



Rural Training Center-Thailand

2009 Apr-May RTC-TH Update

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Community-based environmental education for the self-sufficiency and sustainability of small rural family farms

You may post questions / comments to the Discussion area of our website

Happy Songkran Festival



Water splashing cools folks off in the hot season.

the elderly or parents with little children passed by on foot or motor-bike, the water bearers would lighten up and sprinkle them gently with water from their fingers rather than the hose.

Some families load a barrel of water on their pick-up truck and go cruising the streets. Others set up shop in front of their drive way. It's all fun and games. The mobile and the roadsiders anxiously await the proper time to unleash as much water in the shortest time to soak each other.

You can readily know the "hot spots" for soaking by seeing how wet the pavement is in front of the various houses. This is obviously NOT the time to be on a motorbike carrying Important papers in an envelope!

As we drove about on errands, it was funny to see the road side splashers get excited at our approach...only to be let down when finding no riders in the back of our pick-up truck. Others would throw water at the truck anyway, and the heavy hitters really let loose a deluge. The stark contrast to California's water shortages makes us to think about water conservation.🌍

Traditional Thai New Year is in April. It is the end of the hot season. Water splashing has its origins in the washing of Buddha statues at temples. The wash water was collected and deemed to be blessed. So splashing this water on people was a way of giving them blessings and good luck. Today, it's more like a community-wide free for all water fight.

However, civility seems key to it all. Ardent splashers were armed with buckets and hoses awaiting passers-by. Yet when



Mobile water warriors resting at a wayside.

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Paying Respect to Elders



A spirit ceremony opens the event.

who remember their teachers and return to do something good for their school. This year, a huge fundraising took place to buy new computers for the school. Garlands are sold and the buyer gets to put them around the neck of dancers on a stage. Of course, water splashing is the order of the day.

Live music, student group performances, and various contests added to the festivities. Food was prepared by village volunteers.

During Songkran many former students returned to Ban Na Fa Elementary School to pay respect to their teachers. The event opens with a spirit ceremony and is followed by people expressing gratitude and good tidings on the school leaders and faculty.

Provincial education officials were in attendance as well as leaders from other nearby schools. Alumni 40 years and older participated along with students who graduated last year.

In Thailand, “good students” are those



Our own Aoi heads up the garland sales team!



The event was a rousing success! The alumni organizers raised 70,000 THB for their new computer purchase goal. This was much more than most had imagined they might be able to raise. It all goes to show what can happen with community-based efforts and support of education in their local school. 🌐





Horses on the farm provide free manure and are also mosquito decoys and arbovirus dead-end hosts.

could be “mosquito decoys” for us, too.

Our grassy, organic pasture was a main draw for the pregnant mares. This arrangement gives us the benefits of good quality manure without the expense of buying and caring for the horses. It is a fairly low labor activity for us. The horse owner sets up an electric fence so the horses won't get into the crops. He makes almost daily visits to check on the animals. We have no real costs or responsibilities for their health.



The horse convert grass into manure. The manure is used in our vegetable gardens to add nutrients to the soil. This is a form of recycling energy on the arm. Tropical soils often lack organics.



It is easy to collect the manure for the garden beds located near the farm house.

Horses on the Farm

A friend with horses contacted us about boarding his pregnant mares on our farm. An arrangement was worked out for him to pay a monthly fee. In addition to the extra cash, we get all the horse manure. An added benefit is that horses are considered to be “dead end” hosts for mosquito-borne arboviruses. Since they are larger than humans the mosquitoes may encounter the horses more often than us. So the horses



The horses make use of the former cow pen



A healthy colt is a pleasing result for everyone!

Fish Pond Excavation Work Begins

Excavation work began to repair and deepen the West and Central fish ponds. Over the years, sediments shallowed the ponds from 2 m to 1 m. We had a number of other concerns: repairing the overflow drains, increasing rain water harvesting capacity, and stocking new types of fish. In light of these concerns, we decided to deepen these two ponds from 2m to 4 m.



Deepening the West fish pond begins.



Draining the Central pond to flood the rice paddies.



Removing sediment and deepening the Central pond.



We lost coconut trees in the process of widening berms.



The renovated Central pond deepened to 4 m.



Central pond completed with new overflow drains.



Excavated soil used to level the area near the farmhouse.

RTC-TH Electric Vehicle Project

The RTC-TH has engaged C-FEE (Clean Fuel Energy Enterprise, Co. Ltd., Thailand) to modify their existing Super Jaab model all electric vehicle with a matching trailer.

The goal of the EVP (Electric Vehicle Project) is to expand the RTC-TH I.F.S. (Independent Fuel Systems) program and to support our fledgling amateur radio EmComm (Emergency Communications) effort.



We plan to use off the Super Jaab in our renewable energy transportation and EmComm efforts



The all electric power supply makes it ideal as an alternative fuel vehicle especially when we use Jatropha to make our own electricity. In an emergency, this might be another source of power for EmComm radios.



Charging unit uses normal household current.



Air Marshall Morakot Chansumruard (Ret.), the head of C-FEE with Greg and Saifon Lee following discussion and agreement on the RTC-TH Electric Vehicle Project.

An electric vehicle also fits into the RTC-TH alternate energy plans to use Jatropha SVO to produce electricity on the farm. When this occurs, the RTC-TH would make its own electricity to recharge the electric vehicle and EmComm radio batteries. ●

Community Preparedness

Weather Observations: Classroom to Farm to Community Service

Floods, landslides, and severe weather are among the primary sources of disasters in Nan Province. They are a fact of life and recur especially during the wet monsoon rainy season here. Self-sufficient and sustainable farms need to endure and get past these “speed bumps” in life. The RTC-TH has a comprehensive overview of self-sufficiency and sustainability spanning individual, family, and community levels. Here is an example of the comprehensive integration of RTC-TH programs.

Weather observation lessons started as a series to supplement the NASA CERES S'COOL (Student Cloud Observation On-Line) project we introduced at Ban Na Fa Elementary School. This groomed young students to take the lessons home for use on the family farm. The idea was to make school lessons connect to the real world. This empowers students to become active participants applying academics to the family farm.

The S'COOL lessons were modified for use in GROW (Getting Real On-farm Weather). GROW trains farmers to monitor local weather (measured on their farm as opposed to using government weather station data). The lessons include instructions to make some low-cost weather equipment. The lessons are geared toward the systematic farm management of soil erosion, soil moisture, water resources (especially rainwater harvesting).

We are novices when it comes to amateur radio and Emergency Communications. But weather data from the disaster area can be important in relief planning and operations. So as part of our commitment to sustaining the community, the S'COOL and GROW lessons were combined and evolved into MEWS (Mobile Emergency Weather Station). An emphasis was put on helicopter flight weather data. In many disasters, helicopters are an important aviation asset in relief work.



RTC-TH M.E.W.S. Weather Observation Log											
Observer's name		Location		Date		Time		Weather		Remarks	
Observer's name		Location		Date		Time		Weather		Remarks	
1.0	Observer's name	2.0	Location	3.0	Date	4.0	Time	5.0	Weather	6.0	Remarks
7.0	Observer's name	8.0	Location	9.0	Date	10.0	Time	11.0	Weather	12.0	Remarks
13.0	Observer's name	14.0	Location	15.0	Date	16.0	Time	17.0	Weather	18.0	Remarks
19.0	Observer's name	20.0	Location	21.0	Date	22.0	Time	23.0	Weather	24.0	Remarks
25.0	Observer's name	26.0	Location	27.0	Date	28.0	Time	29.0	Weather	30.0	Remarks
31.0	Observer's name	32.0	Location	33.0	Date	34.0	Time	35.0	Weather	36.0	Remarks
37.0	Observer's name	38.0	Location	39.0	Date	40.0	Time	41.0	Weather	42.0	Remarks
43.0	Observer's name	44.0	Location	45.0	Date	46.0	Time	47.0	Weather	48.0	Remarks
49.0	Observer's name	50.0	Location	51.0	Date	52.0	Time	53.0	Weather	54.0	Remarks
55.0	Observer's name	56.0	Location	57.0	Date	58.0	Time	59.0	Weather	60.0	Remarks
61.0	Observer's name	62.0	Location	63.0	Date	64.0	Time	65.0	Weather	66.0	Remarks
67.0	Observer's name	68.0	Location	69.0	Date	70.0	Time	71.0	Weather	72.0	Remarks
73.0	Observer's name	74.0	Location	75.0	Date	76.0	Time	77.0	Weather	78.0	Remarks
79.0	Observer's name	80.0	Location	81.0	Date	82.0	Time	83.0	Weather	84.0	Remarks
85.0	Observer's name	86.0	Location	87.0	Date	88.0	Time	89.0	Weather	90.0	Remarks
91.0	Observer's name	92.0	Location	93.0	Date	94.0	Time	95.0	Weather	96.0	Remarks
97.0	Observer's name	98.0	Location	99.0	Date	100.0	Time	101.0	Weather	102.0	Remarks
103.0	Observer's name	104.0	Location	105.0	Date	106.0	Time	107.0	Weather	108.0	Remarks
109.0	Observer's name	110.0	Location	111.0	Date	112.0	Time	113.0	Weather	114.0	Remarks
115.0	Observer's name	116.0	Location	117.0	Date	118.0	Time	119.0	Weather	120.0	Remarks
121.0	Observer's name	122.0	Location	123.0	Date	124.0	Time	125.0	Weather	126.0	Remarks
127.0	Observer's name	128.0	Location	129.0	Date	130.0	Time	131.0	Weather	132.0	Remarks
133.0	Observer's name	134.0	Location	135.0	Date	136.0	Time	137.0	Weather	138.0	Remarks
139.0	Observer's name	140.0	Location	141.0	Date	142.0	Time	143.0	Weather	144.0	Remarks
145.0	Observer's name	146.0	Location	147.0	Date	148.0	Time	149.0	Weather	150.0	Remarks
151.0	Observer's name	152.0	Location	153.0	Date	154.0	Time	155.0	Weather	156.0	Remarks
157.0	Observer's name	158.0	Location	159.0	Date	160.0	Time	161.0	Weather	162.0	Remarks
163.0	Observer's name	164.0	Location	165.0	Date	166.0	Time	167.0	Weather	168.0	Remarks
169.0	Observer's name	170.0	Location	171.0	Date	172.0	Time	173.0	Weather	174.0	Remarks
175.0	Observer's name	176.0	Location	177.0	Date	178.0	Time	179.0	Weather	180.0	Remarks
181.0	Observer's name	182.0	Location	183.0	Date	184.0	Time	185.0	Weather	186.0	Remarks
187.0	Observer's name	188.0	Location	189.0	Date	190.0	Time	191.0	Weather	192.0	Remarks
193.0	Observer's name	194.0	Location	195.0	Date	196.0	Time	197.0	Weather	198.0	Remarks
199.0	Observer's name	200.0	Location	201.0	Date	202.0	Time	203.0	Weather	204.0	Remarks
205.0	Observer's name	206.0	Location	207.0	Date	208.0	Time	209.0	Weather	210.0	Remarks
211.0	Observer's name	212.0	Location	213.0	Date	214.0	Time	215.0	Weather	216.0	Remarks
217.0	Observer's name	218.0	Location	219.0	Date	220.0	Time	221.0	Weather	222.0	Remarks
223.0	Observer's name	224.0	Location	225.0	Date	226.0	Time	227.0	Weather	228.0	Remarks
229.0	Observer's name	230.0	Location	231.0	Date	232.0	Time	233.0	Weather	234.0	Remarks
235.0	Observer's name	236.0	Location	237.0	Date	238.0	Time	239.0	Weather	240.0	Remarks
241.0	Observer's name	242.0	Location	243.0	Date	244.0	Time	245.0	Weather	246.0	Remarks
247.0	Observer's name	248.0	Location	249.0	Date	250.0	Time	251.0	Weather	252.0	Remarks
253.0	Observer's name	254.0	Location	255.0	Date	256.0	Time	257.0	Weather	258.0	Remarks
259.0	Observer's name	260.0	Location	261.0	Date	262.0	Time	263.0	Weather	264.0	Remarks
265.0	Observer's name	266.0	Location	267.0	Date	268.0	Time	269.0	Weather	270.0	Remarks
271.0	Observer's name	272.0	Location	273.0	Date	274.0	Time	275.0	Weather	276.0	Remarks
277.0	Observer's name	278.0	Location	279.0	Date	280.0	Time	281.0	Weather	282.0	Remarks
283.0	Observer's name	284.0	Location	285.0	Date	286.0	Time	287.0	Weather	288.0	Remarks
289.0	Observer's name	290.0	Location	291.0	Date	292.0	Time	293.0	Weather	294.0	Remarks
295.0	Observer's name	296.0	Location	297.0	Date	298.0	Time	299.0	Weather	300.0	Remarks

The MEWS weather observation form is a single sheet, double-sided form. Brief notes make the form a self-guided instruction sheet. With almost no training, basic observations on temperature, wind, and rain data can be recorded. With minimal training, a more complete weather report can be given to help relief planners and helicopter flight crews.

Other related lessons in the works will prepare amateur radio EmComm operators to pre-scout helicopter landing zones and prepare local geo-hazards maps. Advanced preparations such as these aid local disaster planners.

As with all RTC-TH materials, the information and training are available for little or no costs. These include how to make weather equipment with off-the-shelf materials. This means trainees can be ready to go quickly. 🌍