antarctic Division grant proposals
2006 - 2007	Auditing and Budgeting committee of the American Malacological Society
2005 - 2007	Membership committee of American Malacological Society
2005 - 2007	Science Fair Judge for the Hawaii Association of Independent Schools (HAIS).
2007 - 2008	Judge for Hawaii State Science & Engineering Fair
2007	Ad hoc reviewer: The Hawaii Academy of Sciences' Pacific Symposium for Science and Sustainability proposals
2004 - 2005	Graduate Student Representative for Ecology, Evolution, and Conservation Biology Specialization Program at the University of Hawaii

2003 - Present

Reviewer for >40 journals: American Malacological Bulletin, Annals of the Carnegie Museum, Animal Conservation, Aquatic Ecology, Aquatic Invasions, Journal of Biochemical Genetics, Biochemical Systematics and Ecology, Biodiversity and Conservation, Journal of Biogeography, BioInvasions Records, Biological Invasions, Biological Journal of the Linnean Society, Caribbean Journal of Science, Conservation Genetics, Contributions to Zoology, Diversity, Diversity and Distributions, Ecology and Evolution, Ethology Ecology and Evolution, Freshwater Biology, Functional Ecology, Genetica, Journal of Heredity, Hawaii Journal of Medicine and Public Health, Hydrobiologia, Infection, Genetics, and Evolution, Integrative Zoology, International Review of Hydrobiology, Invertebrate Biology, Malacologia, Molecular Ecology, Molecular Phylogenetics and Evolution, Journal of Molluscan Studies, National Academy Science Letters, The Nautilus, PeerJ, Philosophical Transactions of the Royal Society of London, PLOS One, Science Matters, Scientific Reports, Sustainability, Terrestrial Arthropod Reviews, Zoological Journal of the Linnean Society, ZooKeys, Zoologica Scripta, Zoological Studies and Zoosystematics and Evolution

2006 Ad hoc reviewer: United States Department of Agriculture

2004 Organizing Committee for Student Forum at 70th Annual Meeting of the American

Malacological Society. 31 July - 4 August

2004 Organizing Committee for 29th Annual Tester Memorial Symposium. 11-12 March

2001 Organizing Committee for the 9th Annual Florida Ecological and Evolutionary

Symposium. 30 March - 1 April

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science (2004-2008), American Malacological Society (1999-Present), American Microscopical Society (1997-2001), Florida Association of Benthologists (1999-2003), Sigma Xi, Society for Integrative and Comparative Biology (1997-2001, 2018-2019), Unitas Malacologica, Union of Concerned Scientists