#### ABOUT THE TRAIL

Eel trap

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A self-guided trail exploring the iron industry of the Knepp Estate and the effect of wilding former farmland on wildlife, vegetation and livestock

Designed and Printed by Treetop Design and Print. Tel: 01293 863131

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#### HOW TO FIND US

Start/finish point: Shipley Village car park, School Lane RH13 8PL. NGR TQ 1439 2193 Regretfully, there is no public transport.

Areas of Natural Beauty/South Downs National

#### ACCESS & FACILITIES

Walking grade: Easy

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Sketch of a

Wealden furnace

**Distance:** Round trip 4.23 miles (6.80km) (approx. 2 hours) with option of 5.43 miles (8.74km) if Countryman Inn, Shipley taken in or 6.58 miles (10.59km) if Crown Inn, Dial post visited.

No stiles; instead kissing or farm gates, generally level terrain on public rights of way with short stages on minor roads.

**Facilities:** Two pubs available by extending walk, camp shop and toilets open Easter to 31 October by extending walk.

#### Route directions are in black italics text

The trail runs within the Knepp Estate joining the route used to carry iron 'sows' - large cast iron 'bars', 2-3m long and weighing half a tonne or more - from Knepp furnace to Shipley forge for refining. The Knepp Estate introduced 'wilding' of its 3500 acres in 2000 allowing cattle, pigs and deer to roam free as well as attracting a multitude of wildlife. Cattle while generally timid, please do not approach these animals during calving season.

Keep dogs on a lead when close to cattle.

#### FIND OUT MORE:

To learn more about the heritage of the wider district and discover additional trails, please visit www.horshammuseum.org

Trail developed by Dr Tim Smith, Hon Sec Wealden Iron Research Group For Wealden iron www.wealdeniron.org.uk For Knepp Wilding www.knepp.co.uk Photographs copyright Tim Smith





Information is correct at time of going to press.

# Horsham Heritage Trails An Iron trail through Knepp

**Exploring Horsham District's Heritage** 

## An iron trail through Knepp

Did you know the Weald was the centre of the armaments industry for nearly 200 years supplying cannon and shot to the Government and merchant ships?

The traditional Sussex rhyme: 'Master Huggett and his man John, They did cast the first can-non' dates from around 1543 in the reign of Henry VIIII.

The Weald is an area of clay and sandstone in southern England bounded by the North and South Downs and running east-west for 66 miles (110km) roughly between Rye and Chichester. Would you believe it is a former industrial landscape that had 119 iron furnaces and 109 forges working for over 300 years? Within a 10 mile (16km) radius of this trail, there were nine furnaces making iron and seven forges to refine the iron.

Iron ore, shelly limestone and an abundance of timber to make charcoal provided the raw materials, while streams and rivers created the power to drive the furnaces.

Iron was first produced in Britain some 800 years before the birth of Christ, in the time known as the 'Iron Age'. Then, it was more valuable than gold or silver and harder to extract from its rocky ores than copper and tin, these metals giving rise to the earlier Bronze Age. The legend of Arthur drawing his sword from a rock reflects the mystical awe attributed to the early blacksmiths.

Knives to butcher animals, pins and broches to fasten clothing, nails to join timber and horse and ox shoes were the earliest uses if iron. Soon weapons such as arrow heads, spear heads and swords began to be made, and armour for knights.

Kipling, a resident of East Sussex, captured the importance of iron in war in the first verse of his poem, 'Cold Iron':

Gold is for the mistress – silver for the maid – Copper for the craftsman, cunning at his trade, Good! said the Baron, sitting in his hall, But Iron - cold iron - is master of them all. As the demand for iron increased furnaces grew in size and water power started to be used to drive the bellows and hammers to shape the iron.

These furnaces were called blast furnace – so named because bellows, driven by a water wheel, blew a continuous blast of air into the furnace near its base. In 1490, the very first blast furnace was built in Britain, at Buxted in East Sussex. Iron was made on the Weald for the next 323 years, the final furnace closing in 1813.

Some iron was cast direct from the furnace into moulds to make useful items such as fire backs, pots, salt pans and even grave slabs. Round shot for cannon, previously labouredly chipped from stone, was in great demand during times of war. From the late 1500s, some furnaces also cast cannon – a very demanding task - flowing metal direct from the furnace into a mould set vertically in a pit before the furnace.

To make tools, horse and ox shoes, nails and weapons, the iron had to be refined in forges by heating and hammering the furnace iron – the beating of the water powered hammers gave rise to the name 'hammer pond'. At the blast furnace, iron was cast into large 'bars' 2-3 metres long weighing half a tonne or more. These were called 'sows', as workers thought they looked like mother pigs ready to feed their piglets. These sows were carried to the forge by ox cart to be refined. It is the route along which these sows were moved, from Knepp furnace to Shipley forge, that we will follow on this trail, looking for evidence on the way. The route takes us through the Knepp estate, a former farming landscape where nature has been allowed to dominate the land since 2000 encouraging wild life and providing a more natural environment for livestock which include long horned cattle, Exmore ponies, Tamworth pigs and red and fallow deer.

Exploring Horsham District's Heritage



'The Lenard fireback cast 1636 shows the tools of the ironmasters' trade and furnace (bottom left)

### 1 Start and finish at Shipley Village car park, School Lane RH13 8PL NGR TQ 1439 2193.

Leaving the car park, turn right onto School Lane then left into Red Lane and right after a few metres onto a footpath through a field. Continue through a small wood and cross Pound Lane (BEWARE TRAFFIC) and enter Knepp Estate. You may find long horned cattle in the field but they are docile. Cross the field and follows the tarmac drive for a while and then bear right at the finger post across the grass. You may see red and fallow deer here.

2) Look to your left to see the present Knepp Castle built in the early 1800s and designed by John Nash (1752 - 1835), the architect of the Brighton Pavilion. The grounds were laid out by landscape gardener Humphry Repton (1752 - 1818), celebrated for his 'red books' proposing his designs to estate owners. They no longer survive as they were dug up during WWII to grow food. *Please observe the privacy of the residents by keeping to the footpath which re-joins the drive at South Lodge.* 

3 Continue along the drive to the furnace pond. Once the largest expanse of water in southern England, this provided water to power the furnace bellows to blast air into the furnace. A notice at the far end of the bay (dam) illustrates a sectioned furnace with a degree of artistic licence. Below the bay is an ice house, later housing a pump, and an eel trap. Furnace ponds often doubled as fish ponds. The pond was drained in 2019 to dredge silt, 15m thick in places.

<sup>(4)</sup> Continue down the drive to Floodgate Farm. This is close to where the furnace stood fed by a channel from the pond. Sadly, nothing can now be seen of the furnace. The furnace dates from 1568 and was operated by the Caryll ironmasters until 1604 and then by a partnership until 1622. *Retrace your steps along the drive.* 

<sup>5</sup> The much earlier Norman Knepp Castle can be seen to the left. It was built in the early 1100s by William de Braose as a stronghold to support the Norman invasion of 1066. By early 1200 it was used as a hunting lodge. King John of Magna Carta fame and later Henry III, Edward II and Richard II all stayed here when hunting deer and wild boar. Parliamentary troops destroyed it during the English Civil War (1642 - 51) and later the rubble helped build the B2135 Steyning road. A permissive path allows you to visit the ruin if you wish to.

<sup>6</sup> Retrace your steps over the pond bay and take the footpath on the left immediately after the barn conversion. Follow the path to the series of footbridges over the meanders of the Adur. If you wish, just before descending to the first bridge, you may climb to the tree platform to the right to view the restored wetlands drained when the river was straightened to make it navigable in 1807. Land 'improvements' followed with the introduction of Pearson's draining plough and, in 1851, the mole winch driven plough.

7) Before crossing the first bridge, descend off the path on the right to the river bank and look back towards the path. You will see a band of dark glassy material in the bank. This is furnace slag brought there to provide a causeway or bridge to support the carts carrying the heavy iron sows. You may find some in the river bed too. Slag is the waste material from making iron, it flows molten from the furnace and hardens like stone providing an excellent hard-core for uses such as this.

<sup>8</sup> Cross the bridges and through the gate. Look at the notice board here explaining the restoration work. Follow the footpath to the right – viewed from when you passed through the gate - and then left in a few metres at the finger post, to cross the field, aiming just left of the large oak tree. Pass through the gate, onto Swallows Lane (BEWARE TRAFFIC). Turn right.

9 At the road junction take the farm track to your left for <sup>1/3</sup> mile. Pass Hammer Farm and go down the short hill through the gate beside the cattle grid to the pond.



<sup>14</sup> Cross the field and pass through the

10 The forge Hammer pond was restored to water in the 1990s. The track passes alongside the original bay - the bank with a deer fence on it on the left.

1) The forge was situated on the left, below the far end of the earlier bay. If you pass through the gap in the bay and turn right, you can find heavy lumps of forge slag below the bay.

If you wish to continue to Dial Post, where there is the Crown Inn, follow the optional additional route map. This also passes the Knepp campsite shop, open Easter to end of October. If not, retrace your steps to 9 and turn left onto Countryman Lane (BEWARE TRAFFIC).

12 After 280m, take the footpath to the right up a farm track. Alternatively, continue on the road for half a mile to the Countryman Inn.

13 To return directly to Shipley, follow the footpath, cross the Adur and continue towards the church.

gate into the churchyard. Shipley church was established by the Knights Templar - the Crusader Knights - around 1140. The west porch dates from this time and the wooden south porch was added 200 years later The stone pillar is believed to have been a mooring post by the river. The building was restored in 1830. If you enter the church, view the monument to the Caryll family - ironmasters of Knepp in pride of place at the altar. This position reflects their wealth and importance resulting from operating Knepp furnace and Shipley forge. The tomb bears the date 1616 and shows life size effigies of Sir Thomas Caryll and his wife Lady Margaret lying side by side, the base depicts their three daughters facing their baby brother in a cradle.

Pass left of the church through the graveyard into Church Close road. Turn left at the junction with School Lane back to the car park.

Visit Horsham Museum to see some artifacts of the Wealden Iron Industry 9 Causeway, Horsham RH12 1HE Open 10am- 5pm Mon-Sat Admission FREE

