

**LOCALLY  
SOURCED  
MATERIALS  
IN THE  
CERAMIC  
PROCESS**

A field guide to  
*Hand Dug CT*

**artspace** 



Stephen Rodriguez  
*Carved Earthenware Bowl*, 1998  
3 1/2" x 3"

made from 100% Maine White earthenware from edge of Bagaduce River in the Penobscot area, pit-fired in Northford, CT

Jeff Kalin

*replica Middle Woodland Jar*, typical of the Northeast,  
2017

12" x 9"

made from a mix of 100% native clays dug from multiple locations in the northeast



Diane Cowen and Collaborator  
*Wheel Thrown Bowl*, early 1980's

made with 100% Sheffield red earthenware from southwestern Massachusetts

**E**very potter hopes to find a local clay that they can mix with their favorite clay body. Even better, every potter dreams of digging local clay and finding that it is perfect on its own for making pots. The clay of Mashiko Japan, for instance, just took a little blunging and screening to produce a perfectly good high fire stoneware body. Many clays in Japan, Korea, and the UK are the same. They did not take much alteration to produce a useable body.

This field guide to the group exhibition, *Hand Dug CT*, talks about which bodies are available where in the U.S. It accompanies a participatory map of Connecticut, which

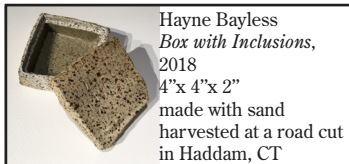
invites visitors to mark location(s) where they have found hand dug clay.

Today, with industry dominating most of the extant mine sites, most clay deposits are cut off to local potters; however, there are local high-fire bodies available North Carolina and other places. The one area most open to modern potters is earthenware found in almost every state, including small pockets in Connecticut, and where small quantities may be obtained without offending local environmental statutes.

The purpose of this guide, however, is not the unearthing of 100% unrefined Connecticut clay. Rather, it describes how potters working today have found other creative ways to experiment with a variety of naturally sourced materials, for the clay body, for glaze composition, as surface decoration, and as a primary fuel.

## IN THE CLAY OR SCULPTURE BODY ITSELF...

**Local Sand** - Sand is often added to a clay body to increase porosity or make it more suitable for heavy pots or sculpture. The quality of the sand really matters in the finished look and result.



**Local Oxides** - Locally made oxides, whether gathered iron oxide, copper oxide, or other sources really can make a difference though I'd say very few potters take the time to do this work.



Marcy LaBella  
*The River Runs Through*, 2018  
made with hand harvested clay slip from the  
CT River in Middletown

**Local Wood Ash** - A potter might experiment with very small amounts of wood ash added to the clay body to make the body more vitreous. Such an action generally is not desired at all, except with the highest temperature clay bodies, such as porcelain or fireclay, but I can imagine instances where this would be desirable, especially with sculpture.

## IN THE GLAZE OF A POT OR SCULPTURE...

### **Local Clays in the Glaze Recipe:**

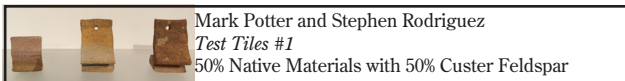
All glazes contain some amounts of clay, and here local clays can make the most visible impact for a modern potter, since local clays generally have lower melting temperatures, and are well suited for glaze formulation as a percentage of the total ingredients. In some instances these percentages can approach 100%. Generally a good glaze can be made by mixing some form of clay with wood ash. This percentage can be 20-80 or 80-20. It depends on the fluxing power of the ash and the melting temperature of the clay.

### **Local Wood Ash within a Glaze Recipe:**

Glazes made with wood ash are limitless in number but generally fall into a broad category known as Ash Glazes. They tend to be runny, very seductive and beautiful. That being said wood ash can be used in small quantities to make another glaze flux better and give it character.

### **Local Oxides, Sand or other Materials in the Glaze Recipe:**

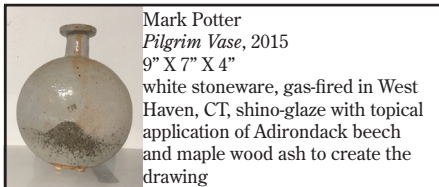
Any locally found material such as feldspar, bentonite, magnetite, etc. the list of minerals is as huge as a geology textbook and most of them can figure in some way in a glaze formulation. It's just chemistry after that.



### **ON THE GLAZE SURFACE...**

#### **Local Wood Ash dusted on the Glaze Surface:**

Wood Ash has a transformative effect on the surface of a glazed pot, and particularly feldspathic glazes or Shino glazes, which are quite stiff and don't tend to run off when



subjected to the heavy fluxing caused by local additions of ash. The character of one person's

wood ash, gathered from their fireplace or wood-stove will depend entirely on what fuels have been burned there. The character is surprisingly different and produces very different colors and effects when sprinkled on Shino glazes.

### **Local Wood Ash Deposited on the Glaze Surface from the Firing itself:**

In a wood-firing the ash from the fuel to heat the kiln is allowed to circulate amongst the pots. This is a huge use of a very local material and is probably the area where the most tonnage of local material is used in pottery today. The pounds of clay used in the pots might be industrial in origin, but almost every wood fire uses locally obtained firewood. There is a huge tradition of wood fire in the US, and I'm estimating there are thousands not hundreds of wood kilns in the US today. This fact should not be forgotten when putting the show together.

### **Local Oxides, or Sand or Clay on the Glaze Surface as Decoration:**

Here locally mined materials can have a huge effect even if the quantity obtained was small.

Mark Potter  
*Carved Askus, thrown,  
altered and carved  
form, 2009*  
wood ash application



### **LOCAL MATERIALS AS FUEL...**

Here we must again call attention to the fact that local materials, whether waste fuel oil, or wood, or for that matter

grass or sticks in the case of pit firing, all can be used to produce pottery, and are used, and have a huge affect on the look of the final outcome.



## LOCAL MATERIALS FOR KILN FURNITURE OR CONSTRUCTION...

The use of local materials must not be neglected when discussing kiln construction, particularly wood kiln construction. Cast-able kiln refractories are often made with huge amounts of sand, lime or other materials that are obtained locally. Even wood is used here, as the sawdust used to produce a cast-able refractory (that burns out in the firing to produce insulating voids in the refractory volume) is locally sourced. Many potters today invest in industrially available materials when spending on a kiln, but the costs of kiln construction are so high that sourcing local materials can save a lot.💰

Field Guide Text by Mark Potter  
Graphic Design by Olivia Irons  
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Artists: Hayne Bayless, Diane Cowen, Joe and Marie  
Cowen, Jeff Kalin, Marcy LaBella, Kiara Matos, Ryan  
Paxton, and Mark Potter, and Stephen Rodriguez