

# Julie E. Davis

Providenciales, Turks and Caicos Islands

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## **Bachelor of Science, Honors Co-op in Marine Biology minor in Environmental Science**

Dalhousie University, Halifax, Nova Scotia, Canada

### **SKILLS**

#### **Laboratory/Field**

Basic chemistry, basic molecular biology, marine animal physiology, microscopy, dissection, larval rearing; scientific diving; intertidal, reef, limnological survey techniques; underwater photography/videography; boat handling; underwater construction; construction of deep-sea sampling gear; flow meters; water quality sampling; experimental design, data analysis, scientific writing, scientific drawing, use of dichotomous keys

#### **Computer**

Excellent command of Microsoft Office, statistical software (MINITAB, SPSS), presentation graphics (Power Point, Corel Draw), Geographic Information Systems (IDRISI, CARIS), GPS, Internet Explorer

#### **Language**

Fluent in English and French; French Public Speaking

### **WORK EXPERIENCE**

August 2006  
Present

**Green Flash Limited**  
*Marine Ecologist*

Turks and Caicos Islands

- Impact monitoring of coral reefs and seagrass beds from coastal development
- Impact monitoring of dredge operations using sediment traps, turbidity monitoring
- Coral transplantation of imperiled corals onto ReefBall artificial reefs
- Water quality monitoring
- Turtle nesting activity monitoring
- Data analysis, monitoring report writing

July 2005  
Present

**Caicos Conch Farm**  
*Offshore Grow Out Manager*

Turks and Caicos Islands

- Responsible for supervising all aspects of offshore operations of 235 pens including but not limited to: pen maintenance, feeding, harvesting, boat and machinery maintenance, pen design and installation, stocking, inventory control of 900,000+ animals.
- Working to optimize offshore grow out conditions for queen conch through scientific monitoring of population density, flow, water quality, pen design, stocking date
- Feed research and development for all post-larval life stages of queen conch
- Responsible for all aspects of processing and packaging of product for export each week as well as local sales.
- General research and development of techniques to improve conch farming and how to optimize the potential for a market-ready product at each life stage

March 2004  
April 2005

**Explorer Ventures: M/V Turks and Caicos Explorer II, M/V Caribbean Explorer I**  
*Dive Instructor*

- Guiding dives, teaching courses, providing surface support and caring for a 100 ft.+ dive vessel which also serves as a hotel and restaurant.
- Assisted with underwater archaeological surveys in search of the lost slave ship *Trouvadore*. Safety diver and surface support for BBC film crew. Conducted Reef Check surveys at frequently visited sites.

Jan.03  
July 03

**St. Eustatius Marine Park**  
*Marine Biology Technician --- Volunteer Internship*

St. Eustatius, Netherlands Antilles

- Coastal on-water patrols, monitoring fishing and diving activities, maintaining/installing moorings.
- Designed and conducted population survey of queen conch in co-operation with local fishermen. Reported results and made recommendations to Netherlands Antilles government for fishery management.
- Conducted baseline survey to monitor impact of divers on reef health.
- Educated the island's youth of the importance of nature conservation and management through monthly

school presentations and weekly Snorkel Club.

-Helped preserve endangered turtle populations on a threatened beach through tagging and nest monitoring program.

May 01  
Dec. 02

**Aquatron Laboratory**  
*Fish Technician*

Halifax, Nova Scotia

-Developed and implemented Standard Operating Procedures (SOPs), becoming one of the first such facilities in Canada to independently establish and implement SOPs. SOPs made scientific research in the facility safer, more efficient, and environmentally responsible.

-Daily fish husbandry and equipment maintenance for flow through seawater system aquarium in support of Dalhousie University and National Research Council of Canada research projects.

Jan. 01  
May 01

**Dalhousie University**

Halifax, Nova Scotia

*Marine Ecology/Biological Oceanography Research Assistant (Metaxas Lab) --- Co-op Work Term 2*

-Constructed sampling gear in support of an extremely successful team studying larval recruitment at hydrothermal vents. Presented work at student conference.

-Assisted with invasive species study on green crabs. Constructed all sampling gear required for a 2-year study. Assisted with field work and laboratory experiments.

-Calibrated flow speeds of a benthic flume in order to study swimming ability of sea urchin larvae under various flow conditions.

May 2000  
Aug. 2000

**Fisheries and Oceans Canada**

Ottawa, Ontario

*Oceans Programs Assistant (Marine Ecosystems Conservation Branch) --- Co-op Work Terms 1 & 3*

&  
Sept. 2001  
Dec. 2001

-Developed a 'Code of Practice for Scientific Activity in Marine Protected Areas' to encourage communication between scientists and decision makers.

-Developed a local area network directory for Integrated Management projects in Canada to help decrease workload and speed up the initial nomination and implementation phases of MPA, IM and MEQ projects.

-Networked with marine conservation organizations across Canada to finalize a paper on 'Protected Areas in Canada's Oceans'.

-Prepared briefing notes, question period notes, and presentation decks for the Associate Deputy Minister of Oceans.

## **VOLUNTEERING**

Peer tutor, captain/co-captain various sports teams, initiated and organized successful fundraising and awareness campaign for Lou Gehrig's Disease (ALS) at Dalhousie University, Marine Invertebrate Diversity Initiative Board of Directors – Student Representative, Turks and Caicos Islands SPCA

## **AWARDS/CERTIFICATES**

Nova Scotia School Athletic Federation Exemplary Participation Award (May 1998)

Canadian Associates of the Bermuda Biological Station for Research Scholarship (2001)

Canadian Yachting Association Pleasure Craft Operator (Nov. 2002)

Dalhousie University Dean's List (Dec. 2002)

PADI Open Water SCUBA Instructor (since 2004)

STCW 95 Basic Safety Training (January 2005)

## **CONFERENCES/PUBLICATIONS**

Invited participant at NOAA sponsored Coral Damage Assessment Workshop. Puerto Rico. 2007.

World Aquaculture Magazine. Contributing Author.

Davis, J., Boettcher, A., Dyer, C. Optimizing Offshore Grow Out Conditions for the Commercial-scale culture of Queen Conch. Poster Presentation. World Aquaculture Society Conference. 2007

Boettcher, A., Davis, J., Dyer, C. Optimization of Grow Out Conditions for the Commercial Production of Queen Conch. Poster Presentation. National Shellfisheries Association meeting 2006.

Metaxas, A. and J. Davis. *Megafaunal assemblages associated with deep-sea corals off Nova Scotia*. Journal of the Marine Biological Association of the UK. December 2005.

Coastal Zone Canada 2000 Youth Forum, Saint John, NB, Attendee

Cameron Conference for Honours Marine Biology Students, Poster (January 2002)