

## CURRICULUM VITAE

**Michael L. Moody**

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### I. Professional Positions:

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|---------------------|--|
| Jan 2017 – Present  | Associate Professor, University of Texas at El Paso                                  |
| Jan 2012 – Aug 2017 | Assistant Professor, University of Texas at El Paso                                  |
| Aug 2007 - Dec 2011 | Research Scientist, Department of Environment and Conservation,<br>Western Australia |
| Aug 2007 – Dec 2011 | Assistant Professor, University of Western Australia                                 |
| Jan 2005 – Aug 2007 | NSF Postdoctoral Research Fellow, Indiana University                                 |

### II. Education:

- PhD, Ecology and Evolutionary Biology, University of Connecticut, 2004
- Masters of Science in Botany, Washington State University, 1999
- Bachelor of Science in Biology, University of Arizona, 1997
- Bachelor of Arts in English Literature, University of Redlands, 1990

### III. Funding and Grants (UTEP TTL - \$1,915,528):

- NSF DBI - “RAMP: ROADS to STEM careers for Hispanic postbaccalaureates in Environmental, Ecology, and Evolutionary Biology.” E. Walsh PI, CoPIs: M.L. Moody, J. McLaren, E. LaRue, P. Lavretsky, V. Loughheed (\$2,995,336) **Submitted** 2023-2026.
- NSF DBI – 2208814 – “Expanding Access and Storage for the Borderland Biological Collections at the University of Texas at El Paso” ML Moody **PI**, CoPIs: E. Greenbaum, M. Zhuang, V. Mata-Silva (\$374,934) 2022-2024.
- NSF OPP – 2109946 – “Collaborative Research: Local adaptation in a dominant arctic tundra sedge (*Eriophorum vaginatum*) and its effects on ecosystem response in a changing climate” **Lead PI** (\$337,463 UTEP; part of \$1.1M collaborative grant with PIs Jim Tang, Ned Fetcher) 2021-2024.
- Institute for Museum and Library Services – “Digitizing trans-border collections from a small herbarium at the University of Texas at El Paso” **PI**, CoPIs: E. Greenbaum, M. Zhuang (\$44,039) 2020-2022
- NSF DBI – 1950810 – Research Experiences for Undergraduates Sites (Biological Sciences), "REU Site: Summer Program in Chihuahuan Desert Biodiversity," **PI & Program Coordinator**, Co-PI: J. Johnson. (\$280,544). 2020-24
- NSF DBI – 1902078 – “Digitization TCN: Collaborative: American Crossroads: Digitizing the Vascular Flora of the South-Central United States” **Subawardee** (\$45,033). PI Peter Fritsch. 2019-2023.

- NSF DBI – 1932909 – “REU Site: Summer Program in Chihuahuan Desert Biodiversity – Supplement.” **PI & Program Coordinator**, (\$35,800). 2019-20
- NSF DBI – 1560184 – Research Experiences for Undergraduates Sites (Biological Sciences), "REU Site: Summer Program in Chihuahuan Desert Biodiversity," **PI & Program Coordinator**, Co-PI: J. Johnson. (\$221,666). 2016-20
- NSF PLR -1417645 – “Collaborative Research: Local adaptation in a dominant arctic tundra sedge (*Eriophorum vaginatum*) and its effects on ecosystem response in a changing climate” **PI** (\$281,227 UTEP; part of \$1M collaborative grant with PIs Jim Tang, Ned Fetcher) 2015-2017
- Department of Homeland Security (DHS) - Summer Research Team Program for Minority Serving Institutions, **UTEP Sponsor**, PI Jennifer Kovacs, Spelman University 2014-2015
- UTEP IDR – Assessment of aridland aquatic biodiversity using second generation sequencing, **Co-PI**, (3 Co-PIs), PI Elizabeth Walsh (\$20,000) 2013 – 2014
- NSF DBI-1263089 - Research Experiences for Undergraduates Sites (Biological Sciences), "REU Site: Summer Program in Chihuahuan Desert Biodiversity" **Co-PI & Program Coordinator**, PI: J. Johnson (\$294,822) 2013 – 2015
- Tiwest Research Contract “Assessment of the putative new and threatened subspecies *Grevillea thelemanniana* subsp. *Coojarloo*, its taxonomic status, phylogeography and interpopulation diversity” **PI** (\$19,500) 2010-2012
- University of Western Australia Research Development Award (RDA), “New tools to uncover a *Eucalyptus* phylogeny and evaluate conservation priority species” **PI** ( \$29,000) 2009 - 2010
- Australian Biological Resources Study (ABRS) Capacity Building Grant, “Taxonomic assessment of the *Petrophile brevifolia* Lindl. species complex (Proteaceae)” **PI** (\$10,000) 2008
- National Science Foundation (NSF) Postdoctoral Research Fellowship in Bioinformatics: *Development of a Universal Approach Using Linkage Disequilibrium and Phylogenetic Incongruence to Identify Ancient Hybridization* **PI** (\$120,000) 2005-2007
- Minnesota Dept. Natural Resources contract “Microsatellite Markers for Genotyping of Invasive Watermilfoil: Part II” **PI** (\$5,000) 2006
- Minnesota and Wisconsin Dept. of Natural Resources Development of a microsatellite library for Eurasian watermilfoil (*Myriophyllum spicatum*) **PI** (\$10,000) 2005
- NSF Doctoral Dissertation Improvement Grant (\$10,000) 2003-2004
- MnDNR contract: Growth comparisons of invasive watermilfoils **PI** (\$5000) 2003
- MnDNR contract: Molecular studies of invasive watermilfoils **PI** (\$4500) 2002

#### **IV. Membership in Professional Societies:**

American Society of Plant Taxonomists, Aquatic Plant Management Society, Botanical Society of America, International Association for Plant Taxonomy, Sigma Xi, Society for the Study of Evolution, Society of Herbarium Curators

## V. Editorial and Peer Review:

-NSF Panels: DBI SBS 2022; DBI GRFP 2019; Arctic Natural Sciences 2016

-Subject Editor: *Molecular Ecology Resources* 2006-2010

-Peer Review: *American Journal of Botany*, *Annals of Botany*, *Annals of the Missouri Botanical Garden*, *Aquatic Botany*, *Australian Journal of Botany*, *Australian Systematic Botany*, *Biogeography*, *BioScience*, *BMC Evolutionary Biology*, *BMC Plant Biology*, *Botany*, *Conservation Genetics*, *European Journal of Taxonomy*, *Evolution*, *Evolutionary Applications*, *Hydrobiologia*, *Journal of Biogeography*, *Journal of Plant Research*, *Journal of the Aquatic Plant Management Society*, *Journal of the Botanical Research Institute of Texas*, *Journal of Systematics and Evolution*, *Landscape Ecology*, *Molecular Ecology*, *Molecular Phylogenetics and Evolution*, *Nuytsia*, *Plant Species Biology*, *Plant Science Bulletin*, *Plant Systematics and Evolution*, *Rheedia*, *Systematic Biology*, *Systematic Botany*, *Taxon*, *Telopea*, *Tree Genetics and Genomes*, *Zoology*

## VI. Teaching Experience (developed new lecture series\* and/or labs<sup>†</sup>):

- \*2020 – (Fall & Summer), UTEP, BIOL 3321, Evolution (lectures; online 30+ hrs)
- \*2014 – (biannual), UTEP, BIOL 5322, Advanced Evolutionary Theory (lectures & discussion 20 hrs)
- \*2014 – (biannual), UTEP, BOT 3332/BIOL 3342, Plants & People (lecture 30 hrs)
- \*<sup>†</sup>2012 – (annual) UTEP, BOT 2410, General Botany (lecture 30 hrs, lab 30 hrs)
- \*<sup>†</sup>2012 – (biannual) UTEP, BOT 3437, Plant Diversity and Systematics (lecture 30 hrs, lab 30 hrs)
- 2018, UTEP, BIOL 3192, Professional Development Seminar (lectures & discussion 15 hrs)
- \*2016, 2018, UTEP, BIOL 5316, Biosystematics (lectures & discussion 15 hrs)
- \*2014, UTEP, BIOL 4192, Senior Seminar (lecture & project development 7 hrs)
- \*2014, 2017, 2019 UTEP, BIOL 1306, Organismal Biology (lecture 15 hrs)
- \*2013, 2015, UTEP, BIOL 5301, Conservation Genetics (lectures & discussion 45 hrs)
- \*<sup>†</sup>2012, UTEP, BIOL 5322, Advanced Evolutionary Theory - Speciation (guest lectures 4.5 hrs)
- \*<sup>†</sup>2012, UTEP, BINF 5352, Bioinformatics – Bayesian phylogenetics (guest lecture 1.5 hrs)
- \*<sup>†</sup>2012, UTEP, BIOL 6312, Biodiversity – phylogeography, conservation (guest lecture 2 hrs)
- \*<sup>†</sup>2007-2011, UWA, PLNT2204, Land Plant Diversity and Systematics (lecture 24 hrs, Lab 36 hrs)
- 2008-2011, UWA, BIOL3360, Saving Endangered species: Field Studies (1 week field study)
- 2010, UWA, PLNT3306, Australian Vegetation – Field studies in Pilbara, WA (1 week field study)
- \*2009-2011, UWA, ANIM3302, Genetics and Evolution, Molecular Systematics (lecture 3hrs)
- \*2008-2009, UWA, SCIE7473, Special Topics, Honours (Semester discussions and essays)
- \*2008, UWA, GENE3304, Molecular Genetics, Molecular Systematics (lecture 2 hrs)
- \*2007, UWA, BIOL2262, Biodiversity Hotspots, Plant Diversity (lecture 6 hrs)

## VII. Graduate Supervision (PhD\*; MS<sup>†</sup>):

- **Luis Alberto Pallares Solano\***, UTEP, Commenced Fall 2021
- **Christopher Munoz\***, UTEP, Commenced Fall 2020
- **Elizabeth Stunz\***, UTEP, Commenced Spring 2015, NSF PLR-1417645 support Ph.D.; Completed Fall 2022
- **Carmen Webster<sup>†</sup>**, UTEP, *Analyzing genetic variation of the tussock cottongrass among ecotypes along a latitudinal gradient through transcriptomics*, Commenced Summer 2019, Completed Summer 2021
- **Michelle Garcia\*<sup>†</sup>**, UTEP, Commenced Spring 2015, NSF Graduate Research Fellowship, Completed 2020, Graduate Certificate.

- **Tanya Hevroy\***, UWA, *Molecular systematics and conservation genetics of the Grevillea Thelemanniana Group (Proteaceae)*, Completed 2015, Ph.D.
- **Christine Allen\***, UWA, *Factors that affect seedling establishment and the implications for the translocation of species at risk of extinction*, Completed 2014, Ph.D.
- **Jessica Stingemore\***, UWA, *The effect of plant density on dispersal mechanisms and genetic variation for two co-occurring Persoonia species*, Completed 2013, Ph.D.
- **Lori Kroiss\***, UWA, *Genetic systems in species of Cullen endemic to nonsummer dominant rainfall regions of Australia*, Completed 2009, Ph.D.

#### **VIII. Undergraduate Honors, Scholarship and Fellowship Student Supervision:**

- **Hashel Orquiz**, *Phylogeny of the Southwest flowering plant genus Hebecarpa (Polygalaceae)*, Summer 2022, NSF-REU
- **Josh Segoviano**, *Seed Germination of Four Chihuahuan Desert Short-Lived Perennials*, Summer 2021, NSF-REU
- **Adan Saenz**, UTEP, *New species descriptions Myriophyllum spicatum complex*, Spring 2019, Bristol/Mayberry Endowed Award
- **Daniela Dominguez**, UTEP, *New species in the Myriophyllum subg. Brachythecum complex*, Summer 2019, NSF-REU; Fall 2019 Bristol/Mayberry Endowed Award
- **Irania Figueroa**, UTEP, *Nurse plant soil microbiota*, Summer 2018, NSF-REU
- **Austin Frisbey**, UTEP – *Corallorhiza maculata phytobiome inventory and community structure* Summer 2016 Surpass Summer Fellowship (Summer 2015-Summer 2016 assisted NSF PLR-1417645 Alaska collections and UTEP lab); GRFP Univ. of Arizona
- **Christian Rodriguez**, UTEP – *Tamarix Invasion 2015-2016 BURS Scholarship*
- **Lia Leibman**, UTEP, (via Whitman College), *Tamarix Invasion*, Summer 2015, NSF-REU
- **Armando Lerma**, UTEP, *Genetic variation and genealogical structure among Eriophorum vaginatum ecotypes using next generation sequencing*, UPBiT 2014-2015
- **Nayell Palomino**, UTEP, *Phylogeography of Eurasian Watermilfoil*, 2014-2015, COURI Undergraduate Research Assistantship; Best Poster COURI Spring 2015
- **Johnathon Penna-Avila** UTEP, *Tamarix Invasion*, Summer 2014, NSF-REU
- **Elizabeth Stunz** UTEP (via Univ. of Idaho), *Tamarix Invasion*, Summer 2014, NSF-REU
- **Megan Vahsen** UTEP (via College of William & Mary), *Phylogeography of the Living Rock Cactus*, Summer 2013, NSF-REU
- **Michelle Garcia**, UTEP, *Systematics of Gonocarpus (Haloragaceae) of Australia*. 2012-2014, NSF-URM Scholarship
- **Natalie Murdock**, UWA, *Taxonomic assessment of the Petrophile brevifolia Lindl. species complex (Proteaceae)*, Complete 2008, Honors completed mark of High Distinction
- **Sarah-Louise Battilana**, UWA, *High levels and complex patterns of genetic divergence among populations of Myriophyllum callitrichoides (Haloragaceae): A phylogenetic study*, Completed 2010, Honors

#### **IX. University Service**

- UTEP PhD in EEB Advisor 2022-Present
- UTEP MS in Biological Sciences Director/Advisor 2018-Present

- Director/Curator UTEP Herbarium 2017-Present
- UTEP Biodiversity Collections Advisory Committee member 2015-Present
- EEB Steering Committee member 2014-Present
- Coordinating Supervisor, Biological Sciences Greenhouse 2012-Present
- Faculty Search Committee Chair – Evolutionary Biologist–2022-23
- COS Commencement Marshall Fall 2022
- COS Associate Dean for Graduate Studies Search Committee 2022
- Faculty Advisor. “Where They Will Grow” Centennial Museum Exhibit. 2021-2022
- Biological Sciences Advisory Committee 2019-2022
- Faculty Search Committee member – Global Change Biologist–2018
- UTEP MS in Biology Review – Chair 2018
- TA Selection Committee Chair 2013-2016
- Faculty Search Committee member – Population Geneticist–2015
- Faculty Search Committee member – Infectious Disease Ecologist-2015
- Instruction Evaluation Committee member 2014-2015
- Faculty Search Committee member – Ecological Modeler-2014
- Faculty Search Committee member – Ecologist–2013
- UTEP –Annual COURI Symposium for College of Engineering and College of Science undergraduate researchers – Judge 2012-2013
- Academic Panel member, Ray Hart Memorial Scholarship, funding for student projects in Natural History, 2010
- School of Plant Biology representative, “A day in the life of an Environmental Scientist”: recruitment and information session aimed at middle school student, 2010
- School of Plant Biology project organizer for the PICSE program, a successful recruitment tool for the university regarding young scientist interested in attending UWA, 2009
- School of Plant Biology representative, “Conservation Biology”: University Expo for conservation biology training at UWA, 2008, 2010

#### **X. Professional and Community Service:**

- American Society of Plant Taxonomists: Collections Committee, 2022-Present
- Botanical Society of America: Graduate Student Research Award Committee, 2022-Present
- World Flora Online – Taxonomic Expert (Family Haloragaceae) 2021-Present
- Botanical Society of America “Root and Shoot Inclusive Conferences Working Group” 2022-23
- Young Stewards/SESI Guest Presentation Session “Plant Invasions” (Local High Schools) 2021
- Botanical Society of America – Strategic Plan Committee (Diversity, Equity, and Inclusion) 2020
- Adjunct and Honorary Staff, University of Western Australia 2012-2017
- KFOX Professional Contributor - <http://kfoxtv.com/news/local/bringing-back-the-bees-brings-controversy-2017>
- Texas Master Naturalist – “Ecological Systems in Texas” This program provides training for novice volunteers to assist the state in naturalist projects 2012-2013
- Terrestrial Biodiversity Workshop – Climate Change 2010
- Molecular Taxonomy Workshop, Biodiversity Conservation Centre, Kings Park, April 2008
- Biodiversity Climate Change Research Plan for Western Australia, Planning workshop, 2008
- DNA Barcode of Life Workshop, November 2008

## XI. Publications – in refereed journals and theses; \*PhD student, <sup>1</sup>Undergraduate student

1. Chen, L.-Y., B. Lu, D. F. Morales-Briones, **M.L. Moody**, F. Liu, G.-W. Hu, C.-H. Huang, J.-M. Chen, Q.-F. Wang. **2022**. Integrating transcriptomes to investigate genes associated with adaptation to aquatic environments, and assess phylogenetic conflict and whole genome duplications in Alismatales. *Molecular Biology and Evolution* 39(5), msac079.
2. Stunz, E.\*, J. Mohl, N. Fetcher, P. Lavretsky, J. Tang, **M.L. Moody**. **2022**. Population genomics of an arctic foundation species (*Eriophorum vaginatum*) provide evidence for ecotypic adaptations and a treeline gene flow barrier. *Frontiers in Plant Science* 860439.
3. Ma, T., T. Parker, S. Unger, J. Gewirtzman, N. Fetcher, **M.L. Moody**, J. Tang. **2022**. Leaf and root phenology and biomass of *Eriophorum vaginatum* in response to warming in the Arctic. *Journal of Plant Ecology* 149926.
4. Ma, T., T. Parker, S. Unger, J. Gewirtzman, N. Fetcher, **M.L. Moody**, J. Tang. **2022**. Responses of root phenology in ecotypes of *Eriophorum vaginatum* to transplantation and warming in the Arctic. *Science of the Total Environment* 805: 149926 <https://doi.org/10.1016/j.scitotenv.2021.149926>
5. Hellquist, B., A. Leu, **M.L. Moody**. **2021**. *Nymphaea kakaduensis* a new species of (Nymphaeaceae) from the northern portion of the Northern Territory, Australia. *Telopea* 24: 267–275.
6. Parker, T., S.L. Unger, **M.L. Moody**, J. Tang, N. Fetcher. **2021**. Intra-specific variation in phenology offers resilience to climate change for *Eriophorum vaginatum*. *Arctic Science*
7. **Moody, M.L.**, M. Garcia\*. **2021**. Post-Oligocene Diversification in Australia; Phylogeography, Systematics and two new species of *Gonocarpus* (Haloragaceae). *Taxon* 70(4): 761-777. <https://doi.org/10.1002/tax.12506>
8. Burford-Reiskind, M.O., **M.L. Moody**, D. Bolnick, C. Hanifin, C. Farrior. **2021**. Nothing in evolution makes sense except in the light of biology. *BioScience* 71(4): 370-382. (all authors equal contribution) <https://doi.org/10.1093/biosci/biaa170>
9. Mohl, J.\*, N. Fetcher, E. Stunz\*, J. Tang, **M.L. Moody**. **2020**. Transcriptome assembly and differential expression of genes in ecotypes of the Arctic foundation species, tussock cottongrass (*Eriophorum vaginatum*), under heat stress. *Scientific Reports* 10:8990
10. Curasi, S.\*, T. Parker, A. Rocha, A., **M.L. Moody**, Tang, J., Fetcher, N. **2019**. Differential responses of ecotypes to climate in a ubiquitous Arctic sedge: implications for future ecosystem C cycling. *New Phytologist* 223(1):180-192. <https://doi.org/10.1111/nph.15790>
11. Schedlbauer, J.L., N. Fetcher, K. Hood, **M.L. Moody**, J. Tang. **2018**. Effect of growth temperature on photosynthetic capacity and respiration in three ecotypes of *Eriophorum vaginatum*. *Ecology and Evolution* [doi.org/10.1002/ece3.3939](https://doi.org/10.1002/ece3.3939)
12. Hevroy, T.H.\*, **M.L. Moody**, S.L. Kraus. **2017**. Population genetic analysis reveals barriers and corridors for gene flow within and among riparian populations of a rare plant. *AoB PLANTS*
13. Parker, T., J. Tang, M. Clark, **M.L. Moody**, N. Fetcher. **2017**. Ecotypic differences in the phenology of the tundra species *Eriophorum vaginatum* reflect sites of origin. *Ecology and Evolution* 7:9775–9786 [doi.org/10.1002/ece3.3445](https://doi.org/10.1002/ece3.3445)

14. S.-Y. Zhao, Chen, L.-Y., Q.-F. Wang, **M.L. Moody**. 2017. Candidate genes for adaptation to an aquatic habitat recovered from *Ranunculus bungei* and *Ranunculus sceleratus*. *Biochemical Systematics and Ecology* 71:16-25. <http://dx.doi.org/10.1016/j.bse.2017.01.003>
15. Barrett, M.D., **M.L. Moody**, R.L. Barrett. 2016. A review of *Myriophyllum callitrichoides* (Haloragaceae) in Western Australia. *Telopea* 19:207-211.
16. Zhao S.-Y., L.-Y. Chen, L.-Y. Wei, Q.-F. Wang and **M.L. Moody**. 2016. RNA-seq of *Ranunculus sceleratus* and identification of orthologous genes among four *Ranunculus* species. *Frontiers in Plant Science* 7:732. doi: 10.3389/fpls.2016.00732
17. **Moody, M.L.**, <sup>1</sup>N. Palomino, P.S.R. Weyl, J.A. Coetzee, R.N. Newman, N.E. Harms, X. Liu, R.A. Thum. 2016. Unraveling the biogeographic origins of the Eurasian watermilfoil invasion in North America. *American Journal of Botany* 103:109-118
18. Weyl, P.S.R., R.A. Thum, **M.L. Moody**, R.M. Newman, J.A. Coetzee. 2016. Was *Myriophyllum spicatum* L. (Haloragaceae) recently introduced to South Africa from Eurasia? *Aquatic Botany* 128:7-12
19. Chen, L.-Y., S.-Y. Zhao, Q.-F. Wang, **M.L. Moody**. 2015. Transcriptome analysis of three *Ranunculus* species (Ranunculaceae) reveals candidate genes in plant adaptation from terrestrial habitats to aquatic habitats. *Scientific Reports* 5
20. Chen, L.-Y., S.-Y. Zhao, K.-S. Mao, D.H. Les, Q.-F. Wang, **M.L. Moody**. 2014. Historical biogeography of Haloragaceae: An out-of-Australia hypothesis with multiple intercontinental dispersals. *Molecular Phylogenetics and Evolution* 78:87-95  
[doi.org/10.1016/j.ympev.2014.04.030](http://doi.org/10.1016/j.ympev.2014.04.030)
21. \*Hevroy, T.H., **M.L. Moody**, S.L. Krauss and M.G. Gardner. 2013. Isolation, via 454 sequencing, characterization and transferability of microsatellites for *Grevillea thelemanniana* subsp. *thelemanniana* and cross-species amplification in the *Grevillea thelemanniana* complex (Proteaceae). *Conservation Genetics Resources* DOI: 10.1007/s12686-013-9918-4
22. **Moody, M.L.** and L. H. Rieseberg. July 2012. Sorting through the chaff, nDNA gene trees for phylogenetic inference and hybrid identification of annual sunflowers (*Helianthus* sect. *Helianthus*). *Molecular Phylogenetics and Evolution* 64:145-155. DOI: 10.1016/j.ympev.2012.03.012
23. Thum, R.A., M. Zuellig, R.L. Johnson, **M.L. Moody** and C. Vossbrink. 2011. Molecular markers reconstruct the invasion history of variable leaf watermilfoil (*Myriophyllum heterophyllum*) and distinguish it from closely related species. *Biological Invasions* 13:1687-1709.
24. **Moody, M.L.** 2011. *Myriophyllum jacobsonii* M.L. Moody (Haloragaceae), a new species from southeast Queensland, Australia. *Telopea* 13:277-283.
25. **Moody, M.L.** and D.H. Les. 2010. Systematics of the aquatic plant genus *Myriophyllum* (Haloragaceae). *Systematic Botany* 35:121-139.
26. \*Kroiss, L., **M.L. Moody**, S. Barker, M. Byrne, and M. Ryan. 2009. Development, characterization and transferability of microsatellite markers for *Cullen australasicum* (Leguminosae). *Conservation Genetics* 10:1803-1805.

27. **Moody, M.L.**, D.H. Les and J. DiTomaso. **2008**. The role of plant systematics in invasive aquatic plant management. *Journal of Aquatic Plant Management* 46:7-14.
28. Les, D.H., S.W.L. Jacobs, N.P. Tippery, L. Chen, **M.L. Moody**, M. Wilstermann-Hildenbrand. **2008**. Systematics of *Vallisneria* (Hydrocharitaceae). *Systematic Botany* 30:49-65.
29. **Moody, M.L.**, and D.H. Les. **2007**. Phylogenetic systematics and character evolution in the angiosperm family Haloragaceae R.Br. *American Journal of Botany* 94:2005-2025.
30. Sapir, Y., **M.L. Moody**, L.C. Brouillette, L.A. Donovan, and L.H. Rieseberg. **2007**. Patterns of genetic diversity and candidate genes for ecological divergence in a homoploid hybrid sunflower, *Helianthus anomalus*. *Molecular Ecology* 16:5017-5029.
31. **Moody, M.L.** and D.H. Les. **2007**. Distribution and composition of invasive hybrid watermilfoil (*Myriophyllum spicatum* × *M. sibiricum*) populations in North America. *Biological Invasions* 9:559-570.
32. McAlpine, D.F., G. Bishop, O. Ceska, **M.L. Moody**, A. Ceska. **2007**. Andean watermilfoil, *Myriophyllum quitense* (Haloragaceae), in the Saint John River estuary system, New Brunswick, Canada: A rare North American disjunct, widespread and well-established. *Rhodora* 109:101-107.
33. Jacobs, S.W.L., D.H. Les, and **M.L. Moody**. **2006**. New combinations in Australasian *Zostera* (Zosteraceae). *Telopea* 11:127-128.
34. Wilson, P.G. and **M.L. Moody**. **2006**. *Haloragodendron gibsonii* (Haloragaceae), a new species from the Blue Mountains, New South Wales. *Telopea* 11:141-146.
35. Jacobs, S.W.L., D.H. Les, **M.L. Moody** and C.B. Hellquist. **2006**. Two new species of *Aponogeton* (Aponogetonaceae) from Australia. *Telopea* 11:129-134.
36. Les, D.H., **M.L. Moody** and S.W.L. Jacobs. **2005**. Phylogeny and systematics of *Aponogeton* (Aponogetonaceae): the Australian species. *Systematic Botany* 30:503-519.
37. Les, D.H., **M.L. Moody** and C. Soros. **2005**. A reappraisal of phylogenetic relationships in the monocotyledon family Hydrocharitaceae. *Aliso* 22:209-228.
38. **Moody, M.L.** **2004**. Systematics of the Angiosperm Family Haloragaceae R. Br. Emphasizing the Aquatic Genus *Myriophyllum*: Phylogeny, Hybridization and Character Evolution. Ph.D. Thesis. University of Connecticut
39. Les, D.H., A.S. Doran, **M.L. Moody** and W.E. Phillips. **2004**. A genetically confirmed intersubgeneric hybrid in *Nymphaea* L. (Nymphaeaceae Salisb.). *HortScience* 39:219-222.
40. Doran, A.S., D.H. Les, **M.L. Moody** and W.L. Phillips. **2004**. *Nymphaea* 'William Phillips', a new intersubgeneric hybrid. *HortScience* 39:446-447.
41. Les, D.H., D.J. Crawford, R.T. Kimball, **M.L. Moody** and E. Landolt. **2003**. Biogeography of discontinuously distributed hydrophytes: a molecular appraisal of intercontinental disjunctions. *International Journal of Plant Sciences* 164:917-932.
42. **Moody, M.L.** and D.H. Les. **2002**. Evidence of hybridity in invasive milfoil populations. *Proceedings of the National Academy of Sciences USA* 99:14867-14871.



43. Xiang, Q.-Y, **M.L. Moody**, C.-Z. Fan, D.E. Soltis, and P.S. Soltis, **2002**. Relationships within Cornales and circumscription of Cornaceae- *matK* and *rbcL* sequence data and effects of outgroups and long branches. *Molecular Phylogenetics and Evolution* 24:35-57.
44. Les, D.H., **M.L. Moody**, S.W.L. Jacobs, and R.J. Bayer. **2002**. Systematics of seagrasses (Zosteraceae) in Australia and New Zealand. *Systematic Botany* 27:468-484.
45. Hufford, L., **M.L. Moody**, D.E. Soltis. **2001**. A phylogenetic analysis of Hydrangeaceae based on sequences of the plastid gene *matK* and their combination with *rbcL* and morphological data. *International Journal of Plant Sciences* 162:835-846.
46. **Moody, M.L.**, L. Hufford, D.E. Soltis, and P.S. Soltis. **2001**. Phylogenetic relationships of Loasaceae subfamily Gronovioideae inferred from *matK* and ITS sequence data. *American Journal of Botany* 88:326-336.
47. **Moody, M.L.** and L. Hufford. **2000**. Floral ontogeny of *Cevallia*, *Fuertesia* and *Gronovia* (Loasaceae Subfamily Gronovioideae). *International Journal of Plant Sciences* 161:869-883.
48. **Moody, M.L.** and L. Hufford. **2000**. Floral development and structure of *Davidsonia* (Cunoniaceae). *Canadian Journal of Botany* 78:1034-1043.
49. McDade, L.A., S.E. Masta, **M.L. Moody**, and E.R. Waters. **2000**. Phylogenetic relationships among Acanthaceae: evidence from two genomes. *Systematic Botany* 25:106-121.
50. **Moody, M.L.** **1999**. Phylogeny and floral diversity of Loasaceae subfamily Gronovioideae. MS thesis. Washington State University, Pullman
51. McDade L. A. and **M.L. Moody**. **1999**. Phylogenetic Relationships among Acanthaceae: evidence from noncoding *trnL-trnF* Chloroplast DNA sequences. *American Journal of Botany* 86:70-80.

## **XII. Short Communications:**

1. **Moody, M.L.** **2009**. Recombination of subspecies in *Trihaloragis* (Haloragaceae). *Nuytsia* 19(1): 197 (2009)

## **XIII. Reports in Completion of Research Contracts:**

**Moody, M.L.** 2006. Microsatellite for genotyping of invasive watermilfoil: Part II. Minnesota Department of Natural Resources, Ecological Services, St. Paul, MN

**Moody, M.L.** 2005. Microsatellite for genotyping of invasive watermilfoil. Minnesota Department of Natural Resources, Ecological Services, St. Paul, MN

**Moody, M.L.** and R. Selsky 2004. Growth comparisons between *Myriophyllum spicatum* and hybrid watermilfoil (*Myriophyllum spicatum* x *M. sibiricum*) grown on different sediment types. Minnesota Department of Natural Resources, Ecological Services, St. Paul, MN

**Moody, M.L.** 2003. Characterizing hybridity in invasive Minnesota watermilfoil populations using molecular markers. Minnesota Department of Natural Resources, Ecological Services, St. Paul, MN

## **XIV. Invited Presentations and Workshops:**

Insights El Paso Science Center. *Invasive Plant Species of the Trans-Pecos Region*. October 2021

New Mexico State University, Dept. of Biology. *Ecology, population genomics and transcriptomics of local adaptation; ascertaining the prospects for the dominant plants of the arctic tundra under climate change*. October 2017

Wuhan Botanical Garden/Chinese Academy of Sciences. *Landscape Genetics and Adaptation in a Dominant Arctic Tundra Sedge*. May 2017.

*Flora of the Franklin Mts*. 2014. Franklin Mountains State Park Volunteer Program Orientation.

*Kwongan Colloquium, Biodiversity in the wheatbelt: where do we go in the 21<sup>st</sup> Century* 2009. Describing biodiversity, new approaches into the 21<sup>st</sup> century.

*Workshop to Develop Research Priorities for Invasive Aquatic Plants* 2005. Chair of workgroup "Invasive Plant Systematics"

*Midwest Aquatic Plant Management Society Annual Meeting* 2004. The history of Eurasian watermilfoil (*M. spicatum*) and the discovery of invasive hybrid watermilfoil (*Myriophyllum spicatum* x *M. sibiricum*; Haloragaceae) in North America.

*North American Lake Management Society Annual Meeting* 2003. Invasive hybrid watermilfoil (*Myriophyllum*) population distribution; a growing management concern.

#### **XV. Papers and Posters Presented at Professional Meetings (\*Graduate student; ^Undergraduate student):**

Stunz, E.\*, Fetcher, N., Moody, M.L., Botany 2022, "Population Structure, demographics, and local adaptations of the arctic dwarf birch (*Betula nana*) in relation to the arctic tussock cottongrass (*Eriophorum vaginatum*) in north-central Alaska," Botanical Society of America, Anchorage, AK – **presentation**

Stunz, E.\*, Mohl, J. E., Lavretsky, P., Tang, J., Fetcher, N., Moody, M.L. Evolution 2019, "Molecular ecology of the arctic tussock cottongrass (*Eriophorum vaginatum*) in the context of local adaptation and climate change." Society for the Study of Evolution, Providence, RI - **presentation**

Stunz, E.\*, Mohl, J. E., Tang, J., Fetcher, N., Moody, M.L. Botany 2018. "Molecular ecology of the arctic moist tundra sedge, tussock cottongrass (*Eriophorum vaginatum*), in the context of local adaptation and climate change." Botanical Society of America, Rochester, MN -**presentation**

Moody, M.L., Mohl, J.\*, Tang, J., Fetcher, N., Stunz, E.\*, Botany 2017, "Population Genomics and Adaptation in a Dominant Arctic Tundra Sedge," Botanical Society of America, Fort Worth, TX - **presentation**

Stunz, E.\*, Mohl, J.\*, Tang, J., Fetcher, N., Moody, M.L., Evolution 2017, "Population genetics and gene flow of the arctic moist tundra sedge, tussock cottongrass (*Eriophorum vaginatum*), in the context of local adaptation and climate change," Society for the Study of Evolution, Portland, OR – **presentation**

\*Stunz, E., \*Mohl, J., Fetcher, N., Tang, J., **Moody, M.L.**, Evolution 2016, "Population genetics and gene flow of arctic tussock cotton-grass (*Eriophorum vaginatum*) in the context of local adaptation and climate change", Society for the Study of Evolution, Austin, TX (June 18, 2016). – **Poster**

- ^Lerma, A., \*J. Mohl, N. Fetcher, M.-Y. Leung, **M.L. Moody**, Oct. 2015. Poster. "Identification of SNP Data from Different *E. vaginatum* Populations Using Bioinformatics" SACNAS National Conference, Washington D.C.
- Moody, M.L.**, \*J. Mohl, ^N. Palomino, R.A. Thum, P.S.R. Weyl. July 2015. Unraveling the history of the North American Eurasian watermilfoil invasion using traditional sequence and RADseq data. Botany 2015: Science and Plants for People. Botanical Society of America, Edmonton, Alberta, CAN
- ^Lerma, A., \*J. Mohl, N. Fetcher, M.-Y. Leung, **M.L. Moody**, Nov. 2014. Poster. Genetic variation and genealogical structure among *Eriophorum vaginatum* ecotypes using next generation sequencing," 15th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, Texas
- ^Lerma, A., \* J. Mohl, N. Fetcher, M.-Y. Leung, **M.L. Moody**, Oct. 2014. Poster. Genetic variation and genealogical structure among *Eriophorum vaginatum* ecotypes using next generation sequencing," SACNAS National Conference, Los Angeles, CA.
- ^Garcia, M., **M.L. Moody**. 2014. Poster. Systematics, phylogeography and species discovery in the Australian angiosperm genus *Gonocarpus* (Haloragaceae), SACNAS, National Conference, Los Angeles, CA.
- ^Martin, M., E.J. Walsh, **M.L. Moody**, \*J.A. Rivas, and \*K. Hinson. 2014. Poster. Wind as a mode of dispersal for aquatic microinvertebrates in the North American desert southwest. *Ecological Society of America Annual Meeting*
- ^Garcia, M. and **M.L. Moody**. 2014. Poster. Systematics, phylogeography and species discovery in the Australian angiosperm genus *Gonocarpus* (Haloragaceae). *Botanical Society of America National Meeting*
- Walsh, E.J., **M.L. Moody**, T.E. Gill, \*K. Hinson and ^M. Martin. 2014. Paper. Assessment of Aridland Aquatic Biodiversity using Second Generation Sequencing. *Joint Aquatic Sciences Meeting*.
- ^Martin, M., E.J. Walsh, **M.L. Moody**, \*J.A. Rivas, and \*K. Hinson. 2014. Poster. Genetic Profiling of Wind-Dispersed Rotifer Species in the Southwestern United States. *Joint Aquatic Sciences Meeting*
- ^Garcia, M. and **M.L. Moody**. 2014. Poster. Phylogeny of the angiosperm genus *Gonocarpus* (Haloragaceae) emphasizing diversity species delimitation and biogeography in the southwest Australian Biodiversity Hotspot. Annual SACNAS National Conference.
- \*Hevroy, T., S. Krauss, **M. L. Moody**. 2013. Paper. Who is sleeping with whom? Resolving cryptic relationships in the *Grevillea thelemanniana* (Proteaceae) species complex. *Botanical Society of America National Meeting*
- ^Garcia, M. and **M.L. Moody**. 2013. Poster. Phylogeny of the angiosperm genus *Gonocarpus* (Haloragaceae) emphasizing species delimitation and biogeography in the southwest Australian Biodiversity Hotspot. *Botanical Society of America National Meeting*
- Moody, M.L.** 2011. Sorting through the chaff, nDNA gene trees for phylogenetic inference and hybrid identification of annual sunflowers (*Helianthus* sect. *Helianthus*). *Botanical Society of America National Meeting*
- Moody, M.L.** 2011. Deep divergence within a rare granite endemic species complex (*Myriophyllum petraeum*) in the biodiversity hotspot of southwest Australia *Botanical Society of America National Meeting*

- Moody, M.L.** 2010. Molecular systematic approach for species hypothesis testing in a conservation context. *Australian Network for Plant Conservation Annual Meeting*
- Moody, M.L.** 2008. Molecules, morphology and madness: Systematics of the aquatic plant genus *Myriophyllum* (Haloragaceae). *Botanical Society of America National Meeting*
- Moody, M.L.** 2006. Invasive watermilfoil: utilizing microsatellite data. *Aquatic Plant Management Society Annual Meeting*
- Moody, M.L.** and D. H. Les. 2004. Getting wet in a sunburnt country: Systematics of the angiosperm family Haloragaceae R.Br. *Botanical Society of America National Meeting*
- Moody, M.L.** and D. H. Les. 2003. Hybrid watermilfoil (*Myriophyllum spicatum* x *M. sibiricum*; Haloragaceae) distribution and population structure in Minnesota and Wisconsin. *Aquatic Plant Management Society Annual Meeting*
- Moody, M.L.** and D. H. Les. 2003. Hybrid watermilfoil (*Myriophyllum spicatum* x *M. sibiricum*, Haloragaceae) populations: an invasive threat to North American lakes. *Botanical Society of America National Meeting*
- Les, D.H., A.S. Doran, **M.L. Moody**, and W. E. Philipps. 2003. The first genetically confirmed intersubgeneric F1 hybrid in *Nymphaea* L. (Nymphaeaceae Salisb.). *Botanical Society of America National Meeting*
- Moody, M.L.** and D.H. Les. 2002. Foiled again: hybridity in invasive milfoil (*Myriophyllum*) populations. *Botanical Society of America Annual Meeting*
- Moody, M.L.** and D.H. Les. 2002. Hybridity in invasive milfoil populations: unveiling a hidden management concern? *Aquatic Plant Management Society Annual Meeting*
- Moody, M.L.** and D.H. Les. 2001. Phylogenetic relationships in Haloragaceae emphasizing the aquatic genus *Myriophyllum*. *Botanical Society of America Annual Meeting*
- Moody, M. L.** and D. H. Les. 2000. (Poster) Phylogenetic relationships in *Myriophyllum* (Haloragaceae). *American Journal of Botany* (abstracts) 87:524.
- Moody, M.L.** and L. Hufford. 1999. (Poster) Phylogeny and floral diversity of subfamily Gronovioideae (Loasaceae). XVI International Botanical Congress, St. Louis, MO
- McDade L.A. and **M.L. Moody**. 1997. (Paper) Phylogenetic relationships among Acanthaceae, evidence from nuclear and chloroplast genomes. *American Journal of Botany* (abstracts) 84: 623.