

ACKNOWLEDGEMENTS

I would like to express my gratitude to my advisor, Associate Professor Dr. Nantana Gajasen, who opens my mind in ecological system approach and let me enter in ecological modelling world, with her advice, comment and suggestion in this thesis. Without her kindness, this study could not be accomplished. I am very grateful to my co-advisor Dr. François Bouequet who gave me a chance in Multi-agent systems and the best help in model construction and role-playing game. I would like to especially thanks to Dr. Christophe Le Page for great suggestion in Role-playing game. I am deeply thanks to Dr. Guy and Dr. Ingon Trebuil for their kindly explanation of Multi-agent systems. I also thanks Dr. Art-Ong Pradatsundarasar who has been a great consultant in razor clam population.

I gratefully acknowledge to the head of department of biology and the chair of the committee Dr. Siriwat Wongsiri, financial support by department of biology, Chulalongkorn university graduate school and especially grant and financial support from The Biodiversity Research and Training Program (BRT) for studied at Don Hoi Lord, Samut Songkhram province.

Gratefully thank Mr. Pranomsak Pomburom, Mr. Warong Naiwinit and Mr. Paolo Campo for giving me more understanding on Multi-agent systems and Role-playing game

I also thank very much to Khong-rugsar family and every fisherman there could not be named here at Ban Chu Chi village for their great field study data collection help and gave me about razor clam knowledge.

Thank you very much to all member of Tropical Ecology and Natural Resource Management Laboratory Pee Keng, Pee Chat, Pee Nong, Pee Kwan, Pee Oh, Pee Beer, Pee Kob, Pee Ote, Eng, Map and Nong Chu who have spent great time together.

I would like to express all of my heart-feeling gratefulness to my mom, uncle, aunt and brother who gave me education that is the best wealth in my life and always embrace and encourage me to withstand and to conquer with such love and care.

Finally, I would like to dedicate this thesis to my late father who always said to me in my mind “Don’t give up”.