# RISA R. PESAPANE

### **EDUCATION**

- 2019 Ph.D. in Ecology, designated emphasis Biology of Vector-borne Disease, University of California Davis
- 2011 M.S. in Wildlife Science, focusing on disease ecology, Virginia Tech
- **2007 B.S. in Biology,** Virginia Tech
- 2006 B.S. in Wildlife Science, Virginia Tech

# **ACADEMIC APPOINTMENTS**

09/2019 - **Assistant Professor**, joint appointment with the Department of Veterinary Preventive Medicine and the School of Environment and Natural Resources.

The Ohio State University, Columbus, OH, USA

# REFEREED PUBLICATIONS (\* denotes trainee)

- Vieira RFC, Muñoz-Leal S, Faulkner G\*, Şuleşco T, André MR, **Pesapane R**. Chapter 9 Global climate change impacts on vector ecology and vector-borne diseases, in: McNabb SJN, Shaikh AT, Haley CJ. (Eds.), Modernizing Global Health Security to Prevent, Detect, and Respond. Academic Press, pp. 155–173.
- Bassini-Silva R, **Pesapane R**, Welbourn C, Ochoa R, Foley J, Barros-Battesti DM, de Castro Jacinavicius F. Two new species of chigger mites (Trombidiformes: Trombiculidae: Blankaartia and Euschoengastia) associated with rodents from the Amargosa Valley, Mojave Desert, United States, with the redescription of Euschoengastia fasolla Brennan and Beck, 1955. International Journal of Acarology. *In press*.
- 2023 Machtinger ET, Poh KC, **Pesapane R**, Tufts DM. An integrative framework for tick management: The need to connect wildlife science, one health, and interdisciplinary perspectives. Current Opinion in Insect Science: 101131
- 2023 Eleftheriou A\*, Swisher S\*, Arruda A, Berrian A, **Pesapane R**. Describing the experience of livestock producers from Ohio, USA with ticks and associated diseases. One Health Outlook 5.1, 15.
- 2023 Sabet A\*, Ward SF, **Pesapane R.** Amblyomma maculatum (Gulf Coast tick). Trends in Parasitology: S1471-4922.
- Eleftheriou A\*, Beckett J\*, Bai N\*, **Pesapane R**. An established population of Asian longhorned ticks (Acari: Ixodidae) in Ohio, USA. Journal of Medical Entomology (2023): tjad104.
- Ehrlich M, Madden C, McBride DS, Nolting JM, Huey D, Kenney S, Wang Q, Saif LJ, Vlasova A, Dennis P Lombardi D, Gibson S, McLaine A, Lauterbach S, Yaxley P, Winston JA, Diaz-Campos D, **Pesapane R**, Flint M, Flint J, Junge R, Faith SA, Bowman A, Hale V. Lack of SARS-CoV-2 Viral RNA Detection among a Convenience Sampling of Ohio Wildlife, Companion, and Agricultural Animals, 2020–2021. Animals: 13, 2554.
- 2023 Eleftheriou A\*, Samantha S\*, Andreia A, Amanda B, **Pesapane R**. A survey of knowledge, attitudes, and practices of veterinary professionals regarding ticks and tick-borne diseases: Insights from Ohio, USA. One Health: 100592.
- Frederick J, Thompson A, Sharma P, Dharmarajan G, Ronai I, **Pesapane R**, Smith R, Sundstrom K, Tsao J, Tuten H, Yabsley MJ, Glenn T. Phylogeography of the blacklegged tick *Ixodes scapularis* throughout the United States identifies candidate loci for differences in vectorial capacity. Molecular Ecology. 32, 3133–3149

- Occi J, Hall M, Campbell V, Stronsick S, Sullivan CF, **Pesapane R**, Gonzalez J, Toledo A, Fonseca DM. Multistate survey of spotted fever Rickettsia and relapsing fever Borrelia in the bat tick, *Alectorobius kelleyi* (Ixodida: Argasidae). Ticks and Tick-borne Pathogens. 14(3):102157
- 2022 Scott JD, McGoey E\*, **Pesapane R.** Molecular detection of *Anaplasma phagocytophilum*, *Babesia odocoilei, Babesia* sp., and *Borrelia burgdorferi* sensu lato in songbirds. Journal of Biomedical Research and Environmental Sciences. 3(12): 1451-1459
- 2022 Scott JD, McGoey E\*, **Pesapane R.** Tick-borne pathogens *Anaplasma phagocytophilum, Babesia odocoilei*, and *Borrelia burgdorferi* sensu lato in blacklegged ticks widespread across Eastern Canada. Journal of Biomedical Research and Environmental Sciences. 3(10): 1249-1256
- 2022 Eleftheriou A\*, Cole D\*, Kieffer J, **Pesapane R.** Molecular prevalence of *Anaplasma marginale* and associated risk factors in beef cattle herds from Ohio: A cross-sectional study. Journal of the American Veterinary Medical Association 1.aop: 1-5.
- Swisher S\*, **Pesapane R.** Reconsidering the Role of state animal import requirements in controlling invasive ticks and tick-borne disease. Preventive Veterinary Medicine *105718*.
- 2022 **Pesapane R**, Chaves A, Foley J, Javeed N\*, Barnum S, Greenwald K, Dodd E, Fontaine C, Duignan P, Murray M, Miller M. Nasopulmonary mites (Acari: Halarachnidae) as potential vectors of bacterial pathogens, including *Streptococcus phocae*, in marine mammals. PLOS ONE 17(6): e0270009
- 2022 López-Pérez AM, **Pesapane R**, Clifford DL, Backus L, Foley P, Voll A, Bassini Silva R, Foley J. Host species and environment drivers of ectoparasite community of rodents in a Mojave Desert wetlands. PLOS ONE 17(6): e0269160
- Scott JD, **Pesapane R**. Detection of *Anaplasma phagocytophilum*, *Babesia odocoilei*, *Babesia* sp., *Borrelia burgdorferi* sensu lato, and *Hepatozoon canis* in *Ixodes scapularis* ticks collected in eastern Canada. Pathogens. 10.10: 1265.
- Pesapane R, Archibald W\*, Norris T, Fontaine C, Halaska B, Duignan P, Javeed N\*, Miller M, Foley J, 2021. Nasopulmonary mites (Halarachnidae) of coastal Californian pinnipeds: Identity, prevalence, and molecular characterization. International Journal of Parasitology: Parasites and Wildlife. 16: 113–119.
- Javeed N, Foley JE, Oliver-Guimera A, Affolter VK, Keel MK, Reed A, **Pesapane R,** Duignan PJ, Murray M, Tinker MT, Miller MA. Demodectic mange in threatened southern sea otters (*Enhydra lutris nereis*). Veterinary Dermatology. 32(3), 211-e55.
- 2020 Castle ST, Allan N, Clifford D, Aylward CM, Ramsey J, Fascetti A, **Pesapane R,** Roy A, Statham M, Sacks B, Foley J. Diet composition analysis provides new management insights for a highly specialized endangered small mammal. PLOS ONE 15(10): e0240136.
- 2020 Foley JE, Allan N, **Pesapane R**, Johnson A, Woods L, Brignolo L, Luce A, Clifford D, Imai D. Disease and pathological conditions of an endangered rodent, *Microtus californicus scirpensis*, in a captive-rearing facility and in the wild. Journal of Zoo and Wildlife Medicine. 50(4): 758-768.
- 2019 López-Pérez AM, Foley JE, Roy A, **Pesapane R**, Castle S, Poulsen A, Clifford DL. Subpopulation augmentation among habitat patches as a tool to manage an endangered Mojave Desert wetlands-dependent rodent during anthropogenic restricted water climate regimes. PLoS One. 14(10):e0224246
- 2019 **Pesapane R,** Foley JE, Thomas R, Castro LR. Molecular detection and characterization of *Anaplasma platys* and *Ehrlichia canis* in dogs from northern Colombia. Veterinary Microbiology. 233: 184-189

- 2019 Shockling-Dent CE, **Pesapane R**, Batac F, Dodd E, Foley JE, Smith W, Miller M. Pathology and epidemiology of nasopulmonary acariasis (*Halarachne* sp.) in southern sea otters (*Enhydra lutris nereis*). International Journal of Parasitology: Parasites and Wildlife. 9: 60-67
- **Pesapane R,** Enge B, Roy A, Clifford D, Foley JE. A Tale of Two Valleys: disparity in Sin Nombre Virus antibody reactivity between neighboring Mojave Desert communities. Vectorborne and Zoonotic Disease. 19(4): 290-294.
- 2018 **Pesapane R**, Dodd E, Javeed N, Miller, M, Foley JE. Molecular characterization and prevalence of *Halarachne halichoeri* in threatened southern sea otters (*Enhydra lutris nereis*). International Journal of Parasitology: Parasites and Wildlife 7(3):386-390.
- Buckenberger-Mantovani S, Allan N, **Pesapane R**, Brignolo L, Foley JE. Eradication of a Tropical Rat Mite (*Ornithonyssus bacoti* Hirst) infestation from a captive colony of endangered Amargosa voles (*Microtus californicus scirpensis*). Journal of Zoo and Wildlife Medicine. 49: 475-479
- 2018 **Pesapane R**, Clifford L, Allan N, Roy A, Bellini N, Rivett O, Foley JE. The Biology and ecology of the Amargosa vole. Western Wildlife 5: 43–52.
- 2018 Allan N, Knotts T, **Pesapane R**, Ramsey J, Castle S, Clifford D, Foley JE. Conservation implications of shifting gut microbiomes in captive-reared endangered voles intended for reintroduction into the wild. Microorganisms 6(3): 94
- Imai DM, **Pesapane R**, Conroy C, Alarcon CN, Allan N, Fung J, Foley JE, Murphy, BG, Verstraete, FJM. Apical elongation of molar teeth in captive *Microtus* voles. Veterinary Pathology 55: 572-583
- Allan N, **Pesapane R**, Foley JE, Clifford D. Successful care and propagation of the endangered Amargosa vole (*Microtus californicus scirpensis*) in captivity. Zoo Biology 37(1): 59-63
- 2018 Krohn A, Conroy CJ, **Pesapane R**, Ke B, Foley JE, Rosenblum EB. Conservation genomics of desert dwelling California voles (*Microtus californicus*) and implications for management of endangered Amargosa voles (*Microtus californicus scirpensis*). Conservation Genetics 19(2): 383-395
- **Pesapane R,** Ponder M, Alexander KA. Tracking pathogen transmission at the human–wildlife interface: Banded mongoose and *Escherichia coli*. EcoHealth 10(2): 115-128
- Alexander KA, Blackburn JK, Vandewalle ME, **Pesapane R**, Baipoledi EK, Elzer, PH. Buffalo, Bush Meat, and the Zoonotic Threat of Brucellosis in Botswana. PLoS ONE 7(3): e32842.
- 2009 **Pesapane R**. Seizures in a colony of genetically obese mice. Lab Animal 38(3): 81

# TEACHING AND ADVISING

DIDACTIC TEACHING		
	2023-present	OSU Wildlife Ecology Methods (ENR 5362), Guest Lecture
	2023-present	OSU Disease and Diagnoses 1A (VMCOLL 6310), Lab Module Instructor
	2022-22	OSU Comparative Biology of Disease II (VMCOLL 6550.02), Module Instructor
	2021-present	OSU Parasitology (VMCOLL 6010.02), Lab Module Instructor
	2021-present	OSU Interdisciplinary Team Science (EEOB 5194), Module Instructor
	2021-present	OSU Ecology of Infectious Disease (VETPREV/PUBHEHS/ENR 5335), Lead Instructor
	2019-present	OSU Mammalian Wildlife Biology and Management (ENR 5364), Guest Lecture
	2019-present	OSU Epidemiology of Zoonoses (VETPREV 7721). Module Instructor

#### STUDENT ADVISING

2023-24	OSU Graduate and Professional students: Ningzhu Bai, Lauren Vesprani, Ashani Hangawatte,
	DaZané Cole, Morgan Shields, Andreas Eleftheriou, Benjamin Zeiger, Afsoon Sabet
2023-24	OSU Undergraduate laboratory mentees: Selena Wang, Jazmin Jennings
2022-23	OSU Graduate and Professional students: Ningzhu Bai, Lauren Vesprani, Ashani Hangawatte,
	Allison Williams, DaZané Cole, Morgan Shields, Andreas Eleftheriou, Kate Neumeyer, Kaylee
	Shrock, Benjamin Zeiger
2022-23	OSU Undergraduate laboratory mentees: Selena Wang, Elena McGoey, Jazmin Jennings
2021-22	OSU Graduate and Professional students: Ningzhu Bai, Lauren Vesprani, Barb Birtcil, Savannah
	Beverly, Ashani Hangawatte, Allison Williams, DaZané Cole, Morgan Shields, Andreas Eleftheriou
2021-22	OSU Undergraduate laboratory mentees: Yiming Chu, Julia Beckett, Caleb Cummings, Selena Wang,
	Elena McGoey
2020-21	OSU Graduate and Professional students: Ningzhu Bai, Lauren Vesprani, Wiley Archibald, Jed
	Henning, Barb Birtcil, Savanah Beverly
2020-21	OSU Undergraduate laboratory mentees: Ningzhu Bai, Yiming Chu

### **SERVICE ACTIVITIES**

2023- present	Journal of Medical Entomology, Where the Wild Things Are: One Health at the Wildlife-Arthropod
	Interface Special Collection, Guest Editor
2023-23	Healthy People, Places, and Animals: One Health at the Arthropod Vector-Animal-Landscape
	Interface: Entomological Society of America Annual Meeting, Moderator/Host
2022-23	VPM faculty search committee for One Health faculty position, Member
2022-23	2 <sup>nd</sup> Ohio Regional Tick Symposium Planning Committee, <b>Organizer</b>
2022-22	The Ohio State University Health Sciences Interprofessional practice and education (BuckIPE) One
	Health working group, Member
2022-22	One Health at the Wildlife-Arthropod Interface Symposium: Entomological Society of America
	Annual Meeting, Moderator/Host
2022-22	Invasive Arthropod and Pathogen Species Symposium: 8th International Congress of Society for
	Vector Ecology, Moderator/Host
2022-present	MUVE-ing Together Initiative: Connecting entomology, Ecology, and Human Health, Organizer
2021-present	Buckeye Bug Bite Laboratory, <b>Director</b>
2020-present	Veterinary Public Health Graduate Committee, Committee Member
2019-present	OSU MENR Ecosystem Health Subcommittee, Chair
2019-21	Ohio Regional Tick Symposium Planning Committee, Organizer
2015-19	One Health Commission, Board Member

### **EXTENSION & OUTREACH**

# CONTINUING EDUCATION TEACHING

- Asian Longhorned Ticks and Theileria. **OSU Beef School.** Synchronous, 1 hour of continuing education. Attended by cattle producers. March 8<sup>th</sup>, 2023. Virtual.
- The changing landscape of tick-borne disease in Ohio. **Zoetis.** Synchronous, 1 hour of continuing education. Attended by veterinary professionals. March 9<sup>th</sup>, 2023. Cambridge, OH, USA.
- The changing landscape of tick-borne disease in Ohio. **Merck.** Synchronous, 1 hour of continuing education. Attended by veterinary professionals. October 19<sup>th</sup>, 2022. Ashland, OH, USA.
- The changing landscape of tick-borne disease in Ohio. **Zoetis.** Synchronous, 1 hour of continuing education. Attended by veterinary professionals. August 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup>, 2022. Columbus, OH, USA.
- What Veterinarians Need to Know About Tick Range Expansion and the Rise in Tick-Borne Disease. **American Veterinary Medical Association annual meeting.** Synchronous, 1 hour of continuing education. August 1<sup>st</sup>, 2022. Philadelphia, PA, USA.

- The changing landscape of tick-borne disease in Ohio. **Merck.** Synchronous, 1 hour of continuing education. Attended by veterinary professionals. April 13<sup>th</sup>, 2022. Columbus, OH, USA.
- A new era of ticks and tick-borne disease in Ohio. **Midwest Veterinary Conference.** Asynchronous, half our of continuing education. February 16-20<sup>th</sup>, 2021. Virtual.
- 2020 High Alert for Tick-Borne Disease: Everything You Need To Know To Protect Your Patients and Build Your Practice. **Zoetis.** Synchronous, 1 hour of continuing education. October 22<sup>nd</sup>, 2020. Virtual.
- 2020 Stopping mighty small pests, creating mighty big problems. **University of Minnesota Structural Pest Management Conference.** Synchronous, 1 hour of continuing education. March 10<sup>th</sup>, 2020. Minneapolis, MN, USA.

### APPLIED PUBLICATIONS

2022 **Pesapane R,** McDermott T. Asian Longhorned Ticks in Ohio [Fact sheet]. Ohio State University Extension Ohioline. <a href="https://ohioline.osu.edu/factsheet/vme-1035">https://ohioline.osu.edu/factsheet/vme-1035</a>

#### OUTREACH

- 2023- OSU BITE SITE <a href="https://kx.osu.edu/bite">https://kx.osu.edu/bite</a>. A one stop shop for information on ticks, mosquitoes, and other biting insects; includes the newest research from OSU vector experts and educational materials for bite prevention.
- 2021- Ohio Department of Agriculture, Animal Disease Diagnostic Laboratory. Memorandum of Understanding for data and sample sharing. *Ad hoc* tick task force to monitor and report Asian Longhorned ticks in Ohio.
- 2020- New Philadelphia City High Schools Tick Project. <a href="https://bradyk7.wixsite.com/website">https://bradyk7.wixsite.com/website</a> A training and education partnership between OSU and k-12 educators on tick ecology and tick-borne disease.

### PROFESSIONAL PRESENTATIONS

# **EXTERNAL**

- Tick tock: Identifying and addressing gaps in biosecurity training against the rapid expansion of invasive ticks. USDA Monthly Veterinary Services Cattle Health Meeting with the National Assembly of State Animal Health Officials. Virtual.
- One Wild Ride: the changing dynamics of ectoparasites, pathogens, and their wildlife hosts. **Ohio Wildlife Rehabilitation Conference.** Columbus, OH, USA.
- 2023 An Ecosystem Perspective on Ectoparasites and their Associated Pathogens. **Otterbein University Zoo** and Conservation Science seminar series. Westerville, OH, USA.
- 2023 An Ecosystem Perspective on Ectoparasites and their Associated Pathogens. **The Ohio State University SENR seminar series.** Columbus, OH, USA.
- Asian longhorned ticks: pathogens and other pernicious impacts of this exotic pest. **University of Cincinnati Biology Department seminar**. Cincinnati, OH, USA.
- 2023 Tick Talk: Ticks and Wildlife Community Ecology. **Ohio Wildlife Diversity Conference.** Columbus, OH, USA.
- Asian longhorned ticks: pathogens and other pernicious impacts of this exotic pest. **Illinois Mosquito and Vector Control Association annual meeting.** Springfield, IL, USA.
- 2022 Asian Longhorned Ticks in Ohio: An invasion story. Society for Vector Ecology 8<sup>th</sup> International Congress. Honolulu, HI, USA.
- 2022 Mighty surprising mites: Nasopulmonary mite infestations and implications for marine mammal health. Entomological Society of America Joint Annual Meeting with Entomological Society of Canada. Vancouver, Canada.
- 2022 The changing landscape of tick-borne disease in Ohio. Merck. Columbus, OH, USA.
- 2022 The changing landscape of tick-borne disease in Ohio. **Zoetis.** Columbus, OH, USA.
- What Veterinarians Need to Know About Tick Range Expansion and the Rise in Tick-Borne Disease.

  American Veterinary Medical Association. Philadelphia, PA, USA.
- Nasopulmonary mites (Acari: Halarachnidae) as potential vectors of bacterial pathogens, including *Streptococcus phocae*, in marine mammals. Poster. **Wildlife Disease Association.** Madison, WI, USA.

- Nasopulmonary mites (Halarachnidae) of coastal Californian pinnipeds: Identity, prevalence, and molecular characterization. **California Department of Fish and Wildlife Science Symposium.** Virtual.
- 2022 (Keynote) An ecosystem perspective on ticks and wildlife. **Ohio Wildlife Management Association.** Columbus, OH, USA.
- 2022 Update on tick surveillance and testing at Ohio State University. **Ohio Mosquito and Vector Control Association.** Virtual.
- 2022 The changing landscape of tick-borne disease in Ohio. Merck. Grove City, OH, USA.
- New tick surveillance efforts in Ohio and the arrival of the Asian Longhorned tick. **Indiana Vector Control Association.** Jefferson, IN, USA.
- New tick surveillance efforts in Ohio and the arrival of the Asian Longhorned tick. **Ohio Mosquito and Vector Control Association.** Virtual.
- Bacterial Taxa Associated with Nasopulmonary Mites (Acari: Halarachnidae) Including Streptococcus phocae in Marine Mammals. **Sea Otter Research and Conservation Symposium.** Virtual.
- Nasopulmonary mites (Acari: Halarachnidae) of coastal Californian pinnipeds. **Entomology Society of America, Eastern Branch Meeting.** Virtual.
- 2021 A new era of ticks and tick-borne disease in Ohio. Midwestern Veterinary Conference. Virtual.
- 2020 Stopping mighty small pests, creating mighty big problems. <u>Invited Seminar.</u> **Minnesota Structural Pest Management Conference**. Minneapolis, MN, USA.
- 2020 Ticks and Tiverton Township. <u>Invited Seminar</u>. **Tiverton Institute**. Coshocton, OH, USA.
- 2019 Molecular characterization and prevalence of *Halarachne halichoeri* in threatened southern sea otters (*Enhydra lutris nereis*). Poster. **68th Annual International Conference of the Wildlife Disease Association**. Tahoe, CA, USA.

#### **INTERNAL**

- Environmental and health scientists bite back! Managing tick and mosquito bite-based diseases in Ohio and beyond. **OSU Environmental Professionals Network Breakfast**. Columbus, OH, USA.
- 2023 Recent developments in ticks and tick-borne disease in Ohio. **Ohio Regional Tick Symposium.** Columbus, OH, USA.
- 2022 Ticks and Tick-borne Pathogens in Central Ohio Parks: Implications for Management. **Ohio Woodland** Water and Wildlife Conference. Columbus, OH, USA.
- 2021 State of tick vectors in Ohio. Ohio Regional Tick Symposium. Columbus, OH, USA.
- 2021 An updated report on ticks and tick-borne disease in Ohio. **Ohio Woodland Water and Wildlife Conference.** Columbus, OH, USA.
- 2021 Preliminary results of a multi-species surveillance network for ticks and tick-borne pathogens in Ohio. **OSU Entomology Departmental Seminar.** Columbus, OH, USA.
- 2020 Ecology and surveillance of ticks and tick-borne pathogens in Ohio. **OSU Applied Field Epidemiology Program** seminar series. Columbus, OH, USA.
- 2020 Ticks and tick-borne disease: a new reality in Ohio. **OSU Infectious Diseases Student Community of Practice and Engagement at Ohio State (ID SCOPE)** seminar series. Columbus, OH, USA.
- 2020 Tracking Pathogen Transmission at the Human-Wildlife Interface: Banded Mongoose and *Escherichia coli*. **OSU Global One Health Institute** seminar series. Columbus, OH, USA.

### PROFESSIONAL MEMBERSHIPS

The Entomological Society of America, **Member** Wildlife Disease Association, **Member** Society for Vector Ecology, **Member** 

# **SELECT PRESS**

Tiny, cattle-killing ticks spread across Ohio: 'No getting rid of them' New York Post. <a href="https://nypost.com/2023/11/03/lifestyle/cattle-killing-ticks-spread-in-ohio-no-getting-rid-of-them/">https://nypost.com/2023/11/03/lifestyle/cattle-killing-ticks-spread-in-ohio-no-getting-rid-of-them/</a>

- An exotic tick that can kill cattle is spreading across Ohio. OSU News <a href="https://news.osu.edu/an-exotic-tick-that-can-kill-cattle-is-spreading-across-ohio/">https://news.osu.edu/an-exotic-tick-that-can-kill-cattle-is-spreading-across-ohio/</a>
- Asian longhorned ticks spreading across Ohio, threaten livestock. WOSU 89.7 Public Radio. October 3, 2022. <a href="https://news.wosu.org/2022-10-03/asian-longhorned-ticks-spreading-across-ohio-threaten-livestock">https://news.wosu.org/2022-10-03/asian-longhorned-ticks-spreading-across-ohio-threaten-livestock</a>
- Teaching with Ticks: Pesapane Collaborates with New Philadelphia School District. The Ohio State University Infectious Diseases Institute. October 3, 2022 <a href="https://idi.osu.edu/news-articles/teaching-with-ticks">https://idi.osu.edu/news-articles/teaching-with-ticks</a>
- 2022 **OSU's submit a tick program**. 91.3 WYSO Public Radio. June 9, 2022.
- Where fleas and ticks come from, how to prevent them on people and pets, and other FAQ. The Ohio State University Health and Discovery. June 7, 2022 <a href="https://health.osu.edu/health/animal-health/where-fleas-and-ticks-come-from">https://health.osu.edu/health/animal-health/where-fleas-and-ticks-come-from</a>
- 2021 Outdoors: Tiny ticks present outsized issues. Toledo Blade. July 3, 2021. <a href="https://tinyurl.com/y2dcawku">https://tinyurl.com/y2dcawku</a>
- 2021 Out and about? So are ticks. CFAES News. July 2021. https://tinyurl.com/tfs9uk8y
- 2021 Troubling tick season expected. CFAES News. June 15, 2021. https://tinyurl.com/2u2m9u85
- Ticking Away to Summer: May is Lyme Disease Awareness Month. OSU Infectious Diseases Institute. May 24, 2021. <a href="https://tinyurl.com/bdhhjm68">https://tinyurl.com/bdhhjm68</a>
- 2021 Tick season has arrived in central Ohio. 10TV. May 13, 2021 <a href="https://tinyurl.com/yckpvt6v">https://tinyurl.com/yckpvt6v</a>
- 2020 Livestock owners in Ohio warned to be on guard after Asian Longhorned tick found. The Columbus Dispatch. August 8, 2020 https://tinyurl.com/2v2wp3fv
- 2020 **Asian Longhorned Tick Confirmed in Gallia County**. The Ohio Department of agriculture. July 31, 2020. <a href="https://tinyurl.com/5n99juuu">https://tinyurl.com/5n99juuu</a>
- High Stakes Surveillance: Pesapane Lab Identifies New Blood-Sucking Tick Species in Ohio. OSU Infectious Diseases Institute News. October 7, 2020. <a href="https://tinyurl.com/sr99cvnf">https://tinyurl.com/sr99cvnf</a>
- Go outdoors, but watch for ticks. OSU College of Food, Agricultural, and Environmental Science News. September 30, 2020. <a href="https://cfaes.osu.edu/news/articles/go-outdoors-watch-for-ticks">https://cfaes.osu.edu/news/articles/go-outdoors-watch-for-ticks</a>
- 2016 Saving the Amargosa Vole. PBS Outdoor Nevada. May 3, 2016. <a href="https://tinyurl.com/yckt894v2015">https://tinyurl.com/yckt894v2015</a>
- The Untold Story of How Scientists and Citizens Are Saving This Unique Desert Critter From Extinction. TakePart. April 8, 2015. <a href="https://tinyurl.com/2p8enfcv">https://tinyurl.com/2p8enfcv</a>
- 2015 **Endangered Amargosa voles return to Mojave Desert**. Las Vegas Review Journal. June 28, 2015. <a href="https://tinyurl.com/2p97hs8v">https://tinyurl.com/2p97hs8v</a>
- 2013 Humans passing drug resistance to wildlife in protected areas in Africa. ScienceDaily. April 24, 2013. <a href="https://tinyurl.com/k8vy5hu5">https://tinyurl.com/k8vy5hu5</a>