



Forest on Blackboard Project

Forest on Blackboard Project is a project under Forest Restoration Research Unit (FORRU), Biology Department, Chiangmai University, cooperate with Japan Environmental Education Forum (JEEF) funded by Toyota Environmental Activities Grant Program of Toyota Motor Corporation. This initiative is to develop the education materials which suitable for local area context for forest biodiversity and conservation towards Sustainable Forest Management in Kanchanaburi province.

There are two Wildlife Sanctuaries and seven National Parks located in Kanchanaburi province. And some part of Kanchanaburi province is in Thungyai-Huai Kha Khaeng Wildlife Sanctuaries, the World Heritage site in the Western forest complex of Thailand. The major threats to this landscape include habitat degradation from illegal logging, agricultural encroachment, wild fires, infrastructure development, mining and poaching of wildlife. Human activities have been found to contribute to a lot effect on the ecosystem of protected area.

This proposed initiative aims to develop environmental education materials and produce the exercises to be an example for teachers. In the last period of the project (2012-2013) we produced **“Teacher’s Manual for Environmental Education in Kanchanaburi”** for Primary school level (Grade 4-6). This book integrate the science and social study subjects with the local contexts of Kanchanaburi, trying to make understanding of students on value of natural resources and forest ecosystem, toward to sustainable management.

During the last project, we got a lot of supporting from **Kanchanaburi Primary Education Service Area Office 1**. Mr.Jamnong Yodkam, Director (Ex Director at present) assign to Dr. Jirawan Nakpat, School Supervisor to advise our project. Moreover, we also got the supporting from 7 schools in Wang Dong-Chong Sa Dao schools Network under Kanchanaburi Primary Education Service Area Office 1. Teachers helped to brainstorm



ideas, comments and testing in classrooms to help us to develop the Teacher's Manual.

“Teacher's Manual for Environmental Education in Kanchanaburi” is already distributed to every Primary schools in Kanchanaburi province, Every District Centres of Kanchanaburi Provincial Office of the Non-formal and Informal Education, University's Libraries in Thailand and gave to some interested teachers in Centre and Western of Thailand.

We also was supported from SCG Foundation to produce the Student's Manual which will use together with our Teachers's manual. The Student's Manual will included the Knowledge and exercises for students. **All these Documents, Both Teacher's and Student's Manual and included with pre-test, post-test can be download at www.forru.org and all the project's pictures that teacher can be use to teach students found at [Facebook: Forest on Blackboard](#).**



Facebook: Forest on Blackboard



Lesson 1 Geography in Kanchanaburi

Lesson 2 Biodiversity

Lesson 3 The Relationships between Living things and Environment

Lesson 4 Environmental problems in Kanchanaburi and its effects

Lesson 5 Forest conservation and biodiversity in Kanchanaburi

Lesson 6 Books, Websites, Music, Movies related Environmental topic and Field trip Sites in and nearby Kanchanaburi

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Lesson 1 Geography in Kanchanaburi

- The general information of Kanchanaburi province, learning through drawing of outstanding geography of Kanchanaburi
- The outstanding geography of Limestone Mountain; the link between the Cave, Stream, Waterfall and Pu Forest (Swamp Ecosystem) which origin from Limestone Mountain.
- Hot Spring, Fault lines and Sinkhole, (these are the disaster that can be found in Kanchanaburi and was requested from Kanchanaburi Primary Education Service Area Office 1).

Lesson 2 Biodiversity

- Meaning and the useful of Biodiversity.
- Learning of the variety of Wildlife species that can be found in Kanchanaburi province through game “Who am I?”

Lesson 3 The Relationships between Living things and Environment

- Interspecific Interaction, Food chain, Food web and relationship of living things and local environment.
- In this lesson, detail and example can be found in school yard to be convenient for teachers and easy to understand for students.
- The exercises is trying to use game format; Who eats whom? both for animal food chain and bird adaptation to environment (bird’s bill and their food).

Lesson 4 Environmental problems in Kanchanaburi and its effects

- This lesson give the example of environmental problem in Kanchanaburi province such as *Air Pollution* (Forest fire and burning the sugar cane fields for harvesting), *Chemical Pesticides and Bio-Control*, Effects from *lead mining contamination* in upper watershed areas and *Wild Elephant* in Kanchanaburi Province.

Lesson 5 Forest conservation and biodiversity in Kanchanaburi



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- The community role in Conservation of Huay Sapan village's Community forest
- The government role; both In-situ and Ex-situ in Kanchanaburi province.

Lesson 6 Recommendation of Books, Websites, Music, Movies that related Environmental topic and Field trip Sites in and nearby Kanchanaburi.

The recently project (2014-2015), we have purpose to develop the teacher's manual on the environmental study and forest conservation topics for the Secondary School level and also to develop exercises for students to learn about their local environment. Now, we are working with 7 teachers of Secondary School level to develop the Teacher's Manual. Each teachers will select their interested topic that relate to local environment in their schools and will help to test the lesson in the classroom.

Tidarat T. Chupraphatthasri

Project Manager of Forest on Blackboard Project





Picture 1 School Supervisor of Kanchanaburi Primary Education Service Area 1 and Teachers from 7 schools of Wang Dong-Chong Sa Dao Network intend the workshop to develop the Teacher's Manual for Environment Education of Kanchanaburi on October, 2012.

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Picture 2 Mrs.Lamai PanKlang, teacher from Ban Wang Dong School and Mrs.Benchawan SaoSaeng, teacher from Wat Kao Noi School taught the Limestone Ecosystem topic in their classrooms.

Picture 3 Students learning about Limestone Mountain through the

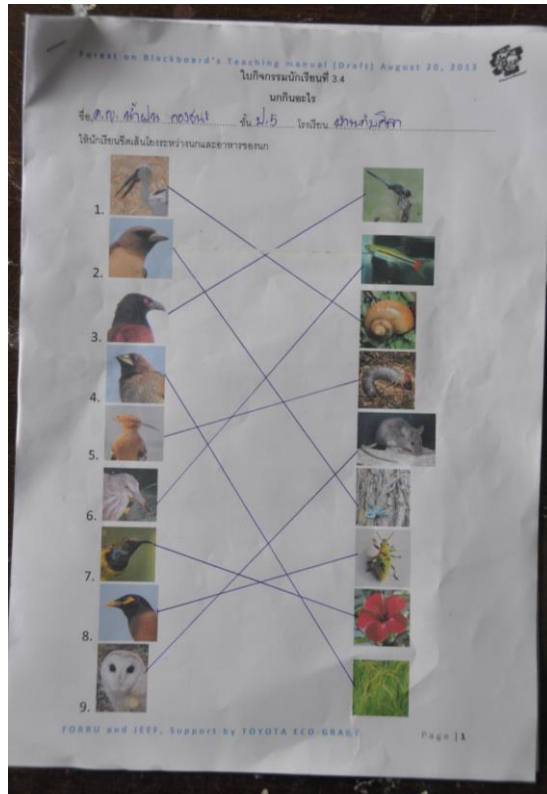


activity of Limestone Model to make the understanding about the connecting of cave, stream and Pu Forest (Swamp forest) which origin from Limestone Mountain.

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Picture 4 Mr. Manoch LuangAum lead the children to watching bird in school to teach about the adaptation of bird and environment. (Bird's bill and their food)



Picture 5 The matching game was used to investigate about the character of bird's bill, foods and their environment.