# **Hudson Robert DeYoe**

School of Earth, Environmental and Marine Sciences & Biology Department University of Texas –Rio Grande Valley 1201 W. University Dr.

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# Education

Edinburg, TX 78539

#### Graduate

Bowling Green State University, Bowling Green, OH. Ph.D, Biology. 1991. Dissertation: Preliminary characterization the relationship between *Rhopalodia gibba* (Bacillariophyceae) and its cyanobacterial endosymbiont.

University of Vermont, Burlington, VT. M.S., Botany, 1981. Thesis: Seasonal succession of the algae in Shelburne Pond, VT.

#### **Undergraduate**

Cornell University, Ithaca, NY. B.S., Biology, 1977. Southampton College, Southampton, NY. Marine Biology, 1973-1975.

#### **Professional Experience**

Associate Director, School of Earth, Environmental and Marine Sciences, University of Texas Rio Grande Valley, Edinburg, TX, January 2017-present. Assist Director in SEEMS administration.

Interim Director, Coastal Studies Laboratory, University of Texas Rio Grande Valley, Edinburg, TX, June 2015-August 2016. Supervise staff, oversee finances, advance research activity, and operations management.

Director, Center for Subtropical Studies, University of Texas - Pan American, Edinburg, TX, November 2001-August 2016. Encourage and coordinate research on regional environmental issues, secure funding and host public outreach activities on environmental issues, communicate and coordinate with administration, and membership and grant writing.

Professor of biology, Teaching and research. Area of research – Ecology of marine and freshwater algae and seagrasses, and human impact on aquatic ecosystems. Biology Department, University of Texas – Rio Grande Valley, Edinburg, TX, September 2009-present.

Associate professor of biology, Teaching and research. Area of research - marine and freshwater algae, seagrasses and water quality. Biology Department, University of Texas - Pan American, Edinburg, TX, September 2002-2009.

Assistant professor of biology, Teaching and research. Area of research - marine and freshwater algae. Biology Department, University of Texas - Pan American, Edinburg, TX, September 1996-2002.

Research coordinator, Oversight of a multi-faceted research program that provided information critical to the development of a comprehensive conservation management plan for a large estuarine system in south Texas. Duties included project report and RFP development and proposal review, contract administration, maintenance of QA/QC program, writing complex summary reports,

establishment of in-house library, and providing technical and logistical support to three large committees. Corpus Christi Bay National Estuary Program, Corpus Christi, TX August 1994- August 1996.

Post-doctoral research associate, Investigation of nitrogen physiology of the Texas "brown tide" alga and molecular sequence analysis of the rRNA gene of the Texas "brown tide" alga and *Aureococcus anophagefferens*. University of Texas at Austin Marine Science Institute, Port Aransas, TX. May 1992-July 1994.

Research associate, Investigation of the effect of environmental change on the water quality and algal communities of selected lakes in northern Michigan. University of Michigan Biological Station, Pellston, MI. April 1991- January 1992.

Research assistant, Scanning electron microscopy and starch gel electrophoresis in genetic study of alpine plants. Bowling Green State University, Bowling Green, OH. August 1988- May 1989.

Aquatic biologist, specialist in phycology. Responsibilities included designing and executing environmental monitoring and impact studies for nuclear power plant and hydroelectric projects, designing sampling equipment, collecting and analyzing a wide variety of aquatic biological samples, data analysis and report writing. Aquatec, Inc., South Burlington, VT. September 1980- May 1981, part-time; June 1981- July 1985, full-time.

Research assistant, Record-keeping and maintenance of extensive live collection of *Sedum* spp. for plant taxonomic research. Cornell University, Ithaca, NY. May 1976-January 1978, part-time.

## **Teaching Experience**

I have taught the following courses at the university:

General Biology lecture and lab

General Ecology lecture and lab

Marine Botany lecture and lab (graduate/undergraduate)

Plant Morphology lecture and lab

Biology Seminar (undergraduate)

Biology Problems (undergraduate)

Marine Ecology lecture and lab (graduate/undergraduate)

Graduate Biological Research Problems

Graduate Biology Seminar

Advanced Ecology (graduate)

Tropical Ecology (Costa Rica study abroad course)

Research Methods in Environmental Science

Laboratory instructor for Introductory Biology laboratories for Biology major course. Bowling Green State University, Bowling Green, OH. January 1992- May 1992.

Laboratory coordinator/instructor, Coordinator for Introductory Biology courses for Biology major and non-majors in addition to teaching laboratories. Bowling Green State University, Bowling Green, OH. September 1990- May 1991.

Laboratory coordinator, Coordinator for Introductory Biology laboratories. Bowling Green State University, Bowling Green, OH. June 1987- June 1988.

Laboratory instructor for Introductory Biology, Limnology and Plant Physiology laboratory courses. Bowling Green State University, Bowling Green, OH. September 1985- May 1988.

Laboratory instructor for Introductory Biology and Botany laboratories. University of Vermont, Burlington, VT. September 1978- May 1980.

#### **Grants/Contracts**

Proposal entitled "Connecting Catchment to Coast: Freshwater Inflow". Submitted to Texas Sea Grant Program. Budget \$302,281, Pending.

Proposal entitled "Ecosystem response to climate change in the Gulf of Mexico: Coupled natural-human system dynamic". Submitted to Gulf Research Program. \$389,609, Pending.

Contract entitled "Texas Beach Watch Program- South Padre Island". Awarded \$96,145. Texas General Land Office, 9/1/18-8/31/19. Principal Investigator.

Proposal entitled "Texas Beach Watch Program- South Padre Island". Awarded \$97,532. Texas General Land Office, 9/1/17-8/31/18. Principal Investigator.

Proposal entitled "LLM-PEM: A Predictive Ecological Model for the Lower Laguna Madre-Drift Algae and Seagrass Component". Awarded \$49,171, 9/16-5/18. One Gulf Program. Co-Principal Investigator.

Proposal entitled "Texas Beach Watch Program- South Padre Island". Awarded \$97,532. Texas General Land Office, 9/1/16-8/31/17. Principal Investigator.

Proposal entitled "Experiential Learning Program at Two Hispanic Serving Institutions on Water for Agriculture, Food Safety and Childhood Obesity Amount." Awarded \$213,772. USDA, National Institute of Food and Agriculture, Hispanic Serving Institutions Education Grants. Senior Personnel.

Proposal entitled "Lower Rio Grande Valley Environmental Leaders Workshop". Awarded \$25,000, 8/14-12/16. CE3SAR Research Coordination Network. Principal Investigator.

Proposal entitled "Sampling Services for a Binational Synoptic Water Quality Survey of the Lower Rio Grande/Rio Bravo". Awarded \$29,279, 7/15-8/16. Texas Commission for Environmental Quality. Co-Principal Investigator.

Proposal entitled "Sampling Services for a Binational Synoptic Water Quality Survey of the Lower Rio Grande/Rio Bravo". Awarded \$35,580, 7/14-7/15. Texas Commission for Environmental Quality. Co-Principal Investigator.

Proposal entitled "Water quality along salinity wedge of the Rio Grande Estuary". Awarded \$16,000, 9/14-10/15. Texas Water Development Board. Principal Investigator.

Proposal entitled "Sampling Services for the Binational Synoptic Water Quality Survey of the Lower Rio Grande/Rio Bravo". Awarded \$35,243. 7/14-12/14. Co-Principal Investigator.

Proposal entitled "Modeled Inflow Validation & Nutrient Loading Estimation in Two Subwatersheds of the Lower Laguna Madre". Awarded \$98,440, 10/13 to 8/16. Texas General Land Office- Coastal Management Program. Principal Investigator.

Proposal entitled "Collection of water quality data for the Rio Grande Delta". Awarded \$11,000, 2/13-8/14. Texas Water Development Board. Principal Investigator.

Proposal entitled "Modeling the Impact of Solar-Powered Circulation on the Dynamic and Eutrophication of the Impaired Saltwater Transition of the Arroyo Colorado of South Texas." Awarded \$39,953, 4/12 to 2/14. Texas Engineering Experiment Station. Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 1/12-12/12. Texas Water Development Board. Principal Investigator.

Proposal entitled "Reassessment of seagrass distribution and biomass in the Lower Laguna Madre, Texas." Awarded \$18,354, 3/12 to 8/13. Texas General Land Office Coastal Management Plan Program. Principal Investigator.

Proposal entitled "Characterization of nitrogen loading to the Lower Laguna Madre." Awarded \$4,583 7/11 to 8/12. Texas Water Development Board. Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 1/11-12/11. Texas Water Development Board. Principal Investigator.

Proposal entitled "Effects of Hydrology and Nutrient Loadings on Invasive Plant Production in the Rio Grande Estuary". Awarded \$18,153, 9/10-8/13. USDA through Sul Ross State University. Principal Investigator.

Proposal entitled "Competition between seagrass and newly introduced green algae in the Lower Laguna Madre, Texas." Awarded \$1,997, 8/10-8/11. UTPA Undergraduate Research Initiative.

Proposal entitled "Effects of River Flow and Nutrient Loading on Estuarine Wetlands of the Lower Rio Grande". Hudson DeYoe. Awarded \$29,000, 9/09-8/12. Funded by USDA through Sul Ross State University.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 1/10-12/10. Texas Water Development Board. Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 1/09-12/09. Texas Water Development Board. Principal Investigator.

Proposal entitled "Assessment of oxidative stress induction by hydrogen sulfide in the seagrass *Thalassia testudinum*". Awarded \$5,000, 11/08-8/09. UTPA Faculty Research Council. Principal Investigator.

Proposal entitled "Characterization of the water quality and phytoplankton of the Lower Rio Grande." Awarded \$1787, 11/08-8/09. UTPA Undergraduate Research Initiative.

Proposal entitled "Effects of River Flow and Nutrient Loading on Estuarine Wetlands of the Lower Rio Grande". Awarded \$30,569, 7/08-7/10.USDA through Sul Ross State University. Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$8,000, 9/07-12/08. Texas Water Development Board. Principal Investigator.

Proposal entitled "Restoration of the Bahia Grande- Phase II". Awarded \$89,041, 12/06-12/09. US EPA Gulf of Mexico Program. Co-Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 4/06-3/07. Texas Water Development Board. Principal Investigator.

Proposal entitled "Lower Rio Grande water and flow monitoring program". Awarded \$20,000, 9/04-3/06. Texas Water Development Board. Principal Investigator.

Proposal entitled "Restoration of the Bahia Grande- Phase I". Awarded \$46,188, 12/04-8/06. United States Fish & Wildlife Service. Co-Principal Investigator.

Proposal entitled "Advanced College Experience in the Biological Sciences". Awarded \$150,000, 7/02-7/07. United States Department of Agriculture. Co-Principal Investigator.

Proposal entitled "Renovation and expansion of the seawater system at the UTPA Coastal Studies Laboratory". Awarded \$47,000, 11/02-10/05. National Science Foundation. Co-Principal Investigator.

Proposal entitled "Estuarine water quality monitoring program". Awarded \$4,318, 9/02-8/03. Texas Water Development Board through University of Texas Marine Science Institute. Principal Investigator

Proposal entitled "Estuarine water quality monitoring program". Awarded \$4,117, 9/01-8/02. Texas Water Development Board through University of Texas Marine Science Institute. Principal Investigator

Proposal entitled "Rapid Assessment of Seagrass Stress and Productivity Using Pulse Amplitude Modulated Fluorometry". Awarded \$57,691, 3/02-3/07. Texas Sea Grant Program. Co-Principal Investigator.

Proposal entitled "Drift algae dynamics and their role in seagrass bare patch development." Awarded \$2,100, 11/00-8/01. Coastal Conservation Association. Principal Investigator.

Proposal entitled "Estuarine water quality monitoring program". Awarded \$3,354, 10/00-9/01. Texas Water Development Board through University of Texas Marine Science Institute.

UTPA Scholar's Fund Awarded \$6,307 for graduate student support. 10/0-8/01. UTPA Administration.

Proposal entitled "Web Site Development for the General Biology Laboratory, Parts I and II". Awarded fall 1999 and spring 2000 \$1000 by Title III Student Retention Mini-Grant Program.

Proposal entitled "Phytoplankton and Water Quality Monitoring of the Lower Rio Grande: Continuation". Awarded \$1600 11/99 by Undergraduate Research Scholar's Program. Principal Investigator.

Proposal entitled "Phytoplankton and Water Quality Monitoring of the Lower Rio Grande". Awarded \$3,447 11/99 by the UTPA Faculty Research Council. Principal Investigator.

Proposal entitled "A preliminary investigation of the growth of epiphytes and seagrasses under the influence of treated wastewater discharge." Awarded \$3,738 1/99 by the Texas Sea Grant Program. Principal Investigator.

Proposal entitled "Roles of nitrogen to phosphorus supply ratios and grazer pressure on maintenance of the Texas brown tide". Awarded \$54,803 1/98 by the Texas Higher Education Coordinating Board. Principal Investigator.

Proposal entitled "Characterization of the Structure and Composition of Wind Tidal Flat Algal Mats in South Texas". Awarded \$3,480 10/97 by the UTPA Faculty Research Council. Principal Investigator.

Research Fellow, University of Texas Marine Science Institute, September 1995-August 1996.

Non-service fellowship awarded by Graduate College, Bowling Green State University, Bowling Green, OH, September 1989- August 1990.

Sigma Xi Grants-in-Aid, awarded in 1987 to assist in doctoral research.

#### **Publications**

Dirrigl, F., A. Chavez, J. Vanegas, and H. DeYoe. 2019. Identifying Regional Sustainability and Environmental Issues: Adoption of an Interdisciplinary Charrette Approach. Planning Education and Research. Submitted 8/19.

Hudson DeYoe, Robert I. Lonard, Frank W. Judd, Richard Stalter and Ilka Feller. 2019. The Biological Flora of the Tropical and Subtropical Intertidal Zone- *Rhizophora mangle* L.: A Review. Journal of Coastal Research- Accepted with revision.

Kowalski, J.L., H.R. DeYoe, G.H. Boza, Jr., D.L. Hockaday, and P. Zimba 2018. A comparison of salinity effects from Hurricanes Dolly (2008) and Alex (2010) in a Texas lagoon system. Journal of Coastal Research v. 34(6): 1429–1438.

Judd, F.W., R.L. Lonard, K.R. Summy, H.R. DeYoe, and R. Stalter. 2017. The biological flora of coastal dunes and wetlands: *Avicennia germinans* (L.) L. Journal of Coastal Research 33: 191-207.

Castillo-Villar, K., M. Cabrera-Rios, M. Persans and H. DeYoe. 2016. Engaging minority students in sustainable bioenergy and water quality through an education and research network. Proceedings of the 2016 American Society for Engineering Education Annual Conference & Exposition.

Kowalski, J.L., H. R. DeYoe, and T. C. Allison. 2016. Flowering and seed production in the subtropical seagrass *Halodule wrightii* (Shoal Grass). Botanica Marina 59 (2-3): 193-199.

DeYoe, H.R. and J.L. Kowalski. 2014. Range extension of the macroalgae *Anadyomene stellata* (Wulf. In Jacquin) C. Agardh and re-appearance of *Caulerpa sertularioides* (S.G. Gmel.) M. Howe into the Lower Laguna Madre, Texas. The Southwestern Naturalist 59(2): 55-59.

Palmer, T.A., P.A. Montagna, J.B. Pollack, R.D. Kalke and H.R. DeYoe. 2011. The role of freshwater inflow in lagoons, rivers, and bays. Hydrobiologia 667 (1): 49-67.

Kowalski, J.L., H.R. DeYoe, C.P. Krull and T.C Allison. 2009. Comparison of leaf-clipping and leaf piercing techniques as applied to the seagrass *Syringodium filiforme* (Kutz.). Bulletin of Marine Science 85(2&3): 212-226.

Kowalski, J.L., H.R. DeYoe and T.C. Allison. 2009. Seasonal Production and Biomass of the Seagrass, *Halodule wrightii* Aschers. (Shoal Grass), in a Subtropical Texas Lagoon. Estuaries and Coasts 32(3): 467-483.

Kowalski, J.L., D.L. Hockaday, G. H. Boza Jr. and H.R. DeYoe. 2007. Re-occurrence of the tropical green macroalga, *Penicillus capitatus* (Chlorophyta: Bryopsidales), in Lower Laguna Madre of South Texas. Texas Journal of Science. v. 59(4): 305-10.

DeYoe, H.R., E. Buskey, F. Jochem. 2007. Physiological Responses of *Aureoumbra lagunensis* and *Synechococcus* sp. to Nitrogen Addition in a Mesocosm Experiment. Harmful Algae. v.6(1): 48-55.

Mausel, P.W., R. Jensen, N. Dias, C. Yang, J. Everitt, R. Fletcher, D. Hockaday, H.R. DeYoe. 2005. Preliminary Spectral Assessment of Laguna Madre Water Features Using AISA+Hyperspectral Data. Proceedings of 20<sup>th</sup> Biennial Workshop on Aerial Photography, Videography and High Resolution Digital Imagery for Resource Assessment.

De Yoe, H.R., D. Hinojosa-Kettelkamp, J. Carter, A. Vasquez and K.R. Summy. 2005. Quantifying spatial distribution of wind tidal flat cyanobacterial mats using color and color infrared photography. Proceedings of 20<sup>th</sup> Biennial Workshop on Aerial Photography, Videography and High Resolution Digital Imagery for Resource Assessment.

Yousef, S., K.R. Summy, C.R. Little, A. Kuang and H. DeYoe. 2005. Detection of stressors in glasshouse crops using color infrared imagery: III. Effects of salt toxicity and nitrogen deficiency. Proceedings of 20<sup>th</sup> Biennial Workshop on Aerial Photography, Videography and High Resolution Digital Imagery for Resource Assessment, Weslaco, TX.

Summy, K.R., H.R. DeYoe, J.H. Everitt and M.R. Davis. 2004. Use of aerial color infrared photography for mapping the spatial distribution of cyanobacterial mats in wind-tidal flats of the Lower Laguna Madre, Texas. Proceedings of 19<sup>th</sup> Biennial Workshop on Color Photography, Videography and Airborne Imaging for Resource Assessment.

Buskey, E., H.R. DeYoe, F. Jochem and T. Villareal. 2003. Effects of mesozooplankton removal and ammonium addition on planktonic trophic structure during a bloom of the Texas "brown tide": a mesocosm study. J. Plankton Research 25(2): 215-228.

Kowalski, J.L., H. R. DeYoe, T. C. Allison, and J. E. Kaldy. 2001. Optimization of the leaf-clip technique and comparison of leaf-clip and leaf-marking techniques for productivity estimation in <u>Halodule wrightii</u> Aschers. Marine Ecology Progress Series. 220:131-136.

DeYoe, H.R. and D.L. Hockaday. 2001. Range extensions of the seaweeds *Codium taylorii* and *Caulerpa prolifera* in the Lower Laguna Madre, Texas. Texas J. Science 53(2): 190-192.

DeYoe, H.R., D.A. Stockwell, R.R. Bidigare, M. Latasa, P. Johnson, P. Hargraves and C.A. Suttle. 1997. Description and characterization of the algal species *Aureoumbra lagunensis* gen. et sp. nov. and referral of *Aureoumbra* and *Aureococcus* to the Pelagophyceae. J. Phycology 33: 1042-1048.

DeYoe, H.R., A.M. Chan and C.A. Suttle. 1995. Phylogeny of *Aureococcus anophagefferens* and a morphologically similar bloom-forming alga from Texas as determined by 18S ribosomal RNA sequence analysis. J. Phycology 31(3):413-418.

DeYoe, H.R. and C.A. Suttle. 1994. The inability of the Texas "brown tide" alga to use nitrate and the role of nitrogen in the initiation of a persistent bloom of this organism. J. Phycology 30(5):800-806.

DeYoe, H.R., J.C. Marks, R.L. Lowe. 1992. The effect of nitrogen and phosphorus on the endosymbiont load of *Rhopalodia gibba* and *Epithemia turgida* (Bacillariophyceae). J. Phycology 28(6):773-777.

Galen, C., J.S. Shore and H.R. DeYoe.1991. Ecotypic divergence in alpine *Polemonium viscosum*: genetic structure, quantitative variation and local adaptation. Evolution 45(5):1218-1228.

Keithan, E.D., R. L. Lowe, H. R. DeYoe. 1988. Benthic diatom distribution in a Pennsylvania stream: The role of pH and nutrients. J. Phycology 24:581-585.

#### **Technical Reports**

Jones, K., L. Camacho, T. Sinha, O. Al-Qudah, H. DeYoe, A. Sanchez Gonzalez, J. Ho, J. Guerrero 2018. Laguna Madre Estuary Program Environmental Strategic Plan - Final Report. GLO Contract 17-184-000-9821.

Ho, J. and H.R. DeYoe. 2016. TCEQ Water Quality Survey 2014-2016, Final Report.

DeYoe, H.R., W. Pulich and N. Fernando. 2016. Modeled inflow validation and nutrient loading estimation in two subwatersheds of the Lower Laguna Madre. Final Report. Prepared for the Texas General Land Office Coastal Management Program. 41 p.

DeYoe, H.R. and J.L. Kowalski. 2013. Reassessment of Seagrass Distribution and Biomass in the Lower Laguna Madre, Texas. Final Report. Prepared for the Texas General Land Office Coastal Management Program. 120 p.

De Yoe, H., R. J. Edwards, D. Buzan, W. Pulich, Jr., J. Benavides and C. Marin. 2012. Rio Grande, Rio Grande Estuary, and Lower Laguna Madre Basin and Bay Expert Science Team for the Lower Rio Grande Basin. 2012. Environmental Flows Recommendations Report. Final Submission to the Environmental Flows Advisory Group, Rio Grande, Rio Grande Estuary, and Lower Laguna Madre Basin and Bay Stakeholders Committee, and Texas Commission on Environmental Quality, 237 p.

Hicks, David W., Hudson DeYoe, Tom Whelan, Jude Benavides, Mary J. Shands, and Elizabeth Heise. 2010. Bahia Grande Restoration Monitoring: Final Report. Prepared for USEPA Gulf of Mexico Program.

DeYoe, H.R. 2007. Bahia Grande Restoration Project: 2006-07 Annual Report. Prepared for the U.S. Gulf of Mexico Program.

DeYoe, H.R. 2006. Bahia Grande Restoration Project: 2005-06 Annual Report. Prepared for the U.S. Gulf of Mexico Program.

DeYoe, H.R. and R.L. Lowe. 1991. The effect of slightly elevated temperature on the benthic algal community of Douglas Lake, Michigan. Prepared for the University of Michigan Biological Station, Pellston, MI.

DeYoe, H.R. and R.L. Lowe. 1991. A water quality survey of fifteen lakes in Cheboygan and Emmet Counties, MI. Prepared for the University of Michigan Biological Station, Pellston, MI.

Binkerd, R.C., H.G. Johnston, P.C. Downey, S.C. McAvoy and H.R. DeYoe. 1983. Operational and Biological Studies: The Vermont Yankee/Connecticut River System. Prepared for Vermont Yankee Nuclear Power Corp., Brattleboro, VT.

Binkerd, R.C. and H.R. DeYoe. 1983. Water Quality Effects of Redevelopment of the Highgate Falls Hydroelectric Project. Prepared for Swanton Village Electric Light Dept., Swanton, VT.

#### **Published Abstracts and Oral/Poster Presentations**

DeYoe, H. and W. Pulich. 2018. Evaluating a Seagrass Productivity Model for the Lower Laguna Madre. Gulf Estuarine Research Society meeting, Galveston, TX.

Perdomo, R., J. Garcia, E. Gonzalez, C.L Cheng and H. DeYoe. 2018. Hydrology, Water Chemistry, and Biological Indicators Used to Assess the Effects of Treated Effluent on Unconfined Coastal Environments. Gulf Estuarine Research Society meeting, Galveston, TX.

Pinon, C., J. Garcia, H. DeYoe and K. Cammarata. 2018. Potential Impact of Wastewater Treatment-Derived Nutrients on Seagrass and Epiphyte Communities in the Lower Laguna Madre. SACNAS meeting, San Antonio, TX.

Chavez, L, B. Schier, G. Hinojosa, M. Pena, A. Rodriguez, E. Garcia, A. Ly, K. Castillo, H. DeYoe and M. Persans. 2018. Towards a sustainable energy solution... optimizing neutral lipid production in

algae. 8th International Conference on Algal Biomass, Biofuels and Bioproducts Conference, Seattle, WA.

Perdomo, R., C. Cheng, H. DeYoe, E. Gonzalez and J. Garcia. 2018. Water Chemistry & Isotopic Signatures Used to Determine if Groundwater Transport of Treated Effluent Occurs. LRGV Water Quality Management & Planning Conference, South Padre Island, TX.

Quidilla, W. and H. DeYoe. February 2018. Drainage system water: Does water quality change during transport? Subtropical Agriculture & Environments Society Annual Meeting, Weslaco, TX.

DeYoe, H. and W. Pulich. 2017. Nutrient Loading Dynamics from Freshwater Inflow Pulses into the Texas Lower Laguna Madre. Coastal & Estuarine Research Federation meeting, Providence, RI

Quidilla, W. and H. DeYoe. May 2017. Water quality changes in a Lower Rio Grande Valley drainage canal. 19th Annual Water Quality Management and Planning Conference, South Padre Island, TX.

Thomas, V., M. Persans and H. DeYoe. February 2017. Use of seaweed to stimulate plant growth. 70<sup>th</sup> Annual Meeting of Subtropical Agriculture and Environment Society. Weslaco, TX.

Schauer, E., W. Quidilla, E. Quintero, H. DeYoe, Dale Crockett and Carla Guthrie. May 2016. Characterization of storm water and baseline runoff from the Lower Rio Grande Valley with focus on Brownsville and Arroyo Colorado drains. 18<sup>th</sup> Annual Water Quality Management and Planning Conference, South Padre Island, TX.

Quintero, E., E. Schauer and H. DeYoe. May 2015. Characterization of stormwater and baseline runoff from the Lower Rio Grande Valley with focus on Brownsville and Arroyo Colorado drains. South Texas Stormwater Conference, South Padre Island, TX.

Ho, J., H. DeYoe, L. Clapp, L. Camacho, and E. Heise. May 2015. Binational Water Quality Monitoring in the Lower Rio Grande/Rio Bravo: Cooperative Efforts to Protect Vital Trans-boundary Water Resources. Poster presentation at the Am. Soc. of Civil Engineering. Austin, TX

Schauer, E., D. Huallpa, E. Quintero, J. Garcia and H. DeYoe. March 2014. Barge impacts on Arroyo Colorado water quality. Poster presentation at the Texas Academy of Science annual meeting, Galveston, TX.

Huallpa, D. and H. DeYoe. March 2014. Potential effects of destratification on the phytoplankton of the Arroyo Colorado. Oral presentation at the Texas Academy of Science annual meeting, Galveston, TX

Maldonado, A., R. Contreras, D. Huallpa, P. Flores, J. Arriaga, M. Villapando and H. DeYoe. November 2013. Baseline study of a pre-montane Costa Rican stream. Poster presentation at the UTPA Undergraduate Research Conference, Edinburg, TX.

Huallpa, D., E. Quintero, E. Schauer and H. DeYoe. November 2013. A novel approach to an environmental problem: Potential effects of destratification on the phytoplankton of the Arroyo Colorado. Poster presentation at UTPA Undergraduate Research Conference, Edinburg, TX.

DeYoe, H.R., J. L. Kowalski, C. P. Krull, and T. C. Allison. Seasonal production and biomass dynamics of the seagrass *Syringodium filiforme* Kützing in a subtropical lagoon. November 2013. Coastal and Estuarine Research Foundation biannual meeting, San Diego, CA.

Triplett, E., C. Tamez, J. Parsons, J. Kowalski and H. DeYoe. April 2013. Variation in elemental composition of the seagrass *Halodule wrightii* from the Lower Laguna Madre. Poster presentation at the Texas Bays and Estuaries meeting, Port Aransas, TX.

Gomez, C., J. McDaniel, J. Garcia, E. Quintero and J. Kowalski, H. DeYoe. April 2013. Seagrass abundance patterns in the Lower Laguna Madre. Oral presentation at the Texas Bays and Estuaries meeting, Port Aransas, TX.

Xenia B. Gonzalez, Carmen Gómez, Isaac Peña, Jack McDaniel, Dennis Lee, and Aegean Castañeda, Hudson R. DeYoe, and Joseph L. Kowalski. March 2013. Primary productivity in the Lower Laguna Madre and Arroyo Colorado, Texas. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Heather Hernandez, Ana Navarro, Mike Persans and Hudson DeYoe. March 2013. Enhancement of lipid production of the marine green microalgae *Nannochloris* sp. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Peter Cerda, Yesenia Cerino, Marlon Duran, Esteban Triplett, Mike Persans and Hudson DeYoe. March 2013. Arsenic-induced stress indicators in the seagrass, *Thalassia testudinum*. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Diana Huallpa and Hudson DeYoe. March 2013. Potential effects of destratification on the phytoplankton of the Arroyo Colorado. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Wendy Rogers and Hudson DeYoe. March 2013. San Martin Lake: Loved by many, studied by few. Oral presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

John Garcia, Esteban Triplett, Mark Besonen, Joseph Kowalski and Hudson DeYoe. March 2013. Sediment grain size patterns in the Lower Laguna Madre. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Edwin Quintero, Joseph Kowalski and Hudson De Yoe. March 2013. Seagrass epiphyte biomass patterns in the Lower Laguna Madre. Oral presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Carmen Gomez, Jack McDaniel, Hudson R. DeYoe, John Garcia, Edwin Quintero, and Joseph Kowalski. March 2013. Seagrass abundance patterns in the Lower Laguna Madre. Poster presentation at the Texas Academy of Science annual meeting, Kerrville, TX.

Warren Pulich and Hudson R. DeYoe. Sept 2012. Plant Indicators of Hydrologic Regimes in the Rio Grande/Rio Bravo Estuary. Poster presentation at the Binational Border Water Resources Summit, El Paso, TX.

Hudson R. DeYoe. Sept 2012. Lower Rio Grande and Lower Laguna Madre Bays and Basins Expert Science Team Report Summary. Oral presentation at the Binational Border Water Resources Summit, El Paso, TX.

Peter Cerda and Hudson DeYoe. March 2012. Nutrient Removal of a Constructed Treatment Wetland in the Rio Grande Valley. Oral presentation at the Texas Academy of Science meeting in Alpine, TX.

Marco Ramos, Hudson DeYoe and Joseph Kowalski. March 2012. Primary productivity in the Lower Laguna Madre and Arroyo Colorado, Texas. Poster presentation at the Texas Academy of Science meeting in Alpine, TX.

Danielle Garza, Joseph Kowalski, Hudson DeYoe. March 2012. Potential competitive interactions between the seagrass *Thalassia testudinum* and the rhizophytic alga *Penicillus capitatus* in the Laguna Madre of Texas: Year two. Poster presentation at the Texas Academy of Science meeting in Alpine, TX.

Tyler Murray and Hudson DeYoe. March 2012. Nitrogen leaching from a wind-tidal flat cyanobacterial mat community. Poster presentation at the Texas Academy of Science meeting in Alpine, TX.

Marlon Duran\*, Michael Persans and Hudson DeYoe. March 2012. Arsenic as a stressor of the seagrass *Thalassia testudinum*. Poster presentation at the Texas Academy of Science meeting in Alpine, TX.

Hudson DeYoe and Warren Pulich. March 2012. Tracing nitrogen from the Arroyo Colorado into the Lower Laguna Madre. Oral presentation at the Texas Academy of Science meeting in Alpine, TX.

Hudson R. DeYoe, Andrew McDonald, Robert Edwards, Tim Brush, Frank Judd, Fred Zaidan, Robert Lonard. January 2012. Exotic Invasive Species of South Texas: An overview. Subtropical Biology Conference, Center for Subtropical Studies, Edinburg, TX.

Joseph Kowalski, Hudson DeYoe, Gilbert Boza, Jr. and Don Hockaday. January 2012. Post-hurricane effects of Hurricanes Dolly (2008) and Alex (2010) on the Lower Laguna Madre of Texas. Subtropical Biology Conference, Center for Subtropical Studies, Edinburg, TX.

Hudson R. DeYoe, Joseph Kowalski, Christian Krull and Terry Allison. November 2011. Seasonal production and biomass of the seagrass *Syringodium filiforme* Kutzing in a subtropical Texas lagoon. Coastal and Estuarine Research Federation meeting in Daytona Beach, FL.

Kowalski, Joseph, Hudson R. DeYoe. November 2011. The effects of freshwater discharge on the Lower Laguna Madre following landfall of Hurricane Alex. Coastal and Estuarine Research Federation meeting in Daytona Beach, FL.

Warren Pulich and Hudson DeYoe. November 2011. Application of hydrodynamic modeling techniques to assess water quality effects on Lower Laguna Madre, Texas seagrasses. Coastal and Estuarine Research Federation meeting in Daytona Beach, FL.

Brian L Fredensborg, German Riojas, Thomas A Eubanks, Alondra Hernandez, Flor A Sandoval, Steven Luther, Ramiro Garza, Hudson DeYoe, Frank Dirrigl Jr, Jason Parsons, Michael W Persans and Kristine Lowe. August 2011. Distribution and pathways of arsenic in a hypersaline estuary. Poster presentation at the Ecological Society of America meeting in Austin, TX.

Hudson DeYoe and Joseph L. Kowalski. March 2011. Post-hurricane Alex effects on phytoplankton primary production of the Lower Laguna Madre. Oral presentation at the Texas Academy of Science meeting in Austin, TX.

Joseph L. Kowalski and Hudson DeYoe. March 2011. Post-hurricane Alex effects on the physicochemical conditions of the Lower Laguna Madre. Oral presentation at the Texas Academy of Science meeting in Austin, TX.

Duke, Paul. and Hudson DeYoe. March 2011. Characterization of nutrient load in the Arroyo Colorado and drains. Oral presentation at the Texas Academy of Science meeting in Austin, TX.

Darlene Flores and Hudson DeYoe. March 2011. Synoptic survey of water and sediment quality of the Lower Laguna Madre, TX. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Irwin Mendoza and Hudson DeYoe. March 2011. Plankton primary productivity of the tidal segment of the Rio Grande, TX. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Jessica M. Montemayor and Hudson DeYoe. March 2011. Seasonal and spatial variability of bacteria levels in the Lower Rio Grande. Oral presentation at the Texas Academy of Science meeting in Austin, TX

Victoria Brown, Justine Zoe Gapayao, Eliezer Antonio Gracia, Aaron S. Barreiro, Natasha Mitra, and Liana Garza, Hudson DeYoe and Joseph Kowalski. March 2011. Nutrient limitation of phytoplankton in the Brazos-Santiago Pass, South Padre Island. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Eliezer Antonio Gracia, Aaron S. Barreiro, Victoria Brown, Justine Zoe Gapayao, Natasha Mitra, and Liana Garza, Hudson DeYoe and Joseph Kowalski. March 2011. Primary productivity in the Lower Laguna Madre, Texas from Port Mansfield to the Gulf of Mexico. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Aaron S. Barreiro, Eliezer Antonio Gracia Victoria Brown, Justine Zoe Gapayao, Natasha Mitra, and Liana Garza, Hudson DeYoe, and Joseph Kowalski. March 2011. Water column chlorophyll decrease as an indicator of filtering capacity of the Eastern Oyster, *Crassotrea virginica*. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Sandoval, Flor, Elliot Chavez, Steven D. Luther, Yessica E. Cerino, Michelle J. Lo, H. R. DeYoe, Jason G. Parsons and M. Persans March 2011. <u>Survey of heavy metal and metalloid content of the seagrass *Thalassia testudinum* in the Lower Laguna Madre Texas. Poster presentation at the Texas Academy of Science meeting in Austin, TX.</u>

Tyler Murray, Joshua Perez, Joseph Kowalski and Hudson DeYoe. March 2011. Competition between the algae *Penicillus capitatus* and the seagrass *Thalassia testudinum*. Poster presentation at the Texas Academy of Science meeting in Austin, TX.

Chloe Veron, Daniella Diaz, Sebastian Garcia, Nicolas Jones, Hudson DeYoe and Joseph Kowalski. March 2010. Trawling vertebrates and invertebrates: A diversity comparison within the Lower Laguna Madre, Texas. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Daniella Diaz, Sebastian Garcia, Chloe Veron, Nicolas Jones, Hudson De Yoe and Joseph Kowalski. March 2010. Primary productivity in the Lower Laguna Madre from Port Mansfield to the Gulf of Mexico. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Nicholas Jones, Hudson DeYoe and Joseph Kowalski. March 2010. Potential competitive interactions between the seagrass *Thalassia testudinum* and the alga *Penicillus capitatus* in a subtropical Texas Lagoon. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Sebastian Garcia, Daniella Diaz, Chloe Veron, Nicolas Jones, Hudson DeYoe and Joseph Kowalski. March 2010. Nutrient limitation of phytoplankton in the Brazos-Santiago Pass, South Padre Island, Texas. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Joseph Kowalski and Hudson DeYoe. March 2010. Salinity recovery in the Lower Laguna Madre of Texas following Hurricane Dolly. Oral presentation at the Texas Academy of Science meeting in Stephenville, TX.

Analicia Solis and Hudson DeYoe. March 2010. A technique to more accurately measure metabolic rates of seagrass. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Oliver Ostorga and Hudson DeYoe. March 2010. Observing salinity stress in freshwater plankton. Poster presentation at the Texas Academy of Science meeting in Stephenville, TX.

Jessica M. Montemayor and Hudson DeYoe. March 2010. Temporal and spatial variability in the abundance of *Eshcerichia coli*, Enterobacteriaceae and other bacteria in the Lower Rio Grande, Texas. Oral presentation at the Texas Academy of Science meeting in Stephenville, TX.

Warren Pulich, Hudson DeYoe, and Joseph Kowalski. Nov. 2009. Hydrographic and ecological characterization of the Rio Grande estuary of Texas. Poster presentation at the Coastal and Estuarine Research Federation National/International Conference, Portland, OR.

Michael Persans, Hudson DeYoe, Natali Mejia, and Ammie Ortiz. Nov. 2009. Stress detection in the seagrass *Thalassia testudinum*. Poster presentation at the Coastal and Estuarine Research Federation National/International Conference, Portland, OR.

Whelan III, T., H. R. DeYoe, K. R. Summy, M. Persans and D. Hockaday Nov. 2009. Effects of Decreased Salinity on Spectral Reflectance in *Thalassia testudinum*. Oral presentation at the Coastal and Estuarine Research Federation National/International Conference. Portland, OR.

Priscilla Saenz, Barbara Garza, Javier Reynoso, Dora Cedillo, Antonio Villarreal, Christian Garcia, Ruben Trevino, Erin Bieberbach, Hudson DeYoe and Thomas Whelan. March 2009. Bahia Grande Water Quality, 2005-2008. Poster presentation at the Texas Academy of Science meeting in Junction, TX.

Jessica Montemayor, Javier Reynoso, Gamiel Garza, Erika Rodriguez, Leo Saldana, Michelle Cox, and Hudson R. DeYoe. March 2009. A long-term water quality dataset for the Lower Rio Grande/Rio Bravo. Poster presentation at the Texas Academy of Science meeting in Junction, TX

Ammie Ortiz, Maria Silva, Natalie Mejia, Michael Persans and Hudson DeYoe, March 2009. Use of PAM fluorometry to detect stress in the seagrass *Thalassia testudinum*. Poster presentation at the Texas Academy of Science meeting in Junction, TX.

Kowalski, Joseph, Hudson R. DeYoe and Carla Guthrie. March 2009. Water quality of the tidally influenced segment of the Lower Rio Grande. Presentation at the Texas Academy of Science meeting in Junction, TX.

Natali Mejia, Ammie Ortiz, Maria Silva, Michael Persans, and Hudson DeYoe. March 2009. Oxidative stress in the seagrass *Thalassia testudinum* induced by lowered salinity using simulated and natural hurricanes. Oral presentation at the Texas Academy of Science meeting in Junction, TX.

Natasha Pardo and Hudson R. DeYoe. July 2008. Nutrient limitation and productivity of phytoplankton in the Lower Laguna Madre, Texas. Annual meeting of the Phycological Society of America in New Orleans, LA.

Natasha Pardo and Hudson R. DeYoe. April 2008. Nutrient limitation of phytoplankton in the Lower Laguna Madre, Texas. Oral presentation at the Texas Bays and Estuaries meeting in Port Aransas, TX.

Natali Mejia, Fritzie J. Into, Jacqueline D. Bruce, Anna Martinez, Thomas Whelan III, Hudson R. DeYoe and Michael W. Persans. March 2008. Monitoring oxidative stress induced by lowered salinity and heavy metals in turtle grass (*Thalassia testudinum*) in the Lower Laguna Madre Texas USA. Poster presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Fritzie J. Into\*, Natali Mejia, Ana Santacruz, Jacqueline D. Bruce, Anna Martinez, Thomas Whelan III, Michael W. Persans and Hudson R. DeYoe. March 2008. Use of enzymatic assays for superoxide dismutase and catalase activity to assess oxidative stress induced by lowered salinity and heavy metals in turtle grass (*Thalassia testudinum*) in the Lower Laguna Madre Texas USA. Poster presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Hudson R. DeYoe and J. Kowalski. March 2008. Production and biomass dynamics of the seagrass, *Thalassia testudinum* in the Lower Laguna Madre, Texas. Oral presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Natasha Pardo and Hudson R. DeYoe. March 2008. Nutrient limitation and productivity of phytoplankton in the Lower Laguna Madre, Texas. Oral presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Requenez, P., DeYoe, H.R. and J.L. Kowalski. March 2008. Production and biomass dynamics of the seagrass, *Halodule wrightii* in the Lower Laguna Madre, Texas. Oral presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Cedillo, D., A. Villarreal, C. Garcia, R. Trevino, E. Bieberbach and H.R. DeYoe. March 2008. Bahia Grande Water Quality, 2005-2007. Poster presentation at the Texas Academy of Science meeting in Corpus Christi, TX.

Gutierrez, A., N. Prado, H.R. DeYoe, K. R. Summy, J. H. Everitt, R. Fletcher and M. R. Davis. January 2008. Comparison of spectral reflectance by red and black mangrove in coastal areas of southern Texas. Annual Meeting of the Rio Grande Valley Horticultural Society, Weslaco, TX.

DeYoe, H.R., R. Trevino, E. Bieberbach, A. Villarreal. March 2007. Water quality in the Bahia Grande following restoration of tidal flow. Presented at the Texas Academy of Science meeting in Waco, TX.

Kowalski, J.L., D.L. Hockaday, G. H. Boza and H.R. DeYoe. March 2007. Re-discovery of the tropical green macroalga, *Penicillus capitatus* Lamarck (Chlorophyta: Bryopsidales), in Lower Laguna Madre, Texas. Presented at the Texas Academy of Science meeting in Waco, TX.

Villarreal, A. and H.R. DeYoe. March 2007. Grazing efficiencies of three marine snails, *Littorina irrorata*, *Anachis avara*, *Bulla striata* from the Lower Laguna Madre, Texas. Presented at the Texas Academy of Science meeting in Waco, TX.

DeYoe, H.R., T. Whelan III, E. Bieberbach, R. Trevino, A. Villarreal and C. Martinez. December 2006. Water and sediment quality in a restored shallow marine system, the Bahia Grande of South Texas. Presented at the 3<sup>rd</sup> National Conference on Coastal and Estuarine Habitat Restoration in New Orleans, LA.

<u>Bieberbach, E.</u>, R. Trevino, A. Villarreal, H.R. DeYoe and T. Whelan III. March 2006. Water quality early in the restoration of the Bahia Grande. Presented at the Texas Academy of Science meeting in Beaumont, TX.

Trevino, R., T. Whelan III and H.R. DeYoe. March 2006. A comparison of pore water ammonium levels between vegetated and unvegetated sediments. Presented at the Texas Academy of Science meeting in Beaumont, TX.

Luna, J.C., C. Martinez, T. Whelan III and H.R. DeYoe. March 2006. Bahia Grande restoration: Interim sediment results, 2005. Presented at the Texas Academy of Science meeting in Beaumont, TX.

DeYoe, H.R. and J. Kowalski. March 2006. Effect of sediment nutrient additions on seagrass growth in oligotrophic and eutrophic areas of the Lower Laguna Madre, Texas. Presented at the Texas Academy of Science meeting in Beaumont, TX.

De Yoe, H. R. and Dundar, O. October 2005. Use of the macroalgae *Laurencia poiteaui* as an indicator of nutrient enrichment in a Texas subtropical lagoon. Presented at the Estuarine Research Federation meeting, Norfolk, VA.

DeYoe, H.R. and J. Kowalski. April 2005. Preliminary observations of a seagrass fertilization experiment in the Lower Laguna Madre. Presented at the 2005 Bays and Estuaries meeting, Port Aransas, TX.

DeYoe, H.R., J. Kowalski, T. Whelan III, J. Luna. March 2005. Killing seagrass with drift algae: How long does it take? Poster presented at the Texas Academy of Science Meeting, Edinburg, TX.

Bieberbach, E., H.R. DeYoe, J. Kowalski. March 2005. Seagrass biomass and growth differences between oligotrophic and eutrophic areas of the Lower Laguna Madre, TX. Poster presented at the Texas Academy of Science Meeting, Edinburg, TX

Trevino, R. and H.R. DeYoe. March 2005. Refinements of a sediment chlorophyll assay. Poster presented at the Texas Academy of Science Meeting, Edinburg, TX

DeYoe, H.R., B. Sanders, R. Trevino, L. Saldana. March 2005. A baseline diurnal study on the lower Rio Grande, TX. Poster presented at the Texas Academy of Science Meeting, Edinburg, TX

DeYoe, H.R., D. Camacho, T. Whelan III and J. Kowalski. March 2004. Effect of drifting seaweed on seagrass survival in the Laguna Madre, TX. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Dundar, O. and DeYoe, H.R.. March 2004. Use of tissue nutrient content of the macroalga *Laurencia poiteaui* to detect eutrophication in the Laguna Madre, TX. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Saldana, L. and DeYoe, H.R. March 2004. Epiphyte load on artificial seagrass blades in the Laguna Madre, TX. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Camacho, D., T. Whelan III, H. DeYoe and M. Cotta Goma. March 2004. Hydrogen sulfide in pore waters of a *Thalassia testudinum* meadow in the Lower Laguna Madre. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Yoshida, Y. J., Reynoso, T. Whelan III, M. Cotta Goma, H.R. DeYoe. March 2004. Trace metals in epiphytes associated with *Thalassia testudinum* leaves. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Cotta Goma, M. T. Whelan III, D. Camacho and H. DeYoe. March 2004. Physiological responses of *Thalassia testudinum* to trace metal exposure. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Allen Gilpin, C. and H. DeYoe. March 2004. Comparison of epiphytic diatom communities on marine seagrass *Halodule wrightii* in the Lower Laguna Madre below sewage outfall. March 2004. Presented at the Texas Academy of Science Meeting, Kerrville, TX.

Summy, K.R., H. DeYoe, J.H. Everitt and M.R. Davis. October 2003. Use of aerial color infrared imagery for mapping the spatial distribution of cyanobacterial mats on wind tidal flats of the lower Laguna Madre, Texas. 19<sup>th</sup> Biennial Workshop on Color Photography, Videography and Airborne Imaging for Resource Assessment, Logan, Utah.

DeYoe, H.R. T. Whelan III, K.R. Summy. April 2003. Quantification of cyanobacterial mats: From chlorophyll analysis to remote sensing. Presented at the Gulf Estuarine Research Society Meeting. Port Aransas, TX.

DeYoe, H.R. T. Whelan III, K.R. Summy. March 2003. Wind tidal flat algal mats: Their importance and quantification. Presented at the Texas Academy of Science Meeting, Nacogdoches, TX.

Summy, K. R., H. R. DeYoe and T. H. Whelan III. March 2003. Detection of cyanobacterial algal mats using remotely sensed imagery. Presented at the Texas Academy of Science Meeting, Nacogdoches, TX.

Summy, K. R., R. Mazariegos, R. Lonard, F. Judd, and H. DeYoe. February 2003. Remote sensing – GIS research at the University of Texas – Pan American. 13<sup>th</sup> Annual Texas GIS Forum and Training Conference, Austin, TX.

DeYoe, H.R., J.L. Kowalski, C. Onuf. August 2002. Spatial and temporal characterization of drifting macroalgae in a subtropical Texas lagoon. Presented at Botany 2002 Meeting in Madison, WI.

DeYoe, H.R. March 2002. Probing a long-term water quality dataset for the lower Rio Grande/Rio Bravo. Presented at the Texas Academy of Science Meeting. Laredo, TX

Montagna, P.A. and H.R. DeYoe. March 2002. Effect of freshwater inflow on the lower Rio Grande. Presented at the Texas Academy of Science Meeting. Laredo, TX

DeYoe, H.R. July 2001. River plankton and water quality of the Lower Rio Grande/Rio Bravo, Texas, USA. Presented at the 55<sup>th</sup> Phycological Society of America meeting.

De Yoe, H.R. and Cerrate-Reinoso, L. March 2001. Nutrient competition between two microalgae. Presented at the Texas Academy of Science Meeting, San Marcos, TX.

DeYoe, H.R., E. Buskey, F. Jochem, and T.A. Villareal. July 2000. Effect of nitrogen addition on a mixed species phytoplankton bloom. Presented at the 54<sup>th</sup> Phycological Society of America meeting.

DeYoe, H.R., J. Kowalski, C. Gilpin, C. Pederson, T. Allison. March 2000. Epiphyte load on artificial seagrass leaves in the vicinity of sewage treatment plant outfalls. Presented at the Texas Academy of Science meeting, Kingsville, TX.

DeYoe, H.R., C. Guajardo, M. Cox and G. Schlaefer. March 2000. Water quality and phytoplankton of the lower Rio Grande upstream and downstream of an urban area. Presented at the Texas Academy of Science meeting, Kingsville, TX.

Buskey, E., H.R. DeYoe, F. Jochem, T.A. Villareal, C. Hyatt, L. Hyde. January 2000. Effects of mesozooplankton removal on trophic structure during a bloom of the Texas "brown tide": a mesocosm study. Presented at the American Society of Limnologists and Oceanographers meeting.

DeYoe, H.R. August 1999. Ammonium uptake in *Aureoumbra lagunensis*, the Texas brown tide alga. Presented at the XVI International Botanical Congress, St. Louis, Missouri.

De Yoe, H.R. December 1997. Wind tidal flat algal mats in south Texas: Who Cares? Presented at the Lower Laguna Madre Foundation Education Day. Brownsville, Texas.

DeYoe, H. R. April 1996. Physiology and phylogeny of the Texas brown tide alga. Invited seminar. Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine.

DeYoe, H.R. February 1996. Unusual nitrogen pathways of two algae. Invited seminar. University of Texas- Pan American, Edinburg Texas.

DeYoe, H.R. 1995. Nitrogen as a factor in the initiation of the Texas brown tide and the role of the Corpus Christi Bay National Estuary Program. Gulf of Mexico Program Symposium, Corpus Christi, Texas.

DeYoe, H.R. 1995. The possible role of a natural nitrogen input in the initiation of the Texas brown tide. EPA Coastal Technology Transfer Conference, New Orleans, LA.

De Yoe, H.R. and C.A. Suttle. 1994. A persistent bloom-forming alga that cannot use nitrate-nitrogen. Presented at the Phycological Soc. Am./Am. Soc. Limnol. Oceanogr., Miami, FL.

DeYoe, H.R., A.M. Chan and C.A. Suttle. 1994. Phylogeny of *Aureococcus anophagefferens* and a morphologically similar bloom-forming alga from Texas as determined by 18S rDNA sequence analysis. Presented at the Phycological Soc. Am./Am. Soc. Limnol. Oceanogr., Miami, FL.

DeYoe, H.R. and C.A. Suttle. 1994. A persistent bloom-forming alga that cannot use nitrate-nitrogen. 6th Annual South Texas Bays and Estuaries Meeting, University of Texas Marine Science Institute, Port Aransas, TX.

DeYoe, H.R. 1993. The Texas "brown tide" alga: Its inability to use nitrate-nitrogen and further comparisons with the east coast "brown tide" alga (*Aureococcus anophagefferens*). Invited seminar, University of Texas Marine Science Institute, Port Aransas, TX.

DeYoe, H.R. 1990. The effect of light intensity on the photosynthetic apparatus of the endosymbiont of *Rhopalodia gibba*. Presented at the Phycological Soc. Am., University of Maryland, College Park, MD.

DeYoe, H.R. and G.S. Bullerjahn. 1989. Confirmation of the cyanobacterial nature of the endosymbiont of *Rhopalodia gibba* and the effect of nitrate-nitrogen on the presence of the endosymbiont. Presented at the Phycol. Soc. Am., University of Toronto, Toronto, Ontario.

De Yoe, H.R. 1981. Algal seasonal succession in eutrophic Shelburne Pond, VT. Invited seminar, University of Vermont, Burlington, VT.

#### **Collaborators**

Richard Stalter, St. John's University Susana Enriquez, Professor, Instituto de Ciencias del Mar y Limnologia Brigitte Van Tussenbroek, Professor, Instituto de Ciencias del Mar y Limnologia Edward Buskey, Professor, University of Texas Marine Science Institute Ken Dunton, Professor, University of Texas Marine Science Institute Kim Jones, Professor, Texas A&M University-Kingsville Joseph Kowalski, Research Associate, University of Texas Rio Grande Valley Paul Montagna, Professor, Texas A&M University-Corpus Christi Michael Persans, Associate Professor, University of Texas Rio Grande Valley Warren Pulich, Jr., Research Professor, Texas State University- San Marcos David Hicks, Professor, University of Texas Rio Grande Valley

#### **Professional Service**

Board of Directors member (invited) of the Lower Laguna Madre Estuary Partnership. May 2019-present.

Member (appointed) of the International Boundary Waters Commission Citizens Forum Board. January 2014-May 2016.

Valley Nature Center, Board of Directors member, August 2013-August 2014.

Co-chair (elected) of the International Boundary Waters Commission Citizens Forum Board. April 2013-December 2013.

Member (appointed) of the International Boundary Waters Commission Citizens Forum Board. January 2012-December 2013.

Member (appointed) and Chair of the Lower Rio Grande/Lower Laguna Madre Bays and Basin Expert Science Team. March 2011-2018.

Member (invited) of Steering Committee of Climate, Energy, Environment and Engagement in Semi-Arid Regions (CE3SAR), a Research Coordination Network. March 2011-2018.

Member of the Seagrass Monitoring Workgroup, 2004-present.

Texas Sea Grant Advisory Committee, September 2010-2013.

Member of the Edinburg Environmental Advisory Board, April 2007-2018.

President of the Texas Academy of Science. March 2007-2008.

Chair of Local Organizing Committee for 2005 Texas Academy of Sciences annual meeting. March 2003-2005.

Academic Director and Board member of the Texas Academy of Science. March 2003-2005.

Invited member of NERR Site Selection Committee and Evaluation Subcommittee, 2002-2004.

Member of Core Planning Team for Rio Grande Valley EPA Environmental Education Program, 2001-2004.

Member of Phycological Society of America Bold Award Committee, 2000-2002.

Invited participant to Texas Parks & Wildlife Dept. Seagrass Monitoring Workshop. August 14-15, 2000.

Member of Science Exhibit Planning Committee for McAllen International Museum. July 2000-2002.

Environmental counsel to the city of Edinburg, Texas. October 1997-2000.

Member of Project Advisory Committee of the Coastal Bend Bays & Estuaries Program, August 1997-2000.

Ex-officio member of the Science and Technical Advisory Committee of the Corpus Christi Bay National Estuary Program, September 1996-August 1997.

Invited participant for Symposium on Texas Seagrasses, sponsored by Texas Parks & Wildlife Department, November 1996, Corpus Christi, Texas

Invited participant for Workshop One: Management and Mitigation of Harmful Algal Blooms in Coastal Waters sponsored by National Fish & Wildlife Foundation and the National Oceanic & Atmospheric Administration, August 1996, Port Aransas, Texas.

Invited participant for Brown Tide Summit meeting, Islip, NY sponsored by NY Sea Grant and Peconic Estuary Program, October 20-21, 1995.

Proposals reviewed for the following agencies/programs: Texas, Georgia and New York Sea Grant Programs, National Science Foundation, ECOHAB Program, United States Dept of Agriculture.

Manuscripts/reports reviewed for the following societies/agencies: Texas Journal of Science, Journal of Great Lakes Research, Estuaries, US Department of Agriculture, Texas Natural Resource Conservation Commission, U.S. Fish and Wildlife Service, Journal of Estuarine, Coastal and Shelf Science, Botanica Marina, World Journal of Microbiology and Biotechnology and Journal of Coastal Research, Regional Studies in Marine Science

### **Skills and Special Training**

Sustainability science, seagrass and algal culture and field studies, micro- and macroalgal ecology and taxonomy, water quality automated/manual sampling, water analysis, chlorophyll analysis, data quality assurance/quality control. Training in photobiology with Dr. Susana Enriquez, Instituto de Ciencias del Mar y Limnologia, May 2008.

#### **Professional Associations**

- -Estuarine Research Federation
- -Gulf Estuarine Research Society
- -Texas Academy of Science