

MID-ATLANTIC TRANSITION HUB (MATH)

PRESERVING THE PAST TO SERVE THE FUTURE

Using Pre-fossil Fuel Technology on Regional Waterways

Andrew Willner

www.andrewwillner.com

Transitioning includes reinvigoration of heirloom technologies and traditional skills needed to thrive in a carbon-constrained future. Permaculture, which birthed the Transition environmental movement, offers guidance on how to use those skills to design superb quality lives.

High Tech is, "industrial technology and refers to things that are out of your control, as opposed to low technology, which is simple things done in a smart way. Low technology is using the intelligence of nature to accomplish tasks. High technology is buying an apple from the store; low technology is getting an apple from a tree you planted yourself. One of the big differences is in high technology you are disconnected from cause and effect relationships. So if you pollute through high technology, you may not feel the direct result. Low technology is connection because you are involved in the process and you are directly affected by the consequences."

C. Milton Dixon, interviewed in *The (Chicago) Examiner*, May 2011

<http://kinstonecircle.com/faculty/milton-dixon/>

Transitioning fosters and supports the revitalization of "pre-petro" technological skills. The Transition environmental movement asks us to consider relearning for example, the skills needed to reanimate wind mills, sailing vessels, watermills; and pressing hand tools, levers, block and tackle back into service.

Two low technologies that have immediate relevance in the Mid-Atlantic region are: **1) Short Sea Shipping:** i.e. carrying freight under sail that doesn't cross oceans, which is resurging as more people build and rebuild wooden ships for the transport of goods along coastal waters and the inland waters of the Hudson Valley, and, **2) Mill Restoration:** Water mills are being built and rebuilt for grinding grain, pressing cider, as well as producing electricity for individually owned operations and communities. Building, restoring, preserving, and actively using these technologies is a key to preserving the past to serve the future.

The Traditional Knowledge Institute wrote in 2010: "Today, traditional knowledge is in danger and its disappearance would not only cause the loss of people's capability to keep and pass on the artistic and natural heritage, but also of an extraordinary source of knowledge and cultural diversity from which the appropriate innovation solutions can be derived today and in the future."

Research & Reskilling

Commerce and water transport of farm and manufactured goods flourished for centuries before cheap fossil fuels became readily available. Many of those technologies are still being practiced or recorded in libraries and online.

Sailing cargo vessels for example, are competitive right now for certain cargos. Erik Andrus' Vermont Sail Freight Project <http://www.vermontsailfreightproject.org/> is the most viable in the region. The vessel Ceres, built on a farm near Lake Champlain will carry Vermont farm

goods to New York City and ports in between, and return to Burlington with fair trade goods, like cocoa beans that have been delivered by sailing vessel to Brooklyn from the Caribbean.

Mill Restoration & Asset Mapping

Symbiotic relationships, e.g. pigs eat organic waste and turn it into manure; mills are located near farms; and towns organically spring up near waterways for power and transportation, ...are still valid, and will be more so as we prepare for a powered down future.

Look for streams in your watershed called "Mill Creek," and streets in your town called, "Mill Road." In doing so you might find a mill converted to another use. In Clinton, NJ one mill is an art center and the other is operating as an exhibit. In Thompson PA the old grain mill is operational but abandoned. Many mills are currently used as educational tools by historical societies or operated as restaurants and shops rather than for the purposes for which they were built.

We would do well to identify locations where mills can be built or rebuilt in order to re-skill woodworkers, millwrights, and inform farmers about the advantages of water power for the future. I found at least 15 Mill Creeks in my watershed! We can conduct an inventory, and create a database of mills that are working and that can be rehabilitated. We also need a Bioregional Traditional Knowledge Database that will gather and protect historical knowledge and promote innovative practices based on traditional skills.

The Mid-Atlantic Transition Hub (MATH) of Transition US, will support these efforts in the fall of 2013 by bringing together builders, millwrights, woodworkers, crafts persons, and historical societies to participate in a *Powered Down Waterways Reskilling Festival*. Jim Kricker, preeminent restorer of traditional waterwheels, windmills and sailing vessels, will anchor a two-day *Reskilling Festival* featuring demonstrations, talks, and hands-on instruction. Jim's website <http://www.rondoutwoodworking.com/> is a valuable resource for locating working and restored mills.

The International Traditional Knowledge Institute gathers and protects historical knowledge, promotes and certifies innovative practices based on the modern re-proposal of tradition. Using traditional knowledge does not mean direct reapplication of techniques from the past, but rather seeks to understand the logic of past models of knowledge. It is a dynamic system able to incorporate innovation subjected to the test of the long term and thus achieves local and environmental sustainability.

Lewis Mumford wrote in 1970: "The great feat of medieval technics was that it was able to promote and absorb many important changes without losing the immense carryover of inventions and skill from earlier cultures. In this lies one of its vital points of superiority over the modern mode of monotecnics, which boast of effacing, as fast and as far as possible, the technical achievements of earlier periods."

There are schools and apprentice shops for learning large-scale woodworking skills that are needed for low-tech water-driven mills, and wind-driven vessels that will be part of the

continuum that supersedes the "blip" of petroleum powered short term thinking and consumption.

There are websites: The following are some links to the resources, skills, and techniques that are needed to Transition our Bioregion to one that is carbon constrained yet resilient, abundant, and equitable. Let the following list be a starting point – an opportunity to contribute your own favorite sites, books, and especially humans with these skills:

- WoodenBoat magazine can be a resource for wooden boat building apprenticeships, <http://www.woodenboat.com/>
- The Museum of Old Techniques <http://www.mot.be/w/1/index.php/MuseumEn/Museum>
- Low Tech Magazine <http://www.lowtechmagazine.com/> [How to make everything ourselves: open modular hardware](#) / [The museum of old techniques](#) / [Online knotting reference books](#) / [Primitive technology handbook](#) / [Compendium of Useful Information](#), <http://www.lowtechmagazine.com/2009/10/history-of-industrial-windmills.html>
- Museum of Early Trades and Crafts <http://metc.org/>
- Institute for Traditional Knowledge <http://www.intk.org/>
- Appropedia [http://www.appropedia.org/Welcome to Appropedia](http://www.appropedia.org/Welcome_to_Appropedia)
- The Whole Earth Catalog (ask your parents or dig it out from under the other stuff on your bookshelf), or <http://www.wholeearth.com/index.php>
- Ropes, Knots, and Hitches http://www.netknots.com/rope_knots
- Maritime Museums, <http://maritimemuseums.net/>
- One windmill source <http://www.windmills.net/>
- A mill source, Mills restored by Rondout Woodworking <http://www.rondoutwoodworking.com/Clients.html>
- HARVEST <http://www.andrewwillner.com/2013/04/harvest/> The Harbor and River Vessel Transport Company

