

# HOG RIVER JOURNAL

## Re: Collections

### The Kent Iron Furnace

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Museum artifacts come in all sizes. The Kent Iron Furnace, on the grounds of the Sloane-Stanley Museum in Kent, is, at 30 feet tall, an especially large one. The blast furnace operated for nearly 70 years, from 1825 to 1892, and was a major player in the nationally significant iron industry in the upper Housatonic Valley in the 19th century. Today the granite “tower” on the east bank of the Housatonic River appears to be a piece of sculpture, and its verdant setting does not hint at its smoky past.

Visitors to the furnace learn the story of local iron production through an educational diorama in the adjacent museum and by exploring the Kent Iron Company interpretive trail developed by the Connecticut Antique Machinery Association, which points out other, less obvious, evidence of the once prosperous business that operated in this location. [1]

Most visitors who enjoy the Housatonic Valley for its scenic landscape and its green serenity are probably not aware that a century and half ago the area was considerably less bucolic. The iron industry took root in this region in the early 18th century due to the area’s wealth of high-grade iron ore. The area also met other requirements for the production of cast iron: fuel, which was obtained in the valley from the abundant forests transformed into charcoal; flux, available in the form of limestone or marble, both of which were quarried in the vicinity; and a source of moving water to power “air blast machines” to blow air into the furnace.

It took approximately 138 bushels of charcoal, 2,612 pounds of ore, and 432 pounds of limestone flux to make one ton of pig iron. Unless the water source was frozen or the water level too low in the summer, iron works were in operation



*Engraving of the Kent Iron company, c. 1800's.  
Connecticut Commission on Culture & Tourism*

24 hours a day, 7 days a week. In 1870 it was reported in the Litchfield Enquirer that the Kent furnace produced 50 tons of pig iron in a week. The iron's grade made it especially appropriate for the production of train car wheels.

**Remains of the Kent Iron Company today.**  
**Connecticut Commission on Culture & Tourism**

More than 40 iron furnaces operated in the upper Housatonic Valley of Connecticut, New York, and Massachusetts between 1735 and 1923. As ore supplies dwindled and technology grew outdated, the area's iron-making industry collapsed in the early 20th century. Buildings were torn down or left to decay, and metal was salvaged for reuse, especially during World War II, when there was a tremendous demand for scrap iron. Most traces of this major industrial activity have been obliterated from the region; in Connecticut only the ruins of four furnaces survive. The grounds of the Sloane-Stanley Museum retain the most complete evidence of an iron-production complex. Because of the fragile nature of this heritage resource, the site has been designated a State Archaeological Preserve. [2]



*Remains of the Kent Iron Company today.*  
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The most visible relict, the stone blast furnace, was originally encased in a tall frame building constructed against a steep bank, which permitted raw materials to be easily loaded into the top of the furnace; the sand casting floor was at the foot of the furnace. As the ore was heated, impurities separated from the molten iron and floated to the surface. Alert visitors to the site will notice pieces of this glassy material, called slag, littering the ground around the furnace. Visitors are asked to leave the slag in place so future visitors can enjoy spotting it for themselves and to maintain the integrity of the site.

The channel of the mill race can still be seen near the furnace, and the ruins of the dam that diverted water from the Housatonic River are visible if the water level is low. To maximize the economic benefit, the water was also used to power a saw mill and a grist mill. Careful perusal of the landscape also reveals the foundations of the company store and the waterwheel, cellar holes for other buildings including on-site housing, and the track bed used for the railroad that brought in raw materials.

The site's most unusual artifact is a huge, odd-shaped lump of iron. This was the ironmaster's worst fear. If the internal

temperature of the furnace dropped too low, the iron in the crucible solidified prematurely. The resulting mass, nicknamed a “salamander,” had to be extracted from the furnace’s crucible. Salamanders wasted valuable materials and, more crucially, time. The furnace had to be allowed to cool before workers could take it apart and remove the mass; then the workers had to rebuild the furnace and heat it up again. The salamander on the ground in Kent shows the holes from the air blast nozzles.

The Sloane-Stanley Museum is located on Route 7 one mile north of the intersection with Route 341. The museum is open through October, Wednesday-Sunday, 10 a.m. to 4 p.m. Admission is free, but donations are welcome. The adjacent Connecticut Antique Machinery Association and Connecticut Mining Museum are open the same hours; although admission is free, a donation is requested.

Karin Peterson is the museum director for the Connecticut Commission on Culture & Tourism. Her responsibilities include oversight of Old New-Gate Prison & Copper Mine (which she wrote about in the Spring 2006 HRJ), the Sloane-Stanley Museum, the Prudence Crandall Museum in Canterbury, and the Henry Whitfield State Museum in Guilford.

[1] The Kent Iron Company Interpretive Trail Guide . Produced by the Connecticut Antique Machinery Association, Inc. with a grant provided by the Connecticut Commission on Culture & Tourism. Copies may be obtained from any of the museums named above.

[2] State Archaeological Preserves were established by the Connecticut Legislature as a means of protecting significant archaeological sites. The Connecticut Commission on Culture & Tourism is empowered to coordinate this program with the Office of State Archaeology. To date 20 sites have received this special designation.