

[Universe Unfolding](#)

10 June 2009 Richard Copeland

The past week and a half has been one of wonder indeed. I spent some of it fantasizing on the good old pre-retirement days when I spent long days at the office or comfortably at a standstill in the Toronto traffic commute. Very little of the unfolding universe has coordinated with our activities of the past days. A week or two behind in gardening due to the ridiculous weather finds us with tomatoe plants of tall and stringy variety that is better suited to be wound into wreaths, while they remained unconditioned to the outdoors as transplants due to winds sufficient enough to tear them apart but not appreciably charge the batteries on the hybrid system. On one of the premium good days, we lucked into a massive stash of 3 year old manure at a local farm which, given the precipitation break, forced a mobilization of the troops, trucks and tractor to spend that day hauling this treasure of ground-gold to our various gardens. Perhaps that is actually one good coordination, for if the gardens had been planted, working the manure in would have been impossible. This ancient body paid the price of shovelling at days' end.

Meetings arose with the several organizations we belong to, further cutting up available time slots. One of them was the ORI vision session, and that morning the 3 balck pigs we had been baby sitting became 10. Yes I was right. That female didn't only look to be pregnant. Advice from afar included separating the males from them, separating the mother from them, remove the piglets teeth (do they have any yet?) and feed them starter. Audrey alert to Google found out that they are a heritage breed, are foragers, capable of looking after themselves, need nothing from us except a lot of water for mom, and are very tasty. It is the pigs that are produced by market growers that have these difficult issues. This old black pig breed takes longer to mature and is fading as a species due to their undesirable long time to maturity, not a great cash flow advantage. Any one need a new roto-tiller? To my surprise they were just there on Sunday morning, walking around as toddlers. Will they reach the terrible 2's by this weekend? They could easily walk under the electric fence, but have chosen to hang around so far.

The ORI meeting was among the best ever. Graciously John and Diane offered their place on Lake Clear for the event and ideas flowed. The new members of the board, 2 of them educators, are keen with getting into the education system with programs of broad scope - an approach involving youth that can only improve our environment at the real grass roots!. Socially, with a great pot luck dinner afterwards, we got to know the new folks and old members better, networking our way through ideas and ideals. Congrats to Ole to running an inclusive session, generating ideas and thanks to John and Diane for their hospitality and an inspiring environment. Okay. The universe unfolded that one very well.

Too much of my thought time over the past week & a half was spent on all the news about automotive bailouts, infrastructure spending and pondering the solar value of the Feed In Tariff for solar. Do we want to keep making more cars that need highways? Do we want to repair and replace infrastructures, specifically transportation types, that are ancient and last century? Who's thinking about this century? Is the Green Energy Act going to pull off a shift into a green economy? Again the universe is not unfolding as it should.

Sorry for the lapse in blogging. I will return to this, maybe not with a vengeance, but at least with more commitment.
richard

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[Update + Composter](#)

29 May 2009 Richard Copeland

3rd day of overcast and only small winds. We are getting some sun this afternoon and it is a good thing since Audrey, in preparation for tomorrow's market, is baking (running the dishwasher, stove and the 30 year old Vita-Mix - a glorified blender that can grind grain, maybe even gravel). Electrons are flying out of the battery bank. I had thought that I would break down and run the generator, but things are really hanging in there. I figure I have to endorse the Battery Equalizer product. Under present conditions of input and usage the batteries have never done this well before.

What crummy weather. We have heard that the frost free date for our little hamlet is June 5th and now I don't doubt it. But it is almost June, where is that summer weather? Even acclimatizing the plants started indoors is proviing difficult with the winds just strong enough enough to rip away at them.

Finally got the new composter put together and started filling it with the top section of compost from the older one. I did have 3 at one time, but the wood post corners, optinistically driven into the ground, did finally rot. I built a new one 2 years ago using steel T-bar for corners and did the same with this new one. These composters are great - easy to make, easy to use and can handle considerable volume depending on how large one makes them. The removeable sides can be added as compostable material is added and they simply grow taller. The sides are simple wood slats, about 4 feet long and 3.5" wide, which gives a a 3 to 4 foot square base for the unit. Stacking them on each other leaves a 3.5" air space in between. I also have learned to run a wire through the holes in the T-bar around the top to prevent the posts from leaning outward. A photo is attached. The foreground shows the 1st composter opened up for using the composted material in the bottom and the background shows the new unit. 3 is probably the best number to build, allowing for many stages of composting and facilitating the turning of material from one to another. These are not news, many folks use them, and they are great even as a holding area if you don't get around to watering and turning.

richard

Attachments:

 [ComposterBlog.jpg](#) [Photo of Composter] 287 Kb

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[Passive Hot Water Shower](#)

28 May 2009 Richard Copeland

On today's to-do list was the task of recharging the outdoor solar shower. The rain and cold influenced a mind change, but the thought of blogging about it didn't go away. Several people have visited to see it, some have actually had a shower in it - a delightful experience for the outdoors - and others have actually built one. For today's blog I have inserted an excerpt from an article I had written in 2005 and I also include a photo and a diagram of how the thing is piped. If you are interested in having one of your own, there should be sufficient information here to build one.

The key to this first project was the ability to scrounge. It was decided that we would build a passively solar heated outdoor shower. The summer months find our occupancy rate quite high, with five of our own kids, and several friends spending time with us. The city kid/friends seem to have some kind of obsession for great numbers of showers and the increase in hot heat water usage was apparent. The shower project budget was declared at \$50, it had to be a thing a beauty to at least one person and Adam had to do most of the work. (I really liked the last specification)

The design was to be simple, as passive solar heating should be. A tank, lying on its side, would hold water above the shower stall, we would insulate the enclosure and place reflecting material on the insulation and then place a transparent glazing over the box angled around 45 degrees and facing kind of south. The solar box would be supported by posts and the enclosure made to provide total privacy. The shower had to be easy to fill and we wanted a guage to indicate water level in the tank. That ended the engineering phase. We moved to materials acquisition.

Cedar was clearly the best choice for the enclosure. On the property we have a stand of small cedars that is overly dense and needed thinning to kick start its regrowth. Adam tended to that situation, the tree thinning activity supplying six posts, and sawing the smaller logs through their length provided a nice rustic siding, which he mounted vertically. We did decide to purchase planed cedar for the floor.

The tank was supplied by the best re-use center in Matawatchan - the dump. An abandoned antique expansion tank of 30 gallons capacity had nicely located threaded holes allowing a bottom and a top threaded fitting when laid on its side. It held water, we rinsed it out, cleaned up the outside and painted it with a flat black heat resistant paint. Adam measured the tank and began to place the poles and build a box of size to enclose our tank. Once we knew the size of the box we could return to the dump and check windows for the glass cover. I wish sometimes the dump would fulfill a more leading role by competing with hardware store hours.

Rummaging through our own junk we managed to find a piece of acrylic the right size to cover the solar panel. A sprinkler head from old pond made an excellent shower head. Finally we had to spend some money. I purchased some CPVC water pipe, outside tap and 3 tees, 2- 90 degree elbows and 2 male adapters. To turn the shower off and on I settled for an expensive ½" globe valve. The water level guage was made up of a larger diameter piece of clear plastic tubing (about 20"

long), fittings to adapt it to the CPCV and a floatation device inserted into the larger pipe that would indicate water level. The connections are straightforward. The tap was mounted low enough to allow a hose hook-up for filling. The ½" pipe extends upward to a tee. The horizontal pipe runs to another tee directly under the tank where it connects to the lower tank fitting and then downwards to the globe valve and the shower head. We put a window rod on the globe valve handle to allow short people to shower too. That looked after the bottom of the tank. The first tee in the vertical pipe was adapted (these fittings are best done on the fly depending on what you ended up with pipe sizes) to accept the clear pipe which is vertical and slightly longer than the width of the tank. We tried to find a rubber ball to put inside but had to settle for wine bottle cork painted red. The top of the clear pipe is then adapted back into CPVC to another tee. The horizontal side of the tee runs over to the second 90 and enters the top fitting of the tank. The vertical continues upwards, I would go at least a foot, to another 90 which you have to close with a screen (keep out the bugs.). This vents the tank. When you fill the tank via garden house, the water pressure pushes the cork (use a ball!) into the top tee closing that entry and allowing the tank to fill from the bottom. Once full water gushes from the vent. When you turn off the water the cork floats in the clear pipe and displays the water level. You can fill it with well water, or if you have a small pump and a rain barrel, the rain water shower is the best.

Our shower will provide 4-6 showers per day, except when used by teen aged girls with long hair. Sometimes it can be cool (no sun) but most of the time it is right on. We do run into 'too hot' conditions frequently but you can simply add more cold in this case. It is used in late April through Thanksgiving, when the more hardy among us will bare the cold air and enjoy a hot shower. The budget was easily met. I'll own up now to spending the left over cash on a six pack.

We love it. Visitors line up, and there is exhilaration in looking at mountains and sky, or talking with your friends while enjoying a refreshing shower in the great outdoors. There is appreciation for what nature can supply readily from the environment, without the costly addition of non-renewable energy. There is further satisfaction in finding materials that can be re-used instead of dumped. And as for the shower, more than one of us love it for eye appeal, and it's a great addition to yard as conversation piece. One can double their energy and water savings by showering with a friend.

Attachments:

 SolarShowerBlog.jpg	[Photo of Solar Shower]	476 Kb
 SolarShowerDiagramBlog.pdf	[Single Line Diagram - Solar Shower]	11 Kb

[Add your comment](#)

[SDHW Workshop in Renfrew](#)

26 May 2009 Richard Copeland

Last night a Solar Hot water Workshop was held at the library in Renfrew. With the efforts of Janet (ORI) and Danya (Sustainable Ottawa) the room was full, standing room only had there been more than the 30 plus people in attendance. Sustainable Ottawa has a grant through the federal gov't of \$1250 per approved system installed. Recent changes by both the Provincial & Federal gov'ts can actually bring the total rebates + grants to over \$4000 per system. There has never been a better time to do this. Even if you not are in the Sustainable Ottawa geographical territory the better than \$3000 in incentives is spectacular.

This was a gardening day, at least one of preparation and maintenance. Weeded the back beds, layed in some raw manure in the bottom of the two new ones (it keeps things warm), watered the hoophouse, acquired new posts for a second large composting stand and looked at the split wood I didn't get put away before the next 3 days rains. Too pooped to do more.

Good energy day, and that should do us for the next 3 days of clouds. Should check the electrolyte levels soon.

richard

[Add your comment](#)

[Bring on the Black Flies](#)

24 May 2009 Richard Copeland

As one with a science background, one of my favourite definitions of time is that it is something invented to prevent everything from happening all at once. If you think about it, it really works. One gets to observe life as it unfolds and if one is paying attention learning, living and life's true events can be absorbed and contemplated. Not forever, but at least for a lifetime. The relativity of time comes into play as you age. Somehow more events unfold at a more rapid pace than they did, well, when you were younger. Spring, which is where I'm going here, now comes on on with the pace and ferocity of the first winter blizzard. Trees that were bare, just recently have burst into full leaves. Gardens are full of weeds and demanding their vegetable plants. The lawns are too long and the yellow heads of the dandelions turn into fluffy seeds overnight. The first lawn cut, if done in the morning, will see dandelions reappear by dinner time. Equipment needs to be serviced. The outdoors solar shower needs to be put into service. The fall planting of garlic needs weeding along with the early spring planting of onions. The new raised beds need to be filled immediately. There is a definite breakdown in how time has been working. Amid all this, of course, is the blackfly. While one is doing all this activity stuff the miserable little x@#+!!'s set upon you. Sure you can slather stuff on you (and worry about its consequences - deet is the only thing that works) or do what we do and wear the 'bug' jacket. The bug jacket however is a jacket and is hot, and the screen through which you look is difficult to see through, particularly if you are planting carrot seeds. We live on hill, and with luck a good breeze is sufficient to keep them at bay around the house, but forget them and head downhill or to the garden and - lookout.

Another spring task has been the washout and refilling of the outdoor shower. If you saw the faux log raised bed photos in a previous blog, you might have noticed a wood enclosed stand with a wedge shaped top. That is our first solar domestic hot water system. It runs generally from the long weekend of May to Thanksgiving. It will deliver about 4-5 showers toward the end of the day, and it refreshing and enjoyable. Audrey and I have tended more to the indoor unit since our other SDHW system was installed, partly due to laziness but also due to having a lot of water that ought to be consumed. The outdoor unit, when we have a small 12VDC pumping, is filled with rain water and becomes very hot by day's end. Many visitors have been astonished at the feeling of freedom and warmth as they privately shower and gaze out the mountains or the sunset.

richard

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[More on Slab Wood +](#)

21 May 2009 Richard Copeland

We got a car given to us. Problem we have had is that the main vehicle around here is an eight passenger all wheel van. Actually it works out great most of the time, it is the car pooling dream for ORI meetings or packing the 7 of us in the extended family for a trip to town. As a 1 or 2 person vehicle, well not very efficient. So a neighbour had a car given to him and he in turn passed it on to me. At 40MPG and really in good condition we decided to go with it as goto town for grocery and back and forth from the village vehicle. Just as there is no such thing as a free cat, so it is with cars but for a reasonable amount it was refitted with new front brakes and 4 tires and safetied. And it is uper. The gas guage barely moved from Renfrew to home. I hope it isn't broken.

The car is also outfitted with a water-4-gas unit, which the prior owner owner found valuable. It certainly has pep and good mileage. Maybe try out later with the unit W4G unit disconnected. I had done some research last year on these things and claims of 20-50% fuel efficiency were made. Some others were failures, but most were successful. The websites that set to show a scam actually came out in favour. Very little was offered in terms of the science.

As I mentioned in my last blog I had built a slab wood planter. I built a second one and as promised I have attached a photo. It is sort of faux log, a great use of what is scrap material for a very practical purpose. See what you think.

richard

Attachments:

 [SlabPlanterBlog.jpg](#) [Photo of Slab Wood Planter] 102 Kb

[Add your comment](#)

[Wood Slab Raised Beds](#)

19 May 2009 Richard Copeland

Funny day - cool, mix of sun, cloud and wind. Mostly cloud but enough sun the bring the batteries right up. On the sustainable side of things, the local portable band saw mill produces a lot of slab wood. Commercial mills produce a lot more, but so many are closing down. The slabs, that's the stuff of the first few cuts on a log, where the sides are trimmed off to square the log into the shape and size desired. The slabs can be a disposal issue, but much of the slabwood around here is used to fire up the evaporators for maple syrup making, or even home heating, particularly with the hardwoods. Today I discovered a new application for this country unique by-product. I made a raised bed or planter box, about 3.5' X 8' by screwing the slabs (softwoods) onto a corner post and filling the spaces between (they are really wavy at times) with thinner slabs screwed into the inside. The look from the outside is that of logs. Pretty nice, I really like the raised beds, have a few already in the back yard and wanted to more of this intensive type of veggie gardening. I'll try a grab a pic tomorrow and post it.

richard

[Add your comment](#)

[Black Pig Tilling](#)

18 May 2009 Richard Copeland

Sunday, yesterday, was cold and rainy. Actually ran the downstairs stove to get the damp out and add a little heat comfort. Audrey arrived home with the grandkids and Fili and we dined together, hustling around in the cold before dinner to provide the black pigs with space in which to work their magic. Roto-tiller heaven it is, in the space of 3 days they cleared out a considerable piece of garden. We expanded the area by double, adding electric fence to the expanding perimeter. I have included a photo as promised. In the foreground are the thick grasses and weeds that grew last summer in an area dedicated to edible pod peas, their weeding difficult due to the delicacy of the plants. The weeds grew in, the worst of them twitch grass, and we have to deal with it now. In the photo the foreground shows the weeds in the expanded territory, while the cultivated area is in the background - cleared out. That area was cleaned in 3 days and many of the roots, which a tiller would chop up and leave behind were consumed. These guys are our new best friends. Today is the return of old Sol, laundry and a dishwasher run. I spent some of the day splitting wood which I was able to get out of the bush yesterday, while the black flies huddled in the - whatever they huddle in - during a day of blustery cold weather and enjoyed a morning of good work. Today them flies are back.

richard

Attachments:

 [Black Pigs](#) [The pigs tilling the garden over 3 days] 144 Kb

[Add your comment](#)

[Dodging the downpours](#)

16 May 2009 Richard Copeland

Yesterday was the banner day. It was Friday and that Friday had to be the day to cut the lawn. Cut? Harvest actually. Weather forecasting had Saturday listed for rain and it was correct. I did the push mower parts of the cut and then borrowed Bill's riding mower. We lend a lot of equipment around, for example he uses my log splitter, we trade cars etc. The lawn is an unplanned feature of the place. One of our unrealised retirement wishes was to have a place with no lawn to cut, a home in the bush where trees, ferns and falling leaves were the environmental staple. We didn't plan or plant a lawn, but we cut. Yes, if you mow the weeds a lawn happens. We had a lot a clear space around the house and the weeds (not all of them) were getting to be a problem. So we cut a bit, a bit more, "lets clean up that space". Before we knew it we hand a lawn mass larger than that of all former houses combined. The rider mower is the only way to do it, otherwise it is 2 days of mowing and 2 of recovery.

It is the May long weekend, and it is the weekend generally believed to bring on the black flies. They have been around for a couple of weeks, unusually early, but their biting has not been that aggravating, they were tending to flop around in their

pre-season wake-up ritual. It's official they have awakened. I cut the lawn toughing it out, a few more passes here or there while flagging away at them or inhaling them whole, I denied myself the safe harbour of the bug netting. Paid the price for that, but then I seem to do this every year. I have this theory that if you OD on them early, the bites are not as troublesome for the rest of the summer. Nothing scientific on this immunity hypothesis, just a good excuse for being stupid. Surprisingly by mid day today, amid the cut grass, thousands of dandelion blooms have already appeared. We moved the black pigs yesterday and brought them up to the garden nearest the house. Not because that very morning neighbour JP phoned to tell me the pigs were coming up his driveway, but because we wanted them to work this particular garden. Adam built a quick lean-to shelter, we fenced off a good size area with electric fence and then Adam, food in hand, led them up the half km of trails like a pied piper. Zak, my dog, got to be first to test the fence for power and he will not be the next to do the testing. Poor thing. The black pigs gave a quick test and they now have the desired respect for it. The black pigs are into day 2 and are doing a real number on the tilling in the garden. I will have to attach a photo this week of their progress.

richard