



# The Manabigama

by John Thies

**24 cubic feet  
of space,  
half a cord of wood,  
one human being.**

A view inside the firing chamber of the John Thies' Manabigama kiln, which was designed with education in mind.

For more than thirty years now, I have been building, firing and maintaining various large wood kilns. Almost all of them have been a design taken directly from the chamber kilns used historically around the world. My present kiln is fired seven times a year for my personal work and also for group workshops. The kiln is a 300-cubic-foot crossdraft, with three chambers in the traditional noborigama style. Two of the chambers are used for glazework and one is used for salt glazing.

I started using this kiln nine years ago for teaching group workshop firings. I schedule three a year, which is all I can manage given the labor and time involved. Each year, the groups enjoy the experi-

ence and the work that comes from it, but many ask for additional space in my kiln at other times during the year, which is not possible given my production schedule.

With new ideas in mind, I set out to build a very versatile and efficient wood-firing kiln that could be used by students who had interest in a complete hands-on experience, from the preparation, loading, firing and unloading to the final clean-up phase. I didn't want to interfere with the successful larger firings, in which students can get a large volume of wood-fired pots without the in-depth hands-on experience. The new kiln would allow me to cut down on the extensive labor, fuel and overhead costs of my larger kiln.



John Thies stokes the 24-cubic-foot Manabigama from the front.



This photo shows a side view of the Manabigama during the cooling phase.

I named the new kiln “Manabigama” at the suggestion of my friend Phil Berneburg, former technical editor for CM. In Japanese, *mana* means educational or learning, *bi* means a thing of beauty, and *gama* means kiln. The Manabigama is a traditional design with a few simple modifications. I see it as a cross between an anagama and a groundhog-style kiln. Basically, it is a crossdraft tube built into the side of a hill.

The overall interior dimensions are 24 inches in width, 7 feet in depth, 40 inches in height. Its firebox is in the front, incorporated into the inside with a grate system, and extra air intakes are built into the front and sides. This is done to provide more secondary air intake to help burn green or wet fuel. The firebox is plenty adequate being 2 feet wide, 2 feet deep and 30 inches high from the floor to ware level. The chimney has inside dimensions of 9 inches deep by 18 inches wide and is 12 feet high. The shape is a long rectangle with two straight, 18-inch-tall side walls and a catenary arch built on top. This creates ample headroom for ease of loading, as well as extra height for stacking and tall pieces.

There is approximately 24 cubic feet of ware space, more than enough for teaching purposes. The kiln door is in front, only halfway down, and is bricked up including the stoke hole. It can be loaded in two to three hours, fires evenly to Cone 10–12 in eight hours tops, or if you choose, you can fire two to three days depending on how much ash buildup you like. The consumption of fuel is also minimal—less than half a cord of wood.

All in all, the Manabigama is a very simple design to build. It is capable of yielding wonderful ash-glazed pieces with a minimum of labor, fuel and overhead costs. And it is a fantastic wood-fired kiln for teaching without the tremendous strain of a large three-chambered kiln.

*Thanks to Phil Berneburg, who was instrumental in inspiring me to build this kiln.*

*For further information on Monocacy Pottery, see [www.monocacypottery.com](http://www.monocacypottery.com), or e-mail [monocacypottery@adelphia.net](mailto:monocacypottery@adelphia.net).*

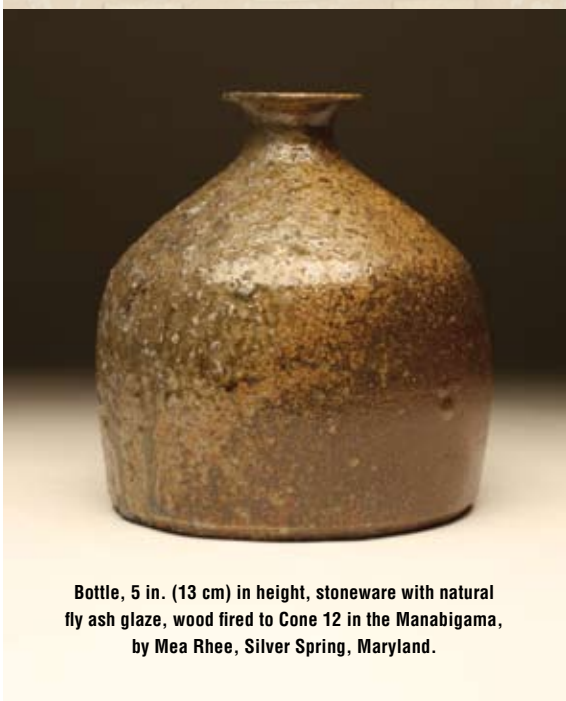
## THOUGHTS FROM A MANABIGAMA GUINEA PIG

by Mea Rhee

I had attended kiln workshops for several years, and felt I was ready for more. I was looking for a wood kiln that I could try to fire by myself when John called and said, "Come see my new kiln. I think you're going to like it." Of course I volunteered to test fire it.

I had help and John was always nearby, but for the first time I was able to manage the entire process, which was my goal for this firing. The kiln's design is just right for a student at my level. All of its processes are small, straightforward and flexible. I love that there is no barrier between the firebox and the pots, so the pots receive as much effect from the fire as possible. This is my goal aesthetically too.

I am already busy designing pots for my next kiln load. I plan to gain as much understanding as I can each time I fire it, and enjoy every minute of it. This kiln is going to carry me to a point in the future when I'm ready to build my own. And when I get there, I'll probably build something very similar.



Bottle, 5 in. (13 cm) in height, stoneware with natural fly ash glaze, wood fired to Cone 12 in the Manabigama, by Mea Rhee, Silver Spring, Maryland.

