

CURRICULUM VITAE

Jeff Beal, M.S.

Ducks Unlimited Inc.

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APPOINTMENTS

- 2020-present Regional Biologist Florida, Ducks Unlimited Inc.
2004-2020 Biological Scientist III-IV, Marine/Estuarine Subsection, Aquatic Habitat Conservation and Restoration Section, Florida Fish and Wildlife Conservation Commission (FWC)
1996-2004 Environmental Specialist III, State Aquatic Preserves Program, Florida Department of Environmental Protection (FDEP)
1994-1996 Environmental Specialist I, State Aquatic Preserves Program, Florida Department of Environmental Protection
1991-1993 Research/Teaching Assistant, Florida Institute of Technology
1992 Fish Biologist, Harbor Branch Oceanographic Institute

ACADEMIC QUALIFICATIONS

- 1993 M.S. Marine Biology, Florida Institute of Technology, Melbourne, FL
1990 B.S. Marine Biology, Jacksonville University, Jacksonville, FL

SELECT PUBLICATIONS

- [1] Lin, J, and JL Beal. 1993. Effects of mangrove marsh management on the fish and macro-crustacean communities at St. Lucie County, Florida. *Bulletin of Marine Science* 57(1):193-201.
- [2] Beal, JL, and BS Schmit. 2000. The effects of dock height on light irradiance (PAR) and seagrass (*Halodule wrightii* and *Syringodium filiforme*) cover. In S. Bortone (ed.), *Seagrasses: Monitoring, Ecology, Physiology, and Management*, CRC Press. 318pp.
- [3] Collier C, R Ruzicka, K Banks, L Barbieri, J Beal, et al. 2008. The State of the Coral Reef Ecosystems of Southeast Florida. pp. 131-159. In: JE Waddell and AM Clarke (eds.), *The State of the Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2008*. NOAA Technical Memorandum NOS NCCOS 73. 569 pp.
- [4] Herren, L, B Sharpe, JL Beal, J Tucker, C Conrad. 2011. Hydrologic Restoration of the North Fork St. Lucie River. *Final report*, 307 pp.
- [5] Beal, JL, J Voss, S Edge, and L Cohen. 2012. Assessment of coral stressors on St. Lucie Reef: Florida's northernmost coral reef. *Final Report for State Wildlife Grant, USFWS T-19-1*, 54pp.

- [6] Kahn, AE, JL Beal, MJ Durako. 2013. Diurnal and tidal variability in the photobiology of the seagrass *Halophila johnsonii* in a riverine versus marine habitat. *Estuaries and Coasts*, 36:430-443.
- [7] Klepac CN, J Beal, C Kenkel, A Sproles, JM Polinski, MA Williams, MV Matz, JD Voss. 2015. Seasonal stability of coral-*Symbiodinium* associations in the subtropical coral habitat at St. Lucie Reef, Florida. *Mar Ecol Prog Ser* 532:137-151.
- [8] Radabaugh, Kara R., Christina E. Powell, and Ryan P. Moyer (eds.). 2017. Coastal Habitat Integrated Mapping and Monitoring Program Report for the State of Florida: Chapter 12 Indian River Lagoon co-author. Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Technical Report No. 21.
- [9] Radabaugh, Kara R., Stephen P. Geiger, and Ryan P. Moyer (eds.). 2019. Oyster Integrated Mapping and Monitoring Program Report for the State of Florida: Chapter 8 Central Eastern Florida co-author. Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Technical Report No. 22.
- [10] Dodge DL, MS Studivan, RJ Eckert, JL Beal, E Chei, JD Voss. 2020. Population structure of the scleractinian coral *Montastrea cavernosa* in the Northern Florida Reef Tract and implications for conservation and management. *Bull Mar Sci* doi: 10.5343/bms2019.0074.
- [11] Studivan MS, A Shatters, Dodge DL, JL Beal, JD Voss. 2021. Synergistic effects of thermal stress and estuarine discharge on transcriptomic variation of *Montastraea cavernosa* corals in southeast Florida. *Frontiers in Modern Science* doi:10.3389/fmars.2021.662220.
- [12] Mahoney RD, JL Beal, D Lewis, GS Cook. 2021. Quantifying the Response of an Estuarine Nekton Community to Coastal Wetland Habitat Restoration. *Sustainability* doi:10.3390/su132313299.
- [13] Lehman R, GR Poulakis, JL Beal, et al. 2021. Environmental DNA evidence of the Critically Endangered smalltooth sawfish, *Pristis pectinata*, in historically occupied US waters. *Aq Cons Mar Fresh Eco* doi:10.1002/aqc3721.
- [14] Stevens P, R Paperno, JL Beal, et al. 2022. Identification of fish habitat hotspots for use in prioritizing conservation and restoration projects in coastal rivers. *Env Bio Fishes* doi:10.1007/s10641-022-01226-8.

PUBLICATIONS IN PREP

Stevens, P, R Paperno, J Beal, G Poulakis. Fish assemblages of the Caloosahatchee River. Conceptual Ecologic Model revision. RECOVER Northern Estuaries Fish Subteam.

Stevens P, Beal J, R Paperno. Fish assemblages of the St. Lucie and Loxahatchee Rivers. Conceptual Ecologic Model revision. RECOVER Northern Estuaries Fish Subteam.

Smith K, J Beal, A Roddenberry, E McDevitt, C Anderson, K Konchar. A GIS Assessment of Florida's Aquatic Resources: A Framework for Restoration and Management.

Beal J and S Laramore, E. Dark, R Yu. Oyster health of restored versus natural reefs of the IRL.

Dark E and JL Beal. Lionfish invasion of the Indian River Lagoon: habitat preferences.

SELECT MAJOR WRITING CONTRIBUTIONS (GREY LITERATURE)

Indian River Lagoon South Feasibility Plan: North Fork St. Lucie River Floodplain Restoration section. 1999

North Fork St. Lucie River State Buffer Preserve Management Plan. 2004

Comprehensive Everglades Restoration Plan Restoration Coordination and Verification (RECOVER) Northern Estuaries Conceptual Ecological Models and Hypothesis Clusters (originals in 2005 and subsequent revisions)

Comprehensive Everglades Restoration Plan System Status Reports for Northern Estuaries sections (originals in 2007 and subsequent updates)

St. Lucie Watershed Protection Plan. 2008

Atlantic Coast Fish Habitat Partnership Fish Habitat Matrix online tool and 2016 Bioscience publication entitled, 'The importance of benthic habitats for coastal fisheries.'

MAJOR GRANTS and OTHER FUNDS AWARDED

[1] Beal, J and P Sime. 2001. North Fork St. Lucie River marsh and river oxbow restoration. St. Lucie River Issues Team. \$120,000

[2] Beal, JL and R Brockmeyer. 2008, 2010. Restoration of dragline ditch coastal wetlands in Volusia County, Florida, Phases I and II. USFWS National Coastal Wetland Grant Program. \$1,617,000

[3] Beal, J and J Voss. 2009. Assessment of coral stressors on St. Lucie Reef: Florida's northernmost coral reef. Florida State Wildlife Grant Program, USFWS T-19-1. \$56,000

[4] Haydt, P, R Brockmeyer, K Smith, J Beal. 2013. Northeast Florida Estuarine Habitat Restoration Initiative. Included Project Management of a 5-acre saltmarsh restoration in New Smyrna Beach, FL. NOAA Coastal Habitat Restoration Grant Program. \$3,283,000

[5] Beal J and J Voss. 2013. An Integrative Assessment of estuarine impacts on coral health and the Implications for Water Resource Management in Southeast Florida. Florida Seagrass. \$217,500

[6] J Voss and J Beal. 2015. Assessing Freshwater Discharge Impacts on Coral Health and the Implications for Water Resource Management in Southeast Florida. NOAA Coral Reef Conservation of Domestic Grant Program \$126,500

- [7] Hanisak, D, J Beal, C Jacoby, and F Gidus. 2018. Pilot-Scale Demonstration of Seagrass Restoration in the Indian River Lagoon Using nursery grown *Halodule wrightii*. Indian River Lagoon National Estuary Program. \$131,500
- [8] Osborne T, J Nunez, and JL Beal, and F Gidus. 2019. Clam Restoration of the Indian River Lagoon for water quality improvements. Indian River Lagoon National Estuary Program. \$185,000
- [9] Beal, J. 2019. Restoration of the Jensen Beach impoundment. NOAA Restoration Program. \$900,000
- [10] Beal, J and P Stevens. FWRI fish seine data analysis and expansion of the telemetry array for St. Lucie River RECOVER NE Fish Subteam. \$47,000
- [11] Beal, J. South Florida Ecosystem Wetlands I for USFWS North America Wetlands Conservation Act. Restoration at Dupuis MA and Loxahatchee NWR. \$3,000,000
- [12] Beal, J. South Florida Ecosystem Wetlands II for USFWS North America Wetlands Conservation Act. Restoration at Cape Sable ENP. \$6,000,000
- [13] Beal, J. South Florida Ecosystem Wetlands III for USFWS North America Wetlands Conservation Act. Restoration at Lakes Hatchineha and Cypress. \$4,049,171
- [14] Beal, J. South Florida Ecosystem Wetlands IV for USFWS North America Wetlands Conservation Act. Restoration at Dupuis MA Phase 2. \$3,000,000
- [15] Beal, J. South Florida Ecosystem Wetlands V for USFWS North America Wetlands Conservation Act. Restoration at Fakahatchee Strand and acquisition at Jefferson. \$6,629,130

SELECT IN-HOUSE AGENCY FUNDING AWARDS

- [1] Beal, J. 2005. Reconnection of Miller Oxbow, North Fork St. Lucie River, FL. FWC Aquatic Habitat Restoration and Enhancement Subsection funding program \$110K
- [2] Beal, J and S Geiger. 2014. Restoration of dead-margin oyster reefs in Mosquito Lagoon. FWC Marine Estuarine Habitat Restoration Monitoring and Assessment Program \$40K
- [3] Beal, J. and R Moyer. 2015. Marsh Madness – A project to engage citizens, students and scientists in restoration, monitoring, and outreach. FWC Marine Estuarine Habitat Restoration Monitoring and Assessment Program \$118K
- [4] Beal, J and S. Laramore. 2015. Investigation of oyster (*Crassostrea virginica*) health on natural and restored reefs through routine monitoring in the Indian River Lagoon, Florida. FWC Marine Estuarine Habitat Restoration Monitoring and Assessment Program \$43K
- [5] Beal, J and G Cook. 2019. Fish and motile decapod responses to dragline ditched coastal wetland restoration, Flagler County. FWC Marine Estuarine Habitat Restoration Monitoring and Assessment Program \$36K

PEER-REVIEW and COMMITTEE MEMBER

Bulletin of Marine Science, Marine Pollution Bulletin, Marine Technology Journal, numerous state and federal agency and university technical and scientific documents

Committee Member – Emily Dark (Antioch Univ., M.S., 2012-2014);

Committee Member --Courtney Klepac (Florida Atlantic Univ., M.S., 2013-2015)

Committee Member—Richard Mahoney (Univ of Central Florida, MS, 2019-2020)

Mentoring: Ph.D. – Amanda Kahn, (UNCW 2005-2009); FAU Honors College Senior Thesis – Sara Thomas (Florida Atlantic Univ., 2014-2015); M.S. Student – Danielle Dodge (Florida Atlantic Univ., 2016-2018; Knauss Fellow 2018); Ian Combs (Florida Atlantic Univ., 2018-19)

PROFESSIONAL ORGANIZATION AFFILIATIONS & BOARD POSITIONS HELD

East Central Estuarine Restoration Team (ECERT). Role: Steering Team (former Chair)

North East Estuarine Restoration Team (NERT). Role: Steering Team

Restoration Coordination and Verification (RECOVER) (Comprehensive Everglades Restoration Plan) Northern Estuaries Fish Subteam. Steering Team (former Chair)

Atlantic Coast Fish Habitat Partnership (of the ASMFC) Science and Data Subteam. Former Role: Co-Chair; State rep

Atlantic Coast Fish Habitat Partnership (of the ASMFC) Steering Team. Role: DU rep

Indian River Lagoon National Estuary Program Management Board. Former role: Agency rep

FWC Aquatic Habitat Restoration and Enhancement Subsection South Regional Assessment Team. Role: Subject Matter Expert

FWC Marine Fisheries Habitat Partners Team. Role: Subject Matter Expert

Guana-Tolomato-Matanzas National Estuarine Research Reserve Science Advisory Team. Role: Subject Matter Expert

Florida Atlantic Univ at Harbor Branch Indian River Lagoon Symposium Steering Team. Former Role: Agency rep; lead for student judging

Indian River Lagoon Spoil Island Workgroup. Former Role: Co-chair

FDEP Statewide Ecosystem Assessment of Coastal and Aquatic Resources. Former Role: Subject Matter Expert

FWC Floridalivingshorelines.com website development team. Former Role: Subject Matter Expert

Indian River Lagoon Algal Bloom Investigation Green Team. Former Role: Agency rep

FWC Small Unmanned Aircraft Systems Team. Former Role: Subject Matter Expert

FWC Coastal Habitat Integrated Mapping and Monitoring Program team. Former Role: Subject Matter Expert

FWC Oyster Integrated Mapping and Monitoring Program Team. Former Role: Subject Matter Expert

Indian River Lagoon South Feasibility Plan team. Former Role: Agency rep

St. Lucie River Watershed Protection Plan. Former Role: Agency rep

FDEP South East Florida Coral Reef Initiative team. Former Role: Agency rep; State Navigator alternate

FDEP Our Florida Reefs. Former Role: Agency rep

FWC Florida Sportfish Restoration Team. Former Role: Subject Matter Expert

FWC Conservation Wildlife Legacy Initiative imperiled species review team (fishes). Former Role: Subject Matter Expert

FWC Critical Wildlife Areas review team. Former Role: Subject Matter Expert

FDEP Hardbottom TAC. Former Role: Agency rep

North Fork St. Lucie River State Aquatic Preserve Management Plan Update Review Team. Former Role: Subject Matter Expert

Loxahatchee State Aquatic Preserve Management Plan Update Review Team. Former Role: Subject Matter Expert

SELECT PRESENTATIONS and POSTERS

Hundreds of presentations/posters given at numerous events on numerous topics related to Florida fish, wildlife, habitats, and water quality including as an invited guest speaker at Florida Atlantic Univ at Harbor Branch Lecture Series, IRLNEP Council, Project Shore, Florida Master Naturalist Course, Governing Boards, public meetings, and numerous civic and governmental events and panel discussions. The following are select examples:

Biological response to large-scale enhancement of a dredge spoil island in the Indian River Lagoon, FL. Restore Americas Estuaries 2006.

Beal, J¹; Steven Hitt ²; Erin McDevitt ¹; Laura Herren ³ ¹Florida Fish & Wildlife Conservation Commission ²Ecological Associates, Florida; ³ Florida Dept of Environmental Protection

Biological response to hydrologic restoration of oligohaline floodplain communities and oxbows along North Fork St. Lucie River, St. Lucie County, FL. American Fisheries Society and Restore Americas Estuaries 2006.

Beal, J, Steven Hitt, Laura Herren, Greg Kaufman, Rich Hauck. Florida Dept of Environmental Protection

Living on the ledge: assessment of coral stressors on St. Lucie Reef, Florida. Coastal and Estuarine Research Federation 2011.

Beal, J¹; Voss, J.D. ².

¹Florida Fish & Wildlife Conservation Commission ²Harbor Branch Oceanographic Inst at Florida Atlantic Univ, Ft. Pierce, FL.

Use of a Spoil Island for Seagrass and Mangrove Mitigation in the Indian River Lagoon. Indian River Lagoon Symposium 2012.

Dave R. Clark, L.R. Ellis, T.Z. Osborne, A.G. Rozin, and J. Beal
Inwater Research Group, Jensen Beach, FL

Estuarine impacts on St. Lucie Reef: Determining the effects of changing resource management on Florida's northernmost coral reef. Indian River Lagoon Symposium 2012.

Joshua D. Voss¹, Dennis Hanisak¹, Sara Edge¹, Lisa Cohen¹, and Jeff Beal²,

¹Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL

Restoration of dragline-ditched coastal marshes in Mosquito Lagoon through multi-tiered partnering. Restore Americas Estuaries 2012.

Beal, J¹; Ron Brockmeyer ²; William Greening ³; Nicole Adimey ⁴ ¹Florida Fish & Wildlife Conservation Commission ²St Johns River Water Management District Palatka, FL; ³Volusia County Mosquito Control District; ⁴USFWS

Restoration of coastal estuarine habitats through NOAA's Coastal and Marine Habitat Restoration Grant Program. Restore Americas Estuaries 2014.

Beal, J¹; Ron Brockmeyer ²; Paul Haydt ² ¹Florida Fish & Wildlife Conservation Commission ²St Johns River Water Management District Palatka, FL.

Estuarine Impacts on Coral Reef Health and Implications for Water Resource Management in Southeast Florida. Indian River Lagoon Symposium 2014.

Joshua D. Voss¹, Jeff Beal², Maureen Williams¹, Lisa Cohen¹, and Courtney Klepac¹ ¹Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL

Coral and Zooxanthellae Responses to Seasonal Fluctuations and Freshwater Discharge on St. Lucie Reef, FL. Benthic Ecology Meeting 2014.

Courtney Klepac ¹; Voss, J.D. ¹; Beal, J. ²; Sproles, A. ³; Polinski, J. ⁴
¹Harbor Branch Oceanographic Inst at Florida Atlantic Univ, Ft. Pierce, FL; ²Florida Fish & Wildlife Conservation Commission, FL; ³Victoria Univ of Wellington, NZ; ⁴Albion College, Albion, MI

Presence of the invasive lionfish (*Pterois spp.*) in the Indian River Lagoon: Implications for control and management. Southeast Estuarine Research Society 2015.

Jeff Beal¹, Emily Dark²; ¹Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL; ²Antioch Univ

Restoration of coastal estuarine habitats in Indian River Lagoon. Florida Waterfowl Summit 2015.

Beal, J¹; Ron Brockmeyer. ²; Paul Haydt ²; Daphne Booth. ³; Kent Smith ¹
¹Florida Fish & Wildlife Conservation Commission ²St Johns River Water Management District; ³NOAA.

Effects of St. Lucie River Estuarine Discharge Water on Corals and Their Symbionts. Reef, FL. Indian River Lagoon Symposium 2015.

Alicia Shatters¹; Voss, J.D. ¹; Beal, J. ².
¹Harbor Branch Oceanographic Inst at Florida Atlantic Univ, Ft. Pierce, FL; ²Florida Fish & Wildlife Conservation Commission, FL.

Promoting living shorelines along waterfront properties: challenges and opportunities. Southeastern Association of Fish and Wildlife Agencies 2016.

Beal, J, Steven Rockwood, Kent Smith Florida Fish & Wildlife Conservation Commission

East-Central Florida Estuarine Restoration (ECERT): Decoding the Indian River Lagoon, a National Treasure. Restore Americas Estuaries Special Session 2016 chaired by J. Beal. Presentation entitled **Black and Blue: Informing Estuarine Restoration Performance Measures Using Assessments of Offshore Coral Communities.**

Beal, J¹; Voss, J.D. ²; Courtney Klepac ²; Danielle Dodge ²; Sproles, A. ³; Polinski, J. ⁴
¹Florida Fish & Wildlife Conservation Commission ²Harbor Branch Oceanographic Inst at Florida Atlantic Univ, Ft. Pierce, FL; ³Victoria Univ of Wellington, NZ; ⁴Albion College, Albion, MI

Oyster health: natural versus restored reefs. Atlantic Coast Fish Habitat Partnership 2017.

Beal, J¹; Susan Laramore ²; Emily Dark³.¹Florida Fish & Wildlife Conservation Commission ²Harbor Branch Oceanographic Inst at Florida Atlantic Univ, Ft. Pierce, FL; ³Florida Dept of Environmental Protection

Oyster Restoration in Florida: Past, present, and future. Restore Americas Estuaries Special Session 2018 chaired by J. Beal. Presentation entitled **Slow Bivalves at Work: the role of filter feeders in the restoration of the Indian River Lagoon.** Beal, J. Florida Fish & Wildlife Conservation Commission

Intervention strategies for diseased corals in Southeast Florida and potential impacts on mucus microbial communities. Benthic Ecology Meeting 2019/2020 and Indian River Lagoon Symposium 2019.

Erin Shilling¹, Jeff Beal², Joshua D. Voss¹ ¹Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL

Quantifying the effects of habitat restoration on fish communities in a dynamic coastal estuary. Coastal and Estuarine Research Federation 2019.

Richard Mahoney¹, Jeff Beal², Dakota Lewis¹ Geoffrey Cook¹; ²Univ of Central Florida, ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL;

Characterizing the Impacts of Scleractinian Tissue Loss Disease with 3D Photogrammetry. Indian River Lagoon Symposium 2019.

Ian Combs¹, Michael Studivan¹, Jeff Beal², Joshua D. Voss¹ ¹Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL

Intervention strategies for diseased corals in Southeast Florida and potential impacts on mucus microbial communities. International Coral Reef Symposium 2020.

Erin Shilling¹, Ian Combs¹, Michael Studivan¹, Jeff Beal², Joshua D. Voss¹
¹Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL

An Environmental DNA Tool to Monitor Recovery of the USA's Smalltooth Sawfish Population. American Elasmobranch Society 2020.

RN Lehman¹, NM Phillips¹, RM Scharer², AJ Court², AK Wooley², JP Hadden¹, MJ Ajemian³, MP McCallister³, JL Beal², GR Poulakis²

¹ University of Southern Mississippi, Hattiesburg, MS; ²Florida Fish and Wildlife Conservation Commission, Fort Pierce, FL; ³Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL

KNOWLEDGE, SKILLS, AND EXPERTISE

- 30 years working experience on the conservation and restoration of marine, estuarine, oligohaline, and freshwater aquatic systems of Florida as related to plants, fish, wildlife, invertebrates, and habitats;
- 15 years working experience supervising up to 10 professional employees (biologists, field technicians, administrative staff) including various training programs conducted by state agencies for supervising;
- expertise and knowledge of Florida habitats (seagrasses, mangroves, saltmarshes, oyster reefs, riverine oxbows/floodplains, freshwater wetlands, coral reefs) as related to water quality and fish, waterfowl, and wildlife;
- expertise and knowledge of south and central Florida watershed management issues;
- skills and extensive knowledge of Grant Management, Project Management, and Contract Management for the State of Florida including associated procurement, bidding, pcard usage, on-line purchasing processing, budgeting, and request for qualifications. Advancing Accountability State Contract Training;
- experience as resource manager of state aquatic preserves in the Indian River Lagoon region including aquatic habitat restoration, applied research and monitoring, comprehensive planning, and environmental education;
- experience as resource manager of state buffer preserves in the Indian River Lagoon region including comprehensive planning, exotic species removal, restoration of various riverine and upland habitats, and use of prescribed fire; Certified Burn Manager through State of Florida Division of Forestry including all associated coursework (certification lapsed)
- knowledge of state and federal permitting process including NEPA, Biological Opinion, and ESA Section 7 Consultation as an applicant and as a reviewer as per state agency mission;
- knowledge and expertise concerning *Halophila johnsonii* (ESA listed threatened marine plant) as a state representative including field management of a post-hurricane mapping effort through a NOAA-funded initiative;
- expertise and knowledge of Everglades Restoration especially with respect to effects on Northern Estuaries species and habitats;
- technical, scientific, environmental education, management plan and policy writing for a wide variety of audiences and stakeholders;
- knowledge of experimental design, data analysis, and data interpretation;
- developing and giving technical presentations on numerous topics regarding aquatic habitats and fish and wildlife in Florida and beyond including for professional meetings, conferences, and workshops, commissions (agency, municipality), councils (Indian River Lagoon National Estuary Program) and governing boards (Water Management Districts), public meetings with stakeholders, and civic organization and non-profit events;
- representing state agencies on numerous teams, workgroups, and technical advisory committees to speak on scientific findings, policy, and mission (including as steering team member or lead);
- leading technical standing teams of up to 250 environmental professionals to develop partnerships, discuss conservation and restoration techniques, leverage funding, and to facilitate permitting;
- representing state agencies during field visits with elected officials and agency leadership to discuss issues related to fish, wildlife and habitat; scientific data analysis and interpretation; problem solving; leading and facilitating professional and public meetings regarding scientific, technical, and policy topics;

- skills using most Microsoft products and Primer;
- skills using various field and data-logging equipment including GPS, laser level, boat electronics including sidescan sonar, YSI and Aquatroll water quality instruments, HOBO products (various), PAM fluorometer, Ocean Optics instruments
- technical grant writing and review for funding entities such as federal agencies (USFWS, NOAA, EPA), Atlantic Coast Fish Habitat Partnership, State Wildlife Grants, St. Lucie River Issues Team, FWC, FDEP, Coastal Zone Management Program, Indian River Lagoon National Estuary Program, Florida SeaGrant;
- FWC Boating and Trailering training and towing and operating vessels up to 35ft;
- AAUS Scientific Diver Enriched Air Nitrox; over 1000 professional dives logged including five NOAA cruise missions;
- trained as state agency rep for Coral Crime Scene Investigation team;
- CPR/First Aid/O2 administration training.

AWARDS

Atlantic Coast Fish Habitat Partnership Melissa Laser Award 2017

FWC Division of Habitat and Species Conservation Scientific Employee of the Year 2010

Florida Assoc. of Environmental Professionals Treasure Coast Chapter President's Award 2003

FDEP Team Performance Award for the Palm Beach County Seagrass Workgroup 1998

REFERENCES

Kent Smith, FWC Marine/Estuarine Subsection administrator; supervisor for 15 years; colleague for 30 years..... kent.smith@myfwc.com; 850.566.9059

Ron Brockmeyer, SJRWMD; colleague and co-principal on various grants for 30 years.... rbrockmeyer@sjrwmd.com; 386.972.8647

Dr. Joshua Voss, FAU at Harbor Branch; colleague and co-principal on various grants for 15 years.... Jvoss2@fau.edu; 305.588.0732

Dr. Dennis Hanisak, FAU at Harbor Branch; colleague and co-principal on various grants for 30 years.... dhanisak@fau.edu; 772. 242.2306

Emily Purcell, Ducks Unlimited South Atlantic Region; supervisor for 2.5 years at DU..... epurcell@ducks.org ; 843.330.3024