

Michael T. Pshar, PWS

Senior Ecologist



Expertise

Wetland Ecology, Delineation
Evaluation and Permitting

Wildlife Ecology and
Permitting

Marine Aquatic Systems
Evaluation and Permitting

Education

M.S. Ecological Restoration,
University of Florida, in process

B.S., Marine Science Biology,
University of Tampa, 2004

Certifications

FWC Authorized Gopher
Tortoise Agent, GTA-13-00027

Professional Wetland
Scientist, #2674, Society of
Wetland Scientists, 2016

FDEP Qualified Stormwater
Management Inspector,
#13217

SWFWMD Wetland
Assessment Procedure (WAP)
Training 2009-2016

FAESS Hydric Soils Workshop
Certificate of Attendance
2010-2014

US Department of Labor
MSHA 30 CFR Part 46 and
Part 48 Certifications

Memberships & Affiliations

Tampa Bay Watch Member
since 2006

Tampa Bay Association of
Environmental Professionals
(TBAEP) Member since 2009

Society of Ecological
Restoration (SER) Member
since 2014

Mike Pshar is knowledgeable of a diverse array of Florida ecosystems. He is experienced in wetland mitigation design, monitoring and compliance, habitat survey and mapping, and performs a variety of land management tasks for private and public sector clients throughout Florida. Additional skills and job duties include environmental assessments, listed species surveys, permitting, and relocation, water quality monitoring, marine natural resource surveys, and prescribed burning. Michael also assists the Flatwoods team in the State and Federal wetland permit application process, UMAM analysis, and wetland jurisdictional determinations in accordance with State and Federal guidelines. He has been trained by the Southwest Florida Water Management District in the Wetland Assessment Procedure (WAP) and by the Florida Department of Environmental Protection (FDEP) as a Qualified Stormwater Management Inspector. Mike is a Gopher Tortoise Agent as authorized by the Florida Fish and Wildlife Conservation Commission (FWC). He also has completed US Department of Labor Mine Safety and Health Administration (MSHA) training.

WETLAND DELINEATION, EVALUATION AND PERMITTING

Project Manager – Wetland Mitigation Monitoring, Central and South Florida

Managed a variety of Flatwoods mitigation monitoring projects for private and public sector clients. Developed work scope and budgets, proposal writing, performed data collection, data set manipulation, statistical analyses and technical report writing, trained staff in all mitigation monitoring permit compliance tasks, performed agency site visits and ongoing project management.

Assistant Project Manager – Comprehensive Wetland Assessment, Hardee County, Florida

Developed comprehensive data collection methods for a complex (multi-habitat type) wetland system, managed and led field teams in implementation of data collection methods, performed wetland assessment and habitat mapping, managed data, data sets, and calculations, completed technical report writing vegetation results sections, assisted in client correspondence and ongoing project management tasks.

Project Ecologist/Project Coordinator - Wellfield Hydrological and Ecological Monitoring Programs, Hillsborough and Pasco Counties, Florida

Coordinated the ecological monitoring program that was developed for the Cross Bar Ranch and Morris Bridge Wellfields. Services have included quantitative and qualitative monitoring of vegetative changes (Wetland Assessment Procedure, WAP), assessment of wetland condition, statistical analyses, expert witness testimony, aerial photographic interpretation, and analysis of water levels in nearby water bodies to determine potential wellfield effects during drought periods.

Project Ecologist - Substation and Transmission Line, Throughout Florida

Provided site assessments, wetland delineations, general and species-specific listed species surveys, FWS and FWC listed species permitting, listed species relocations, and permit compliance monitoring for several substations and transmission lines in Florida.

Project Ecologist – Environmental Assessment, Brevard County, Florida

Performed field surveys for presence of wetlands and protected wildlife such as gopher tortoise, red cockaded woodpecker, and bald eagle and conducted land use and habitat mapping for this 2.8 acre site. Results of the survey were summarized in a memorandum and submitted to the private land owner.

Project Ecologist – Pipeline Corridor Surveys, Levy, Hillsborough, Manatee, Martin, and Pasco Counties, Florida

Included state (FDEP) and federal (USACE) wetland jurisdictional determination, UMAM data compilation, T&E surveys and habitat mapping, soil profile identification, use of sub-meter GPS to define wetland limits in the field, and supplemental data collection for Rapanos.

Project Ecologist – Wildlife Survey and Jurisdictional Wetland Determination, Charlotte County, Florida

Conducted listed species wildlife surveys (1000+ acres) including variety of wetland dependent wading birds and rookery sites. Assisted and led wetland delineation teams using methodologies outlined in USACE 1987 Wetland Delineation Manual.

WATER RESOURCE MANAGEMENT

Project Manager - Morris Bridge Wellfield Hydrological and Ecological Monitoring Program, Hillsborough County, Florida

Managed the ecological monitoring program that was developed for the Morris Bridge Wellfield. Services have included quantitative and qualitative monitoring of vegetative changes (Wetland Assessment Procedure, WAP), assessment of wetland condition, statistical analyses, expert witness testimony, aerial photographic interpretation, and analysis of water levels in nearby water bodies to determine potential wellfield effects during drought periods.

Project Ecologist – Environmental Management Plan Implementation, Hardee County, Florida

Implemented the Environmental Management Plan (EMP) to satisfy several conditions of a WUP for a client in Central Florida. This plan included the installation and monitoring of permanent monitoring transects to allow for standardized vegetative, soils, and hydrologic monitoring. Wetland evaluation procedures included WAP, the United States Department of Agriculture Stream Visual Assessment Procedure (SVAP), and Uniform Mitigation Assessment Method (UMAM). Data collected during this effort was compiled, organized, analyzed, and stored in a Microsoft Access database as part of the environmental monitoring.

WILDLIFE ECOLOGY AND PERMITTING

Project Manager/Project Ecologist - Gopher Tortoise Relocations, Throughout Florida

Excavated and relocated hundreds of gopher tortoises and gopher tortoise burrow commensals to on-site and off-site recipient sites as an FWC Authorized Gopher Tortoise Agent. Tasks involved survey effort, permit application preparation, agency field review participation, Florida One-Call utility location coordination, excavation or trapping, tortoise transport, installation and removal of exclusionary fencing and completion of After Action Reports.

Project Ecologist – Crested Caracara Surveys – Bald Eagle Monitoring, Okeechobee and Polk Counties, Florida

Tasks Included performing crested caracara territory surveys, nest surveys, recording behavioral observations, nest monitoring. Conducted bald eagle nest monitoring during active roadway improvement construction. Documented eagle behavior observations, flight patterns, and feeding of juvenile eagles per USFWS bald eagle monitoring guidelines. Submitted bald eagle monitoring documentation to staff Project Manager and FFWC Project Manager with brief summary of daily observations and corrective action measures if applicable.

Project Ecologist – Listed Species Surveys, Collier County, Florida

Conducted pre-construction surveys and periodic monitoring, to determine potential construction-related impact to protected species. CERP project consisted of road removal and filling of ditches and canals within portions of lands of the State. Target species included Florida panther, Florida black bear, Everglades mink, manatee, eastern indigo snake, wood stork, bald eagle, Everglades snail kite, and migratory and wading bird species. Required close coordination with USFWS, SFWMD, and Division of Forestry (DOF) staff to ensure compliance with all permit conditions.

Project Ecologist – Florida Scrub-jay Nesting and Territory Surveys, Hillsborough and Manatee Counties, Florida

Territory surveys for 12 family groups, supplemental feedings, and periodic nest checks to approximate incubation and fledging start dates.

Project Ecologist – Burrowing Owl Food Availability Arthropod Sampling, Polk County, Florida

Assisted with a one year seasonal study that compared the arthropod food availability between existing pasture and reclaimed pasture to which burrowing owls were translocated and currently reside. This study was designed to better understand the ecology and habitat selection of burrowing owls in order to successfully translocate colonies of reproductively viable populations.

Project Ecologist – Xeric Reclamation Project, Florida Mouse Population Study, Hardee County, Florida

Assisted team of ecologists in Florida mouse sampling two years after translocation at a xeric oak reclamation site. Performed surveys to sample 20% of the 100 acre site for presence of Florida mice in order to determine translocation success and estimate population. All Florida mice were PIT (passive integrated transponder) tagged, and were sampled every six months to track population trends.

MARINE AQUATIC SYSTEMS EVALUATIONS

Project Ecologist – Benthic Habitat Survey, Seagrass Mapping, Franklin County, Florida

Conducted formal seagrass survey per FWC Recommended Survey Protocols for Estuarine and Marine Submerged Aquatic Vegetation (SAV) along a 5-mile, sea bottom transect, utilizing SCUBA. Tasks included mapping and photographing presence of hard bottom benthic communities and presence of seagrass along unconsolidated sandy ocean bottom in preparation of infaunal cable installation. SAV was mapped, species identified, blade counts conducted where applicable and assigned appropriate cover class (Braun Blanquet method).

Project Ecologist – Benthic Habitat Survey, Seagrass Mapping (*Halophila johnsonii*), Palm Beach County, Florida

Conducted formal seagrass survey per FWC Recommended Survey Protocols for Estuarine and Marine Submerged Aquatic Vegetation (SAV) along a 1500 ft., sea bottom transect, utilizing SCUBA. Tasks included mapping and photographing presence of *Halophila johnsonii* (Threatened Species, State and Federal) along unconsolidated sandy ocean bottom in preparation of infaunal cable installation. SAV density was mapped where applicable and assigned appropriate cover class (Braun Blanquet method).

Project Ecologist – PD&E Study Essential Fish Habitat Assessment (EFH) Hillsborough and Pinellas Counties, Florida

Perform seagrass mapping along an 8 mile corridor to field verify existing mapped seagrass data (combination of FWRI and SWFWMD data sets) and qualitatively map beds in areas not previously mapped. Provide agency correspondence with NOAA (NMFS) regarding corridor wide existing habitat types and description of proposed action relating to unavoidable impacts. Report findings and mitigation options if impacts to EFH are anticipated during the consultation process and provide EFH Assessment report as component of WEBAR.

Project Ecologist – 12 -hour Diel Study (Placida Harbor, Gasparilla Sound), Charlotte County, Florida

Collected data in accordance with the FDEP requirements for analysis of existing water quality conditions. Tasks performed included measuring a variety of *in situ* parameters utilizing hydrolab, licor, and sechhi disk as well as grab water sample collection. A marine natural resource survey was completed and included mapping seagrass and oyster beds, species identification, and resource density determination.

Project Ecologist, – Water Quality Monthly Monitoring and Sampling Peace River, Shell Creek, Horse Creek (2005-2006), Charlotte, Lee, Manatee, and Sarasota Counties, Florida

Performed water quality data collection as part of a long term watershed water quality program. Data collection accomplished via the following instrumentation: turbidity meter, secchi disk to measure depth of water column light penetration, Hydrolab to record salinity, pH, DO, temperature, and conductivity at pre-determined depth intervals within established collection locations within the Peace River, Horse Creek, and Shell Creek tributaries.