

Curriculum Vitae: André Eric Punt
SEPTEMBER 2011

EDUCATION AND EMPLOYMENT

- 1982 Matriculated Bergvliet High School ('A' aggregate).
1983 - 1985 B.Sc. UCT (Distinctions in Applied Mathematics, Computer Science, and Mathematics, and Degree with Distinction).
1986 B.Sc. (Hons) UCT (Computer Science - 1st class).
1987 - 1988 M.Sc. UCT (Applied Mathematics - Degree with Distinction) Thesis title: Model selection for the dynamics of Southern African hake resources.
1989 - 1991 Ph.D. UCT (Applied Mathematics) Thesis title: Management procedures for Cape hake and baleen whale resources.
1987 - 1992 Research Officer in the Benguela Resources Population Modeling project of the Benguela Ecology Programme, FRD based in the Department of Applied Mathematics, UCT.
1992 - 1994 Research Associate at the School of Fisheries, University of Washington.
1994 - Resource Modeller, Division of Marine Research, CSIRO.
2001 - 2005 Research Associate Professor, School of Aquatic and Fishery Sciences, University of Washington.
2005 - 2007 Associate Professor, School of Aquatic and Fishery Sciences, University of Washington.
2007 - Professor, School of Aquatic and Fishery Sciences, University of Washington.

TEACHING EXPERIENCE

- 1987 - 1991 Lectured parts of AMA 218S (Introduction to Biological Modeling).
1988 & 1991 Lectured parts of SMS 201F (Calculus of Several Variables and Vector Analysis).
2001 Planned and lectured FISH 512 (Age Structured Models) with Ray Hilborn.
2002, 2004-5 Planned and lectured FISH 458 (Fisheries Stock Assessment).
2003 Planned and lectured workshops on Visual Basic and AD Model Builder.
2003, 5, 7, 8 Planned and lectured FISH 507 (Numerical Computing for Fisheries Assessment and Management).
2004 Planned and lectured FISH 507 (Age Structured Models) with Ray Hilborn.
2004 Acted as faculty mentor for Lucy Flynn who taught FISH 497 (Visual Basic Programming with Excel).
2005-11 Planned and lectured QSCI 381B (Introduction to Probability and Statistics).
2006, 7, 9 Planned and lectured FISH 558 (Advanced Fisheries Stock Assessment).
2008 Planned and lectured FISH 497E (Advanced R programming).
2009-10 Acted as faculty mentor for FISH 507 F (Introduction to R programming).

2009-10 Planned and lectured FISH 507G (Advanced R programming).
2010 Planned and lectured FISH 559 (Numerical Computing for Fisheries
Assessment and Management).

During 2001-2010, I have also given guest lectures / participated in the following courses: FISH 210, 323, 444, 458, 475, 512, 522, 558, 578, BIOL 562 and QERM 597.

STUDENTS SUPERVISED

I currently chair the Committees of the following students:

1. Gavin Fay: "Spatial modelling for monitoring and management of marine metapopulations" (Ph.D.) [Started Autumn 2001]
2. Chantel Wetzell: (Ph.D.) [Started Spring 2011]
3. Motoki Wu: "Elucidating the effectiveness of meta-analysis estimates of steepness" (MS) [Started Summer 2009]
4. Cody Szuwalski: "Reaching management objectives given uncertainty: A management strategy evaluation of the eastern Bering Sea snow crab (*chionocetes opilio*) fishery?" (Ph.D) [Started Summer 2009]
5. Ingrid Spies: "Building a bridge between genetics and fisheries management; addressing loss of genetic diversity, the utility of small datasets, and mismatches between management and biological units" (Ph.D.) [Started Summer 2009]
6. Charlotte Boyd: "The predator's dilemma: Investigating the response of seabirds to changes in the availability and distribution of small pelagic prey resources" (Ph.D.) [co-supervisor with Glenn Van Blaricom]
7. James Thorson: "Evaluating Pacific groundfish schooling behavior and un-trawlable refuges using multi-species mixture models and data from autonomous underwater vehicles" (Ph.D.) [Started Autumn 2009]
8. Dusanaka Poljak: "Management Strategies for Bristol Bay red king crab given Ocean Acidification" (MS) [Started Autumn 2010]
9. Felipe Hurtado: "Management of small pelagic fishes" (Ph.D.) [Started Autumn 2010]

I also co-supervise Mr Bruce Taylor, Ph.D. student at the University of Melbourne (2001-), and am a member of the committee of John Feenstra (Ph.D. student, University of Adelaide). I am a member of the Committees of the following UW students:

1. Eva Dusek (MS) [2005 –
2. Allan Hicks (Ph.D.) [2006 –
3. Steven Barneaux (Ph.D) [2006 –
4. Nicolas Guiérrez (Ph.D) [2006 –
5. Kresmir Williams (Ph.D.) [2008 –
6. Carey McGilliard (Ph.D.) [2008 –
7. Neala Kendall (Ph.D.) [2009 –
8. Stan Kotwicki (Ph.D.) [2009 –
9. Kevin See (Ph.D.) [2009 –
10. Chad Wilsey (Ph.D.) [2009 –

11. Joe Bizzaro (Ph.D.) [2010 –
12. Kotaro Ono (Ph.D.) [2011 –

Students with completed degrees

Chaired

1. Gavin Fay: “A Bayesian stochastic metapopulation model for Steller’s sea lions in Alaska” (MS; SAFS, 2004).
2. Teresa A’Mar: “Quantifying Error and Uncertainty in Fishery Stock Assessment Models” (MS; QERM, 2004).
3. Stephani Zador: “Management implications of factors influencing seabird populations” (Ph.D.; SAFS, 2007) [co-chair with Julia Parrish]
4. Rod Towell: “Population dynamics of Northern fur seal population (*Callorhinus Ursinus*) on the Pribilof Islands, Alaska” (MS; QERM, 2008).
5. Jason Cope: “Issues and advances in data-limited stock assessment: Experimentation through simulation” (Ph.D.; SAFS, 2008)
6. Melissa A Haltuch: “Modeling human and climate impacts on the management of the Pacific north west groundfish fishery” (Ph.D.; SAFS, 2008)
7. John Brandon: “Quantifying Uncertainty and Incorporating Environmental Stochasticity in Stock Assessments of Marine Mammals”. (Ph.D.; SAFS, 2009)
8. Teresa A’Mar: “A Management Strategy Evaluation exploring the National Standards of the Magnusson-Stevens Fisheries Conservation and Management Acts with respect to the robustness of decision rules used for North Pacific groundfish, with applications for the U.S. Gulf of Alaska walleye pollock (*Theragra chalcogramma*) fishery” (Ph.D.; QERM 2009)
10. Doug Kinzey: “Multispecies stock assessment with predator-prey interactions” (Ph.D.; SAFS 2010)
11. Tommy Garrison: “The Value of Marine Protected Areas for Improving Stock Assessments” (MS; QERM 2010)
12. Chantel Wetzell: “Challenges of data-Limited Stock Assessments: Simple vs. Complex Stock Assessment Techniques and the Influence of Data” (MS; SAFS 2011)

Committees

1. Gakushi Ishimura (MS) [2001–2003] (thesis title: “Bioeconomic model approach for a fluctuating fish stock: Bioeconomic assessment of harvest strategies for the Pacific whiting fishery”).
2. Brandon Chasco (MS) [2002–2004] (thesis title: “Run Reconstruction and in-season forecasting of sockeye salmon in Chignik, Alaska”).
3. Carolina Minte-Vera (Ph.D.) [2001–2004] (thesis title: “Meta-Analysis of Density-dependent Somatic Growth”).
4. Trevor A. Branch (Ph.D.) [2001–2004] (thesis title: “Individual quotas as a management tool for multispecies fisheries”).
5. Lucy Flynn (MS) [2003–2005] (thesis title: “Quantification and Prediction of Bristol Bay, Alaska, Sockeye Salmon (*Oncorhynchus nerka*) Run Timing”).
6. Tim Miller (Ph.D.) [2003– 2005] (thesis title: “Estimation of Catch Parameters from a Fishery Observer Program with Multiple Objectives”).
7. Ian Stewart (Ph.D.) [2002–2006] (thesis title: “Stock assessment with an evaluation of structural uncertainty, and model performance applied to English sole”).

8. Eric Ward (Ph.D.) [2003–2006] (thesis title: “Incorporating model selection and decision analysis into population dynamics modeling”).
9. Carey McGillaird (MS) [2005 –2006] (thesis title: “The importance of space and the state of the fishery in models of no-take marine reserves”)
10. Jordan Watson (MS) [2006–2007] (thesis title: “Trade-offs in the design of fishery closures: silky shark bycatch management in the Eastern Pacific Ocean tuna purse seine fishery”)
11. Kristen Broms (MS) [2007–2008] (thesis title: “Small game population reconstruction: Model development and applications”)
12. Alex da Silva (Ph.D.) [2001– 2008] (thesis title: “Population dynamics of the blue shark, *Prionace glauca*, in the North Atlantic Ocean”)
13. Ian Taylor (Ph.D.) [2002–2008] (thesis title: “Modeling spiny dogfish population dynamics in the Northeast Pacific”)
14. Robin Thomson (Ph.D.) [2004–2008] (thesis title: “Statistical inference for movement behaviour using animal tracking data”)
15. Judith Little (Ph.D.) [2003-2009] (thesis title: “Evaluating linkages in the social-ecological system of U.S. West Coast fisheries from ecological and spatial perspectives”)
16. Dawn Dougherty (MS) [2007-2009] (thesis title: “The effects of management scale: A simulation study for U.S. Pacific coast groundfish”)
13. Teresa Mongillo (MS) [2007-2009] (thesis title: “Estimated polychlorinated biphenyl (PCB) and polybrominated diphenyl ether (PBDE) accumulation in Southern Resident killer whales”)
14. Hans Nesse (MS) [2007-2009] (thesis title: “Correlates of the decline of the Steller sea lion in the North Pacific”)
15. Gaku Ishimura (Ph.D.) [2007-2010] (thesis title: “Transboundary management of a fish stock under climate variability: The case of Pacific sardine in the California current ecosystem”)
16. Tony Jaecks (MS) [2009-2010] (thesis title: “Population dynamics and trophic ecology of Dolly Varden in the Iliamna River, Alaska: Life history of freshwater fish relying on marine food subsidies”)
17. Suresh Sethi (Ph.D.) [2009-2010] (thesis title: “Fisheries Management with People in Mind: Assessing and Managing Risk”)
18. Juan Valero (Ph.D.) [2004 2011] (thesis title: “Spatial dynamics, recruitment trends and sustainability of Pacific NW geoduck clams (*Panopea generosa*)”)
19. Amanda Bradford (Ph.D.) [2007 – 2011] (thesis title: “Population characteristics and dynamics of the critically endangered western gray whale”)
20. Rebecca Jablonski-Diehl (MS) [2009-2011] (thesis title: “Facing the Future of the International Whaling Commission: Addressing Environmental Threats through Organizational Learning”)

POSTDOCTORAL FELLOWS SUPERVISED

Catherine Holt (2006-2008), Ivonne Oritz (2008-present), Teresa A’mar (2009-2010), Ian Taylor (2008-2010), Bob Lessard (2008), James Murphy (2009-2010), Elizabeth Moffit (2009-present), Mathieu Woillez (2011-present)

ACADEMIC ADMINISTRATION EXPERIENCE

2001 - present Planned and co-ordinated the UW-NMFS mini-workshop series
 2001 - 2003 University of Washington Faculty Senator

2002 - present Quantitative Committee, SAFS
2003 Chair: Marine Ecology Position Search Committee
2005 – 2007 Member: Recruitment, Admissions, and Scholarship Committee
2006 Member: JISAO Director Search Committee
2007 – present Member: JISAO Council
2007 – present Member: SAFS School Council
2007 – present Chair: Recruitment, Admissions, and Scholarship Committee
2008 Member: SMA Search Committee
2011 – present Associate Director, SAFS

PROFESSIONAL ACTIVITY

Appointments (major committees)

1. Member: Scientific Committee of the International Whaling Commission, 1990 – present
2. Chair: Southern Shark Fishery Assessment Group (Australia), 1995 – 2001.
3. Member: Northern Prawn Fishery Assessment Group, Australia (Australia), 1996 – 2000.
4. Scientific Member: Southern Shark Fishery Management Committee (Australia), 1997 – 2001
5. Member: IUCN Standards and Petitions Working Group, 1998 - present
6. Member: Pacific Fishery Management Council Scientific and Statistical Committee, 2001 – present
7. Participant: Working Group on Integration of Marine Protected Areas and Fishery Science and Management, 2004 – 2006.
8. Member: PSMFC Panel on “Strengthening Scientific Input and Ecosystem-Based Fishery Management for the Pacific and North Pacific Fishery Management Councils”, 2005.
9. Member: North Pacific Research Board Science Panel, 2005 – present
10. Member: North Pacific Research Board Ecosystem Modeling Committee, 2006
11. Member: North Pacific Fishery Management Council Crab PLAN Team, 2007 - present
12. Honorary Associate, Center for Marine Science, University of Tasmania, 2005 – 2009
13. Editorial Boards: *Population Ecology*, *The Open Source Fish Science Journal*
14. Associate Editor: *Journal of Applied Ecology*, *Fisheries Research*
15. Guest Editor: *Fisheries Research* - Special Issue on GLMs, GAMs and GLMMs in fisheries
16. Guest Editor: *Fisheries Research* – Harvest strategies
17. Guest Editor: *Fish & Fisheries* – Ecosystem Based Fisheries Management
18. Guest Editor: *Fisheries Research* – Stock Synthesis

Peer reviewer

I review 2-3 papers per month. The journals for which I have reviewed manuscripts since 2001 include: *African Journal of Marine Science*, *AFS Symposium Series*, *Aquatic Living Resources*, *Bulletin of Marine Science*, *Canadian Journal of Fisheries and Aquatic Sciences*, *CCAMLR Science*, *Conservation Biology*, *Ecology Letters*, *Ecological Modelling*, *Ecological Applications*, *Environmental Biology of Fishes*, *Fish and Fisheries*, *Fisheries Research*, *Fishery Bulletin*, *ICES Journal of Marine Science*, *Journal of Agricultural, Biological and Environmental Statistics*, *Journal of*

Applied Ecology, Journal of Cetacean Research and Management, Journal of Marine Systems, Journal of Northwest Atlantic Fisheries Science, Journal of Zoology, Limnology and Oceanography: Methods, Marine and Freshwater Research, Marine Ecology Progress Series, Marine Mammal Science, New Zealand Journal and Marine and Freshwater Research, Population Ecology, North American Journal of Fisheries Management, The Open Source Fish Science Journal, South African Journal of Marine Science, Transactions of the American Fisheries Society.

Since 2001, I have reviewed grant applications for: Cooperative Institute for Marine Resources Studies; DEFRA (United Kingdom) Florida Sea Grant College Program; Foundation for Research and Development (Australia); Great Lakes Fishery Commission; JIMAR, Pelagic Fisheries Research Program; Natural Environment Research Council (United Kingdom); National Research Foundation (South Africa); North Pacific Research Board; NSERC (Canada); Pacific States Marine Fisheries Commission.

Awards

1. Jamieson Memorial Bursary - awarded on the basis of matriculation symbols (South Africa – 1983).
2. Jacob Burlank Scholarship - awarded to the top student in Mathematics II who intends progressing to Mathematics III (South Africa – 1984).
3. Roderick Noble Scholarship - awarded to the B.Sc graduate from UCT with the most outstanding academic record throughout his/her undergraduate career (South Africa – 1985).
4. Southern Life Book Prize - awarded to the top student in the B.Sc. (Hons) Computer Science class (South Africa – 1986).
5. Myer Levinson (EMDIN) Scholarship - awarded to the UCT student who is most successful in his/her B.Sc. (Hons) degree and who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1986).
6. Croll Memorial Scholarship - awarded to the UCT student who is most successful in his/her B.Sc (Hons) degree and who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1986).
7. South African College Croll Scholarship - awarded on the basis of examination results to a UCT student who intends furthering his/her research in the year following the award of the scholarship (South Africa – 1988).
8. S2A3 Medal - awarded by the South African Association for the Advancement of Science for the best M.Sc. dissertation in the Sciences at UCT (South Africa – 1988).
9. K. Radway Allen Award - awarded for an outstanding contribution in fish or fisheries science (Australia - 1999).
10. CSIRO Gold Medal (2009).
11. COFS Distinguished Teaching Awards (USA – 2003 & 2005).
12. COFS Distinguished Research Award (USA – 2008).

Recent (2001-2011) invited talks / keynotes addresses

1. Invited speaker: DFO Fisheries Management Studies Working Group, Dartmouth, 25-29 June 2001.
2. Invited speaker: Life Histories, Assessment and Management of Crustacean Fisheries, La Coruña, 8-14 October 2001.

3. Invited speaker: DFO Workshop on Implementing the Precautionary Approach in Assessment Advice, Ottawa, 10-14 December 2001.
4. Keynote speaker: Elasmobranch Fisheries: Managing for Sustainable Use and Biodiversity Conversation, 24th Annual NAFO meeting, Santiago de Compostela, 11-13 September 2002.
5. Invited speaker: Oregon Chapter American Fisheries Society, 39th Annual Meeting, Eugene, 26-28 February 2003.
6. Invited speaker: American Fisheries Society, 133rd Annual Meeting, Quebec, 11-13 August 2003.
7. Invited speaker: Pre-conference Workshop on Assessment and Management of Deepsea Fisheries, Dunedin, 27-29 November 2003.
8. Keynote speaker: Deep Sea 2003 Conference, Queenstown, 1-5 December 2003.
9. Invited speaker: World Fisheries Congress, Vancouver, 2-6 May 2004.
10. Keynote speaker: 2004 World Conference on Natural Resource Modelling, Melbourne, 12-15 December 2004.
11. Keynote speaker: ICES Symposium on Fisheries Management Strategies, Galway, 27-30 June 2006.
12. Keynote speaker: 10th National Stock Assessment Workshop, Port Townsend, 5-8 June 2008.
13. Keynote speaker. 5th World Fisheries Congress, Yokohama, 20-24 October 2008.
14. Keynote speaker. National Ecosystem Modelling Workshop II, Annapolis, 25-27 August 2009.