‘Experiential’ residential field courses

Gray A Williams

The Swire Institute of Marine Science and
Area of Ecology & Biodiversity,
School of Biological Sciences, HKU
Why residential field trips?

- Ecology is the science of the interaction between organisms and their environment.
- To truly understand ecology you need to immerse yourself in the environment: the living laboratory/classroom approach.

... You also get to go to really cool places and see really cool things.
BIOL2318 Biological Sciences Field Course: Marine Life Science 2013 & 14 HKU – UBC Vancouver (Dr V Thiyagarajan & GA Williams)
ENVS3016 Environmental Science in Practice is newly launched flagship course of Environmental Science Major. In the reading week of early March, 2012, I led a group of final year ENVS students to a residential field trip in Shimane and Hiroshima, Japan. The field trip, which is a main component for practical and field-based learning of environmental science, was really a great success.

On the second day of the trip, the academic staff of Shimane University and Fukushima University (Professor Kitosu Noma, Director of the Research Center for Coastal Lagoon Environments, Shimane University, Professor Toshiki Izumi, Dr Koji Sato and Dr Katsuo Hirose) gave us a series of lectures on regional environments and their historical changes of braided lake Nakaura.

On the following day, we conducted sediment coring by using two boats to reconstruct anthropogenic impact on the lake for the last few hundred years. Dr Sato primarily conducted the coring, grabbed sampling, and did water quality measurement, and our students were there to observe and record the data. After that, we brought the sediment core back to the laboratory of the institution. We were joined by a reporter at the coring, who subsequently wrote a feature at a local newspaper, highlighting the importance of environmental science education and the first cultural and educational exchange among HKU and Shimane University.

Just as old Chinese adage states, “It is better to travel ten thousand miles than read ten thousand books”. To widen the horizon of Environmental Science students, Dr Moriaki Yasuhara of School of Biological Sciences organized a 6-day field trip with University of the Ryukus in Okinawa for the undergraduate course ENVS3016 Environmental Science in Practice during the reading week on March 2013. This had not only equipped the students with essential technical skills for environmental science, but also provided them with the opportunity to have exchange with Japanese teachers and students.

Life as an Okinawa university student

“The best thing of this course is that I can experience the life of Japanese university student. We worked with Japanese students during the trip and solved the problems together. Now we have a strong feeling of brotherhood with them,” said Yuan Wai-kuen Will, final year student of HKU Environmental Science Major.

The students were given several lectures by Japanese professors including Dr Kazuiko Fujita (University of the Ryukus), Dr Chuki Hongo (University of the Ryukus) and Dr Koji Sato (University of Shimane), the place that we conducted the field trip last year, enhancing their understanding of the environmental problems in Okinawa and the field works. They also worked with Japanese students from both Okinawa and
Why do we need coastal aquaculture in a business city, the Hong Kong (HK)?

How much is HK’s oyster aquaculture production worth?

How we do oyster aquaculture business in HK? Can we make it economically sustainable?

How to start an oyster hatchery? why is it important?

How young science entrepreneurs can start their own ecological business in Hong Kong?

What kind of jobs does oyster aquaculture support?

Experts from HKU (HK), Agriculture, Fisheries and Conservation Department (AFCD-HK), Oyster Growers (HK), and Institute of Oceanology (China) and Lee Kum Kee Ltd., will be collaboratively teaching this course.
BIOL3305: Tropical and Temperate Marine Ecology Field Course 2017-19 (Drs BD Russell & S Cannicci)

Orpheus Island, GBR
Tropical ecosystems

Sydney
Temperate ecosystems

Quantification of patterns and processes

Laboratory experiments

Field experiments
BIOL 3328: Estuarine and Nearshore Ecology (2011 to date): Joint course between HKU, University of Johannesburg, Northwestern University (SAfrica) and Arkansas University (USA) (Gray A Williams)
• 10 HKU undergrads and 4 Postgrads every year travel to Tsitsikamma in SAfrica
• Students from all universities mixed into 4 groups
• They live together in tents; cook and share chores together
Living Lab - Tsitsikamma 2019
Added values/benefits

• Different educational approaches and tasks
• Moved outside your comfort zone
• The excitement of a new environment
• Cultural exchange (different evenings)
• Learn new skills (camping; cooking over a braii)
• See really cool organisms in a really cool environment – that’s ecology!
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