

Curriculum Vitae – Wiebke J. Boeing

General

Name: Wiebke J. Boeing
Present Position: Professor
Principal Unit: Department of Fish, Wildlife and Conservation Ecology
College: Agricultural, Consumer and Environmental Sciences

Educational Background:

2002: Ph.D., Aquatic Ecology, Louisiana State University
 1996: M.Sc. (Diplom), Hydrobiology, Technische Universität Dresden, Germany
 1993: B.Sc. (Vordiplom), Biology, Universität Potsdam, Germany

Previous Professional Experience:

8/2015 – present Full Professor, New Mexico State University (NMSU)
 8/2010 – 8/2015 Associate Professor, NMSU
 8/2004 – 8/2010 Assistant Professor, NMSU
 5/2004 – 8/2004 Post-doctoral Researcher, University of Illinois
 9/2002 – 4/2004 Post-doctoral Researcher, National Oceanic and Atmospheric Administration (NOAA) and University of Washington
 8/1997 – 8/2002 Teaching Assistant, Louisiana State University
 1/1995 – 12/1996 Research Assistant, Environmental Analytical Institute, Germany
 8/1994 – 12/1996 Research Assistant, Technische Universität Dresden, Germany

Allocation of Effort

Allocation of Effort (%)							
Year	Scholarship			Teaching (Instruction) & Advising	Outreach	Service	Other
	Extension	Research	Teaching				
2011 - present		60		30		10	
2004 - 2010				100			

Scholarship

List of Research Areas, Titles and Sources of Funding

* - graduate student; ** - undergraduate student

Algae and Shrimp Cultivation

- 2018: Success through synergy: Increasing cultivation yield and stability with rationally designed consortia. Department of Energy; **\$3 million** (co-PI)
- 2013: Realization of Algae Potential (REAP). Department of Energy; **\$5 million** (co-PI with 18 others; 6 from NMSU; **\$130,000** to my lab)
- 2013: Energize New Mexico – Bioalgal Energy Development. National Science Foundation; **\$3 million** to NMSU (co-PI with 9 others from NMSU)
- 2012: 3 NSF NMSU Undergraduate Research Initiative Grants; **\$7,500** (co-PI with Z. Brecheisen**, R. Pardee** and A. Pertusini**)
- 2012: Testing of a new shrimp diet (cottonseed meal-algae) to replace fish products. Cotton, Inc.; **\$22,000** (PI)
- 2010: National Alliance for Advanced Biofuels and Bio-products. Department of Energy; **\$49 million**; (~100 co-PIs; **\$450,000** to my lab) - **Leader of Algae Cultivation Team**
- 2008: Environmental Factors Determining Lipid Content in *Nanochloropsis* and Limiting Undesired Organisms. NMSU Internal Research Grant; **\$44,068** (PI)
- 2007: NM Energy Innovation Fund; **\$150,000** (co-PI with 2 others)
- 2006: Evaluation of global ocean nutrient profiles. SATOP/NASA; **\$4,000** (PI)

Aquatic Communities

- 2020: Enhancing Hispanic Access to Natural Resource and Agricultural Careers through Education, Mentorship, and Training (ENHANCEMENT). USDA NIFA; **\$1 million** (co-PI with 4 others)
- 2020: Teleconnections among Great Plains NEON sites by wind and wing. National Science Foundation; **\$800,000** (co-PI with 4 others; \$16,500 to my lab through University of Kansas)
- 2019: Analysis of diet and prey selection among American Bullfrog populations of New Mexico. T&E, Inc.; **\$3,000** (co-PI with L. Samaniego*)
- 2019: NIH NMSU Maximizing Access to Research Careers; **\$8,500** (co-PI with M. Varela**)
- 2015: Habits and habitat of *Kinosternon hirtipes*. Texas Park & Wildlife Department; **\$40,000** (PI with J. Smith*)
- 2012: Effects of climate change on aquatic communities in the arid southwest. USDA Hatch; **\$35,000** (PI)
- 2012: Life history requirements and suitable habitat for endangered invertebrates of Bitter Lake National Wildlife Refuge. NM Game & Fish; **\$9,000** (PI with N. Macanowicz*)
- 2012: Relating benthic abundance and diversity to environmental factors in desert sinkholes. T&E, Inc. Grant; **\$2,500** (co-PI with N. Macanowicz*)
- 2012: Habits and habitat of the Chihuahuan Desert mud turtle, *Kinosternon hirtipes*. T&E, Inc. Grant; **\$2,500** (co-PI: with J. Smith*)
- 2011: NIH NMSU Maximizing Access to Research Careers; **\$8,500** (co-PI with H. Campos**)
- 2011: NIH NMSU Maximizing Access to Research Careers; **\$8,500** (co-PI with D. Macias**)

2010: The Influence of Environmental Variable on Southwestern Toads. T&E, Inc. Grant; **\$2,454** (co-PI with N. Harings*)

2010: Examination of Channel Catfish (*Ictalurus punctatus*) Demographics in Response to Long-Term Removal Efforts in the San Juan River, NM, UT. T&E, Inc. Grant; **\$2,500** (co-PI with J. Morel*)

2009: La Mancha Wetland Project. Southwest Environmental Center; **\$20,000** (PI)

2009: Gila River Planning Committee. New Mexico Interstate Stream Commission; **\$8,533** (PI)

2009: Influence of the Environmental Factors on the Toads *Spea Multiplicata* and *Gastrophyrne Olivacea*. T&E, Inc.; **\$2,380** (co-PI; with N. Harings*)

2009: How do fish use UV radiation to hunt? NSF NMSU Undergraduate Research Initiative; **\$2,500** (co-PI with S. Carver**)

2008: Student experiential learning in the Natural Resource science through summer internships and professional mentoring – a joint proposal. USDA Higher Education Challenge; **\$490,000** (PI with 10 co-PIs)

2008: NMSU Graduate School; **\$105,100** (PI with N. Harings*)

2008: NSF NMSU Advance of Minority Participation, Bridge to Doctorate; **\$80,000** (co-PI with J. Morel*)

2008: NIH NMSU Maximizing Access to Research Careers; **\$8,500** (co-PI with M. Silva**)

2007: The Impacts of Water Loss due to Irrigation on Aquatic Communities in Desert Sinkholes. USDA National Research Initiative; **\$100,000** (PI)

2007: Managing Native Fish Species and Invertebrates in Desert Sinkholes. NM Game & Fish, **\$22,000** (PI with K. Swaim*)

2007: Relating Native Fish Abundance and Condition to Environmental Factors in Sinkholes in New Mexico. Water Resources Research Institute; **\$5,000** (co-PI with K. Swaim*)

2007 : Relating Native Fish Abundance and Condition to Environmental Factors in Sinkholes in New Mexico. T&E, Inc. ; **\$2,500** (co-PI with V. Greif**)

2007 : Does UV light facilitate fish predation ? NSF NMSU ADVANCE; **\$2,000** (co-PI with V. Greif**)

2006 : Chemical communication between male and female *Daphnia*. – NSF NMSU ADVANCE; **\$2,000** (co-PI with V. Zamora**)

2006 : Habitat Barriers to dispersal and gene flow in the tree frog (*Hyla wrightorum*). T & E, Inc; **\$1,995** (co-PI with J. Jungels*)

2005: NMSU Graduate School; **\$36,000** (PI with K. Swaim*)

2005: Temperature effects on larval development rate and survival of the endangered Rio Grande Silvery Minnow. T & E, Inc.; **\$2,500** (PI)

2004: NSF ADVANCE (**\$50,000**)

2004: NMSU Start-up funds (**\$50,000**)

List of Research Products
(until 2000 I spelled my last name 'Böing')

* - graduate student; ** - undergraduate student, # - corresponding author

Book Chapters

- Boeing, W.J.** 2019. Anti-Predator Behavior. *In: Choe J.C. (ed). Encyclopedia of Animal Behavior*, 4: 292-297.
- Boeing, W.J.** 2017. Defensive Avoidance. Reference Module in the Life Sciences. Elsevier
- Boeing, W.J.** 2010. Sample portfolios across disciplines: Fish, Wildlife, and Conservation Ecology – Wiebke J. Boeing. *In: Seldin, P., J.E. Miller and C.A. Seldin. The teaching portfolio: a practical guide to improved performance and promotion / tenure decisions.* 4th edition. Josey-Bass, A Wiley Imprint.
- Boeing, W.J.** 2010. Antipredator Defenses: Defensive Avoidance. *In: Breed M.D. and J. Moore (eds). Encyclopedia of Animal Behavior*, 476-480 Oxford: Academic Press. (**with honorarium**)
- Boeing, W.J.,** M.H. Martin and J.T. Duffy-Anderson. 2007. Groundfish. *In: Spies, R.B. (ed) Long-term ecological change in the northern Gulf of Alaska.* Elsevier, pp 200-311.

Proceedings

- Böing, W.J.** 1997. Die Reaktion des Phytoplanktons auf den Frassdruck von *Daphnia pulex* in Enclosure Experimenten. DGL-Tagungsband: 544-549.

Refereed Journal Articles

- Oyebamiji, O.O.*, A.A. Corcoran, E. Navarro-Pérez**, M.O. Ilori, O.O. Amund, F.O. Holguin, **W.J. Boeing**#. 2021. Lead tolerance and bioremoval by four strains of green algae from Nigerian fish ponds. *Algal Research*. In print.
- Guo, Z.*, **W.J. Boeing**, Y. Xu, C. Yan, M. Faghihinia, D. Liu. 2021. Revisiting seasonal dynamics of total nitrogen in reservoirs with a systematic framework for mining data from existing publications. *Water Research*. In print.
- Guo, Z.*, **W.J. Boeing**, E. Borgomeo, Y. Xu and Y. Weng. 2021. Linking reservoir ecosystems research to the sustainable development goals. *Science of the Total Environment*: 146769.
- Canton, M.C.*, F.O. Holguin, C.C. Gard and **W.J. Boeing**#. 2021. Allelochemical effect of gramine under temperature stress and impact on fat transesterification. *Chemistry and Ecology*, 37: 481-492.
- Hatch, M.D.*, F. Abadi, **W.J. Boeing**, S. Lois, M.D. Porter and D.E. Cowley. 2020. Sustainability management of short-lived freshwater fish in human-altered ecosystems should focus on adult survival. *PLOS ONE*: 0232872.
- Siville, B.* and **W.J. Boeing**#. 2020. Optimization of algal turf scrubber (ATS) technology through targeted harvest rate. *Bioresource Technology Reports* 9: 100360.
- Campos, H.*, **W.J. Boeing** and H.L. Throop. 2019. Decaying woodrat (*Neotoma* spp.) middens increase soil resources and accelerate decomposition of contemporary litter. *Journal of Arid Environments* 17: 104007.
- Canton, M.C.*, F.O. Holguin and **W.J. Boeing**#. 2019. Alkaloid gramine to control algal invaders: Algae inhibition and gramine persistence. *Bioresource Technology Reports* 7: 100304.

- Oyebamiji, O.O.*, **W.J. Boeing**, F.O. Holguin, O. Ilori and O. Amund. 2019. Green microalgae cultured in textile wastewater for biomass generation and biodegradation of heavy metals and chromogenic substances. *Bioresource Technology Reports* 7: 100247.
- Corcoran, A.A., M. Seger, R. Niu, N. Nirmalakhandan, P.J. Lammers, F.O. Holguin and **W.J. Boeing**[#]. 2019. Evidence for induced allelopathy in an isolate of *Coelastrella* following co-culture with *Chlorella sorokiniana*. *Algal Research* 41: 101535.
- Platt, S.G., J.L. Smith*, T.R. Rainwater, and **W.J. Boeing**. 2019. Notes on the predation of rough-footed mud turtles (*Kinosternon hirtipes*) in West Texas, USA. *Western North American Naturalist* 79: 130-134.
- Smith, J.L.* , S.G. Platt, R.L. Martin Jr. and **W.J. Boeing**. 2018. *Kinosternon hirtipes* (rough-footed mud turtle) nesting behavior and descriptions of nest sites. *Herpetological Review* 49: 109-110.
- Lammers, P.J., M. Huesemann, **W. Boeing**, D.B. Anderson, R.G. Arnold, X. Bai, K. Balachandran, M. Bohle, Y. Brhanavan, L. Brown, J. Brown, J.K. Brown, S. Chisholm, C.M. Downes, S. Fulbright, Y. Ge, J.E. Holladay, A. Khopkar, A. Koushik, P. Laur, B.L. Marrone, J.B. Mott, N. Nirmalakhandan, K.L. Ogden, R.L. Parsons, J. Polle, R.D. Ryan, T. Samocha, M. Seger, T. Selvaratnam, R. Sui, A. Thomasson, A. Unc, W. Van Voorhies, P. Waller, Y. Yao and J. Olivares. 2017. Review of the cultivation program within the National Alliance for Advanced Biofuels and Bioproducts. *Algal Research* 22: 166-186.
- Bartley, M.L.* , **W.J. Boeing**[#], D. Daniels, B.N. Dungan and T. Schaub. 2016. Optimization of environmental parameters for *Nannochloropsis salina* growth and lipid content using the response surface method and invading organisms. *Journal of Applied Phycology* 28: 15-24.
- Smith, J.L.* , S.G. Platt and **W.J. Boeing**. 2015. *Kinosternon hirtipes* (rough-footed mud turtle) maximum size and habitat. *Herpetological Review* 46: 82-83.
- Campos, H.** , **W.J. Boeing**[#], B.N. Dungan and T. Schaub. 2014. Cultivating the marine microalga *Nannochloropsis salina* under various nitrogen sources: Effect on biomass yields, lipid content and composition, and invasive organisms. *Biomass & Bioenergy* 66: 301-307.
- Harings, N.M.* and **W.J. Boeing**. 2014. Desert anuran occurrence and detection in artificial breeding habitats. *Herpetologica* 70: 123-134.
- Bartley, M.L.* , **W.J. Boeing**[#], F.O. Holguin and T. Schaub. 2014. Effect of pH on growth and lipid accumulation of the biofuel microalgae *Nannochloropsis salina* and invading organisms. *Journal of Applied Phycology* 26: 1431-1437.
- Boeing**, **W.J.**[#], K.L. Griffis-Kyle and J.M. Jungels*. 2014. Anuran habitat associations in the northern Chihuahuan Desert. *Journal of Herpetology* 48: 103-110.
- Xu, Y. and **W.J. Boeing**. 2014. Modeling maximum lipid productivity of microalgae: Review and next step. *Renewable and Sustainable Energy Reviews* 32: 29-39. **Special recognition with Renewable Energy Global Innovations**
- Xu, Y. and **W.J. Boeing**. 2013. Mapping biofuel fields: A bibliometric evaluation of research output. *Renewable and Sustainable Energy Reviews* 28: 82-91.
- Macanowicz, N.* , **W.J. Boeing**[#] and W.R. Gould. 2013. Evaluation of methods to assess benthic biodiversity in desert sinkholes. *Freshwater Science* 32: 1101-1110.
- Boeing**, **W.J.**[#] 2013. Aquaculture: an Ecologist's Perspective. *Journal of Fisheries & Livestock Production* 1: e105.
- Bartley, M.L.* , **W.J. Boeing**[#], A.A. Corcoran, F.O. Holguin and T. Schaub. 2013. Effects of salinity on growth and lipid accumulation of biofuel microalga *Nannochloropsis salina* and invading organisms. *Biomass & Bioenergy* 54: 83-88. **Special recognition with Renewable**

Energy Global Innovations

- Corcoran, A.A. and **W.J. Boeing**. 2012. Biodiversity increases the productivity and stability of phytoplankton communities. *PloS ONE*: e49397.
- Boeing, W.J.** # and C.W. Ramcharan. 2010. Inducible defenses are a stabilizing factor for predator and prey populations: a field experiment. *Freshwater Biology* 55: 2332-2338.
- Jungels, J.M. *, K.L. Griffis-Kyle and **W.J. Boeing** #. 2010. Low genetic differentiation among populations of the Great Plains Toad (*Bufo cognatus*) in Southern New Mexico. *Copeia* 2010: 388-396.
- Boeing, W.J.** #, B. Wissel and C.W. Ramcharan. 2010. Can costs and benefits of *Daphnia* defense against fish be measured in a field experiment? *Fundamental and Applied Limnology* 176: 1-10.
- Hylander, S. *, **W.J. Boeing**, W. Granéli, J. Karlsson, J. von Einem, K. Gutseit and L.-A. Hansson. 2009. Complementary UV protective compounds in zooplankton. *Limnology and Oceanography* 54: 1883-1893.
- Leech, D.M., **W.J. Boeing**, S. Cooke*, C.E. Williamson and L. Torres**. 2009. UV-enhanced fish predation and the differential migration of zooplankton to UV radiation and fish. *Limnology and Oceanography* 54: 1152-1161.
- Cooke, S.L. *, C.E. Williamson, D.M. Leech, **W.J. Boeing** and L. Torres**. 2008. Effects of temperature and ultraviolet radiation on diel vertical migration of freshwater zooplankton. *Canadian Journal of Fisheries and Aquatic Sciences* 65: 1144-1152.
- Boeing, W.J.** # and J.T. Duffy-Anderson. 2008. Ichthyoplankton dynamics and biodiversity in the Gulf of Alaska: responses to environmental change. *Ecological Indicators* 8: 292-302.
- Cáceres C.E., A. Christoff** and **W.J. Boeing**. 2007. Variation in ephippial buoyancy in *Daphnia pulex*. *Freshwater Biology* 52: 313-318.
- Boeing, W.J.** #, C.W. Ramcharan and H.P. Riessen 2006. Clonal variation in depth distribution of *Daphnia pulex* in response to predator kairomones. *Archiv für Hydrobiologie* 166: 241-260.
- Boeing, W.J.** #, C.W. Ramcharan and H.P. Riessen. 2006. Multiple predator defence strategies in *Daphnia pulex* and their relation to native habitat. *Journal of Plankton Research* 28: 571-584.
- Boeing, W.J.** #, B. Wissel and C.W. Ramcharan 2005. Costs and benefits of *Daphnia* defense against *Chaoborus* in nature. *Canadian Journal of Fisheries and Aquatic Sciences* 62: 1286-1294.
- Boeing, W.J.** #, D.M. Leech, C.E. Williamson, S. Cooke* and L. Torres**. 2004. Damaging UV radiation and invertebrate predation: Conflicting selective pressures for zooplankton vertical distribution in the water column of low DOC lakes. *Oecologia* 138: 603-612.
- Wissel, B., **W.J. Boeing** and C.W. Ramcharan. 2003. Effects of water color on predation regimes and zooplankton assemblages in freshwater lakes. *Limnology and Oceanography* 48:1965-1976.
- Benndorf J., **W. Böing**, J. Koop and I. Neubauer. 2002. Top-down control of phytoplankton: the role of time scale, lake depth, and trophic state. *Freshwater Biology* 47: 2282-2295.
- Benndorf J., B. Wissel, A.F. Sell, U. Hornig, P. Ritter and **W. Böing**. 2000. Food web manipulation by extreme enhancement of piscivory: an invertebrate predator compensates for the effects of planktivorous fish on a plankton community. *Limnologica* 30: 235-245. (#7 most often cited for that journal)

- Böing, W.J.**[#], A. Wagner, H. Voigt, T. Deppe and J. Benndorf. 1998. Phytoplankton responses to grazing by *Daphnia galeata* in the biomanipulated Bautzen reservoir. *Hydrobiologia* 389: 101-114.
- Kamjunke, N., **W. Böing** and H. Voigt. 1997. Bacterial and primary production under hypertrophic conditions. *Aquatic Microbial Ecology* 13: 29-35.

Technical Reports / Popular Articles

- Boeing, W.J.** 2019. GALs, a personal account. AAUW NM Fall Roadrunner.
- Boeing, W.J.** 2019. Exploring the Gila Wilderness with Girls on outdoor Adventures for Leadership and Science. The Grant County Beat. Community News.
<http://www.grantcountybeat.com/community/community-news/51835-exploring-the-gila-wilderness-with-girls-on-outdoor-adventures-for-leadership-and-science>
- Boeing W.J.** 2019. Exploring the Gila Wilderness with Girls on outdoor Adventures for Leadership and Science. USDA Forest Service News.
<https://www.fs.usda.gov/detail/gila/news-events/?cid=FSEPRD640438>
- Boeing, W.J.**, M. Barley*, A.A. Corcoran, Y. Xu, and H. Campos**. 2014. Polycultures and effects of environmental parameters on *Nannochloropsis salina* production and invading organisms. *In: Olivares, J.A. et al. National Alliance for Advanced Biofuels and Bio-products. Full Final Report, Section III. Department of Energy, pp 45-46.*
- Lammers, P., M. Huesemann, and **W.J. Boeing**. 2014. Cultivation. *In: Olivares, J.A. et al. National Alliance for Advanced Biofuels and Bio-products. Full Final Report, Section II. Department of Energy, pp 60-88.*
- Boeing, W.J.** 2013. Testing of a new shrimp diet (cottonseed meal and algae) to replace fish products. Cotton Incorporated Final Report.
- Boeing, W.J.**, M. Huesemann, and P. Lammers. 2013. NAABB Cultivation Team Summary Report. Department of Energy, 35 pp.
- Macanowicz, N.* and **W.J. Boeing**. 2013. Benthic macroinvertebrates in extreme environments: Sampling methods and influencing factors on benthic macroinvertebrate communities in desert sinkholes. NM Department of Game and Fish Final Report, 103 pp.
- Smith, J.* and **W.J. Boeing**. 2012. Habits and habitat of the Chihuahuan Desert mud turtle, *Kinosternon hirtipes*. T&E, Inc. Report, 11 pp.
- Macanowicz, N.* and **W.J. Boeing**. 2012. Life history requirements and suitable habitat for endangered invertebrates of Bitter Lake National Wildlife Refuge (BLNWR). NM Department of Game and Fish Annual Report, 9 pp.
- Boeing, W.J.** and K.M. Swaim*. 2009. Impacts of irrigation practices on aquatic communities in desert sinkholes. USDA National Research Initiative Final Report. 50 pp.
- Boeing, W.J.** and S. Hylander*. 2009. Different UV protective compounds in copepods occurring in desert sinkholes in response to UVR and fish predation. NM Department of Game and Fish Annual Report. 20 pp.
- Swaim, K.M.* and **W.J. Boeing**. 2008. Relating fish abundance and condition to environmental factors in desert sinkholes. NM Department of Game and Fish Annual Report. 64 pp.
- Swaim, K.M.* and **W.J. Boeing**. 2008. Relating native fish abundance and condition to environmental factors in sinkholes in New Mexico. T&E, Inc. Report, 59 pp.
- Swaim, K.M. and **W.J. Boeing**. 2007. Relating fish abundance and condition to environmental factors in desert sinkholes. *Fish Soup* 38: 9-10

- Boeing, W.J.** and K.M. Swaim*. 2007. Managing native fish species and invertebrates in desert sinkholes. NM Department of Game and Fish Annual Report. 9 pp.
- Swaim, K.M.* and **W.J. Boeing**. 2007. Relating native fish abundance and condition to environmental factors in sinkholes in New Mexico. T&E, Inc. Report, 3 pp.
- Swaim, K.M.* and **W.J. Boeing**. 2007. Relating fish abundance and condition to environmental factors in desert sinkholes. WRRRI report, 19 pp.
- Boeing, W.** and K. Swaim. 2007. Managing native fish species and invertebrates in desert sinkholes. Share with Wildlife Update. 7.
- Swaim, K. and **W. Boeing**. 2006. Relating fish abundance and condition to environmental factors in desert sinkholes. www.wrri.nmsu.edu/research/rfp/studentgrants06/proposals/Swaim.pdf
- Jungels, J.* and **W.J. Boeing**. 2006. Habitat barriers to dispersal and gene flow in the mountain tree frog (*Hyla wrightorum*). T&E, Inc. Report, 3 pp.
- Boeing, W.J.**, J.T. Duffy-Anderson and K.M. Bailey. 2004. Responses of Ichthyoplankton Biodiversity and Dynamics to Environmental Change. NOAA Quarterly Research Reports 1: 5-6.

Popular Articles/Interviews about Research Conducted in my Laboratory

- Chávez, A.M. 2019. Program for girls promotes STEM education, fellowship. NMSU ACES Magazine. 16-17.
- Tapia, X. 2018. NMSU GALS program empowered teenage girls through backpacking trip. Las Cruces Sun News August 18, 2018.
- Bannister, J. 2012. Algae and cotton a recipe to grow shrimp? Sun News July 16, 2012.
- Kovar, M. 2010. Boeing profile. NMSU Research & Resources.
- Martino, F. 2009. KRWG radio interview with Dr. Wiebke Boeing about biodiesel producing algae.
- Hayes, C. 2009. Picky about their (fish) neighbors. Share with Wildlife Update: 3.
- Nava, D. 2009. Search for alternative fuels brewing in state ponds. Round Up 9: 1.
- Olmsted, A. 2008. NMSU's Artesia Center Prepares for commercial demonstration of biodiesel project. NMSU News Center.
- Ash, S. 2007. NMSU Graduate Student investigates fish abundance in desert sinkholes. Divining Rod 30: 10.
- Ash, S. 2007. NMSU Graduate Student investigates fish abundance in desert sinkholes. US Fish & Wildlife Service. www.fws.gov/.../Fish%20Abundance%20in%20Desert%20Sinkholes.pdf
www.fws.gov/southwest/refuges/newmex/bitterlake/docs/Fish%2520Abundance%2520in%2520Desert%2520Sinkholes.pdf+Kristin+Swaim&hl=en&gl=us
- Martin, N. 2004. Fisheries Expert joins NMSU College of Agriculture. NMSU CAHE New Center.
- Duncan, A. 2004. New fisheries professor to study climate change, exotics. Round Up 106: 6.

Papers and Posters Presented before Professional Societies
(until 2000 I spelled my last name 'Böing')

* - graduate student; ** - undergraduate student

- Oyebamiji, O., M. Ilori, F. Holguin, W. Boeing. 2021. Lead tolerance and bioremoval by strains of green algae from a highly polluted Nigerian wastewater stream. Algal Biomass, Biofuels & Bioproducts, online.
- Varela, M.**, L. Samaniego*, **W.J. Boeing**. 2021. Diet analysis of native and invasive anurans in Sierra County, New Mexico. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, online.
- Siville, B.*, J. Castro*, M. Buenemann, **W.J. Boeing**. 2020. Algae Consortia and Microbiomes – Improving Culture Health and Performance through Diversity: Patch mosaic paradigms in algae turf scrubber substrate. Algal Biomass Summit, Virtual Conference.
- Siville, B.*, J. Castro*, M. Buenemann, **W.J. Boeing**. 2020. Patch mosaic paradigms in algae turf scrubber substrate. Algal Biomass Summit, Virtual Conference (poster).
- Boeing, W.J.**, M. Canton*, A.A. Corcoran, F.O. Holguin. 2020. Challenges and solutions in high density ecology: Lessons from algae cultivation. ASLO-SFS, Madison, WI, USA. (cancelled due to COVID-19)
- Samaniego, L.* and **W.J. Boeing**. 2019. Occupancy of native leopard frogs in response to biotic and abiotic variables. Chihuahuan Desert Conference, El Paso, NM, USA.
- Varela, M., L.A. Samaniego, **W.J. Boeing**. 2019. Diet analysis of native and non-native ranid species in Sierra County, New Mexico. Chihuahuan Desert Conference, El Paso, NM, USA (poster).
- Boeing, W.J.**, K. Swaim, N. Macanowicz, S. Hylander, C. Koebisch. 2019. From Bacteria to Fish – what spins the aquatic food web in desert sinkholes? Chihuahuan Desert Conference, El Paso, NM, USA.
- Samaniego, L.* and **W.J. Boeing**. 2019. Occupancy of American Bullfrog (*Lithobates catesbeianus*) and ecosystem impacts. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Albuquerque, NM, USA (poster).
- Siville, B.* and **W.J. Boeing**. 2019. Remediation of Aquatic Ecosystems with Algae Turf Scrubbers (ATS) – Optimization. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Albuquerque, NM, USA.
- Flynn, L.M.*, D. Doublet*, L. Kremer*, T. Rossettie* and **W. Boeing**. 2019. Challenges and rewards of starting a teenage mentorship program in a University STEM Department. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Albuquerque, NM, USA.
- Oyebamiji, O.*, **W.J. Boeing**, F.O. Holguin, P. Cooke, O. Amund, M. Ilori. 2018. Antibiotic stress and light intensity: two major factors involved in the accumulation of carotenoid pigments in green microalgae isolates. Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability, Sitges, Spain (poster).
- Oyebamiji, O.*, **W.J. Boeing**, F.O. Holguin, O. Amund, M. Ilori. 2018. Green microalgae species cultured in textile wastewaters for biomass generation and biodetoxification of heavy metals and chromogenic substances. Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability, Sitges, Spain (poster).

- Galarza, J.* , E. Delgado Licon, S. Munson-McGee, **W.J. Boeing**, D.J. Valles-Rosales. 2018. Glandless cottonseed meal as a protein source for aquaculture. American Society of Agricultural and Biological Engineers, Las Cruces, NM, USA.
- Holguin, F.O., **W.J. Boeing**, C. Brewer, N. Nirmalakhandan, P. Lammers, T. Schaub, W. Van Voorhies. 2016. The green marathon: algae cultivation, crop protection, co-products and conversion at NMSU. 5th Pan-American Congress on Plants and BioEnergy, Santa Fe, NM, USA.
- Oyebamiji, O.* , **W.J. Boeing**, F.O. Holguin, G. Oyetibo, O. Amund, O. Ilori. 2016. Heavy metals bioremoval and biostabilization of wastewater from Nigeria traditional textile cottage industry using green microalgae. Society for Applied Microbiology, Edinburgh, Scotland (poster).
- Oyebamiji, O.* , **W.J. Boeing**, F.O. Holguin, P. Cooke, O. Amund, O. Ilori. 2016. Spectral imaging: Tools for detection, distribution and correlation of secondary pigment and pollutants in microalgae. Society for Applied Microbiology, Edinburgh, Scotland (poster).
- Canton, M.C.* , F.O. Holguin, **W.J. Boeing**. 2016. Allelopathic organic alkaloid Gramine: Efficacy as an algae inhibitor and degradation. Association for the Sciences of Limnology and Oceanography, Santa Fe, NM, USA.
- Boeing, W.J.**, F.O. Holguin, R. Niu, M. Seger, G. Chavez**, P.J. Lammers. 2016. Direct competitive contact needed for production of allelopathic chemical. Association for the Sciences of Limnology and Oceanography, Santa Fe, NM, USA.
- Smith, J.* and **W.J. Boeing**. 2015. Habits and habitat of the rough-footed mud turtle, *Kinosternon hirtipes*. Texas Herpetological Society Symposium, San Marcos, TX, USA.
- Oyebamiji, O.O.* , **W.J. Boeing**, O. Holguin, O.O. Amund and M.O. Ilori. 2015. Heavy metal removal ability of two microalga species. 5th International Conference on Algal Biomass, Biofuels & Bioproducts, San Diego, CA, USA (poster).
- Oyebamiji, O.O.* , **W.J. Boeing**, O. Holguin, O.O. Amund and O. Ilori. 2015. Microalgae growth in untreated textile wastewater. 5th International Conference on Algal Biomass, Biofuels & Bioproducts, San Diego, CA, USA (poster).
- Holguin, F.O., R. Nui, M. Seger, W.J. Boeing, G.J. Chavez**, B. Dungan, N.A. Csakan, J. Jarvis, T. Schaub, and P.J. Lammers. 2015. Microalgal crop protection by allelopathic control. 5th International Conference on Algal Biomass, Biofuels & Bioproducts, Sand Diego, CA, USA.
- Campos, H.** , **W.J. Boeing**, B. Dungan and T. Schaub. 2015. Nitrogen media affects the productivity of *Nannochloropsis salina* cultures: algal biovolume, lipid signatures, and densities of invasive organisms. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Las Cruces, NM, USA.
- Brusuelas, J.** , N. Harings* and **W.J. Boeing**. 2015. Response of spotted salamander larvae to salinity and temperature. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Las Cruces, NM, USA.
- Boeing, WJ** and N. Macanowicz*. 2015. Habitat diversity, water quality, and biotic factors drive benthic macroinvertebrate communities in desert sinkholes. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Las Cruces, NM, USA.
- Lammers, P.J., M. Seger, G. Chavez**, N. Csakan, R. Niu, **W. Boeing**, O. Holguin and T. Schaub. 2014. Quality control systems reveal the *Yin* and *Yang* of outdoor algae cultivation. International Conference on Algal Biomass, Biofuels & Bioproducts, Santa Fe, NM, USA.

- Bennett, J.** , N. Harings* and **W.J. Boeing**. 2013. Response of spotted salamander (*Ambystoma maculatum*) to salinity and temperature. Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, USA.
- Harings, N.* and **W.J. Boeing**. 2013. Desert anuran occurrence and detection in artificial breeding habitat. Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, USA.
- Macanowicz, N.* and **W.J. Boeing**. 2013. Unique habitats for unique communities: what factors drive benthic macroinvertebrate communities in desert sinkholes. Association for the Sciences of Limnology and Oceanography, New Orleans, LA, USA.
- Xu, Y.Y. and **W.J. Boeing**. 2013. Modelling maximum lipid productivity of microalgae: review and next step. Association for the Sciences of Limnology and Oceanography, New Orleans, LA, USA.
- Boeing, W.J.**, M. Bartley*, P. Lammers and W. van Voorhies. 2013. Ecological dynamics and invasion rates of algae production systems under varying environmental conditions. Association for the Sciences of Limnology and Oceanography, New Orleans, LA, USA.
- Lammers, P.J., W. Van Voorhies, **W. Boeing** and T. Dale. 2012. Repeated nutrient additions enhance growth rate and reduce invader population during outdoor photobioreactor cultivation of *Nannochloropsis salina*. Conference on Algal Biomass, Biofuels and Bioproducts, San Diego, CA, USA.
- Macias, D.** , N. Harings* and **W.J. Boeing**. 2012. The effects of salinity on hatching and larval growth rates in *Spea multiplicata* and *S. bombifrons*. Annual Biomedical Research Conference for Minority Students. San Jose, CA, USA.
- Arviso, E.** , Z. Brecheisen** and **W.J. Boeing**. 2012. Resistance and resilience of algae poly- versus monocultures in response to salinity stress. SACNAS National Conference, Seattle, WA, USA.
- Bartley, M.L.* and **W.J. Boeing**. 2012. Predicting optimum growth and lipid accumulation of the microalgae *Nannochloropsis salina* and minimizing invading organisms with a response surface model. Ecological Society of America, Portland, OR, USA.
- Macanowicz, N.H.* and **W.J. Boeing**. 2012. Macroinvertebrate populations in desert sinkholes: Assessment of abiotic and biotic factors on assemblage and trapping methods. Society for Freshwater Science, Louisville, KY, USA.
- Boeing, W.J.**, J. Jungels* and K.L. Griffis-Kyle. 2012. Chihuahuan desert toad association with habitat. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA.
- Macanowicz, N.* and **W.J. Boeing**. 2012. Relationships of biotic and abiotic factors with benthic organisms in a desert wetland. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA.
- Campos, H.** and **W.J. Boeing**. 2012. Media assessment for *Nannochloropsis salina* algae cultures. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA (poster – **awarded best student poster**).
- Chavez, L.** and **W.J. Boeing**. 2012. Invader variability in raceway ponds for production of marine algae *Nannochloropsis salina*. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA (poster).
- Macias, D.** , N. Harings* and **W.J. Boeing**. 2012. The effects of salinity on larval growth rates in Southwestern toads *Spea multiplicata* and *S. bombifrons*. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA (poster).

- Pardee, R.**, H. Chaparro**, Z. Brecheisen**, L. Chavez**, M. Bartley* and **W.J. Boeing**. 2012. Manipulating pH and its effects on growth and lipid accumulation in marine microalgae *Nannochloropsis salina* and invaders. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA (poster).
- Villalobos, J.**, N. Macanowicz* and **W.J. Boeing**. 2012. Influence of temperature on growth of *Nannochloropsis salina* in algae production ponds and invasion of undesired organism. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Phoenix, AZ, USA (poster).
- Harings, N.* and **W.J. Boeing**. 2011. Development and survival response of *Spea multiplicata* to pH and UV-radiation. NM The Wildlife Society Meeting, Albuquerque, NM, USA.
- Corcoran, A. and **W.J. Boeing**. 2011. Biodiversity increases productivity and stability of algal communities subject to predation by the rotifer *Brachionus plicatilis*. Ecological Society of America, Austin, TX, USA.
- Boeing, W.J.**, J.A. Mapula** and D.E. Cowley. 2011. Temperature and salinity influence egg hatching and larval survival of Rio Grande silvery minnow. Sustainability on the Border: Water Climate, and Social Change in a Fragile Landscape Conference, El Paso, TX, USA.
- Boeing, W.J.**, M.J. Desmond, R. Valez, M.K. Carroll, V. Lombraña, A. Sells, J. Smith, R. Wiedenmann and J.P. Zebrowski. 2010. Student experiential learning in the natural resources. North American Colleges and Teachers of Agriculture Conference, State College, PA, USA (poster).
- Boeing, W.J.**, J.M. Jungels* and K.L. Griffis-Kyle. 2010. Low genetic differentiation among populations of the Great Plains Toad (*Bufo cognatus*) in Southern New Mexico. Chihuahuan Desert Conference, El Paso, TX, USA.
- Boeing, W.J.** and K.M. Swaim*. 2010. Influences of biotic versus abiotic variable on various trophic levels in an aquatic desert ecosystem. Joint Meeting of American Society of Limnology and Oceanography and North American Benthological Society, Santa Fe, NM, USA.
- Harings, N.* and **W.J. Boeing**. 2010. The influence of environmental variables on Southwestern toads. AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society, Flagstaff, AZ, USA.
- Mapula, J.A.**, **W.J. Boeing** and D.E. Cowley. 2008. Temperature and salinity influence egg hatching rate and survival of Rio Grande silvery minnow. AZ/NM Joint Meeting of The Wildlife Society and American Fisheries Society, Prescott, AZ, USA (poster – awarded best student poster).
- Boeing, W.J.** and M.J. Desmond. 2008. Combining scholarship and teaching with recruitment – how to kill two birds with one stone. Western Region Teaching Symposium, Las Cruces, NM, USA (poster).
- Swaim, K.M.* and **W.J. Boeing**. 2007. Relating fish abundance and condition to environmental factors in desert sinkholes. North American Benthological Society, Columbia, SC, USA.
- Boeing, W.J.** and K.M. Swaim*. 2007. How environmental variables influence biodiversity in 40 sinkholes in New Mexico. American Society of Limnology and Oceanography, Santa Fe, NM, USA.
- Swaim, K.M.* and **W.J. Boeing**. 2006. Favorable environmental conditions for management of native fishes in desert sinkholes. International Center for Arid and Semiarid Land Studies, Lubbock, TX, USA.

- Boeing, W.J.** and K.M. Swaim*. 2006. Food web complexity and zooplankton diversity in 40 sinkholes in New Mexico. *Deutsche Gesellschaft für Limnologie / Societas Internationalis Limnologicae*, Dresden, Germany.
- Kithil, P. And **W.J. Boeing**. 2006. Ocean carbon sequestration concept using wave-driven deep ocean pump system. Ocean Carbon Biogeochemistry Workshop, Woods Hole, MA, USA.
- Boeing, W.J.**, J.T. Duffy-Anderson and K.M. Bailey. 2004. Responses of Ichthyoplankton Biodiversity and Dynamics to Environmental Change. Marine Science in Alaska Symposium, Anchorage, AK, USA.
- Boeing, W.J.**, J.T. Duffy-Anderson, K.M. Bailey, A.C. Matarese, J.M. Napp, S.J. Picquelle and B.A. Megrey. 2003. New Metrics for Ecosystem Change: Bio-diversity and Dynamics of Ichthyoplankton Assemblages. Steller Sea Lion Symposium, Anchorage, AK, USA.
- Boeing, W.J.**, J.T. Duffy-Anderson and K.M. Bailey. 2004. Ichthyoplankton dynamics and diversity: prospects and limitations as ecosystem indicators. Quantitative Ecosystem Indicators for Fisheries Management, Paris, France. (poster)
- Boeing, W.J.**, J.T. Duffy-Anderson and K.M. Bailey. 2003. Responses of ichthyoplankton biodiversity and dynamics to environmental change. Larval Fish Conference, Santa Cruz, CA, USA.
- Boeing, W.J.**, D.M. Leech and C.E. Williamson. 2002. Sunburn or risk of predation: balancing conflicting evils in the water column. American Society of Limnology and Oceanography, Victoria, Canada.
- Leech, D.M., **Boeing, W.J.** and C.E. Williamson. 2002. The effects of UV and fish on zooplankton vertical migration. American Society of Limnology and Oceanography, Victoria, Canada.
- Boeing, W.J.**, B. Wissel and C.W. Ramcharan. 2001. The stabilizing role of prey defense in a pelagic food web. Ecological Society of America, Madison, WI, USA.
- Wissel, B., **W.J. Boeing** and C.W. Ramcharan. 2001. Effects of water color on predation regimes and zooplankton assemblages in freshwater lakes. Ecological Society of America, Madison, WI, USA.
- Boeing, W.J.**, B. Wissel and C.W. Ramcharan. 2001. Costs and benefits of *Daphnia* antipredator behavior toward fish in nature. American Society of Limnology and Oceanography, Albuquerque, NM, USA.
- Wissel, B., **W.J. Boeing** and C.W. Ramcharan. 2001. Efficiency of fish predation at various light levels. American Society of Limnology and Oceanography, Albuquerque, NM, USA.
- Boeing, W.J.**, B. Wissel and C.W. Ramcharan. 2001. Constraints by an invertebrate predator on the antipredator defense of *Daphnia*. Canadian Conference for Fisheries Research / Society of Canadian Limnologists, Toronto, Canada.
- Wissel, B., **W.J. Boeing** and C.W. Ramcharan. 2001. *Chaoborus* predation on zooplankton along a water color gradient. Canadian Conference for Fisheries Research / Society of Canadian Limnologists, Toronto, Canada.
- Boeing, W.J.** 2000. Variable behavioral, morphological, and life-history responses of *Daphnia* to predator kairomone. Aquatic and Marine Science Symposium, LUMCON, Cocodrie, LA.
- Böing, W.J.** 1996. Struktur und Biomasseänderung des Phytoplanktons in Abhängigkeit des Fraßdrucks (*Daphnia* spp.) und Nährstoffgehaltes. Deutsche Gesellschaft für Limnologie / Societas Internationalis Limnologicae, Schwedt, Germany.

Other Research Presentations

(until 2000 I spelled my last name 'Böing')

* - graduate student; ** - undergraduate student

- Varela, M. and **W.J. Boeing**. 2021. Cannabidiol on Aggression in *Betta splendens*. NMSU Undergraduate Research and Creative Arts Symposium, Las Cruces, NM, USA.
- Boeing, W.J.** 2020. From bacteria to fish: what spins the aquatic food web in desert sinkholes? Texas Tech University, Lubbock, TX, USA. (**invited speaker**, cancelled due to COVID)
- Boeing, W.J.** 2020. High-density ecology: Algae cultivation for biofuel production. Texas Tech University, Lubbock, TX, USA. (**invited speaker**, cancelled due to COVID)
- Boeing, W.J.** 2017. From bacteria to fish: what spins the aquatic food web in desert sinkholes? Ningbo University, China. (**invited speaker**)
- Jack, L.* and **W.J. Boeing**. 2015. Biofuels: Productivity of algal polycultures vs. monocultures. NSF EPSCoR Symposium, Albuquerque, NM, USA. (poster)
- Macanowicz, N.* and **W.J. Boeing**. 2013. Unique habitats for unique communities: benthic macroinvertebrate diversity in a desert wetland. NMSU Graduate Research & Arts Symposium, Las Cruces, NM, USA. (poster)
- Boeing, W.J.**, A.A. Corcoran and M.L. Bartley*. 2013. Biodiversity and environmental conditions that increase productivity and stability of *Nannochloropsis salina* and limit invading organisms. National Alliance for Advanced Biofuels and Bioproducts (NAABB) symposium, Tempe, AZ, USA. (**invited speaker**)
- Arviso, E.***, Z. Brecheisen** and **W.J. Boeing**. 2012. Resistance and resilience of algae poly- versus monocultures in response to salinity stress. NMSU Bridge Program, Las Cruces, NM, USA.
- Boeing, W.J.** 2012. Experiments and testbeds – Milestone 1. NAABB symposium, Phoenix, AZ, USA.
- Boeing, W.J.** 2012. Environmental simulations. NAABB symposium, Phoenix, AZ, USA.
- Boeing, W.J.** 2011. Crop protection and pond monitoring. NAABB External Advisory Board symposium, Tempe, AZ, USA.
- Boeing, W.J.** 2011. Effects of environmental parameters and biodiversity on productivity, lipid production and stability of algae production systems. NAABB External Advisory Board symposium, Tempe, AZ, USA.
- Bartley, M.*, **W.J. Boeing**, A. Corcoran, T. Schaub and F. Holguin*. 2011. Effects of salinity on growth and lipid accumulation of *Nannochloropsis salina* and invading organisms. NAABB External Advisory Board symposium, Tempe, AZ, USA. (poster)
- Corcoran, A. and **W.J. Boeing**. 2011. Biodiversity increases productivity and stability of phytoplankton communities. NAABB External Advisory Board symposium, Tempe, AZ, USA. (poster)
- Corcoran, A., M. Bartley and **W.J. Boeing**. 2011. Algae crop protection: minimizing undesired organisms. NAABB External Advisory Board symposium, Tempe, AZ, USA. (poster)
- Boeing, W.J.**, J.A. Mapula** and D.E. Cowley. 2011. Temperature and salinity influence egg hatching and larval survival of Rio Grande silvery minnow. Sustainability on the Border: Water, Climate, and Social Change in a Fragile Landscape Conference, El Paso, TX, USA.
- Boeing, W.J.** 2010. Ecology – crop protection. NAABB symposium, Albuquerque, NM, USA.

- Corcoran, A. and **W.J. Boeing**. 2010. Research efforts in the Boeing laboratory: environmental factors and community dynamics. NAABB Upstream Conference, St. Louis, MO, USA.
- Boeing, W.J.**, A.A. Corcoran and M.L. Bartley*. 2010. Environmental factors determining lipid content in *Nannochloropsis* and limiting undesired organisms. NAABB Cultivation Team, phone conference.
- Boeing, W.J.**, J.M. Jungels* and K.L. Griffis-Kyle. 2010. Chihuahuan desert toad habitat association and genetic differentiation of the Great Plains Toad (*Bufo cognatus*). Chihuahuan Desert Conference, El Paso, TX, USA.
- Bartley, M.L.*, A.A. Corcoran and **W.J. Boeing**. 2010. Effects of salinity on growth of marine microalgae *Nannochloropsis*. WRRRI Symposium, Socorro, NM, USA.
- Boeing, W.J.** 2010. Environmental factors determining lipid content in *Nannochloropsis* and limiting undesired organisms. NAABB symposium, St. Louis, MO, USA.
- Silva, M.R.** and **W.J. Boeing**. 2009. Effects of temperature and turbidity on foraging in Senegal bichir. NMSU Undergraduate Research and Creative Arts Symposium (URCAS), Las Cruces, NM, USA.
- Boeing, W.J.** 2009. Environmental influences on the aquatic food web in desert sinkholes. NMSU, Department of Plant and Environmental Sciences, Las Cruces, NM, USA. (**invited seminar**)
- Boeing, W.J.**, M. de Jong*, P.J. Lammers, V.G. Lee**, J.I. Rhodes**, W. van Voorhies and J. Winkler. 2008. Producing biodiesel: environmental factors determining lipid content in *Nannochloropsis* and limiting undesired organisms. NMSU University Research Council, Las Cruces, NM, USA. (poster)
- Lee, V.** and **W.J. Boeing**. 2008. Algae pond dynamics and ecology. Artesia, NM, USA.
- Greif, V.K.** and **W.J. Boeing**. 2008. Does UV light facilitate fish predation? NMSU URCAS, Las Cruces, NM, USA. (poster)
- Swaim, K.* and **W.J. Boeing**. 2007. Favorable environmental conditions for management of native fishes in desert sinkholes. NMSU Graduate Research and Arts Symposium, Las Cruces, NM, USA.
- Swaim, K.* and **W.J. Boeing**. 2007. Relating fish abundance and condition to environmental factors in desert sinkholes. WRRRI Symposium, Las Cruces, NM, USA.
- Boeing, W.J.** 2007. From abiotic factors to fish: What spins the complexity of a food web? Lund University, Lund, Sweden. (**invited seminar**)
- Boeing, W.J.** 2007. Food web complexity and diversity – What actually matters? University of Texas El Paso, El Paso, TX, USA. (**invited seminar with honorarium**)
- Mapula, J.A.**, **W.J. Boeing** and D.E. Cowley. 2007. Temperature and salinity influence egg hatching rate and larval survival of Rio Grande silvery minnow. NMSU URCAS, Las Cruces, NM, USA. (poster)
- Boeing, W.J.** and K.M. Swaim*. 2006. Favorable environmental conditions for management of native fishes in desert sinkholes. Bitter Lake Symposium, Roswell, NM, USA. (**invited speaker**)
- Boeing, W.J.** 2006. Increasing fish production. National Ocean Industries Association, Washington, DC, USA.
- Kithil, P. and **W.J. Boeing**. 2006. Ocean carbon sequestration concept using wave-driven deep ocean pump system. Ocean Carbon Biogeochemistry Workshop, Woods Hole, MA, USA. (poster)

- Boeing, W.J.** and J.T. Duffy-Anderson. 2004. From patches to ecosystems: the importance of scale in recruitment dynamics. Hatfield Marine Science Center, Newport, OR, USA. (**invited seminar**)
- Boeing, W.J.**, J.T. Duffy-Anderson and K.M. Bailey. 2004. Responses of ichthyoplankton biodiversity and dynamics to environmental change. Marine Science in Alaska Symposium, Anchorage, AK, USA. (**invited speaker**)
- Boeing, W.J.**, J.T. Duffy-Anderson, K.M. Bailey, A.C. Matarese, J.M. Napp, S.J. Picquelle and B.A. Megrey. 2003. New metrics for ecosystem change: biodiversity and dynamics of ichthyoplankton assemblages. Steller Sea Lion Symposium, Anchorage, AK, USA. (poster)
- Boeing, W.J.** and J.T. Duffy-Anderson. 2003. New metrics for ecosystem change: biodiversity and dynamics of ichthyoplankton assemblages. Symposium on Ecosystem Indicators, Seattle, WA, USA. (**invited speaker**)
- Boeing, W.J.** 2002. Consequences of predator-prey interactions for community stability. National Oceanic and Atmospheric Administration (NOAA), Seattle, WA, USA. (**invited seminar**)
- Boeing, W.J.** 2002. Antipredator defenses and community stability. Iowa State University, Ames, IA, USA. (**invited seminar**)
- Boeing, W.J.** 2002. Costs and benefits of *Daphnia* antipredator defense and consequences for community stability. Louisiana State University, Baton Rouge, LA, USA. (dissertation defense)
- Boeing, W.J.**, B. Wissel and C.W. Ramcharan. 2000. Costs and benefits of *Daphnia* antipredator behavior in nature. BioGrads Fall Symposium, Louisiana State University, Baton Rouge, LA, USA.
- Boeing, W.J.** 2000. Variable behavioral, morphological, and life-history responses of *Daphnia* to predator kairomone. Aquatic and Marine Science Symposium, LUMCON, Cocodrie, LA, USA.
- Böing, W.J.** 1996. Die Reaktion des Phytoplanktons auf den Frassdruck von *Daphnia pulex* in der Talsperre Bautzen und Enclosure Experimenten. University of Technology Dresden, Dresden, Germany. (thesis defense)
- Böing, W.J.** 1994. Phytoplankton in zwei Braungewässern in Fairbanks, Alaska. University of Technology Dresden, Dresden, Germany. (**invited seminar**)

Invited task forces

2008: Undergraduate Research Task Force

Awards and Recognition for Excellence in Research

2015: Association for the Sciences of Limnology and Oceanography Fellow

2015: Biomass & Bioenergy Outstanding Reviewer

2010: NMSU, College of Agriculture, Consumer and Environmental Sciences Team Award: Desmond, M.J., W.J. Boeing, M.K. Carroll, V. Lombraña, A. Sells, J. Smith, K. Smith, R. Valdez, and R. Wiedenmann. – Natural Resources Consortium.

2002: American Society for Limnology and Oceanography Travel Award (\$400)

2002: Louisiana State University BioGrads Travel Award (\$600)

2001: McDaniel Scholarship for Student Travel Award (\$450)
2001: Louisiana State University Graduate School Travel Award (\$300)
2001: Louisiana State University BioGrads Travel Award (\$200)
2000: Best Presentation, Louisiana State University BioGrads Symposium (\$200)
2000: Louisiana State University BioGrads Research Award (\$200)
1999: Louisiana State University BioGrads Research Award (\$150)
1999: Sigma Xi Graduate Student Research Grant-in-Aid (\$930)
1999: Association for Women in Science Educational Foundation Predoctoral Fellowship Award (\$1,000)
1994: DAAD (German Academic Exchange Program) Travel Award (\$500)

Teaching and Advising

Teaching Responsibilities and Load

For the past 5 years, I have taught two classes each year (three different undergraduate classes). Two are required core classes in our department (FWCE 301 – Ecology and FWCE 393 – Professional Experience) and one is an elective (FWCE 459 – Aquatic Ecology + laboratory). Classes have a typical enrollment of 25-50 students. In addition, our faculty rotates teaching the undergraduate and the graduate seminar.

I also teach various individualized classes (Problems, Special Topic, Research Credits etc.) for undergraduate and graduate students. In FY 2010/2011 I was identified as teaching the highest percentage of credits within our department.

I was on sabbatical leave in Fall 2017 and did not teach any classes during that semester.

Furthermore, since 2010, I have supervised 5 credit hours of internship (FWCE 391), 38 credits of problems (FWCE 448), 7 credits of Special Topics (FWCE 450), 6 credits of graduate level Special Topics (FWCE 535), 11 credits of graduate problems (FWCE 548), 7 credits of Special Research Programs (FWCE 598), 17 credit hours of thesis credit (WLSC 599), and 45 credits of Doctoral Research (BIOL 600, BIOL 700, and AGRO 700) for a total of 136 extra-curricular student credit hours (SCHs).

Altogether, I taught 1,330 SCHs since 2010.

Teaching performance

Peer evaluations

My peer evaluation stem from the workshop evaluations I received. In Fall 2010 and Spring 2012, I taught the ‘Testing the Waters: In-Class Activities that Increase Student Learning and Make Your Life Easier’. Both workshops were very well attended and I received 21 evaluations in 2010 and 14 evaluations in 2012. My workshop evaluations were 6.05 / 7 in Fall 2010 and 6.36 / 7 in Spring 2012.

Some written remarks included:

It was very inspirational and interesting. I will use it in class every day.

Great ideas for less lecture and better student learning that you can immediately implement. Team-based Learning is something to strive for over time.

The class activities are fun and work.

Well organized, excellent examples given. Nice job. Presenter funny!

Student Course Evaluations

Students evaluate instructors at the end of the semester in eight different categories on effectiveness, attitude, and fairness. Overall scoring occurs in 5 ratings, where the lowest rating is ‘unsatisfactory’ (0-20) and the highest is ‘very commendable’ (80-100). I am honored that students in my classes have consistently placed me in the top level. Below I summarize my scores in my different classes.

Student Evaluation Scores (past 5 years)							
Class (credits)	Semester	2014	2015	2016	2017	2018	Average
FWCE 393 (3)	Fall		90	95	sabbatical	96	
FWCE 301 (3)	Fall		95		sabbatical		
FWCE 459 (4)	Fall			95		97	
FWCE 515 (1)	Spring		95			100	
<hr/>							
Credit Weighted Grand Average							

Typical written remarks from students are:

Dr. Boeing is a great resource for wildlife majors. She has had a lot of great experience that she can relate to course material.

Seems to truly care about students' success.

She is able to switch things up when the class is losing interest.

She is easily approachable to ask questions or ask for help.

She discussed whatever we didn't understand and really helped us learn.

Informative. Fun. Professional. Interesting.

One of my favorite teachers.

Genuine interest in material and able to instill this passion into class.

*She provides a wonderful learning environment, making it easy to ask questions.
Everyone feels comfortable.*

Self-Improvement Activities

The scientific world is fluid and there are constant discoveries and new views to be accepted, questioned, or reinforced. It is my responsibility to stay informed and keeping up to date with the latest peer-reviewed literature and to keep my lecture material current. Similarly, teaching methods need to be tested and re-fined in order to become the most effective teacher possible and to continue my professional growth.

The NMSU Teaching Academy offers many classes regarding professional teaching development. I frequently attend those classes and have participated in three teaching conferences.

Teaching Academy

2019/2020: NMSU Teaching Academy Member (> 10 hours)
2018/2019: NMSU Teaching Academy Member (> 10 hours)
2017/2018: NMSU Teaching Academy Sustaining Member (>20 hours)
2016/2017: NMSU Teaching Academy Sustaining Member (>20 hours)
2015/2016: NMSU Teaching Academy Sustaining Member (>20 hours)
2014/2015: NMSU Teaching Academy Distinguished Member (>40 hours)
2013/2014: NMSU Teaching Academy Member (>10 hours)
2012/2013: NMSU Teaching Academy Sustaining Member (> 20 hours)
2011/2012: NMSU Teaching Academy Sustaining Member (> 20 hours)
2010/2011: NMSU Teaching Academy Distinguished Member (>40 hours)
2009/2010: NMSU Teaching Academy Most Distinguished Member (96 hours)
2008/2009: NMSU Teaching Academy Distinguished Member (53 hours)
2007/2008: NMSU Teaching Academy Sustaining Member (35.5 hours)
2006/2007: NMSU Teaching Academy Sustaining Member (31.5 hours)
2005/2006: NMSU Teaching Academy Distinguished Member (40 hours)
2004/2005: NMSU Teaching Academy Sustaining Member (21.5 hours)

Teaching Conferences

2021: Quality in Online Education Conference; New Mexico State University (1 day)
2008: Western Region Teaching Symposium; New Mexico State University (2 days)
2006: Sun Conference; Teaching Conference in El Paso, TX (2 days)
2005: Western Region Teaching Symposium; Colorado State University (3 days)

Other

2010/2011: Participant of the NMSU Advancing Leaders Program

2009/2010: Participant of first PRIMOS faculty cohort to advance undergraduate teaching and learning in STEM fields (**with honorarium**)

2004-present: Participant of the NMSU NSF ADVANCE mentoring program

2004-2008: 14 hours of professional development with NMSU NSF ADVANCE

2006: Fundraising workshop (2 days)

2006: Proposal writing workshop with Samuel Scheiner from NSF (5 hours)

2005: NM-AGEP / ADVANCE grant proposal development workshop

2005: NSF/NM EPSCoR week (3 days)

2005: 50th Annual New Mexico Water Conference (3 days)

2005: Bauer seminar “How to Grants” (2 days)

2004: USDA/CSREES Grantmanship Workshop, Tuscon, AZ (1 day)

Professional Service to Teaching

Guest Lectures

2007: Dr. R. Valdez’s Natural Resource Management class at NMSU (WLSC 110)

2006: Dr. R. Valdez’s Natural Resource Management class at NMSU (WLSC 110)

2006: Dr. K. Griffis-Kyle’s Introductory Biology class at NMSU (BIOL 111)

2006: Dr. Bruce Miller’s Ichthyology class at University of Washington

2001/2001: Several substitute lectures for Drs C. Ramcharan and M. Noor at Louisiana State University

Committee Memberships Related to Teaching

2008: Western Region Teaching Symposium Planning Committee

Consulting Activities

2017: NMSU Teaching Academy: Teaching Portfolio Mentor

2013: NMSU Teaching Academy: Tenure Portfolio Mentor

2012: NMSU Teaching Academy: Tenure Portfolio Mentor

2010: NMSU Teaching Academy: Teaching Portfolio Mentor

2009: ADVANCE mentor for Dr. Jin Yao (Jornada)

2009: NMSU Teaching Academy: Teaching Portfolio Mentor (**with honorarium**)

Special Honor, Awards of Excellence in Teaching

2009: Who’s who among Teachers in America

2001: William H. Gates Award for Excellence in Freshman Instruction

Academic Advising

I advise approximately 30 undergraduates and two graduate students each semester in both academic and personal issues. I am also the academic advisor for student-athletes of my

department. Furthermore, I regularly critique student's resumes, application letters and provide them with recommendation letters.

Other Advising Services to Students

Former graduate students

- Siville, Bert. 2020. ATS Technology: Function and optimization in small scale aquaculture. NMSU Dissertation, 99 pp.
- Samaniego, Lauren. 2020. Synthesizing biotic and abiotic factors responsible for the success of native and alien ranids on a ranch in southern New Mexico. NMSU Master's Thesis, 72 pp.
- Siville, Bert. 2018. Algae Turf Scrubbers. NMSU Master's Non-Thesis.
- Canton, Michael. 2016. Alkaloid gramine as a modle for allelopathy: algae inhibition, removal, and applications. NMSU Master's Thesis, 78 pp.
- Smith, Jennifer. 2016. Habits and habitats of the rough-footed mud turtle, *Kinosternon hirtipes*, and outlook for its survival. NMSU Dissertation, 149 pp.
- Macanowicz, Neeshia. 2013. Benthic macroinvertebrates in extreme environments: Sampling methods and influencing factors on benthic macroinvertebrate communities in desert sinkholes. NMSU Master's Thesis, 94 pp.
- Smith, Jennifer. 2013. Rough-footed mu turtle. NMSU Master's Non-Thesis.
- Bartley, Meridith. 2012. Optimization of environmental parameters for microalga *Nannochloropsis salina* growth and lipid accumulation, and minimizing of invading organisms. NMSU Master's Thesis, 59 pp.
- Harings, Nicole. 2012. Southwestern desert anuran response to environmental variables. NMSU Dissertation, 150 pp.
- Morel, James R. 2010. Survival trends and matrix projections of channel catfish (*Ictalurus punctatus*) population dynamics in the San Juan river, Utah-New Mexico. NMSU Master's Thesis, 104 pp.
- Swaim, Kristin M. 2008. Relating fish abundance and condition to environmental factors in desert sinkholes. NMSU Masters Thesis, 71 pp.
- Jungels, Jeremy. 2008. Habitat association and genetic similarity among populations of the Great Plains toad (*Bufo cognatus*) in the Chihuahuan Desert. NMSU Masters Thesis, 48 pp.

Present graduate students

Bryanna Quijada (MSc Non-Thesis)
Anthony Granite (MSc)
Mary Mitchell (MSc)

Former graduate student committees

- Tituskin, Julia. 2021. Species-specific responses to warming alter community composition. NMSU Master's Thesis, 64 pp.
- Polisetti, Kaavya. 2020. Evaluation of biomass productivity and nutrient removal by *Acutodesmus obliquus* in municipal wastewater for biofuel production. NMSU Master's Non-Thesis, 12 pp.

- Wallin, Tyler. 2019. Recovery of a native Southwestern trout under threat of wildlife and warming temperatures: An assessment of survival and thermal limits of Gila trout (*Oncorhynchus gilae*). NMSU Master's Thesis, 71 pp.
- Joffe, Nina. 2019. Symbiotic maintenance and stress response in the Hawaiian bobtail squid, *Euprymna scolopes*, under CO₂-driven ocean acidification. NMSU Dissertation, 157 pp. (Dean's representative)
- Galarza Prieto, Jorge. 2019. Effect of glandless cottonseed content as a main protein source of extruded shrimp feed digestibility. NMSU Master's Thesis, 102 pp. (Dean's representative)
- Munasinghe Arachchige, Srimali. 2018. Algal-based wastewater treatment: Factors influencing pathogenic bacterial inactivation and potential coliform regrowth. NMSU Master's Thesis, 65 pp. (Dean's representative)
- Delanka-Pedige, Himali. 2018. Algal-based wastewater treatment: Assessment of pathogen removal and bacterial community profile on effluent. NMSU Master's Thesis, 65 pp. (Dean's representative)
- Campos, Herman. 2017. Decayed woodrat middens increase soil resources and accelerate the decomposition of contemporary litter at *Yucca baccata* patches. NMSU Master's Thesis, 42 pp. (Dean's representative)
- Fatima, Sofia. 2016. Classification of copepods in sinkholes. NMSU Master's Thesis, 47 pp. (Dean's representative)
- Campbell, Meredith . 2016. Non-lethal detection of Asian fish tapeworm *Schyzocotyle acheilognathi* infection in humpback chub *Gila cypha* using a novel molecular screening tool. NMSU Master's Thesis, 82 pp.
- Roopnarain, Ashira. 2014. Optimisation of lipid production, harvesting processes and the mass culture of *Isochrysis galbana* U4 for biodiesel production. University of Witwatersrand, South Africa. PhD dissertation, 285 pp. (External Reviewer)
- Gregson, Jessica. 2014. Wastewater metagenomics in a wastewater algal system; laboratory scale evaluations. NMSU Master's Thesis, 71 pp. (Dean's representative)
- Rodriguez, Stacy. 2013. Evaluating radioprotectors for the enhancement of sterile insect technique when applied to *Aedes aegypti* mosquitoes. NMSU Master's Thesis, 51 pp. (Dean's representative)
- Castle, Wendy. 2013. Conflict and cooperation in the squid-Vibrio symbiosis. NMSU PhD Dissertation, 95 pp. (Dean's representative)
- Trujillo, Eduardo. 2010. Non-thesis Master's; NMSU Biology. (Dean's representative)
- Martin, Renee. 2010. Characterization of the genetic diversity in endangered Wyoming toad (*Anaxyrus baxteri*). NMSU Master's Thesis, 97 pp.
- Bisati, Chandana. 2010. Modeling algae biomass production in raceway reactors. NMSU Master's Thesis, 87 pp. (Dean's representative)
- De Jong, Marijn. 2009. Analysis of algae for biodiesel fuel production. NMSU Master's Thesis, 62 pp. (Dean's representative)
- Muldoon, Ariel C. 2007. Site fidelity and habitat use of a nonnative predatory fish in a manmade canal in New Mexico. NMSU Master's Thesis, 29 pp.
- McShane, Ryan R. 2007. Ecological effects of an invasive detritivorous fish in an intermittent arid-land system. NMSU Master's Thesis, 70 pp.

Present graduate student committees

Maryam Ashraf (Biology, NMSU)

Maribel Baeza (Biology, UTEP)

Jorge Galarza Prieto (Biology, NMSU)

Sergei Shalygin (Plant and Environmental Sciences, NMSU)

Jane Trujillo (Fish, Wildlife & Conservation Ecology, NMSU)

Anthony Cornwell (Plant and Environmental Sciences, NMSU)

Undergraduate student workers

Mariangel Varela (2019-present), Alizea Delgado (2019), Juanita Carballeira (2019), Nick Hadsell (2018), Alicia Medina (2018), Caleb Green (2017-2018), Marvin Jojola (2015-2017), Aliah Guerrero (2016), Rachel Bean (2015), Genevieve Tucker (2015), Edauri Navarro (2015), Gary Chavez (2013-2014), Herman Campos (2010-2013), Renee Pardee (2011-2013), Jacob Villalobos (2011-2013), Zach Brecheisen (2011-2013), Heberto Chapparo (2011-2013), Jasper Brusuelas (2011-2013), Daniel Macias (2011-2013), Levi Chavez (2010-2012), Alexander Pertusini (2011-2012), Devin Bendixsen (2011-2012), Richelle Morin (2010-2011), Josh Criswell (2011), Tim Clawson (2010), Lisa Rogash (2010), Justin Monzinger (2010), Dalli Chavez (2010), German Camacho (2010), David Alsworth (2010), Lauren Ross (2010), Tori Gadney (2010), Noah Moss (2010), Zachary Tiemann (2007-2010), Raymond Lucero (2008-2010), Shane Carver (2008-2010), Aaron McGuire (2008-2010), Brandon Foley (2008-2010), Jason Lithgow (2009-2010), Kelsey Gaffney (2009-2010), David Carrasco (2009-2010), Matteo Silva (2007-2009), Shelley Belin (2007-2009), Jesse Bergloff (2007-2009), Virginia Lee (2008-2009), Jordan Hill (2008-2009), Josh Wood (2008-2009), Allyson Rocks (2008-2009), Elena Tsentas (2009), Ian Dolly (2009), Daniel Trujillo (2009), Valerie Greif (2007-2008), Tyler Williford (2007), Justin Mapula (2005-2006), Victoria Zamora (2005-2006), Cheryl Stanton (summer 2005), Anna Christoff (summer 2004), Johnny Tenegra (summer 2004), Lisette Torres (summer 2001), Kenyatta Esters (1999-2002), Christie Yee (1999-2002), Lakisha Brown (2000-2001), Emily Hyfield (summer 2000), Amanda Case (summer 2000), Shannon Adams (summer 2000), Emily Smith (1998-2002), Eric Triche (1998-2001), Jessica Magro (1998-2001)

Judging Teams

2020: Judge and moderator for NMSU Research and Creative Week

2017: Judge for El Paso Community College Summer Art and Science Symposium

2005: Judge for the New Mexico State Science Fair

1999: Judge for the High School Science Fair in Louisiana

Student Clubs

2011-2013: Advisor of the NMSU Student Chapters of The Wildlife Society and American Fisheries Society – Our TWS students won the ‘**Best of the West**’ award at the student conclave competing with 14 other universities in 2013

2004-2010: Advisor of the NMSU Student Chapter of the American Fisheries Society

Outreach

Presentations

- Boeing, W.J.** 2020. The magical world in a water drop. Girl Scouts (6 workshops) – cancelled due to COVID
- Boeing, W.J.** 2020. The magical world in a water drop. Three 45-minute workshops for 32 female Middle School Students to explore science careers. Girls Can.
- Boeing, W.J.** 2018. Algae for biofuels. 2 workshops to High School students. Dream Keepers.
- Boeing, W.J.** 2014. Easy Applications for Ecological Concepts. 2 workshops for ‘Scientific Connected Communities’ SC² institute to Elementary School teachers.
- Boeing, W.J.** 2011. Microalgae for Biofuels. RASSI summer institute (Mean Green Science Machine) for High School students.
- Boeing, W.J.** 2011. Algae workshop. 8 workshops for ‘Scientific Connected Communities’ SC² institute for 240 High School teachers.
- Boeing, W.J.** 2010. How big to you have to be to save the world? 6 presentations to 120 NM MESA Middle and High School students at Vista Middle School.
- Boeing, W.J.** 2008. About my (fulfilled) dreams. Career Awareness Speaker to 200 High School students. Las Cruces, NM, USA. (**invited speaker**)
- Boeing, W.J.** 2008. Natural Resources. Presentation to 20 High School students from the Mescalero Apache Tribe. Las Cruces, NM, USA.
- Boeing, W.J.** 2003. Expanding your horizon. Presentation to High School women. American Association of University Women, Seattle, WA, USA. (**invited speaker**)

Recruitment Activities

- 2018-present:** Ran GALs (Girls on outdoor Adventure for Leadership and Science) Program – Graduate students take high school students into the Gila Wilderness for one week
- 2009-present:** Professional experience (FWCE 393) – College students present about their internship experiences at High Schools
- 2013-2014:** University contact to place San Andres High School students into internships
- 2010:** Hosted High School Students from the Bosque School in Albuquerque for 2 days and introduced them to various research projects (burrowing owls, toads, biodiesel)
- 2009:** Southern NM State Fair – created departmental promotional slide show and attended
- 2009:** Sampled sinkholes at Bitter Lake with High School students from the Bosque School in Albuquerque.
- 2006:** Undergraduate seminar (FWCE 402) – 12 students went to six local High Schools and gave presentations on fish, wildlife and conservation ecology related issues.
- 2006:** Lecture to Southwestern Indian Polytech Institute Natural Resource Program (2-year college).
- 2006:** Lecture “About my Dreams” to Indian Resource Development / Dream Keepers Summer Program (7th and 8th grade students)
- 2005:** Women Recruitment Fair at NMSU Doña Ana Branch Community College
- 2004:** Aggie Fair at the NMSU Corbett Center
- 2004:** Recruitment at four NM High School Fairs in Albuquerque, NM
- 2004:** Ocean Career Day

Service

Department of Fish, Wildlife and Conservation Ecology

- 2020:** Chair for Fisheries Ecologist Search Committee
- 2018-2019:** Department Head Search Committee Member
- 2018:** Reviewer for Dr. Boykin's P&T portfolios
- 2015:** Reviewer for Dr. Frey's P&T portfolio
- 2015:** Quantitative Ecologist Search Committee Member
- 2013:** Department Head Search Committee Member
- 2011-2013:** Advisor of the two student societies of our department (TWS and AFS)
- 2013:** Horstman, S. 2013. NMSU Wildlife Society wins "Best in the West". NMSU News Center and Hotline.
- 2004-2010:** Co-advisor of the NMSU American Fisheries Society student chapter
- 2010-present:** Graduate Curriculum Committee Member
- 2006-present:** Acting Department Head on several occasions
- 2005-present:** Facilities Committee Member (Chair from 2010-2011)
- 2004-present:** Organizer of 'Aquatic Ecology Laboratory Meetings'
- 2008-2010:** Undergraduate Curriculum Committee Member
- 2005-2008:** Undergraduate Curriculum Committee Chair
- 2005/2006:** Hosted five seminar speakers for the departmental seminar (terminated since)
- 2006:** Presentation to the Departmental Advisory Board about the Undergraduate Curriculum
- 2005:** Distance Education Committee
- 2005:** Departmental Retreat Committee
- 2004-2005:** Undergraduate Curriculum Committee Member
- 2004-2005:** Graduate student journal club
- 2006:** Introduction of our Department to college ambassadors
- 2005:** Representative for the Comprehensive Wildlife Conservation Strategy Forum (NMDGF)

College of Agriculture, Consumer and Environmental Sciences)

- 2019-present:** College P&T committee.
- 2021:** Workshop for Ag-Science projects for 4H/FFA youth
- 2020:** Reviewed 4 GA proposals for ACES.
- 2019:** Reviewed 5 GA proposals for ACES.
- 2018:** Search Committee for Academic Programs Assistant Dean
- 2018:** Sustainability Committee
- 2018:** Hemp – Added Value Committee
- 2018:** Reviewed Dr. Efren Delgado's P&T package
- 2008:** Western Region Teaching Symposium Planning Committee Member

New Mexico State University

- 2019-present:** P&T Committee member for the NMSU Library.
- 2009-present:** Mentor to junior faculty (Drs Jin Yao, Maria Castillo, Fitsum Abadi Gebreselassie, Efren Delgado, Colby Brungard)

2014-2018: Senator, Faculty Senate
2017: On 'Women in Academia Panel' at NMSU Teaching Academy
2016-2017: Biology Department Search Committee
2015: Teaching Academy Workshop "Testing the Waters – In-class activities" at Doña Ana Community College; **with honorarium**
2013: Mentor of Teaching Academy Workshop "P&T Portfolio"
2013: Reviewed 20 grant applications for the NMSU Internal Research Award
2012: Teaching Academy Workshop "Testing the Waters – In-class activities"
2012: Mentor of Teaching Academy Workshop "P&T Portfolio"
2011: Member of the Advancing Leaders Program and co-creator of 'Provost Project'
2011: University National Scholarship Committee – Reviewed and interviewed 5 students for Fulbright scholarships
2011: Head coach for Teaching Academy Workshop "Peer Coaching"
2010: Teaching Academy Workshop 'Testing the Waters – In-class activities'
2010: Mentor of Teaching Academy Workshop "Teaching Portfolio"
2010: Head coach for Teaching Academy Workshop "Peer Coaching"
2008-2011: University National Scholarship Committee
2008-2011: Campus Nomination Committee for the Udall Scholarship
2007-2011: Reviewer for NMSU Alliance for Minority Participation Program – Bridge to Doctorate Applications
2008: Undergraduate Research Task Force
2007: Moderator for the NMSU ADVANCE Mentoring Orientation

State of New Mexico / Community

2017: Presented Teaching Portfolios and Peer Review of Teaching Workshops at Oklahoma State University (with honorarium)
2013-2015: Consultant for Aztec Algae
2009-2012: Help at the Mescalero Fish Hatchery for a day once a year
2005-2008: Help at the Mescalero Fish Hatchery for a day once a semester
2009: Bitter Lake Fish Bucket Brigade
2009: Gila River (NM) Planning Economic Forum committee member
2007: Levee clean-up with the Consolidated Sportsmen
2005: Levee clean-up with the Consolidated Sportsmen
2003: Volunteer for the Nature Conservancy

Professional

2004-present: Review ~ 12 manuscripts and proposals for various journals / agencies each year
2021: Judge for four student presentations for AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society
2021: Moderator of the poster session for AZ/NM Joint Meeting of the Wildlife Society and American Fisheries Society
2017-2018: Reviewed 23 proposals for NSF GRFP
2016-2017: Reviewed 11 proposals for Strategic Research and Development Program (SERDP)
2015-2018: *Algal Research* Associate Editor

2015-2016: Scientific Committee for 2016 ASLO Meeting
2013-2015: ASLO Lindeman Award Committee
2015: Judge for Sigma Xi Student Research Showcase
2013-2014: *Journal of Fisheries and Livestock Production* Editorial Board
2013-2014: Reviewed P&T package for Dr. Kerry Griffis-Kyle and Dr. Sandra Connelly
2014: Reviewed Dissertation for University of The Witwatersrand, South Africa
2008: Session Chair, Ocean Sciences Meeting (ASLO, AGU and TOS), Orlando, Florida

Reviewer: Academia Sinica

African Journal of Marine Sciences
Algae
Algal Research
American Midland Naturalist
Annales de Limnologie – International Journal of Limnology
Archiv für Hydrobiologie
Basic and Applied Ecology
Behaviour
Biomass & Bioenergy
Bioresource Technology
Biotechnology Process
BMC Biology
BMC Developmental Biology
Canadian Journal of Fisheries and Aquatic Sciences
Desalination and Water Treatment
Ecological Applications
Ecology and Evolution
Ecology
Environmental Technology
Evolution
Functional Ecology
Freshwater Biology
Hydrobiologia
Journal of Applied Microbiology
Journal of Applied Phycology
Journal of Biomass and Bioenergy
Journal of Fisheries and Livestock Production
Journal of Plankton Research
Journal of Renewable and Sustainable Energy
Journal of the Science of Food and Agriculture
Journal of Theoretical Biology
Journal of Threatened Taxa
Limnologica
Limnology
Limnology and Oceanography
Marine Biology Research
Marine Drugs

National Science Foundation
National Fish and Wildlife Foundation
Netherlands Organisation for Scientific Research
NMSU Alliance for Minority Participation Program
New Mexico Water Resources Research Institute
Oecologia
Photochemistry and Photobiology
Proceedings of the Royal Society B
SeaGrant
Southwestern Naturalist
Water, Air & Soil Pollution
Water Research

Member: Ecological Society of America
Societas Internationalis Limnologicae (International Limnological Society)
American Society of Limnology and Oceanography
American Fisheries Society
Deutsche Gesellschaft für Limnologie (German Society for Limnology)
Sigma Xi