

James Lee Loftin
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Highlights

Masters degree in Biological Oceanography.
28 years work experience in the marine science field.
Experienced with laboratory and field operations.
Familiar with data management and analysis, including statistics.
Many years experience operating on boats.

Education

Florida State University Tallahassee, FL
Master of Science in Biological Oceanography 1987

- In addition to marine biology and ecology, courses included physical, chemical and geological oceanography, fisheries, statistics, and computer operations.

Florida Institute of Technology Melbourne, FL
Bachelor of Science in Biological Oceanography 1978

- Curriculum included courses in physics, chemistry, calculus, statistics, and computer science, as well as field and laboratory work in marine biology and ecology.
Graduated with honors.

Sandalwood High School Jacksonville, FL
High School Diploma 1974

- Assisted teacher in two marine biology classes, maintained marine aquaria.

Employment

- Sep. 2003
to May 2005
- Maine Maritime Academy
Oceanography and Chemistry Instructor
Casteen, Maine
- Conducted oceanography and chemistry laboratory classes.
 - Planned course content and methods of presentation.
 - Prepared outline of material to be covered.
 - Selected and assembled materials to be used.
 - Conducted classes in the field, from boats and in labs.
 - Administered tests and issued grades.
- March 2002
to August 2004
- NOAA Fisheries
Fishery Crew Leader
Orono, Maine
- Tagged Atlantic salmon parr in the fall using ventral fin clips at Green Lake National Fish Hatchery.
 - Conducted visual implant elastomer tagging operations at Green Lake hatchery in the spring.
 - Assembled, installed and maintained rotary screw traps in the Penobscot River, Maine.
 - Collected salmon and other fish species using rotary screw traps to study the spring emigration on the Penobscot River.
 - Captured salmon post-smolts in Penobscot Bay using a pair trawl pulled between two 90 ft. trawlers.
 - Recorded salmon smolt length, weight, fin condition, and condition.
 - Collected scales, fin clips, gill biopsies, blood, muscle and intestinal samples from fish.
 - Collected GPS location data to geo-reference sampling stations.
 - Recorded water temperature, river height and discharge, and trawl depth profiles.
 - Organized and audited trawl datasheets, entered daily data into an onboard laptop computer.
 - Entered river sampling data into data loggers, and downloaded them later into Excel spreadsheets or Access databases on desktop PC computers.
 - Summarized abundance, morphological, physiological and behavioral data from hatchery records, rotary screw trap catches, post-smolt trawl catches and adult returns to dam fish traps.
 - Analyzed data from the Penobscot smolt program using statistical and spreadsheet software. Examined the relationship between smolt survival or condition and the timing or location of stocking, and to environmental conditions during emigration.
 - Conducted a tag and recapture study to estimate the abundance of smolts emigrating out the Penobscot River in 2002 - 2004.
 - Reviewed technical reports, proposals and manuscripts.

May 2001
to Jan. 2002

University of Maine Department of Wildlife Ecology

Orono, Maine

Biologist

- Cooperated with University of Maine scientists, NOAA personnel, and student assistants to estimate seal population size along coastal Maine.
- Conducted aerial photographic surveys in single engine aircraft to record the number of seals hauled out during periods of low tide.
- Conducted aerial surveys to relocate radio tagged seals in Maine.
- Identified and counted seals on photographic slides.
- Trained and supervised undergraduate and graduate student assistants; performed quality control tests.
- Managed project records including radio tag relocations, photographic records, navigation logs, and slide count data.
- Used navigational software to coordinate GPS flight records, handwritten notes, and photographic records.
- Developed and maintained spreadsheet databases of seal count data; conducted preliminary summaries and analyses.

Sep. 2000
to May 2001

Acheron, Inc.

Newport, Maine

Biologist

- Conducted statistical analyses to detect changes in groundwater pollutant levels near a secure sludge landfill.
- Compiled and analyzed data on industrial pollutants and sewage treatment plant discharges for license renewals.
- Performed bioassay tests with water fleas and fish to assure safety of industrial discharges.
- Measured stream flow rates at sites in Maine and created calibration curves for in-stream staff gauges.
- Conducted field sampling for biomonitoring studies in Maine.
- Wrote reports and license renewal applications.

Feb. 2000
to Jul. 2000

Bureau of the Census

Bangor, ME

Crew Leader

- Supervised census bureau operations in Hancock county, Maine, including activities of eight employees.
- Trained enumerators for the list/enumerate field operation.
- Assigned daily work loads and survey areas to census enumerators.
- Performed quality control on completed interview forms and maps.
- Prepared performance records and submitted payroll forms.
- Conducted field interviews of the public and created census maps.

Jan. 1991
to Jun. 1999

University of Florida, Dept. of Fisheries
and Aquatic Sciences

Gainesville, FL

Biological Scientist

- Managed contracted field research projects investigating the ecology of artificial reefs and grouper in the Gulf of Mexico.
- Constructed and monitored 132 experimental reefs (4 to 16 square meters per reef), to assess the effects of reef size and spacing on reef populations.
- Supervised two assistants and two graduate students in daily activities and field research scheduling.
- Collected animals using fish traps, crab traps, hand nets, gill nets, plankton nets, cores, and trawls.
- Surveyed marine benthic habitats using transect and quadrat techniques, underwater cameras, and manned sleds.
- Developed techniques to surgically implant sonic transmitters in grouper at sea, and obtain weights of live grouper on the boat.
- Collected, entered, edited, and compiled data into computer files.
- Performed statistical data analyses and created figures and slides using SAS, Sigmastat, Sigmaplot, Prostat, Excel, Lotus, and Powerpoint software.
- Assisted with preparation of grant proposals, reports, posters, and presentations of research results at meetings.
- Frequently coordinated with other university, state, and federal researchers on cooperative research projects.
- Maintained and operated two 24 ft. research vessels, scuba diving gear, and other research equipment including vehicles, small tools, and sampling gear.

Aug. 1988
to Dec. 1990

Texas Parks and Wildlife Department
Rockport Marine Lab

Rockport, TX

Biological Technician II

- Conducted fishery independent surveys of marine populations and fishing pressure in South Texas bays and the Gulf of Mexico.
- Surveyed marine populations using standardized sampling with trawls, gill nets, seines, and dredges.
- Counted, measured, and identified all organisms caught to lowest possible taxonomic level.
- Tagged and released game fish.
- Collected fish scales and spines for aging, and tissue samples for DNA studies.
- Conducted fish kill surveys to estimate the abundance, species and length frequencies of freeze killed fish.
- Participated in sport harvest creel surveys and aerial surveys to estimate sport and commercial fishing pressure.
- Collected red drum brood stock for hatcheries.

- Assisted state and national stranding networks for marine mammals and sea turtles.
- recorded, edited, and summarized data and submitted reports.
- Conducted literature searches to update vertebrate and invertebrate species lists.
- developed software to select sampling sites, give site descriptions, and plot locations on maps.
- Interacted with state and federal biologists, and the public.
- Operated and maintained department vessels (21-35 ft.), constructed and repaired sampling equipment, and purchased supplies and services.

May 1988
to Aug. 1988

Texas Parks and Wildlife Department
Marine Development Center

Corpus Christi, TX

Biological Technician II

- Participated in all operations at a red drum saltwater fish hatchery.
- Sexed and stocked brood fish in spawning tanks; transferred eggs to large incubators for hatching; stocked fry into rearing ponds; harvested fingerlings and distributed them to Texas bays.
- Monitored water temperature, salinity, pH, dissolved oxygen, ammonia, and photoperiod in indoor spawning tanks; tested chlorophyll and plankton levels in outdoor rearing ponds.
- Added acids, bases, and organic and inorganic fertilizers to ponds.
- Maintained and operated air and water pumps, filter screens, sand filters, biological filters, UV light filters, and a complex water supply and storage system.
- Conducted public tours and interacted with the press.

Mar. 1983
to Mar. 1987

Gulf Specimen Company, Inc.

Panacea, FL

Marine Biologist

- Collected all major phyla of marine plants and animals using trawls, seines, epibenthic drags, dredges, and scuba.
- Maintained animals in aquaria ranging from 10 to 500 gallons.
- Constructed and maintained air and water pumping facilities.
- Shipped live specimens worldwide.
- Cultured marine polychaetes.
- Measured and tagged sea turtles and electric rays.
- Conducted public tours and interacted with the press.

Sep. 1978
to Sep. 1980

Marineland of Florida

Marineland, FL

Curator's Assistant

- Maintained animals, exhibits, and facilities.
- Tested temperature, salinity, pH, copper, chlorine, and bacteria levels in saltwater tanks.

- Assisted during rescues, medical treatment, and autopsies of marine mammals, turtles, birds, and fish.
- Rehabilitated injured birds.
- Participated in redfish mariculture experiment.
- Operated a reverse osmosis freshwater treatment plant.
- Interacted with the public and press.

Jun. 1971 to Aug. 1977 Outboard, inc. Jacksonville, FL
Shop Assistant

- Installed outboard motors, instruments, and rigging on boats.
- Test-ran new boats and motors.
- Performed general maintenance on boats, trailers, and facilities.

Jun. 1973 to Aug. 1973 Jacksonville Marine Science Center Jacksonville, FL
Teacher's Assistant

- Assisted teachers during classes and field trips.
- Collected local marine specimens using seines, dip nets, and trawls, and tropical specimens in South Florida using scuba.
- Maintained 15-20 marine aquaria.

Early Related Field Experience

- March - October 1986 - 1987
 Surveyed breeding birds for Florida Breeding Bird Atlas.
- December 1977 - 1987
 Censused birds in Florida for Christmas Bird counts.
- January - December 1984
 Captured, measured, and tagged blue crabs in Apalachee Bay for Florida Department of Natural Resources.
- April - May 1981
 Participated in a study of least terns near St. Augustine, Florida.
- June - July 1978
 Sampled water, sediments and plankton in Indian River, Florida for Florida Institute of Technology.
- May 1978
 Studied snail kite behavior in Everglades, Florida for Florida Audubon Society.
- July 1976 and 1977
 Measured and tagged loggerhead turtles and transferred eggs to protective enclosures on Cape Romano and Keewadin Island, Florida for Carretta Research.

Related Skills

- **Sampling:** Familiar with use of quantitative techniques using otter trawls, pair trawls, rotary screw traps, electrofishing equipment, drags, dredges, plankton nets, gill nets, crab and fish traps, water collection bottles, fluorometers, cores, transects and quadrats, caging experiments, etc. Familiar with aquatic ultrasonic telemetry techniques.
- **Office:** familiar with PC computers, printers, typewriters, calculators. Experienced with software including SAS, Sigmastat, Sigmaplot, Access, Excel, Lotus 123, Word, Wordperfect, and Powerpoint.
- **Laboratory:** Familiar with a large variety of lab equipment, such as microscopes, scales and balances, chemistry equipment, electronic meters for pH, oxygen, etc.
- **Mechanical:** Familiar with basic motor mechanics; experienced with most types of hand and power tools.
- **Boating:** Over 35 years experience operating a variety of boats up to 35 ft. long, including canoes, inflatables, inboard and outboard motor boats and trawlers. Familiar with use of equipment including loran, GPS, depth recorders, radar, etc.
- **Diving:** PADI Basic Certification (5/73)
PADI Senior Advanced (3/75)
PADI Search and Rescue (3/75)
PADI Equipment Specialist (12/75)
FSU Academic Dive Program (5/82)
University of Florida Scientific Diver (3/91)
Nitrox Certified (5/93)
Familiar with most dive equipment, including compressor and storage facilities, wet suits, dry suits, sonic tracking equipment, and cameras.

Selected Publications

*Effects of habitat and fishing mortality on the movements, growth, and relative weights of juvenile-to-adult gag (*Mycteroperca microlepis*).*

1997. Final project report, National Marine Fisheries Service MARFIN program, Grant Number NA57FF0288.

Environmental and fishery performance of Florida artificial reef habitats: guidelines for technical evaluation of sites developed with state construction assistance.

1998. Florida Department of Natural resources Project Report R/FDNR-4.

*The intertidal distribution of eggs by crown conchs (*Melongena corona*).*

1987. MS thesis, Florida State University, Tallahassee, FL.

Lindberg, William J., T. Frazer, K. Portier, F. Vose, J. Loftin, D. Murie, D. Mason B. Nagy and M. Hart. 2005. Density-dependent habitat selection for shelter and performance of gag grouper. *Ecological Applications*, in review.

Selected Presentations

Loftin, J.L., J.A.Hale, W.J.Lindberg, and F.E.Vose. 1996. Residence time of gag grouper on artificial reefs. 16th Annual Meeting of the American Fisheries Society, FL.

Loftin, J.L., J.A. Hale, A.C. Heck, K.M. Portier and W.J. Lindberg. 1997. Hard-bottom habitat near Suwannee Regional Reefs: Quantitative description and relationship to fish abundance. *Proceedings of the Florida Big Bend Coastal Research Workshop*.

Kellogg, L.L., B.L. Kiel, J.L. Loftin, J.A. Hale and W.J. Lindberg. 1997. Spatial patterns of grouper (*Pisces: Serranidae*) occupying experimental patch reefs. *Proceedings of the Florida Big Bend Coastal Research Workshop*.

Gilbert, James R., Gordon T. Waring, Stephanie Wood, Sarah Billig and James Loftin. 2001. Short-term movements of radio-tagged harbor seals (*Phoca vitulina*) in New England waters. Fourteenth Biennial conference. *Society of Marine Mammalogy*.