Curriculum Vitae

Name: Sabine <u>Daume</u>

E-mail: <u>sdaume@scsglobalservices.com</u>

Relevant Qualifications

PhD in Marine Biology La Trobe University Australia

Diplom (MSc level) in Marine Biology, Marine Chemistry and Botany University Kiel Germany

RABQSA-Certified ISO 9011:2008 Lead Auditor

AQS Management Systems, Inc., USA

Employment History

Scientific Certification Systems 2009 - present

California, USA

Sustainable Seafood Certification Program

Department of Fisheries 2001 - 2008

Western Australia

Research Scientist

Deakin University 1998 - 2001

School of Ecology and Environment

Victoria, Australia
Post-doctoral Fellow

Relevant Work experience

Regional Director – Australasia, SCS Global Services 2014 - present

Since relocation to Australia in early 2014 I became the Regional Director for SCS Global Services looking after the Australasia Region with strong focus of expanding the business in Australia. Responsibilities include both fishery and aquaculture certification under the auspices of the Marine Stewardship Council (MSC) and Aquaculture Stewardship Council (ASC) respectively. I led the first ASC full assessment audit in Australia in January 2014 using the ASC Salmon standard.

Manager, Scientific Certification Systems 2009 – 2013

As the manager for SCS's Sustainable Seafood Certification Program I was responsible for leading the company's program, which includes both fishery and chain of custody certification under the auspices of the Marine Stewardship Council (MSC), using the MSC methodology and standards. I have the oversight of internal program staff as well as external contract auditors that are involved in the certification program. I received formal training as a lead audit (RABQSA-Certified ISO 9011:2008) by AQS Management Systems, Inc. I have been the team leader and lead auditor of many annual, full- and pre-assessment audits. I received formal training on the new Fisheries Assessment Methodology, Default Assessment Tree and the Risk Based Framework during the CB workshop in London, UK (October 2009.2010,2011,2012) and the RBF training in Montreal, Canada in 2009 and London, UK 2011.

In addition, I served on the Global Steering Committee of the Abalone Aquaculture dialogue (AAD), convened by the World Wildlife Fund (WWF) and now represent the AAD at the Technical Advisory Group (TAG) of the Aquaculture Stewardship Council (ASC). The aquaculture certification program at SCS will be developed as part of the Sustainable Seafood Program which will involve aquaculture farm and chain of custody certification as accreditation for the ASC standards will become available.

Senior Research Scientist, Department of Fisheries WA 2001 – 2008

As a Senior Research Scientist at the Research Division of the Department of Fisheries in Western Australia, I was responsible for leading a group of technical staff and post-graduate students. In this position, I gained relevant fisheries experience, lead research projects related to fishery and fisheries habitats of temperate and tropical invertebrate species. I am experienced working with diverse cultural groups, including indigenous groups in the far northwest of the state, in very remote marine environments. I worked with industry personnel at all levels (divers, technicians, managers, executive officers) as well as policy makers and managers in government departments.

Post-doctoral Fellow, Deakin University Australia 1998 – 2001

As a Post-doctoral fellow at Deakin University in Australia, I applied my qualifications and became an expert in the biology and ecology of exploited marine invertebrate species. I worked closely with the abalone aquaculture and fishing industry in Australia. I led several research projects addressing questions related to the settlement and recruitment and other aspects of the early lifehistory of abalone.

Publications

Certification Reports

- Daume S., Morison S., Ariji M., Tamura Y. (2014). MSC Final Certification Report. The Kyoto Danish Seine Fishery. MSC Certification August 2014 p. 159.
- **Daume** S., Morison S., Lack M. (2012). MSC Final Certification Report. The Macquarie Island Toothfish Fishery. MSC Certification April 2012 p. 116.
- **Daume** S., Morison S., Lack M. (2012). MSC Final Certification Report. The Australian Heard Island and McDonald Islands Patagonian Toothfish Fishery. MSC Certification March 2012 p. 127.
- **Daume** S., DeAlteris J., Allen R. (2012). MSC Final Certification Report. The Louisiana Blue Crab Fishery. MSC Certification March 2012 p. 118.
- **Daume** S., Haddon M., Frusher S., Phillips B. (2012). MSC Final Certification Report. The Western Australian Rock Lobster Fishery. MSC Re-certification March 2012 p. 140.
- **Daume** S., Beamesderfer R. (2011). MSC Final Certification Report. The Annette Island Reserve Salmon Fishery. MSC June 2011 p. 198.
- Daume S., Morison S., Wilcox C., Lack M. (2011). MSC Final Certification Report. The Australian Mackerel Icefish Fishery. MSC Re-certification June 2011 p. 108.
- Daume S., SosaNishizaki O., Lluch Belda D., (2011). MSC Final Certification Report. The Baja California Lobster Fishery, Mexico,. MSC Re-certification June 2011 p. 92.
- Daume S., Parsons D., Maguire J.-J. (2011). MSC Final Certification Report. Scotian Shelf Shrimp in Shrimp Fishing Areas (SFA) 13, 14, and 15. MSC June 2011 p. 101.
- Daume S., Martell S., Essington T., Sutinen J. (2011). MSC Final Certification Report. US Pacific Halibut. MSC Re-certification August 2011 p. 123.
- Daume S., Martell S., Essington T., Sutinen J. (2011). MSC Final Certification Report. US Pacific Sablefish. MSC Re-certification August 2011 p. 98.
- Chaffee C., SosaNishizaki O., Lluch Belda D., Daume S. (2011). MSC Final Certification Report. The Pacific Sardine Fishery, Gulf of California, Mexico. MSC June 2011 p. 176.
- **Chaffee C.,** Botsford L.W., Armstrong D., Hanna S., **Daume** S. (2010). MSC Final Certification Report. The Oregon Dungeness Crab Fishery. MSC November 2010 p. 119.

Peer Reviewed Journal Articles

- Morgan S., Daume S., Cauley H., Ninnes C., Villalon J. (2013). A New Market-Based Tool for Conservation: Improving Aquaculture Through ASC Certification Oryx, volume 47, issue 02, pp. 171-172.
- Daume S., Fromont J. Parker F., Davidson M., Murphy D., Hart A. (2010). Quantification of sponge erosions in Western Australian pearl oyster shells in. Aquaculture Research 41;e260-267.
- **Daume,** S., Davidson, M., Ryan, S. and Parker, F. (2007). Comparisons of rearing systems based on algae or formulated feed for juvenile greenlip abalone (*Haliotis laevigata*). Journal of Shellfish Research 26(3), 729-737.
- Parker, F., Davidson, M., Freeman, K., Hair, S. and **Daume**, S. (2007). Investigation of optimal temperature and light conditions for three benthic diatoms and their suitability to commercial scale nursery culture of abalone (*Haliotis laevigata*). Journal of Shellfish Research 26(3), 751-761.
- Strain, L., Borowitzka, M. and **Daume**, S. (2007). The development of Rhodophyta species as diets for juvenile greenlip abalone (*Haliotis laeviqata*) in the later nursery phase. Journal of Shellfish Research 26 (3), 737-744.
- **Daume**, S. (2006). The roles of bacteria and micro and macro algae in abalone aquaculture- A Review. Journal of Shellfish Research 25(1):151-157.
- Freeman, K., **Daume**, S., Rowe, M., Parsons, S., Lambert, R. and Maguire, G.B. (2006). Effects of season, temperature control, broodstock conditioning period and handling on incidence of controlled and uncontrolled spawning of greenlip abalone (*Haliotis laevigata* Donovan) in Western Australia. Journal of Shellfish Research 25(1), 187-194.
- Graham, F., Mackrill, T., Davidson, M. and Daume, S. (2006). Influence of conditioning diet and spawning frequency on

- variation in egg diameter for greenlip abalone Haliotis laevigata. Journal of Shellfish Research 25(1), 195-200.
- Strain, L., Borowitzka, M. and **Daume**, S. (2006). Growth and survival of juvenile greenlip abalone (*Haliotis laevigata*) feeding on germlings of the macroalgae *Ulva* sp. Journal of Shellfish Research 25(1), 239-247.
- Watson, D., **Daume**, S., Prince, J., Beasley, L. and Knott, B. (2005). The influence of culture conditions on the growth and biochemical composition of an algal feed for juvenile greenlip abalone (*Haliotis laevigata*). Molluscan Research 25(1), 1-8.
- **Daume**, S. and Ryan S. (2004). Fatty acid composition of eggs derived from conditioned and wild caught greenlip abalone broodstock (*Haliotis laevigata*). Journal of Shellfish Research 23(4), 967-974.
- **Daume**, S. and Ryan S. (2004). Nursery culture of the abalone *Haliotis laevigata*: Larval settlement and juvenile production using cultured algae or formulated feed. Journal of Shellfish Research 23(4), 1019-1026.
- **Daume**, S., Huchette, S., Ryan, S. and Day, R. W. (2004). Nursery culture of *Haliotis rubra*: The effect of cultured algae and larval density on settlement and juvenile production. Aquaculture 236, 221-239.
- Watson, D., **Daume**, S., Prince, J., Beasley, L. and Knott, B. (2004). The influence of light intensity on the density of different diatoms as feed for juvenile greenlip abalone (*Haliotis laevigata*). Aquaculture 235, 345-359.
- **Daume**, S., Long, B. M. and Crouch, P. (2003). Changes in amino acid content of an algal feed species (*Navicula* sp.) and their effect on growth and survival of juvenile abalone (*Haliotis rubra*). Journal of Applied Phycology 15, 201-207.
- **Daume**, S., Krsinich, S. A., Farrell, S. and Gervis, M. (2000). Settlement, early growth and survival of *Haliotis rubra* in response to different algal species. Journal of Applied Phycology 12 (3/5), 479-488.
- **Daume**, S., Brand-Gardner, S. and Woelkerling, Wm., J. (1999). Preferential settlement of abalone larvae: diatom films vs non-geniculate coralline red algae. Aquaculture 174 (3-4), 243-254.
- **Daume**, S., Brand-Gardner, S. and Woelkerling, Wm., J. (1999). Settlement of the abalone larvae *Haliotis laevigata* Donovan in response to non-geniculate coralline red algae (Corallinales, Rhodophyta). Journal of Experimental Marine Biology and Ecology 234 (1), 125-143.
- **Daume**, S., Brand-Gardner, S. and Woelkerling, Wm., J. (1999). Community structure of non-geniculate red algal in three different boulder habitats in southern Australia. Phycologia 38 (2), 138-148.
- **Daume**, S., Brand, S. and Woelkerling, Wm., J. (1997). Effects of post-larval abalone (*Haliotis rubra*) grazing on the epiphytic diatom assemblage of coralline red algae. Molluscan Research 18 (2), 119-130.

Research Grant Final Reports

- **Daume**, S., Fromont, J. and Hart, A. (2009). Management of bioeroding sponges in wild stocks of *Pinctada maxima* in Western Australia. Final report to Fisheries Research and Development Corporation on Project No. 2005/074. Fisheries Research Report No. 196. Department of Fisheries, Western Australia. 48p.
- **Daume**, S. (2007). Improvement and evaluation of greenlip abalone hatchery and nursery production. Final Report of Fisheries Research & Development Council Project No. 2003/203. Fisheries Research Contract Report No.16. Department of Fisheries, Western Australia. 160p.
- Hart, A. M., Fabris, F. P. and **Daume**, S. (2007). Stock enhancement of *Haliotis laevigata* in Western Australia a preliminary assessment. Western Australian Fisheries Research Report No.166. Department of Fisheries, Western Australia. 42p.
- **Daume**, S. (2003). Early life history of abalone (*Haliotis rubra*, *H. laevigata*): Settlement, survival and early growth. Final Report of Fisheries Research & Development Council Project No. 1998/306. Department of Fisheries Contract Report No.3. Department of Fisheries, Western Australia. 110p.

Book Chapters

- Shepherd, S. A. and **Daume**, S. (2013) Ecology of Australian Temperate Reefs: The Unique South. Chapter 6 Ecology of non-geniculate coralline red algae. CSIRO Publishing pp.
- Shepherd, S. A. and Daume, S. (1996). Ecology and survival of juvenile abalone in a crustose coralline habitat in South

Australia. In, Survival Strategies in Early Life Stages of Marine Resources. Eds: Y. Watanabe, Y. Yamashita and Y. Oozeki, Balkema, Rotterdam, pp. 297-313.

Papers given at International Conferences

- **Daume**, S., Cook, P, Mary, L, et al. (2012). Can product certification combat illegal trade? VIII International Abalone Symposium, Hobart, Australia, 6-11th May 20012.
- **Daume**, S (2009). Sustainable Seafood Certification: Developing Standards for the Abalone Aquaculture Industry. World Aquaculture 20010, San Diego, California, March 1-5, 2010.
- **Daume**, S., Hair, S., Parker, F., Davidson, M., Fukazawa, H., Fisher, S. (2009). The influence of specific nutritional components on spawning success and offspring performance of *Haliotis laevigata*. World Aquaculture 2009, Veracruz, Mexico, 25-29th September 2009.
- **Daume**, S., Fabris, F. Davidson, M., Parker, F., Murphy, D. And Hart, A. (2009). Seeding cultured greenlip abalone (*Haliotis laevigata*) at sustainable densities in Western Australia. In: Proceedings of the VII International Abalone Symposium, Pattaya, Thailand, 19-24 th July 2009.
- **Daume**, S., Davidson, M. and Graham, F. (2006). The benefits of seaweed use in abalone aquaculture. In: Proceedings of the VI International Abalone Symposium, Puerto Varas, Chile, 19-24th February 2006.
- **Daume**, S. 2003. Cultivation of algae for the abalone Industry in Australia. 5th Asia-Pacific Conference on algal Biotechnology, Qingdao, China, 18-21 October 2003.
- **Daume**, S. and Ryan, S. (2003). Changes In fatty acid composition of eggs derived from conditioned and wild caught greenlip abalone broodstock (*Haliotis laevigata*). 5th International Abalone Symposium, Qingdao, China, 12-17October 2003.
- **Daume**, S., Long, B. M. and Crouch, P. (2003). Changes in amino acid content of an algal feed species (*Navicula* sp.) and their effect on growth and survival of juvenile abalone (*Haliotis rubra*). 5th International Abalone Symposium, Qingdao, China, 12-17 October 2003.
- **Daume**, S. (2002). Advances and constrains of algal culture for abalone aquaculture. 9th International Conference on Applied Algology, Almeria, Spain.
- **Daume**, S., B. M. Long, and P. Crouch (2002). Changes in amino acid content of an algal feed species (*Navicula* sp.) and their effect on growth and survival of juvenile abalone (*Haliotis rubra*). 9th International Conference on Applied Algology, Almeria, Spain.
- **Daume**, S., A. Krsinich, S. Farrell and M. Gervis (2000). Settlement, early growth and survival of *Haliotis rubra* in response to different algal species. 8th International Conference on Applied Algology at Montecatini Terme, Italy and 4th International Abalone Symposium, Cape Town, South Africa.
- **Daume**, S., S. Brand, Wm. J. Woelkerling and S. A. Shepherd (1998). Preferential settlement of abalone larvae (*Haliotis laevigata*, *H. rubra*) in response to different species and growth-forms of coralline red algae. 3rd International Larval Biology Meeting, Melbourne, Australia.
- **Daume**, S., S. Brand, Wm. J. Woelkerling and S. A. Shepherd (1997). Preferential settlement of abalone larvae (*Haliotis laevigata*, *H. rubra*) in response to different species and growth-forms of coralline red algae. 3rd International Abalone Symposium, Monterey, USA.
- **Daume**, S., S. Brand, Wm. J. Woelkerling and S. A. Shepherd (1996). Preferential settlement and effects of post-larval abalone (*Haliotis rubra*) grazing on the epiphytic diatom assemblage of coralline red algae. Australasian Symposium on Abalone Fisheries, Culture and Biology, Wellington, New Zealand.