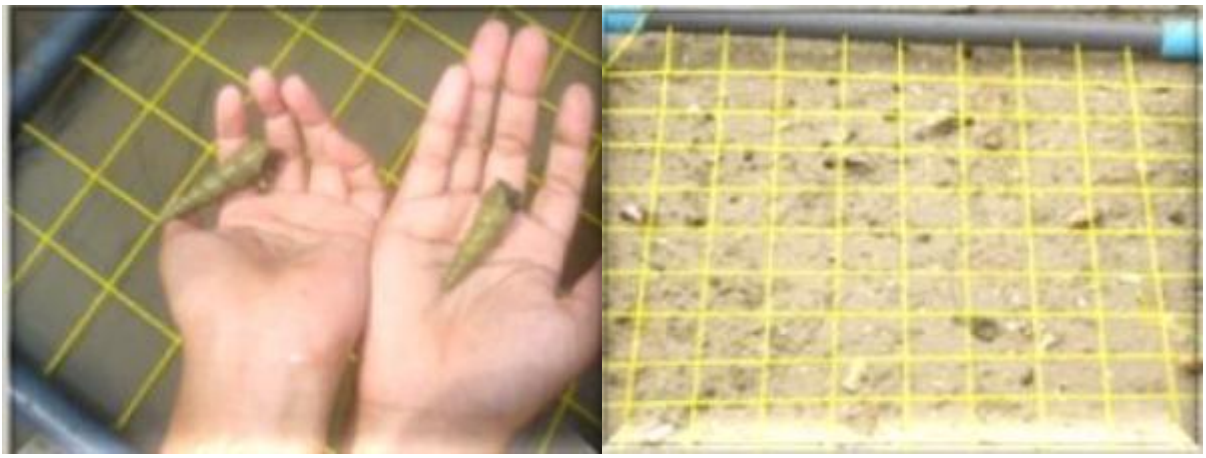
Project Update: November 2010

21st November 2010
The group of 30 students from Kamphuan School, Phukaothong School and Dumrongsart School participated in the RSG-special activity. This scientific programme called Transect Line - they have learned how to use the instruments to measure the map changes in biodiversity in the replanting area.



29th November 2010
The second RSG-outreach programme of conducting professional development with Laem Son National Park, Department of Marine Coastal Resources and Kasetsart University Coastal Marine Resource Research Station. The updated database development was presented for discussion among the group of 30 participants. They were very satisfied in the results.

Please find more details in http://mangrover1.multiply.com/

Map changes in the species within this community mangrove forest to monitor changes in the habitat's biodiversity.

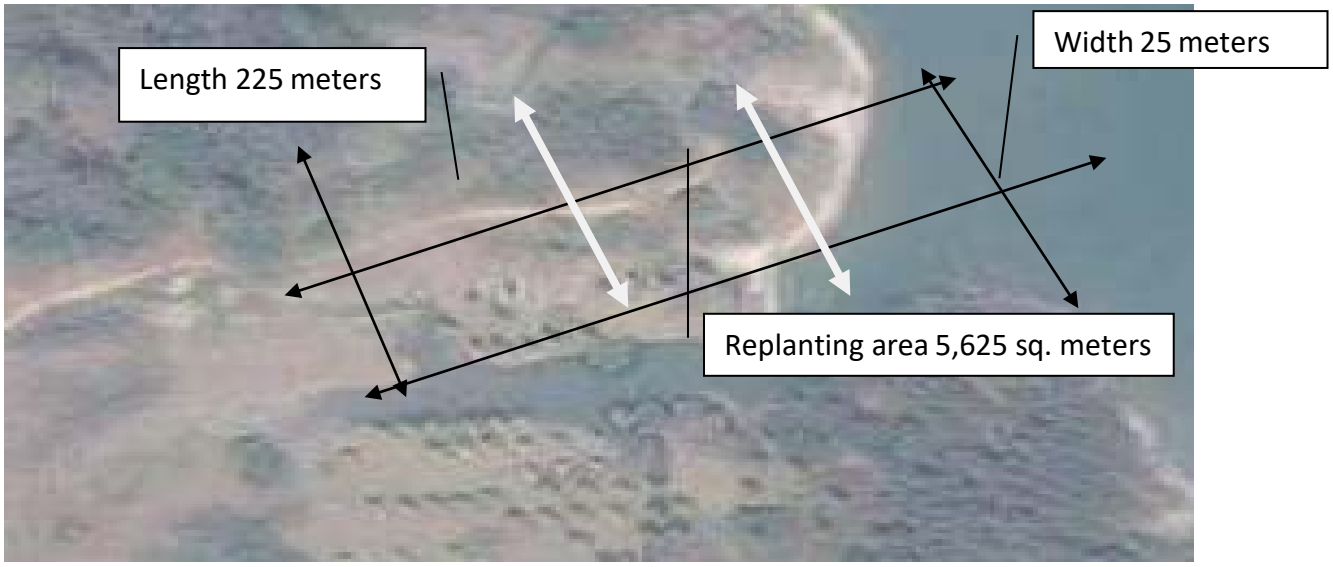
Methodology: Transect Line

Equipments

- Transect Line Ropes
- Stick-Knots
- Quadrant 50x50 centimeters
- Plastic bags and bottles for specimen collection
- Salinity Refractrometer (Hydrometer)
- Ph meter

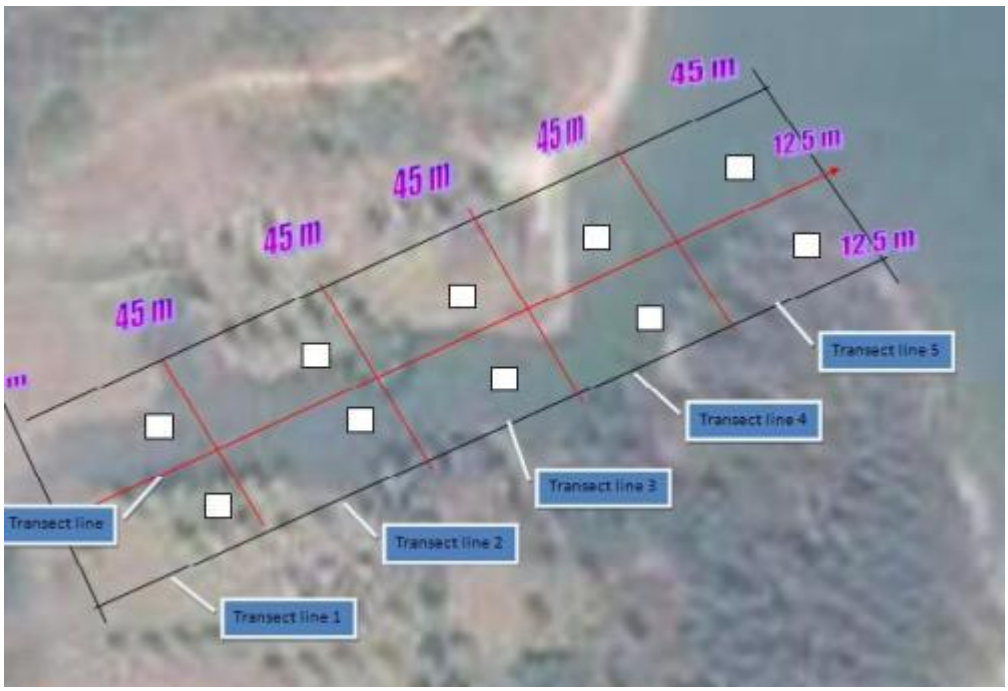
Replanting area

The degraded area for replanting the 20 Mangrove species is differentiated along the estuarine i.e. sandy, soft muddy and hard muddy flat areas. Considering each Mangrove species' habitat is the key for their growth rate, the total replanting area is 5,625 square meters (225x25 meters).



Transect Line area

Put the Anchor knots for tie up the Transect Line ropes (red color), the distance between each transect line is 45 meters. There are 5 areas of transect line; each are is 25x45 meters. Placed the 10 quadrants for collection the specimens.



Collection of the specimens

The area for collecting the specimen is in each quadrants size (50x50 cm.). The date of the specimen collection is from November 15-19 (5 days), 2-3 hours/day.

First period (High Tide) around 16.00 - 17.00 hr.

Second period (Ebb Tide) around 11.30-13.00 hr.

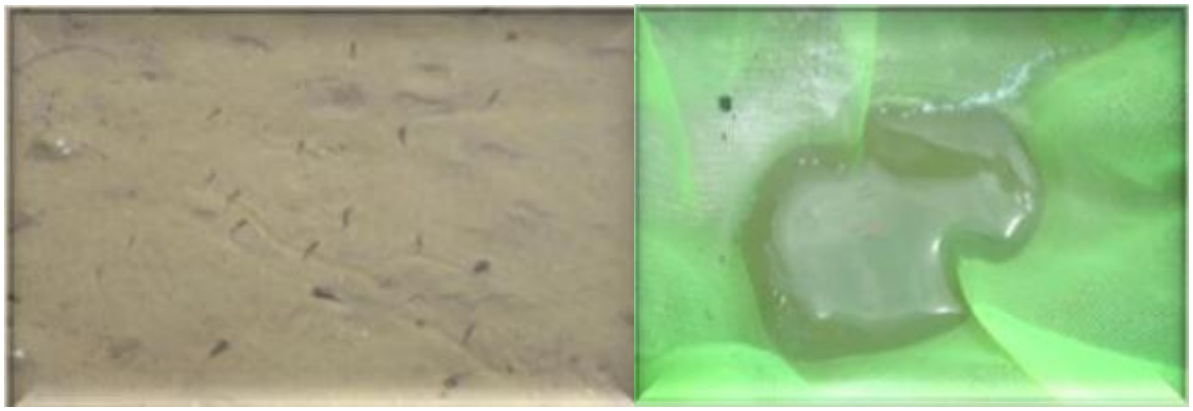
The living animals that were found within the Transect Line.

Clibanarius padavensis (hermit crab), Uca sp. (fiddler crab), Parasesarma plicatum (orange-claw marsh crab)

Seylla serrata (black crab), Dotilla wichmani (soldier crab), Telescopium telescopium (telescope snail)

Saccostrea commercialis (oyster), Melanoid tuberculate, Cerithidea obtusa (horn snail)

Periophthalmodon schlosseri (mudskipper), Parupeneus cinnabarins



Oecophylla smaragdina F. (red ant), Trigoniulus corallinus (millipede) and Lumbricus terrestris

Collection specimens from the Transect Lines

Number	**Living Animals (biodiversity) founded**
Transect Line **1**	• Uca sp. (Fiddler Crab) • Melanoid tuberculata (Pagoda snail)
Transect Line **2**	• Dotilla wichmani (Soldier Crab) • Telescopium telescopium (Telescope snail**)** • Melanoid tuberculata (Pagoda snail) • Clibanarius padavensis (hermit crab)
Transect Line **3**	• Uca sp. (Fiddler Crab) • Dotilla wichmani (Soldier Crab) • Oecophylla smaragdina F. (red ant) • Lumbricus terrestris • Trigoniulus corallinus (Millipede) • Clibanarius padavensis (hermit crab)
Transect Line **4**	• Seylla serrata (black crab) • Parupeneus cinnabarins • Periophthalmodon schlosseri (mudskipper) • Cerithidea obtusa (horn snail)
Transect Line **5**	• Seylla serrata (black crab) • Saccostrea commercialis (oyster**)**

Characteristic of soil and sea water in replanting areas.

Area	**Sea level**	**Water Features**		**Soil features**	
		pH	**Salinity (ppt)**	**pH**	**Soil Type**
Near the seashore	Regularly	6.7-7.2	15-30	6.2-6.8	Soft mud flat
Near the seashore	Regularly	6.7-7.2	0.5-20	6.0-7.5	Soft mud plus sand
Inner side of Mangrove forest	Regularly-occasionally	6.0-7.0	15-30	7.0-8.0	Soft to hard shallow mud flat
Inner side of Mangrove forest	Regularly-occasionally	6.0-7.0	15-30	7.0-8.0	Soft to hard shallow mud flat
Inner side of Mangrove forest	Occasionally	6.0-7.0	10-25	7.0-8.0	Hard mud flat