

ancient bloomery - a place where iron
ore was smelted, where a bloom was
put in. They cut thru the layer of slag & charcoal
which means this is the 15" top soil accumulation
indicating an age of 2400 yrs. The bloom was
one of pine: iron marks in 2 or 3 during
the master used to come, or 3 or 4 open, for
all ore to buy top grade bloom. He had
Ferrara, a Venetian swordsmith actually
lived & worked for a time at the forge
of L. Kallina. A claymore, authentic
as a genuine Ferrara with a map showing
the location of his smithy, damascened on
blade, came to light some yrs ago.
The iron ore, usually bog iron, was brought
in by horseback to be smelted close to
where trees grew to provide charcoal.
16 cent ore $\rightarrow$ 2 cent iron although, in the
the ratio shd have been close to 6:1. For
bloomery $\rightarrow$ c 3 tons/a & consumed on
100 acres of standing trees in doing so. A
large birch was considered to be the best.
There was washed to remove the hematite
heads of the water & finally, poured
up in sm. fragments. Alternate layers of
burning charcoal & powdered iron ore were
built up in a small hollow dug into the
ground until a heaped mound was visible.
The top sealing layer of charcoal was kept
saturated in water to prevent it burning.
A ring of hearth stones surrounded the mound
in 2 gaps called tuyeres at 2% & 4%
in the circle. Through 1 + there
incandescent charcoal were stirred with
iron bars bringing them into close contact
with each other. Particles of iron united & formed
a lump. At the bottom of the pit slag collected
& solidified in the cooler air at the surface.
It was either expelled or pushed back
for further smelting. Sometimes more slag
cinders from previous smeltings were added.
The temp of the machine never rose much above
1200°C as the true melting point of iron
is about 1500°C. The ore was never fully melted.
The low temp avoided the fusion of damaging
impurities such as phosphorus & sulphur.
As the iron was extracted from the pit
it was sprinkled with water & beaten with
hammers to facilitate the removal of any
remaining slag. Each day or bloom
measured 6" x 6" x 5" weighed c 1 1/2 lb.

Smelter, we split the bloom open with
an axe forming it into a shape
In this way he could inspect the
quality of the wrought iron just produced.

28th February - 10.30am

Bonaire Church Hall

Birds To Study:- CRESTED TIT
SENIORS PLEASE BRING YOUR COLLECTION
OF BONES FROM PELLETS

Red Sky at Night - Town Beautification. Michael Joseph 1984 H.S. 95