## Creighton McMaster Litton College of Tropical Agriculture and Human Resources Department of Natural Resources and Environmental Management

FTE Distribution: 10% I; 40% R; 0% E

EDUCATION		
<b>Degree</b>	<u>University</u>	<u>Major</u>
B.A.	Emory and Henry College, Emory, Virginia	Environmental Studies
M.S.	North Carolina State University, Raleigh, North Carolina	Forest Resources
Ph.D.	University of Wyoming, Laramie, Wyoming	Botany

#### LIFETIME AND FELLOW ACHIEVEMENT AWARDS

2020	The Wildlife Society Publication Award for Best Edited Book in 2020: Invasive Wild Pigs in North	
	America (coauthored chapter on Wild Pigs in the Pacific Islands)	

- 2013 Board of Regents' Medal for Excellence in Teaching, University of Hawai'i at Mānoa
- 2012 Mentor of the Year, Department of Natural Resources and Environmental Management Graduate Student Organization (NREM-GSO)
- 2002 Plummer Scholarship, School for Env. & Natural Resources, University of Wyoming
- 2001 NASA Space Grant Graduate Research Fellowship
- 2001 Ellbogen Outstanding Graduate Student Teaching Award, University of Wyoming

#### **PROFESSIONAL APPOINTMENTS** Title Employer **Dates Employed** Professor Department of Natural Resources and 2017-Current Environmental Management, University of Hawai'i at Mānoa Director Undergraduate Research Opportunities Program, 2017-Current Office of the Vice Provost for Research and Scholarship, University of Hawai'i at Manoa Associate Professor Department of Natural Resources and 2012-2017 Environmental Management, University of Hawai'i at Mānoa Graduate Faculty Department of Natural Resources and 2007-Current Environmental Management, and Ecology, Evolution and Conservation Biology, University of Hawai'i at Mānoa Assistant Professor Department of Natural Resources and 2007-2012 Environmental Management, University of Hawai'i at Mānoa Adjunct Research Faculty Oregon State University and USDA Forest 2006-2007 Service California State University Fullerton, Adjunct Research Faculty 2005-2006 Department of Biological Science California State University Fullerton and USDA 2003-2005 Postdoctoral Research Ecologist Forest Service Postdoctoral Research Ecologist University of Wyoming & USDA Forest Service 2002

**COURSES TAUGHT (CREDITS)** 

NREM 301+ 301L Natural Resource Management (3+1)

NREM 480 Applied Forest Ecology (3)

NREM 680 Ecosystem Ecology (4)

NREM 682 Restoration Ecology (3)

NREM 690 Conservation Biology (3)

NREM 695 M.E.M. Capstone Preparation (1)

NREM 696 M.E.M. Capstone Experience (3)

NREM 491 Island Invasion Biology (4)

#### PUBLICATIONS (REVERSE CHRONOLOGICAL ORDER)

UNDERGRADUATE, M.S. AND PH.D. STUDENTS, AND POSTDOCTORAL SCIENTISTS ARE <u>UNDERLINED</u> AND INDICATED WITH SUPERSCRIPTS (<sup>UG, MS, PhD, PD,</sup> RESPECTIVELY)

#### BOOK CHAPTERS

- Hess, S.C., <u>Wehr, N.H.<sup>MS</sup></u>, Litton, C.M. 2020. Wild Pigs in the Pacific Islands. In: VerCauteren, K.C., Beasley, J.C., Ditchkoff, S.S., Mayer, J.J., Roloff, G.J., Strickland, B.K. (Eds.), *Invasive Wild Pigs in North America: Ecology, Impacts, and Management*. CRC Press, Boca Raton, FL.
- Hawbaker, T.J., Trauernicht, C., Howard, S.M., Litton, C.M., Giardina, C.P., Jacobi, J.D., Fortini, L.B., Hughes, R.F., Selmants, P.C., and Zhu, Z. 2017. Wildland Fires and Greenhouse Gas Emissions in Hawaii. In Selmants, P. C., Giardina, C.P., Jacobi, J.D., Zhu, Z. (Eds.), *Baseline and projected future carbon storage and carbon fluxes in ecosystems of Hawai'i*. U.S. Geological Survey Professional Paper 1834.
- Hughes, R.F., Asner, G.P., Litton, C.M., Selmants, P.C., Hawbaker, T.J., Jacobi, J.D., Giardina, C.P., Sleeter, B.M., 2017. Influence of Invasive Species on Carbon Storage in Hawaii's Ecosystems. In Selmants, P. C., Giardina, C.P., Jacobi, J.D., Zhu, Z. (Eds.), *Baseline and projected future carbon storage and carbon fluxes in ecosystems* of Hawai'i. U.S. Geological Survey Professional Paper 1834.
- Sleeter, B.M., Liu, J., Daniel, C.J., Hawbaker, T.J., Wilson, T.S., Fortini, L.B., Jacobi, J.D., Selmants, P.C., Giardina, C.P., Litton, C.M., and Hughes, R.F. 2017. Projected future carbon storage and carbon fluxes in terrestrial ecosystems of Hawai'i from changes in climate, land use, and disturbance. In Selmants, P. C., Giardina, C.P., Jacobi, J.D., Zhu, Z. (Eds.), *Baseline and projected future carbon storage and carbon fluxes in ecosystems of Hawai'i*. U.S. Geological Survey Professional Paper 1834.

CONFERENCE PROCEEDINGS

- Char, J.<sup>MS</sup>, Leary, J. J, & Litton, C. M. 2018. Interpreting Feral Goat (*Capra hircus*) Movement to Guide Management in a Mesic Watershed on O'ahu, Hawai'i. *Proceedings of the Vertebrate Pest Conference* 28. <u>http://dx.doi.org/10.5070/V42811024</u>
- <u>Ritzenthaler, C.A.<sup>MS</sup>, Litton, C.M., Giardina, C.P. and Pelini, S.L. 2016. Soil moisture and millipede abundance are</u> <u>more important drivers of macroinvertebrate diversity than temperature in Hawaiian forest. *Integrative and Comparative Biology* 56: E357.</u>
- <u>Chynoweth, M.</u><sup>MS</sup>, Lepczyk, C. A., Litton, C. M., & Cordell, S. 2010. Feral Goats in the Hawaiian Islands: Understanding the Behavioral Ecology of Nonnative Ungulates with GPS and Remote Sensing Technology. *Proceedings of the Vertebrate Pest Conference* 24. <u>http://dx.doi.org/10.5070/V424110420</u>

## **REFEREED JOURNAL PUBLICATIONS**

### IN REVIEW/REVISION

Hughes, R.F., Asner, G.P, Litton, C.M., <u>Selmants, P.C.</u><sup>PD</sup>, Giardina, C.P., and Jacobi, J. Effects of invasive plant species on carbon storage in Hawaiian ecosystems. *Pacific Science*: In revision.

Iwashita, D.<sup>MS</sup>, Litton, C.M., and Giardina, C.P. Temperature impacts on tree species diversity in Hawaiian

montane wet forest. Pacific Conservation Biology: In revision.

Langston, B., Giardina, C., Litton, C.M., Dudley, M., Francisco, K., Giardina, S.<sup>UG</sup>, Greenhill, M., Laursen, S., Ohara, R., and Spina, C. Improving environmental literacy in Hawaii's youth through place-based, experiential learning. *Journal of Experiential Education*: In review.

#### PUBLISHED

- Delavaux, C.S., LaManna, J.A., Myers, J.A. et al. 2023. Mycorrhizal feedbacks influence global forest structure and diversity. Nature Communications Biology: 6: 1066. https://doi.org/10.1038/s42003-023-05410-z.
- <u>Hwang, B.</u><sup>PhD</sup>, Giardina, C., Litton, C.M., Francisco, K., Pacheco, C., Thomas, N., Uehara, T., and Metcalfe, D. 2022. Impacts of insect frass and cadavers on soil surface litter decomposition along a tropical forest temperature gradient. *Ecology and Evolution* 12(9):e9322. doi: 10.1002/ece3.9322.
- <u>Ware, I.M.</u><sup>PD</sup>, Ostertag, R., Cordell, S., Giardina, C.P., Sack, L., Medeiros, C.D., Inman, F., Litton, C.M., Giambelluca, T., John, G.P., Scoffoni, C., 2022. Multi-Stemmed Habit in Trees Contributes Climate Resilience in Tropical Dry Forest. Sustainability 14, 6779.
- Barton, K.E., Westerband, A., Ostertag, R., Stacy, E., Winter, K., Drake, D.R., Fortini, L.B., Litton, C.M., Cordell, S., Krushelnycky, P., Kawelo, K., Feliciano, K., Bennett, G., and Knight, T. 2021. Hawai'i Forest Review: Synthesizing the Ecology, Evolution, and Conservation of a Model System. Perspectives in Plant Ecology, Evolution and Systematics 52: 125631.
- Zhu, T. <sup>MS</sup>, Litton, C.M., Giardina, C.P., and Trauernicht, C. 2021. Moisture availability regulates increases in fine fuels and modeled wildfire behavior following nonnative feral ungulate removal in Hawai'i. *Journal of Applied Ecology* 58: 2207-2219.
- Knauf, A.<sup>MS</sup>, Litton, C.M., Cole, R.J.<sup>PD</sup>, Sparks, J.P., Giardina, C.P., Gerow, K.G. and <u>Quiñones-Santiago</u>, M.<sup>UG</sup>. 2021. Nutrient use strategy and not competition determines native and invasive species response to changes in soil nutrient availability. *Restoration Ecology* 29: e13374.
- Lyu, M. <sup>PhD</sup>, Giardina, C.P., and Litton, C.M. 2021. Interannual variation in rainfall modulates temperature sensitivity of carbon allocation and flux in a tropical montane wet forest. *Global Change Biology* 7: 3824-3836.
- <u>Cole, R.J.</u><sup>PD</sup>, Soper, F.M., Litton, C.M., <u>Knauf, A.<sup>MS</sup></u>, Sparks, K., Gerow, K.G., Giardina, C.P., and Sparks, J.P. 2021. Restoration benefits of soil nutrient manipulation and weeding in invaded dry and wet tropical ecosystems in Hawai'i. *Restoration Ecology* 29: e13390.
- Sousa, D., Fisher, J.B., Galvan, F.R., Pavlick, R.P., Cordell, S., Giambelluca, T.W., Giardina, C.P., Gilbert, G.S., Imran-Narahari, F., Litton, C.M., Lutz, J.A., North, M.P., Orwig, D.A., Ostertag, R., Sack, L., and Phillips, R.P. 2021. Tree Canopies Reflect Mycorrhizal Composition. *Geophysical Research Letters* 48, e2021GL092764.
- Davies, S.J., Abiem, I., Salim, K.A., Aguilara, S., Allen, D., Alonso, A., Anderson-Teixeira, K., Andrade, A., Arellano, G., Ashton, P.S., *et al.* 2021. ForestGEO: Understanding Forest Diversity and Dynamics through a Global Observatory Network. *Biological Conservation* 253: 108907.
- Kealiikanakaoleohaililani, K., Sato, A., Giardina, C., Litton, C.M., Ramavarapu, S., Hutchins, L., Wight, E., Clark, M., Cordell, S., Francisco, K., McMillen, M., Pascua, P. and Yogi, D. 2020. Increasing conservation capacity by embracing ritual. *Ecopsychology*: Online Early.
- Krushelnycky, P.D., Felts, J.M., Robichaux, R.H., Barton, K.E., Litton, C.M., Brown, M.D. 2020. Clinal variation in drought resistance shapes past population declines and future management of a threatened plant. *Ecological Monographs* 90: e01398.

- Litton, C.M., Giardina, C.P., <u>Freeman, K.<sup>PD</sup></u>, <u>Selmants, P.C.<sup>PD</sup></u> and Sparks, J.P. 2020. Impact of mean annual temperature on nutrient availability in a tropical montane wet forest. *Frontiers in Plant Science* 11.
- <u>Pierre, S.</u><sup>PhD</sup>, Litton, C.M., Giardina, C.P., Sparks, J.P., and Fahey, T. 2020. Mean annual temperature influences local fine root proliferation and arbuscular mycorrhizal colonization in a tropical wet forest. *Ecology and Evolution* 10: 9635-9646.
- Wehr, N.H.<sup>MS</sup>, Litton, C.M., Lincoln, N.K. and Hess, S.C. 2020. Relationships between soil macroinvertebrates and nonnative feral pigs (*Sus scrofa*) in Hawaiian tropical montane wet forests. *Biological Invasions* 22: 577-586.
- Sharma, S<sup>PD</sup>, MacKenzie, R.A., Tieng, T., Soben, K., Tulyasuwan, N., Resanond, A., Blate, G., Litton, C.M. 2019. The impacts of degradation, deforestation and restoration on mangrove ecosystem carbon stocks across Cambodia. *Science of The Total Environment*, doi: <u>https://doi.org/10.1016/j.scitotenv.2019.135416</u>.
- Soper, F.M., MacKenzie, R.A., <u>Sharma, S.</u><sup>PD</sup>, Cole, T.G., Litton, C.M., Sparks, J.P. 2019. Non-native mangroves support carbon storage, sediment carbon burial, and accretion of coastal ecosystems. *Global Change Biology* 25:4315-4326.
- <u>Wehr, N.H.</u><sup>MS</sup>, Kinney, K.M., Nguyen, N.H., Giardina, C.P., and Litton, C.M., 2019. Changes in soil bacterial community diversity following the removal of invasive feral pigs from a Hawaiian tropical montane wet forest. *Nature Scientific Reports* 9:14681.
- Ibanez, T., Keppel, G., Baider, C., Birkinshaw, C., Culmsee, H., Cordell, S., Florens, F.B.V., Franklin, J., Giardina, C.P., Gillespie, T. *et al.* 2018. Regional forcing explains local species diversity and turnover on tropical islands. *Global Ecology and Biogeography* 27:474-486.
- Johnson, D.J., Needham, J., Xu, C., Massoud, E.C., Davies, S.J., Anderson-Teixeira, K.J., Bunyavejchewin, S., Chambers, J.Q., Chang-Yang, C.-H., Chiang, J.-M., Chuyong, G.B., *et al.* 2018. Climate sensitive sizedependent survival in tropical trees. *Nature Ecology & Evolution* 2:1436-1442.
- Wehr, N.H.<sup>MS</sup>, Hess, S.C., and Litton, C.M. 2018. Biology and impacts of Pacific Island invasive species. *Sus scrofa*, the feral pig (Artiodactyla: Suidae). *Pacific Science* 72:177-198.
- Ellsworth, L.M.<sup>PhD</sup>, Dale, A.P., Litton, C.M., and Miura, T. 2017. Improved fuel moisture prediction in non-native tropical *Megathyrsus maximus* grasslands using Moderate Resolution Imaging Spectroradiometer (MODIS) derived vegetation indices. *International Journal of Wildland Fire* 26:384-392.
- <u>Powell, K. MS</u>, <u>Ellsworth, L.M. PhD</u>, Litton, C.M., Oleson, K.L.L., and <u>Ammondt, S. MS</u>. 2017. Towards cost-effective restoration: Scaling up restoration in ecosystems degraded by nonnative invasive grass and ungulates. *Pacific Science* 71:479-493.
- Rowe, J. PhD, Litton, C.M., Lepczyk, C.A., and Popp, B.N. 2017. Impacts of endangered seabirds on nutrient cycling in montane forest ecosystems of Hawaii. *Pacific Science* 71:495-509.
- Long, M.S.<sup>MS</sup>, Litton, C.M., Giardina, C.P., Deenik, J., <u>Cole, R.J.</u><sup>PD</sup>, and Sparks, J.P. 2017. Impact of nonnative feral pig removal on soil structure and nutrient availability in Hawaiian tropical montane wet forests. *Biological Invasions* 19: 749-763.
- <u>Pierre, S.</u><sup>PhD</sup>, Hewson, I., Sparks, J., Litton, C.M., Giardina, C.P., Groffman, P. and Fahey, T. 2017. Ammonia oxidizer populations vary with nitrogen cycling across a tropical montane mean annual temperature gradient. *Ecology* 98: 1896-1907.
- Sumiyoshi, Y.<sup>MS</sup>, Crow, S.E., Litton, C.M., Deenik, J.L., Taylor, A.D., Turano, B., and Ogoshi, R. 2016. Belowground impacts of perennial grass cultivation for sustainable biofuel feedstock production in the tropics. *Global Change Biology Bioenergy* 9: 694-709.

- Selmants, P.C.<sup>PD</sup>, Adair, K.L., Litton, C.M., and Giardina, C.P., and Schwartz, E. 2016. Increases in mean annual temperature do not alter soil bacterial community structure in tropical montane wet forests. *Ecosphere* 7:e01296.
- Ellsworth, L.M.<sup>PhD</sup>, Litton, C.M., and Leary, J.J.K. 2015. Restoration impacts on fuels and fire potential in a dryland tropical ecosystem dominated by the invasive grass *Megathyrsus maximus*. *Restoration Ecology* **23**:955-963.
- Friday, J.B., Cordell, S., Giardina, C.P., Inman-Narahari, F., Koch, N., Leary, J.J.K., Litton, C.M., and Trauernicht, C. 2015. Future directions for forest restoration in Hawai'i. *New Forests* **46**: 733-746.
- Trauernicht, C., Pickett, E., Giardina, C., Litton, C.M., Cordell, S. and Beavers, A. 2015. The scale and context of wildfire in Hawai'i. *Pacific Science* 69:427-444.
- Evans, E.W.<sup>MS</sup>, Ellsworth L.M.<sup>PhD</sup>, and Litton, C.M. 2015. Impact of grazing on fine fuels and potential fire behavior in a nonnative tropical grassland. *Pacific Conservation Biology* 21: 126-132.
- <u>Chynoweth, M.W.</u><sup>MS</sup>, Lepczyk, C.A., Litton, C.M., Hess, S.C., Kellner, J.R. and Cordell, S. 2015. Dispersal and home range use of non-native feral goats in a tropical island montane dry landscape. *PLOS ONE* 10(3): e0119231. doi:10.1371/journal.pone.0119231.
- <u>Pierce, A.</u><sup>PD</sup>, McDaniel, S., Wasser, M., Ainsworth, A., Litton, C.M., Giardina, C.P, and Cordell, S. 2014. Using a prescribed fire to test custom and standard fuel models for fire behavior prediction in a non-native, grass-invaded tropical dry shrubland. *Applied Vegetation Science* 17: 700-710.
- Ellsworth, L.M.<sup>PhD</sup>, Litton, C.M., Dale, A., and Miura, T. 2014. Invasive grasses change landscape structure and fire behavior in Hawaii. *Applied Vegetation Science* 17: 680-689.
- Bothwell, Lori<sup>UG</sup>, <u>Selmants, P.C.</u><sup>PD</sup>, Giardina, C.P. and Litton, C.M. 2014. Leaf litter decomposition rates increase with rising mean annual temperature in Hawaiian tropical montane wet forests. *PeerJ* 2: e685.
- Giardina, C.P., Litton, C.M., Crow, S.E., and Asner, G.P. 2014. Increased total belowground carbon flux, and not soil carbon loss, drives temperature related increases in soil respiration. *Nature Climate Change* 4: 822-827.
- Selmants, P.C.<sup>PD</sup>, Litton, C.M., Giardina, C.P. and Asner, G.P. 2014. Ecosystem carbon storage does not vary with mean annual temperature in Hawaiian tropical montane wet forests. *Global Change Biology* 20: 2927-2937.
- Mascaro, J., Litton, C.M., Hughes, R.F., Uowolo, A. and Schnitzer, S.A. 2014. Is logarithmic transformation necessary in allometry? Ten, one-hundred, one-thousand-times yes. *Biological Journal of the Linnean Society* 111: 230-233.
- <u>Cole, R.J.</u><sup>PD</sup> and Litton, C.M. 2014. Vegetation response to removal of nonnative feral pigs from Hawaiian tropical montane wet forest. *Biological Invasions* 16: 125-140.
- Murphy, M.<sup>UG</sup>, Inman-Narahari, F., Ostertag, R., and Litton, C.M. 2014. Invasive feral pigs reduce tree fern growth and survival in a native-dominated Hawaiian montane wet forest. *Biological Invasions* 16: 63-71.
- Ellsworth, L.M.<sup>PhD</sup>, Litton, C.M., Taylor, A.D, and Kauffman, J.B. 2013. Spatial and temporal variability of *Megathyrsus maximus* fuel loads and moisture on Oahu, Hawaii. *International Journal of Wildland Fire* 22: 1083-1092.
- Chynoweth, M.W. <sup>MS</sup>, Litton, C.M., Lepczyk, C.A., Hess, S.C. and Cordell, S. 2013. Biology and impacts of Pacific Island invasive species. 9. *Capra hircus*, the feral goat (Mammalia: Bovidae). *Pacific Science* 67: 141-156.
- Iwashita, D.<sup>MS</sup>, Litton, C.M., and Giardina, C. 2013. Coarse woody debris carbon storage across a mean annual temperature gradient in tropical montane wet forest. *Forest Ecology and Management* 291: 336-343.

- <u>Ammondt, S. MS</u>, Litton, C.M., <u>Ellsworth, L.M. PhD</u> and Leary, J.K. 2013. Restoration of native plant communities in a Hawaiian lowland dry ecosystem dominated by the invasive grass *Megathyrsus maximus*. *Applied Vegetation Science* 16: 29-39.
- <u>Ammondt, S.</u><sup>MS</sup> and Litton, C.M. 2012. Competition between native Hawaiian plants and the invasive grass *Megathyrsus maximus:* Implications of functional diversity for ecological restoration. *Restoration Ecology* 20: 638-646.
- Cole, R.J.<sup>PD</sup>, Litton, C.M., <u>Koontz, M.K.<sup>UG</sup></u> and Loh, R.K. 2012. Vegetation recovery 16 years after feral pig removal from a wet Hawaiian forest. *Biotropica* 44: 463-471.
- Litton, C.M., Giardina, C.P., <u>Albano, J.K.<sup>UG</sup></u>, <u>Long, M.S.<sup>MS</sup></u> and Asner, G.P. 2011. The magnitude and variability of soil-surface CO<sub>2</sub> efflux increase with temperature in Hawaiian tropical montane wet forests. *Soil Biology and Biochemistry* 43: 2315-2323.
- Mascaro, J., Litton, C.M., Hughes, R.F., Uowolo, A. and Schnitzer, S.A. 2011. Minimizing bias in biomass allometry: Model selection and log-transformation of data. *Biotropica* 43:649-653.
- Dunkell, D.O.<sup>MS</sup>, Bruland, G.L., Evensen, C.I. and Litton, C.M. 2011. Sediment transport, and effects of feral pig (*Sus scrofa*) exclusion in a forested Hawaiian watershed. *Pacific Science* 65: 175-194.
- Ise, T. PD, Litton, C.M., Giardina, C.P. and Ito, A. 2010. Comparison of modeling approaches for carbon partitioning: Impact on estimates of global net primary production and equilibrium biomass of woody vegetation from MODIS GPP. *Journal of Geophysical Research* 115:G04025, doi:04010.01029/02010JG001326.
- Thaxton, J.M., Cole, T.C., Cordell, S., Cabin, R.J., Sandquist, D. and Litton, C.M. 2010. Native species regeneration following ungulate exclusion and non-native grass removal in a remnant Hawaiian dry forest. *Pacific Science* 64: 533-544.
- Litton, C.M. and Giardina, C.P. 2008. Belowground carbon flux and partitioning: Global patterns and response to temperature. *Functional Ecology* 22: 941-954.
- Litton, C.M., and Kauffman, J.B. 2008. Allometric models for predicting aboveground biomass in two widespread woody plants in Hawaii, U.S.A. *Biotropica* 40: 313-320.
- Litton, C.M., Sandquist, D.R. and Cordell, S. 2008. A non-native invasive grass increases soil carbon flux in a Hawaiian tropical dry forest. *Global Change Biology* 14: 726-739.
- Litton, C.M., Ryan, M.G. and Raich, J.W. 2007. Review: Carbon allocation patterns in forest ecosystems. *Global Change Biology* 13: 2089-2109.
- Giardina, C.P., Litton, C.M., Thaxton, J.M., Cordell, S., Hadway, L.J. and Sandquist, D.R. 2007. Science driven restoration: A candle in a demon haunted world–Response to Cabin (2007). *Restoration Ecology* 15: 171-176.
- Litton, C.M., Sandquist, D.R. and Cordell, S. 2006. Effects of non-native grass invasion on aboveground carbon pools and tree population structure in tropical dry forests of Hawaii. *Forest Ecology and Management* 231: 105-113.
- Litton, C.M., Ryan, M.G., & Knight, D.H. 2004. Effects of tree density and stand age on carbon allocation patterns in postfire lodgepole pine. *Ecological Applications* 14(2): 460-475.
- Turner, M.G., Tinker, D.B., Romme, W.H., Kashian, D.K., and Litton, C.M. 2004. Landscape patterns of sapling density, leaf area, and aboveground net primary production in postfire lodgepole pine forests, Yellowstone National Park (USA). *Ecosystems* 7: 751-775.

- Litton, C.M., Ryan, M.G, Knight, D.H., and Stahl, P.D. 2003. Soil-surface CO<sub>2</sub> efflux and microbial biomass in relation to tree density thirteen years after a stand replacing fire in a lodgepole pine ecosystem. *Global Change Biology* 9: 680-696.
- Litton, C.M. and Santelices, R. 2003. Effect of wildfire on soil physical and chemical properties in a *Nothofagus* glauca forest. *Revista Chilena de Historia Natural* 76(4): 529-542.
- Litton, C.M., Ryan, M.G., Tinker, D.B., and Knight, D.H. 2003. Belowground and aboveground biomass in young postfire lodgepole pine forests of contrasting tree density. *Canadian Journal of Forest Research* 33: 351-363.
- Litton, C.M. and Santelices, R. 2002. Early postfire succession in a *Nothofagus glauca* forest in the Coastal Cordillera of Chile. *International Journal of Wildland Fire* 11(2): 115-125.
- Litton, C.M., <u>Campos, M.O.<sup>UG</sup></u>, and <u>Maureira, E.B.<sup>UG</sup></u> 1999-2000. Descripción vegetacional de un rodal de *Nothofagus alpina* (P. et E.) Oerst. en la precordillera andina de la VII Región de Chile. *Ciencias Forestales* 14(1-2): 38-49.
- Litton, C.M. <u>Hernández, J.D.<sup>UG</sup></u> and <u>Jiménez, R.L.<sup>UG</sup></u> 1997. Composición florística y estructura vertical de un rodal de *Beilschmiedia berteroana* (Gay) Kosterm. en la precordillera andina de la VII Región de Chile. *Bosque* 18(1): 61-72.
- Litton, C.M. and Santelices, R. 1996. Estudio comparativo de las comunidades vegetales en bosques de *Nothofagus glauca* (Phil.) Krasser en la Séptima Región de Chile. *Bosque*. 17(2): 77-86.
- Santelices, R. and Litton, C.M. 1996. Efecto del fuego sobre el bosque, la disponibilidad de nutrientes y la materia orgánica en el suelo. *Ciencia e Investigación Forestal* 10(2): 205-215.

#### LEADERSHIP ROLES (COMMITTEES, BOARDS, ADVISORY, ETC.)

DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE

- 2023-Present. Undergraduate Research and Creative Work Assessment Committee (URCWAC), University of Hawai'i at Mānoa.
- 2022-Present. University of Hawai'i Conflicts of Interest (COI) Committee, UH Office of Research Compliance (ORC), University of Hawai'i System.
- 2021-present. Faculty Liaison, NREM Student Diversity, Equity and Inclusivity Action Group, Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.2020-present. Commission on Racism and Bias, University of Hawai'i at Mānoa.
- 2020-present. Commission on Racism and Bias, University of Hawai'i at Mānoa.
- 2020-present. CTAHR Research Advisory Council, College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.
- 2019-present. Truth, Racial Healing and Transformation Campus Center Design Team, University of Hawai'i at Mānoa.
- 2019-present. WASC Reaffirmation Steering Committee, University of Hawai'i at Mānoa.
- 2019-present. Undergraduate Program Committee Member, Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2017-present. Undergraduate Research Opportunity Program (UROP) Director, University of Hawai'i at Mānoa.

- 2016-present. Proposal reviewer for the Undergraduate Research Opportunity (UROP) Council, Office of Undergraduate Education, University of Hawai'i at Mānoa
- 2015-present. Research Advisory Council (Co-lead on Working Group *Enabling and Supporting Student Research*), Office of the Vice Chancellor of Research, University of Hawai'i at Manoa.
- 2015-2016. Search Committee Member, Hawaii County Administrator, College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.
- 2015. Search Committee Member, Administrative and Fiscal APT, Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2014-2018. Departmental Personnel Committee, Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa (Recused for AY 16-17).
- 2014. Search Committee Member (Associate Dean and Director of Research), College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.
- 2013. Faculty Search Committee Chair (Soil Ecology and Biogeochemistry), Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2013-2014. Board of Regents/Chancellor's Excellence in Teaching Award Selection Committee, University of Hawai'i at Mānoa.
- 2013-2014. Strategic Planning Committee (Pre-Award Support Working Group), College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.
- 2013-2015. Curriculum Committee (Committee Chair 2013-2014), Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2013-2015. Strategic Planning Committee (Sustainability Working Group), University of Hawai'i at Mānoa.
- 2012-2013. Strategic Planning Committee (Engaged Scholarship Working Group), University of Hawai'i at Mānoa.
- 2012-present. Research/Faculty Advisory Council (UXI Working Group for MyGrant interface; Subaward Policy Working Group), Office of Research Services, University of Hawai'i at Mānoa.
- 2012-2018. Faculty Recruitment and Retention Committee for the Ecology, Evolution and Conservation Biology Program, University of Hawai'i at Manoa.
- 2011. Faculty Search Committee Member (Human Dimensions of Natural Resource Management), Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2008-2013. Graduate Program Committee Member, Department of Natural Resources & Environmental Management, University of Hawai'i at Mānoa.
- 2008- 2012 and 2013-2015. Judge for the Annual CTAHR Student Research Symposium, College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa.
- 2008-2010. Student Admissions Committee for the Ecology, Evolution and Conservation Biology Program (Chair 2009-2010), University of Hawai'i at Mānoa,

PROFESSIONAL SERVICE

2021. Judge for Student Oral and Poster Presentations, Hawaii Conservation Conference.

2020. Judge for Student Oral and Poster Presentations, Hawaii Conservation Conference.

- 2019. Judge for Student Oral and Poster Presentations, Hawaii Conservation Conference.
- 2017. Member, Institute of Pacific Islands Forestry, USDA Forest Service Program Review.
- 2016. Organizing Committee, "Acacia koa in Hawaii: Facing the Future" Symposium.
- 2015. Judge for Student Oral and Poster Presentations, Hawaii Conservation Conference.
- 2015. Organizing Committee, Association for Tropical Biology and Conservation Annual Meeting.
- 2013-2016. Leadership Committee, Hawaii Carbon Assessment.
- 2013. Judge for Student Oral and Poster Presentations, Hawaii Conservation Conference.
- 2011. Reviewer for Student Travel Awards, Physiological Ecology Section, Ecological Society of America Annual Meeting.
- 2011-present. Steering Committee, Pacific Fire Exchange (PFX).
- 2010-present. Leadership Committee, Tropical Hardwood Tree Improvement and Regeneration Center (Tropical HTIRC).
- 2010. Scoping Committee, Tropical Hardwood Tree Improvement and Regeneration Center (Tropical HTIRC) Workshop.
- 2009-present. Domain Science and Education Coordination Committee (DSECC) for Domain 20 (Pacific Tropical), National Ecological Observatory Network (NEON.
- 2009-2014 and 2015-present. Board of Directors (Vice President 2010-2012; Grants Coordinator 2012-present), Friends of Hakalau Forest National Wildlife Refuge,
- 2008-2009. Board of Directors, Hawaii Organic Farmers Association (HOFA).
- 2008-2012. Judge for Graduate Student Oral and Poster Presentations, Physiological Ecology Section, Ecological Society of America Annual Meeting.

#### JOURNAL REVIEWER

Arid Lands Research and Management, Biological Conservation, Biological Invasions, Biotropica, Canadian Journal of Forest Research, Ecological Applications, Ecosystems, Environmental Research Letters, F1000, Forest Ecology and Management, Frontiers in Plant Science, Functional Ecology, Global Change Biology, Journal of Arid Environments, Journal of Biogeography, Journal of Geophysical Research – Biogeosciences, Nature, New Phytologist, North American Journal of Fisheries Management, Oecologia, Pacific Conservation Biology, Pacific Science, Plant and Soil, Plant Ecology, Restoration Ecology, Tree Physiology

#### **PROFESSIONAL MEMBERSHIPS**

American Geophysical Union (AGU), Association for Tropical Biology and Conservation (ATBC), Ecological Society of America (ESA), Society of American Foresters (SAF)

#### PROPOSAL REVIEWER

National Science Foundation – Ecosystem Studies Program; Department of Energy – National Institute for Climate Change Research; Department of Defense – Strategic Environmental Research and Development Program; USDA McIntire-Stennis Program; Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT, Chile) – Ecology and Environmental Sciences; National Geographic Society

mber Graduated (Career)
u

Chair of Master's Committees	0	29
Chair of PhD Committees	0	2
Member of Master's Committees	0	12
Member of PhD Committees	4	13

#### **GRANT SUPPORT**

EDUCATION FUNDING

- Zahawi, R., Litton, C.M., Drake, D., Daehler, C. and Lemus, J. 2024-2026. IRES Track I: Island Invasion Biology -Leveraging the Galápagos and Hawaiian Islands to provide immersive undergraduate research experiences. National Science Foundation. \$298,926.
- Litton, C.M., Frank, K., Puniwai, N., Zahawi, R., Drake, D., Daehler, C. and Lemus, J. 2024-2026. Aligning Undergraduate Research with the UH Mānoa goal to become a Native Hawaiian Place of Learning: Creating the ka'ao of UH Mānoa haumāna migration to and from Galápagos. UHM Provost Office. \$98,000.
- Litton, C.M. and Dudley, M. 2022. Teaching Change College and Career Exploration and Readiness. Hawaii P-20 Partnerships for Education, GEAR UP Hawaii Program. \$52,734.
- Litton, C.M. and Langston, B. 2021. Teaching Change College and Career Exploration and Readiness. Hawaii P-20 Partnerships for Education, GEAR UP Hawaii Program. \$24,772.
- Litton, C.M. 2020-2025. The Teaching Change Program Our Changing Forests Project. USDA Forest Service Research Joint Venture Agreement. \$33,400.
- Litton, C.M. and Langston, B. 2020. Teaching Change College and Career Exploration and Readiness. Hawaii P-20 Partnerships for Education, GEAR UP Hawaii Program. \$21,286.
- Litton, C.M. and Langston, B. 2019-2021. Teaching Change. Hawaii Community Foundation (Submitted and awarded through the Akaka Foundation for Tropical Forests). \$49,789.
- Litton, C.M. and Langston, B. 2019. Teaching Change College and Career Exploration and Readiness. Hawaii P-20 Partnerships for Education, GEAR UP Hawaii Program. \$28,743.
- Litton, C.M., Spina, C. and Giardina, C.P. 2017-2018. Teaching Change Inspiring the next generation of natural resource managers and scientists for Hawaii. Hawaii Community Foundation (Submitted and awarded through the Friends of Hakalau Forest NWR). \$50,000.
- Litton, C.M., Koh, M.W., and Giardina, C.P. 2016-2018. Training secondary teachers to inspire and empower the next generation of natural resource managers for Hawaii, from Hawaii. USDA-NIFA-AFRI. \$144,775.
- Litton, C.M. and Spina, C. 2016-2017. Teaching Change Career Pathways to College Level Math and ELA Success. Hawaii P-20 Partnerships for Education, GEAR UP Hawaii Program. \$32,799.
- Litton, C.M. and Spina, C. 2016-2020. The Teaching Change Program: Our Changing Forests Project. USDA Forest Service Research Joint Venture Agreement. \$57,871.
- Litton, C.M. 2015-2016. Teaching Change Inspiring the next generation of natural resource managers and scientists for Hawaii. Hawaii Community Foundation (Submitted and awarded through the Friends of Hakalau Forest NWR). \$50,000.
- Litton, C.M. 2014-2016. Supporting the Teaching Change Program. Kamehameha Schools Aina-Based Education (Submitted and awarded through the Friends of Hakalau Forest NWR). \$9,307.

- Litton, C.M. 2014-2016. Supporting the Teaching Change Program. The Learning Coalition (Submitted and awarded through the Friends of Hakalau Forest NWR). \$6,271.
- Litton, C.M. 2013-2015. Teaching change to local youth: Plant phenology, climate change and citizen science at Hakalau Forest National Wildlife Refuge. Hawaii Community Foundation (Submitted and awarded through the Friends of Hakalau Forest NWR). \$20,000.
- Litton, C.M. 2012-2016. Using phenology at Hakalau Forest NWR to increase youth interest and participation in conservation biology in Hawaii. Hawaii P-20 Partnerships for Education, College Access Challenge Grant Program. \$169,317.
- Litton, C.M. (Program Administrator). 2012-2019. Hau'oli Mau Loa Fellows UH Manoa Graduate Assistantship Funds. Hau'oli Mau Loa Foundation (Awarded to UH Foundation). \$1,022,456.
- Litton, C.M. 2011-2012. Youth conservation education at Hakalau Forest National Wildlife Refuge, Hawai'i. National Fish and Wildlife Foundation – Nature of Learning Program (Submitted and awarded through the Friends of Hakalau Forest NWR). \$8,125.
- Chan-Halbrendt, C., Evensen, C., Lepczyk, C.A., and Litton, C.M. 2010-2015. University of Hawai'i Fellowships for Integrative Training in Sustainable Sciences (UH-FITSS). USDA-NIFA Program. \$156,000.

#### **RESEARCH FUNDING**

- Litton, C.M. 2023-2028. Translation and Extension to Support Climate Change Mitigation and Adaption in Hawai'i. USDA Forest Service. \$148,842.
- Litton, C.M. 2022-2027. Research, Translation and Extension to Support Climate Change Mitigation and Adaption in Hawai'i and the US Affiliated Pacific Islands. USDA Forest Service. \$195,000.
- Litton, C.M. 2022-2025. USDA Southwest Climate Hub Advancing Climate Informed Decision Making in Hawaii and USAPI. USDA Agricultural Research Service. \$195,000.
- Litton, C.M. 2022-2027. Understanding and managing forest change in Hawaii in a rapidly changing world. USDA National Institute of Food and Agriculture, McIntyre-Stennis Forestry Program. \$125,000.
- Litton, C.M. 2017-2022. Understanding and managing forest change in Hawaii in a rapidly changing world. USDA National Institute of Food and Agriculture, McIntyre-Stennis Forestry Program. \$125,000.
- Litton, C.M., Cole, R.C., Sparks, J. and Giardina, C.P. 2017-2018. Recovery of native plant communities and ecological processes following removal of nonnative, invasive ungulates from Pacific Island forests. Strategic Environmental Research and Development Program Department of Defense. \$209,567.
- Trauernicht, C., Cordell, S., Litton, C.M., and Stewart, C. 2015-2017. The Pacific Fire Exchange: A JFSP Fire Exchange for the US Affiliated Pacific Islands. Joint Fire Science Program. \$199,998.
- Litton, C.M. 2014-2019. Impacts of land use and tree diversity on soil carbon stocks in S.E. Asian mangrove forests. USDA Forest Service Research Joint Venture Agreement. \$178,634.
- Litton, C.M., Cole, R.C., Sparks, J. and Giardina, C.P. 2013-2017. Recovery of native plant communities and ecological processes following removal of nonnative, invasive ungulates from Pacific Island forests. Strategic Environmental Research and Development Program – Department of Defense. \$1,094,560.
- Litton, C.M. 2013-2019. Tropical hardwood tree improvement, regeneration and conservation genetics. USDA Forest Service Research Joint Venture Agreement. \$112,000.
- Ostertag, R., Giambelluca, T., Giardina, C., and Cordell, S., Litton, C.M. 2013-2016. Stand level water-use in forests of contrasting rainfall regimes: Assessing the impacts of future drying on native Hawaiian ecosystems. Pacific Islands Climate Science Center U.S. Department of the Interior. \$164,048.

- Litton, C.M. and Friday, J.B. 2013-2018. Carbon cycling and storage in Hawaiian terrestrial ecosystems. USDA National Institute of Food and Agriculture, Hatch Program. \$188,100.
- Giambelluca, T., Ostertag, R., Litton, C.M., Fortini, L., Huang, M., Asner, G. and Miyazawa, Y. 2013-2016. Understanding the response of native and non-native forests to climate variability and change to support resource management in Hawaii. Pacific Islands Climate Science Center – U.S. Department of the Interior. \$236,983.
- Litton, C.M. 2012-2017. Understanding and managing forest change in Hawaii in a rapidly changing world. USDA National Institute of Food and Agriculture, McIntyre-Stennis Forestry Program. \$135,485.
- Litton, C.M. 2012-2017. Monitoring climate and the impact of rising temperature on belowground processes. USDA Forest Service Research Joint Venture Agreement. \$281,940.
- Litton, C.M. 2012-2017. Assessing the capacity of a new remote sensing tool to monitor fire risk on Hawaii Island. USDA Forest Service Research Joint Venture Agreement. \$117,022.
- Litton, C.M., et al. 2012. Field vehicle to enhance forestry research, extension and instruction on Hawaii Island. CTAHR Capacity Improvement Program. \$35,000.
- Giardina, C.P., Cordell, S., Litton, C.M., Nakahara, M., Pickett, E. and Stewart, C. 2011-2018. The Pacific Fire Science Consortium. Joint Fire Science Program. \$200,000.
- Litton, C.M. 2011-2016. Quantifying the effects of long-term fragmentation on tropical forest structure and function: Nutrient cycling, forest productivity, and forest mortality. USDA Forest Service Research Joint Venture Agreement. \$179,980.
- Litton, C.M. and Ellsworth, L.M. 2011-2012. Improved wildfire prediction using remote sensing technology on military grasslands in Hawaii. Joint Fire Science Program. \$24,967.
- Litton, C.M. and Ellsworth, L.M. 2011-2012. Improved wildfire prediction using remote sensing technology on military grasslands in Hawaii. Department of Defense-Legacy Resource Management Program. \$48,227.
- Litton, C.M. and Giardina, C.P. 2010. An experimental test of the impacts of rising temperature on carbon input, allocation, and loss in model forests. National Science Foundation Research Experiences for Undergraduates-Ecosystem Science Panel. \$15,000.
- Giambelluca, T., Ostertag, R., Litton, C.M., Giardina, C., and Cordell, S. 2009-2014. Pacific High Island Evolutionary Biogeography: Impacts of invasive species, anthropogenic activity, and climate change on Hawaiian focal species. National Science Foundation – EPSCoR. \$1,132,000 (Sub-award for "Establishment of a climate and ecosystem observatory network").
- Litton, C.M. 2009-2011. Impacts of ungulates on nonnative plant invasions and ecosystem structure and function in native forests of Hawai'i. USDA-CSREES-TSTAR Pacific. \$135,122.
- Litton, C.M. 2009-2014. Effects of mean annual temperature on carbon storage and fluxes in native forests of Hawai'i. USDA Forest Service Research Joint Venture Agreement. \$277,569.
- Litton, C.M. and Giardina, C.P. 2009. An experimental test of the impacts of rising temperature on carbon input, allocation, and loss in model forests. National Science Foundation Research Experiences for Undergraduates-Ecosystem Science Panel. \$13,800.
- Litton, C.M. and Giardina, C.P. 2008-2010. An experimental test of the impacts of rising temperature on carbon input, allocation, and loss in model forests. National Science Foundation-Ecosystem Science Panel. \$135,000.

- Litton, C.M. 2008-2009. Hawai'i Experimental Tropical Forest. USDA Forest Service Research Joint Venture Agreement. \$57,160.
- Litton, C.M. 2008-2011. Independent and interactive impacts of land use change and temperature on belowground carbon cycling. USDA National Institute of Food and Agriculture, McIntyre-Stennis Forestry Program. \$132,265.
- Litton, C.M. 2008-2013. The potential for restoration to break the grass/fire cycle in dryland ecosystems in Hawaii. USDA Forest Service Research Joint Venture Agreement. \$131,254.
- Litton, C.M. 2008-2013. The invasive species/wildfire cycle: Fuel loads, microclimate, fire potential, and fire behavior in dominant grasslands and adjacent forests on military lands of Oahu, Hawaii. USDA Forest Service Research Joint Venture Agreement. \$378,983.
- Litton, C.M. and Friday, J.B. 2008-2011. Ecosystem structure and function in degraded, restored, and intact Hawaiian forests. USDA National Institute of Food and Agriculture, Hatch Program. \$259,680.
- Litton, C.M., Giardina, C. and Giambelluca, T. 2008. Infrastructure development for climate change research in Hawaii. University of Hawaii EPSCoR REAP Program. \$24,944.
- Litton, C.M. 2008. Relationships of an alien plant, fuel dynamics, fire weather and unprecedented wildfires in Hawaiian rain forests: Implications for fire management at Hawaii Volcanoes National Park. Oregon State University (Subcontract from a Joint Fire Sciences Program project). \$22,966.

# PRESENTATIONS AT CONFERENCES (PRESENTING AUTHOR ONLY, SINCE 2007; COAUTHOR ON >200 PRESENTATIONS)

- Litton, C.M. 2021. Becoming Indigenous to Place. Department of Natural Resources and Environmental Management Seminar Series. Honolulu, HI (Invited Talk).
- Litton, C.M., Cole, R.J., Sparks, J.P., Giardina, C.P., and Knauf, A. 2020. Synergies between Nonnative Ungulate and Plant Invasions in Hawai'i – Can the Tide be Turned?. Weed Science Society of America Annual Meeting. Lahaina, HI (*Invited Talk*).
- Litton, C.M., Giardina, C.P. Selmants, P.C., and Sparks J.P. 2019. Rising mean annual temperature alters nutrient cycling and availability in Hawaiian tropical montane wet forest. American Geophysical Union Fall Meeting. San Francisco, CA (*Invited Talk*).
- Litton, C.M., Cole, R.J., Sparks, J.P., Giardina, C.P., and Knauf, A. 2017. Recovery of native vegetation and ecological processes following the removal of nonnative ungulates from Pacific Island terrestrial ecosystems. Strategic Environmental Research and Development Program Symposium, Department of Defense, Washington, D.C. (*Invited Talk*).
- Litton, C.M., Cole, R.J., Knauf, A., Long, M.S., Sparks, J.P. and Giardina, C.P. 2016. Impacts of non-native ungulate removal on vegetation & ecological processes: A tale of two sides of the fence. University of Hawaii at Manoa, NREM Seminar Series, Kahalui, HI. (*Invited Talk*).
- Litton, C.M. 2015. Flux, storage and partitioning of carbon across a mean annual temperature gradient in Hawaiian tropical montane wet forest. Cornell University, Biogeochemistry, Environmental Science and Sustainability Seminar Series, Ithaca, NY. (*Invited Talk*).
- Litton, C.M., Giardina, C.P., Selmants, P.C., and Sparks, J.P. 2015. Whole ecosystem warming effects on ecosystem carbon flux, storage & partitioning in tropical forests: Lessons from a highly constrained MAT gradient in Hawaii. International Symposium on Forest Soils, Fujian Normal University, Fuzhou, China. (*Invited Talk*).

- Litton, C.M., Giardina, C.P., and Selmants, P.C. 2015. Flux, partitioning and storage of carbon across a mean annual temperature gradient in Hawaiian tropical montane wet forest. Association for Tropical Biology and Conservation Annual Meeting. Honolulu, HI (*Invited Talk*).
- Litton, C.M., Long, M.S., Cole, R.J., Sparks, J.P. and Giardina, C.P. 2015. Response of soil physical & chemical properties to removal of feral pigs from Hawaiian montane tropical wet forest. Association for Tropical Biology and Conservation Annual Meeting. Honolulu, HI.
- Litton, C.M., Hawbaker, T., Trauernicht, C., Giardina, C.P. and Sleeter, B. 2015. Wildfire and carbon in Hawaii. Hawaii Conservation Conference. Hilo, HI. (*Invited Talk*).
- Litton, C.M., Cole, R.J., Stewart, M., Hamnett, R., Giardina, C.P. and Sparks, J.P. 2015. Vegetation responses across four Hawaiian ecosystems following removal of non-native ungulates. Hawaii Conservation Conference. Hilo, HI.
- Litton, C.M., Giardina, C.P. and Selmants, P.C. 2014. Rising mean annual temperature increases carbon flux & alters partitioning, but does not change ecosystem carbon storage in Hawaiian tropical montane wet forest. American Geophysical Union Fall Meeting. San Francisco, CA.
- Litton, C.M. 2014. Perspectives on Hawaii's wildfire problem: Research science gaps. Hawaii Conservation Conference. Honolulu, HI.
- Litton, C.M. and Giardina, C.P. 2013. Ecosystem carbon cycling across a 5.2°C mean annual temperature gradient in Hawaiian tropical montane wet forest. Association for Tropical Biology and Conservation Annual Meeting. San Jose, Costa Rica (*Invited Talk*).
- Litton, C.M., Laursen, S.C, Phifer, C. and Giardina, C.P. 2012. Teaching change to local youth: Plant phenology, climate change and citizen science at Hakalau Forest National Wildlife Refuge. American Geophysical Union Annual Meeting, San Francisco, CA
- Litton, C.M., Freeman, K.R., Giardina, C.P. and Selmants, P.C. 2012. Effect of mean annual temperature on nutrient return via litterfall in Hawaiian tropical montane wet forest. American Geophysical Union Annual Meeting, San Francisco, CA
- Litton, C.M. and Cole, R.J. 2012. Vegetation recovery following removal of nonnative feral pigs from Hawaiian tropical montane wet forest. Ecological Society of America Annual Meeting, Portland, OR
- Litton, C.M. and Giardina, C.P. 2011. The magnitude and variability of soil-surface CO<sub>2</sub> efflux increase with mean annual temperature in Hawaiian tropical montane wet forest. American Geophysical Union Annual Meeting, San Francisco, CA (*Invited Talk*)
- Litton, C.M., Giardina, C. and Crow, S.E. 2011. Soil carbon storage does not vary with temperature along a 5.2°C mean annual temperature gradient in Hawaiian tropical montane wet forests. Ecological Society of America Annual Meeting, Austin, TX
- Litton, C.M., Giardina, C. and Crow, S.E. 2011. Soil carbon storage with climate change in Hawaiian tropical montane wet forests. Society of American Foresters National Convention, Honolulu, HI
- Litton, C.M. and Giardina, C. 2011. Increased carbon flux to belowground drives increased soil respiration with rising mean annual temperature. Hawaii Ecosystems Meeting, Hilo, HI
- Litton, C.M. 2010. Carbon input and partitioning along a 5°C mean annual temperature gradient in Hawaiian wet tropical forests. University of Hawaii at Manoa, Department of Geography, Departmental Seminar Series, Honolulu, HI (*Invited talk*)

- Litton, C.M. 2010. Ecosystem level impacts of nonnative ungulates in native Hawaiian terrestrial ecosystems. University of Hawaii at Manoa and Institute of Pacific Islands Forestry, Special Seminar for Chinese Scientific Delegation, Hilo, HI (*Invited talk*)
- Litton, C.M. and Giardina, C. 2010. Carbon input and partitioning across a 5°C mean annual temperature gradient in Hawaiian wet tropical forests. Ecological Society of America Annual Meeting, Pittsburgh, PA
- Litton, C.M. and Giardina, C. 2010. Carbon partitioning across a 5°C mean annual temperature gradient in Hawaiian wet tropical forests. Hawaii Ecosystems Meeting, Hilo, HI
- Litton, C.M. 2010. Impacts of nonnative grass invasion on carbon input and allocation in Hawaiian tropical dry forests. Western Society of Weed Science Annual Meeting, Waikoloa, HI (*Invited Talk*)
- Litton, C.M. and Giardina, C.P. 2009. Carbon input and partitioning across a 5°C mean annual temperature gradient in Hawaiian wet tropical forests. American Geophysical Union Annual Meeting, San Francisco, CA
- Litton, C.M., Sandquist, D.R. and Cordell, S. 2009. Impacts of nonnative grass invasion and precipitation variability on carbon partitioning in a Hawaiian tropical dry forest. Ecological Society of America Annual Meeting, Albuquerque, NM
- Litton, C.M. and Giardina, C.P. 2009. Impact of MAT on ecosystem carbon storage, flux and partitioning in native Hawaiian wet forests. Hawaii Ecosystems Meeting, Hilo, HI
- Litton, C.M. and Giardina, C.P. 2008. Belowground carbon flux and partitioning: Global patterns and response to temperature. American Geophysical Union Annual Meeting, San Francisco, CA
- Litton, C.M. and Giardina, C.P. 2008. Impacts of climate change on terrestrial carbon cycling: Infrastructure and research in the Hawaii Experimental Tropical Forest, Laupahoehoe. Hawaii Ecosystems Meeting, Hilo, HI
- Litton, C.M. 2007. Nonnative grass invasion and ecosystem carbon cycling in Hawaiian dry forests. University of Hawaii at Manoa, Ecology, Evolution and Conservation Biology Graduate Program Seminar Series, Honolulu, HI (*Invited talk*)
- Litton, C.M. and Kauffman, J.B. 2007. Impact of fire and invasive species on aboveground carbon pools along a precipitation gradient in Hawaiian tropical forests. Ecological Society of America Annual Meeting, San Jose, CA