



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

New Business - Community Services Group

J.2.

12/8/2020

Subject:

Appointments to the Environmentally Endangered Lands Program Selection and Management Committee

Fiscal Impact:

There is no fiscal impact as a result of this action.

Dept/Office:

Parks and Recreation Department / Environmentally Endangered Lands Program

Requested Action:

It is requested the Board of County Commissioners provide direction to staff regarding the appointment of members to the Environmentally Endangered Lands Program, Selection and Management Committee.

Summary Explanation and Background:

On January 8, 2019 the Board reappointed members who had served for less than 8 years and directed staff to initiate the process to advertise and fill the remaining openings with the understanding that current committee members who were not being reappointed were welcome to reapply.

All eight positions on the Selection and Management Committee are expiring on December 31, 2020. Currently five members, Elizabeth Becker, Oli Johnson, Tammy Foster, Tamy Dabu and Lisa Toland have served on the committee less than eight years. Two members, Paul Schmalzer, David Breininger have served on the committee more than eight years. On November 12, 2019 the BOCC approved Ordinance 2019-24 which established term limits for advisory board appointments. "(3) Term Limits. Appointees to advisory boards shall serve no more than eight consecutive years, or ten years in sixteen-year period, on the same advisory board for which there is not an Interlocal Agreement or Memorandum of Understanding or other contractual commitment precluding imposition of a term limit. A Commissioner may request the Board of County Commissioners waive the aforementioned term limit should the commissioner have difficulty filling an advisory board appointee position. A waiver of the term limits will only be granted if the Board votes in favor of the waiver by a supermajority vote." Kim Zarillo is the current Tourism Development Council's appointee, but the Tourism Development Council has recommended Mac McLouth as their new appointee.

The following three options are presented for Board's consideration:

Option 1: Reappoint all current science members. Appoint Mac McLouth as the Tourism Development Council representative. The members and their years of service are listed below. Terms would expire December 31, 2022. Approval of this option will require the Board to waive the term limit requirements for the two members who have served more than 8 consecutive years. **If this option is selected, a super majority vote would be required.**

Committee Member Name:	Consecutive Years of Service:
Oli Johnson (Science Appointee)	4
Tammy Foster (Science Appointee)	2
Elizabeth Becker (Science Appointee)	2
Paul Schmalzer (Science Appointee)	30
David Breininger (Science Appointee)	22
Lisa Toland (Science Appointee)	1
Tamy Dabu (Science Appointee)	1
Mac McLouth (TDC Appointee)	0

Option 2: Reappoint the science appointees who have served less than eight years and appoint Mac McLouth as recommended by the Tourism Development Council. These members are listed below. Terms would expire December 31, 2022. Direct staff to initiate procedures to advertise and fill the two remaining science positions with the opportunity for current members to reapply. The process to advertise the positions and present a list of qualified candidates to the Board for final ranking and appointment typically takes about 90 days. The science appointees would remain on the Selection and Management Committee until their replacements have been approved.

Committee Member Name:	Consecutive Years of Service:
Oli Johnson (Science Appointee)	4
Tammy Foster (Science Appointee)	2
Elizabeth Becker (Science Appointee)	2
Lisa Toland (Science Appointee)	1
Tamy Dabu (Science Appointee)	1
Mac McLouth (TDC Appointee)	0

Option 3: Reappoint all current science members that can attend meetings in person. Appoint Mac McLouth as the Tourism Development Council representative. Currently, three members of the committee are prohibited, by their employer, to attend SMC meetings in person. This makes it difficult to meet the in-person quorum requirements, as directed by the State.

The members and their years of service are listed below. Terms would expire December 31, 2022. Direct staff to initiate procedures to advertise and fill the three remaining science positions with the opportunity for current members to reapply. The process to advertise the positions and present a list of qualified candidates to the Board for final ranking and appointment typically takes about 90 days. The science appointees would remain on the Selection and Management Committee until their replacements have been approved.

Committee Member Name:	Consecutive Years of Service:
Oli Johnson (Science Appointee)	4
Elizabeth Becker (Science Appointee)	2
Lisa Toland (Science Appointee)	1
Tamy Dabu (Science Appointee)	1
Mac McLouth (TDC Appointee)	0

Option 4: Appoint Mac McLouth as recommended by the Tourist Development Council. His term would expire on December 31, 2022. Direct staff to initiate procedures to advertise and fill the remaining seven science positions with the opportunity for current members to reapply. The process to advertise the positions and present the list of qualified candidates to the Board for final ranking and appointment typically takes about 90 days. The science appointees would remain on the Selection and Management Committee until their replacements have been approved.

Per the EEL Land Acquisition Manual, the process for ranking and appointing new SMC members is as follows:

- a. *The qualifications of all applicants or nominees responding to a call by the County Commissioners for EEL Selection and Management Committee volunteers shall be reviewed by a Qualifying Committee consisting of the EEL Program Manager, the Chairman of the Procedures Committee (or their designee), and the Director of Human Resources (or their designee). Staff will present the list of all applicants/nominees to the Qualifying Committee for review and an initial ranking based on their level of experience and education. Qualifications for EEL Selection and Management Committee members are outlined in this manual (pages 13 & 14).*

Applicants/Nominees being recommended by the TDC and EDC will not be reviewed or ranked by the Qualifying Committee or the Procedures Committee, but will be presented to the County Commission for final ranking along with the list of science applicants/nominees.

The method of the initial ranking by the Qualifying Committee is as follows:

1. *All applicants who meet the minimum qualifications as approved by the Qualifying Committee will be assigned one hundred (100) points.*
2. *Five (5) additional points are assigned for each graduate degree (Masters or Doctorate) in ecosystem management, natural resources conservation, aquatic biology, field ecology, marine biology, botany, geology, hydrology, fire ecology, natural areas management, human use and recreation in natural areas, science education, or natural areas sanctuary design.*
3. *And/or two (2) additional points for each year up to six (6) years for demonstrated professional expertise in biological or environmental sciences OR a closely related conservation field such as ecosystem management, natural resources conservation, aquatic biology, field ecology, marine biology, botany, geology, hydrology, fire ecology, natural areas management, human use and recreation in natural areas, science education, or natural area sanctuary design.*

The Qualifying Committee will provide the list of all applicants/nominees to the Procedures Committee including identification of those applicants/nominees that have been determined by the Qualifying Committee to be qualified. The qualified applicants will be identified by their initial ranking.

The Procedures Committee will review the list of applicants presented by the Qualifying Committee and will verify the final list of qualified applicants/nominees through a majority vote. County EEL staff will provide the list of the qualified applicants/nominees in ranked order from highest to lowest to the Board for review and final ranking.

Any Procedures Committee member who is applying for an open seat on the Selection and Management Committee, shall refrain from voting on the final list of qualified applicants or participating as a member of the Qualifying Committee.

- b. The Board shall review the qualifications of the qualified nominees and give each nominee a ranking score from 1-3. The Assistant County Administrator (or designated county staff) shall tabulate the ranking scores. Those nominees with the highest scores shall be appointed to the EEL Selection and Management Committee, those nominees with the second highest scores shall be appointed as alternates to the EEL Selection and Management Committee. In cases of tied scores, the Board Chairperson will choose members or alternates by drawing names of those with tied scores from a box.*

Currently the Committee has three members who are not permitted to attend in-person meetings due to their employer's restrictions and one additional member cannot meet in-person due to health concerns. This makes it difficult to obtain an in-person quorum. As such, a consideration of appointment for new members would be the ability to attend in-person meetings.

Clerk to the Board Instructions:

Please send Board Direction Memo to the Environmentally Endangered Lands (EEL) Program.



December 9, 2020

M E M O R A N D U M

TO: Mary Ellen Donner, Park and Recreation Director

RE: Item J.2. Appointments to the Environmentally Endangered Lands Program Selection and Management Committee

The Board of County Commissioners, in regular session on December 8, 2020, reappointed all current science members on the Selection and Management Committee who can attend meetings in-person; appointed Mac McLouth as the Tourism Development Council representative of the Selection and Management Committee; and directed staff to advertise and fill the three remaining science positions who can attend in-person meetings with the opportunity for current members to reapply.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Kimberly Powell
Kimberly Powell, Clerk to the Board

/cld

cc: Environmentally Endangered Lands (EEL) Program

David R. Breininger**Work:**

Conservation Biologist
NASA Ecological Programs
Kennedy Space Center, FL 32899
Phone: (321) 289-5130 cell
Email: david.r.breininger@nasa.gov

10/05/2020 short version

Home:

413 Tortoise View Circle
Satellite Beach, FL 32937
Phone (321) 312-5615 cell
dbreinin@gmail.com

Experience & Expertise

- Thirty-nine years' experience integrating research, monitoring, land management, conservation area design, environmental assessment, regulatory analyses, and education.
- Emphasizes on field studies, mark-recapture, remote sensing, radio telemetry, geographical information systems, statistical modeling, population analyses and landscape modeling.
- Collaborations with scientists and managers on international, national, regional, and local topics
- Expertise emphasizes endangered species biology, biodiversity conservation, fire ecology, habitat quality, landscape dynamics, population demography, dispersal biology, community composition and adaptive management.

Education

2009 *Ph.D., Conservation Biology, University of Central Florida*

1981 *M.S., Ecology, Florida Institute of Technology*

1978. *B.S., Marine Biology, Florida Institute of Technology*

Employment History

2020-present *Chief Scientist, Herndon Solutions Group, Kennedy Space Center Ecology Program (KSC)*

Conduct studies on endangered species, habitat, and ecosystem dynamics to support adaptive management and regulatory compliance

2015-2020 *Senior Scientist, Integrated Mission Support Services, KSC Ecology Program.* Conduct studies on endangered species, habitat, and ecosystem dynamics to support adaptive management and regulatory compliance

2015-present *Courtesy Faculty, University of Central Florida.* Support strategic decision making on passive versus active translocation strategies and support genomic, immunogenetic and disease studies.

2009-2015. *Lead Wildlife Biologist, InoMedic Health Applications, KSC.* Studies on endangered species, habitat and ecosystem dynamics to support adaptive management and develop strategies for regulatory compliance, restoration, and habitat management. Coordinate 5 biologists.

1995-2009. *Senior Scientist and Lead, Dynamac Corporation, KSC.* Conducted studies on wildlife and habitat dynamics to support environmental management, mitigation, restoration, and habitat management. Coordinated 4- 8 biologists and managed subcontracts.

1993-1995. *Research Scientist Florida Institute of Technology* Conducted field studies and population risk modeling to support the Brevard County Scrub Conservation and Development Plan.

1984-1994. *Lead (1994), Supervisor, (1991-1993), Wildlife Biologist (1984-1990), Bionetics Corporation, KSC.* Conducted studies to predict and interpret environmental impacts and develop strategies for mitigation, restoration, and habitat management. Coordinated 4-7 biologists.

1982-1984. *Engineer, Planning Research Corporation.* Analyzed regulatory requirements and prepared regulatory documents for NEPA, endangered species, ground water, and surface water, floodplain, and wetland topics to support the KSC Environmental Management Branch.

1982. *Teacher, Brevard County School District.* Taught math and biology.

1981. *Research Assistant, Technology Incorporated, KSC.* Studied effects of the launches on vegetation.

1978-1981. *Graduate Teaching Assistant, Laboratory Supervisor, Florida Institute of Technology, Field and lab instruction in Florida, Great Smokey Mountains, Central and Southern Rocky Mountains.*

Honors and Awards Since College

2017	Charlie Corbeil Conservation Award, Preserve Brevard
2017	KSC Engineer/Scientist of the Year, NASA
2016	Outstanding Alumni Knight, University of Central Florida
2016	Regional Director's Conservation Award, U.S. Fish and Wildlife Service
2014	Employee of the Month, NASA Medical and Environmental Support Contract
2009	Most Productive, NASA Life Sciences Support Contract
1997	Visionary Award, NASA Life Sciences Support Contract
1996	JFK Award for Leadership, NASA Life Sciences Support Contract
1995	Conservation Colleague Award, Nature Conservancy

Appointments

2016- present	Research Associate, University of Central Florida
2015- present	Board of Directors, Allen Broussard Conservancy
2009- present	Board, Florida Institute of Conservation Science
1997- present	Brevard County Environmentally Endangered Lands Selection and Management Committee
1997- present	Florida Scrub-Jay Recovery Team
2014-2018	Judge, River Fest Sustainability Award, Keep Brevard Beautiful
2013- 2017	Editorial board, Advances in Ecology
2010-2011	Research Professor, Florida Institute of Technology
2010-2016	Graduate Faculty Scholar, University of Central Florida
1999-2001	Florida Scrub-Jay Fire Strike Team Advisory Board
1999-2000	Brevard County Crucial Habitat Conservation Planning Committee
1998-1999	Interagency Fire Science Team
1995-1997	South Florida Ecosystem Multi-Species Recovery Team
1997-1998	Florida Ornithological Society's Grants and Awards Committee Chair
1994-1996	Florida Ornithological Society's Research Awards Committee
1994-1995	Florida Scrub-Jay Habitat Conservation Guidelines Committee
1994-1995	Indian River Lagoon Biodiversity Symposium Planning Group, National Estuary Program
1993	Scientific Advisory Group for the Brevard County Scrub Habitat Conservation Plan, Chair

Project leadership examples

- Developing a population viability analyses approach for Florida scrub-jay metapopulations
- NASA Ecological Monitoring Program Project Review and Advisory Board
- Developing an approach to estimate invasive species (feral pig), emerging predators, and rare species using camera trapping and auditory receivers
- Developing a two-phase approach to diamondback terrapin population estimation
- Coordinated adaptive management program for scrub-jay habitat and population management
- Developing a research and monitoring program to predict and interpret how land cover and habitat management influenced Florida scrub-jay habitat and population dynamics
- Developing endangered species compensation plan for new spaceport development
- Developed spatially explicit Florida grasshopper sparrow metapopulation model
- Initiated a program to develop occupancy approaches to monitor southeastern beach mouse
- Developing modeling approach to predict how land cover and conservation scenarios influenced eastern indigo snake survival and population viability

- Performed indigo snake telemetry studies on Avon Park Bombing Range and east central Florida
- Mentored graduate students on field studies and capture-recapture analyses of wildlife species
- Assembled team to do metapopulation analyses of California least terns from Baja to Oregon
- Assembled scientific team to do populations analyses of snowy plovers at Vandenberg Air Force Base
- Quantified how bird communities varied because of habitat, fire, and water management
- Developing an approach to prioritize species of conservation concern for monitoring and research
- Impact studies of unauthorized habitat destruction to Florida scrub-jays as potential Endangered Species Act violations to aid law enforcement
- Characterized wildlife species of biodiversity concern on Vandenberg Air Force Station
- Investigated how gopher tortoise gopher tortoise densities were influenced by water table, vegetation composition, time-since-fire, and habitat structure
- Mentored high school students and teachers in NASA Education Programs (e.g. SHARP)
- Conducted monitoring of wildlife responses to launches on KSC and Cape Canaveral Air Force Station
- Assisted in development and publication of a Indian River Lagoon Biodiversity Symposium
- Developed habitat relationship model to predict wildlife species composition by land cover type
- Characterized how groundwater regulatory changes could affect KSC operations and develop a compliance approach
- Preparing, reviewing, and editing NEPA documents
- Reviewing laws, regulations, agreements, and NEPA documents to summarize KSC environmental monitoring requirements
- Developed an approach to monitor vegetation responses to space shuttle exhaust

Continuous Improvement

Integrated population models (Bayesian hierarchical statistics with R & JAGS), Kery, Schaub, Abadi

Landscape state and transition modeling with ST-SIM, APEX RMS Colin Daniels

MBA (1/2 course work completed, Florida Institute of Technology)

Capture-recapture statistical analyses using MARK, Colorado State University

Model Selection and Multi-Model Statistical Inference, David Anderson

Habitat Evaluation Procedures, Colorado State University

Advanced ARC/INFO, ESRI

Global Positioning Systems, Trimble

ENVI Image Processing, Research Systems, Inc.

Fire Suppression and Standards for Survival, U.S. Fish and Wildlife Service

Interagency Prescribed Fire, Florida Department of Agriculture

Aircraft Safety, U.S. Fish and Wildlife Service

Population Risk assessment, Applied Biomathematics

Dozens of Environmental Law, Permitting & Regulatory classes

Certified Scuba Diver (>500 open water dives)

Hundreds of First Aid, CPR, and Safety classes

Other Professional Activities:

- 24 proposals funded totaling ~ 3 million dollars as Co-PI or PI
- Peer review of >50 manuscripts for >30 science journals
- Greater than 200 invited lectures
- Newspaper, radio, education, or television interviews > 20 times.
- Organized workshops on biodiversity, adaptive management, scrub biology, and fire ecology

Scientific Publications (93): *Journal Articles (57), Book Chapters (4), Conference Proceedings (7), Published Reports (19), Trade Magazines (4), Theses (2).* *Examples:*

- Cox, J.A., T. Engstrom, D.R. Breininger, E.L. Hewett Ragheb. 2020. Interpreting smoke signals: fire ecology and land management for four federally listed birds. **Frontiers in Ecology and Evolution** 8:267.
- Eaton, M., D. Breininger, Nichols, J., Fackler, P., McGee, S., Smurl, M., DeMeyer, D., Baker, J. Zondervan, M. 2020. Integrated hierarchical models to inform management of transitional habitat and the recovery of a habitat specialist. **Ecosphere**.
- Bauder, J.M., D.R. Breininger, M.R. Bolt, M.L. Legare, C.L. Jenkins, B.B. Rothermel, and K. McGarigal. 2020. Movement barriers, habitat heterogeneity, or both? Testing hypothesized effects of landscape features on home range sizes in eastern indigo snakes. **Journal of Zoology** 311: 204–216.
- Breininger, D.R., E.D. Stolen, D.J. Breininger and R.D. Breininger, and C.R. Hall. 2019. Sampling rare and elusive species: east coast diamondback terrapin population abundance. **Ecosphere** 10:1-15.
- Breininger, D.R., D.M. Oddy, E.D. Stolen, D. K. Hunt. 2018. Influence of sex and transients on survival and detection probabilities of the southeastern beach mouse. **Journal of Mammalogy** 99: 946–951.
- Breininger, D.R., R.D. Breininger, and C.R. Hall. 2017. Effects of surrounding land use and water depth on seagrass dynamics with attention to a catastrophic algal bloom. **Conservation Biology** 31:67-75.
- Breininger, D. R., M. J. Mazerolle, M. R. Bolt, M. L. Legare, J. H. Drese, J. E. Hines. 2012. Using multistate models to quantify habitat fragmentation impacts of eastern indigo snake survival. **Animal Conservation** 15:361-368.
- Duncan, B., P. A Schmalzer, D.R. Breininger, E.D. Stolen. 2015. Comparing fuels reduction and patch mosaic fire regimes for reducing fire spread potential, a spatial modeling approach. **Ecological Modeling** 314:90-99.
- Stolen E.D, D M. Oddy, M. L. Legare, D. R. Breininger, S.L. Gann, S. A. Legare, S. K Weiss, K. G. Holloway-Adkins. 2014. Preventing tracking-tube false detections in occupancy modeling of southeastern beach mouse. **Journal of Fish and Wildlife Management** 5:270-281.
- Johnson, F. A., D. R. Breininger, B. W. Duncan, J. D. Nichols, M. C. Runge, B. K. Williams. 2011. A Markov decision process for managing habitat for Florida Scrub-Jays. **Journal of Fish and Wildlife Management** 2:234-2470.
- Williams, B. K., M. J. Eaton, D. R. Breininger. 2011. Adaptive resource management and the value of information. **Ecological Modeling** 222:3429-3436.
- Breininger, D. R., J.D. Nichols, B. W. Duncan, E. D. Stolen, G. M. Carter, D. Hunt, J. H. Drese. 2010. Multistate modeling of habitat dynamics: factors affecting Florida scrub transition probabilities. **Ecology** 91:3354-3364.
- Breininger, D. R., J. D. Nichols, G. M. Carter, D. M. Oddy. 2009. Habitat-specific breeder survival of Florida Scrub-Jays: inferences using multistate models. **Ecology** 90:3180-3189
- Carter, G. M., E. D. Stolen, D. R. Breininger. 2006. A rapid approach to modeling species-habitat relationships. **Biological Conservation** 127:237-244.
- Akçakaya, H. R., J. L. Atwood, D. R. Breininger, C. T. Collins, B. W. Duncan. 2003. Metapopulation dynamics of the California Least Tern. **Journal of Wildlife Management** 67:829-842
- Breininger, D. R., B. A. Burgman, H. R. Akçakaya and M. O. O'Connell. 2002. Use of metapopulation models in conservation planning, Pages 405-427 in K. J. Gutzwiller, editor. **Concepts and Applications of Landscape Ecology in Biological Conservation**. Springer-Verlag, N.Y.
- Breininger, D. R., V. L. Larson, B. W. Duncan, R. B. Smith, D. M. Oddy, and M. F. Goodchild. 1995. Landscape patterns of Florida Scrub-Jay habitat preference and demographic success. **Conservation Biology** 9:1442-1453.
- Breininger, D. R., M. J. Provancha and R. B. Smith. 1991. Mapping Florida Scrub-Jay habitat for purposes of land-use management. **Photogrammetric Engineering and Remote Sensing** 57: 1467-1474.

10/1/2020

PAUL A. SCHMALZER

EDUCATION

Western Maryland College, B.A. Biology 1976
The University of Tennessee, M.S. Ecology 1978
The University of Tennessee, Ph.D. Ecology 1982

EXPERIENCE

Thirty-eight years of experience in the design and implementation of ecological research, environmental impact analysis, and biological surveys. Expertise in terrestrial plant ecology, fire ecology, restoration ecology, vascular flora, vegetation sampling, and vegetation data analysis.

HERNDON SOLUTIONS GROUP

Senior Plant Ecologist, Kennedy Space Center, Florida. October 2020-Present

Conduct studies of Kennedy Space Center vegetation, fire ecology, and restoration of scrub and wetlands vegetation. Conduct studies of rare plant distributions and ecology. Provide technical guidance to the Vegetation Studies Group. Maintain KSC Herbarium.

INTEGRATED MISSION SUPPORT SERVICES

Senior Plant Ecologist, Kennedy Space Center, Florida. November 2015-September 2020

Conduct studies of Kennedy Space Center vegetation, fire ecology, and restoration of scrub and wetlands vegetation. Conduct studies of rare plant distributions and ecology. Provide technical guidance to the Vegetation Studies Group. Maintain KSC Herbarium.

UNIVERSITY OF CENTRAL FLORIDA, DEPARTMENT OF BIOLOGY

Courtesy Research Associate, Orlando, Florida. March 2016-Present

INNOVATIVE HEALTH APPLICATIONS/INOMEDIC HEALTH APPLICATIONS

Technical Lead, Plant Ecologist, Kennedy Space Center, Florida. October 2009-October 2015

Conduct studies of Kennedy Space Center vegetation, fire ecology, and restoration of scrub and wetlands vegetation. Conduct studies of rare plant distributions and ecology. Provide technical guidance to the Vegetation Studies Group. Maintain KSC Herbarium.

DYNAMAC CORPORATION

Technical Lead, Plant Ecologist, Kennedy Space Center, Florida. January 1995 - September 2009

Conduct studies of Kennedy Space Center vegetation, fire ecology, and restoration of scrub and wetlands vegetation. Conduct studies of rare plant distributions and ecology. Provide technical guidance to the Vegetation Studies Group. Maintain KSC Herbarium. Monitor scrub restoration efforts on Cape Canaveral Air Force Station. Directed studies of effects of rocket launches on Cape Canaveral Air Station. Directed study of threatened and endangered species on Patrick Air Force Base. Directed study of historical vegetation of the Indian River Lagoon Basin. Conducted studies of the flora and rare plants of Canaveral National Seashore. Conducted studies of the occurrence and distribution of rare scrub plants in Brevard County.

THE BIONETICS CORPORATION

Technical Lead, Plant Ecologist, Kennedy Space Center, Florida. 1993-1994.

Conducted studies of Kennedy Space Center vegetation, fire ecology, and restoration of scrub and wetlands vegetation. Provided technical guidance to the Vegetation Studies Group.

Plant Ecologist, Kennedy Space Center, Florida. 1982-1993.

Conducted studies of the vegetation of Kennedy Space Center in relation to environmental variables, successional patterns, fire effects, and space center operations. Contributed to studies of animal habitat use. Conducted studies of vegetation, exotic plants, and potential environmental impacts and coordinated studies of fire history and soil erosion on Vandenberg Air Force Base, California.

FLORIDA INSTITUTE OF TECHNOLOGY

Research Scientist, Plant Ecologist (part time). Melbourne, Florida. 1993-1995.

Brevard County Scrub Habitat Conservation Plan. Helped develop proposal to conduct study of scrub habitat in Brevard County in relation to Florida Scrub-Jay habitat requirements and other rare or declining scrub species. Specific duties include plant sampling protocol, scrub plant identification, report preparation, and graduate student training.

BREVARD COUNTY

Member, Environmentally Endangered Lands Selection and Management Committee (volunteer). 1990-Present.

Helped develop criteria for determination of environmentally endangered lands and priorities for acquisition. Examined numerous sites, prepared reports, and made recommendations regarding acquisition. Helped prepare proposals to State of Florida Conservation and Recreational Lands (CARL) Program, Florida Forever Program, and the Florida Community Trust. Helped develop management criteria and reviewed management plans. Conducted numerous site visits to examine management activities and requirements.

THE UNIVERSITY OF TENNESSEE

Graduate Research Assistant, Ecology Program, Knoxville, Tennessee, 1979-1982.

National Park Service Obed River Vegetation Project. Conducted vegetation survey, prepared vegetation map, conducted survey for endangered and threatened plants and critical plant habitats, prepared floristic list, and prepared report.

National Park Service contract to H.R. DeSelm: Classification of the Vegetation of the Interior Low Plateau. Helped to gather and synthesize literature on vegetation of the Interior Low Plateau and to prepare report.

National Park Service contract to H.R. DeSelm: Evaluation of Five Potential National Natural Landmarks in Tennessee. Helped to gather field data and available information on topography, geology, soils, and vegetation of five proposed National Natural Landmarks in Tennessee.

Hilton Smith Fellowship, 1978-1979.

Graduate Teaching Assistant, 1977-1978.

Taught general biology, prepared lectures and conducted labs.

Non-Service Fellowship, 1976-1977.

PROJECT HISTORY:

National Aeronautics and Space Administration, Kennedy Space Center, 1982-Present. Principal investigator. Designed and implemented vegetation monitoring program for Kennedy Space Center, Florida including long-term studies of changes after fire. Conduct studies of effects of Space Shuttle launches on terrestrial vegetation and soils and help maintain long-term databases of launch deposition patterns.

National Aeronautics and Space Administration, Kennedy Space Center, 1992-Present. Principal investigator. Collaborate on the design and implementation of a scrub restoration program for

Kennedy Space Center. Monitor vegetation changes after combinations of cutting and burning to restore long-unburned scrub habitat. Monitor survival and growth of scrub species planted in former agricultural sites.

National Aeronautics and Space Administration, Kennedy Space Center, and U.S. Fish and Wildlife Service, Merritt Island National Wildlife Refuge. 2010-2011. Principal investigator. Design and implement program monitoring vegetation response to restoration of hardwood swales in scrub and flatwoods landscapes on Kennedy Space Center/Merritt Island National Wildlife Refuge.

U.S. Air Force, 45th Space Wing, 2010-2011. Co-investigator. Compile floristic inventory of selected wetlands areas on Cape Canaveral Air Force Station as part of a comprehensive survey of flora and fauna.

National Park Service, Canaveral National Seashore, 2002-2004. Principal investigator. Compile floristic inventory and survey for threatened and endangered plants on Canaveral National Seashore, Florida.

Brevard County Natural Resources Management Office, 2004-2005. Principal investigator. Conduct surveys for threatened and endangered scrub plants in Brevard County, Florida.

Brevard County Natural Resources Management Office, 2003-2004. Principal investigator. Conduct surveys for selected threatened and endangered plants in Brevard County, Florida.

U.S. Air Force, 45th Space Wing, 1998-2003. Principal investigator. Designed and coordinated the implementation of a scrub restoration program for Cape Canaveral Air Force Station, Florida. Monitored vegetation changes after combinations of cutting and burning to restore long-unburned scrub habitat.

National Aeronautics and Space Administration, Kennedy Space Center, Remediation Program, 1998-2000. Co-principal investigator. Helped to design and implement baseline chemical characterization study for Kennedy Space Center, Florida. Responsible for technical direction of soil and groundwater sections of the study.

U.S. Air Force, 45th Space Wing, 1995-1998. Principal investigator. Coordinated and helped to design program to monitor effects of Delta, Atlas, and Titan rocket launches on the environment of Cape Canaveral Air Force Station, Florida.

U.S. Air Force, 45th Space Wing, 1995-1997. Principal investigator. Coordinated and helped to design threatened and endangered species survey for Patrick Air Force Base, Florida.

St. Johns River Water Management District, 1995-1997. Co-principal investigator. Coordinated and helped to design project to map historical vegetation of the Indian River Lagoon Basin, Florida

GRADUATE STUDENT COMMITTEES:

Shannon Boyle, Florida Institute of Technology, M. S. Biology, December 1996
Theresa K. Burcsu, University of North Carolina Chapel Hill, M. A. Geography, July 1998
Lisa Earnest, University of South Florida, M.S. Marine Science, University of South Florida, December 1998

PROFESSIONAL SERVICE

Florida Native Plant Society: Chair, Science Advisory Committee, 2006-Present

Southern Appalachian Botanical Society: Editor, *Castanea*, 2001-2003
Southeastern Chapter, Ecological Society of America: Vice-Chair, 1993-1995; Secretary-Treasurer, 2000-2002; Chair, 2002-2004

PROFESSIONAL ACTIVITIES

American Association for the Advancement of Science
American Institute of Biological Sciences
Association of Southeastern Biologists
Brevard County Environmentally Endangered Lands Selection and Management Committee.
Ecological Society of America
Florida Academy of Science
Florida Native Plant Society
International Association for Vegetation Science
International Association for Wildland Fire
Natural Areas Association
Society of Wetland Scientists
Southern Appalachian Botanical Society
Tennessee Academy of Science
Torrey Botanical Society

CERTIFICATIONS

Certified Senior Ecologist, Ecological Society of America, 1994-Present

HONORS

NASA Kennedy Space Center Engineer/Scientist of the Year, 2018, Contractor Division
Florida Native Plant Society, Silver Palmetto Award, 2018
Florida Native Plant Society, Silver Palmetto Award, 2009
Florida Native Plant Society, Green Palmetto Award, 2005
The Nature Conservancy, Florida Chapter Conservation Colleague Award, 1995
NASA Manned Flight Awareness Award of Merit, 1989
Phi Kappa Phi, The University of Tennessee, 1982
H.P. Sturdivant Biology Award, Western Maryland College, 1976

PUBLICATIONS/TECHNICAL REPORTS/PRESENTATIONS

Published Papers:

- Schmalzer, P.A., C.R. Hinkle, and H.R. DeSelm. 1978. Discriminant analysis of cove forests of the Cumberland Plateau in Tennessee. p. 62-86. In: P.E. Pope (ed.). Proceedings Central Hardwoods Forest Conference II. Purdue University, West Lafayette, Indiana.
- Schmalzer, P.A., C.R. Hinkle, and H.R. DeSelm. 1980. Vegetation patterns in a section of the Obed Wild and Scenic River, Cumberland County, Tennessee. p. 256-272. In: H.E. Garrett and G.E. Cox (eds.). Proceedings Central Hardwood Conference III. University of Missouri, Columbia.
- Schmalzer, P.A., T.S. Patrick, and H.R. DeSelm. 1985. Vascular flora of the Obed Wild and Scenic River, Tennessee. *Castanea* 50:71-88.
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- Schmalzer, P. A. 2001. Growth of oak-saw palmetto scrub through 10 years after fire. Abstract of presented paper in: Program Abstracts of the 28th Annual Natural Areas Association Conference. p. 36-37.
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- Foster, T.E. and P.A. Schmalzer. 2005. Preliminary characterization of habitat for rare scrub plants in Brevard County, Florida. Abstract of presented poster in: *Ecological Society of America 2005 Annual Meeting Abstracts*. p. 199.

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- Schmalzer, P.A. and T.E. Foster. 2010. Responses of long-unburned oak-saw palmetto scrub to repeated cutting or burning. Poster presented at Ecological Society of America Meeting, August 5, 2010, Pittsburgh, Pennsylvania. Abstract available online at <http://www.esa.org>.
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- Schmalzer, P.A. and T.E. Foster. 2016. Development of scrub vegetation in a former agricultural site through 23 years after planting. Paper presented at Ecological Society of America Meeting, August 9, 2016, Ft. Lauderdale, Florida. Abstract available online at <http://www.esa.org>.
- Schmalzer, P.A. and T.E. Foster. 2019. Variation of Florida scrub vegetation along gradients of soil pH and landscape age on a barrier island complex. Paper presented at Ecological Society of America Meeting, August 15, 2019, Louisville, Kentucky. Abstract available online at <http://www.esa.org>.
- Schmalzer, P.A. and T.E. Foster. 2020. Responses of Florida scrub vegetation to water additions from a groundwater treatment project. Paper presented at Ecological Society of America Virtual Meeting, August 3-6, 2020. Abstract available online at <http://www.esa.org>.

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Accomplished researcher with 19 years of experience designing and implementing ecological projects, analyzing data, and communicating results effectively.

EXPERIENCE

AUGUST 2000 – PRESENT

PLANT ECOLOGIST, KENNEDY SPACE CENTER ECOLOGICAL MONITORING PROGRAM FOR GOVERNMENT CONTRACTORS:

Integrated Mission Support Services	10/2015 to present
InoMedic Health Applications	10/2009 – 9/2015
Dynamac Corporation	8/2000 – 9/2009

- Support Ecological Monitoring Program management through assisting with the development of the program operational plan, monitoring program budget, and program deliverables to the KSC customer.
- Lead the project review and advisory board in reviewing and approving implementation of program monitoring projects that support the KSC customer needs.
- Interact directly with customer technical managers to ensure information exchange and to support informational needs.
- Collaborate on design, data analysis, and communication of results through technical summaries, reports, presentations, and publications of interdisciplinary projects.
- Serve as co-principal investigator on plant ecology studies including recovery of Florida scrub after prescribed burning and mechanical treatment, flora inventories, wetland mitigation vegetation surveys, dendrochronology, plant physiology, and eddy covariance.

MARCH 2015 - PRESENT

ADJUNCT INSTRUCTOR, SOUTHERN NEW HAMPSHIRE UNIVERSITY

- Teach online courses in Environmental Science, Biology, Chemistry, and Ecology to undergraduates mostly majoring in Environmental Science or Geoscience.
- Use web tools to create video lecture segments on course content.

EDUCATION

MAY 2014

Ph.D. INTEGRATIVE BIOLOGY, UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL

Dissertation: *Water availability as the driving factor of growth and physiological function of co-occurring scrub species in central Florida.*

MAY 2002

M.S. BOTANY, UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL

Thesis: *Functional groups based on leaf physiology: Are they spatially and temporally robust?*
NASA Earth System Science Fellowship (1998-2000)

DECEMBER 1996

B.S. BIOLOGY, EASTERN COLLEGE (now EASTERN UNIVERSITY), ST. DAVID'S, PA

Summa cum laude

SKILLS

- Strong problem-solving skills
- Ability to analyze complex data
- Organize and present complex ideas effectively
- Able to work independently as well as collaboratively with diverse team
- Ability to lead multi-disciplinary teams
- Detail-oriented
- Proficient in programming in R
- Experienced with Microsoft Office Suite
- Trained and proficient in use of ESRI ArcGIS
- Experienced teacher and mentor

ACTIVITIES

APPOINTED 2018 - PRESENT

Selection and Management Committee; Brevard County Environmentally Endangered Lands

PUBLICATIONS

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- Breining, D.R., T.E. Foster, G.M. Carter, B.W. Duncan, E.D. Stolen, and J.E. Lyon. 2018. The effects of vegetative type, edges, fire history, rainfall, and management in fire-maintained habitat. *Ecosphere* 9(3).
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- Schmalzer, P.A. and T.E. Foster. 2018. Dynamics of gaps created by burning in Florida oak-saw palmetto (*Quercus*, Fagaceae-*Serenoa repens*, Arecaceae) scrub. *Journal of the Torrey Botanical Society*. 145(3):250-262.
- Schmalzer, P.A. and T.E. Foster. 2018. Restoration of Florida Scrub vegetation in an old field site through 23 years after planting. *Restoration Ecology* doi: 10.1111/rec.12864.
- Steinmuller, H., T.E. Foster, P. Boudreau, C.R. Hinkle, L.G. Chambers. 2019. Tipping points in the mangrove march: characterization of biogeochemical cycling along the mangrove-salt marsh ecotone. *Ecosystems*. doi: 10.1007/s10021-019099411-8.
- Bolt, R., M.A. Mercadante, T.J. Kozusko, S.K. Weiss, C.R. Hall, J. Provancha, N.R. Cancro, T.E. Foster, E.D. Stolen, S.A. Martin. 2019. An adaptive managed retreat approach to address shoreline erosion at the Kennedy Space Center. *Ecological Restoration*. 37(3):171-181.
- Steinmuller, H., T.E. Foster, P. Boudreau, C.R. Hinkle, L.G. Chambers. 2020. Characterization of herbaceous encroachment on soil biogeochemical cycling within a coastal marsh. *Science of the Total Environment*. 738:139532.
- Schmalzer, P.A. and T.E. Foster. 2020. Variation of Florida scrub vegetation along gradients of soil pH and landscape age on a barrier island complex. *Journal of the Torrey Botanical Society*. 147(2):140.

Kathryn Elizabeth Becker

k.elizabeth.becker@gmail.com

Education

M.S. Biology

University of Central Florida

Thesis: Variability of Carbon Stock in Florida Flatwoods Ecosystems Undergoing Restoration and Management

Major Professor: Dr. C. Ross Hinkle

May, 2011

Orlando, FL

B.S. Botany

University of Florida

December, 2008

Gainesville, FL

Research Experience

Graduate Research Assistant

University of Central Florida, Department of Biology

Supervisor: Dr. C. Ross Hinkle

Carbon Dynamics of the Greater Everglades Watershed and Implications of Climate Change

August, 2012 – August, 2018

Graduate Research Assistant

University of Central Florida, Department of Biology

Supervisor: Dr. C. Ross Hinkle

Measuring CO₂ flux in native and urban ecosystems using the eddy covariance method

January, 2011 - December, 2015

Graduate Research Assistant

University of Central Florida, Department of Biology

Supervisor: Dr. C. Ross Hinkle

Urban Forest Effects Model for Orlando, FL

May, 2010 - June, 2011

Research Assistant

University of Florida, Department of Botany

Supervisor: Dr. Michelle C. Mack

Anatuvuk River Fire Project

July, 2009 - August, 2009

Research Assistant

University of Florida, Department of Botany

Supervisor: Dr. Edward A.G. Schuur

January, 2009 - July, 2009

Research Assistant

University of Florida, School of Forest Resources and Conservation

Forest Biology Research Cooperative

Supervisors: Dr. Timothy A. Martin, Dr. Eric J. Jokela and Dr. Jason G. Vogel

Intensive Management Practices Assessment Center Project

January, 2009 - July, 2009

Undergraduate Independent Study

University of Florida, Department of Botany

Sponsors: Dr. Edward A.G. Schuur and Dr. Hanna Lee

Carbon and nitrogen stable isotope analysis of Alaskan permafrost soils

August, 2008 - April, 2009

Teaching Experience

Graduate Teaching Associate, University of Central Florida, Ecology Laboratory August, 2010 - December, 2010

Graduate Teaching Assistant, University of Central Florida, Biology Laboratory 1 August, 2009 - April, 2010

Grants and Honors

UCF College of Graduate Studies Travel Fellowship 2011, 2012, 2013

Elsie Quarterman-Catherine Kever Award (Best Ecological Poster Presented by a Student) 2011
Ecological Society of America, Southeastern Chapter

National Garden Club Scholarship 2010 - 2011

Florida Medallion Scholarship 2002 - 2008

National SMART Grant 2008

Publications

Peer Reviewed Publications

Articles

Ekpe, E.K., **K.E. Becker**, J. Lab, C.R. Hinkle, and F. Escobedo. 2012. Orlando, Florida's Urban and Community Forests and Their Ecosystem Services. University of Florida- IFAS, EDIS FR290.

Conference Proceedings

Becker, K.E. and C.R. Hinkle. 2017. Urban NEE Drivers and Patterns in the Headwaters of the Everglades. *Greater Everglades Ecosystem Restoration (GEER) Meeting*. Coral Springs, FL.

Becker, K.E. and C.R. Hinkle. 2016. Carbon dynamics of a longleaf pine flatwoods ecosystem managed with prescribed fire. *Florida Native Plant Society 36th Annual Conference*. Daytona Beach, FL.

C.R. Hinkle, **K.E. Becker**, B. Benschoter, X. Comas, M. McClellan, M. Budny, D. Harshbarger, S. Graham. 2016. Carbon Dynamics of the Greater Everglades Watershed and Implications of Climate Change. *2016 Environmental System Science (ESS) PI Meeting*. Potomac, MD.

Becker, K.E. and C.R. Hinkle. 2013. Assessing the impact of urban land cover composition on CO₂ flux. *American Geophysical Union 45th annual Fall Meeting*. San Francisco, CA.

Becker, K.E. and C.R. Hinkle. 2012. Measuring the impact of prescribed fire management on the carbon balance of a flatwoods ecosystem in Kissimmee, Florida. *American Geophysical Union 45th annual Fall Meeting*. San Francisco, CA.

Ekpe, E.K., **K.E. Becker**, J. Lab, C.R. Hinkle and F. Escabedo. 2011. An Assessment of the Structure and Environmental Benefits of Urban Forests in Orlando, Florida. *Florida Academy of Sciences 75th Annual Meeting*. Melbourne, FL

Becker, K.E., J.M. Anderson and C.R. Hinkle. 2011. Variability of Aboveground and Belowground Carbon Stocks in Florida Flatwoods Ecosystems Undergoing Restoration and Management. *Ecological Society of America 96th Annual Meeting*. Austin, TX. Poster also presented to *Association of Southeastern Biologists 2011*. Huntsville, AL.

Becker, K.E., E.A.G. Schuur and H. Lee. 2009. Carbon and Nitrogen Isotope Distribution and Abundance in Alaskan Permafrost Soils. *Biology Undergraduate Research Symposium*. Department of Biology, University of Florida, Gainesville, FL.

Technical Reports

Sumner, D.M., C.R. Hinkle and **K.E. Becker**. 2017. Evapotranspiration (ET) at University of Central Florida urban site, daily data, Orange County, Florida, January 29, 2009 - September 27, 2012: U. S. Geological Survey data release, <https://doi.org/10.5066/F7JS9NZB>.

Becker, K.E. and C.R. Hinkle. 2014. Assessing the Carbon Flux Dynamics of a Central Florida Longleaf Pine Flatwoods Landscape Undergoing Prescribed Fire Management. Technical report to: The Nature Conservancy.

Hinkle, C.R., D. Sumner and **K.E. Becker**. 2012. Measurement and Modeling of Evapotranspiration in a Central Florida Urban Setting. Technical report to: Southwest Florida Water Management District.

Ekpe, E.K., **K.E. Becker**, J. Lab, C.R. Hinkle and F. Escabedo. 2010. An Assessment of the Structure and Environmental Benefits of Urban Forests in Orlando, Florida. Technical report to: Orlando Parks Division, Families, Parks and Recreation Department, City of Orlando, Florida.

Other Presentations

Becker, K.E. 2013. Carbon Flux Dynamics of a Subtropical Landscape: The Impact of Land Use, Land Use Change, and Land Management. *Invited Speaker*. University of Central Florida Department of Biology.

Becker, K.E. 2013. Effects of Florida Flatwoods Restoration and Management on Ecosystem Carbon Storage and Sequestration. *Invited Speaker*. The Nature Conservancy, Kissimmee, FL.

Professional Development

Training on Community Earth System Model (CESM): Community Land Model Pacific Northwest National Laboratory	February, 2014 Richland, WA
Ethics/Responsible Conduct of Research Workshops University of Central Florida	October, 2011 Orlando, FL
Summer Course in Flux Measurements and Advanced Modeling University of Colorado Mountain Research Station	July, 2011 Nederland, CO
Collaborative Workshop: Developing a Carbon Budget for the Greater Everglades Ecosystem Participating organizations: FAU, US Geological Survey, UCF, FSU, FIU, South Florida Water Management District, Everglades National Park, and Florida Center for Environmental Studies	July, 2011 Davie, FL

Volunteer Experience

Community

Brevard County Environmentally Endangered Lands Program
Selection and Management Committee Member August 2018 - Present

Departmental

University of Central Florida Biology Graduate Student Association August, 2009 – August, 2018
Faculty Liaison May, 2010 – May, 2012

Mentor to Undergraduate Research Volunteers May, 2010 - August, 2012
University of Central Florida, Department of Biology

Other

Invited Speaker at the Women in Environmental Careers Luncheon with LEAF Interns September, 2016
The Nature Conservancy's Disney Wilderness Preserve Kissimmee, FL

Tamy S. Dabu
170 Grant Road
Merritt Island, FL 32953
USA

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Email: t3ndabu@bellsouth.net
Cell: (321) 474-4315
Work: (321) 494-7198
DSN: 854-7198

Work Experience

Environmental Program Manager, United States Air Force

Air Force Civil Engineer Center (AFCEC), Patrick Installation Support Section (ISS)
1224 Jupiter Street
Patrick Air Force Base, FL 32925
Supervisor: Michael Willard (321) 494-7199, DSN 854-7199; Contact: Yes

November 2018 – present, Biological Scientist (Environmental), GS-0401-12.
40 hours per week.
Clearance: Secret

Duties: Provide professional AFCEC environmental compliance support to the following installations: Avon Park Air Force Range, MacDill Air Force Base, and 45th Space Wing (Patrick Air Force Base, Cape Canaveral Air Force Station, Malabar Tracking Annex, Jonathan Dickinson Missile Tracking Annex (JDMTA), Ascension Island. Provide professional expertise and technical support with an emphasis in the Air Quality, Storage Tanks/POL, Natural Resources and Water Programs. Provide direct program management of these programs in direct support of Planning, Programming, Budgeting & Execution (PPBE) for Environmental Quality (EQ). Provide policy and guidance, program evaluation, resource allocation, and other direct support for all regional environmental compliance, pollution prevention, natural/cultural resources, and cleanup programs, operations and activities. Exercises professional judgement in recognizing and resolving and/or recommending solutions to difficult or unusual environmental problems. Provides consultation and advisory services to leadership and customers in support of environmental administrative issues. Executes AFCEC environmental programs IAW DoD and AF policy and all applicable laws/regulations. Provide advisory services in support of environmental administrative issues. Communicate critical issues to appropriate ISS staff, superiors, installation staff and other stakeholders. Develop specific plans for programs based on org goals and objectives. Identifies strategic sourcing opportunities and leverages a variety of exec methods to reduce cost and provide speedy delivery of products and services. Identifies program execution and contracting strategies to enable efficiencies. Develops, reviews and manages contracts for environmental projects and services.

Provides prompt professional direction and oversees a team of environmental professionals. Provide expertise and support to installations to maintain compliance with all environmental laws and regulations. Timely prepare technical legal documents and/or concise technical information for the installations for submittal to state and various federal regulatory agencies for approval. Serves as a liaison and maintains a technical dialog with my coworkers, contractors, consultants, state and federal agencies. Experience and knowledge of construction and service contracting procedures relevant to executing environmental related contracts. Effectively communicate in a formal briefing or in a public speaking forum. Utilize AF databases such as eDash, MICT, ESOHMIS, APIMS, STAR, Water Enterprise Tracking (WET), Refrigerant Management Compliance, Enforcement Actions Spills Inspections (EASI).

Air Quality and Storage Tanks Program Manager, United States Air Force

45 CES/CEIE

1224 Jupiter Street

Patrick Air Force Base, FL 32925

Supervisor: Laurie Fisher (321) 494-7288, DSN 854-7288; Contact: Yes

June 2016 – November 2018, Biological Scientist (Environmental), GS-0401-12,
40 hours per week (Air Quality Program Manager)

June 2017 – present, Biological Environmental), GS-0401-12,
40 hours per week (Air Quality and Storage Tanks Program Manager)

Clearance: Secret

Duties: Responsible for administrating the Air Quality and Storage Tank Programs for the 45TH Space Wing (45 SW) which includes Patrick Air Force Base (PAFB), Cape Canaveral Air Force Station (CCAFS), Malabar Tracking Annex (MTA), Jonathan Dickinson Missile Tracking Annex (JDMTA) and Ascension Island. Timely prepare all regulatory submittals, many require SW/CC sig. Proficient with the Air Force staffing process for documents. Adhere to Clean Air Act (CAA), Air Force Instructions (32-7040, 32-7044), Air Force Manual (32-7089), Florida Administrative Codes for Air Program and Storage Tank Programs. Utilize the Air Program Information Management System (APIMS) and Storage Tank Accounting & Reporting (STAR) for tracking air emissions and for storage tank compliance. Develop Performance Work Statements (PWS), Statement of Work (SOW) and supporting IGE's, for numerous projects. Utilize AF databases such as eDash, MICT, ESOHMIS, APIMS, STAR, Water Enterprise Tracking (WET), Refrigerant Management Compliance, Enforcement Actions Spills Inspections (EASI). Assist and mentor coworkers. Conduct Multi-Media (Air, Storage Tank, Hazardous Waste, and Water) Inspections to ensure our compliance with Federal, State and municipal regulations. Maintain a professional dialog with my coworkers, contractors, consultants, state and federal agencies. Knowledge of AF budget and funding processes. Prepare budgets for Air Quality & Storage Tank Programs through upcoming fiscal years (FY). Timely complete all Data Calls. Experience with contracting procedures for environmental related contracts. Completed and maintain current hazardous waste, safety, DoD, AF trainings as required. Experience with effectively speaking in a formal briefing, in agency meetings or to the public. Proficient

with writing technical documents for various audiences. Alternate Approving Official (AO) for 45 SW Environmental Compliance Program. Demonstrate excellent problem resolution skills, concrete action plans to resolve problems, skill in fact finding. Strong organizational skills to manage multiple tasks efficiently and effectively.

Project Manager, United States Army Corps of Engineers (ACOE)

Jacksonville District, North Permits Branch,

Cocoa Permits Section

400 High Point Drive, Suite 600

Cocoa, FL 32926

Supervisor: Irene Sadowski, (321) 504-3771, Contact: Yes

April 2008 – June 2016, Project Manager/Biologist, GS-0401-12, 40 hours per week.

June 2003 – March 2008, Project Manager/Biologist GS-0401-11. 40 hours per week.

Clearance: Secret

Duties: Responsible for timely and professionally reviewing applications for work in waters of the United States (Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403)) and within jurisdictional wetlands (Section 404 of the Clean Water Act (33 U.S.C. 1344)) under all appropriate regulations, policy and guidance. Provide excellent reliable public service. Manage one of the largest workloads in the District. Uphold the Department of Army (DA) values: loyalty, duty, respect, selfless service, honor, integrity, and personal courage. Maintain a professional dialog with my team, sponsors, state and federal agencies, applicants and consultants. Responsible for reviewing projects that involve Section 103 of the Marine Protection, Research & Sanctuaries Act of 1972 (33 U.S.C. 1413) work. As a reliable professional Project Manager I am able to evaluate all levels and types of DA permit applications, including complex and controversial projects, perform jurisdictional determinations, functional assessments, review and develop compensatory mitigation proposals that adhere to all regulatory requirements including Endangered Species Act and National Historic Preservation Act. Projects are timely reviewed, coordinated with other federal agencies, Environmental Assessments are prepared and final action is taken. As a Project Manager in the Regulatory Division I perform extensive oral and written communication with the applicant, agent, engineer, consultant, municipality, general public and other regulatory agencies. Serve as a contributing member of the Training Product Development Team (PDT) and Endangered Species Act PDT. Champion on the Efficiency PDT, which developed numerous methods to improve Regulatory Division's work efficiencies. I have managed projects from applicants that include Walt Disney World, Canaveral Port Authority, NASA, St Johns River Water Management District, Brevard County, Indian River County, and thousands of others.

May 2012 – August 2012

Acting Section Chief, United States Army Corps of Engineers

Panama City Section, GS-0401-13,

Regulatory Division, North Permits Branch, 40 hours per week.

Duties: Supervise and mentor a staff of five by applying policies, procedures and regulations related to the ACOE regulatory program in a manner that ensures decisions made are sound and balanced between technical accuracy, product quality, mission requirements, while being fair to the applicant. Review and prepare recommendations and permit decision documents that are clear and concise and reflect a thorough knowledge of the laws, policies, regulations, and precedents applicable to the Regulatory Program. Ensure that the level of detail to each evaluation (environmental assessment) commensurate with the complexity of the proposed project. Build and maintain collaborative, proactive relationships with staff, internal and external customers and stakeholders to provide quality products and services. Promote synergy, teamwork, and trust by fostering open, honest communications with internal and external stakeholders. Promote public confidence in products and projects delivered by ACOE.

December 2001 – June 2003

Environmental Manager, Florida Department of Environmental Protection (FDEP)

3319 Maguire Blvd, Suite 232

Orlando, FL 32803

40 hours per week.

Duties: Manage the Submerged Lands and Environmental Resource Program's (SLERP) permitting program and 8 staff; review and process complex projects, DRI's and Clearing House Projects; resolves problematic and complex projects; coordinates training for all SLERP staff; primary volunteer for speaker on behalf of the SLERP Central District; provides permitting guidance to the compliance/enforcement staff when necessary; conducts site inspections to assess the biological, ecological, water quality and proprietary impacts that a project may pose; conducts compliance inspections; counsels property owners, governmental officials, engineers, and developers and assists in the preparation of permit applications when necessary, explaining the jurisdictional responsibilities and permitting procedures within the Florida Department of Environmental Protection, Environmental Resource Program in the Central District. The Central District area comprises of eight counties: Brevard, Indian River, Lake, Marion, Orange, Osceola, Seminole, and Volusia.

Immediate supervisor: George Gionis: 407-893-3310 (retired).

September 1999 – December 2001

Environmental Supervisor, FDEP

3319 Maguire Blvd, Suite 232

Orlando, FL

40 hours per week.

Duties: Supervised the Submerged Lands and Environmental Resource Program's (SLERP) permitting staff (five employees); Review and process complex projects; Resolve problematic and complex projects; Coordinate training for all SLERP staff; Primary volunteer for speaker on behalf of the SLERP Central District; Provide permitting guidance to the compliance/enforcement staff when necessary; Conduct site inspections to assess the biological, ecological,

water quality and proprietary impacts that a project may pose; Conduct compliance inspections; Counsel property owners, governmental officials, engineers, and developers and assists in the preparation of permit applications when necessary, explaining the jurisdictional responsibilities and permitting procedures within SLERP. Immediate supervisor: Terry Zable (no longer with the FDEP) and George Gionis: 407-893-3310 (retired).

August 1990 – September 1999

Environmental Specialist (I & II): Florida Department of Environmental Protection/Florida Department of Environmental Regulation,
3319 Maguire Blvd, Suite 232
Orlando, FL

40 hours per week.

Duties: Responsible for the review and processing of environmental resource permit applications (initially dredge/fill applications); conducts site inspections to assess the biological, ecological, water quality and proprietary impacts that a project may pose; counsels property owners, governmental officials, engineers, and developers; performs informal jurisdictional determinations; review and process mangrove applications; assist in training new employees; familiar with dredge and fill, environmental resource permitting and proprietary authorization review and process.

December 1988 – December 1989

Tax and Insurance Administrator: Hazleton Laboratories Corporation, Herndon, VA
40 hours per week.

Duties: Filed all state tax returns; accounted for current and deferred taxes; prepared consolidated tax provisions; administered all insurance policies and as necessary within the corporate office.

August 1987 – November 1988

Laboratory Specialist: Akzo/Bionetics Research, Inc. Rockville, MD
40 hours per week.

Duties: Developed hybridomas for contract and commercial purposes. Included fusion, screening, cloning and partial characterization of monoclonal antibodies; use of sterile tissue culture techniques.

November 1986- August 1987

Research Technician: In Vitro Cell Line Screening Project, National Cancer Institute, Frederick Cancer Research Facility, Frederick, MD
40 hours per week.

Duties: Performed general laboratory procedures including sterile tissue culture techniques, In Vitro drug toxicity studies and data analysis using computer systems.

Education:

B.S. in Biology, Bridgewater College – May 1986

A.A. in Accounting, Northern Virginia Community College – December 1989

Additional Information

AF Training:

Approving Official Training
APIMS database
STAR database
HAZWOPPER Training
7 Habitats of Highly Effective People
Currently enrolled in Squadron Officer School (SOS)

USACE training:

13+ years of experience with Section 10/404 programs
Prospect Courses: Regulatory I, II A, II B, II C, IV, Wetlands Development & Restoration, Environmental Impact Assessment, Environmental Laws & Regulations, Cumulative Impact Assessment.

State training:

13 years of experience with the dredge/fill, wetland resource/environmental resource program
I have permitted in excess of 3,000 projects during this time frame (most of these projects were located in Brevard, Indian River, Orange and Marion Counties).
Wetland Delineation Training
Supervisory Training
Public Service Training

AWARDS:

2018 – Cash Award & Time off Performance Award
2017 – Cash Award & Time off Performance Award
2011 – Cash Award, for my contributions on the Endangered Species Act (ESA) PDT and the Efficiency PDT.
2010 – Cash Award, for managing projects.
2009 – On the Spot Award, for my selfless service at the 2009 Florida Dock and Marine Expo in Jacksonville, Florida.

Florida Department of Environmental Protection (FDEP) Employee of the Month - December 2002

FDEP, Central District Employee of the Month – October 2002

FDEP, Central District Outstanding Performance Award 2001

FDEP, Central District Superior Performance Award 2000

FDEP, Central District Award

FDEP, Central District Award

FDEP, Central District

FDEP Central District Employee of the Month – June 1995

4092 Sparrow Hawk Road
Melbourne, Florida 32934

321-795-2553
teclisa@cfl.rr.com

Lisa Toland

Relevant Experience for Brevard County Environmentally Endangered Lands Selection and Management Committee Volunteer Position.

4-year postsecondary academic degree

- B.S. Chemistry, 1985
- The Pennsylvania State University, University Park, PA

Demonstrated Professional Expertise

- 17 Years, President, Toland Environmental Consulting
- 4 Years, Director, Brevard County Natural Resources Management Department
- 6 Years, Assistant Department Head, Brevard County Solid Waste

Demonstrated Knowledge of Brevard County Ecosystems, habitat types and conservation land management techniques.

- As the lead ecologist for Toland Environmental Consulting:
 - Work within all of Brevard County's ecosystems and classify wetland, upland, marine and coastal habitats according to Florida Natural Areas Inventory's Guide to Natural Communities of Florida and the Florida Department of Transportation's Florida Land Use, cover and Forms Classification System.
 - Assess scrub habitat suitability for Florida Scrub-jays, conduct presence/absence surveys for jays, prepare habitat conservation plans, and manage scrub habitat.
 - Notable examples:
 - Capron Ridge 21-acre scrub management and restoration program prior to turning the property over to the Brevard County EELs Program.
 - Sandy Point 73.5-acre scrub restoration and creation program prior to turning the property over to the Brevard County EELs program.
 - Assess habitat suitability, conduct population surveys and relocate gopher tortoises by hand shoveling, bucket trapping, and backhoe excavation as an Authorized Agent for Florida Fish and Wildlife Conservation Commission (FWC).
 - Assess habitat suitability and conduct presence/absence surveys for Florida Grasshopper Sparrows.
 - Delineate wetlands and assess wetland functional values according to State and federal rules.
 - Design and implement wetland mitigation plans including wetland creation, restoration, enhancement and long-term exotic species management.
 - Notable examples:
 - Capron Ridge wetland creation and exotic species management.
 - Brevard County EELs Grant Flatwoods Sanctuary wetland creation, restoration and enhancement program.

- Bull Creek wetland and floodplain restoration and enhancement.
- Conduct seagrass and submerged aquatic vegetation surveys.
- Act as an FWC approved manatee observer for projects involving in-water work in known manatee aggregation areas and travel corridors.
- Conduct biological monitoring programs for bald eagle nesting sites.
- Use ArcGis Desktop software and prepare GIS maps.
- As the Director of Brevard County Natural Resources
 - Prepared, amended, interpreted and enforced Brevard County's Comprehensive Plan and environmental land development regulations.
 - Oversaw, provided staff support and coordinated with the Nature Conservancy for the Brevard County's Environmentally Endangered Lands program.
 - Obtained working knowledge of EEL's Land Acquisition Manual (LAM), EELs Selection and Management Committee and EELs Procedures Committee.
 - Oversaw County staff conducting the initial scrub habitat surveys and occupancy assessments and obtained federal funding and local municipalities support to explore the creation of Countywide Habitat Conservation Plan for Florida Scrub-Jays.
 - Obtained local municipalities support for the creation of a countywide manatee protection plan.
 - Represented all 67 Florida counties for the Florida Local Environmental Regulators Association (FLERA) on the governor's technical advisory committee for the creation of the Florida's single wetland definition and wetland delineation rule.
 - Sat on the East Central Florida Regional Planning Council's technical advisory committee for the creation of the Regional Wetland Buffer Rule for Developments with Regional Impacts.
 - Oversaw the initial engineering and cost sharing studies to begin Brevard's beach renourishment programs.
 - Created Brevard County's sea turtle lighting ordinance and compliance program.
 - Reviewed and approved contamination assessment reports and remedial action plans for petroleum contaminated sites including assessing the local geology, soil profiles, vertical and horizontal permeability rates and ponding and drawdown effects on the hydrology of adjacent environmental resources including wetlands.
- As the Assistant Department Head of Brevard County Solid Waste:
 - Coordinated the construction of more than 20 million dollars in new solid waste facilities including procuring engineers and contractors, acquiring property, obtaining proper zoning, performing public relations, assisting in facility design, obtaining all environmental, building and construction permits, and implementing environmental mitigation plans.

RESUME

Robert "Oli" Johnson
2514 Ruffner Rd.
Melbourne, FL 32901
Home: 321-725-3504
Cell: 321-831-0413

Education

BS in Biology
SUNY at Geneseo
1968

MS in Bio-Environmental Oceanography
Florida Institute of Technology
1981

Experience

High School Science Teacher
Martin County High School
Stuart, FL
1976-1979

High School Science Teacher
Melbourne High School
Melbourne, FL
1981-1990

Park Ranger/Naturalist
Turkey Creek Sanctuary
Palm Bay, FL
1993-2016

Profession organizations

Turkey Creek Sanctuary Committee
Marine Resource Council
Sea Turtle Preservation Society
Florida Audubon Society