

Fall MESEA Workshops

Washington County Solar Thermal Workshops By Soni Biehl

Solar Air Heater Workshop – Perry, 11 October

MESEA was pleased to lead both a solar hot air, and a hot water collector workshop this fall in Washington County. The Pembroke Grange permitted us to hold the first workshop there. Local people participated in learning some solar basics and work through the process of building a hot air collector to near-completion. The completed model is ready to be installed at the senior citizens' center in Eastport. *Below: assembling the air heater case*



Solar Water Heater Workshop – Machias, 25 October

The last weekend in October, decidedly a little chilly, brought a dozen people to the site of the old Machias Grange, now the Beehive Collective. The collective experience of the group was impressive. One participant, a plumber, was conscripted to do the honour of teaching soldering to the others. Not only was the completed solar hot water unit loaded into the back of a truck at the end of the day, but 4 solar hot water collector kits were sold. No convincing necessary there! Both were great groups.

Dixmont Solar Air Heater Workshop By Richard Komp

On 22-23 November, we had a weekend workshop at the Ravens' Nest in Dixmont where we built a very large solar air heater into the south facing wall of three story building. These simple air heaters, the plans of which are in the Maine Solar Primer (as are the plans for the solar water heaters we built in Washington county) are very

inexpensive and can be modified to fit many different buildings. In this workshop we converted the wall of the building to an air heater by putting a set of metal studs turned sideways on the wall, arranged vertically every 20 inches or so and then covering it with old barn roofing painted black as the absorber plate. After that we put a set of 1 x3 wood strapping vertically right over the stud locations and finally a layer of clear greenhouse plastic sheathing.

We even built the air heater around an existing window and arranged a plenum at both the top and the bottom to evenly distribute the air through both the front and the back of the absorber plate. The air intake from the building is in the lower right corner while the out let for the air going back into the building is in the upper right at this highest point in the collector for maximum thermosiphon effect.

The weekend workshop included lectures on how to design your own air heater as well as solar energy in general. The collector wasn't finished when the weekend was over but several MESDEA members stayed on to finish the project and celebrate Thanksgiving at the Ravens' Nest.

Photovoltaic Workshop – Manhattan, 5 December By Richard Komp

This Friday afternoon workshop was for the science club at the Gregorio Luperu High School in the upper end of Manhattan. The club has about 20 members but over 40 people showed up for this hands-on photovoltaic (PV) workshop taught by MESEA members Richard Komp and John Burke. Since the majority of the students were from the Dominican Republic, we did the workshop in both Spanish and English. Since we had so many participants, we split them into three groups for the hands-on session with Tasha Darbes helping supervise the third group. First I gave an explanation of how solar cells worked and how they were made, then we had a discussion on using solar energy. After the break, we plugged in the soldering irons and assembled three small solar battery chargers, which the group was allowed to keep.