



INTERNATIONAL EXCHANGE PROGRAMMES BETWEEN JAPAN AND
OTHER UNESCO MEMBER STATES FOR THE PROMOTION OF
INTERNATIONAL COOPERATION AND MUTUAL UNDERSTANDING

-2008 University Students Exchange Programme-

Learning to Live in a Sustainable Way through Mutual Understanding -Challenge of ESD Fostering Values, Behaviour and Life-styles of University Students-



7 - 17 February 2009

Adelaide, Mt Barker and Kangaroo Island

Programme Organisers

University of the Sacred Heart, Tokyo

Asia/Pacific Cultural Centre for UNESCO (ACCU)

In Cooperation with

Mt Barker Waldorf School, South Australia

People Perspectives: G R (Bob) and J I (Jennie) Teasdale

Whale & Dolphin Conversation Society: Tony and Phyll Bartram

International Exchange Programme between Japan and Other UNESCO Member States for the
Promotion of International Cooperation and Mutual Understanding

-2008 University Students Exchange Programme-

Learning to Live in a Sustainable Way through Mutual Understanding:

Challenge of ESD Fostering Values, Behaviour and Life-styles of University Students

All rights reserved. No portion of this report may be reproduced, by any process or technique,
without the express written consent of the publisher.

Copy rights © 2009 by University of the Sacred Heart, and Asia/Pacific Cultural Centre for
UNESCO.

Published in July 2009

Edited by

Yoshiyuki Nagata, Brenda Bushell, Sachiyo Soga, Ryoko Mizuno, Sayaka Watanabe and Nao Ando

Printed in Japan

TABLE OF CONTENTS

Preface	i
I. Reflections	
1. Reflections on the Kangaroo Island Study Programme	3
2. University of the Sacred Heart Kangaroo Island Environmental Sustainability Study Tour	7
3. Keynote Lecture: “An Introduction to Sustainable Living on Kangaroo Island”	9
II. Programme Information	
1. Introduction and Programme Background	25
2. Objectives	25
3. Delivery of the Programme	26
4. Results	26
III. Proceedings	29
IV. Comments and Suggestions	41
V. Appendix	
1. Programme Schedule	53
2. List of Participants	56
3. List of Collaborating Organisations	58
4. Photos	59
5. Guidelines for Field Study Presentations	68
6. Field Study Presentations	71

Preface

Following upon the previous year's study tour to Thailand and Lao P.D.R., teachers and students of the University of the Sacred Heart held a study tour focused on the theme of sustainability. In February 2009, midsummer in the southern hemisphere, thirteen students and two teachers participated in field work centering on Australia's Kangaroo Island as part of a project funded by Japanese Funds-in-Trust for International Exchange Programme between Japan and Other UNESCO Member States for the Promotion of International Cooperation and Mutual Understanding. Students used to life in the city completed eleven activities and a reporting session in the midst of the incredible natural environment on Kangaroo Island. The eleven days were a chance to reflect on the global environment, coexistence of humans and nature, and their own lifestyles and ways of living.

Kangaroo Island, which is accessed by a 40-minute ferry ride across the straits from suburban Adelaide, the capital of the state of South Australia, is a treasure trove of untouched nature. The students formed groups of 2-3 members and, based on the five themes of 'Learning to Live and Work Sustainably,' 'Developing Eco-Tourism,' 'Maintaining Biodiversity,' 'Managing the Marine Environment' and 'Balancing Human Impacts,' conducted preliminary research in Japan and field work on the island. From a boat, they experienced dolphin watching and investigated their ecosystem, and at the national park, they observed seals. They also built a miniature house where penguins could lay their eggs, visited an eco-friendly factory and farm, and heard from experts at each site.

Every evening, the participants shared what they saw, felt and thought with one another. However, at the end of the tour, each person spent time alone in the midst of nature in a spot overlooking the sea. Participants thought about their lives and the environment far away in Japan and spent time reflecting to understand themselves and their connections to all things. One can say that the time on the island held a very special meaning for students. The nature of the time spent—from sharing with peers to focusing on themselves—differed, but it is certain that the tour was a special time for the students to live through.

On the final day, the group invited various experts they had learned from on the island as well as local people to a presentation about what they had learned, thought, and felt. Even on the short tour, the students absorbed a surprising amount, which they were able to summarise in PowerPoint presentations. The issue of how to make use of what they had learned on Kangaroo Island within the huge Metropolis of Tokyo was a challenge. Concerning this "homework," students gathered information from the local library and via the Internet. They presented the content they had prepared with great care in English and received a huge round of applause from people from the island. At the farewell event, each student received a certificate of

completion from the organisers and the expressions of fulfillment on students' faces made a big impression.

The students, who had completed a tough, one-week schedule, were praised by the lecturers living on the island, who said to me: "We are increasingly charged with a situation at present of unsustainable conditions such as global warming, and all of your students are change agents for making society sustainable." In this way, the trip seemed to give confidence and a feeling of self-efficacy to the students.

Setting aside these results, there is the likely criticism that the students live in a large metropolitan area, and that there is no meaning in their learning in the midst of nature. It is true that life in Tokyo is far removed from that on Kangaroo Island. The clusters of skyscrapers in Tokyo, the subways, the convenience stores and vending machines...the things that have become necessary conveniences for life in the big city were not in evidence at all on Kangaroo Island. Nonetheless, we can say that students returned home learning something important. Rather than a "thing" to be used immediately, this learning seems to be connected to values and worldview.

It is said that "Nature is a great teacher." Truly, Kangaroo Island was a great teacher that enlightened us about important things for living our lives. The beautiful natural scenery in which we were wrapped humbled us, and the incomprehensible vitality of the flora and fauna surprised us. Furthermore, we experienced up close the quiet and darkness, and the fear that one cannot experience in the city. Also, the simple life on the island made us recall the words "simplicity" and "economise," because we are surrounded by global products for our consumer-oriented society. Furthermore, more than anything, important teachers were the people from the island--in particular the Teasdales, who helped to prepare so carefully for the tour, and the Bartrams who gave us the best local welcome. We learned a lot from their character, especially from the caring they showed to the young people.

The learning did not stop with that coming from these great teachers. It seems the students gained capacities—even if only a little. For example, they gained the ability to solve problems that one faces, critical thinking vis à vis materialism and a consumer society, imagination towards other things such as nature, ability to gather information freely using all of the five senses, conceptual ability for planning, etc.—various abilities that are needed when human beings live in an uncertain age. Developing critical thinking and problem solving skills needed to make a future society sustainable is also an important issue expressed in UNESCO's ESD International Implementation Scheme. If the experience on Kangaroo Island can be applied to life in the city and if the study tour can be of at least a little use in forming a sustainable society in the future, there is nothing that would make the person in charge of this tour happier.

Lastly, to UNESCO and the university staff who demonstrated understanding toward the realisation of this tour, I would like to use this space to offer thanks. Also, before traveling to Kangaroo Island, we dropped in at Mt. Barker Waldorf School, an ESD demonstration school, and learned much about co-existence between nature and humans and creating a sustainable school community. In particular, we are thankful for help from Ms. Jennifer West and Ms. Midori Tsuruta. My sincere gratitude also goes to the Woods and Glasby families who welcomed my students at their homes and treated us to home-cooked meals. Lastly, to Mr. Bob and Ms. Jennie Teasdales and Mr. Tony and Ms. Phyll Bartram who prepared for this tour from their heart, I would once again like to say thank you.

May 10, 2009

Yoshiyuki NAGATA
Programme Director
Associate Professor, University of the Sacred Heart, Tokyo

I. Reflections

1. Reflections on the Kangaroo Island Study Programme

While many of us share a vision for a sustainable society, we often find it difficult to bring sustainable living to life. Through our study programme to South Australia, including Adelaide city and Kangaroo Island from February 7 to 17, 2009, we could experience sustainable living: A lifestyle that focuses on practices of ecological action and social commitment. From this perspective, I would like to reflect on several of our experiences and suggest how we can incorporate the practices we learned on our field study programme as we make our transition to a sustainable society.

Our visit to Mt. Barker Waldorf School on the first day of our field study gave us a unique introduction to the dynamics of experiential learning: a learning model that places emphasis on personal and environment experiences as a way to construct knowledge. It also provided us with a framework for our own experiential learning on Kangaroo Island. Through our observations at the school, we could feel a sense of harmony between the students, teachers and the surrounding nature. I think our study team was deeply impressed by the importance placed on “being”, and “learning” in nature within the curriculum at Mt. Barker Waldorf School. So too were some of our members surprised with the classroom dynamics there, particularly in the high school classes, where students were encouraged to take charge of their learning. The students’ sense of confidence and active contribution in class particularly impressed the study team members. Experiential learning presented a new learning style for some, and made them think deeply about their own learning experiences, and how they envision educating for sustainable society after returning to Japan.

Another critical component in the creation of a sustainable society which we experienced through our field study was the practice of teamwork and collaboration. We learned a lot about teamwork from our programme organisers and specialists, Bob and Jenny Teasdale, and Tony and Phyll Bartram. With a mission to practice and promote ecological and sustainable living, the four of them worked closely as a team to develop our programme and facilitate our learning on the island. Their intricate daily planning and coordination for each activity illustrated to us how important teamwork is in order to create a holistic learning experience. I believe through watching them work together, we could also develop good teamwork among our members. This was proven during the field activities we participated in, and of course highlighted during the final presentations our members gave in teams on the last day.

We also had opportunities to participate in teamwork for sustainable society through various “hands-on” experiences in the field. For example, we teamed up with local high school students for tagging Black Bream fish on the Harriet River. We learned from Ms. Judith Wingate, who leads the fish tagging research that teamwork and collaboration are critical components for

building a sustainable ecosystem. Another impressive example of community teamwork and collaboration was the Fairy penguin protection project, along the coastline from Kingscote Jetty. Coming together for a common purpose, community members both young and old are contributing their time and effort to carry rocks, clean and construct small wooden houses to ensure the female Fairy penguin has a protected habitat to lay her eggs. The sense of accomplishment after we finished building the penguin houses alongside people from the community was a very rewarding experience for us.

How to contribute towards creating a sustainable society as individuals was affirmed after visiting Bob and Jenny Teasdale's home on Pelican Lagoon. Their love of nature and desire to live in harmony with the environment motivated them to create a home which is not only friendly to the Earth, but reflects the aesthetic and spiritual values that they hold. Spending time with Bob and Jenny in their lovely home, learning from them and reflecting on our own lives as we did, gave us inspiration on how to live our life in the future.

Finally, we could develop an affinity to nature through the close encounters we had with mammals: communicating with the dolphins as they played alongside our boat, watching the sea lions frolic on the rocks at Admirals Arch, and observing the social community of seals along the beach front at Seal Bay. After these experiences we all realised how much we share in common with mammals and other animals in the wild. Our encounters emphasised the importance of our relationship with the natural world.

The lessons we learned from our field study programme cannot be quantified or listed. Each of us has evolved in so many ways, in terms of our mental, psychological and spiritual growth. The questions remain: How can we realise our growth, and how can we go forward with our new vision for a sustainable society? I think one way is to implement the practices and elements from the field study programme that I have reflected on, here. First, we should always remember that learning is a lifelong experience and that to lead sustainable lives we must not sit passively, but actively seek to find the best way to live in balance with nature. As Aristotle once said, "For the things we have to learn before we can do them, we learn by doing them" (cited in Bynum and Porter, 2005).

Secondly, as individuals, we need to take action. We need to look critically at our lifestyle and challenge ourselves to engage in "acts of kindness" for nature and all living creatures around us. Finally, whether in our local communities or on the Sacred Heart campus, it is important for us to identify what it is we want to do, and then collaborate on small projects that build upon one another for the common goal of achieving a sustainable society. Creating networks for people and organisations who share a common vision is critical to achieving success. In the words of noted anthropologist Margaret Mead: "Never doubt that a small group

of thoughtful, committed citizens can change the world” (The Institute for Intercultural Studies, 2001). So, with our knowledge and skills together with commitment and teamwork, we too can create change!

Brenda Bushell

Associate Professor, University of the Sacred Heart, Tokyo

References

Bynum, W.F. and Porter, R. (eds) (2005). *Oxford Dictionary of Scientific Quotations*. Oxford University Press, 2005 21:9.

Institute for Intercultural Studies (2001). Selected Margaret Mead Quotations, Available: http://womenshistory.about.com/cs/quotes/a/qu_margaretmead.htm, last accessed 17 April, 2009.

Ten important reasons why the USH Environmental Studies Programme on Kangaroo Island worked amazingly well ...

- 1 The Japanese organisers from USH had clear goals about environmental sustainability and what they wanted to achieve during the KI programme.
- 2 Members of the Australian teaching team were able to translate these goals into a dynamic, experiential, environmental studies programme.
- 3 Kangaroo Island's unique and relatively intact eco-system provided an ideal location to implement the programme.
- 4 The participating students from USH were carefully selected and thoroughly prepared for the study programme.
- 5 The Japanese students were well prepared culturally for their Australian experience.
- 6 Competent bilingual lecturers built an effective communication bridge between the Australian people involved and the students whose first language was Japanese.
- 7 The experiential programme was meticulously planned, diverse and engaging, greatly enhancing learning outcomes.
- 8 Essential reflection periods were built into the programme.
- 9 At all times a sense of purposeful collaboration and goodwill between the overseas visitors, the Australian team and local KI people was fostered and consequently blossomed.
- 10 The physical arrangements, including transport, meals, exercise, sleep, recreation etc, were secure allowing students to feel safe and able to apply themselves to study, observation, research and writing.

... so why not do it again and again!

Bob and Jennie Teasdale
Programme Coordinators

2. University of the Sacred Heart Kangaroo Island Environmental Sustainability Study Tour

Reflections

Phyll and I believe it to have been an absolute privilege to work with the staff and students of University of the Sacred Heart in February 2009.

The depth and richness of their learning as demonstrated in their open questioning, seeking approach, together with outstanding final presentations, far exceeded any outcomes we would have expected to achieve. Reacquainting them with “childlike” curiosity and wonder for the natural world and the sense of responsibility and respect this engenders, was an absolute delight for us because it is reaffirmation with the earth and global environments, akin to that shown by ancient and indigenous cultures, which is necessary for us to be able to accept today’s challenges and navigate our way to a sustainable future.

That they successfully began this voyage was all too evident with the sense of distress and being overwhelmed which some students displayed on occasions, but this feeling was steadily replaced by a commitment by all to become true “agents of change”. These outstanding young people are exactly what our planet needs with their openness to learning and desire to make a difference.

There were many examples of deep metacognition and it is exemplified by Sayaka and Yuka and their experiences. Sayaka declared after the Dolphin Watch experience, that she would no longer frequent the Aquarium near her home where captive dolphins featured - an experience she had previously treasured, because she had now seen real dolphins, and with hands clutched to her heart:

“They made me feel”.

Yuka’s quiet heartfelt declaration upon emerging from an almost trancelike state communing with the Southern Ocean in reflection time at Bale’s Bay, was also particularly heart warming.

“I have heard the voice of the Ocean”.

Many more similar experiences, feelings and emotions were chronicled in their reflections and journals.

The students and professors were not the only learners. We personally gained a great deal

from our wonderful association with them, learning so much about the richness and quiet dignity of their culture and the strength of their future desires. Particularly important was their attendance to ancient cultural traditions and the sense of cooperation and working together which it demonstrates. They are brilliant ambassadors for their country and endeared themselves to the many people who were fortunate to interact with them.

Their work in environmental programmes, being actively involved collecting data, cleaning beaches, separating and planting seeds, preparing penguin burrows etc, was highly respected by the local community and won admiration accordingly.

The value of such cross cultural programmes cannot be underestimated at this crucial time when global cooperation in facing our collective challenges is such an imperative. Kangaroo Island as a site for such programmes on sustainable living, is a perfect venue because of its relatively unspoiled environment and, although it too faces current and future challenges, its residents are, for the most part, actively involved in the preservation and conservation of its beauty and environmental harmony.

It would be wonderful to consider such programmes continuing in the future because of the mutual benefits to be gained. Phyll and I would relish the opportunity to work with such wonderful young people and their mentors in the future, should the opportunity arise.

In conclusion, if the aim of this programme was to provide life changing experiences for all participants, it was an outstanding success. Our hearty congratulations and sincere gratitude to Yoshi, Brenda and students and to Bob and Jennie for giving us a simply amazing life experience.

Tony and Phyll Bartram
Programme Facilitators

Keynote Lecture

An Introduction to Sustainable Living on Kangaroo Island

G.R. (Bob) Teasdale

“An Introduction to Sustainable Living on Kangaroo Island”

G.R. (Bob) Teasdale

First of all, I want to welcome everyone to our place. We have been looking forward to this visit for one year and finally it's arrived. And we are so glad to see you. Now one thing I want to say, first of all, we have a few rules at our house, a few simple rules.

Rule No.1 I think a simple one. Absolutely no smoking on the place, anywhere. Why no smoking? It is a very big risk for fire. Bush fires. It is very, very dry outside.

No.2 rule, always keep the door shut. Never, ever leave the door open. Always shut the doors. Shut the front door. Keep all doors shut. Why? Importantly, mice come in and sometimes, snakes. We do not want snakes in the house. Snakes, sometimes are quite big.

No.3, please be careful with water. Please do not use much water. Our only water is in the tanks outside. You passed the tank, that is water from the sky. Rain water. And we don't have a lot of water. So, when you wash your hands, if you can just put a little bit of water in the basin, then wash your hands. Don't just turn the tap and leave the water running. Now does everybody understand? Please try not to use much water.

No.4, when you go to the garden outside, again we always try to keep the gates shut. When you go through, shut the gate because kangaroos often come in to have a feed on Jenny's garden. So we have to keep the gates shut, keep kangaroos out. So, that is rule 4.

No. 5, when you are walking outside, and we'd love you to go for a walk today or later, watch the ground for snakes. We do not often see snakes, but they are there. We saw one just small one 2 days ago. Just out here. So just watch out for snakes. They would be frightened of you. They will want to escape. You will be frightened of them, so everybody is frightened. Just keep away from them. Just watch out because they are not good to tread on.

Now the next thing I will do is to show you your location now. Open your book; it's a very good map of Kangaroo Island. First of all, you can see where you are at the moment, where you came by ferry, from Penneshaw to here. We went to Penneshaw School. We went down this road and you are here. You are on this narrow part of the island. It's called Pelican Lagoon. So we are just here. Tonight we will go to Kingscote which is the town here. We will go in the car to Kingscote.

Kangaroo Island is very big. From one side of the island, to the other is 150km. The island is 150km long and 30km wide, how many square km? So Kangaroo Island is 4,500 square km. 4,500 square km in size. How many people live on Kangaroo Island? Interesting, 4,500 people live on Kangaroo Island. How about that? So, for every one person, there is one square km. One person per square km. Everybody on the island can have one square km of land. Now, if you look at the map, however, you will find all of the green parts of the island are conservation parks. So that one third of the island is conservation park. So people live in other parts of the island.

Now, I want to make a comparison. You all come from Tokyo. Now it's little bit difficult to discover, to define Tokyo, but the actual city of Tokyo, Tokyo-to. Just the central part of Tokyo is

Tokyo-to. According to my web search, that metropolitan is 1,500 sq km. This is just central Tokyo, square km. But how many people live there? According to my web search, there are 13 million. This is one third the size of Kangaroo Island. 4,530 million. That is 8,800 people per square km. That's big in comparison, isn't it? But, I did one more calculation. If we had the same population density on Kangaroo Island, if Kangaroo Island had 8,800 people per square km, Kangaroo Island would have, just let me make sure about this, it would have this many people. If we have the same population density as Tokyo-to, so we would have 39 million people on Kangaroo Island. But we only have 4,500.

As you look out the window, you do not see many houses outside. Not many people. And I think that is one of the beautiful things about Kangaroo Island. Now as I said to you about one third of Kangaroo Island is protected as Conservation Park. In fact, for the lagoon in front of you, this is called Pelican Lagoon. The Lagoon is not a lake because this one is open to the ocean and the tides come up and down. But this is, this water is from Pelican Lagoon, Pelican Lagoon is a marine reserve, a marine conservation park. So this is a very unique special environment. And there are islands in the lagoon, and they also a conservation park. You can see one big island over here with trees. That is a conservation park. There is a very strong commitment on this island to sustainable living, to sustainability especially, to sustainable tourism and sustainable business as well as sustainable living.

Here on the island, we want to maintain this beautiful environment for future generations, for our children, and children's children, and their children. For many years, we want this island to continue to be a beautiful place. What I want to talk about now is sustainable living. Sustainable living. Now one and half years ago, Jenny and I went to the University of Sacred Heart and we talked with you there about several things to do with sustainable living. I want to go back to what I said at the University of Sacred Heart and remind people of some of the things I talked about.

First of all, I think this is the most important thing, learning to live in a sustainable way, learning sustainable living is the single most important challenge facing humans today. The whole human race. This is the No.1 challenge for you and for me. This is the No.1 challenge. It applies to every person in every part of the world, here in Australia and Tokyo, everywhere. If we do not live sustainably, during the next 20 years, if we don't live sustainably, I believe our very existence on this planet is threatened. As humans, if we live like we are living now, I believe the human race will not survive on the planet. And I think many, many scientists believe that now. Jenny and I look at our little grandchildren. They came here for holidays not long ago. When those little ones are my age, what will the world be like? What will Kangaroo Island be like? What will it be like for their children, in two or three generations? That is a very important question.

Now you have all arrived in Australia, at a very interesting and sad time. Here, in South Australia, we have just experience the worst heat wave of 70 years. We had 5 days in a row in a city, in Adelaide, over 43 degrees. We had one day of 46. It was hot, very hot. We had the hottest night time temperature ever recorded, minimum temperature which is the highest minimum ever recorded 33.34 minimum. Last year, in the summer of 2008, we had the longest heat wave ever recorded. It

went for two weeks, I think. In the last 10 years, in South Australia, the average temperatures are rising. Every year in summer, there has been a small rise in average temperatures.

At the same time, here, we are also experiencing declining rainfall, less rain. Some people said this is a long draught. But many others believe we are experiencing long term climate change with reduced rain fall. So far this year, now, if you look out of our window, some of you can see perhaps plastic containers on the fence. That is what Jenny uses to measure rain fall. That is a rain gauge. So far this year, what date is it today? 5 weeks? Since the beginning of the year? 6 weeks, perhaps. So far, we have had only 5 mm of rain, half a cm of rain. That's all of rain we have had. In the last 6 months, we have had 88 mm. That's the least 9 cm. That's all rain for the half year, here. It is the same everywhere in southern Australia, the rain fall is decreasing.

At same time, in northern Australia, there are big floods. If you read papers, we have had very big floods. And more rain in the north, so people think that is the part of the changing pattern as well.

Now, with hotter, dry weather cross southern Australia, we are more and more at risk of bush fires. Last year, on Kangaroo Island, one third of the island was covered with bush fires. This past weekend, we have had worst ever bush fires in Australia. It is the worst bush fire disaster ever in this country. It has been devastating. Over 170 people here died in the fires. It is in the papers. It is reported in all papers. It is considered Australia's biggest natural disaster. So, over 170, I think, it will be over 200 very soon. Over 750 houses, nearly 800 houses destroyed in Victoria.

Scientists are predicting that these patterns of heat and dryness and bush fires will get worse. We are expecting less rain more heat more bush fires. So, I ask again, what will be like for our grand children when they grow up? What will this country be like?

I repeat again, learning to live sustainably is everybody's responsibility because it is holistic system. Our planet is holistic system. Everything is interdependent. How you live in Japan can influence climate on Kangaroo Island. How we live on Kangaroo Island can influence climate in Japan. Our globe is interdependent. Everybody has to take responsibility.

Now, I want to ask a question. What do I mean by sustainable living? I say it is important we all live in a sustainable way, but what is sustainable living? And I'm going to define it as living in harmony with the environment. My simple definition. That means to me giving back to the earth, giving back to the environment as much as we take from it.

It also means taking responsibility for the carbon we released into the atmosphere. So, what I'm suggesting is that we need to put back the carbon resources we took from the earth.

Here is an example, A few days ago, after long wait at Narita airport, you took a plane ride from Narita to Singapore. You had run in Singapore from one plane to another, and then, you took another plane from Singapore to Adelaide. How many tons of carbon dioxide was released into the atmosphere by the jet engines on your flights? I went to the World Wide Web, which is very good and I found a site where I could put Narita, Singapore, Adelaide and it calculated for me how much carbon dioxide per person for that flight, one way. How much was it? How much was it, per person? 1kg ? 2kg ? What do you think? Well, according to that website, it was 1 ton of carbon dioxide per

person, each way that's 2tons of carbon dioxide emissions for each person.

Now, one thing, people often do when they go on plane rides is to buy carbon credits. Did you buy any carbon credits? How can you buy carbon credits? Simply by paying some money to the company to plant trees in order to soak up carbon from atmosphere to put back into ground. Now, if you check on the web, you'll find many examples of this carbon credit system. You will get lots of hits on Google on how you can buy carbon credits.

There is an electronic company that I'm familiar with in Japan, called NEC. NEC sells carbon credits, I believe, so if you buy some electronic products from NEC, they will sell you carbon credits for the cost the carbon used, CO₂ used in the manufacture of those goods and that company uses your money to plant trees. Actually are doing this on Kangaroo Island. NEC is leasing land on Kangaroo Island to plant trees for carbon credits. They can tell people that in Japan, "we are planting trees on the pristine island, on the clean beautiful island", but they are not planting trees indigenous to Kangaroo Island. They are planting fast growing Tasmanian eucalyptus trees, they do not belong here. Planting only are kind of tree is what we call mono-culture planting, one tree only. And this is very bad for the environment here.

Therefore my message is that when we buy carbon credits, we need to be very, very careful and find out what the company is doing with the money and with the trees. If they're planting one kind of tree, I think it's not a good idea.

My big question is what we can do to reduce carbon that we put in atmosphere. What can we do to put carbon dioxide back into the earth? We take fuel, jet fuel, petroleum which is part of the earth. Our exhaust put it into the atmosphere, how do we put it into the earth again? These are very big questions. How do we reduce carbon? How do we put it back into the earth? I hope during this week, you will think very deeply about this and that will become part of sustainable learning while you are here.

The last thing, I want to talk about is sustainable learning. I would like to talk some more about Kangaroo Island study tour and about our ideas for sustainable learning. I define sustainable learning in two ways. It is learning that you will never forget, learning that will leave you with memories for the rest of your life. It is learning for the life itself. Secondly, I define sustainable learning as learning that will change the way that you live. It is learning in which you will make a difference to the way you live the rest of your life.

How do we do it? How do we learn sustainability? You will not learn much by just sitting, listening to me and Jenny and Phyll and Yoshi and Tony and Brenda and others. Instead, we want you to learn differently. We want you to learn by looking, by doing, by asking questions, by sharing and by reflection. In Other words, we want you to learn by using your head, your hands, and your heart, everything. It is learning by doing, and looking, and thinking, and talking, not just by listening.

Now we asked each one of you to bring a small book. A small notebook. We would like you to write in it daily. We want you to keep a diary. And what I'm suggesting is this. Every day, sometimes 2 or 3 times, perhaps when you ride on the bus and when you are sitting in your hotel room at night,

you keep a record of what you have done on one side of the page, and an objective factual record of everything that you have done on one side of the page.

Then, on the back, keep your reflections, ask yourself, “what I am learning.” How can I change the way I live when I return home? How can I share this learning with others? These are your reflections, thoughts, ideas understandings, and feelings. This is the heart. This is the head. This is the factual. I think this is a very good way to keep your diary.

Please do not be afraid to ask questions. When you observe, please ask me questions. This is an opportunity to look, think and ask, because this is the discovery learning. You are in control of your learning. It’s up to you to be active in your learning. And make the most of the very wonderful opportunity on Kangaroo Island.



Japanese students aboard the KI Marine Tours Banana Boat

Tokyo students get a taste of beach culture

Kangaroo Island recently was "home" for 13 students and two lecturers from the University of the Sacred Heart in Tokyo, Japan. The UNESCO sponsored students came to study environmental sustainability on KI. The visitors were very comfortably housed in Deidre Morrison's Acacia Apartments. An environmental study program was co-ordinated by educators, Jennie and Bob Teasdale, whose home at Pelican Lagoon was used as an example of sustainable living. The property also provided a site for quiet reflection.

KICE's Penneshaw Campus opened its doors and its heart to the Japanese visitors.

The visitors later linked with other KICE students, assisting with their award winning environmental programs. They visited Harriet River to help in the Black Bream catch, tag and release project with Marine Biologist Judith Wingate, teacher Malcolm Iversen and Kingscote Campus Year 9 students. A highlight for the group was KI Dolphin Watch with KI Marine Tours Andrew Neighbour supported by Lance Tyley. The visitors found this a particularly moving and poignant experience and are determined to effect change in this and other environmental areas in Japan.

Eco-friendly tourism enterprises Island Pure Sheep Dairy and Clifford's Honey Farm, together with Kelly Hill Caves and Seal Bay, demonstrated well managed, low impact tourism to the visitors. The contributions of DEH staff Clarrie Kennedy and Don Duffy, Sharon Symons at Clifford's Honey Farm

and the staff at Island Pure were particularly appreciated.

A visit to Bales Bay provided an opportunity to fully appreciate the beauty of the Southern Ocean and KI's stunning marine environment. Remarkable Rocks and Admiral's Arch worked their magic as always, with particular resonance for many of the "city bound" visitors. The connection to NEC's monocultural forests of bluegums struck a chord and saw the students explore in depth the difference between these plantings and more natural, balanced environments.

As part of their experiential learning the visitors also were involved in other hands-on environmental activities, assisting John Ayliffe and Jenny Clapson's Penguin Centre staff to clean penguin burrows, and Veronica Bates at the Seed Bank, who appreciated the "extra hands" in seed collection and planting. The group also undertook a successful beach clean up at Bales Bay.

On the last evening the visiting students and lecturers prepared a sumptuous Japanese feast for their KI supporters, complete with a beautiful choral performance that thrilled everyone present. A series of presentations followed, clearly reflecting the remarkable environmental learning journey that each member of the visiting group had experienced on KI. They left KI empowered and determined to take up the many environmental challenges faced by the people in Japan. It is hoped more such visits will eventuate, further highlighting KI as a site for environmental programs of excellence.

Asu no Mori

On the last evening of the study programme on Kangaroo Island, our 15 guests cooked a marvellous Japanese Banquet. After the meal came speech-making, singing and gift-giving; a significant celebration in itself. There was much laughter, copious tears, warm hugs and sparkling surprises. The last surprise will live on in Kangaroo Island for ever.

We were given an envelope inscribed with three words: Asu no Mori. Inside the envelope we found \$150 in Australian bank notes. The students hastened to explain, and as we listened we realised the huge significance of this gift. The group had collected this money to buy native trees for a forest on our property to celebrate their visit in a sustainable way. To describe our joy at such a surprise is too difficult, but we think it is quite possible that our stressed planet was quickened just a little at that special moment.

On our property there is a gentle fold in the hills that slope down to Pelican Lagoon, where there was once thick native forest. When settlers came its trees were axed for fence posts and firewood, for ships and sheds and houses. Its last indignity was fire as its remnants of vegetation were burnt to the ground to make way for sheep. For 150 years it has supported sheep and people. But now the sheep have gone and the small fertile valley is hoping for new native trees – a sustainable forest.

Veronica Bates at the Kangaroo Island Native Seed Bank and Nursery has planted and is nurturing 100 indigenous trees for the forest. When the winter rains arrive soaking the topsoil, the children from the local school will come with Veronica and help us plant the trees. Together we'll protect the trees from kangaroos and watch over them till they are sturdy and well established and able to fend themselves.

And so Asu no Mori will grow and flourish. A native habitat, once thought lost forever, will re-establish itself with all its accompanying biodiversity of flora, fauna, insects and micro-organisms. It will be a place for people to wander, to enjoy and to touch the earth lightly and with wonder. The replanted little valley will become a special forest – again.

Thank-you special friends from Japan for your generosity, your far-sightedness and your belief that we can all make a difference. Because of Asu no Mori the future of our planet is a little safer.

Bob and Jennie Teasdale
Programme Coordinators

A Study Tour Encountering History's Worst Forest Fires

In Australia, a drought has continued for seven years. In the 117 years since records have been kept, the seriousness of this drought is without precedent. Global warming can be thought of as the cause of damage to the environment such as this drought. Compared to fifteen years before, temperatures have increased 0.75 degrees, and one can clearly see an unusual shift in temperatures and rainfall (refer to diagram on the next page: National Geographic, April 2009).

In the midst of these severe conditions, we travelled on February 7, 2009, to Australia, encountering the worst forest fires in the country's history. This date, which became known as "Black Saturday," was coincidentally the date we departed from Japan.

According to the government of the state of Victoria, the number of dead exceeded 200, and over 7000 people lost their homes. There were strong opinions that the cause of this enormous devastation originated in environmental issues. In the damaged area, the recent drought was compounded by unusually high temperatures and dryness as well as strong wind and a large volume of dried leaves that were susceptible to burning.

Kangaroo Island, where we stayed was far away from the area where the forest fires occurred. On a map, the direct distance was about 650 kilometers. However, two days after the fires broke out, the planner of the study tour, Professor Bob Teasdale, woke up in the morning and looked out to the sea from his home, seeing eerie smoke rising faintly in the air from Victoria State. Even for those of us who were far away on Kangaroo Island, it was easy to feel what was going on—that's how tremendous the fire damage was.

One cannot view this fire damage as simply natural. There was a rumor that an arsonist had deliberately set the fire. However, putting aside the cause, one can say that the fact that the fires spread so quickly with such devastation was due to the unusual sequence of dry days exceeding 40 degrees borrowing the power of the wind.

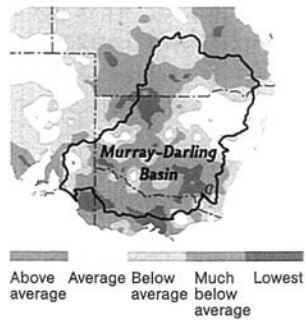
In actuality, the fires developed into an environmental argument. Some pointed out that the dried leaves and dried branches that accumulated over a long period of time in mountain forests became fuel and increased the damage, and that planned burns should be implemented. The environmental preservation side, on the other hand, opposes the loss of biological diversity that comes from burning. Based on the latter opinion, burning has, in fact, been restricted.

"Co-existing with nature" is a phrase frequently promoted in ESD. However, nature has two sides. There is the nature that enriches and relaxes, and that which brings fear and sadness. How to co-exist with this latter type of nature, in particular, was the unexpected homework we encountered on this study tour.

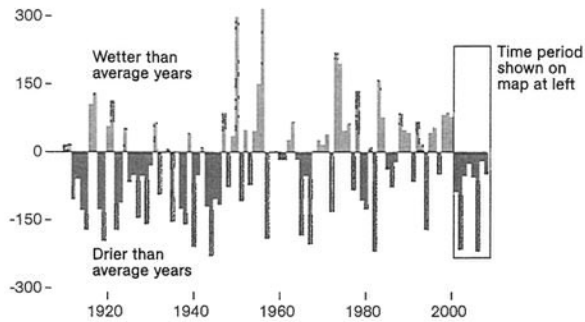
Yoshiyuki Nagata
Programme Director

RAINFALL

Murray-Darling Patterns
2001-2008

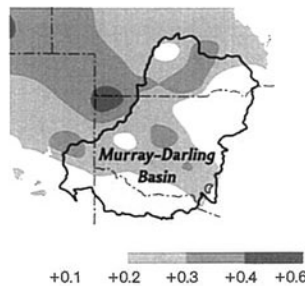


Murray-Darling Anomalies
1910-2007, in mm of rain (base average 1961-1990)

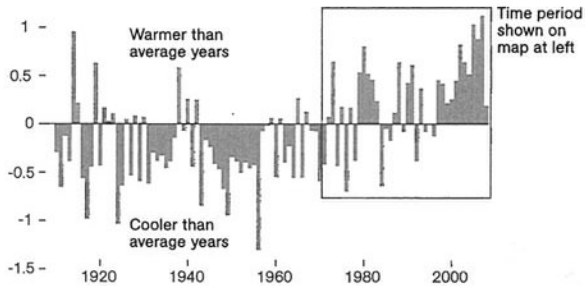


WARMING

Average Temperature Trends
1970-2007, in degrees Celsius



Anomalies
1910-2007, in degrees Celsius (base average 1961-1990)



A 19th-century surveyor judged South Australia lands north of this line too dry for farming.



PARCHED LANDS

The dry and marginally fertile lands of the Murray-Darling Basin were transformed into the breadbasket of Australia through a massive water-management program that dammed rivers, filled reservoirs, and tapped water for irrigation and other human needs. It was a precarious balancing act, until seven years of drought—and decades of warmer temperatures—brought farmers to their knees. Stoked by drought, deadly bushfires dealt another blow early this year.

MARTIN GAMACHE, NG STAFF
SOURCES: AUSTRALIAN BUREAU OF METEOROLOGY; AUSTRALIAN BUREAU OF STATISTICS;
BRETT BRYAN, CSIRO; GEOSCIENCE AUSTRALIA; MURRAY-DARLING BASIN AUTHORITY

Source

NATIONAL GEOGRAPHIC • APRIL 2009

Briefing



The Moment

7|2|09: Kinglake

AUSTRALIANS LIKE TO THINK they know the land they live on. The country's founding myths are built upon stories of creeks and billabongs and deserts. "I love a sunburnt country" go the lines of a beloved verse by poet Dorothea Mackellar, "A land of sweeping plains/ Of ragged mountain ranges/ Of droughts and flooding rains."

But what happens when beauty turns to terror? Australia found out last weekend when wildfires swept through the southeastern state of

Victoria. Fires are a regular and natural occurrence in the Australian bush, but nobody was ready for the conflagration that exploded through the forests and towns north of Melbourne, and elsewhere in the state, on Saturday Feb. 7. Fueled by 117°F (47°C) heat and fierce northerly winds, huge fireballs burned through fields, cars, houses, stores and schools.

On Sunday morning, as weeping survivors emerged from the ruins to tell of corpses beside roads and of missing relatives and neigh-

bors, the full extent of the disaster began to dawn. More than 200 people died in just a few days, the worst peacetime loss of life in mainland Australia's history.

In one house police found four children all huddled

Huge fireballs burned through fields, cars, houses, stores and schools

together. They knew they were children by the size of their skulls. Near a road, firefighters found the body of a man who appeared to have crashed his motorcycle and then died as he tried to outrun the flames. One man put his

children in the car and dashed back to his house to collect something; when he returned the car was on fire and his children dead.

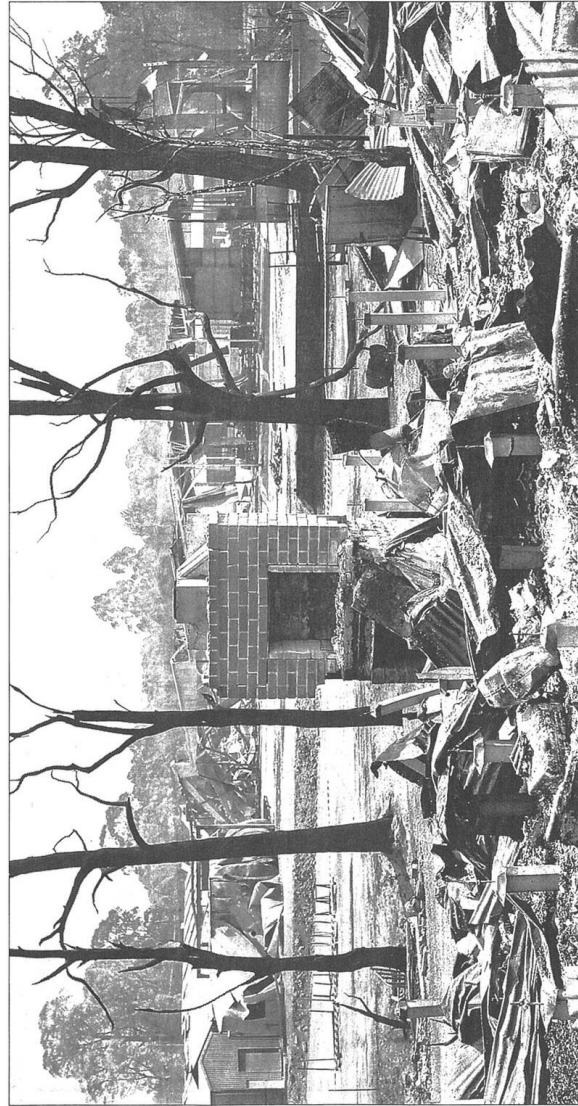
As the nation mourned and opened its arms to comfort those who had lost a child or a mate or all they owned, police delivered more chilling news: some of the fires had been deliberately lit. "There's no words to describe it other than it's mass murder," Prime Minister Kevin Rudd said. Rudd spoke too of rebuilding towns "brick by brick, school by school, community hall by community hall." Getting over the heightened fear of nature's fury might take longer. —BY SIMON ROBINSON AND RORY CALLINAN ■

Reference

"TIME", February 23, 2009

Dangerous quest for gratification

Flames of murder



through the remote community of Narbethong.

than 500 killers. They include Port Arthur mass murderer Martin Bryant, the evil Peter Dinklage, and these Wales, who killed his Mass wife and stepfather, and John Sharpe, who speargunned his pregnant wife and their infant daughter.

friends, have no other way to express their feelings, have very limited self-esteem and, at times, limited intelligence."

His call came as police continue their hunt for arsonists believed responsible for several of last week's deadly fires.

"We're talking about the guy who deliberately bends over in the bush, gathers together leaves and sticks, pulls out a match or a cigarette lighter and lights it.

"I've dealt with people who, on a day like Saturday, have lit one fire, moved on and lit another. Then they've rung the CFA or 000.

"Typically, the common theme with these fellows is they're socially weak and have inadequate personalities. They have very few

friends, have no other way to express their feelings, have very limited self-esteem and, at times, limited intelligence."

"They've lit fires as a demonstration of power. It gives them a psychological kick, a gratification that they're not getting anywhere else. The consequences are not always in their minds."

"If people have inadequate kids or limited brothers, uncles or cousins or whatever, you've got to watch them on days like this," he said.

II. Programme Information

1. Introduction and Programme Background

Five years have passed since the start of the United Nations Decade of Education for Sustainable Development (DESD: 2005-2014). In keeping with the DESD, a special study programme was conceptualised to offer university students a unique opportunity to observe and to learn about sustainable living overseas.

The main venue chosen for the study programme was Kangaroo Island, South Australia, where environmental practices are widely acclaimed both nationally and internationally. The main reason why the island was selected is that Mr. G. R. Bob Teasdale and Ms. Jennie Teasdale, who are both experienced educators, deeply committed to environmental sustainability and familiar with UNESCO's educational ideas, have established an Eco-House on the island. It was thought that the house could be a learning centre for the study tour. Also, the island, with its great landscape as well as magnificent fauna and flora was believed to give the students opportunities to study the unique environment through real life involvement in a variety of ecological settings together with the local people. The island is surely one of the best venues for such a programme where each day, the study group could enjoy hands-on learning at its best in different locations to observe, experience and discuss environmental issues, and to prepare in-depth case studies.

Additionally integrated throughout all aspects of the programme was an experiential English component for students whose first language is not English. Communication with local experts as well as students on the island provided a good opportunity to expand each participant's knowledge and skill of the English language, and to increase their understanding of Australia's culture and lifestyle.

2. Objectives

The objective of the programme was to help participants learn how to live in a sustainable way. Learning on Kangaroo Island emphasises the importance of international understanding and mutual co-operation to help address the deep environmental challenges faced by all people living on the planet.

At its core, the programme seeks to further the goals of the DESD by providing hands-on, experiential learning for a group of young professionals. As shown in UNESCO's International Implementation Scheme (IIS), one of the key roles of ESD is to foster the values, behaviour and lifestyles required for a sustainable future. The aim of this programme is to transform the students' ways of thinking about sustainable living, and to encourage them to put their learning into action in all aspects of their personal, social and professional lives.

3. Delivery of the Programme

The group studied the unique environment of Kangaroo Island via real life involvement in local places and with local people; i.e., by hands-on, experiential learning. Each day the group was taken to a different location to observe, experience and discuss environmental issues and to prepare in-depth case studies. Working in small groups, participants kept a record of their programme using digital photography and a written reflective journal. Case studies were documented and each group made a short power-point presentation of their environmental research on their last evening on the island. Throughout the environmental study programme participants were given clear directions and supported by experienced, qualified teachers and researchers. Local experts also engaged with the study group to share their environmental knowledge and experiences relevant to sustainable living.

4. Results

Through the experiential learning programme on Kangaroo Island focused on Education for Sustainable Development (ESD), all the participants came to understand deeply what it means to live sustainably. Based on their rich experiences within nature and their cooperation with community members on the island, participants came away with new insights on how to educate for a sustainable future, and a sense of hope and determination to pursue the following activities:

- 1) Write, edit and publish a report of the ESD study programme so that the experiences, impressions and views can be shared with citizens, including professors and students.
- 2) Make a presentation for staff at the ACCU, Tokyo office, and also for students, professors and staff at the University of the Sacred Heart.
- 3) Make presentations at several national and international conferences and in various academic circles about the results of the programme, particularly from an ESD perspective.
- 4) Develop a model plan to realise a sustainable campus and community, and motivate other students and community members to work hand-in-hand to achieve this goal.
- 5) Incorporate ESD philosophical thoughts as well as ESD teaching and learning practices in the University.
- 6) Build a network of individuals and groups who want to study and take action toward the transition to a sustainable society.

III. Proceedings

Day 1 (Feb. 7th, 2009)

All the participants gathered at Narita International Airport at 09:00. We checked in and boarded the plane with much excitement for an 11:30 takeoff. However, due to mechanical problems, we had an initial delay of two hours, while sitting on the plane, followed by another four hours back in the departure area. Finally, at 17:00, we left for Singapore, arriving at 23:10. As our connecting flight for Adelaide was leaving at 23:50, we had to rush to make the flight, but in the end we arrived safely in Adelaide at 09:10 the next day. Although we were all a little tired from our long day's journey, our enthusiasm was not diminished.

Day 2 (Feb. 8th, 2009)

At 09:10 all the participants arrived at the airport in Adelaide and boarded a public microbus at 10:45 for the Paringa Hotel, where we stayed for 2 nights. As the focus of the study tour team was ESD, we made an effort to use public transportation whenever possible. Arriving at the hotel around 11:00, we left our bags, then had an orientation of the city by walking around the area, including the University of Adelaide, the riverside of Torrens, and other key points around the city. From 12:30 to 14:00, we had free time to look around the Aboriginal Museum and to enjoy lunch. After that we went to the Migrant Museum, then returned to our hotel where we checked in and had a rest for 1 hour. At 16:15 we took a city bus to the home of Mr. and Mrs. Wood and their daughter Kyra Wood. Mr. Wood, who was one of the founding members of the Mt. Barker Waldorf School, prepared a delicious Australian barbeque for us and we enjoyed a wonderful conversation, learning many things about the Australian lifestyle and about the Waldorf school system. Yuka Yanagita, one of the study programme participants, played the piano and all the students performed a Japanese popular song entitled "Sukiyaki-Uewo Muite Aruko-".

At 20:30 we left for the hotel, reaching there at 21:30. After a brief meeting about the schedule for the next day we retired to our rooms, very tired, but very satisfied with our first day's activities.

Day 3 (Feb. 9th, 2009)

At 06:45 all participants assembled in the lobby of the hotel and took breakfast at the café nearby, then boarded the bus at 07:35, arriving at Mt. Barker Waldorf School at 08:50. We were surprised because the school was surrounded by splendid nature. The Japanese teacher Mrs. Midori Tsuruta and her class of students met us and presented each of us with a handmade bouquet of flowers.

First, we listened to a brief explain about the school in the teacher's room. Then we visited the grade 5 class, who were studying Japanese. The students greeted us in Japanese and sang some Japanese songs. Then the ESD team members paired with the students from the class and moved outside. The ESD study team members then taught their partners the Japanese song, "Momiji", which is a song about Japanese maple trees, and next we were taught an Australian song, "Kookaburra", by our Australian partners, which is a song about an Australian bird.

At 10:00, we observed the grades 9, 10 and 12 classes separately. We could find some

contrasts to the Japanese style of teaching, and also found some differences about the students' attitudes to learning. We were surprised at how the students were so active and enjoyed their classes. Also, we could not believe that the students created their own textbooks, because the school does not use any particular textbooks. Therefore, the participants felt that all students in the school were independent and also realised the respect the teachers showed of their students.

From 11:00 we had morning tea prepared by the teachers and enjoyed conversation with them. They talked about the school, their university and themselves. Afterwards, we took a walk around the school, looking in on the preschool, theater, farm and wood/metal classroom. We were very impressed with the surroundings. Following this we visited the Japanese classroom, "Nadeshiko House", and talked with the grade 12 students who were studying Japanese.

After leaving Mt. Barker Waldorf School, we enjoyed lunch at Mr. and Mrs. Glasby's house from 12:35. Their house is eco-friendly, and after lunch Mrs. Glasby showed us around her home and explained the concept of it. The house was enlarged by Mr. Glasby's daughter as part of her research graduation project when she was in grade 12 at the Mt. Barker Waldorf School. At 14:18, we took a bus back to the center of Adelaide and had some free time to enjoy walking around the city, including time for dinner. From 20:05 we had reflection time back at the hotel and talked about our impressions of the day's activities.

Day 4 (Feb. 10th, 2009)

At 06:15 the ESD study team assembled in front of the Paringa Hotel and left for the Adelaide Central Bus Station. The bus arrived at the port where we then boarded a ferry at 09:00 and headed for St. James Port on Kangaroo Island. We had breakfast on the ferry and arrived at Kangaroo Island at 9:55. At the St. James Port, Mr. and Mrs. Teasdale and Mr. and Mrs. Bartram welcomed us and took us by bus to Kangaroo Island Community School, Penneshaw Campus.

After reaching the school at 10:25, we had a short introductory lecture in the library by the principal, Mrs. Leanne Woods. She explained the school's mission, which is to build a sustainable society in collaboration with the community. After being guided around the campus by some of the students, we were treated to morning tea at 11:15 in the library and during that time, Mrs. Woods answered our questions about the school and community. We were impressed at how the school and community are closely connected and also how vital role nature plays within the community. From the visit to this school the ESD team could realise the importance of a diversified educational programme which puts emphasis on meeting the needs of all students. The curriculum reflects sustainable development and illustrates how small school communities can deliver excellent education through collaboration and cooperation between the school and community members.

After leaving the school we arrived at Mr. and Mrs. Teasdale's eco-house at 12:30. At first, Mr. Teasdale gave a short lecture on "Sustainable Living" and "Sustainable Learning." He first informed us about the changing climate in Australia. He emphasised that if we don't live sustainability, this planet will be in peril within 20 years. He explained that we have to give back to the earth as much as we are given by the earth. This is a critical element of holistic living and is everybody's



responsibility. We all agreed that living in harmony with the environment is very important, but is quite challenging as our lifestyle is quite different in Japan, especially in large cities such as Tokyo and Osaka. Mr. Teasdale also stressed that sustainable learning is very important for life and through this life-long learning, we can implement best practices for sustainable living for the rest of our lives. He mentioned learning from our minds, hearts and bodies is very important.

**« For more detailed information,
please see Reflections 3 in this report. »**

At 13:25 Mr. and Mrs. Teasdale and Mr. and Mrs. Bartram entertained us with an Australian BBQ. We experienced kangaroo meat for the first time in our lives, so it was a very precious experience. We also enjoyed a good conversation with both couples.



After lunch from 14:40, Mrs. Teasdale explained about their eco-house and its properties. The properties include “Shelter”, “Water”, “Power”, “Food” and “Aesthetic and Spirituality.” She explained the house systems and devices. The most important point we learned from her presentation, is that we should try to live a comfortable life considering both nature and humans. This means that humans should coexist together with nature and should not dominate nature. The key is to lead a simple lifestyle with respect for nature.

From 15:00 we separated into 5 study groups and conducted a field study tour of the house and property, based on worksheets developed by Mrs. Teasdale. Mr. Teasdale, Mr. and Mrs. Bartram, Mr. Yoshiyuki Nagata and Ms. Brenda Bushell led us in our field study. We learned about the eco-house through our five senses. We felt the eco-house merge in nature and we were surprised by the eco-design and ultimate minimum life style. We became very much aware of the low consciousness most Japanese people have toward leading a sustainable lifestyle compared to the high consciousness of Mr. and Mrs. Teasdale. After gathering our data, Mr. Teasdale offered some questions, challenging us to think about how we can live more sustainable in our homes, how the University of the Sacred Heart can become sustainable, and what we can do to become more sustainable in our daily lives. We were asked to consider these questions during the study programme.

At 16:15 we left Mr. and Mrs. Teasdale’s eco-house and checked into the Acacia Apartments, our accommodation for the rest of the study programme. On the way, we were very excited to see a wild kangaroo family. After dinner we held a meeting from 19:15 to reflect on the day’s activities. We discussed about the issues of sustainable living. A point was made about the difficulty of implementing sustainable living, considering the level of development in society and the gap between the rich and poor. In conclusion, Mr. Nagata suggested the need for people to live in balance,

and to consider quality of life as a starting point for sustainability.

Day 5 (Feb. 11th, 2009)

At 08:30 the ESD study team left the Acacia Apartments and went by bus to Emu Bay for the Dolphin Watch study activity. This activity is part of a larger study and research programme



organised by Mr. and Mrs. Bartram, and is being integrated into the local school curriculum on KI. At 09:35, we got on two boats; Ms. Bushell and three students on a smaller boat and Mr. Nagata and the other students got on a bigger one with Mr. and Mrs. Bartram. It was quite windy and the temperature was 18C degrees. The boats were so speedy and everyone was so excited in anticipation of seeing dolphins in the wild! At first, there

were no dolphins and we were worried that perhaps we couldn't see any dolphins. But soon after, about ten dolphins came near the boats. We were amazed because they acted so friendly, swimming under our boats and playing together alongside our boats even though we did not feed them any food. We all enjoyed watching the dolphins and took many photographs and videos, as well as gathered data for Mr. and Mrs. Bartram's research. After the dolphin watch, Mr. Bartram said to the dolphins, "Thank you for working together" which really impressed us.

At 12:30, we returned to Acacia Apartments for lunch and then spent 2 hours catching up on our daily diary and other matters. From 14:05, we gathered in the seminar room and listened to a presentation by Mr. Bartram on the Marine Environment. He is a member of the Whale and Dolphin Conservation Society (WDCS) and according to him, dolphins lived more than 50 billion years ago, and through research it has been determined that dolphins have a remarkable ability to detect many aspects. For example, dolphins recognise when cancer is present in a human and when women are pregnant. Moreover, several months ago, two dolphins saved a child who was about to be attacked by a shark. One dolphin lured the shark away, and the other dolphin escorted the child to safety. Mr. Bartram also explained the problem of marine pollution. Although we thought the colour of the water was so brilliant, he informed us that the colour was intensified due to the chemicals that are emitted from human activities. Due to these chemicals the seaweed has become weakened which in turn has disrupted the natural web of life in the ocean on Kangaroo Island, there is a project to protect the marine environment. Mr. Bartram explained that both students and community members can study about dolphins. The project has been implemented all over the world using computer technology. In this way everyone can understand the situation and develop a deeper consciousness. The presentation was very impressive and it made us think more deeply.

After a short break we assembled again at 17:30, left the Acacia Apartments and visited Kangaroo Island Marine Center. Ms. Toni Soutar showed us the marine life around the area and led us to the fairy penguin houses constructed along the coastline. As many fairy penguins have been attacked by prey due to an imbalance of nature caused by human activity, the fairy penguin housing

project was established to protect the penguins from becoming endangered. These houses are simple wooden boxes with a small hole so the female penguins can go in and lay their eggs in safety. We were told that if the male has a nice clean house, he will attract a female partner. From this explanation we were motivated to clean and set up the houses for the penguins. At first, we removed the penguin feathers, then, we dug holes for the base of the houses in the rocky soil and positioned the houses, then secured them with rocks and soil. From this experience we learned the issues related to nature's imbalance and how to protect the wild penguins. And by chance, we could observe one penguin in its house while walking back to the marine center. It made our work even more meaningful!

At 20:00, we returned to the Acacia Apartments and prepared dinner, and from 21:30 we held our meeting. Many students were impressed to see the wild dolphins and started to think about the relationship between the human beings and wild animals and plants. Australians think of whales as mammals; in contrast, Japanese think of whales as fish. Some of us were confused by the differences in thinking and behaviour between Australians and Japanese when it comes to whales and other wildlife. Mr. Nagata said that ESD requires us to critically analyze all behaviour and to think carefully about the world around us.

Day 6 (Feb. 12th, 2009)

At 09:00 the ESD study team left the Acacia Apartments and went to Harriet River by bus. On the bus, we heard about the bush fire damage and the communities and groups which were making donations to help the fire victims. We arrived at Harriet River at 10:00 and met Ms. Judith Wingate and high school students from Kangaroo Island. At first, we listened to Ms. Wingate's explanation about Black Bream Fish Tagging. She does fish tagging in order to better understand the Black Bream's ecosystem. Then, together with the high school students we caught and tagged the Black Bream. According to Ms. Wingate, it does not hurt the fish as the tiny tag is inserted in the muscle area of the fish near the upper fin. On the tag is written the address and phone number of her research project, so if a fisherman catches a tagged fish, she/he will be encouraged to phone in and tell where the fish was caught. This information helps to track where the fish go and the condition of the fish. Ms. Wingate said that most of the fishermen call in the information and that they are generally interested in the quality of the local ecosystem.

At 12:00 we said good bye to Ms. Wingate, and left Harriet River for Vivonne Bay. Mr. Bartram said that Vivonne Bay is one of the most beautiful bays in the world. We all agreed with him. There is one pier on the Vivonne Bay, and before World War II the pier was three times longer than it is now. The reason for this is because the Australians dismantled it because they were afraid the Japanese army would land there. This point was very informative for us. After lunch at Kaiwara Food Bank, we made a short stop at the NEC afforestation project. NEC is a major Japanese electronics company. As part of their corporate social responsibility (CSR) project they have been leasing land from a farmer and planting eucalyptus trees to address global warming. Since 2002, they have planted approximately 35,000 trees. They have been taking Japanese people on a tour of

this afforestation project promoting their model of CSR. However, there are several problems related to this afforestation project. The first problem is that this forest is surrounded by an electric fence. If animals touch the fence, they may be killed. So unlike other forests, there are few insects and animals in the NEC forest.

The second problem is that the eucalyptus trees in NEC forest are not indigenous eucalyptus trees on Kangaroo Island. The trees are denizen from Tasmania and are causing ecological problems. Their roots go very deep and as a result absorb a lot of water. Because of this, the water in the water-table is being reduced. It is inevitable that seeds from these trees will be dropped and will begin to grow around the island, with the potential of ultimately destroying the ecosystem on the island. At present there are no laws stating that people must not plant denizen plants, but why did NEC choose to plant eucalyptus trees of Tasmania on Kangaroo Island? It may be that the Tasmanian eucalyptus grows quickly therefore, NEC can show people immediate results of how eco-friendly the company is. NEC forest has just planted trees that can absorb carbon dioxide, but they do not think about the local ecosystem, animals and plants on Kangaroo Island. The forest is artificial and it is not sustainable.

After our observation at the NEC forest we arrived at the Island Pure Sheep Dairy. Here we heard an explanation about the special environment of the Sheep Dairy; for example, the farm does not have dogs because using dogs causes much stress for sheep. They are treated with care and respect and they eat organic food. After the explanation, we watched a DVD about the sheep products and then, we tasted the products made by the Island Pure Sheep Dairy.

We returned back to Acacia Apartments at 15:00 and took a rest, then organised dinner. After dinner we had a meeting to discuss the day's activities. Many students were shocked to learn about the NEC afforestation project and discussed various ways to address the situation. Also, many students commented on the good practices of the sheep farm and were happy because even though the sheep were hooked up to milking machines they seemed very well treated. Compared to the wild dolphins that live in the ocean, sheep live a very different life. Students felt the important thing is for children to study through experience. This is real education.

Day 7 (Feb. 13th, 2009)

At 09:00 the ESD study team left Acacia Apartments and went to the Seal Bay Conservation Park by bus. From 10:30 we took a walk to Seal Bay with Mr. Clarence who is one of the guides at the park. We had to maintain a distance of about 10 meters from the seals in order to reduce their stress. According to Mr. Clarence, seals take 18 months to become adults, but some people capture seals when they are young in order to get the seal skins for commercial use. Due to this, the number of seals is decreasing. We learned while observing the seals that seals use their voice to communicate and the males have a territory which they protect. In addition, the male seals go to sea about 3 days in order to hunt. There is one boss in one territory. If another seal enters the territory, the boss will kill it. Seals in this park are micro-chipped, so researchers can track their whereabouts at any time.

We left the Seal Bay Conservation Park at 11:40 and visited Bales Beach. Here we had a

lecture from Mr. Bartram about Beach Ecology. According to him, there are no islands from this location to the South Pole. Sands on the beach come from the land by wind. Most of the oxygen from the earth is produced by the beach. After the lecture we had time to reflect along the beach and from 12:30 we gathered garbage along the beach and discussed the kinds and reasons for such garbage.

After lunch we arrived at the Native Seed Bank and Plant Nursery and from 14:30 we listened to an explanation by Ms. Veronica Bates about the various projects carried out by the seed bank. We then assisted Ms. Bates in potting and maintaining the seedlings and young plants. Through this programme, she is supporting local communities and educating people of the importance of indigenous plants on Kangaroo Island.

From the Native Seed Bank and Plant Nursery we took the bus to the community library where we had time to research information in preparation for our upcoming presentation. From 19:00 we had dinner and a short time meeting to review the day's activities. After that we worked in groups on our presentations.

Day 8 (Feb.14, 2009)

Leaving Acacia Apartment at 09:00 the ESD study team arrived at Kelly Hill Caves at 10:10. We walked to the caves taking in the forest view on the way, and before entering the cave, we had an explanation by Mr. Don Duffy, a ranger at Kelly Hill Visitor Center. We then walked deep into the cave and spent 30 minutes observing various cave formations, including beautiful stalactites while listening to Mr. Duffy's explanations. It was splendid and pleasantly cool. Everyone could feel the mysterious power of nature hidden in the cave.

From the caves we took the bus to the National Park and Wildlife South Australia Information Center, reaching there at about 11:30. Previous arrangements had been made for a park ranger to guide us, however he was called to the mainland for a rescue operation connected to the bushfires, so Mr. Bartram substituted for him, explaining about the local vegetation and habits of the koala bears. He said koalas were introduced to Kangaroo Island from the mainland, and now people worried about the propagation of the koalas. We enjoyed sandwiches for lunch at the National Park and Wildlife South Australia Information Center cafeteria.

Our next stop was at Remarkable Rocks. It is a masterpiece of nature featuring bizarrely shaped granite boulders sculpted by the wind and sea over 500 million years. We climbed up the rocks and took many pictures. The scenery was very beautiful and most magnificent. Then from 15:00 we went to Cape Du Couediec and saw Admirals Arch, where many wild sea lions could be found playing in the water and lounging on the rocks. At 15:55 we passed by the light house and went to the landing site where ancient people carried food from the mainland to the lighthouse every three months. This setting made us aware of how severe life must have been on KI in the olden days. However, the scenery was spectacular. The ocean was so blue!! We returned to Acasia Apartments at 18:30, prepared dinner and then worked on our presentations for the next day. The evening reflection time was lively with everyone giving their opinions. Some people talked about the need for

experiential education for the environment, others said that today's experience reminded them of their hometown and wanted to savour their experience. Others expressed the opinion that it was important to have a comfortable and relaxed life in order to feel and appreciate the beauty of nature. Many agreed that life in Japan was too busy to really appreciate nature's offerings.

Day 9 (Feb. 15, 2009)

The ESD study team left Acacia Apartments at 09:00, and 1 hour later arrived at Clifford's Honey Farm, where Ms. Sharon Clifford welcomed us. She explained about Ligurian Bees which are working there and were imported in the 1880s from the province of Liguria in Italy. The bees are believed to be the last remaining pure strain left in the world.

Honey is produced from the many varieties of native eucalyptus trees as well as from the trees introduced on Kangaroo Island, including Tea trees, Bottlebrush, Banksias and many other native and introduced plants. After the explanation and observations of the bees at work, all the participants enjoyed buying many kinds of products made from the pure honey. At 11:00 we left for Mr. and Ms. Teasdale's house. After a cup of coffee/tea and homemade cupcakes that Ms. Teasdale baked, Mr. Teasdale instructed the students to go out and reflect alone in nature for about 1 hour. Each of us went out and looked for a place where we could relax and reflect. Each place had a beautiful ocean view a cloudy sky above, and a beautiful field behind. After about 1 hour Mr. Teasdale called us all back to the house and after reorienting ourselves we set off by bus at 13:50 for the Sunset Winery for lunch where we had a wine tasting and tried various kinds of Australian cheeses and other local delicacies.

After lunch we returned to the Acacia Apartments and from 15:30 some of us prepared a Japanese dinner while others put the finishing touches on their presentations. The presentations started at 17:40, with the audience consisting of people from the organisations with whom we worked with during the study programme. We divided into 5 groups. Each group gave a presentation of approximately 10 minutes.

« For further details, please see Appendix 6 in this report »

At the conclusion of the presentations we sang several Japanese songs for the audience.

After the presentations, the table was set for dinner and from 19:30 we hosted a dinner for Mr. and Mrs. Teasdale, Mr. and Mrs. Bartram, and Mrs. Deidre, the owner of the apartments, to express our appreciation. They were very delighted with the Japanese dishes and found them to be delicious. Then, Mr. Teasdale handed testimonials, after which Mr. Nagata, Ms. Bushell, Mrs. Teasdale, and Mr. and Mrs. Bartram congratulated each of the participants for their hard work and enthusiasm for learning. After the awards ceremony, we sang songs and the party ended at 22:50. Then from 23:00 to 00:10 we had a meeting where everyone reflected on the day's activities.

Day 10 (Feb. 16, 2009)

The ESD study team left Acacia Apartment at 07:00, and 15 minutes later, arrived at the

Kingscote Airport. While bidding farewell to Mr. and Mrs. Teasdale, and Mr. and Mrs. Bartram, most of us could not hold back tears. After a 20-minute plane ride we arrived at Adelaide Airport, we had breakfast, talked with each other and bought some souvenirs until our departure at 13:00. We arrived at Singapore Changi International Airport at 17:30, and spent the first hour discovering the airport, then from 18:45 to 21:15 we got together in a quiet corner and had a meeting about our study tour. Each of us shared our thoughts on why we participated in this field study programme and what we hope to do in the future for sustainable living back in Japan. After some time spent walking around and getting some refreshments in the airport, we boarded the plane at 23:45.

Day 11 (Feb. 17, 2009)

After a nine-hour flight we arrived at Narita International Airport at 07:10. After gathering our luggage, the students presented handmade Japanese paper fans to both Ms. Bushell and Mr. Nagata. These fans were a small token of our gratitude for a most valuable fieldtrip.

IV. Comments and Suggestions

After the programme, the participants were requested to answer questions as part of the evaluation of this International Exchange Programme. The participants answered each of the questions as follows:

1. What is your overall impression of the programme you participated in?

- The programme was exceptionally well organised, incorporating hands-on activities which reflect the three pillars of ESD. During our study tour we could learn how individuals, communities and organisations are building a sustainable society on Kangaroo Island, South Australia. The practices carried out on the island reflect UNESCO's principles and from this, all the students could build their knowledge for the transition to a sustainable society.
- As a leader/representative of the USH team, I found the programme quite successful in term of its structure, students' involvement and the depth of their learning. One of the key factors which brought the programme such a success is the well-preparedness of the participants/learners. Behind the rich experiences of the students in Adelaide and Kangaroo Island, there were, I believe, a series of intensive learning activities even before departure at the University and careful preparation by the host organisation/individuals, especially Mr. and Ms. Teasdale.
- It was a very precious and experimental programme. I felt the beauty and greatness of nature through all the field study we participated in, such as watching the dolphins, cleaning the penguin houses, experiencing the fish tagging, and visiting the eco-business industry-sheep dairy and honey farm-, seeing wild sea lions and seals, and so on. I also considered about learning with nature through visiting and observing the Waldorf School in Adelaide. As an educational environment, nature makes the human heart and sense enrich. Through the programme, I felt that nature was very beautiful and great and it gave us a healing effect and release from everything, but it was fragile. And we must not forget that it also has a tremendous power on human beings, such as bushfires and earthquakes.
- I felt this programme was special and worthy. Through this tour, many participants including me felt their minds had been changed from before they went there. Wild nature, animals and humans' warmth at the Waldorf School and on Kangaroo Island were impressed me deeply and I learned about a sustainable community model. I very much appreciated being able to join this programme.
- I feel this programme helped me grow and broaden my view. In this programme, I met a lot of wonderful people, including Mr. and Mrs. Teasdale, the people related in all fields of study and the teachers at the Mount Barker Waldorf School and the Penneshaw Campus who are making wonderful efforts to create a sustainable environment and sustainable society. I learned a lot of things from these individuals with their hopes for a sustainable future. I felt I have to work hard like them. Also, I learned the importance of sustainability, sustainable society and economics could create from sustainable environment from splendid nature on Kangaroo Island.
- I could learn from the true experience about ESD and took a hint how to lead life in the future through a lot of programmes. I think we could get "the learning that accepted an individual" and "learning to be common with all the members". I think that the, learning was very important and of great value. In addition, I faced myself and my life, and it was an opportunity to think about how to live from now on.
- I was able to feel the true nature and the breath of nature with its skin. And I was able to notice the sustainability of Kangaroo Island through the exchange with people. They gave me a lot of surprises and pleasure. And, my sense of values was changed.
- Everything I saw and felt was amazing. I cannot spend such a wonderful time living my life as usual in Japan. There are a lot of things that I got from this programme. I also met wonderful

people in this programme. I thank everyone who gave me a chance to take part in it.

- Kangaroo Island Environmental study programme was full of adventure for me. Australia was very different from Japan. I was impressed with the beauty of nature and amazed how animals and people were living so close together. I was able to feel that the nature was really close to human beings. It was a touching sight, very beautiful. At the same time, I knew that we have been destroying a lot of nature in this world. I could realise our responsibility of nature keenly, and learned that there is nothing more precious than nature.
- My most memorable impression of the programme was visiting Mr. and Mrs. Teasdale's house. This house gave me a chance to reflect on many things in Japan. Although I often heard the word "ecological" in Japan, I didn't change my life style. But Mr. And Mrs. Teasdale did it. There are many ecological things in their house. I was very impressed by their house and I thought I would try to make changes like them. Mr. And Mrs. Teasdale's life style taught me that it's important to act. I think the house is a symbol of Mr. and Mrs. Teasdale's personality. I can't forget the warmth in the house.
- This study tour gave me a lot of surprises. I grew up in Kobe which is a city surrounded by beaches and mountains. There is a lot of nature; however, nature in Kobe is being destroyed. On the beach, there is much garbage and there is a red tide. Many citizens try to reduce the garbage and protect the marine environment but it is almost impossible because every summer, many people visit the beach and they dump garbage. Many Japanese keep their own space clean but they cannot keep public space clean. I thought using education can change their thinking!
- I felt the magnificence of nature and people's warmth. We don't control nature but it is necessary to coexist with nature. I felt that nature is grand. It has been encouraged by teachers, parents and advertisements, but I understand for the first time by actually experiencing, feeling and learning. People in K.I. are very warm and kind. People may have richness of mind by enclosing nature.
- It is a wonderful and beautiful natural setting on Kangaroo Island. It was so impressive to see the coexistence between nature and humans. On Kangaroo Island, I felt nature every day, and I realised humans are part of nature.
- It is a quite beautiful nature and warmth of people in Australia. I was influenced by them because there is nothing like this in Japan.
- The programme gave me a profound impression for my life. Through my experience in Australia, I realised how I have stepped away from nature in Japan. I was moved by the magnificent natural environment. Especially, Remarkable Rocks told me why people weep at the scene and feeling of beautiful nature. I think it was so good for me to participate in it. I am thankful to have experienced such a great programme.

2. What do you feel were the most useful/valuable activities of the programme? Please give reasons why.

- a. Visits to the community school on Kangaroo Is. and the Steiner School in Adelaide enlightened Japanese students on teaching pedagogy and how to create a sustainable school society. A number of the Japanese students will begin careers in teaching from April 2009, others are training to be teachers so I believe their experience in the two schools broadened their perspectives on teaching practices.
- b. Investigation of the eco-house gave students an opportunity to understand deeply what it means to live sustainably. Students read about various practices for sustainable living, but to see with their own eyes was truly a motivating experience for them. They now have the practical knowledge and understanding to initiate some sustainable practices in their homes and university.
- c. Eco-tourism, in particular the dolphin and seal watch (along with presentations from

specialists) provided students with a deeper sense of respect and awe for marine mammals – extending to all wildlife. From these experiences students could understand the vulnerability of wildlife and reflect critically on the environment and wildlife issues we face today.

- One of the most valuable activities is the investigation of the Eco House on the Teasdale's property. The students in groups were given a real opportunity of experiential learning there by investigating the various uniqueness of the property such as solar panels, water management system, ventilation system, organic garden and so on. It was also the first opportunity for the students to use their own 'field-notes' in which they wrote about what they felt or thought and what they observed or experienced. This was a good start of their experiential learning process on Kangaroo Island.
- It was to listen to a lecture from Mr. Bob Teasdale and see his sustainable eco-house. It helps me consider about the sustainable living that uses the power and energy from both nature such as solar heat, water from rain, wind, and human technology such as refrigerator, washing machine, shower head and solar panels. There is the integrity of the human and nature power. And also, I felt the culture and healing from the arts and creatures that come from the world, for example, the stone art from the various places of the world, the quilt that Ms. Teasdale made, and the photos that were taken by local photographers. Everything in the house is related and harmonises with the nature surrounding the house.
- I think watching wild animals such as the dolphins and the sea lions was the most valuable activity of this programme. Especially the day of watching the dolphins and listening to the presentation by Mr. Bartram who belongs to the World Dolphins Conservation Society, gave me a deep impact about the relationship between humans and wild animals. Before I went to Kangaroo Island, I had never thought that dolphins have remarkable abilities, but after that I noticed, they were surely mammals and moreover, our ancestors. In spite of this fact, some Japanese keep catching dolphins and take them into show businesses. Through learning about the dolphins programme, I realised one important issue about biodiversity.
- My most valuable activities of this programme were visiting the Penneshaw Campus and Mr. and Mrs. Teasdale's eco-house. The Penneshaw Campus is a very small and public school but it gives high quality education to the students. Also, the school cooperates with the community to create a sustainable society, because the principal believes not only schools and teachers help children grow, but also all the people in the community help their children to grow. I was very impressed by her words.
Also the eco-house and Mr. Teasdale's lecture were memorable. His philosophy of sustainability was persuasive. I thought the idea was important for our era and it was necessary to share with human beings.
- The investigation of the sea lions. Because the reason, I felt the very large sea and an animal, connections with humans being greatly by observing a wild sea lions close. I think that this showed the relationship that is natural environments and human holistic by this observation clearly. I felt the importance of the symbiosis with nature using the five senses.
- It is a visit to the eco-house of Mr. and Mrs. Teasdale. I was able to meet people who had a sustainable mind, and know concretely, and experience the method of their life. In this, I found that Mr. and Mrs. Teasdale really value the connection with all lives including nature. All the people we met in the programme were very attractive. They are always listening not only to the human voice but also to the voice of nature. I was really impressed. From this, I actually felt that a sustainable environment is made by sustainable people.
- Spending time alone surrounded by nature. I watched the sea, trees and flowers without thinking. I listened to trees' singing while closing my eyes. That was a great time because I can just feel all things. If I had not participated in this programme, I cannot spend such a time. That was a very precious time for me.

- I felt attached to Beach Ecology by Mr. Bartram at Bales Beach. I learned marine life through this programme. In that programme we spent time by ourselves at the beach. The beach as far as I could see was a quiet ocean, soft sand, cool seawater, salt breeze. The warmth of every thing felt good. I breathed some fresh air and closed my eyes, as if I was hearing the ocean's voice. Precious time flashed by. The beautiful ocean scene before me was unforgettable.
 - The most valuable activity is Dolphin Watching. When we went to the sea, dolphins came near to us. I saw the situation and reviewed my life because they are so friendly to us although we destroy their life style. Then I thought that we have to change our life styles to more friendly to the nature ones. I could realise it because I saw innocent dolphins through the activity.
 - The most useful/valuable activities are Dolphin Watch and Living with Fairy Penguins for me. When I was an elementary school student, I often visited an aquarium near my house. I liked watching the dolphin show. Before this study tour, I have never seen wild dolphins. I thought dolphins can jump high, but it is because people programme dolphins and give them treats. Now, I don't want to see a dolphin show in aquariums because I think dolphins treated by human beings are not look so happy. Moreover, some Japanese eat whales. To think about dolphins and whales as mammals or fish is from different points of view between Australians and Japanese. We should think of dolphins and whales as mammals and respect them. Working with the Fairy Penguins project surprised me because for wild penguins, many people work hard. Making penguins' houses is very hard work, but when I did that activity, my heart became warm. I understood that many people make an effort in order to protect wild animals. After we made the penguins' houses, we could see two wild penguins. I hope the penguin population of Kangaroo Island increases from now on.
 - The most valuable activity of the programme was Seal Bay Conservation Park. In the other places we were separated from wild animals; we saw them from afar. At Seal Bay Conservation Park, we stood on the same beach with the wild sea lions without any separation. They did not fear humans because people are kind to animals and nature on K.I.
 - It was the Dolphin Watch. When our ship was encircled by dolphins and I watched the dolphins jumping and turning around and around in the sea, I was so excited, like a little girl. I am very, very happy. I feel a real soft spot in my heart for dolphins. It was my first time for such an experience. I started to think about the mysteries of nature, preciousness of life through the dolphin watch.
 - I felt the most valuable activity was the contact with wild animals. I had a good experience and learned the importance of earth or environment because I could feel directly using my 5 senses.
 - I think the final reflection time at the Teasdale's home is the most valuable activity. Because I've never spent such a precious time as we did. In a stressful society like Tokyo, I forgot to think about being with nature deeply. Through this activity, I realised that my attitude toward life and future has changed on Kangaroo Island and I learned how important it is for us to be with nature. Then I could feel harmony between the great environment and myself. .
- 3. What were your objectives in participating in this programme? Please tell us whether or not your expectations were met, and the reasons why/why not.**
- I was a supporting faculty member on this study programme me so my objectives included:
 - a. Assisting Mr. Nagata in carrying out the programme
 - b. Supporting the students' knowledge-building and output in the form of presentations
 - c. Building my own knowledge about ESD for implementation in my own classes.

My expectations were met in every way. I could engage with students and with the specialists on Kangaroo Is., building my knowledge and also developing a network of people who share the same values and goals. My classes will be enriched as a result of this experience, and my lifestyle will be impacted positively.

- As an organiser who has conceptualised the programme from the initial stage, one of the most important objectives in my participation is to provide the young with opportunity to reconsider the values/behaviours/life-styles of their lives in Japan. To be honest, it takes time for us to know whether or not this intention has been met. It is true to say that it depends on the students how deeply they rethought of their lives in Tokyo through this programme. Some of the students, after their return, started to change some of their behaviours and others not (yet). One of the challenges for this kind of study programme is how one could realise 'sustainable learning' in each individual even after the end of the programme.
- My objectives were to see the Waldorf School Education and meet Mr. and Ms. Teasdale again. My experience exceeded my expectations. The Waldorf Education in Adelaide was perfect as an ESD model. It is systemic and harmonised with nature and the human growth stage. And Mr. and Ms. Teasdale welcomed us and their lectures were easy to understand and made me reconsider about the relationship with ESD and nature, which are implemented through environmental education.
- I had two of main objectives for this programme. The first objective was visiting again the Waldorf School and seeing the progress of sustainable education. I could feel the special atmosphere which was warm, gentle, creative, and spiritual that the place held. . Then I saw sustainable educational place had been there and achieved my first objective. My second objective was learning how to be a sustainable role model like Mr. Bob Teasdale who organised this programme. I still don't know what the real role model of a sustainable person is, but I learned what I should start first. It's thinking about myself deeply, and listening to my own voice from inside. If I escape from meeting and caring for myself, I can't do good things for others and nature. By the way, I got the idea for how to be a sustainable person.
- My objective in participating in this programme is to learn and feel about ESD, and get some hints for my study which I plan to undertake in graduate school. This programme more than met my expectations. Through the education of making rich minds and the nature and people's faces on KI, I realised seeking how to live sustainable gave hints to solve our many difficult problems. There were a lot of unexpected findings and hints for my study in this programme and it made me open my mind, so my learning will be expanded.
- There are two reasons. First, I'll be an elementary school teacher from the next year, but ESD and a method of the natural education was not clear before. Therefore, I thought I want to give better environmental education for a lot of children. Second, I wrote a graduation thesis of ESD which assigned a viewpoint to child care support. So, I wanted to learn ESD in the field surrounded by a natural environment. I think the root of various social problems is related to the earth, so I was able to achieve my aim. I think that the thing which is clouded, and I saw absent-mindedly became clear. First, I was able to experience this myself, "the education that conflicted with a genuine article" for ten days. At first this experience will be to be useful greatly when I stand in front of my class. Second, in the environment, I was able to learn that I cannot protect nature by myself without the cooperation and collaboration with others such as "individuals", "government", "community", "school". I now realise the importance of developing a relationship; person to person, and the importance of communication.
- My objectives were to learn about these two points.
 - What consideration do people on Kangaroo Island have for the environment? And how is the consideration reflected in their daily lives?
 - What can I do to build a sustainable environment?

I think my expectations were met because I got the answer by participating in this programme, thinking by myself, and sharing the feelings with other members. I was able to consider nature from experiential learning, and now I understand the richness of nature. .
- The one reason why I participated in this programme is to learn things that I can do for nature in the future. I took some cues from this programme.

- I live in a big city, Tokyo, different from Kangaroo Island. I wanted to know how Kangaroo Island people face each environment issue which was unknown territory for me. It was a golden opportunity that fitted my objectives to study. Fortunately, I was able to join in this programme, I was strongly impressed by people and nature. Everything was beyond my imagination. People and nature live together. It warmed my heart to hear people's story. I was happy seeing important things for me.
 - My objective was broadening my horizons. In the future, I want to be an elementary school teacher. Then I want to tell my experiences about Kangaroo Island to study about the environment because I think it's an easy way to start to study. Before I went to Kangaroo Island, I was only interested in education in Southeast Asia. However, I could be interested in environment and broaden my horizons because of this programme and through the many experiences I used my five senses and I felt many things.
 - My objective is changing my thinking about ecology. When I was a first year student at university, I became a member of the ecology circle and heard some lectures at JICA and attended ecology events produced by NHK. I studied ecology a lot, but in my life, I could not turn off the air conditioner, lights and so on. At that time, I could understand ecology in my mind, but to do some activities are too difficult for me because sometimes I thought ecological activities are troublesome. Having participated in this tour my mind changed a lot. I can understand why we need to protect the environment. There are not only human beings but also plants, animals, many living things on the earth. It is common but through this study tour, I realised about these things again. This study tour reminded me of an important thing such as why Japanese say "Itadakimasu" before eating and "Gochisousamadeshita" after eating. I forgot a very important thing, "gratitude". I experienced many field activities and they reminded me and I became to know what is important in my life. This study tour connected my mind and heart.
 - I had two objectives in participating in this programme. First, I only experienced passive learning and I thought such learning was the norm and correct. While studying in university I noticed that passive learning is not interesting because I was only given knowledge. I want to learn something by real education and I want to feel and to learn. Second, I like nature and animals, so I am interested in the environment. My expectations were met because it was possible to learn by actually seeing, feeling and experiencing.
 - Before I went on this study tour, I couldn't decide what to do after graduation. So I wanted to go on this study tour to find a key to decide what to do in my future. Also I am interested in UNESCO. So I expected to see the activities of UNESCO from a close distance. I couldn't do this. However, I felt the philosophy of UNESCO through this study tour. I understand the importance of bringing up youth in the world after this experience.
 - My objective was getting an opportunity to see what I should do or can do. I wanted to see with my own eyes and feel, because I wondered if there is a contradiction between my ideal and the lifestyle in Japan.
 - My objective in participating in this programme was to study about ESD. Especially, I wanted to know philosophies of life which people live surrounded with nature have. Through this programme, I could hear many opinions about life and death. Moreover, I felt a circle of life being in a rich natural environment. So, I can say my experiences exceeded my expectations.
4. **To maximize the benefit of this programme, how do you plan on applying ideas and skills you obtained through your participation in the programme upon your return?**
- I would like to include various aspects and knowledge from the programme into the classes I'm teaching. I also believe I can motivate and support students to plan and take action for sustainable campus life. Finally, I believe my lifestyle can be positively impacted from what I have experienced during this fieldtrip.

- With volunteer students, I will make presentation on what we have learnt with special focus on the activities in the Island at ACCU. Also in order to share the rich experiences in Kangaroo Island and their implication to our urban lives in Tokyo, the participants will make another formal presentation at the University, too, by inviting teachers as well as students. Further they will report their experiences at USH Festival in autumn. Furthermore, I am planning to make a presentation at academic circles or societies on whether students' behaviours and value system I am thinking about planning to realise a sustainable campus in my university, relating with local community and harmonising with nature. I learned the importance of nature through the study tour, so I will rethink about leaning through nature and with nature in the university and the energy from nature. I also will rethink about the balanced relationship with nature and ESD, not emphasising nature too much.
- Mr. Teasdale taught us what sustainable learning is. According to him, it remains in one's mind all of his/her life and changes one's behaviour and way of life. I guess participants including me, could gain sustainable learning in this tour through experiences of meeting wild nature and animals. In Japan, there are only a few chances to meet the "real world", but I will manage to make time for children to meet the "real word" such as a beautiful ocean, forest and wild animals as an elementary school teacher, and I'd like to incorporate sustainable learning in my classroom in the future.
- When I return to Japan, first, I will consider the ways in which my life is not sustainable, then, I must think and practice how to be sustainable. I want to tell how the importance of sustainable living and sustainable environment guides for sustainable living through my local nature. To change people's sense of value from their convenient living is hard, however, as like my mind changed through this programme, I will have an effect on the people whom I meet. Then, I want to tell a lot of people through my action and study.
- I noticed that it was the house of our grandmother that is thought to "be old-fashioned" I participated in this study tour, and to live as the highest ESD. So, I will meet my grandmother and I want to interview her about "nature", "the living", and so on. I will keep the knowledge and the information that I got on Kangaroo Island which I learned, and how to keep human relations alive. I want to give a good opportunity to children for children. I want to make time to come in contact with nature. Because I noticed that it was difficult to take such time without intention to come in contact with nature in Japanese society. Lack of time to spend time in nature may be the reason why we have a big ecological footprint.
- I would like to switch my life to a sustainable one in the fullest way. First I must become a sustainable inhabitant. And, I want to tell children the sense obtained on Kangaroo Island as a teacher in the kindergarten. I want to offer the chance to make children appreciate nature. Moreover, I will want to create the environment for teaching that allows children to grow as sustainable beings. As an owner of the amazing experience, I want to tell people how deeply our living is connected to the sustainability of the earth. And I will tell them how to carry out a sustainable way of life.
- What I can do now is share this experience with people around me. I am thinking now about other things that I can do for society.
- Through this precious experience, I realised that it is important to gain as much and learn as much as possible. It seems that Kangaroo Island has a close connection between the past and the future. I'm interested in history, I want to learn past events more and more and think about the future on my own. This experience will be advantageous for me.
- I have two things that I want to do in Japan. The first thing is reviewing Japanese traditional lifestyle. I think there are many hints that I want to do in Japanese traditional lifestyle. Living in this style is very ecological. And through this style, we can know how to love nature. Loving nature connects to sustainable beautiful earth. The second thing is getting to know nature around us. We have wonderful nature in Japan. Indeed, in Tokyo there are only small

forests. But we have to know and protect them in local ways. If every person in the world protects nature around him or her, nature will be sustainable.

- After this study tour, I often think how to protect the environment. It is a difficult thing but we have to do some activities and change other people's minds and protect the environment. I will tell my experience in my ecology circle and share our thinking. Moreover, I am studying media, so I will focus on environment media and study more and more deeply. I understood why we have to protect the environment in this study tour, so I have to study how to protect the environment from now on.
- I have told my experiences of the study tour to many people for example, my family, friends, etc.. When I talk, most people are interested in the NEC forest, especially. The action of NEC planting eucalyptus trees on KI from Tasmania was thought to contribute to the absorption of CO₂. However, this action has a bad influence on K.I. because, the eucalyptustrees from Tasmania are exotic plants and they destroy the ecosystem on K.I. This illustrates that a lack of knowledge has the opposite effect to what is our purpose is.
- This study tour has given me the principle that guides my life. I can study what is sustainable living through my experience on Kangaroo Island. I have a fateful encounter. It is a model for my life. In this study tour, I feel my powerlessness. I am determined to study hard, to get good English skills and to get power. I want to contribute greatly to the society and world in my future.
- It is important to send information, how to put my experiences to good account. Also I found that we need to cooperate with the community. The improvement of environment is a collaboration of many sectors.
- For sustainable development, I think it is very important to tell others how precious nature is and to protect the environment, communicate with each other and create a sustainable lifestyle for future generations. So, I'll tell my experiences to others and write articles about it for newspapers or magazines. And I'll keep trying to study about ESD and take action for a sustainable future.

5. Please give us your suggestions on how to improve the Programme in the future.

- I felt the programme was excellent and met the criteria for UNESCO ESD. During this programme we learned primarily about the best practices being carried out on the island for sustainable development. Perhaps in the future, we can investigate several of the problems that exist on the island – connected to society, environment, economy, etc., so the students have opportunities for discussion, critical thinking, problem solving, etc. These activities can help to prepare them as leaders for future societal transformation.
- In order to exchange ideas and opinions, having sharing meetings/sessions for several groups which participated in this exchange programme would be effective for the quality of the future programme to be enhanced. Open forum with other audiences with particular focus on ESD in non-formal education could be another possibility.
Also if all the reports from these groups can become available on the website of ACCU, it will be even more useful for the participants' sustainable learning.
- It was very good to experience various field studies, but considering the days, it was a tight schedule each day. We would like to have more time to share reflection from each member and to prepare the presentation.
- Doing many activities was actually good for us, but I guess the schedule was tight and not enough time to prepare for the presentation. I think taking more time for reflecting and discussing with members is better to enhance the programme good.
- This programme had been enhanced and no improvements are needed, however, the schedule

was very tight, so some participants could not participate in some of the activities because of their bad condition. Also some participants could not write their diary in the day and sometimes we could not have a deep discussion. Therefore, I suggest securing enough time for participants to digest their experiences which they get from the activities.

- While there are many people who felt sick and tired, and I also felt very tired, it was a very splendid programme. If we could have some break in the programming then we can get in better physical condition and this will result in better learning.
- There were some days the programme schedule was too tight. I think if there had been more time it would be more helpful for students; thinking about each day or resting enough in preparation for the next day.
But this is the evidence of our fruitful, learning. Thank you for giving us such a great help.
- If it is impossible, it may be better to participate with other university students.
- I'm overwhelmed by the different lifestyle and I'm ashamed of myself for my irresponsibility for nature. At the same time, I was refreshed by nature. The world still has a rich natural environment. We should protect the environment and learn a lesson from nature. I think it is important to touch heart-warming nature. So I want to continue to have programmes like this.
- I want to talk with local university students about the environment.
- I want to get more information about real time Australia such as bush fires. In Japan, many news programmes reported about the bush fire but I want to get more local information. I watched TV programmes about bush fires in Australia. I was surprised because one of the TV programmes reported how to protect wild animals. If some disaster happened in Japan, most of animals including pets will be ignored by people because people cannot think about animals. After this trip, I thought I should have read papers and got more information about real time Australia.
- I had a very wonderful experience in this study tour. I could understand more deeply before going on this study tour that we should study ESD. It is important to experience actually to learn and I want to increase the opportunity to go on more study tours.
- After I go back to Japan, I want to do many activities, to make full use of efforts of this study tour concretely. Of course, I should find the way myself, however, if we can work together, our effort is more effective.
- I felt that we need more time for thinking by ourselves.
- Thank for everything and I'm very satisfied with this experience. I don't have any suggestions. I was only disappointed at the delay at the airport the first day which was a waste of time.

V. Appendix

1. Programme Schedule

DATE	TIME	ACTIVITIES
Day 1: 7 February, 2009	17:00 23:00 23:10	Departure from Narita Arrival at Singapore Departure from Singapore
Day 2 8 February, 2009 (Adelaide, South Australia)	9:10 10:45-11:00 12:30-15:00 16:15-17:15 17:15-20:30 20:30-21:30 21:30-22:00	Arrival at Adelaide International Airport Bus to Adelaide Paringa motel Sightseeing in Adelaide Bus to Mr. Wood's House Dinner with the Wood Family Bus to Adelaide Paringa motel Wrap-up Meeting
Day 3 9 February, 2009 (Mt Barker, South Australia)	7:30 13:00-15:00 19:30-20:30 21:00-22:00	Bus to Mt Barker Waldorf School Lunch with Mr. Peter Grasby Own Dinner out Wrap-up Meeting
Day 4 10 February, 2009 (Kangaroo Island, South Australia)	6:15-6:45 6:45-8:50 9:00-9:55 9:55 10:10-10:15 10:25-11:45 11:45-12:30 12:30-13:25 13:25-14:40 14:40-15:00 15:00-16:15 16:15-17:05 17:05 17:10-18:00 18:45-19:15 19:15-20:00	Walk to Adelaide central Bus Station Bus to Cape Jervis Departure to the St. James Port on Kangaroo Island Arrival at Penneshaw on Kangaroo Island Brief visit to supermarket Visit to KICE (Kangaroo Island Community Education Penneshaw Campus) Bus to Teasdale's House Welcome and Opening Address by Mr. Bob Teasdale Lunch: Australian BBQ Explanation of Programme by Jennie Teasdale Field Study 1 <u>The Teasdale's Property</u> by Jennie Teasdale Bus to Kingscote Arrival at accommodation, Acacia Apartments Shopping for breakfasts and snacks Dinner at Acacia Apartments Wrap-up Meeting
Day 5 11 February, 2009 (Kangaroo Island, South Australia)	8:30 9:35-12:00 12:30-13:30 14:05-15:45	Walk to Boat for Dolphin Watch Field Study 2 <u>Dolphin Watch</u> by Tony & Phyll Bartram Lunch at Acacia Apartments Marine Environment Presentation- Tony

	17:30-17:45 17:45-19:30 20:15-21:30 21:30-22:00	Bartram Gather at Marine Center on Kingscote Jetty Field Study 3 <u>Living with Fairy Penguins</u> by John Ayliffe Dinner at Acacia Apartments Wrap-up Meeting
Day 6 12 February, 2009 (Kangaroo Island, South Australia)	9:00 10:00-12:00 12:45-13:00 14:10-15:00 19:00-20:30 20:30-21:30	Bus leaves for Field Studies Field Study 4 <u>Black Bream Fish Tagging</u> (at Harriet River)with Judith Wingate, Tony Bartram and KICE students Lunch at Kaiwara Food Barn Field Study 5 <u>Island Pure Sheep Dairy</u> Dinner at Acacia Apartments Wrap-up Meeting
Day 7 13 February, 2009 (Kangaroo Island, South Australia)	9:00 10:00-11:40 11:40-12:30 13:15-14:10 14:10-14:25 14:25-15:40 15:40-19:00 19:00-20:30 20:30-20:40 20:40	Bus leaves for Field Studies Field Study 6 <u>Seal Bay Conservation Park</u> Field Study 7 <u>Beach Ecology</u> (at Bales Beach)by Tony Bartram Lunch at Kaiwara Food Barn Bus to Seed Bank Field Study 8 <u>Native Seed Bank and Plant Nursery</u> by Veronica Bates Free Time for Presentation Dinner at Acacia Apartments Wrap-up Meeting Free time for Presentation
Day 8 14 February, 2009 (Kangaroo Island, South Australia)	8:30 9:35 10:30-11:30 12:00 19:00-20:00 20:30-22:00	Bus leaves for Field Studies Field Study 9 <u>Kelly Hill Caves</u> Lunch at The Chase Café Field Study 10 <u>Finder Chase National Park</u> Dinner at Acacia Apartments Wrap-up Meeting
Day 9 15 February, 2009 (Kangaroo Island, South Australia)	9:00 10:10-11:00 11:30-13:00 13:50-14:45 14:45-15:30 15:30-17:40 17:40-18:40 19:30-22:00 23:00-24:10	Bus leaves for Field Studies Field Study 11 <u>Clifford's Honey Farm</u> Reflection at Teasdale's House Lunch at Sunset Winery Bus to Acacia Apartments Final Presentations Reception and Student Presentations Celebration Dinner at Acacia Apartments Presentation of Certificates and Closure Wrap-up Meeting

Day 10 16 February, 2009 (Kangaroo Island, South Australia)	7:00 7:15 8:35 13:00 17:30 18:45-21:15 23:45	Bus to Kingscote Airport Departure from Kingscote Airport Arrival at Adelaide International Airport Departure from Adelaide International Airport Arrival at Singapore Final Meeting at the Airport Departure from Singapore
Day 11 17 February, 2009	7:10	Arrival at Narita

2. List of Participants

Mr. Yoshiyuki Nagata

Associate Professor, University of the Sacred Heart, Tokyo

Email: yoshy@pobox.com

Ms. Brenda Bushell

Associate Professor, University of the Sacred Heart, Tokyo

Email: brenda.bushell@gmail.com

Ms. Sachiyo Soga

Postgraduate Student, University of the Sacred Heart, Tokyo

Email: erafeliz@hotmail.com

Ms. Ryoko Mizuno

Postgraduate Student, University of the Sacred Heart, Tokyo

Email: iina_ryoko@yahoo.co.jp

Ms. Ayumi Makino

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: ayumili3281@yahoo.co.jp

Ms. Shoko Higa

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: pepemimimirozooo@yahoo.co.jp

Ms. Yuka Yanagita

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: yukakko1015@yahoo.co.jp

Ms. Minori Yamada

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: minocoro_pooh@yahoo.co.jp

Ms. Hinako Takeda

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: pinako_u_u0922@yahoo.co.jp

Ms. Nao Ando

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: naoando_1225@yahoo.co.jp

Ms. Moe Mihara

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: mippa_25315@yahoo.co.jp

Ms. Sayaka Watanabe

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: sayaka1114sayaka@yahoo.co.jp

Ms. Yuka Kakimori

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: Yuka5198p8p@yahoo.co.jp

Ms. Risa Shioi

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: risashioi@hotmail.com

Ms. Sachiyo Hikita

Undergraduate Student, University of the Sacred Heart, Tokyo

Email: sachiyo880913@hotmail.co.jp

3. List of Collaborating Organisations

Mt Barker Waldorf School

Tel: (+61) 8-8391-0411

Fax: (+61) 8-8391-2386

Address: PO Box 318, Mt. Barker SA, 5251, Australia

E-mail address: office@mtbarkerwaldorf.sa.edu.au

People Perspectives

Tel: (+61) 8-8370-9499, 8-8553-7373

Fax: (+61) 8-8370-9499

Address: PO 656 Penneshaw, Kangaroo Island, South Australia, 5222

E-mail address: teasdale@internode.on.net

Whale and Dolphin Conservation Society

Tel: (+61) 8-8553-7190

Address: PO Box 30, American River, Kangaroo Island,
South Australia, 5221

E-mail address: bartram@kin.on.net

Kingscote Campus of Kangaroo Island Community Education

Tel: (+61) 8-8553-2074

Fax: (+61) 8-8553-2075

Address: 5 Centenary Avenue Kingscote, Kangaroo Island,
South Australia, 5223

E-mail address: info@kice.sa.edu.au

URL: www.kice.sa.edu.au

Penneshaw Campus of Kangaroo Island Community Education

Tel: (+61) 8-8553-1067

Fax: (+61) 8-8553-1199

Address: Howard Drive, Penneshaw, Kangaroo Island,
South Australia, 5222

E-mail address: info@kice.sa.edu.au

4. Photos

Feb. 8th, 2009

Adelaide city



Feb. 9th, 2009

Mt Barker Waldorf School



Feb. 10th, 2009

Visiting Penneshaw School and Mr. and Ms. Teasdale's house



Feb. 11th, 2009

Field study: Dolphin Watch and Living with Fairy Penguins



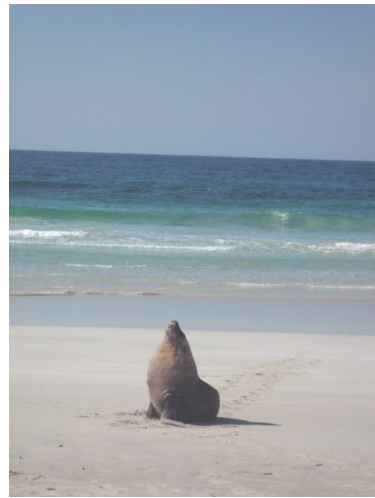
Feb. 12th, 2009

Field study: Fish Tagging and Sheep Dairy



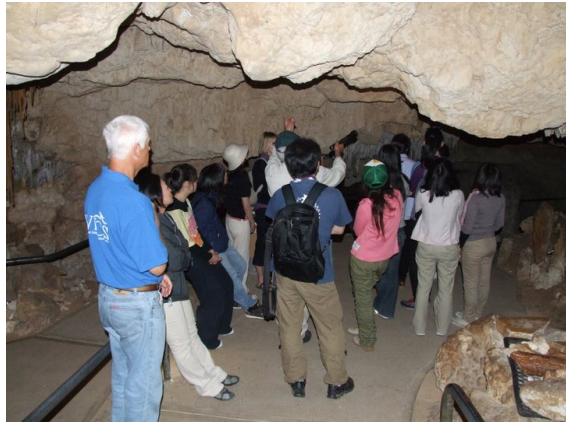
Feb. 13th, 2009

Field study: Seal Bay Conservation Park and Seed Bank



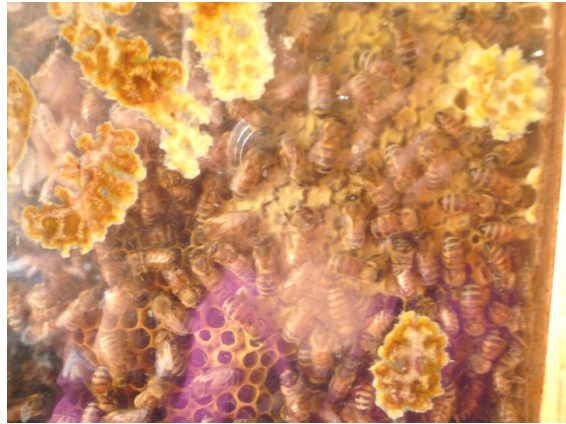
Feb. 14th, 2009

Field study: Kelly Hill Caves and Finder Chase National Park



Feb. 15th, 2009

Field Study: Honey Farm and Special Reflection Time



Final Presentations





Japanese Evening



5. Guidelines for Field Study Presentations

Expectation

During your stay on Kangaroo Island, you will be given time to prepare a ten (10) minute power point presentation on your KI experience. You will prepare a collaborative group presentation in English with the other members of your group. Each group will work on one of the topics outlined below. Staff will be available to assist you at any time in your preparation.

Your group will be invited to give a presentation on the final night of your stay on Kangaroo Island. Your presentation can include writing, photographs, quotes, illustrations, maps etc.

Ten Minute Power Point Presentations:

5.00pm, Acacia Apartments, Sunday 15 February

Methodology

Students will work in five small groups; three groups comprising 3 people and two groups comprising 2 people. Please allocate groups and choose your topic before arriving on Kangaroo Island. You may even begin some background thinking or study.

Using the 11 Field Studies, your own observations, discussions with local people and staff, brochures, books and the world wide web, each group will answer its question. All Field Studies will have some relevance to your topic.

Assignment Topics

Each group will choose 1 (one) topic only.

Topic 1: Learning to Live and Work Sustainably

Some people on KI are attempting to live more sustainable lifestyles.

- Describe particular ways that people on KI are living and working in greater harmony with the natural environment.
- Why is this important and why is it difficult for some people to live and work sustainably?
- What are the key things that you have learnt about living and working sustainably from your KI experience.
- How might you transfer this knowledge to your lives in Japan?

Understand your key words and phrases:

sustainable, living in harmony with the natural environment, life style

Topic 2: Developing Eco-Tourism

KI uses its unique environment to sell itself as a popular tourist destination.

- Describe how Kangaroo Islanders are trying to develop ecologically sensitive tourism.
- Why is environmentally friendly tourism necessary and what difficulties do tourism operators face?
- What was your response to your experience of eco-tourism on KI?
- Briefly describe eco-tourism ventures in Japan. Thinking about your time on KI, what eco-tourism ideas could be used in Japan?

Understand your key words and phrases:

eco-tourism, unique environment, ecologically sensitive tourism

Topic 3: Maintaining Biodiversity

Environmentally aware people on KI are trying to maintain its unique biodiversity.

- What excited you about biodiversity on KI?
- Choose and describe in biological terms 3 or 4 species of KI flora/fauna that you have observed.
- How are KI environmentalists working to ensure these species survive? What are the threats that these species face?
- Talk about biodiversity protection in Japan and what new knowledge you might take home.

Understand your key words and phrases:

biodiversity, species, flora, fauna, environmentally aware

Topic 4: Managing the Marine Environment

KI has a relatively unpolluted, pristine marine environment that includes oceans, bays, beaches, rivers and lagoons.

- What amazed you most about KI's marine environment?
Describe some of its unique features.
- What are some of the marine threats and challenges faced by those who want to maintain this highly valued marine environment?
- How can environmentalists protect and manage KI's marine environment optimally?
- How does Japan protect its marine environment and what new ideas might you take back?

Understand your key words and phrases:

marine environment, unpolluted, pristine, marine threats and challenges

Topic 5: Balancing Human Impacts

Non-Indigenous Australians have lived on KI for less than 200 years, but unfortunately their impact is huge and their environmental footprint large.

- Describe some major human impacts on the KI environment that you have observed during your KI study tour.
- How are environmentally aware people on KI trying to minimise human damage to the island environment?
- What have you learnt about getting the balance right between the human and natural environments on KI?
- After this study tour have you some ideas about how you might lessen your environmental footprint back in Japan?

Understand your key words and phrases:

human impact, non-Indigenous, environmental footprint, getting the balance right

6. Field Study Presentations

Topic 1: Learning to Live and Work Sustainably

Topic 2: Developing Eco-Tourism

Topic 3: Maintaining Biodiversity

Topic 4: Managing the Marine Environment

Topic 5: Human Impacts

Topic 1

Learning To Live and Work Sustainably

Team: M&Ms
(Moe Mihara, Minori Yamada)

We would like to talk about “sustainable living and working.” Through this tour, there are a lot of special things we learned. We will focus on especially the Penneshaw School and the Teasdale House in this presentation.

First of all, we will talk about the Penneshaw School. The school is open to the community. For example, community members can use the school’s library. The community members teach students how to play golf. This is a good example of collaboration. Students grow vegetables and sell them and they buy the new seeds from the money which they earn. They also practice composting so it is good for the environment. This is a good example of sustainability. In Penneshaw, they do many community activities. On Kangaroo Island, there is also community education like dolphin watching, organic farming, and protecting animals. This illustrates the promotion of sustainable work.

Second, we also experienced sustainable living through Mr. and Mrs. Teasdale’s house. The house can be divided in 5 aspects; shelter, water, power, food and aesthetics and spirituality. First, the shelter. Their walls are very thick and it keeps cool in summer and keeps warm in winter, so they do not need to use the air conditioner through the year. Also, half of the house is built into the ground. The ground always averages 19 degrees Celsius and never changes. Therefore they can always feel comfortable in the house. The blinds and the roof include insulation. This also makes them comfortable. Next is water. In Australia, people use rain water for living. There are water tanks which save water from the roof. The tanks have another job. They stand by the house so they shut the sun light and help keep the temp constant. Next, power. They use solar energy for everything in their house. They have special 5 watt lights so they need less power. Then, the food. They have an organic vegetable garden, pantry and compost. The pantry keeps things cool so they put vegetables, wine and cakes in it. Finally, aesthetics and spirituality. There are several pieces of beautiful art in their house. For example, the stained-glass is surrounded by the blocks which are 100 years old. In their bedroom, there is a wonderful bed cover made by Mrs. Teasdale. She worked on it for 5 years. It is amazing.

Why is it important? We should live comfortably with the environment and hand down the beautiful earth to future generations.

Why is it difficult? To create a living space based on ecosystem sustainability is still expensive because there is little demand. People do not recognise it as a priority in their life. Especially in Japan, there is not enough space to set solar panels. So it is difficult for us to change our house to the

perfect eco house. In the world there are some countries which have no eco technicians. We do not have time to relax and think about the environment because we feel busy everyday. We should make time to do it.

To solve these problems we need to know the importance of sustainable living.

People living and working sustainably know all kinds of knowledge about their natural environment. As we said before, in the Teasdale house, there are a lot of eco systems and they are made by their knowledge, so it is important to get it. Their life style is very simple. What they have is just what they need. In the world, there are many products so we tend to want everything. We need the power to evaluate what we need.

We saw the wonderful nature on Kangaroo Island. I have seen similar views in my hometown in Hokkaido. When I saw the view in Hokkaido, I thought it is usual because there are many beautiful places. But I realised that it is not usual for everyone after I did this programme. I live in a very special surrounding, but it is not only in Hokkaido but in many places in Japan. We have wonderful nature in Japan. Indeed, in Tokyo there are only small forests. But we have to know and protect them. We need to know the local nature and protect it in local ways. If we can do this we can live sustainable. So what we must do is study the traditional Japanese life-style. There are many hints there. In this way we can begin to be more conscious of our local nature and connect to the earth in a sustainable way. Thank you very much for listening to our presentation.

Sustainable Living and Working

Team M&Ms
Moe&Minori

1. **Community Members**

- can use school library
- teach students how to play golf

2. **Students**

- grow vegetables and sell them
- buy new seed by the money which they earned

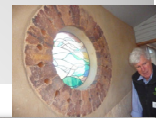


Penneshaw school

- Community education
- Organic farming
- Animal protection

Sustainable Work Sectors

- Shelter
- Water
- Food
- Power
- Aesthetics and Spirituality



Teasdale house

Why is it important?

To hand down the beautiful Earth to future generations

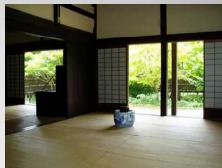
Why is it difficult?

- Cost
- Space
- Techniques
- Time

- We need knowledge
- Value of the simple life style

The key things

- Knowing the natural environment
- Reviewing the traditional Japanese life style



How might we transfer in Japan?

Topic 2

Developing Eco-Tourism

-Dynamic Economy-

Team: GO
(Sachiyo Soga, Yuka Kakimori, Sachiyo Hikita)

We will talk about “ecotourism” from the perspective of our precious experience.

First of all, we will give an overview of the experience here. We listened to a lecture about dolphins, then saw them, as well as seals and sea lions, cleaned the penguin houses, planted and divided the seeds and had many other so called eco-tourism experiences. So we can define eco-tourism as: activities to sustain society for present and future generations where:

- local people and tourism can learn about the relationship between nature and human beings through non- intrusive ways of preserving the original nature;
- all creatures on earth respect each other and are content with their own lives.

Then, to think about the impact from ecotourism, we could see the history of eco-tourism on Kangaroo Island.

Kangaroo Island has diverse and precious nature. Using such advantage, eco tours started from the 1970s. At the time, the visitors were domestic and the number was 20,000. Now, the number has increased to 160,000 tourists, and they are from domestic and foreign countries. As a result from increasing the tourists, we found 2 influences. One is health for the economy and sanitation, and the other is that ecotourism is effective in education. In the former, that is, the health for economy and sanitation, we can see the sub-influences which are increasing job opportunities and making the island cleaner because visitors take care of nature. In the point of education, we can also see the sub-influences which are awareness for environmental issues, nature, biodiversity and so on, and improvement of the knowledge and skills about nature for people, and as a result, the importance of living with nature spread into families and communities.

Through field studies, we found the structure of the positive impacts from ecotourism. The core of the picture is ecotourism which includes the local community, economy, education, and nature around it. Now we will explain about each aspect.

In the aspect of local community, ecotourism improves the capacity of local communities. Ecotourism strengthens the network among local people. Its final goal is symbiosis. We could see local people helping and respecting each other through ecotourism on Kangaroo Island.

With regards to the economical aspect, we could find a lot of economic benefits of ecotourism for the island. Ecotourism gives market opportunities and job opportunities to the local society. Through improving ecotourism, visitor numbers are increasing and this gives positive economic impacts to Kangaroo Island.

In the educational aspect, ecotourism gives learning and thinking opportunities to both tourists

and local people. We can take a few examples. Finder Chase National Park has an information center for visitors. As the Principal of Penneshaw School told us, ecotourism can be good learning for working together with local people. Because especially children learn a lot of skills such as communication, writing an email and considering how to explain information to tourists, through studying and teaching with each other about environment, we can find the importance of living together.

Finally, in nature, by introducing less damaging ecotourism, nature on Kangaroo Island has become healthy. For example, entrance fees to National Park are used for conservation of nature. Moreover, ecotourism can control tourists by giving guide books or information and by building roads or fences so that tourists cannot injure nature. It is very effective for protecting the natural unique environment.

These four factors centered on ecotourism are connected to each other and they make a synergy effect for sustainable life.

On the other hand, we can find challenges of ecotourism.

Sometimes there are some conflicts between nature and human beings. We, human beings, want to feed wild animals and change the environment for human utility without thinking about how they live naturally. For example, someone feeds pelicans to attract tourists and they enjoy it on Kangaroo Island. But such behaviour includes complex problems between local people depending on each sense of what the natural environment is like. So it is important to communicate with stakeholders who have an interest or responsibility in the management of the local future, such as animal meetings for local animal environments on Kangaroo Island or meetings among stakeholders of national parks on Kangaroo Island for deciding the rules for tourists. This communication helps people learn how to coexistence with nature and communication and action among stakeholders will achieve symbiosis of human beings and nature.

Now, let's move to the Japanese ecotourism, based on these arguments so far.

There are some issues between nature and human beings. For example, there are a lot of eco-tours out of the city, such as to World Heritage places. Such places have a serious problem. The problem is complex. In the natural area where nature is related with traditional local culture it is very beautiful, but there is no opportunity to work. People move to cities, which creates economical disparity between the rural and urban area. Moreover, we have a problem of an accelerating depopulation and aging society in the rural area. This causes the autonomous power to weaken, and as a result people do not have sufficient economical resources to protect and sustain nature and to develop villages and towns. There creates the conflict between nature, local people and tourists. More simple, if tourists encroach on nature too much then the ecological system will be destroyed. As a resolution for these complex issues, we suggest to develop ecotourism that we experienced and learned here on KI.

So, here is the ecotourism idea in Japan. To develop community-based ecotourism, which can increase jobs. Elderly people who stay, live in the community and want to do something could work at a part time job flexibly. To go out and work in, with and for nature, people would become more aware of nature and engage to keep it as it is. Moreover, elderly people could use their own local knowledge for eco-tour. The more ecotourism needs would increase, the more people could work. Generating this cycle in the community goes towards a sustainable community. As a conclusion, in the age of globalism, we wonder if a sustainable economy is possible. But we saw it through this tour. That it is not a strong and dominant economical power, not neo-liberalism, not a human-centered economy.

Someday our bodies will return to the Earth. Yes, we live and stand on earth which has been created by thousands of lives, from many creatures over a long time. So shall we pass nature and culture to future generations? In order to do that, we should be aware that we are the one piece of nature, accept our mistakes such as having destroyed nature. And we should also shift the unsustainable business into the sustainable business. So ecotourism as a business model in which nature and human beings love and respect each other and where a dynamic and economic power can be created, is regarded as effective for sustainable development.

Thank you very much for your attention and everything you have done for us.

Dynamic Economy -Ecotourism-

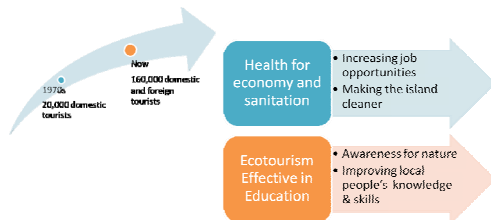
TEAM GO (豪)
Sachiyo Soga
Yuka Kakimori
Sachiyo Hikita

What is ecotourism?

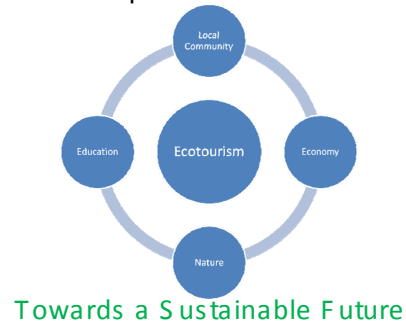
- Ecotourism is the activity to sustain society for present and future generations
 - where local people and tourists can learn about the relationship between nature and human beings through non-intrusive ways of preserving the original nature;
 - where all the creatures on Earth respect each other and are content with their own life.

History of Ecotourism in KI

- KI has diverse and precious nature.



Positive Impacts from Ecotourism



Challenges of Ecotourism

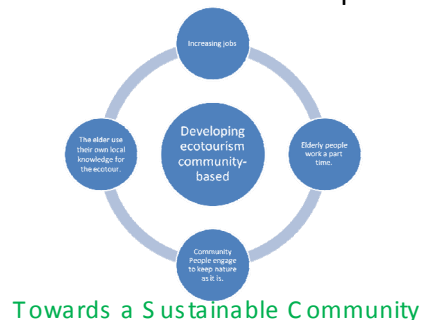
Conflict → Co-existence → Symbiosis



Ecotourism issues in Japan



Ecotourism idea in Japan



Thank you very much
for everything.

Topic 3 Maintaining Biodiversity

**Team: The Species
(Ayumi Makino, Nao Ando, Shoko Higa)**

What is biodiversity? Biodiversity is the existence of a large number of different kinds of animals and plants which make an important balanced environment. The movie, “Darwin’s Nightmare,” represents the miserable example of broken biodiversity. Lake Victoria stretches through Tanzania, Kenya and Uganda. The biodiversity was broken by non-native fish which were brought by people. These non-native fish not only changed the lake environment, but also changed the local people’s lives. Because of the damaged lake environment, their life became poor. People suffered from hunger, violence, murder and the number of street children increased. From this, we can understand how a broken biodiversity can result in unsustainable living. So, biodiversity is very important.

In this study tour, we saw the people who attempted to keep biodiversity on KI. On February 13th, we went to the “Native Seed Bank and Plant Nursery.” There we saw the grass-roots works of KI Natural Resources Management Board and now it helps farmers with re-vegetation works on their property. So the Nursery supplies plants for the project. It is managed by Veronica Bates, and she collects local native seeds. She plants them in tubes and grows them until they are big enough for planting. Farmers can re-vegetate their cleared land, especially where soil become weak or where salinity is a problem. Ms. Bates also give advice and helps farmers to re-vegetate. This action ensures biodiversity on the farmer’s property. Also at Penneshaw Campus students plant local native plants and observe insects and water weed in their school. So they learned their local biodiversity and how it is important to keep that for KI environment and people.

Moreover on the 12th, on the way to our field study, we saw a plantation of eucalyptus. It is called the NEC “Refreshed Afforestation Project” and it is managed by NEC, which is one of the biggest Japanese IT companies. Here, we will explain about NEC “Refreshed Afforestation Project.” NEC buys old computers from their customers and recycles them. Then they sell them. At the same time, NEC plants a tree in the NEC forest. Since 2003, 35,395 eucalyptus trees were forested to reduce CO₂. According to NEC Homepage, there is an afforestation tour for Japanese customers. They felt they and NEC did a wonderful thing for the environment. Surely, those eucalyptus contribute to reduce CO₂, however, new environmental problems occur. This is that the eucalyptus gives a negative influence on biodiversity of KI. The eucalyptuses which NEC plants are not local native eucalyptus on KI. They are from Tasmania. This eucalyptus is more aggressive than the local one and absorbs a lot of water. Therefore, the forest has the potential to destroy biodiversity and dry

up rivers. Moreover, this NEC forest is surrounded by electric fences to protect the eucalyptus from animals and managed local people. When animals touch the fence, they are injured or maybe even die. Usually, a lot of kinds plants grow and animals live in the natural forest. No such electronic fences exist. NEC forest is just planting trees without think about animals and biodiversity on KI. The forest is very artificial and unsustainable. And here, we have a question. Why does NEC make environmental problems while saying they are trying to solve environmental problem?

The reason is that NEC just thinks about immediate profit and shallow image for the environment. Consumers' consciousness of environmental issues is growing and also the climate of public opinion is that companies which disregard environmental issues are immoral companies. If a company doesn't take any action for environmental issues, they wouldn't be regarded as a good company. So they take some action, however, they think economic profit comes first. They neglect to study the environmental issues. NEC did little research but chose the fastest growing trees to show quick results of their project. Then they tried to get a positive evaluation. There was no communication and co-operation between KI local people and NEC. From this, we understand that because NEC just thinks about economical profit, they did not choose local eucalyptus, but chose Tasmanian eucalyptus which can grow faster.

Here, we want to introduce Asaza Project in Japan. Asaza is a water plant native to Japan. Kasumigaura, one of the main bases of the Asaza Project, is the second largest lake in Japan. The environment surrounding Kasumigaura changed drastically during the economic growth period that occurred starting from the 1960s. Then the beautiful environment was broken. For that, the Asaza Project was established to preserve and restore the natural environment in Kasumigaura. The NPO organisation suggested a revolutionary network system. This includes stakeholders from various sectors; education, agriculture, political, etc. The Asaza Project aims at from many angles. "Coordinated effort" creates mechanism to integrate environmental preservation as a purpose into the acting bodies by meeting their individual goals through a non-binding network. The possibility of co-operation is by different organisations such as environmental preservation, education and human resource development, scientific and human resource development, scientific research, and regional development. That is to say, to recover the broken biodiversity in Kasumigaura, community, schools, and companies work together by exploiting each others' knowledge and capabilities. Today, biodiversity of Kasumigaura had recovered earlier than the beginning plan. Also, it is surprising to realise that NEC is involved in the Asaza Project. Unlike the eucalyptus on KI, the Asaza project has elementary schools that make biotopes the same as Kasumigaura and they monitor the conditions and exchange the information using the NEC IT Screen called the "Weather Bucket." In the Asaza Project, NEC works effectively, on the other hand, on KI, they do not. Why is it happening?

The reason is that, on KI, NEC did not have enough communication with the local people. If NEC had enough communication, NEC could have learned about biodiversity and collaborated with

local people to keep biodiversity and reduce CO₂ also. From this example we understand what we need to do to keep biodiversity. We need to have a sense of value for nature, to get knowledge on the environment, to have good communication with each other, and to collaborate.

From this study tour, we found the circle of sustainable living and we recommend this idea to you. Today, we have a lot of problems in our lives which are hard to solve. Those problems come from our unsustainable living. So if we want to live free from that and keep the beautiful nature for our children, we have to pursue sustainable living. For sustainable living, first, we have to create a sustainable environment. A splendid environment appeals to humans directly about the importance of sustainability. When humans are in the marvelous environment, their mind becomes clear, their consciousness can be raised and their mind can be changed. Also they can develop sustainable practices for life. Then, humans can create a sustainable society and sustainable economics. On KI, we learned how to create sustainable living focusing on 5 topics. The five topics do not result in sustainable living just by themselves. They have to connect together to approach sustainable living. It is important for us to do this for future generations. So, education is the bridge to the next generation. Let's all cooperate together for the benefit of nature and future human life. Thank you very much for listening to our presentation.

Topic 4 BIODIVERSITY

The species
Ayumi Makino
Nao Ando
Shoko Higa

What is biodiversity?

The existence of a large number of different kinds of animals and plants which make up an important balanced environment.

Native Seed Bank and Plant Nursery

KI Natural Resources Management Board
→ helps farmers with re-vegetation works on their property.



This action ensures biodiversity on the farmer's property.

NEC "Refreshed Afforestation Project"



NEC forest 2005



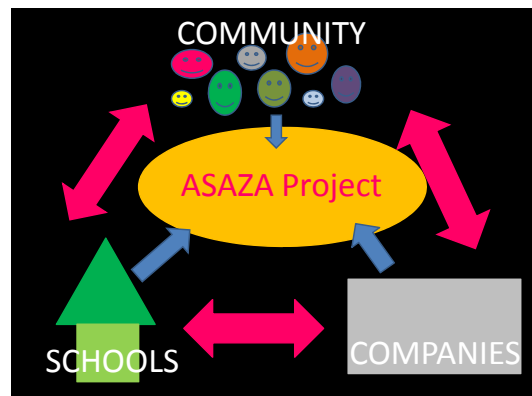
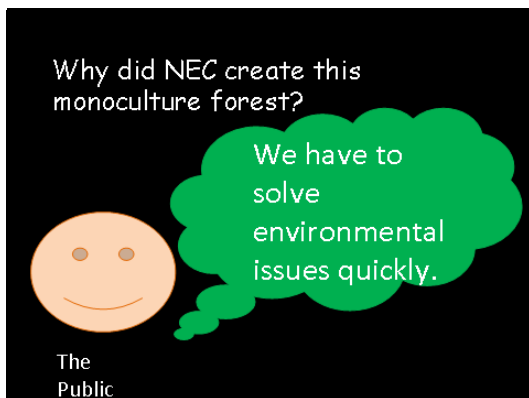
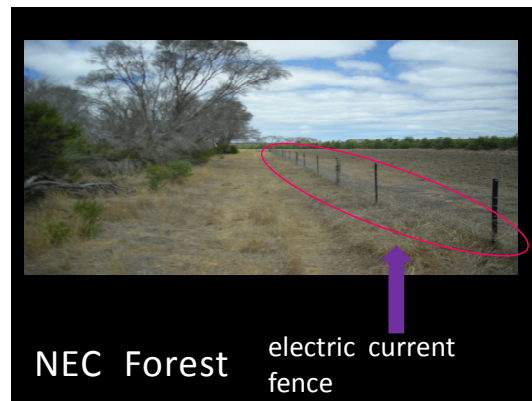
2006

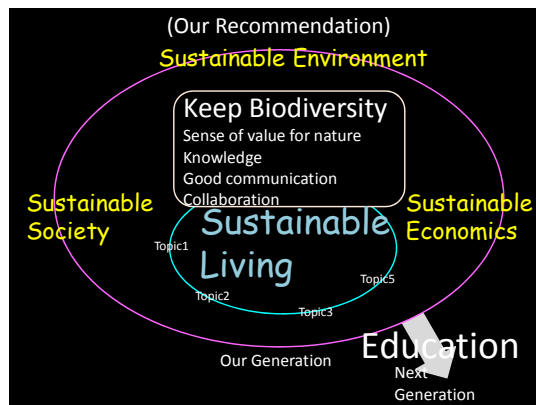


2007



2008





References

NEC http://www.nec.co.jp/eco/ja/2006_2/hl/01.html [Accessed 14 February, 2009]

NEC “Refreshed Afforestation Project”

<http://121ware.com/navigate/support/afforestation/index.html>

[Accessed 14 February, 2009]

Topic 4

Managing the Marine Environment

Team: Marine Girls
(Ryoko Mizuno, Sayaka Watanabe)

Hello, everyone. My name is Ryoko Mizuno. My name is Sayaka Watanabe. Today, we would like to talk about “Marine Environment”.

First, we will talk about what amazed us on Kangaroo Island and the marine environment. We were amazed at the ocean’s sparkle. I live in Japan near the beach, but the beach is polluted because of industry. People who live in near the beach pick up rubbish but we cannot pick all of it. I felt how different this is to KI. We were also impressed about the relationship between humans and animals. For example, the dolphins were close to us, so friendly, and Sea Lions stand freely although people observed them closely. These two things were so amazing to us!! In this way, Kangaroo Island’s ocean keeps a beautiful and marvelous marine environment, but it has some of the marine threats and challenges.

There is a negative cycle we found. The sand from the land contains the house sewage which is discharged near the ocean. Because of this the seaweed will die. When we watched the dolphins by the ocean, we found the sea weed is dying due to agricultural chemicals. It is connected to the decrease in living marine creatures. The biggest problem is human habitant. Human habitant influences the marine environment seriously. For example, fish eat the plastic bags which are thrown by people. Secondly, fishhooks catch the seals’ necks and they suffer and die from them. These are very cruel human activities.

In this study tour, we saw many people trying to resolve these problems. We would like to introduce about such great activities on Kangaroo Island.

First, we will talk about the dolphin watch by World and Dolphin Conservation Society, which aims to protect dolphins. They not only research dolphin’s ecology but also try to change people’s mind. They do dolphin watch for students and adults all over the world. We joined this activity and learned about dolphins that have feelings and thinking and remarkable abilities, such as telepathy. In Japan, many dolphins are captured because of dolphin shows in many aquariums. 15 percent dolphins died when they are captured. It shocked and surprised us. Moreover, in Australia, there are only 2 aquariums which have dolphin shows, but in Japan, almost all aquariums have dolphin shows and they are very popular.

The next activity we experienced was fish tagging. Fish tagging is to tag fish and research their movement for protecting marine and river eco systems. If fishermen catch the tagged fish, they phone the researcher and the researcher can track where the fish are moving. Students also can do fish tagging as a school activity. It influences students’ sense of values. The high school students we did fish tagging together with have good practices for protecting and cherishing fish and nature.

Before we did fish tagging, we thought that was just fishing, but after we learned the real meaning of fish tagging.

In Seal Bay, we observed many sea lions. The people living around Seal Bay try to protect endangered sea lions. They manage to keep a natural marine for sea lions. They have a tour and appeal to the tourists about how precious seals are.

In this way, marine environmentalists on Kangaroo Island manage to protect the marine environment two ways. One is direct activity and another is indirect activity. These activities connect to sustainable learning, which ultimately we never forget and can change one's mind and life.

In Japan, there is one polluted river in Osaka. When one baseball team won the league, the fans jumped in the polluted river. People who jumped in the river suffered from stomach aches for more than one week because at the bottom of the river, there is much sludge. Why is there so much sludge? Because the river was treated as garbage can. People throw their garbage into that river. Then, fish decreased and there were many dead fish and rubbish. Japan is a rich and developed country but why did it happen? It is related to people's mind. Some Japanese cannot respect nature. It is the biggest problem in Japan.

Of course, there are many activities to protect marine environment in Japan. As you can see by this slide, some elementary school students pick up rubbish. In this slide you can see people who are the members of an NPO picking up rubbish. However, Japanese have a low consciousness for the marine environment. We guess Japanese marine environmentalists should try to tell people why they should pick up rubbish efficiently and impressively. In Australia, people are closer to the marine environment and they can touch directly and can get value from a sense of feel and cooperation with wild animals or beautiful marine life. In Japan, we just do activities but the most important thing is to educate why they have to do that. If they educate like that, people will never forget their experiences and these are valuable for them.

By the way, we will suggest some ideas to Japanese environmental NPOs, NGOs, government and organisations of education through our learning from this study tour. The first idea is to teach people the connection behind any phenomenon. For example, our country's marine pollution causes problems for not only Japanese beaches, but also beaches in other countries as well as, fishes, animals, and people. So it is important to consider the global effect and think about how to create a sustainable future. The second is to import the experiential education into the Japanese education system. We think humans need to experience real nature. In Japan, especially in urban areas, we have no chance to meet the real world such as wild animals and beautiful marine life like on Kangaroo Island, but if we travel little bit farther away, we can reach the Okinawan beautiful sea, organic gardens, wild birds and so on. What the most important thing is to take the opportunity so that the learner can meet the real world and change their minds and lives. It means to give learners sustainable learning opportunities that they will never forget.

Through this study tour, we could meet a lot of “the real” life. After we encountered wild animals, we changed our view of zoos and show of the dolphins in Japan. These changes can hopefully influence people, at least surrounding us. Thank you for listening to our presentation.



★New ideas★

- to teach people the connection behind any phenomenon

- to import more the experiential education into Japanese education system

↓
to give learners sustainable learning



Topic 5

Human Impacts

Team: lalala rice
(Yuka Yanagita, Hinako Takeda, Risa Shioi)

First of all, we will introduce the poem which we wrote.

*These days we are always so busy.
We are not only busy, but also we don't have break time.
Even if we have more time,
We cannot relax in our own heart.
So, we start to wonder why our lives are so busy;
Why technology and economic activities are consuming our time.*

First, regarding the human impact on K.I. we saw many current issues. For example, the problem of NEC forest, the gap of extraordinary weather between South Australia, and North Australia, the decrease in the number of dolphins due to sea temperature rising.

Second, regarding the way to minimise human damage on K.I. We were taught it is critical for cooperation between the government, community, and individuals.

- dolphin watching to cooperate between the government.
- Promote the recycling of garbage and fish tagging. It is the cooperation within the community which includes the school.
- Eco-house like Mr. and Mrs. Teasdale's beautiful house. It's cooperation of the individuals and nature.

So, we noticed that each community has to collaborate and connect deeply.

Third, regarding getting the balance close together. It means deep ecology: the relationship between people and nature. And also we need to build up the relation of trust between animals and humans. Through this relationship we can build consciousness and a deep respect for all living beings on the Earth. Forth, after our environmental learning from all of you, we can bring back environmental practices to Japan.


First, disseminate information about the environment. We live every day surrounded by high technological devices in Japan. And Japanese people are not aware of the environment so they have to begin by getting information, understanding and knowing. We need to recover a clean heart that respects nature and what we have.

Second, we need to develop eco-practices for our life. We have to understand the problem and then take action ourselves voluntarily.

Third, environmental education. It means real education. For example, comprehensive

hands-on like dolphin watching, fish tagging and so on. We need to meet the real nature and feel with our 5 senses. This is true environmental education. Until we experienced the programme on K.I., we were not so aware of the natural beauty in Japan. So when we return we will be more conscious and be motivated to share information with colleagues, family and community about the environment in Japan. And as future teachers, we can develop activities around the environment to build passion in Japanese children for the environment.

We considered what we learned through this sustainable tour, we expressed our feelings in the pictures. They show the holistic relation between nature all over the world, and this green ribbon which is an ESD colour symbolises the connection. Thank you very much for listening to our presentation.



These days we are always so busy.

We are not only busy also we don't have break time.

Even if we have more time,
we cannot relax in our own heart.

So, we start to wonder why our lives are so busy;
Why technology and economic activities are consuming our time.




Environmental Study Tour 2009 in K.I.

produced by team lalala rice

Human Impacts on K.I.

- problem of NEC forest
- a gap of extraordinary weather between South Australia
- sea temperature rising (decrease in the number of dolphins)



The way to minimize human damage on K.I


- dolphin watching; WDSC (NGO)
- recycle, fish tagging (COMMUNITY; including the school)
- Eco-house (INDIVIDUAL)

→We noticed about that each community has to collaborate and connect deeply.

Getting the balance between humans and the environment.

The importance of living close together.

→deep ecology: the importance of human and animals relationship
→need to build up trust between animals and humans.
⇒We have to live with consciousness which we receive from nature's kindness.



We can bring back environmental practices to Japan

- disseminate information about the environment
- eco-practice for our life (take action)
- environmental education (real education)

Thank you!!



Published by

University of the Sacred Heart, Tokyo

4-3-1 Hiroo, Shibuya-ku, Tokyo, Japan 150-8938

TEL : +81-3-3407-5914

FAX : +81-3-5485-3526

July, 2009

Printed in Japan