TOMASZ E. KORALEWSKI

Ecological Systems Laboratory
Department of Ecology and Conservation Biology
Texas A&M University
2258 TAMU, College Station, TX 77843-2258

Phone: 979-845-5702 http://www.ecological-systems-lab.com tomasz.e.koralewski@gmail.com

EDUCATION

- <u>Ph.D., Genetics</u>. 2006–2010. Texas A&M University, College Station, TX. Dissertation: Comparative genomic analysis of adaptive and economic traits related genes in Southern pines.
- <u>B.Sc.</u>, <u>Biology</u>. Biology Teacher Certificate (elementary/middle school). 2001–2004. Kazimierz Wielki University in Bydgoszcz, Poland. Thesis: Two-generation versus parentage analysis based on the neighborhood model as alternative approaches for estimating pollen gene flow in plant populations.
- M.Sc., Electronics and Telecommunications Engineering. 1996–2001. University of Technology and Agriculture in Bydgoszcz (now Bydgoszcz University of Science and Technology), Poland. Thesis: An application for multi-user database programming, using Borland C++ Builder package.

ACADEMIC POSITIONS

- 09.2019–08.2022 Associate Research Scientist, Department of Ecology and Conservation Biology (formerly Wildlife and Fisheries Sciences), Texas A&M University, College Station, TX
- 01.2018–09.2019 Assistant Research Scientist, Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX
- 07.2011–12.2017 Postdoctoral Research Associate, Department of Ecosystem Science and Management, Texas A&M University, College Station, TX
- 12.2010–07.2011 Postdoctoral Research Associate, Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, TX
- 06.2006–08.2010 Graduate Research Assistant, Department of Ecosystem Science and Management, Texas A&M University, College Station, TX

PEER-REVIEWED PUBLICATIONS

- 1. <u>Koralewski, TE, H-H Wang, WE Grant, MJ Brewer, NC Elliott (2023)</u> Error propagation in an integrated spatially explicit individual based model. Ecological Modelling, 475: 110215.
- 2. Brewer, MJ, NC Elliott, IL Esquivel, AL Jacobson, AM Faris, A Szczepaniec, BH Elkins, JW Gordy, AJ Pekarcik, H-H Wang, <u>TE Koralewski</u>, KL Giles, CN Jessie, WE Grant (2022) Natural enemies, mediated by landscape and weather conditions, shape response of the sorghum agroecosystem of North America to the invasive aphid *Melanaphis sorghi*. Frontiers in Insect Science, 2: 830997.

- 3. <u>Koralewski, TE, H-H Wang, WE Grant, MJ Brewer, NC Elliott (2022)</u> Evaluation of areawide forecasts of wind-borne crop pests: Sugarcane aphid (Hemiptera: Aphididae) infestations of sorghum in the Great Plains of North America. Journal of Economic Entomology, 115(3): 863-868.
- 4. Wang, H-H, WE Grant, <u>TE Koralewski</u>, MJ Brewer, NC Elliott (2021) Simulating migration of wind-borne pests: "Deconstructing" representation of the emigration process. Ecological Modelling, 460: 109742.
- 5. Elliott, N, K Giles, M Brewer, A Szczepaniec, A Knutson, JP Michaud, C Jessie, A Faris, B Elkins, H-H Wang, <u>T Koralewski</u>, W Grant (2021) Recruitment of natural enemies of the invasive sugarcane aphid vary spatially and temporally in sorghum fields in the Southern Great Plains of the USA. Southwestern Entomologist, 46(2): 357-372.
- 6. Iwanaga, T, H-H Wang, <u>TE Koralewski</u>, WE Grant, AJ Jakeman, JC Little (2021) Toward a complete interdisciplinary treatment of scale: Reflexive lessons from socioenvironmental systems modeling. Elementa: Science of the Anthropocene, 9(1): 00182.
- 7. <u>Koralewski, TE, H-H Wang, WE Grant, MJ Brewer, NC Elliott, JK Westbrook (2021) Modeling the dispersal of wind-borne pests: Sensitivity of infestation forecasts to uncertainty in parameterization of long-distance airborne dispersal. Agricultural and Forest Meteorology, 301-302: 108357.</u>
- 8. Iwanaga, T, H-H Wang, SH Hamilton, V Grimm, <u>TE Koralewski</u>, A Salado, S Elsawah, S Razavi, J Yang, P Glynn, J Badham, A Voinov, M Chen, WE Grant, TR Peterson, K Frank, G Shenk, CM Barton, AJ Jakeman, JC Little (2021) Socio-technical scales in socio-environmental modeling: Managing a system-of-systems modeling approach. Environmental Modelling & Software, 135: 104885.
- 9. <u>Koralewski, TE, H-H Wang, WE Grant, JH LaForest, MJ Brewer, JK Westbrook, NC Elliott, JK Westbrook (2020)</u> Toward near-real-time forecasts of airborne crop pests: Aphid invasions of cereal grains in North America. Computers and Electronics in Agriculture, 179: 105861.
- 10. Wang, H-H, WE Grant, <u>TE Koralewski</u>, NC Elliott, MJ Brewer, JK Westbrook (2020) Where do all the aphids go? A series of thought experiments within the context of area-wide pest management. Agricultural Systems, 185: 102957.
- 11. <u>Koralewski, TE, H-H Wang, WE Grant, MJ Brewer, NC Elliot, JK Westbrook, A Szczepaniec, A Knutson, KL Giles, JP Michaud (2020) Integrating models of atmospheric dispersion and crop-pest dynamics: Linking detection of local aphid infestations to forecasts of region-wide invasion of cereal crops. Annals of the Entomological Society of America (Special Collection: Geospatial Analysis of Invasive Insects), 113(2): 79-87.</u>
- 12. <u>Koralewski, TE</u>, JK Westbrook, WE Grant, H-H Wang (2019) Coupling general physical environmental process models with specific question-driven ecological simulation models. Ecological Modelling, 405: 102-105.
- 13. Wang, H-H, WE Grant, NC Elliott, MJ Brewer, <u>TE Koralewski</u>, JK Westbrook, TM Alves, and GA Sword (2019) Integrated modelling of the life cycle and aeroecology of wind-borne pests in temporally-variable spatially-heterogeneous environment. Ecological Modelling, 399: 23-38.

- 14. Culpepper, LZ, H-H Wang, <u>TE Koralewski</u>, WE Grant, WE Rogers (2018) Understory upheaval: factors influencing Japanese stiltgrass invasion in forestlands of Tennessee, United States. Botanical Studies, 59: 20.
- 15. Casola, C, <u>TE Koralewski</u> (2018) Pinaceae show elevated rates of gene duplication and gene loss that are robust to incomplete gene annotation. The Plant Journal, 95(5): 862-876.
- 16. Neale, DB, PE McGuire, NC Wheeler, KA Stevens, MW Crepeau, C Cardeno, AV Zimin, D Puiu, GM Pertea, UU Sezen, C Casola, <u>TE Koralewski</u>, R Paul, D Gonzalez-Ibeas, S Zaman, R Cronn, M Yandell, C Holt, CH Langley, JA Yorke, SL Salzberg, and JL Wegrzyn (2017) The Douglas-fir genome sequence reveals specialization of the photosynthetic apparatus in Pinaceae. G3: Genes, Genomes, Genetics, 7(9): 3157-3167.
- 17. Lu, M, KV Krutovsky, CD Nelson, <u>TE Koralewski</u>, TD Byram, CA Loopstra (2016) Exome genotyping, linkage disequilibrium and population structure in loblolly pine (*Pinus taeda* L.). BMC Genomics, 17: 730.
- 18. <u>Koralewski, TE, M Mateos and KV Krutovsky</u> (2016) Conflicting genomic signals affect phylogenetic inference in four species of North American pines. AoB PLANTS, 8: plw019.
- 19. Wang, H-H, <u>TE Koralewski</u>, EK McGrew, WE Grant, and TD Byram (2015) Species distribution model for management of an invasive vine in forestlands of eastern Texas. Forests, 6(12): 4374-4390.
- 20. <u>Koralewski, TE, H-H Wang, WE Grant and TD Byram (2015)</u> Plants on the move: Assisted migration of forest trees in the face of climate change. Forest Ecology and Management, 344: 30-37.
- 21. <u>Koralewski, TE</u>, JE Brooks and KV Krutovsky (2014) Molecular evolution of drought tolerance and wood strength related candidate genes in loblolly pine (*Pinus taeda* L.). Silvae Genetica, 63(1–2): 59-66.
- 22. Wang, H-H, WE Grant, J Gan, WE Rogers, TM Swannack, <u>TE Koralewski</u>, JH Miller and JW Taylor Jr. (2012) Integrating spread dynamics and economics of timber production to manage Chinese tallow invasions in southern U.S. forestlands. PLOS ONE, 7(3): e33877.
- 23. <u>Koralewski, TE</u> and KV Krutovsky (2011) Evolution of exon-intron structure and alternative splicing. PLOS ONE, 6(3): e18055.
- 24. Wang, H-H, WE Grant, TM Swannack, J Gan, WE Rogers, <u>TE Koralewski</u>, JH Miller and JW Taylor Jr. (2011) Predicted range expansion of Chinese tallow tree (*Triadica sebifera*) in forestlands of the southern United States. Diversity and Distributions, 17(3): 552-565.
- 25. Burczyk, J and <u>TE Koralewski</u> (2005) Parentage versus two-generation analyses for estimating pollen-mediated gene flow in plant populations. Molecular Ecology, 14(8): 2525-2537.

NON-PEER-REVIEWED PUBLICATIONS

Conference Proceedings and Abstracts

- 1. Lu, M, KV Krutovsky, CD Nelson, JB West, <u>TE Koralewski</u>, TD Byram, NA Reilly, CA Loopstra (2017) Exome genotyping and association genetics of quantitative traits in clonally tested loblolly pine populations (*Pinus taeda* L.). In: Proceedings of the Thirty-fifth Meeting of the Canadian Forest Genetics Association. Forest Health and Productivity in Changing Environments. June 26-29, 2017, Edmonton, Alberta, p. 52.
- 2. Casola, C, W Zhu, <u>TE Koralewski</u> (2017) Analysis of Pinaceae gene family evolution suggests accelerated gene turnover in pine trees. In: Proceedings of the 34th Southern Forest Tree Improvement Conference. Applying genetics and genomics to accelerate breeding enhance genetic gain and improve adaptation. June 19-21, 2017, Crowne Plaza Melbourne Oceanfront, Melbourne, Florida, p. 3.
- 3. Lu, M, C Loopstra, K Krutovsky, CD Nelson, T Byram, <u>T Koralewski</u>, C Seeve (2017) Whole exome genotyping in loblolly pine identified 2.8 million SNPs used for association analyses. In: Proceedings of the 34th Southern Forest Tree Improvement Conference. Applying genetics and genomics to accelerate breeding enhance genetic gain and improve adaptation. June 19-21, 2017, Crowne Plaza Melbourne Oceanfront, Melbourne, Florida, p. 26.
- 4. <u>Koralewski, TE</u>, TD Byram, H-H Wang, WE Grant (2016) Deployment and procurement of loblolly pine (*Pinus taeda* L.) seed sources guided by the application of Categorical Universal Response Function (CURF). In: Proceedings of the 33rd Southern Forest Tree Improvement Conference. Using Tree Improvement to Grow New Products for a Changing World. June 8-11, 2015, Arlington Hotel, Hot Springs, Arkansas, pp. 22-24.
- 5. <u>Koralewski, TE</u>, M Mateos, and KV Krutovsky (2016) Phylogeny of major southern pines (subsection *Australes*, genus *Pinus*, family Pinaceae). In: Proceedings of the 33rd Southern Forest Tree Improvement Conference. Using Tree Improvement to Grow New Products for a Changing World. June 8-11, 2015, Arlington Hotel, Hot Springs, Arkansas, p. 82.
- 6. Byram, TD, <u>TE Koralewski</u> and EM Raley (2013) A climate change response function for loblolly pine (*Pinus taeda* L.) from the Western Gulf region of the United States. In: Proceedings of the 32nd Southern Forest Tree Improvement Conference. Advancing the Value of Forest Plantations. June 10-13, 2013, Clemson, South Carolina, p. 36.
- 7. Krutovsky, KV, <u>TE Koralewski</u> (2012) Evolution of exon-intron gene structure and alternative splicing: What we can learn from completely sequenced genomes and predict for non-model species. In: Abstracts of the 8th International Conference on Bioinformatics of Genome Regulation and Structure\Systems Biology. June 25-29, 2012, Novosibirsk, Russia, p. 171.
- 8. <u>Koralewski, TE</u>, LA Zhivotovsky and KV Krutovsky (2007) Metabolomics complexity in forest trees expected from intron-exon gene structure. In: Proceedings of the 29th Southern Forest Tree Improvement Conference. Tree Improvement in North America: Past, Present, and Future. Joint

Meeting: Western Forest Genetics Association & Southern Forest Tree Improvement Committee. June 19-22, 2007, Galveston, TX, p. 125.

Technical Reports

- 1. Byram, T, A Farjat, F Isik, <u>T Koralewski</u>, S McKeand, G Peter, R Whetten, J Zhang (2015) Assisted Migration: Matching Genetics to Sites. PINEMAP (Pine Integrated Network: Education, Mitigation, and Adaptation Project) Year 4 Annual Report | March 2014-February 2015 "Mapping the future of southern pine management in a changing world", pp. 22-23.
- 2. Krutovsky, K, T Byram, R Whetten, N Wheeler, D Neale, M Lu, <u>T Koralewski</u>, C Loopstra (2013) PINEMAP + PineRefSeq = Future Forests. PINEMAP (Pine Integrated Network: Education, Mitigation, and Adaptation Project) Year 2 Annual Report | March 2012-February 2013 "Mapping the future of southern pine management in a changing world", pp. 26-27.
- 3. Byram, T, <u>T Koralewski</u>, G Peter, J Zhang, F Isik, A Farjat (2013) Using Historical Progeny Tests to Optimize Pine Breeding and Deployment Strategies. PINEMAP (Pine Integrated Network: Education, Mitigation, and Adaptation Project) Year 2 Annual Report | March 2012-February 2013 "Mapping the future of southern pine management in a changing world", pp. 28-29.

SCIENTIFIC PRESENTATIONS

- 1. Peterson, M, ZC Derouen, SM Heldman, AE Bishop, <u>TE Koralewski</u>, H-H Wang, and WE Grant (2022) Plants on the move: The current trend and future risk of Japanese honeysuckle invasion in southern United States. The 23rd Ecological Integration Symposium "The Return of the 'Ologists'", Program Book, p. 27. April 7-8, Annenberg Presidential Conference Center, Texas A&M University, College Station, TX.
- 2. Guillaume, JHA, JM Applegate, BFW Croke, PD Glynn, WE Grant, V Grimm, S Hamilton, T Iwanaga, AJ Jakeman, <u>TE Koralewski</u>, TC Lim, JC Little, S Razavi, G Shenk, and H-H Wang (2021) Reasoning about model complexity with a multi-scale approach. Science is Society: American Geophysical Union (AGU) Fall Meeting. December 13-17, 2021, New Orleans, LA and Online Everywhere.
- 3. Wang, H-H, CL Wonkka, F Mestre, D Alagador, <u>TE Koralewski</u>, ML Treglia, A Pękalski, WE Grant, F Smeins, and WE Rogers. (2020) Plant conservation in temporally variable, spatially heterogeneous environments. Texas Plant Conservation Conference, Fort Worth Botanic Garden and Botanical Research Institute of Texas. August 13-14, 2020, Virtual Conference.
- 4. Bishop, AE, Z Derouen, M Peterson, SM Heldman, Y Marinkovic, C Vazquez, L Chilongo, <u>TE Koralewski</u>, H-H Wang, and WE Grant (2018) Determinants of Japanese honeysuckle, *Lonicera japonica*, invasion in southeast United States forestlands. 103rd Ecological Society of America Annual Meeting "Linking extreme events, ecosystem resilience and human well-being". August 5-10, 2018, Ernest N. Morial Convention Center, New Orleans, LA.
- 5. <u>Koralewski, TE</u>, JK Westbrook, WE Grant, and H-H Wang (2018) A platform for linking physical and ecological simulation models: The aeroecology of aphids. 103rd Ecological Society of America

- Annual Meeting "Linking extreme events, ecosystem resilience and human well-being". August 5-10, 2018, Ernest N. Morial Convention Center, New Orleans, LA.
- 6. Marinkovic, Y, C Vazquez, SM Heldman, AE Bishop, L Chilongo, MR Peterson, Z Derouen, H-H Wang, TE Koralewski, WE Grant, and WE Rogers (2018) Influencing factors and implications for mitigation of Chinese tallow in southeast United States. 103rd Ecological Society of America Annual Meeting "Linking extreme events, ecosystem resilience and human well-being". August 5-10, 2018, Ernest N. Morial Convention Center, New Orleans, LA.
- 7. Marinkovic, Y, A Bishop, K Carbajal, H-H Wang, <u>TE Koralewski</u>, and WE Grant (2018) Biological Invasion and Coexistence in the Southeast United States. 54th Annual Meeting of the Texas Chapter of The Wildlife Society "The relevance of conservation to a diverse society... How to make it a reality". February 9-11, 2018, Sheraton Dallas Hotel, Dallas, TX.
- 8. <u>Koralewski, TE</u>, JK Westbrook, WE Grant, and H-H Wang (2018) Coupling complex physical environmental process models with specific question-driven ecological models. 9th International Congress on Environmental Modelling and Software "Modelling for Sustainable Food-Energy-Water Systems". June 24-28, 2018, Lory Student Center, Colorado State University, Fort Collins, CO.
- 9. Wang, H-H, WE Grant, JK Westbrook, MJ Brewer, <u>TE Koralewski</u>, TM Alves, GA Sword, and NC Elliott (2018) Modeling the life cycle and aeroecology of wind-borne crop pests in temporally-variable spatially-heterogeneous environments. 9th International Congress on Environmental Modelling and Software "Modelling for Sustainable Food-Energy-Water Systems". June 24-28, 2018, Lory Student Center, Colorado State University, Fort Collins, CO.
- 10. Carbajal, K, Y Marinkovic, H-H Wang, <u>TE Koralewski</u>, WE Grant (2017) How abiotic and biotic factors shape the coexistence of invasive species. 102nd Ecological Society of America Annual Meeting "Linking biodiversity, material cycling and ecosystem services in a changing world". August 6-11, 2017, Oregon Convention Center, Portland, OR.
- 11. Casola, C, <u>T Koralewski</u>, M Lawing (2017) Accelerated Gene Turnover and Parallel Gene Family Expansions and Contractions in Marine Mammal Lineages. The Annual Meeting of the Society of Molecular Biology and Evolution (SMBE 2017). July 2-6, 2017, JW Marriott Austin, Austin, TX.
- 12. <u>Koralewski, T, C Casola (2017)</u> Signatures of convergent evolution in chloroplast genes in C4 plants. The Annual Meeting of the Society of Molecular Biology and Evolution (SMBE 2017). July 2-6, 2017, JW Marriott Austin, Austin, TX.
- 13. <u>Koralewski, TE</u>, C Casola (2017) Parallel evolution in chloroplast genes in C4 plants. Second Annual Southeast Texas Evolutionary Genetics and Genomics (STEGG) Symposium. June 2, 2017, Ocean and Coastal Studies Building, Texas A&M University at Galveston, Galveston, TX.
- 14. Casola, C, W Zhu, <u>T Koralewski</u> (2017) Analysis of Pinaceae gene family evolution suggests accelerated gene turnover in pine trees. Plant and Animal Genome (PAG) XXV Conference. January 13-18, 2017, Town & Country Hotel, San Diego, CA.
- 15. Sezen, UU, DB Neale, P McGuire, N Wheeler, KA Stevens, M Crepeau, C Cardeno, A Zimin, D Puiu, M Pertea, G Sablok, C Casola, <u>T Koralewski</u>, R Paul, D Gonzalez-Ibeas, S Zaman, R Cronn,

- M Yandell, C Holt, CH Langley, JA Yorke, SL Salzberg, JL Wegrzyn (2017) A Reference draft genome for Douglas-fir (*Pseudotsuga menziesii* (Mirb.) Franco). Plant and Animal Genome (PAG) XXV Conference. January 13-18, 2017, Town & Country Hotel, San Diego, CA.
- 16. Cole, A, K Anthony, C Chen, H-H Wang, <u>TE Koralewski</u>, and WE Grant (2016) Effects of genetic depletion on estimating risk of extinction of the endangered Florida panther. 101st Ecological Society of America Annual Meeting "Novel Ecosystems in the Anthropocene". August 7-12, 2016, Greater Fort Lauderdale/Broward County Convention Center, Fort Lauderdale, FL.
- 17. <u>Koralewski, TE</u>, C Casola (2016) Evidence of retrogenes in loblolly pine. The Evolution Conference. June 17-21, 2016, Austin Convention Center, Austin, TX.
- 18. Lu, M, KV Krutovsky, CD Nelson, <u>TE Koralewski</u>, TD Byram, CA Loopstra (2016) Exome genotyping and association genetics of environmental adaptation and stress mitigation traits in a clonally tested loblolly pine (*Pinus taeda* L.) population. Genomics and Forest Tree Genetics Conference. Conference jointly organized by the four working parties of IUFRO subdivision 2.4 (Genetics). May 30 June 3, 2016, Palais des Congrès, Arcachon, France.
- 19. <u>Koralewski, TE</u>, M Mateos, and KV Krutovsky (2016) Phylogeny of major southern pines (subsection *Australes*, genus *Pinus*, family Pinaceae). 2016 PINEMAP Annual Meeting. May 24-26, 2016, The Warnell School at the University of Georgia, Athens, GA.
- 20.Lu, M, K Krutovsky, CD Nelson, <u>T Koralewski</u>, T Byram, C Loopstra (2016) Exome genotyping and association genetics of environmental adaptation and stress mitigation traits in a clonally tested loblolly pine (*Pinus taeda* L.) population. 2016 PINEMAP Annual Meeting. May 24-26, 2016, The Warnell School at the University of Georgia, Athens, GA.
- 21. <u>Koralewski, TE, H-H Wang, WE Grant, TD Byram (2016)</u> Boosting plant migration: Boosted regression modelling as a tool to guide decisions on assisted migration of forest trees under changing climate. The International Society for Ecological Modelling Global Conference 2016. May 8-12, 2016, Towson University, Baltimore, MD.
- 22. Vogel, J and <u>TE Koralewski</u> (2016) Assessing how loblolly pine families and forest carbon cycling will respond to a changing climate. Department of Ecosystem Science and Management Seminar Series "Forests in Flux". February 23, 2016, Texas A&M University, College Station, TX.
- 23. Cole, A, K Anthony, C Chen, H-H Wang, <u>TE Koralewski</u>, and WE Grant (2016) Effects of genetic depletion on estimating risk of extinction of the endangered Florida panther. 52nd Annual Meeting of the Texas Chapter of The Wildlife Society "Chronic Wasting Disease in Texas Whitetails...Now What?" February 18-20, 2016, Wyndham San Antonio Riverwalk, San Antonio, TX.
- 24. Lu, M, KV Krutovsky, CD Nelson, <u>T Koralewski</u>, T Byram, C Loopstra (2016) Exome genotyping and association genetics of environmental adaptation and stress mitigation traits in a clonally tested loblolly pine (*Pinus taeda* L.) population. In: Plant & Animal Genome XXIV. The International Conference on the Status of Plant and Animal Genome Research, Final Program and Exhibit Guide, p. 57. January 9-13, 2016, San Diego, CA.

- 25. <u>Koralewski, TE, TD</u> Byram, H-H Wang, WE Grant (2015) Modeling responses of forest trees to changing climate based on historical provenance trial data. Camcore 2015 Annual Meeting. November 12, 2015, Thomas G. Hildebrand, DVM '56 Equine Complex, College Station, TX.
- 26. <u>Koralewski, TE</u>, H-H Wang, WE Grant, and TD Byram (2015) Mitigating climate change effects on plants through assisted migration with the application of a modeling approach: A lesson from forest trees. 100th Ecological Society of America Annual Meeting "Ecological Science at the Frontier: Celebrating ESA's Centennial". August 9-14, 2015, Baltimore Convention Center, Baltimore, MD.
- 27. <u>Koralewski, TE, TD</u> Byram, H-H Wang and WE Grant (2015) Supporting loblolly pine deployment and procurement decisions: A modeling approach. 2015 PINEMAP Annual Meeting. June 3-4, 2015, UGA Hotel and Conference Center, Athens, GA.
- 28. Lu, M, K Krutovsky, CD Nelson, <u>T Koralewski</u>, T Byram, C Loopstra (2015) Phenotyping and exome capture in a population of *Pinus taeda* L. 2015 PINEMAP Annual Meeting. June 3-4, 2015, UGA Hotel and Conference Center, Athens, GA.
- 29. <u>Koralewski, TE, TD</u> Byram, H-H Wang, WE Grant (2015) Where from and where to: Using climate models to guide deployment. The Future of Forest Genetics. Western Gulf Forest Tree Improvement Program, Contact Representatives Meeting. May 19-20, 2015, Thomas G. Hildebrand, DVM '56 Equine Complex, College Station, TX.
- 30. <u>Koralewski, TE, H-H Wang and TD Byram (2014)</u> In search of optimal strategies for delineating assisted migration guidelines as applied to loblolly pine families from the Western Gulf region of the USA. 2014 PINEMAP Annual Meeting. May 14-16, 2014, UGA Hotel and Conference Center, Athens, GA.
- 31. Byram, TD, <u>TE Koralewski</u> and EM Raley (2013) WGFTIP seed source study and seed movement. Forestry at the Margins: The Impact of Climate, Restoration, and Genomics on Future Forests. Western Gulf Forest Tree Improvement Program, Contact Representatives Meeting. May 15-16, 2013, Forest Tree Improvement Center, Oklahoma Forestry Services, Idabel, OK.
- 32. <u>Koralewski, TE</u>, TD Byram and EM Raley (2013) A climate change response function for loblolly pine (*Pinus taeda* L.) from the Western Gulf region of the United States. 2013 PINEMAP Annual Meeting. April 24-26, 2013, UGA Hotel and Conference Center, Athens, GA.
- 33. Byram, TD, <u>TE Koralewski</u> and EM Raley (2013) Strengths and weaknesses of universal response function approaches for support of deployment decisions. 2013 PINEMAP Annual Meeting. April 24-26, 2013, UGA Hotel and Conference Center, Athens, GA.
- 34. <u>Koralewski, TE, TD</u> Byram, and EM Raley (2013) A climate change response function for loblolly pine (*Pinus taeda* L.) from the Western Gulf region of the United States. Breeding for Value in a Changing World, sponsored by the IUFRO Working Group 2.02.20, Breeding and Genetic Resources of Southern US and Mexican Pines. February 4-7, 2013, Omni Jacksonville Hotel, Jacksonville, FL.
- 35. Wang, H-H, WE Grant, TM Swannack, J Gan, WE Rogers, <u>TE Koralewski</u>, JH Miller, JW Taylor Jr. (2011) Predicted range expansion of Chinese tallow tree (*Triadica sebifera*) in forestlands of the

- southern United States. August 7-12, 2011, 96th Ecological Society of America Annual Meeting, Austin, TX.
- 36. <u>Koralewski, TE, KV Krutovsky</u> (2010) Evolution of intron-exon structure and alternative splicing: what did we learn from genomes of completely sequenced species and what can we predict for insufficiently studied species? The 11th Ecological Integration Symposium "Understanding Patterns and Processes Across Scales". March 26-27, 2010, Texas A&M University, College Station, TX.
- 37. <u>Koralewski, TE</u>, JE Brooks and KV Krutovsky (2008) Molecular ecology and evolution of drought resistance related genes in four Southern pines from subsection *Australes*. The 9th Ecological Integration Symposium "Metacommunities: Connectivity, Dispersal, and Invasion". March 28-29, 2008, Texas A&M University, College Station, TX.
- 38. Koralewski, TE, JE Brooks and KV Krutovsky (2008) Comparative nucleotide sequence analysis in four Southern pines from Subsection *Australes*. Plant and Animal Genome (PAG) XVI Conference. January 12-16, 2008, San Diego, CA.
- 39. <u>Koralewski, TE, LA Zhivotovsky</u> and KV Krutovsky (2008) Proteomic complexity expected from intron-exon gene structure due to alternative splicing. Student Research Poster Competition, 2008 Texas A&M AgriLife Conference "Agriculture is Life!" January 7-11, 2008, Texas A&M University, College Station, TX.

TEACHING EXPERIENCE

Guest Lecturer

- Herbivory and mutualism. Lecture in the course Population and Community Ecology (ECCB 403). October 14, 2022. Texas A&M University, College Station, TX.
- Modeling response of forest trees to changing climate based on historical data. Virtual lecture in the course Ecology II. June 2, 2022. National Chiayi University, Chiayi, Taiwan.
- Evolution and Adaptation. Lecture in the course Fundamentals of Ecology (RENR 205, sections 501 and 502). November 07, 2014; March 30, 2015; March 21, 2016. Texas A&M University, College Station, TX.

Teaching Assistant

Special Topics in Molecular Ecology (ESSM/MEPS/GENE 689). Spring 2010. Texas A&M University, College Station, TX.

Population Genetics (GENE 612). Fall 2008; Fall 2009. Texas A&M University, College Station, TX.

Workshop Presenter

Introduction to Perl. Module in the Open Source for Open Science (OSOS) Workshop 2017 (also offered for credit as EEBL 612). September 1-3, 2017. Texas A&M University, College Station, TX.

AWARDS AND RECOGNITION

- National Institute of Food and Agriculture (NIFA) Partnership Award in the area of "Mission Integration of Research, Education, or Extension" for the PINEMAP Team. October 6, 2016. Waterfront Centre, Washington, DC.
- Certificate of Outstanding Contribution in Reviewing. July 2015. Ecological Modelling. Elsevier, Amsterdam, The Netherlands.
- 3rd place within taxonomy "EIS/SRW Dual Competition". March 28-29, 2008. The 9th Ecological Integration Symposium "Metacommunities: Connectivity, Dispersal, and Invasion" & Texas A&M Student Research Week 2008 "Building Community Through Research", Texas A&M University, College Station, TX.
- 2nd place in Graduate category, Student Research Poster Competition. January 7-11, 2008. 2008 Texas A&M AgriLife Conference "Agriculture is Life!" Texas A&M University, College Station, TX.
- ESSM Graduate Student Travel Grant, \$450. March 2007. Department of Ecosystem Science and Management, Texas A&M University, College Station, TX.
- Prospective Graduate Student Travel Grant, \$500. February 2006. Office of Graduate Studies, Texas A&M University, College Station, TX.

PROFESSIONAL ACTIVITIES

Reviewer for Journals

Ecological Informatics, Ecological Modelling, Forests, Genome Biology and Evolution, Genome Research, Journal of Environmental Management, Molecular Ecology Resources, New Forests, PLOS ONE

Professional Service

- Member. Seminar Committee, Ecology & Evolutionary Biology (EEB), Texas A&M University, College Station, TX. Spring 2022; Fall 2022.
- Judge. The 23rd Ecological Integration Symposium "The Return of the 'Ologists'." April 7-8, 2022, Texas A&M University, College Station, TX. April 8, 2022.
- Moderator of a Conference Session "Modeling ecological dynamics in temporally variable, spatially heterogeneous environments". The International Society for Ecological Modelling Global Conference 2016. May 8-12, 2016, Towson University, Baltimore, MD. May 11, 2016.
- Judge. The 17th Ecological Integration Symposium "Ecological Perspectives in Sustainability". March 31 April 1, 2016, Texas A&M University, College Station, TX. April 1, 2016.
- Judge. Texas A&M Student Research Week 2016 "Rev'd Up for Research". Texas A&M University, College Station, TX. March 29, 2016.

- Judge. Texas A&M Student Research Week 2015 "Connecting Ideas". Texas A&M University, College Station, TX. March 25, 2015.
- Judge. The 12th Annual Ecological Integration Symposium "Disturbance, Recovery, and Ecological Implications". March 24-26, 2011, Texas A&M University, College Station, TX. March 26, 2011.
- Group Leader, Senior Graduate Teaching Academy (GTA) Fellow. Graduate Teaching Academy Steering Committee (GTASC). Texas A&M University, College Station, TX. July 2008 Apr 2009.