

KENNETH A. HAYES, PhD

SMITHSONIAN INSTITUTE • NATIONAL MUSEUM OF NATURAL HISTORY
 DEPARTMENT OF INVERTEBRATE ZOOLOGY, MALACOLOGY
 MRC 163 PO BOX 37012, WASHINGTON, DC 20013-7012
 PHONE 202-633-1749 • FAX 202-357-2343 • E-MAIL HAYESK@SI.EDU

EDUCATION

- Postdoctoral 2009-2010** Smithsonian Institute, 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

PROFESSIONAL APPOINTMENTS

- 2009 - 2010 **Postdoctoral Research Fellow** - Smithsonian Institute, 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, Harmful Algal Blooms, St. Petersburg, FL.
- 1999 - 2002 **Graduate Teaching Assistant** - University of South Florida, Department of Biology, Tampa FL.

PEER-REVIEWED PUBLICATIONS

- Hayes, K.A.**, S.C. Thiengo and R.H. Cowie. 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. Hayes**, 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.
- Rawlings, T.A., **K.A. Hayes**, R.H. Cowie and T.M. Collins. 2007. The identity, distribution and impacts of non-native apple snails in the Continental United States. *BMC Evolutionary Biology* 7:97 [14 p.].
- Hayes, K.A.** and S.A. Karl. 2004. Characterization of microsatellite markers from the gastropod genus *Melongena*. *Molecular Ecology Notes* 4:755-757.

IN PREP PUBLICATIONS

Hayes, K.A. and S.A. Karl. *In Prep.* Population Structure of the Florida Crown Conch (*Melongena corona*).

Hayes, K.A. and E.E. Strong. *In Prep.* Redescription of two invasive apple snails, *Pomacea canaliculata* and *P. insularum*. *ZooTaxa*

Hayes, K.A., S.C. Thiengo and R.H. Cowie. *In Prep.* Phylogeny, morphology and species limits of Neotropical apple snails (Caenogastropoda: Ampullariidae). *Molecular Phylogenetics and Evolution*

Hayes, K.A., S.C. Thiengo and R.H. Cowie. *In Prep.* Comparative phylogeography of two species of *Pomacea*.

Thiengo, S.C., **K.A. Hayes**, A. Mattos, M.A. Fernandez and R.H. Cowie. *In Prep.* On the identity of two New World ampullariids, *Pomacea lineata* and *Pomacea figulina*. *ZooTaxa*

BOOK CHAPTERS

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 & 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.

ABSTRACTS AND OTHER PUBLICATIONS

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 Newsletter* 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.

CURRENT RESEARCH FOCUS

My research interests revolve around questions concerning the systematics, phylogeography, evolution and conservation of invertebrates, particularly gastropods. I am especially interested in the evolutionary processes that generate and maintain biodiversity, and how ecological adaptations and specialization help drive diversification. Because of their incredibly high diversity and the multitude of adaptations to marine, aquatic and terrestrial habitats, gastropods offer an excellent system for addressing these dynamic areas of research.

My interest in understanding and conserving biodiversity along with my concern over the continued rapid spread of invasive species led me to research that also seeks to document and better understand the processes that result in rapid population and ecosystem changes after introduction. These “accidental” experiments provide a unique opportunity to investigate population genetics within recently founded, rapidly expanding populations.

RESEARCH EXPERIENCE

2009 - Present Comparative Anatomy and Phylogenetics of the Lower Caenogastropoda (Mollusca: Gastropoda) Architaenioglossa (Ampullariidae, Cyclophoridae, Viviparidae) and the Campanilidae.

2004 - 2009 Mapping the distribution of alien land snails in Hawaii.

2004 - 2006 Apple snails in Hawaii: Mapping their distribution and assessing impacts.

2003 - 2009 Systematics, phylogeography, evolution and invasion biology of Neotropical apple snails.

- 2002 - 2003 Life-cycle studies of dinoflagellates, including *Karenia brevis* and phylogenetic relationships and taxonomic status of *Pyrodinium bahamense* subspecies and varieties.
- 1999 - 2003 Genetic analysis of the Florida Crown Conch (*Melongena corona*) populations throughout Florida and Alabama using microsatellites analysis and DNA sequences.
- 2002 Research Scientist aboard RV Suncoaster in the Gulf of Mexico. Tracking and collecting Red Tide Bloom (*Karenia brevis*) data in coastal waters of Florida. Collected and processed water samples used in the development of molecular probes for *K. brevis*.
- 2002 AAUS research diver aboard RV Suncoaster in the Bahamas. Collection, preservation, and identification of reef fish and a variety of invertebrates for population and systematic studies being conducted in Dr. Stephen Karl's lab (USF) and Dr. Brian Bowen's (UF).
- 2001 Field collection of blood samples from gopher tortoises (*Gopherus polyphemus*) in the Florida Everglades for population genetics research by Tonia Schwartz and Dr. Stephen Karl (USF).
- 1999 - 2000 Field collection of Florida Lancelets (*Branchiostoma lanceolatus*) for isolation and identification of developmental regulatory genes. Assisted in both fieldwork and laboratory experiments at USF in cooperation with the Max-Planck Institute Berlin, Germany.
- 2000 AAUS research diver aboard RV Bellows and RV Suncoaster in the Bahamas. Collection, preservation, and identification of reef fish and a variety of invertebrates for population and systematic studies being conducted USF and UF.
- 2000 AAUS research diver aboard RV Suncoaster in the Gulf of Mexico. Collection, preservation, and identification of polychaetes for an Annelid genome project and other marine invertebrates for projects in Dr. James Garey's lab (USF).
- 1998 - 1999 Undergraduate research conducted in Dr. James Garey's lab at USF. Assisted with invertebrate identification and genetic analysis of various invertebrate relationships.

TEACHING EXPERIENCE

- 2007 Organized and co-taught Population Genetics Primer. 5 September – 7 November. Department of Zoology, University of Hawaii.
- 2006 Organized and co-taught Graduate Level Molecular Systematics/Ecology Primer. 7 September – 26 October. Department of Zoology, University of Hawaii.
- 2000-2002 Guest Lecturer Advanced Invertebrate Zoology, USF Tampa, FL.
- 1999 - 2002 Laboratory Instructor for various biology labs including freshman biology, Cellular Biology, Advanced Invertebrate Zoology, Genetics and Molecular Systematics.
- 1998 Undergraduate Teaching Assistant for Advanced Invertebrate Zoology. USF Tampa, FL.

STUDENTS ADVISED

University of South Florida Mathew Moody (2001-2002)

University of Hawaii C.T. Tran (2004-2006), S. Arnasson (2007), J. Bedrosian (2007),
J.R. Kim (2007-2009), C. Yee (2008-2009), J.T. Skelton (2008-2009)

INVITED PRESENTATIONS (PRESENTER UNDERLINED)

Hayes, K.A., R.H. Cowie and S.C. Thiengo. Phylogeny, biogeography and morphology of Neotropical Apple Snails (Caenogastropoda: Ampullariidae). Presented at the XXI Encontro Brasileiro de Malacologia, Rio de Janeiro, Brazil. 19-24 July 2009.

Hayes, K.A., 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.

Hayes, K.A. and R.H. Cowie. Molluscan taxonomy in the 21st century: Examples from New World Ampullariidae. Presented at the 74th Annual meeting of the American Malacological Society, Carbondale, IL., 29 June - 3 July, 2008.

- Hayes, K.A., 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. Presented at the 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)
- Hayes, K.A., S.C. Thiengo, R.C. Joshi and R.H. Cowie. Alien ampullariids: Introductions, impacts and identities. Presented at the Instituto de Biologia, Universidade Estadual de Campinas, Campinas, SP. Brazil. 9 November 2006.
- Hayes, K.A., C.T. Tran and R.H. Cowie. The horticultural industry as a vector of alien snails and slugs: results of surveys in Hawaii. Presented during Invasive Gastropod forum at the 14th annual Hawaii Conservation Conference 26-28 July, 2006.
- Hayes, K.A. and R.H. Cowie. (Oral) Apple snail invasions in Asia and beyond. Presented at the VI Latin American Malacological Congress, 4-7 July 2005.
- Cowie, R.H. and Hayes, K. A. Invasive ampullariid snails: taxonomic confusion and some preliminary resolution based on DNA sequences. Presented at the 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.
- Hayes, K.A. Systematics, phylogeography, and evolution of Apple Snails (*Pomacea* spp.). Presented at the Brazilian Malacological Society Meeting held at Rio de Janeiro State University (UERJ), 12 May 2004.
- Hayes, K. The “Corona Complex”: Evolution and Systematics. Presented at the Monthly Meeting of Suncoast Conchologist Society. 1 April 2003.
- Hayes, K. Conservation in the Marine Realm - What can molluscs tell us? Presented at Innerspace Explorers Dive Club Monthly Meeting. Tampa FL. 2 April 2002.
- Hayes, K. Phylogeography of the “Corona Complex”: Evolution at a Snail's Pace. Presented at University of Tampa Department of Biology Seminar. Tampa, Florida. 15 November 2001.

PROFESSIONAL SERVICE ACTIVITIES

- 2007 - 2009 Counselor-at-large for American Malacological Society
- 2006 Chair of organizing committee for student workshop at 72nd Annual Meeting of the American Malacological Society. 29 July – 3 August
- 2006 Grant Proposal Reviewer for Australian Government Antarctic Division
- 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 Reviewer for the Hawaii Academy of Sciences’ Pacific Symposium for Science and Sustainability
- 2004-2005 Graduate Student Representative for Ecology, Evolution, and Conservation Biology Specialization Program at the University of Hawaii
- 2003-Present Reviewer for *American Malacological Bulletin* (1), *Journal of Heredity* (1), *International Review of Hydrobiology* (1), *The Nautilus* (1), *Malacologia* (9), *Biodiversity and Conservation* (1), *Biochemical Systematics and Ecology* (1), *Biological Invasions* (1), *Zoological Studies* (1), *Caribbean Journal of Science* (1) and *Philosophical Transactions of the Royal Society of London* (1).
- 2006 External Reviewer for United States Department of Agriculture – Agriculture Research Services
- 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

2005-present Sigma Xi
 2004-present Unitas Malacologica
 2001-present American Association for the Advancement of Science
 1999-present American Malacological Society
 1997-present Society for Integrative and Comparative Biology
 1999-2003 Florida Association of Benthologists
 1997-2002 American Microscopical Society

AWARDS AND HONORS

2008 2nd Place AAAS Award of Excellence for Student Presentation – 89th Annual meeting of the AAAS Pacific Division
 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 – 72nd Annual American Malacological Society Meeting
 2004 Honorable Mention Student Presentation – 29th Annual Tester Memorial Symposium
 2003 Constance Boone Award for Best Student Presentation – 69th Annual American Malacological Society Meeting
 2002 Best Student Presentation – 16th Annual Florida Association of Benthologists Meeting
 2002 Second Place Student Presentation – 68th Annual American Malacological Society Meeting
 2005 Sigma Xi Induction
 2000 Phi Kappa Phi Honor Society Induction
 1998 Golden Key National Honor Society Induction
 1997, 1998 Dean's National Honor List
 1993 President's Honor List

PENDING GRANTS AND FELLOWSHIPS

\$698994	Submitted July 2009	Co-PI on NSF: REVSYS: A revision of New World Ampullariidae – an emerging model system in evolutionary biology and systematics training. PI: R.H. Cowie, Co-PIs: E.E. Strong and S.C. Thiengo.
\$161500	Submitted September 2009	Michigan Society of Fellows Postdoctoral Fellowship for 2010-2013: An integrative research approach to understanding the evolutionary transition from aquatic to terrestrial life using amphibious gastropods in the family Ampullariidae.
\$25000	Submitted September 2009	EOL Rubenstein Fellowship: Encyclopedia of life species pages for the Architaenioglossa (Gastropoda: Ampullariidae, Viviparidae, Cyclophoridae)

GRANTS, SCHOLARSHIPS AND FELLOWSHIPS AWARDED

\$40000	2009-2010	Smithsonian Institution Postdoctoral Research Fellowship
\$10000	2008	UH Dai Ho Chun Fellowship
\$1100	2008 (Spring)	Ecology, Evolution and Conservation Biology Travel Grant
\$1477	2007	UH Graduate Student Organization Travel Grant
\$2500	2007(Fall)	Ecology, Evolution and Conservation Biology Research Grant
\$1100	2007	Unitas Malacologica Travel Grant for World Congress of Malacology
\$2000	2007 (Spring)	Ecology, Evolution and Conservation Biology Research Grant
\$3000	2006 (Fall)	Ecology, Evolution and Conservation Biology Research Grant
\$1000	2006 (Spring)	Ecology, Evolution and Conservation Biology Travel Grant
\$4000	2005 (Fall)	Ecology, Evolution and Conservation Biology Research Grant

\$1100	2005	Unitas Malacologica Student Research Award
\$1500	2005	Conchologists of America Research Award
\$1200	2005	UH Graduate Student Organization Travel Grant
\$1500	2005 (Spring)	Ecology, Evolution and Conservation Biology Travel Grant
\$1000	2005	American Malacological Society Student Research Award
\$4000	2004 (Fall)	Ecology, Evolution and Conservation Biology Research Grant
\$1500	2004 (Spring)	Ecology, Evolution and Conservation Biology Travel Grant
\$300	2004	Western Society of Malacologists Student Research Grant
\$1500	2004	Conchologists of America Research Award
\$5000	2004	Maybelle Roth Scholarship
\$180	2003	USF, Biology Graduate Student Travel Award
\$250	2002	USF, Dept of Biology - Student Travel Award
\$1500	2001	Conchologists of America Research Award
\$250	2001	USF, Dept. of Biology – Student Travel Award
\$300	2000	Sigma Xi Grants-in-Aid of Research
\$2000	2000	Lerner Grey Fund for Marine Research
\$1500	2000	American Malacological Society Student Research Award
	1999-2002	Graduate Teaching Assistantship

CONTRIBUTED PRESENTATIONS (PRESENTER UNDERLINED)

Kim, J.R., K.A. Hayes, N.W. Yeung and R.H. Cowie. (Oral) The prevalence of *Angiostrongylus cantonensis* in the Main Hawaiian Islands. Presented at the 17th annual Hawaii Conservation Conference 28-30 July 2009.

Yeung, N.W., K.A. Hayes, C.T. Tran, J.R. Kim, T.J. Skelton, W.M. Meyer and R.H. Cowie. (Poster) Introduction, spread and impacts of alien snails and slugs in Hawai'i. Presented at the 17th annual Hawaii Conservation Conference 28-30 July 2009.

Kim, J.R., K.A. Hayes, N.W. Yeung and R.H. Cowie. (Poster) Invasive veronicellid slugs in the Main Hawaiian Islands. Presented at the 17th annual Hawaii Conservation Conference 28-30 July 2009.

Yeung, N.W., K.A. Hayes, C.T. Tran, J.R. Kim, T.J. Skelton, W.M. Meyer and R.H. Cowie. (Poster) Introduction, spread and impacts of alien snails and slugs in Hawai'i. Presented at the 75th Annual Meeting of the American Malacological Society, 19-23 July 2009.

Cowie, R.H., K.A. Hayes, W.M. Meyer, C.T. Tran, J.R. Kim, T.S. Skelton and N.W. Yeung. (Oral) Introduction pathways, spread and impacts of snails and slugs in Hawaii. Presented at the 2nd Annual Pacific Biosciences Research Center's Symposium on Biodiversity, 7 May 2009.

Kim, J.R., K.A. Hayes, N.W. Yeung and R.H. Cowie. (Oral) The prevalence of the rat lungworm, *Angiostrongylus cantonensis*, in the Main Hawaiian Islands Presented at the 2nd Annual Pacific Biosciences Research Center's Symposium on Biodiversity, 7 May 2009.

Thiengo, S.C., K.A. Hayes, A.C. Mattos, M.A. Fernandez and R.H. Cowie. (Oral) South American Ampullariidae: Morphology and taxonomy of the genus *Pomacea*. Presented at the 2007 Ampullariidae Workshop, Mendoza Argentina December 2007.

Hayes, K.A. (Oral) Molecular Systematics and Evolutionary Patterns of Diversification in New World Ampullariidae. Presented at the World Congress of Malacology, 15-20 July 2007. (Constance Boone Award)

Thiengo, S.C., K.A. Hayes, A. Mattos, M.A. Fernandez and R.H. Cowie. (Oral) On the identity of two New World ampullariids, *Pomacea lineata* and *Pomacea figulina*. Presented at the World Congress of Malacology, 15-20 July 2007.

Hayes, K.A. (Oral) Genetic characterization of invasive apple snail populations: evidence of multiple introductions to SE Asia. Presented at the 72nd Annual Meeting of the American Malacological Society, 29 July - 3 August, 2006. (Constance Boone Award)

- Cowie, R.H., K.A. Hayes and C.T. Tran. (Oral) The horticultural industry as a vector of alien snails and slugs: results of surveys in Hawaii. Presented at the 72nd Annual Meeting of the American Malacological Society, 29 July - 3 August, 2006.
- Hayes, K.A. (Oral) Presentation. Molecular systematics and comparative phylogeography of apple snails (*Pomacea* spp.): Misidentifications, multiple introductions and patterns of Neotropical diversification. Presented at the University of Hawaii Ecology, Evolution, and Conservation Biology Evo-lunch seminar, 18 November 2005.
- Hayes, K.A. (Oral) Preliminary phylogenetic assessment of invasive apple snails in Asia and beyond. Presented at the 71st Annual Meeting of the American Malacological Society, 26-30 June 2005.
- Hayes, K.A. (Oral) One, twice, three times or more: Apple snail introduction(s) to S.E. Asia and the Pacific. Presented at the 30th Annual Tester Memorial Symposium. 16-18 March 2005.
- Cowie, R.H. and Hayes, K. A. (Oral) Invasive ampullariid snails: taxonomic confusion and some preliminary resolution based on DNA sequences. Invited paper presented at the 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.
- Hayes, K.A. (Oral) Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). Presented at the 70th Annual Meeting of the American Malacological Society, 31 July - 4 August 2004.
- Hayes, K.A. (Oral) Phylogeography and Evolution of the Florida Crown Conch (*Melongena corona*). Presented at the World Congress of Malacology, 11-16 July 2004.
- Hayes, K.A. (Oral) Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). Presented at the World Congress of Malacology, 11-16 July 2004.
- Hayes, K. (Oral) Systematics, Phylogeography, and Evolution of Apple Snails (*Pomacea* spp.). Presented at the 29th Annual Tester Memorial Symposium. 11-12 March 2004.
- Hayes, K. (Oral) Phylogeography and Evolution of the Corona Complex (*Melongena corona*). Presented at the 29th Annual Tester Memorial Symposium. 11-12 March 2004.
- Hayes, K. (Oral) Phylogeography and Evolution of the Corona Complex (*Melongena corona*). MS Thesis Defense. University of South Florida, Tampa. FL. 5 December 2003.
- Hayes, K. (Oral) Evolution of the “Corona Complex” in the genus *Melongena* (Gastropoda: Melongenidae). Presented at the 69th Annual Meeting of the American Malacological Society. Ann Arbor, Michigan. 25-29 June 2003. (Constance Boone Award)
- Hayes, K. (Oral) Evolution of the “Corona Complex” in the genus *Melongena* (Gastropoda: Melongenidae). Presented at the 16th Annual Meeting of Florida Association of Benthologists. St. Augustine, Florida. 21 November 2002. (Awarded Best Oral Presentation by Student)
- Hayes, K. (Oral) Evolution of the “Corona Complex” in the genus *Melongena* (Gastropoda: Melongenidae). Presented at the 68th Annual Meeting of the American Malacological Society. Charleston, South Carolina. 3-7 August 2002. (Awarded 2nd Place – Best Student Presentation)
- Hayes, K. and S.A. Karl. (Oral) Evolution of the “Corona Complex” in the genus *Melongena* (Gastropoda: Melongenidae). Presented at the 14th International Congress of UNITAS MALACOLOGICA (World Congress of Malacology). Vienna, Austria. 19-25 August 2001.
- Hayes, K. and S.A. Karl. (Oral) Evolution of the “Corona Complex” in the genus *Melongena* (Gastropoda: Melongenidae): Preliminary microsatellite data. Presented at the 9th Annual Florida Ecological and Evolutionary Symposium. Archbold Research Station, Lake Placid, Florida. 31 March 2001.