

PENNY PATRICIA WHITE

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EDUCATION

M.Sc., (2011) Resource Management and Environmental Studies Graduate Program (RMES), Institute for Resources, Environment, and Sustainability (IRES), University of British Columbia, Vancouver, B.C.

B.Sc., (2004) Department of Biology and Department of Environmental Studies, University of Victoria, Victoria, B.C. (1st class, Double major)

AWARDS

2007	\$17500	National Science and Engineering Research Council Graduate Scholarship
2007	\$3000	Best in Show - Photo salon Vancouver Island Juried Art Photography Show
2006	\$1000	Youth Representative - Environment Canada Minister's Round Table on SARA
2006	\$775	Graduate Entrance Scholarship - University of British Columbia
2006	\$2796	Aquaculture Research Exchange to Shikoku, Japan - BC Innovation Council
1992	\$2000	B.C. Provincial Scholarship
1992	\$500	C.H. Dowling Memorial Award – University of Victoria

SKILLS SUMMARY

My experience is interdisciplinary as I have developed skills in scientific research and technical methodologies, communication, photographic related arts, and PC computing.

Scientific research: Marine ecology field and laboratory methodology, technical and scientific report writing, genetic analysis, biogeography, traditional ecological knowledge (TEK) ethnography, univariate and multivariate statistical analysis, underwater ROV assisted research, habitat surveys, and aboriginal fisheries project management.

Technical: Small boat operation, aquaculture husbandry (abalone, oyster, mussels, scallops, sea urchins, kelp, and integrated multi-trophic aquaculture), aboriginal fisheries project field techniques, species identification (seaweeds, invertebrates, salmonids), electrofishing, snorkel surveys, salmon habitat assessment and rehabilitation, determining the diversity indexes of the intertidal, wilderness tree classification, clinometer use, forklift operation, knowledgeable of safety considerations around heavy machinery.

Communication: Teaching, technology transfer, youth outreach, First Nation community consultation.

Arts: Photography and graphic design.

Computing: Statistical analysis - SPSS 11.0, SigmaPlot 8.0, Primer, PC-ORD 5.0; Mapping - Nobeltech, Arcview; General computing - Microsoft Office 2003 and 2007 (Word, Excel, PowerPoint, Publisher); Photography - Adobe Photosuite CS2; Website design - Dreamweaver MX.

PROFESSIONAL EXPERIENCE

- 2009 – **Aboriginal Youth Outreach Presenter, BC Centre for Aquatic Health Sciences – Building Aquatic Science Capacity in Aboriginal Communities.** I worked with a team of aboriginal academics presenting aquatic science topics to aboriginal high school students in rural communities. We provided examples of aboriginal educational models, supported the exchange of aquatic science methodologies, and assisted in the transfer of aquatic industry expertise.
- 2008 - **Research Assistant, British Columbia Coastal Ecosystem Services Project – Innovative Revenue Generation.** We identified the relevant terrestrial, freshwater, and marine ecosystem services in coastal BC for innovative revenue generation for the Great Bear Rainforest. Each ecosystem service was characterized for the current knowledge regarding their production, the dynamics of their providers, their interactions with other ecosystem services, their valuation, the relevant threats and impacts, and possible sites/case studies to elucidate missing information and incomplete understanding.
- 2005-2009 - **Contract Biologist, Metlakatla First Nation Fisheries Program** - Project leader a habitat evaluation and a Dungeness crab survey. Work for these projects included proposal writing, literature research, project design, capacity building, field work, data analysis, and completion of the final report. I acted as field biologist for the Kitsumkalum / Metlakatla eulachon (*Thaleichthys Pacifica*) 2005 survey of the Skeena River. I also assisted with quarterly and final reporting to DFO. Attended research workshops for shellfish aquaculture, pinto abalone population recovery, and wild salmon population recovery and summarized the meeting in reports.
- 2005-2006 - **Coordinator/Presenter, University of British Columbia Fisheries Department** - Coordinating the UBC Fisheries Department's "Roadshow" program including setting up focus group meetings, developing PowerPoint presentations, website concept development, and giving presentations to groups of aboriginal youth/students/mature audiences.
- 2005 - **Instructor, Malaspina University-College** - Instructor for the Clam Survey: Field Methods and Clam Survey: Data Analysis non-credit courses for the Fisheries and Aquaculture Extension Program (AQUA 550 and AQUA 552). This assignment involved re-writing the PowerPoint presentations, delivery of lectures, giving instruction in the field, and evaluating participant performance.
- 2004-2005 - **Contract Biologist, Penelakut First Nation Seafood Corporation** - Conducted clam surveys including assistance with the project design, field supervisor, sample processing, and data analysis.
- 2003-2005 - **Research Associate, Blue Revolution Consulting Group Inc.** - Set up pilot shellfish aquaculture rafts and provided shellfish monitoring and husbandry training with several North Coast and East Vancouver Island First Nation groups. Prepared shellfish samples to be tested for cadmium content. Completed a shellfish capability study by surveying beaches and deep-water reaches. Conducted international research on the kelp culture and harvest industry. Aged Horse mussels (*Modiolus modiolus*) and completed the data analysis and reporting. Conducted field work and reported for Canadian Environmental Impact Assessments. Completed field work and reported on Manila clam surveys using DFO survey protocols. Website development and graphic design.
- 2002-2003 - **Lab Technician, Bamfield Huu-ay-aht Community Abalone Project** - Conducted a growth experiment of post-settlement abalone (*Haliotis kamtschatkana*) with five food treatments. Environmental monitoring of the rearing tanks, including pH, oxygen saturation, ammonia concentration, water velocity, diatom abundance and diatom species composition. Maintenance of abalone veligers, juveniles, adults and brood stock. Maintenance of the filtering system, including cartridge, bag filters. Initiated spawning of the abalone. Maintenance of algal batch cultures of benthic *Rhodomonas* sp. for abalone shell marking via food content.
- Summer 2001 - **Fisheries Technician, Kitsoo Fisheries Co-management Program** - Salmon stream enumeration - identified and took scale samples from migrating salmon captured in downstream traps for two rivers. Completed the data analysis and summarized the results for that current year and previous years. Cared for and estimated numbers of hatchery reared sockeye salmon fry. Assisted with the mating index determination abundance estimates of four-spotted prawns caught by commercial vessels. Constructed a Manila clam predation experiment. Conducted and wrote a report on a presence/absence/abundance of *Porphyra* of the Kitsoo/Xai'xais traditional territory.

VOLUNTEER EXPERIENCE

In my residential community I contribute photography, graphic arts, and bookkeeping skills to students, artists and community organizations. For the Girl Guides of Canada, I am the contact Owl for the 1st Gabriola Brownies. Recently, I was the treasurer for the Resource Management and Environmental Studies Graduate Student Society. During my undergraduate studies at the University of Victoria, I was elected to the University of Victoria Senate, assisted the Environmental Studies Student Association with fundraising and research, helped promote activist events with the International Socialists, canvassed for the Canadian Institute for the Blind, organized events for the creative Women's Collective, recruited members for the Access 2000 task force, and provided photography services to student performers. As a high school student, I volunteered with the recycling club and provided support to persons infected with the HIV virus.

PUBLICATIONS

Reports

Chan, K. M. A., **P. White**, & N.C. Ban. 2009. Catalogue of Key Ecosystem Services in the Great Bear Rainforest and Preliminary Assessment of Associated Revenue Generation and Enhanced Value Opportunities. For Rainforest Solutions Project and Coastal First Nations. 50 pages.

White, P. 2008. Metlakatla First Nation Territory Crab (*Cancer magister* et al.) Survey 2006-2007 Interim Report. For the Metlakatla First Nation and the Department of Fisheries and Oceans. 29pp.

White, P. 2007. Metlakatla First Nation: Duncan Bay Habitat Survey 2006. For the Metlakatla First Nation and the Department of Fisheries and Oceans. 26pp.

White, P. 2005. Metlakatla First Nation Territory Crab (*Cancer magister* et al.) Survey 2005: Duncan Bay, Metlakatla Bay, and Venn Passage. For the Metlakatla First Nation and the Department of Fisheries and Oceans. 85pp.

White, P., and B.C. Kingzett. 2004. Age determination of Horse Mussels, *Modiolus modiolus* collected during Clover Pt. Outfall Marine Monitoring Program (2003). For Capital Regional District. 9p+ append.

Kingzett, B.C., T. Norgard & **P. White**. 2004. Tsimshian Shellfish Aquaculture Development Project: 2004 Interim Site Monitoring Report. For Ecotrust Canada on behalf of: Tsimshian Stewardship Committee. 59pp.

Norgard, T., B.C. Kingzett & **P. White**. 2004. Turning Point Initiative Shellfish Aquaculture Development Project: 2004 Interim Site Monitoring Report. For Coastal First Nations Turning Point Initiative. 117pp.

Kingzett, B.C. D. Paltzat, & **P. White**. 2003. Age determination of Horse Mussels, *Modiolus modiolus* collected during Clover Pt. Outfall Marine Monitoring Program (2002). For Capital Regional District. 9p+ append.

Newspaper articles

Chan, Kai M. A. and **Penny White**. " Co-management can offer great gains ". Metro, Vancouver, British Columbia. (July 20 2009). <http://www.metronews.ca/vancouver/comment/article/264801--co-management-can-offer-great-gains>

PRESENTATIONS

White, P. October 9th, 2008. Edible Seaweed is Black Gold: Aboriginal Stewardship of Intertidal Algae Gardens. Nature Vancouver: Vancouver Natural History Society – Marine Biology section “Diversity is the Spice of Life” Series. Vancouver Museum.

White, P. June 4th, 2008. The influence of many. BC Innovation Council: Aquaculture & Environment Innovation – Progress and Challenges Seminar. Vancouver Island University.

White, P. October 5th-6th, 2006. Metlakatla Fisheries Program. BC Coastal Community Network: Communities Weathering Change – Is the Coast Clear? Delta Vancouver Airport Hotel, Richmond, B.C. <https://www.confmanager.com/main.cfm?cid=122&nid=5820>

PHOTOGRAPHIC EXHIBITIONS

2008	Solo	"Thanksgiving tour"	Tammy Hudgeon Glassworks,	Gabriola Island, BC
2008	Juried	"The Key"	Gabriola Art works Gallery,	Gabriola, BC
2008	Solo	"Marine Oust"	Vancouver Court House,	Vancouver, BC
2008	Juried	"Photosalon 2008"	Nanaimo Art Gallery,	Nanaimo, BC
2008	Open	"Light"	Gabriola Art works Gallery,	Gabriola, BC
2007	Solo	"Marine Opus"	Gabriola Art works Gallery,	Gabriola, BC
2007	Solo	"Thanksgiving tour"	The Launderette,	Gabriola, BC
2007	Juried	"Photosalon 2007"	Nanaimo Art Gallery,	Nanaimo, BC
2007	Open	"Joy"	Gabriola Art works Gallery,	Gabriola, BC
2007	Juried	"Erotica"	Gabriola Art works Gallery,	Gabriola, BC
2006	Open	"Water"	Gabriola Art works Gallery,	Gabriola, BC
2006	Juried	"Blow"	Gabriola Art works Gallery,	Gabriola, BC
2006	Juried	"Erotica"	Gabriola Art works Gallery,	Gabriola, BC

PRESS

Gordon, Katherine. In preparation. Sono Nis Press, Winlaw, B.C.

Moher, Frank. June 2007. More Living Magazine, Nanaimo, B.C.

Bissell, Mary. February 2007. Saving seaweed. The Knowledge Network: The Leading Edge – Innovation in BC.

http://www.unbsj.ca/sase/biology/chopinlab/misc/content/savingseaweed.html?unique_id=1287420316370

McCloy, Heather. April 3rd, 2003. Co-op chronicles, The Ring: The University of Victoria's Community Newspaper, Vol. 29 (7), <http://ring.uvic.ca/03apr03/features/white.html>.