### <u>The Celtic Southern Origins of the Iron Age Cimbri of Jutland and Medieval</u> <u>Migration to England: Focus on the Y Chromosome Evidence Involving</u> <u>Haplogroups R-U152/S28 and R-DF27/S250</u>

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## **Three Hypotheses**

DNA testing has shown that Y chromosome haplogroup R-U152/S28 and subclades are relatively common in eastern England today. They are known as "Alpine – Celtic" or "Italo – Celtic" based on the distribution across Europe as a whole. In seeking a likely source to explain the presence of this group in England, the author found that the <u>Cimbri Tribe of what is today Jutland and nearby islands in Denmark</u> was a likely candidate. Although residing deep within "Germanic" territory (Scandinavia), there is considerable evidence that they began as a Central and Southern European Celtic tribe, and their descendants may have been among those who moved to England during the major Medieval migrations.

The following study, which <u>began in 2006</u>, will explore the historical, archaeological, linguistic and other data relating to the Cimbri. We will then take a "deep dive" into the DNA evidence, specifically relating to Y chromosome haplogroup R-U152/S28 and subclades. In 2023 this work was expanded to include haplogroup R-DF27/S250 and subclades, based on the findings of recent ancient DNA studies. This article is a work in progress, and will be updated as new data emerges.

There are three specific hypotheses, noted as A, B and C which will be explored in order to explain when, and from where, R-U152/S28 and subclades as well as R-DF27/S250 and subclades arrived on the shores of what is today England and the British Isles.

**<u>Hypothesis</u>** A: This first hypothesis will include a comprehensive overview of the Cimbri Tribe using largely historical, archaeological and ancient DNA sources. Here we will also explore the possibility that the patriline of <u>many to a majority</u> of the individuals in the British Isles who are members of haplogroups R-U152/S28 and subclades, or R-DF27/S250 and subclades, originated as Cimbri descendants who arrived as Danish Vikings in the 8<sup>th</sup> to  $11^{th}$  Centuries.

**<u>Hypothesis</u> B**: The second hypothesis investigates the possibility that the appearance of these haplogroups in England can best be explained by the Anglo-Saxon migration to Britain beginning in the 4<sup>th</sup> and 5<sup>th</sup> Centuries. Therefore, the proposal here is that <u>many to a majority</u> of those who are R-U152/S28 or R-DF27/S250 and subclades in the British Isles are attributable to the arrival of the Angles and Jutes (see Angles and Jutes; and Jutes <u>here</u>) from what is today Jutland, Denmark. Both hypothesis A and B have in common the proposition that each of these haplogroups and subclades could trace their paternal ancestry to Cimbri ancestors who originally came from Jutland and associated islands to the British Isles – it is largely the timing of the migration that differentiates the two.

**<u>Hypothesis C</u>**: The final proposal (see Belgae <u>here</u>) largely ignores the Cimbri and Jutland and focuses on the Belgae Tribe and descendants, as well as those of the Belgica and Celtica regions, and Iberian Regions, south of the British Isles and west of the Rhine River. The proposal is that between from the Iron Age to late Medieval times, they were the primary group who brought R-U152/S28, DF27/S250 and their subclades to the British Isles.

What all three hypotheses have in common is an assertion that the ancestors of the majority of those who are R-U152/S28 as well as R-DF27/S250, and whose Y chromosome male lineage is from the British Isles, are derived at some point from a Continental "La Tene" Celtic or Iberian source – it is really only the specifics that are in question.

## The Cimbri

The Cimbri and their allies almost brought the Roman Empire to its knees in the last century BC. Hence, the first goal is to assemble widely scattered facts to accurately record, and lift the veil on this tribe, one of Europe's most enigmatic people of the early historic era. As we shall see, problems in accomplishing this task are somewhat daunting. For example, there are inconsistencies in data sources, and highly conflicting viewpoints expressed by those interpreting the data. These difficulties can be addressed by a careful sifting of diverse material from the traditional fields of history, archaeology linguistics, osteology and isotope analysis. What is somewhat unique here, however, is a detailed focus on the data from the emerging field of ancient DNA research. This data source has only come to the fore since 2015, well after the first iterations of this "trilogy", and has already revolutionalized our understanding of the populating of the Europe.

<u>Origins of the Cimbri – German or Celt?</u>: Before delving into the topic in any depth it is essential to clear up one matter which seems to have created the largest swirl of controversy – were the Cimbri Germans, or were they Celts? Since they resided in the heart of the northern Germanic, southern Scandinavian region the answer should be obvious, however what seems apparent may only be an illusion.

During the events of 113 to 101 BC, where the Cimbri became a highly destructive force in the lands bordering on the Roman Empire, their tribal confederation included the Teutones and the Ambrones, and subsequently the Celtic Helvetii and other Celtic associates. The name Teutones is enigmatic, but most commonly assumed to imply "the people, tribe, or race" in Celtic languages (e.g., tuatha in Irish). Their other companions were the Ambrones, a Gallic tribe according to Festus. Amb- is a very common Celtic tribal and forename prefix. Markale (1976) wrote that the Cimbri, *were associated with the Helvetii, and more especially with the indisputably Celtic Tiguri* (p. 40). As will be seen later, these associations may link to an ancestry in common, recalled from two hundred years previous. Also, all the known Cimbri chiefs had Celtic names including, Boiorix (King of the Celtic Boii tribe of Italy and Bohemia), Gaesorix (King of the Gaesatae, Rhone Valley Celts from Gaul; often recorded as Celtic mercenary warriors), and Lugius (after the Celtic god Lugh). Hubert (1934) states, *All these names are Celtic, and they cannot be anything else* (Ch. IV, I). He provides much more information on this and other relevant matters using a balanced and clearly unbiased approach. However some authors take a different perspective. For example, Wells (1995) states, without any reference, that *the Cimbri, originally from Denmark, the Cimbric peninsula, are certainly not Celts, though their personal names too are transmitted through classical writers in a Celtic form* (p. 606).

The Gundestrup Cauldron, discovered in a peat bog in Cimbri territory, is a testament to Celtic life in every detail. It is without a doubt the single most impressive example of Celtic iconography from Iron Age Europe. Posidonius, an early chronicler of the Cimbri, who was 22 years old when they appeared on the world's stage in 113 BC, gives verbal descriptions consistent with the visual details on the Cauldron. The Cimbri also venerated cauldrons (e.g., at the time of Augustus calling a cauldron their most "precious possession"), which, along with the above, clearly indicate characteristic Celtic not Gemanic cultural traits.

Some of the Classical authorities who stated clearly that the Cimbri were Celts include Posidonius of Apamea, Florus, Appian (e.g., *those Celts who they call Cimbrians*), Diodorus Siculus, Dio Cassius, and Orosius. There are interpretive problems that have beset inquiries over the years. One problem is that in the earlier days the term "Germani" had yet to be coined and all north of the Alps were known simply as barbarians or Celts. Perhaps the best evidence is from Appian of Alexandria who wrote his "History of Rome: The Gallic Wars" about 130 AD. Here he discusses "Gauls", "Celts" and "Germans". Of the Cimbri he said they were *a most numerous and warlike hoarde of Celtic tribes* (Epit.2), whereas Ceasar *overcame the Germans under Ariovistus* (Epit.3), the king of the Germanic Suebi tribes.

Many 19<sup>th</sup> Century scholars addressed this "issue" of Cimbric origins. Ritson (1827) explored the writings of most of the Classical authors and concluded that, *the Teutons and Cimbri were nations of Germany, and without the slightest pretensions to a Celtic origin* (p. 260). Thierry (1828) wrote what is arguably one of the most comprehensive studies of the Gauls. He marshaled considerable evidence to assert in his introduction that, *The word Cimbri thus indicated one of the branches of the Gallic population, and this branch had colonies in Cisalpine Italy; but was already recognized before the existence of Gallic colonies in the Transapline region; the Gallic population of Italy was thus divided in two distinct branches, Galls and, Cimbri or Kinbri (translation by the author from text in French). Latham (1844), in a paper read at the Philological Socity, argued that the Cimbri known to Marius (who defeated them in 101 BC – see later) were not from Jutland at all but, <i>came from either Gaul or Switzerland, and that they were Kelts.* Furthermore they were, *an organized Keltic confederation coterminous with the Belgae, the Ligurians, and the Helvetians descended with its eastern divisions upon Noricum, and with its western ones upon Provence* (pp.clxix-clxx).

The difficulties inherent in adducing sufficient evidence to arrive at firm conclusions is reflected in the fact that in 1851 Latham added a "Note" to his previous work in a sense

recanting, *Hence, I modify the last propostion, and hesitate to commit myself to the doctrine, that the Cimbro-Teutons were Gauls at all; what they were, being a greater mystery than ever* (p.clxx). Smith, writing his "Dictionary of Greek and Roman Geography" in 1854 argues that they are Celtic, and for example their armor and customs as described in Classical sources were not Germanic. In 1877 Rawlinson wrote a very well researched monograph entitled, "On the Ethnography of the Cimbri" which was presented to the Anthropological Institute. He specifically acknowledged that there were two theories of origins – Germanic and Celtic. He outlines the essentials of each, and provides 6 lines of evidence (e.g., their manner of making war; the documented participation of their women in battle) that point strongly to the Cimbri being Celtic. He believes that some of the opinions in favor of a German origin come from prejudices of Germans who would rather believe that the famous Cimbri (who lived among Germanic people) were culturally and biologically German.

It appears that there is resistance shown by some modern writers to believing that there could be a large Celtic enclave among the Germanics. In atlases of the Celts not one chooses to put an "inconvenient" blotch of color on the Jutland Peninsula far removed from the Celtic homeland – yet have no difficulty in circumscribing a region in modern Turkey (Galatia) where three Celtic outlier tribes of the Iron Age are placed. An example is Konstam (2003) in his "Historical Atlas of the Celtic World". On page 26 he calls the Cimbri "a proto-Celtic culture" and in the rest of the book calls them "Germanic". On the map of migrations in the chapter "Celtic Origins" he shows an arrow from the proto -Celtic territory circa 1000 BC heading north to the tip of the Jutland Peninsula and labels this, "Slav – German Migrations". Some recent authors, via maps included with the text, appear to acknowledge the migration of Alpine peoples to Denmark in La Tene Celtic times (e.g., 500 BC). However they appear reticent to explain the northward pointing arrows. An example is the monumental work, "The Celtic World" edited by Green (1995) with an arrow (unexplained) from the La Tene Celtic territory to Northern Jutland (p. xxiv). A very interesting exception to the general reticence noted above is a map in the comprehensive (more than 100 authors) companion book (edited by Moscati et al) relating to the all – Europe exhibition entitled "The Celts", held in Venice in 1991. Here, under "The Era of the Oppida: Second-First Century B.C.", the map shows sites clustered across Europe from the Balkans in the east to the Bay of Biscay in the west, but with nothing north of mid Germany – except Gunderstrup and Dejbjerg in Northern Denmark, and Rynkeby on the Island of Fyn (Funnen) in Denmark (pp.420-421). Latham (1844) wrote, the supposed presence of Kelts in the Cimbric Chersonesus [Jutland] has complicated more than one question in ethnography (p. clix). It appears that the rationale is that the Cimbri were in such an isolated pocket, so it is best to simply ignore their Celtic origins - but ironically chapters on their migrations appear in most books pertaining to the Celts.

If there is one single source that could be considered to be the most outstanding in terms of the historical period as it relates to the Celts it would have to be Henri Hubert's meticulously referenced, "The Greatness and Decline of the Celts" (1934). One chapter focuses on the relationship between the Celts and Germanics and the blurring of distinctions between the two. He provides carefully reasoned arguments that even though

many Belgae tribes called themselves Germans, this was not correct – they were Gauls who often came from east of the Rhine. He also affords sufficient evidence for readers to conclude on their own whether the weight of evidence best supports the Celtic or Germanic hypothesis in relation to the Cimbri. Furthermore, he assembles a great deal of information on each Celtic tribe – which is something seldom seen in other works. Other authors add further confirmation, such as Starcke (1968) who noted that in the ancient home of the Cimbri, Himmerland, there is *clear proof of bull-worship, which is not known to have been practiced by other Teutonic tribes* (p. 56). This is depicted in graphic detail on the Gundestrup Cauldron (discovered in a bog in Himmerland) which provides evidence of bull sacrifice and cult activity (more on this later). This viewpoint is echoed by the Danish Ministy of Foreign Affairs publication (1981) in the evidence they have assembled.

Herm (1976) goes to some length in an attempt to clear up the outstanding questions. He interprets Strabo's statements (see later for details) in light of the meaning of the word "Germani" at the time it was used. The useage did not mean what it does today. Strabo stated, *Thus I imagine that the Romans who lived in Gaul called them 'Germani' because they want to indicate that they were the 'authentic', the real Celts. Germani means in their language 'genuine' in the sense of 'original'.* Herm concludes, the Cimbri were *the very heart of that family. They were the most Celtic of the Celts* (p. 67).

Perhaps the last word should be given to an eminent Classical scholar and a renowned modern Celtic scholar. First, Posidonius of Apamea (135 – 51 BC) who, about a generation after the Cimbri defeat in 101 BC, interviewed Celtic leaders at Massilia (Marselles) and visited battle sites and concluded that the Cimbri, Teutones, and Ambrones were from the German north but were related to the Helvetii Celts of Switzerland. Peter Berresford Ellis, in "The Celtic Empire" (1990), reviewed the available evidence and came to the following conclusion. *The contemporary evidence, however, seems clear enough. The Cimbri and the Teutones spoke Celtic, had Celtic names and used Celtic weapons. The very names of the two tribes were Celtic. They were, then, Celts. And, eventually, they formed alliances with other Celtic tribes, creating a large Celtic army which, once more, nearly brought about the downfall of Rome (p.121).* 

Hence it is concluded that the original or early Cimbri were both culturally (at least at one time) and genetically a Celtic isolate within a sea of Germanic and Scandinavian people. Hence they were more similar genetically to the La Tene Celts of Switzerland and tribes such as the Helvetii. They may have born scant resemblance to the Germanic Danes who, circa 500 AD, apparently absorbed the Jutland Peninsula into their territory with the result being that the Cimbri lost their ethnic – tribal identity and became an apparently indistinguishable part of the Danish fabric (see below for a more detailed analysis).

**The Language of the Cimbri**: That the Cimbri spoke a Celtic language is attested to by the reports of Pliny the Elder (circa 77 AD) who stated that Philemon wrote that, *the Cimbris word Morimarusa means the Dead Sea, as far as the Promentory of Rubeas, beyond which they name it the Cronian Sea ("Naturalis Historiae", Libri IV, xiii, line* 

95). The word "Morimarusa", referring to the Baltic Sea, is composed of 'muir' and 'marbh' in Q-Celt Irish; 'mor' and 'maro' / 'marw' in P-Celt languages such as Breton and Welsh. Importantly, there is no Germanic word in any dialect that would even approximate these root elements (Wikipedia entry for "Cimbri"). Furthermore, Thierry (1828) notes that 'crwnn' means coagulated or frozen, and in Gallic, cronn has the same meaning; Murchroinn equals 'icy sea'. It seems that there is no argument, these are Celtic words – apparently Gaulish Celt. There is even a hint here as to how long the Cimbri may have resided in the Baltic region. Latham, in a paper read at the Philological Society, 1844, stated that, Of Sallust and Cicero, the language points to Gall (p.clvi) meaning that the consensus of these scholars was that the Cimbrian language was similar to that spoken by the Celts in Gaul. In the Wikipedia entry for "Cimbri" the author says, it is at any rate more probable that the North Sea and the Baltic would be considered 'dead' and 'frozen' by Central Europeans than by Scandinavians living by and from the This suggests that the Cimbri had a more recent rather than deep history of sea. occupation in the region when Philemon wrote his geography (about 325 BC as we will see later). Other evidence as to the language spoken by the Cimbri can be seen in the actions of the Roman intelligence service of Marius, run by Sertorius, which sent spies who spoke Gaulish Celtic into the Cimbri camp in 101 BC. They were able to understand the language of the Cimbri so they could report back details of importance to their masters (Hubert, 1934).

The meaning of the name Cimbri: According to some sources, the name derives from kimme (rim) and thus "people of the coast". As will be described later, some consider that Cimbri = Cimmeri (the Cimmerians being an ancient people who "disappeared" from Western Asia about 800 BC). There is a 600 or so year gap between the historical documentation relating to each, time enough for dialect changes although linguists view as likely Cimbri changing to Cimmeri rather than the other way around via Grimm's law with mb morphing to mm (Markale, 1976). Furthermore, there are different variants of Celtic, other than Q-Celt (e.g., Irish) and P-Celt (e.g., Welsh and Gaulish). Those knowledgeable about the language(s) such as reported in the Encyclopedia Britannica 1911 state that what is found as an mm sound in Welsh would be mb in other forms of Celtic so that in Welsh "cymmer" is equivalent to "combor" in Old Irish (the latter on a time scale being an earlier version of Celtic) and means "confluence of brooks". Some sources note that the Welsh term for themselves is Cymri that in Brythonic (P-Celt) means, "companions" or "tribesmen". One expert offers an opinion that Cimbri might relate to Kom-roghes, which in General Celtic signifies, "the fellow countrypeople" (Gavin-Hauser, personal communication, 2007). This would perhaps relate to their status as kin to the Teutones who resided near them, were their allies in the famous campaign of 113 to 101 BC, and whose name means "the people" in all Celtic languages.

However, to the Germans the Cimbri were "raiders" or "plunderers". Perhaps this arises from the Celtic word (reflected in the Old Irish version) of, *cimb*, *a tribute or ransome*, *and cimbid*, *a prisoner*. *This would also fit with the etymology suggested by Festus* 'Cimbri lingua gallica latrines dicuntur (the Cimbri are called Brigands in the Gallic language)' (Markale, 1976, p. 40). Ellis (1990) echoes these views and concludes that, *This supposes a formation of 'one who takes prisoners for tribute', which could easily be an act of brigandage* (p.120).

**The First Contemporary Recording of the Name Cimbri**: During his voyage of about 325 BC to the Baltic Sea, Pytheus (actually those who quoted him, as the work is lost) apparently only recorded meeting the Teutones. Therefore, the Cimbri may have split from the Teutones during this interval and became their "fellow countrymen". There is some evidence that the name Cimbri may have been used by Celts who, with their Illyrian allies, attacked the Greek shrine at Delphi in 279 BC (a matter discussed at some length later). However, the specific name of "Cimbri" as a "tribal group" does not occur in any surviving <u>contemporary</u> record until 113 BC when reports reached the Romans that they were harrying the Scordisci around Belgrade, and the Illyrian Celtic Noricans in the Salzburg area. The first recorded battle with the Romans was at Noreia south of modern Klajenfurt where the Cimbri annihilated the Roman army of Papirius Carbo. The Cimbri were on the map (e.g., Herm, 1976). We will see later, however, that there is strong evidence that the Cimbri were embedded in much earlier records.



General map of Denmark, with the Jutland Peninsula on the left.

What follows is a work in progress, a draft that will be refined as new evidence continues to emerge. The goal is to present all known pertinent information about the Cimbri, and so "tell their story", based on wide variety of data sources. The approach is chronological. The first section explores early archaeologically defined cultures with the goal of determining when windows of opportunity were open for the Cimbri to have migrated to the Jutland Peninsula, and so posit the most likely location of their ancestral home or homes. The work will draw to a conclusion with an outline of the modern, and particularly the ancient, DNA studies which offer compelling scientific evidence as to the presence of an "Alpine – Celtic" peoples in Denmark, and their migration to England as Anglo-Saxon-Jutes or Danish Vikings prior to the Norman invasion of 1066.

# **Timeline for Jutland, Denmark and Central Europe**

# **BC – Early Prehistory**

#### **Early Prehistory:**

The topic of the Paleolithic, Mesolithic, and Neolithic as it relates to the Central European Celts is beyond the scope of the present study. Here we will pick up the thread in the Bronze Age, and attempt to determine when the Cimbri were most likely to have migrated north to what is today Denmark.

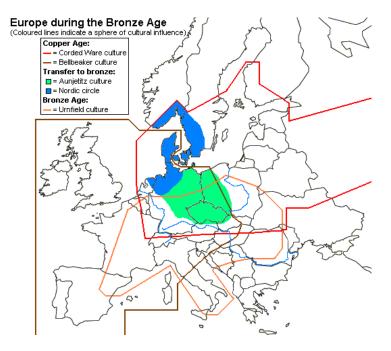
#### Bronze Age: 2300 - 900 BC in Central Europe / Nordic Bronze Age 1800 - 500 BC

2300 BC marks the approximate beginning of the Unetice Culture (emerging out of the Beaker folk group) found on both sides of the Elbe River to the Baltic Sea in what is today the Czech Republic, Western Poland and Germany. It represents a fusion of the Corded Ware and Beaker traditions and are considered by many to be proto – Celtic. It is this Unetice group that introduced bronze objects to the region and made prestigious objects mainly for the elite of the area and mainly as status symbols. Many of these bronze objects ended up as votive offerings in bogs. At Gallemose near Randers, Jutland are 12 kilograms of bronze objects such as wagon parts and rings apparently made somewhere south of the Baltic, as well as other items such as axes locally made as well as from Britain or Central Europe. What is interesting, especially in relation to the finds in Jutland, is that some in the Unetice group used hollowed out tree trunks for burial, a characteristic as we shall see which is also found in Jutland in areas later known to be Cimbri territory. It may not be stretching the evidence too far to see these people as the putative ancestors of the eastern Hallstatt – La Tene Celts proposed to be predominantly R1b-U152/S28 (a discussion of genetic concepts will be left until later in the study), and ultimately spawning the group that became the Cimbri. The present study proposes that the majority of the genetic haplogroups present at this date (2300 BC) in Jutland would have been I1 (mostly I1-M253, but an unknown percentage of the I-M223 variety) and R-P312\* with R-U106 plus R-DF27/S250 and a sprinkling of R1a-Z284; and a modicum (e.g., 6% each) of E3b-M78 and J2-M172 representing migrants who may have arrived with the early agriculturalists from the Balkans. The sources of these percentages will be noted later and are extrapolated from present – day population figures.

In a detailed study of this time (the Late Neolithic, Early Bronze Age) period, Vankilde (2005) concluded that Northern Jutland (as opposed to other parts of Denmark and Scandinavia) experienced a rapid influx of goods of foreign origin about 2350 BC, which accords perfectly with the date given to the beginning of the Unetice Culture. The author asserts that, such objects of copper and gold tend to be particularly frequent in the Beaker region of northern Jutland, where the local fine – ware pottery of Beaker derivation shows links with the Veluwe group at the Lower Rhine (p. 28). Vankilde does not believe that the evidence suggests any large – scale movement of people, only the migration of a limited number of foreign individuals, posessing knowledge of metallurgy, to the region of Limfjord. Vankilde emphasizes that the Beaker group in Northern

Jutland is a form of cultural island within the Jutland Peninsula (see later discussion of the Cimbri as a cultural / genetic isolates), close to a source of high - quality flint, with more in common with the Rhenish (Rhine) group than the British Isles. One fact is abundantly clear – that the metals (raw materials) were not available nearby and had to be transported from a minimum of 800 kilometers away (Levy, 1995). Sarauw (2007) focuses on the distinctiveness of the Bell Beaker, where in Jutland there appear to be territorial groups, loosely connected, in a complex patterning across the region. Sarauw emphasizes the essentially local character of the observed changes, consistent with a largely stable population with nothing to indicate migration beyond exchange of marriage partners and limited arrival of metal workers.

It is interesting and perhaps significant that there is a regional cluster of objects known as "amber spacer - plates" that are found in the Unetice homeland, and the distribution extends to northern Jutland. These items have been dated from **1700 to 1450 BC** (Kristiansen, 2001). This illustrates clearly the close connections between the region that would later become the "Celtic homeland" of Central Europe and the territory of the Cimbri. This pattern is precisely what is seen in Scarre (Ed., 1991) with the "cruciform broaches" that are dated circa 500 AD and seen only in England (where they are widely distributed especially in the east) and Friesland and the area where the Angles lived prior to their migration to England. In the latter case this reflected in an actual migration as many of the villages on the Continent became deserted at this time. It is possible that in the former instance (Unetice link) there may have been some migration as well. Until ancient DNA studies are undertaken for this region, all at present is in the speculative domain.



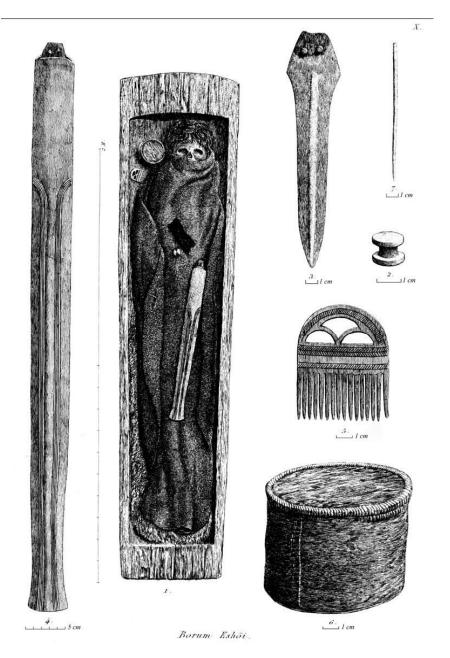
The Unetice Culture (Aunjetitz / Lusatian Culture) and Nordic Circle Culture shown in relation to other traditions

Between 1600 and 1200 BC the Tumulus Culture dominated Europe and emerged from the Unetice Culture. This group was named after practice of burying their dead under a mound. Early in this stage there is no evidence of immigration or disruptions in trade. Soon, however, a significant disruption occurred via a migration of "higher civilizations" from the Southeast that appears to have led to a merging of the two cultural horizons in Jutland (although as we will see later, one author believes that the arrival was from the They were likely an elite group who lived side by side with the previous west). occupants who may have been serfs to these war - like peoples for the first few generations. The incomers buried their dead in hollowed out oak tree trunks in full costume and replaced the megalith tombs with simple mounds as was done in southerly Danubian areas. These people may have brought their Indo – European language that was likely proto – Celtic. There is a possibility that these may have been the ancestors of the Cimbri and this is the first hypothesis relative to the arrival of the first R-U152/S28 and R-DF27/S250 groups (proto – Cimbri) in Jutland, dating their arrival to between 2350 and 1500 BC, where they amalgamated with the previous occupants comprising a heterogeneous Ychromosome haplogroup mélange (as noted above). The reason why the Cimbri of the area spoke Celtic and continued to follow Celtic traditions such as the use of Druids and human sacrifices can be explained on the basis of elite dominance rather than a complete replacement of the indigenous proto - Germanic population, although the latter cannot be ruled out. Kristiansen (1998) asserts that, Although the overall tendency today is to stress continuity in settlement and culture between the Tumulus and Urnfield culture I find it difficult to maintain such a peaceful picture. Furthermore, she believes that the evidence would support, as it does with the Hallstatt – La Tene cultural change, a major reorganization of settlement and economy, leading to the rise of strong, pioneer farming communities expanding into new habitats both locally and over longer distances, supported by warrior chiefs (p. 385).

Haywood, in his "Atlas of the Celtic World" (2001) shows a migration to Jutland from the Kelheim / Unetice area from the 12<sup>th</sup> to the 8<sup>th</sup> Century BC, followed by a folk movement from Jutland to Vestfold (Norway) and Skane (Sweden) between the 8<sup>th</sup> and 5<sup>th</sup> Centuries BC (Map, pp. 30-31). Here *links were established to the south and to Greek and Cypriot traders, leading to the formation of long – distance trade networks between Jutland and the Rhone valley / northern Italy running through southern Germany and the Rhine, with amber and animal products moving southward and Mycenaean prestige goods and ideology moving northwards* (Kristiansen, 1998, p. 378). Raftery, in his "Atlas of the Celts" (2001) shows the major trade networks of this time. The Rhine / Danube route followed the west side of Jutland, down the Weser River to the Danube and east to the Rhone. The Carpathian route extended from the north of Jutland to the Oder River and south to the Zavist area and the fanning out to the Black Sea, Italy, and the Danube. Any exchange of population from the major nodes can only be surmised.

In Denmark dendochronologically dated intact Bronze Age burials in hollowed out tree coffins date from 1468 BC. At Borum Eshoj near Arthus (Jutland) a noteworthy find dated to 1387 BC, and finds at 22 other locations have been studied. The 16-18 year old "Egtved girl", somewhat iconic in Denmark, has recently been subjected to isotopic analysis and there is considerable disagreement as to her place of birth (local, elsewhere

in Scandinavia, or Black Forest, Germany (see <u>here</u>). The oldest of this collection is **1468 BC**, and the most recent about **1165 BC**. The burials appear to cluster around Ribe County (later the home of the Angles / Jutes) and the Himmerland County (later home of the Cimbri) regions.



Young male, Borum Eshoj; dated 1344; dagger linked with Central European Reinecke C2 Phase.



Photo of same grave as seen in drawing above.



Borum Eshoj, elderly female oak coffin burial in same mound as dendochronologically dated coffin of 1348 BC. The intact nature of the grave goods is nothing short of spectacular.

The entire 2006 issue of Acta Archaeologica is devoted to a detailed study of these burials. The burials included for example full clothing attire and very long swords. They were the so - called "Mound Warriors" of the Tumulus Culture. Supposedly they were an intrusive warlike group which reached Denmark; they probably included proto – Celtic chieftains (Wilcox and Trevino, 2000, p.54). The evidence appears to link these people with the various groups that made up the Unetice Culture of the proposed Celtic homeland at the headwaters of the Rhine, Danube and other Rivers originating in the Alpine Region. Many of these burials contain items that have been identified as having a "Central European affiliation" and typically include swords and daggers that are part of the Reinecke C2 phase. In the words of the Royal Danish Ministry of Foreign Affairs Udenrigsministeriet series, Imported items such as weapons, shields and bronze vessels show that there was a lively exchange with southern parts of Central Europe, particularly the Alpine region. These individuals were candidates for the ancestors of the Cimbri, although there may have been only a trickle of folk migration. As noted earlier, testing of modern people and ancient DNA both suggest that the predominant genetic Ychromosome halogroup of the Alpine region is / was R-U152/S28.

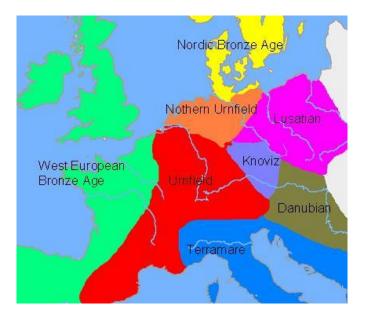
#### **Urnfield Cultures in Europe: 1300 – 500 BC:**

The "<u>Urnfield Culture</u>" develops gradually, being named after the cremation burials in urns buried in fields and found throughout what were to become the Nordic and the Celtic regions from Western Hungary to Britain and across the Alps and almost to the North Sea. It is dated **1300 to 500 BC**. The origin of the cremation tradition appears to be the Balkans. This culture replaces the Tumulus Culture. This is a time of collapse of the many civilizations and subsequent migrations (e.g., exodus of Israelites from Egypt ca. 1250 BC; collapse of Anatolian Hittite empire ca. 1180 BC). It is contended by many scholars that the peoples of the Urnfield Culture were Celts or proto - Celts. Germain to our discussion, by circa 1200 BC the Urnfield Culture included component groups including the Nordic Culture, the Central Urnfield (Hallstatt) Culture, and the Lusatian Culture in locations roughly depicted in the map below.

Artifacts found in the <u>Nordic Bronze Age</u> include huge trumpet – like bronze lurs found at highest density in Denmark (and are also portrayed on rock carvings in the Nordic Regions). Splendid examples of the latter were found at Ulvkaer, Vendessel, North Jutland. These objects had been placed on a dry location but within a swamp (Kaul, 2003). Archaeological "treasures" from the later Bronze Age appear in the bogs of Jutland and are all thought to be votive offerings. An example is the magnificent "sun chariot" from Trundholm with a horse ahead of a wheeled sun figure that may have been a miniature of a real object of this nature used to invoke the spirit world to bless the harvests in the fields circumnavigated by these ornate devices. A wooden "sacrificial platform" has been found at Sandagergard. Sometimes burials included bronze wagons carrying cauldrons. These can be found not only in Central Europe but also a similar one at Slallerup, Denmark. Furthermore, just to the north, in Norway, Bronze Age tumuli along the southern shore *contain objects with unmistakable affinities to the Danish peninsula of Jutland* (Malmstrom, 1950, p. 10).

It is also about this time that the amber routes from Jutland and the Baltic were developed. If bronze was flowing north and amber south along the same route it may be that the ancestors of some of those who would become the Cimbri were involved, and at some point prior to 2300 BC decided to make a permanent move from their Central European homeland to control the source of the amber.

Kristiansen (1998), speaking of the Nordic Bronze Age to 750 BC, reports that, we can observe a general Nordic cultural tradition from the Neolithic onwards that encompasses present-day Denmark, northern Germany and southern Sweden (pp. 67-68). Furthermore, The Nordic tradition emerged during the Bronze Age around 1500 BC and is recognizable until 500 BC. Nordic Bronze Age culture is constituted by elements of general European origin (tumulus barrows, and later on urn burials) and elements of genuine Nordic origin. Their synthesis defines a new social and cultural tradition, which can be traced for 1000 years, despite developments and changes in form and style. Basic ritual and social traditions, and their material correlates, however, display continuity throughout the period......but already beginning to break up from 700 BC with the advent of Ha C Hallstatt C (pp. 69-70). In other words, the first hypothesis of an early arrival of the Cimbri who were Celtic speaking and, as will be seen below, very much embedded in a classic Celtic cultural matrix from at least the 1<sup>st</sup> Century BC to the 3<sup>rd</sup> Century AD, is not supported with convincing evidence. Kristiansen is very clear that certain similarities with Central European cultures at this time can be explained in full by a tendency of those in Nordic regions to accept valued prestige goods and their stylistic elements – but there is no need to posit a mass migration at this period in time. Hence it is not likely that the bulk of the progenitors of the Cimbri, other than indigenous groups integrated with later migrants, arrived much before about 800 BC - although some limited Central European introgression is entirely possible and even likely.



Urnfield culture

The most famous of the sites of this era is at Hallstatt in Austria (Alps) where salt was mined and an extensive trade network was established extending into the British Isles and elsewhere in all directions and which gave its name to the well – known <u>Hallstatt Culture</u>. It emerged from the previous period of the Urnfield Culture, being characterized by immensely rich inhumation burials, and divided into four phases. It is here that iron became intermixed with bronze (800 to 600 BC marks the beginning). Grave goods were similar across what would later be known as Celtic areas of Europe but the most ornate riches were at Hallstatt. Cultural zones were divided here too with an Eastern cultural zone (e.g., Hungary; Croatia) and a Western cultural zone (e.g., Italy, Alpine Germany, Switzerland, France).

Linked to the Hallstatt is the <u>Lausatian Culture</u> of Poland, Eastern Germany, the Czech and Slovak Republics and into Hungary and Moravia – with the Elbe River being at the epicenter with unmistakable Celtic culture evident in Bohemia (e.g., the Czech Republic) (Kruta, 2004). Although compared to the Hallstatt burials those relating to this culture are Spartan, there are exceptions such as the "royal" tomb of Seddin at Brandenburg, Germany covered by a large barrow and containing "exotic" Mediterranean imported goods. In addition, there are numerous hoards with bronze and gold metalwork in abundance. Some in bog areas may have been sites of votive offerings. Most burials were by cremation, which was also the practice in many parts of the Nordic zone such as Jutland. Some researchers believe that this horizon is an extension of the Nordic Bronze Age Culture and there is a certain arbitrariness in the subdivision. It is believed that this area involved an extensive exchange of peoples between the Nordic and Lausatian Cultures – the area being for example the home of the Goths and perhaps even earlier the ancestors of the Bastarnae of Thrace.

Some of the earliest connections between these areas is circa 950 BC seen in an examination of the distribution of elite bronze hammered vessels (e.g., buckets), the first and most substantial being the area of production in the Hungary / Czech region, and secondarily in Himmerland, Jutland - the later home of the Cimbri. Also characteristic of this artistic tradition are the Jensovice cups made in Stamberk-Koptoue in Mahren and found in a hoard, with other distinctive bronze items made there, in Funen (Fyn Island), Denmark. The route from the manufacturing source passed through Moravia, which may have been a distribution point, but the evidence suggests long distance travel from production source to consumption point. Two networks of links, thought to involve alliances and marriage exchanges, followed either the Oder to Sealand (both later home of the Teutones), and secondly an alliance system to the Elbe (toward what would later be Cimbri territory). Goods were apparently transported by ship and reached all the Danish islands. The data suggest that there was some movement of people in both directions, particularly from Sealand to the mouth of the River Oder and then a jump to the southern Lausatian area. Kristiansen (1998) is the source of this information unless otherwise specified.

**Circa 840 BC** - One of the earliest known <u>bog bodies</u> was buried on or about this date (the timing consistent with the "Cimmerian hypothesis" noted below). All are preserved due to the chemical composition of the peat in which they and their clothing and

associated artifacts were entombed. A peat bog body hot spot in Himmerland (the geographic territory of the Cimbri) is the Borremose Bog where the "<u>Borremose Man</u>" was found (as well as many others). He appears to have been hanged, had his right thigh broken, and hit on the back of the head with a blunt instrument (although some archaeologists believe that these "injuries" were caused by damage at the time of excavation), at a time when it is proposed that the Cimmerians migrated to Jutland. Curiously though, two sheepskin capes had been meticulously rolled up and placed at his feet. This appears to usher in a period with burial of human sacrificial offerings, as well as those judged by the community to be criminals (or morally reprehensible), in bogs and "sacred" places, a behavior which lasted to about 500 AD through the period of known Cimbri occupation. In other words, there is some degree of cultural continuity in Northern Jutland that dates from the 9<sup>th</sup> Century BC.



A map showing the location of the major bog body finds within what was to become Cimbri territory.

**770** BC – Another Borremose bog body from the late Bronze Age is a 25 to 35 year old woman with a skull crushed and face smashed with a club of some sort, and her shoulder length hair and scalp loosely attached to her skull and a type of wollen shirt over her naked body.

**750** BC – At about this time the trading axis shifted from Hungary to Central and Northern Italy which was now producing the elite metalwork such as wagons, horse gear, weapons and shields that found its way to Jutland and the Danish Islands. Italy wanted amber in return, which it sold to southern markets. Central to the trading connections was the Phahlbau region of Switzerland, near the bend in the River Elbe which brought goods to Jutland during this period. Another route north was via the Oder River to the Danish Isles and Pommerania. Both avoided the heavily defended Lausatian areas. While there are sites in Himmerland where these items are found, Funen and Sealand appear to have been more heavily involved in this trade network at this time. Furthermore, Nordic goods and apparently, via likely marriage alliances, females were expanding to the south (as attested to by metalwork such as the "West Baltic spearheads" and pottery). About 700 BC there developed a regional decorative tradition in Northern

Jutland seen on hanging vessels and goldwork that is similar to the Villanovan / Italian style. The same parallels are seen with Italian bronze shields and belt boxes, and large breast fibulae (clips much like safety pins) for females.

To complicate matters, the massive "royal" burial at Sidden on the Elbe (noted above in relation to the Lausitz (Lusatian) Culture), contains a decorated amphora almost identical to one found at Rorboek in Northern Jutland. There are actually a series of aristocratic barrows associated with this region and all are of the cremation type. It is interesting that the ornate burial complex seen in Sidden is mirrored in one place in the north – the Island of Funen just east of Jutland. Here at Voldtofte there is a barrow originally 7 meters high and 40 meters in diameter. After describing the grave goods with parallels in Bologna, Italy and the Central European Hallstatt wagon fittings, Kristiansen (1998) concludes that this complex represents a deliberate attempt to introduce foreign high-status customs and prestige goods. The associated settlement appears to have been a chiefly center to monopolize cattle (p. 178), and also for the trade of amber, textiles, mercenaries, horses, slaves and even women to the Italian city states via Sidden and Switzerland. In all of this there is still not any clear evidence that it was the ancestors of the historic Cimbri who were involved in these elite trading networks, although it does suggest the possibility of a ruling elite coming from the peripheral Hallstatt area. Also, the trade networks have shifted in 200 years from the Hungary, Oder River, Sealand axis, to a western trade network following the Elbe River to Jutland and surrounds.

<u>The "Thraco – Cimmerian Hypothesis"</u>: Perhaps it is time to pause and examine what can only be termed <u>controversial historical evidence</u> that an Eastern Celtic group, part of the Cimmerian – Scythian people, blasted onto the world stage in the 7<sup>th</sup> and 8<sup>th</sup> Centuries BC. Some authors assert that the Cimbri left Jutland prior to the 8<sup>th</sup> Century and are the Cimmerians known to the peoples of Iran and Assyria having arrived via Thrace and settling in Crimea and adjacent regions – returning soon thereafter to their ancestral home in Jutland.

There has been a great deal written about this matter since the Cimmerians are associated with the Biblical Gomer or Gomerians. The Cimmerians are first noted in 850 BC by Homer, and by many Classical writers in subsequent years – including historians of the stature of Herodotus (circa 450 BC). The latter provided a very clear perspective on the peoples who he said lived to the north of the Black Sea, indicating information that the Cimmerians became associated with the Thracians and merged with them, devastated a good part of the Middle East and Asia Minor only to be chased off the worlds stage by the Scythians and ultimately to disappear to the east and west. In "Empires of the Bible" (1904) it is stated (and frequently so elsewhere), It will be remembered that in the account of Gomer himself, it was stated (page 7) that when the Scythians, 650-600 BC, dispossessed the Cimmerians of the country of the Ukraine, the Cimmerians went toward the west, where we should find them again. We must now follow these onward. They took possession of the country that is now northern Germany and Denmark, and afterward accompanied their kindred of the children of Riphath in their invasions of Italy. The *Cimbri (for so the Cimmerii were then called) and the Gauls form the two branches of the* great Celtic race, and both are often referred to by Roman writers as Gauls. In the time of Alexander the Great all western Europe above the River Po and the Pyrenees Mountains, and from the plains of the Drave and the Save to the Baltic Sea, was possessed by these two branches of Celts. And when Alexander the Great held, at Babylon, 'the States-general of the world', there came ambassadors from the Celts among those who desired 'to propitiate his favor, to celebrate his greatness, or to solicit his protection'. Accounts of this nature must be taken with a grain of salt as frequently the interpretations given by some authors appear to be colored by their religious perspectives. If one was to go out on a limb and translate these views into genetic terms, in the western group R-S116 / P312\* but now comprised of a myriad of haplogroups, would predominate, and the eastern segment would be largely R-U152/S28 and perhaps some R-DF27/S250.

Many peoples have a tradition of descent from the Cimmerians and the etymology of their ethnic names may bear out these beliefs (although controversy bedevils this issue too). These include the Cymru or Cwmry of Wales and the Cumbria of Western England. It is believed that in the 8<sup>th</sup> Century a "Thraco – Cimmerian" migration triggered cultural changes that contributed to the transformation of the Urnfield culture into the Hallstatt C culture, ushering in the European Iron Age. The Greek historian Plutarch (c. 47 - 127 AD), who would have had first hand familiarity with the Cimbri, reported in "Life of Gaius Marius" (written 75 AD) that the Cimbri were Galloscythians or Celto – Scythians (depending on the translation) who were pushing westward, people known to the Greeks as the Cimmerians. Plutarch then describes the homeland of the Cimbri in the remotest and darkest location extending into the interior as far as the Hercynian forest (Black Forest in Germany in the west). Further, This was Homer's occasion for the story of Ulysses [written 850 BC] calling up the dead, and from this region the people, anciently called Cimmerii, and afterwards, by an easy change, Cimbri, came into Italy (in 101 BC). He admits, however, that this is "conjecture" rather than "authentic history".

Some further evidence emerged from Greek historian Diodorus Siculus circa 60 BC: Diodorus concludes that the valour of these people [Britons] and their...ways have been famed abroad. Some men say that it was they who in ancient times overran all Asia [Minor] and were called 'Cimmer-ians' – time having corrupted the word into the name 'Cimbr-ians' as they are now called.... They are the people who captured Rome, being called in time Greco-Gauls, because they mixed with the Greeks.

Thierry (1828) in "Histoire des Gaulois" uses the Classical sources to posit the emergence of two branches of the Gaulish nation. The first is the Gauls proper such as the Tectosages of Toulouse, France; and the second is the Kymri (or Cimbri) who are represented by tribes such as the Boii of Bohemia and the Cimbri of Jutland, these being descendants of the ancient Cimmerians.

Jean Markale, devoted an entire chapter of his book, "The Celts: Uncovering the Mythic and Historic Origins of Western Culture" (1976) to discovering "Who were the Cimbri?" (Chapter 2). He takes a completely unique perspective and concludes that the common tie is that the many legends about the Hyperboreans and the builders of ancient temples such as Stonehenge and Delphi can best be explained by seeing the Cimbri as the original people of the British Isles who were displaced by incoming Celts and forced to migrate to the barren Jutland Peninsula. He believes they were a "non Indo – European people" whose ancestors built both Stonehenge and presumably via their Thraco – Cimmerian branch, the Temple at Delphi revered by the Greeks, and other megalithic monuments seen throughout Europe before giving up this practice circa 2000 BC, but always with the hope of recovering what was rightly theirs. Curiously this is what they appear to have done as La Tene Celtic aristocracy and as Danish Vikings. There is a distinct lack of clarity here, although of course the hypothesis may be correct – however the evidence suggesting that this group came from Britain to Denmark and were non Indo-European speakers is very weak to non – existent, and no other author has put forward this view. It will <u>not</u> be put forward here as a hypothesis for consideration in relation to the origins of the Cimbri.

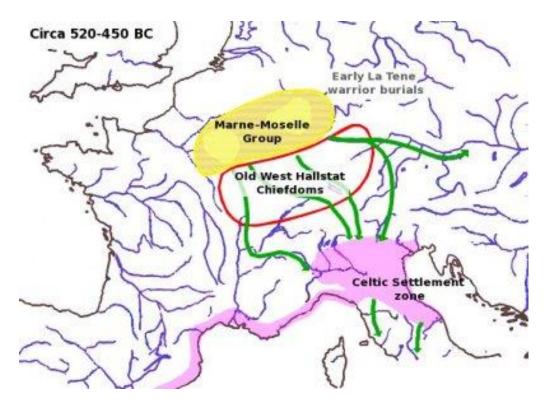
It appears that the classical authors, as well as those who have attempted to interpret their writings, have interchanged not only the Irish Tuatha de Danann, Cymry, Cimmerians, Cimbri, Celto-Scythians, but also the Hyperboreans (about which volumes could be written). Suffice it to say that the jumble of facts and myth appear to suggest a link between all of these groups but at what time and under what circumstances is not at all clear. Each is a group of mysterious origins who lived at the end of the earth in a foreboding sacred place and who were driven from their original home. Again, unless genetic or archaeological evidence can be mustered to support these statements then they will topple of their own weight. It is perhaps noteworthy that the Merovinginans trace their ancestry to the Sicambri tribe, reported to be a Cimmerian tribe whose king was Marcomir I (died 412 BC) with purported origins around the mouth of the Danube on the Black Sea, and the Anatolian region. They were said to have changed their name to Franks after their chief Franco in 11 BC.

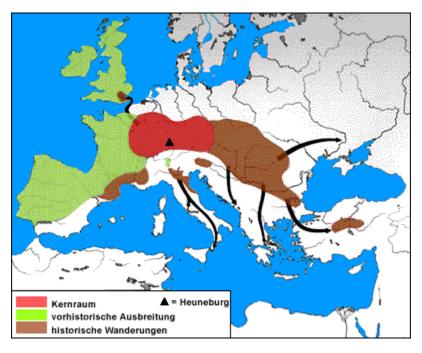
Archaeological evidence in relation to the "Thraco – Cimmerian" hypothesis is carefully considered by Kristiansen (1998). She argues that *it has become commonplace in Anglo* - American archaeology to dismiss migrations in a rather high – handed manner (p. 185), and that a more careful analysis of cultural change is needed. Kristiansen speaks of the shift in production centers from Hungary to Italy and the Alpine region. The weight of evidence shows that there was a warrior culture of the horse / wagon complex that, from a Central European perspective, followed the Danube to the Hallstatt regions of the east (e.g., Austria) and in successive waves from the 9<sup>th</sup> to the 6<sup>th</sup> Centuries pushed further to the west. Ultimtely one branch followed the Elbe River directly and a second migration backtracked fom the west from the headwaters of the Rhine River northeast to the Elbe and north into Jutland. The entire Hallstatt complex was altered with new male prestige weapons and specialized horse tack and wagons that are new to the region and are associated with new ruling elites especially in east Central Europe. She considers the influences to be not only Cimmerian but also Scythian (more recent nomadic "intruders", originally from Central Asia, but pastoral nomads with a long and rich history). Rankin (1996) continues this theme, speaking of the evidence, that Celtic peoples owe their origin to a specifically eastern warrior culture imposing itself upon an Eastern European culture of the Urnfield, Lausatian type, and introducing the lordly habit of tumulus burial (p. 33).

Specific Thraco – Cimmerian archaeological finds with the earliest known iron goods (along with bronze items) have been documented from the Balkans to Lake Zurich in Switzerland to Denmark. It is now recognized that some of the Thracian tribes may have been Celtic. The Thraco - Cimmerians are a candidate for the peoples among whom R-U152/S28 was first found, ultimately spreading rather quickly to Switzerland, then, in stages, to the Bay of Biscay. Although entirely speculative, the Cimbri may have been long established with R-U152/S28 from Central Europe whose elite moved to Jutland circa 1500 BC and who, from time to time, got the wandering spirit and headed south alone to become the Celtic scourge of the Near East as the Cimmerians in the 8<sup>th</sup> Century BC – this being the second hypothesis as to the origins of the Cimbri.

As we will see later, ancient DNA testing has shown that R-U152/S28 was well established in locations from the Czech Republic to Switzerland by the early Bronze Age. This data source is only useful in locations with inhumation burials since the process of cremation destroys DNA. As an early "teaser", the locations of ancient DNA burials of R-U152/S28 individuals can be seen in the map here.

Transition from Hallstatt to La Tene in the Central European Homeland





The first of the above maps shows the only documented folk movements from the Hallstatt and La Tene areas – to the south and to the east. The second reflects the expansion of a general Celtic culture and denote areas where Celtic languages were spoken.

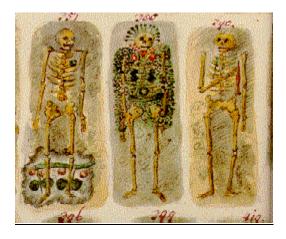
The Bronze Age shift to the Iron Age was not altogether smooth and had regional features that delayed its introduction. Iron was in use in Greece by 1000 BC, but not until 750 BC did Central Europe see its introduction – and not until 500 BC did its use emerge in the Nordic zone. Changes were gradual rather than reflecting any sort of "revolution".

<u>Hallstatt C and D (750/700 to 450 BC)</u> represent the time of major changes in Europe. Kristiansen (1998) proposes that the movement of Ha C warrior elite spread across Central and Western Europe, at a time when trade routes to the north diminished. However, those in the eastern tier were very centralized and hierarchical with continued links to the Lusatian Culture and the Baltic regions with a continuation of emphasis on trade in amber and mining of salt in the immediate surrounds of Hallstatt in Austria, with elite inhumation burals.

One rather dramatic example of the links between areas that would later become the territorial regions of the Helvetii and the Boii, and southern Jutland, Fyn and Sealand is the clustering of finds of Mindelheim swords on the later 8<sup>th</sup> ad 7<sup>th</sup> Centuries BC (Koch, 2007).

Furthermore, a very large barrow at Lusehoj in southwestern Funen, dated to circa **800 BC** included the remains of a chief whose body had been cremated, wrapped in nettle cloth, isotopic analysis showed that the nettles were grown in Austria, and placed in a bronze vessel associated with drinking ceremonies, likely made in eastern Austria based on stylistic considerations. None of the rich grave goods were made of iron. Clearly the

remains of this chief were brought to Denmark from Austria (T. Douglas Price, "<u>Ancient</u> <u>Scandinavia: An Archaeological History from the First Humans to the Vikings</u>" (Oxford, 2015), pp.232-234.



Artist rendition of typical rich Hallstatt inhumation burials

At the earliest stages the bronze weapons were traded extensively, and are few in number beyond a semi – circle over the northern Alpine zone but are found in Northern Jutland (from western Hallstatt sources). The cultural flourishing here is outstanding and has been the subject of numerous books and articles. Designs, shapes, styles show Mediterranean (Phonecian, Greek, and Etruscan) and Eastern (e.g., Thrace, Pontic / Balkan areas) influence, but melded within a Celtic cultural matrix. The "Western Hallstatt" culture was represented in an arc via the Alpine areas of Switzerland, Bavaria, and Italy and to the north in Bohemia (Czech / Slovakia) and Moravia (which will play a significant role in later developments related to the Cimbri). The "Eastern Hallstatt" encompassed the eastern – most Alps and the Dinarian Alps of the Balkans. Trade involved iron and salt, traded for amber in the north and horses to the south.

Using placename evidence, Rankin (1987) concludes that the Celtic language that spread across the extent of Europe emerged out of the Urnfield / Hallstatt peoples. Furthermore, it is in the Northern Alpine area where, *the Celtic peoples had their original home, in the sense that it may have been the region in which they developed their individual character as distinct from other presumable IE* [Indo – European] *groups* (p. 9).

Before considering the La Tene period there is one more potentially relevant development relating to the time interval from about 600 to 450 BC. This relates to a post – Cimmerian intrusion into Eastern Europe and westward by the <u>Scythian warriors</u> of the Pontic steepes. Kristiansen (1998) asserts that there is ample archaeological evidence to illustrate their incursion with typical assemblages of artifacts (e.g., bow and arrows, mirrors and earrings), expanding westward from the Carpathian Mountains into Western Hallstatt territory. At some point before 500 BC they were in the Lusatian areas and the interactions were not at that time peaceful. Kristiansen reported, *A remarkable find of Scythian gold ornaments appeared in a bog in eastern Jutland several hundred kilometers away from the battlefields. What lay behind this deposition we shall never* 

know, but a very direct link to the events in Poland must be assumed; it represents either the spoils of war brought back by auxiliary troops from Jutland, or, on the contrary, it was a marriage gift from the expanding Scythians to a Jutish king to secure the hinterland against support for the Lausitz hillforts (pp. 285-286). It is curious that the only examples of Scythian ornaments anywhere around the Baltic are three clusters in Northeastern and one in Northwestern Jutland.

About 500 BC (the dawn of the La Tene Culture) the Lausitz (Lusatian) Culture went into very sharp decline – in the east likely due to Scythian aggression, and in the west due to internal factors (exhaustion of the land). It is believed that at this time, some of this group, which had their role in the amber trade abruptly severed, may have migrated – perhaps to the Danish region where they had long contacts. Could it have been this group, likely speaking a Celtic language, which evolved into the Teutones and the Cimbri? The ground plan of one of the fortified villages, at Biskupin, is very interesting and perhaps pertinent. After the first building phase in the winter of 738-737 BC (dating via dendochronology), burning, and re-occupation, Biskupin was abandoned completely about 500 BC (possibly with the occupants being literally drowned out by the rising water levels in the surrounding lake), with the occupants leaving for unknown locations (see Scarre, 1998). Biskupin looks remarkably like the fortified villages in Northern Jutland (e.g., Borremose) that appear "out of nowhere" a little later in time (see below).

<u>Cimbrian – Bohemian - Gaulish – Italian Connection</u>?: Thierry (1828) and Guizot (1869) assembled evidence suggesting two waves of Gaulish Celtic peoples who invaded northern Italy. Guizot states that it was in the first half of the fourteenth century B.C., another vast horde of Gauls, who called themselves Anahra, Ambra, Ambrons, that is, "braves," crossed the Alps, occupied northern Italy, descended even to the brink of the Tiber, and conferred the name of Ambria or Umbria on the country where they founded their dominion. Note that a tribe called the Ambrones were among the confederacy of the Cimbri in their odessey of 113 - 101 BC (see later). Perhaps these where the people also known as Lepontii Celts, known to be established in the area since pre-historic times. The earliest component of the second wave (which lasted 66 years) can be firmly dated, according to both authors, to 587 BC. At this time Gaulish Celtic people began to cross the Alps en masse. In the words of Guizot, Towards the year 587 B.C., almost at the very moment when the Phoceans had just founded Marseilles, two great Gallic hordes got in motion at the same time, and crossed, one the Rhine, the other the Alps, making one for Germany, the other for Italy. The former followed the course of the Danube and settled in Illyria, on the right bank of the river. According to Thierry, the nations of Gallic blood are divided into two branches, Galls and, Cimbri. He makes it very clear that he does not include the Ligurians among the Gaulish people, they having a completely different origin.

The key players among the northern group were the Boii. Rankin (1987) calls the Boii, *that formidable and widespread family of tribes* (p. 110). They have been *attested at various times in Transalpine Gaul (modern France) and Cisalpine Gaul (northern Italy), as well as most anciently found in Pannonia (today Western Hungary), Bohemia, Moravia and western Slovakia* (Wikipedia, "Boii"). It is a strong likelihood based on the

historical and archaeological data that Bohemia and surrounds (Moravia) was the ancient home of the Cimbri of Jutland (*the strongest of the Kimric hordes*) according to Thierry, and their Boii kin residing in Cisalpine Italy. The king of the Cimbri in 101 BC (see later) was Boirix or "King of the Boii" so the connection runs deep. Aylet Sammes (1676) includes a map within his book on the history of Britain showing the supposed route taken by the Cimmerians from the Black Sea to reach the shores of Britain. On the same map he places *Cimbri divictus' Roman migrant* between the Danube and the Hercynian Forest. He also labels the North Sea as the *Mare Cimbri*. His source is unknown but clearly he believed that the people in this area were the Cimbri who migrated from Gaul. The notation of Diviacus is interesting since he was the Aeduan Celtic prince who provided Caesar with a great deal of intelligence (e.g., Collis, 2003).

Livy, the eminent Roman historian, wrote that in the time of Tarquinius Priscus (616-579 **BC**), and hence at a later date than noted above, Gaulish Celts under the command of the Biturgis tribe, initiated a wave of migration precipitated by overpopulation. Ambitgatus was apparently the overlord here, and his nephews were chosen by lot to lead parties "wherever the gods indicated". Segovesus ('he who can conqueror') found his way to the Hercynian Forest in Bohemia, and Bellovesus ('he who can kill') led his group including the Bituriges and surrounding tribes including the Auleceri, Carnutes, Aedui, Arverni and Ambarri into Italy (Mansvelli, 1991). Unfortunately, Livy does not discuss details of the northerly group who followed Segovesus. Collis (2003) believes that the ancestors of the Boii migrated from the lands of the Bituriges to the Hercynian Forest. It may be significant that in the time of Caesar, the only group accompanying the Helvetii in the abortive migration toward the lands of the Santones on the Bay of Biscay in 58 BC who were allowed by Caesar to remain in Central France (region of the Bituriges), specifically the Sancerre region on the left ban of the Loire (Kruta, 2004, p. 106) were the Boii. It is perhaps noteworthy that Livy states that among those who invaded Italy circa 400 BC or before, the Boii and the Lingones entered via the St. Bernard Pass (a western approach). That the Boii were the "people of Segovesus" is confirmed by Tacitus (Germania, 28). He says that, the furthest of the peoples of Gaul in former days were the Boii who occupied the territory between the Hercynian Forest, and the rivers Rhine and Main. This is the same shown in the above noted Sammes map as the Cimbri. It seems that Cimbri and Boii may be to some extent synomymous.

Cunliffe (1994), discusses Livy's, two discinct phases, the first around 600 BC, the second 200 years later. The validity of this first immigration has been doubted, but there is an increasing body of archaeological evidence to suggest that some northerly communities may have moved through Alpine passes to settle in the foothills around the Lombard Lakes during the sixth and fifth centuries (p. 363). For example, the inscriptions in Celtic using Etruscan script found among the Golesecca culture of the Piedmont and Lombard lake region date from the end of the 7<sup>th</sup> Century (i.e., circa 600 BC). However, Kruta (2004) states that, *The idea that such inscription was employed by non-indigenous Transalpine tribes who integrated with the local population as a kind of advance guard for the 4<sup>th</sup>-century invasion seems utterly unlikely (p. 29). Hence there is controversy surrounding this matter. Later we will review the evidence that it was the* 

Cimbri who brought the Etruscan – based runic writing system from the Alps back to southern Scandinavia after the defeat of 101 BC at Vercellae.

Hence these "newcomers" merged with those of the ancient Celtic Golasecca culture of Northern Italy. Here, for example, in the Valcamonica Valley are literally miles of rock carvings dated to this time period. One particularly impressive example is the antlered diety who is likely Cernunnos with an apparent snake by his left side and a possible raven on his right shoulder – with both arms being uplifted as are those of the figure immediately below (Scarre, 1998, p. 156). This configuration can be seen in the Gundestrup Cauldron from Himmerland, Denmark and the rock carving at Greinberg many hundreds of years later, both associated with the Cimbri (discussed in detail later in the present work).

The genetic evidence (see author's database <u>here</u>) tends to support this hypothesis with R-U152/S28 being found within northern Cimbri territory (but not surrounding regions), and is one of the predominant haplogroups among the Italians residing in the Alpine region of Italy.

Considering that Livy stated that the migration included about 300,000 individuals, it seems likely that some of the movement of what appears to be large family and kinship groups but specifics are lacking for the northern contingent since they were beyond the purview of the writers of the time. However, evidence should appear in the archaeological record. One item, reflecting the military nature of this venture, that would be expected to show up in burial contexts are swords. The antennae hilted sword has been found to the west beyond the Pyrenes (again, the authors of the time had little awareness of what was occurring beyond their immediate line of sight). A major late Hallstatt D cluster is seen in the Bituriges and neighboring Arvernian region, the Swiss lakes, the Italian lakes in the Insubres (Le Pontic – Golesecca area), and below the Po River toward the Italian Adriatic coast. This description may "fit" with the Bellovesus route. The largest more northerly grouping of these swords is in the area attributable to the Segovesus migration route. It surrounds a later Oppidum of Lugidunon north of Bohemia along the Saale River (Koch, 2007, map 124) where in the time of Tacitus (see later) the Suevi Angeloii resided, who had links to the Jutland Peninsula.

It is unclear whether the Segovesus adventure is connected with the Marne – Champagne area of France which was to become one of the "big three" nuclei of Celtic culture during the La Tene era. Here, a *non-indigenous population established itself around the middle of the*  $6^{th}$  century BCE (Kruta, 2004, P. 46).

Another line of confirmatory evidence giving validity to the words of Livy is the distribution of Hallstatt D (600-480 BC) "elite wagon burials". There is a very large grouping across the Alpine (southern) regions. However, there are two burials in the Bituriges area, one each north of the primary Hallstatt clusters, and three in the Italian lake district. These include, *the cemeteries of Ca'Morte and Sesto Calende, and further south at San Martino, near Ravenna, and Casola Valsenio, near Bologna* (Cunliffe, 1994, p. 363).

As an example of another artifact that can be used to date the early migrations and link Central France to the lands of the Boii is the "Dux brooch". This early La Tene object was introduced to Bohemia via France as seen by comparing finds in the two locations – the Dux hoard from Duchov providing a large array of artifacts for comparison purposes (e.g., Collis, 2003). Duchov is in the extreme northeast of the Czech Republic. In this area this can be seen a sharp division between the Hallstatt D and early La Tene material culture with that of the south reflecting a more indigenous quality, whereas the flat inhumation burials and other features around Duchov and Zavist. These burials generally conform to those seen at Bourges in that there are very few rich burials.

The timing of the expansion of Zavist (one of the largest Celtic settlements anywhere) may be instructive. It has been occupied off and on for many hundred years but it was in the middle of the  $6^{th}$  Century experienced its most dramatic expansion. Kruta (2004) has linked the expansion here to the emergence of *the confederation of the Boii* (p. 105). There are features in the more southerly areas whose material culture is similar to that of the Hunsruck-Eifel area (Mosel region of Germany) which may relate to later migrations in La Tene A. The archaeological record is complex and difficult to interpret in any straightforward way. It would make sense that in order to avoid excess conflict, the first incomers stayed somewhat to the north of the largest group of settlements – but this is little more than a guess at this time.

Some further evidence relating to this time period comes from Avienus, proconsul of Africa in 366 AD who apparently had access to an array of very early sources, many lost, such as Himilico's "Periplus of the Northern Sea" written circa 500 BC. Avienus stated, If anybody has the courage to urge his boat into the waves away from the Oesteryminides [south of the Breton Peninsula] under the pole of Lycaon (in the Northern sky) where the air is freezing, he comes to the Ligurian land, deserted by its people; for it has been emptied by the power of the Celts a long time since in many battles. The Ligurians, displaced, as fate often does to people, have come to these regions [Massilia; Marseilles]. Rankin (1987) interprets the statements of Avenius and suggested that, they came by ship, and that the Celts who expelled them also used ships. Perhaps the northern zone from which they were displaced was in the area of Jutland where the Cimbri lived in later historical times. Rankin concludes that perhaps Avienus was attempting to explain the process of how the Ligurians (a pre - Celtic Indo - European people) came to be in the neighbourhood of Massilia together with the presence of the Celts in the region to the north of them (p. 6). One might take this a step further and suggest that there is evidence that circa 600 BC the Cimbri may have left Moravia, or came directly from Gaul, to live in Jutland after chasing out the previous inhabitants - they in turn having being displaced by Scythian invaders.

Thus a <u>third hypothesis concerning the origins of the Cimbri is that they represent</u> scattered Celtic migrants from the Moravian region, some of whom may have been relatively recent arrivals from Gaul, who may have migrated north and west before 500 BC and uprooted the local population.

# Pre – Roman Iron Age / La Tene Culture: 500 BC - 1 AD

Much has been written on the "La Tene" finds in Lake Neuchatel at La Tene, Switzerland. Most of the items here appear to have been votive offerings and are extraordinarily rich in design, beauty and technological sophistication. The story can be told via the maps above where the warrior aristocracy appears to abruptly move from Hallstatt territory (where society there goes into a precipitous decline, and in many cases experienced violent destruction) to the north and west with their sumptuous inhumation "princely burials" (e.g., circa 600 BC) having few parallels in sheer splendor. In Central Europe the interval from about 500 BC until the Roman occupation of Celtic lands circa 1 AD is called the La Tene (Culture). In the north, the comparable period is known as the Pre – Roman Iron Age or Early Iron Age that, at least initially, is characterized by "a scarcity of finds" (Daniel and Klindt – Jensen, 1957).

The prime area of settlement and La Tene cultural expansion was from France across the northern reaches of the Alps to Hungary. It is now that the Greek and Roman writers refer to the Keltoi, Galli or other appellations. The heartland of the La Tene civilization was in the headwaters of the Danube in Alpine Germany, west to the Eifel in France and Bohemia as well as Austria in the east – but in general somewhat further north and west than the Hallstatt tradition. Some of the burial chambers of the presumed aristocracy in Central Europe rival those of Egyptian pharohs, reflecting a concern for the afterlife. Specific centers of power in 500 BC were Marne (modern France) in the west, Moselle (modern Germany), and the eastern focus was Bohemia (modern Czech and Slovakian Republics) – all immediately north of the Hallstatt chiefdom zone (see Cunliffe, 1997 for an excellent detailed treatise on the ancient Celts).

It is likely that as far as the Cimbri and Teutones are concerned, the amber routes played a key role in their emergence in the north. The amber route from the Baltic *leads through the valley of the Vltava and the territory of Bohemia. Here, one of the principle sites was the settlement of Zavist, south of Prague. It was established in the Hallstatt period and developed throughout the fifth century as a major cult center (Cunliffe, 1997, p. 66).* This probable power base of the Boii people had become, from the 5<sup>th</sup> Century, the eastern epicenter of power, as the Marne – Moselle zone was in the west (e.g., Senones, Treveri tribes).

In the <u>last phase of the Bronze Age in Jutland</u> the graves in are less ornate and might just include for example a dagger. The aristocracy appears to disappear – or are invisible in the burial record. Inhumation burials are replaced by urnfields. It is at this time that the many beautiful and extremely valuable lurs (musical instruments) were deposited in votive contexts – suggesting a time of turmoil or uncertainty. Specialist workshops disappear, southern imports almost entirely dry up. It is a time of general decay in the apparent standard of living for peoples in Scandinavia, perhaps due to climatic changes where the warm temperate weather became damp and bitterly cold, plus the emergence of new centers of power to the Celtic south. There was also apparently a dramatic decline in population, and between 400 and 200 BC there is a significant scarcity of finds (Lauring, 1957). This is precisely the same scenario involving the same time frame for the Marne, Mosel, and Bohemian areas a population was displaced to Italy and the southeast (Cunliffe, 1997). Considering that the migration of circa 120 BC allegedly included about 300,000 Cimbri, and presumably an equal number of Teutones from what is today Denmark, it is hard to reconcile these facts. It appears, however, that more recent investigations have come to different conclusions with a careful analysis of the data. However, it is a time called by many the archaeological "Dark Age" of Denmark (Kristiansen, 1998). A tentative hypothesis is that the Cimbri left in large numbers to join other Celts migrating at the same time and to the same areas.

Jensen (1982) states that, In the five centuries preceeding the birth of Christ, a wave of settlement expansion swept over Denmark. The introduction of new types of land management created in the course of a few centuries countless changes in the old settlement pattern which had endured for almost 2000 years (p. 198). This is echoed by Kristiansen who noted that by 500 to 450 BC a change in social organization, settlement and production had taken place, reflected in the appearance of Celtic fields. Also small villages with family farms keeping stalled cattle appeared (p. 306). An example of a village of this era is Grontoft in Western Jutland, complete with urnfield cemetery and a paucity of grave goods. Recently there have been unique extensive excavations here, at what has been termed a "wandering village", surrounded by Celtic fields in West Jutland. The settlements moved about once every generation within a "resource territory", beginning about 500 BC when house styles underwent a dramatic change. Sometime around 250 BC it was fenced and a generation later abandoned. Some of the buildings, longhouses, are 20 meters in length. Perhaps this village relates to the smaller numbers of Cimbri who remained home when their kinfolk migrated. Perhaps it was one of the first homes to the Cimbri, and remained so until a more secure establishment came under cultivation such that by 1 AD essentially all the available land had been put to use. Another village of interest that emerges about the 5<sup>th</sup> Century BC is near Bruneborg in the eastern part of Central Jutland. It is here that there is a ready supply of iron, and evidence of its use from the earliest days of settlement. In addition, aerial photography during the 1970s and 1980s has revealed an unexpectedly concentrated region of Celtic fields in Himmerland with 500 documented sites (there were likely many more but agricultural practices have doubtless eradicated all traces of many). The same author reported locating 66 such fields in Western Jutland (Olesen, 2004).

In contrast to what is reported above, it is interesting that about 500 BC there is a sudden and dramatic flourishing of "culture" in Jutland. Jensen (1982) noted that, *The few central and southern European wealth objects which did manage to reach Denmark in the period after 500 BC often remained in circulation all the way up to the first century BC. One example of this long circulation is a series of Campanian and Etruscan bronze products from the fifth to the third centuries BC which have been found in graves from the first century BC. These wealth objects must have circulated for three or four hundred years* (p. 236).

Again, a reasonable hypothesis is that it was at this time, about 500 BC, that the bulk of Cimbri and possibly the Teutones arrived for the first time in Denmark, bringing with

them their Celtic culture and language (although a large exodus appears to have occurred between circa 400 and 200 BC – the next two finds perhaps supporting this hypothesis).

**Circa 490 BC** – A woman's body found in the Haraldskaer Bog was long assumed to be Viking Queen Gunhild but C14 analysis has demonstrated a much earlier date. She appears to have been the victim of a ritual sacrifice with rope marks around her neck.

**Circa 475 BC** – Another bog man was found in the Borremose Bog (see above) in Himmerland. No cause of death was discovered. What may be a necklace was found around his neck with a round disc made of bronze (22 mm.) with two pieces of a leather string and an amber bead. Four thick branches were placed across his chest where there was the upper half of an upper arm and the radius of a baby. Tacitus has recorded that, *the coward, the unwarlike, the man stained with abominable vices is drowned in the dirty slough by putting a hurdle [heavy weight] on top of him.... This bog yielded another body, this time a woman wrapped in a wollen blanket that appears to be a skirt. Forensic examiners were unable to confirm the cause of death although it has been long assumed to be violent due to the damage to her face and part of her scalp and hair were placed against the neck and right hand. This may have reflected the fact that she was judged to have violated some serious moral code such as prostitution or infidelity.* 

It was in **400 BC** that iron making arrived in Denmark, and a profusion of new fortified settlements and evidence of warfare appear. Lauring (1957) speculates that iron technology was imported via "new intruders" from the Celtic south, perhaps moving north along the Amber Road from Bohemia – Moravia to smelt iron and trade in amber. It is also at the beginning of the Pre- Roman Iron Age one can see striking shifts in the cultural picture at many other levels than the bog finds, including iconography, the settlement pattern and the burial custom. In addition, the transition from Bronze Age to Iron Age were followed by other striking changes in the sacral use of bogs and wetlands. One sees a renewed occurrence of 'bog pots', i.e., earthenware vessels deposited in bogs which are presumed to have contained food. Furthermore, it is striking against the background of the extremely few finds from the latest period of the Bronze Age that the Early Iron Age is so strongly represented (Kaul, 2003, p. 32). This apparently complicated situation apparently reflects the tendency for lands vacated by the Celtic group to be taken over by another as clearly happened in Bohemia circa 400 BC (Cunliffe, 1997).



Map showing the amber route from northern Jutland to Lausitz (Lusatian Culture) and Moravia (Bohemia), in relation to amber finds

**400 BC** - Most recent texts (e.g., Frey, 1995) give a date of circa 400 BC for the migration of the Boii, Senones, Cenomani, and Lingones into the Po Valley and the Adriatic coast. These Celtic settlements came to be known as "Gallia Cisalpina" to the Romans. Other Celtic people moved east along the Danube at approximately this time, and it is entirely possible that part of the movements of this group ocurred northward. These events would have been outside the purview of any of the Classical authors, but does seem to be recorded in the archaeological history of Jutland (see above). A reliance on the archaeological record to outline this massive migration is is found in Kruta (1991) who calls it, "The First Celtic Expansion: Prehistory to History" (p.206); and also Vitali (1991) in relation to the specific impact on Italy.

**350 BC** – On or about this date (attested to by carbon 14 dating) a very significant battle occurred at Als, an island off the east coast of Jutland in territory recorded as belonging to the Anglians at a later date. It is here that a vast storehouse of votive offerings has been found. For example, the "<u>Hjortspring Boat</u>" (canoe capable of carrying 20 warriors) was found in a bog here. Also found were a large number of swords, Celtic – style shields (wooden with a metal boss), spears, helmets, chain mail, cords, needles, bailing scoops and so on – believed to be captured weapons from the enemy. It is believed that the attackers came from elsewhere in up to 6 or 7 boats. This practice was to become

relatively common in the Roman Iron Age with similar finds here and in areas near Himmerland (e.g., Island of Funen) – but this is by far the earliest find of its kind (Kaul, 2003, pp. 212-223).

# **BC – Early Historical Era in Germania and Eastern Europe**

**325 BC** – Pytheas made a voyage from Massilia (Marseilles) to survey the north coasts of Europe, which he described in the now lost "On the Ocean". Fortunately Pliny the Elder provided an important quote from that work - *Pytheas says that the Gutones, a people in Germany, inhabit the shores of the estuary of the Ocean called Mentonomon, their territory extending a distance of six thousand stadia: that, at one day's sail from this territory, is the Isle of Abalus, upon the shores of which amber is thrown up by waves in spring, it being an excretion of the sea in a concrete form; also, that the inhabitants use this amber by way of fuel, and sell it to their neighbours, the Teutones. Timaeus, too, is of the same belief, but he has given to the island the name of Basilia.* 

As noted earlier, it was Philemon who provided information used by Pliny the Elder as to the language of the Cimbri in relation to their words for the Baltic Sea and regions to the east. In all probability the lost works of Phytheas and Philemon described both people. Philemon, according to Thierry (1828), was a contemporary of Aristotle who was born in 384 and died in 322 BC. Latham (1851) concludes that this Philemon, was a contemporary of Alexander the Great (p. clxvii), who lived 356 to 323 BC. Thus, it would be a reasonable assertion that Philemon obtained his information from Pytheas who circa 325 BC sailed around the Jutland Peninsula and spoke to the locals in that vicinity. Further evidence is offered by Rankin (1995) who, in speaking of the Celtic habit of taking arms against the sea (even to the death) as a reflection of what Aristotle described as "thymos" reported that, The fourth-century BC historian Ephorus attributes like behaviour to the Cimbri and Teutones (Timaeus XLVI) (p. 24). Timaeus, Greek historian of Tauromentum in Sicily, died about 260 BC. Ephorus of Cyme was a wellrespected Greek historian who died in 330 BC. He wrote 29 books on history and was widely quoted by other historians (e.g., Strabo, Diodorus Siculus), but only fragments of his texts remain. It is therefore apparent that both the Teutones and the Cimbri made the radar of the Classical authors as far back as 5 years before the voyage of Pytheas -330BC. It would seem likely that Pytheas was familiar with the work of Ephorus and probably knew what to expect in his above noted voyage. This would strongly point to the residence of the Cimbri in their Jutlandic home before this date.

**298 BC** – In this year the leader of the first documented group of Celtic people migrating east toward Greece was one Cimbaules. It was a common practice for a Celtic leader to have as a prefix to his name part of the tribal name. Boirix was the king of the Boii (from Bohemia). This name was also that of the leader of the Cimbri when Teutobod was head of the Teutones at the time of their defeat in 101 BC (see later). Perhaps this gives support to the statements of Appian in relation to the events of 279 BC (see below) to the effect that the Cimbri were active participants in the sacking of Delphi which is close to Cimbaules' recorded position 10 years earlier (Haywood, 2001). These people likely came from the Danube corridor including Moravia / Bohemia, as well as those who

settled in Italy 100 years earlier. Archaeological evidence indicates that when the Zavist settlement in Bohemia moved south their former territory was taken over by migrants from western Switzerland and Baden – Wurtemberg. The Celts also settled as far east as Transylvania in Romania, and began to move into Illyria where, in 335 BC Celtic emissaries from the Adriatic met with Alexander the Great in Babylon. Nothing further is heard of the Celts in this region until Cimbaules is noted in the records.

**Circa 280 BC** – Shortly after the time when Pytheas was making his epic journey, humans were, or continued to be, buried in peat bogs within the territory of the Cimbri or their immediate neighbors. The most famous of all bog bodies, the "<u>Tollund Man</u>", was found in the Bjaeldskoval peat bog at Tollund, 10 km. west of Silkeborg, Jutland. His face is haunting in detail. He appears to be asleep, and his features are perfectly preserved and there is a leather pointed cap on his head. His nose is aquiline.

It is an extraordinary privilege to look upon the face of a probable Cimbrian male age 35 to 40 (one wonders whether he was the father to children and has living descendants). He was hanged but without any signs of a struggle so he may have been a high - status tribal individual who considered it an honor to be sacrificed to the gods. Apparently, this was recorded as a method whereby an old king passed on the mantle to his successor. The Celts did not fear death, when asked what did frighten them, they replied to Alexander the Great only that the sky should fall on them. Alexander hoped they would express awe and fear of him (Cunliffe, 1997). This was a time when regular burials were cremations so there is little to provide evidence of the physical features of other local people. Early carbon 14 dating indicated **280 BC** (approximately) for the Tollund, Elling and Grauballe finds. More recent C14 dating of the Tollund Man yields a date of **405-380 BC**. This calls into question the dating of all the Danish "bog bodies".



Tollund Man. Circa 280 BC.

A mere 80 meters from the above find was the "<u>Elling Woman</u>", with a long pig tail tied in a knot who was about 25 years old and she too had been hanged, but appears to have been carefully "laid to rest". Closer to Silkeborg the approximately 30 - year - old "<u>Grauballe Man</u>" was discovered in a peat bog. His throat was slit from ear to ear. This is entirely reminiscent of the descriptions of the ritual bloodletting sacrifices depicted on a cauldron (see later) and in the writings of the Classical authors. He was also buried at about the same time as the Tollund Man but his manner of death and treatment of his remains afterwards is dramatically different.



The Grauballe Man is perhaps the best - preserved body from Ancient Times. He had been ritually sacrificed circa 280 BC, perhaps over the Braa Cauldron shown below.

**279** BC – La Tene Celts invade Thrace, Macedonia and Greece. This military expedition, which did include settlement, may explain the presence of the Ychromosome marker U152/S28 in these locations (author's database, 2008). As to the place of origin of the attackers, Pausanias declares that, *These Gauls inhabit the most remote portion of Europe, near a great sea that is not navigable to its extremities, and possesses ebb and flow and creatures quite unlike those of other seas. Through their country flows the river Eridanus, on the bank of which the daughters of Helius (Sun) are supposed to lament the fate that befell their brother Phaethon. It was late before the name "Gauls" came into vogue; for anciently they were called Celts both amongst themselves and by others ("Description of Greece", [1.4.1] IV). This appears to suggest that the first wave of Celts came from the Baltic Sea region, and the Eridanos to Greek writers was a river in Northern Europe that led to the source of the amber, all of which would be consistent with the territory of the Cimbri.* 

The Roman writer Appian of Alexandria (circa 95 AD to 165 AD) was very specific here. In discussing the Illyrians in his "History of Rome: The Illyrian Wars" he said, according to the Greeks, that they occupied the Adriatic Coast of the Balkans to the foothills of the Alps and the headwaters of the Danube. Appian notes that the Celts, Illyrians, and Galatians descend from the same peoples (via three sons of Polyphemus). One of the Illyrian Celtic tribes was the Scordisci (who during his day were settled in Pannonia – Hungary). Another Illyrian tribe in the 3<sup>rd</sup> Century BC was the Autarienses *who were overtaken with destruction by the vengence of Apollo. Having joined Molostimus and the Celtic people called Cimbri in an expedition against the temple of Delphi, the greater part of them were destroyed by storm, hurricane, and lightening before the sacrilege was committed* (p. 4). Pausanias ("Guide for Greece", 10.19.4-23.9) provides a very detailed compilation of the tripartite Celtic assault on the Balkans and Greece, many of whom were the veteran troops of Cimbalus above. Apparently, the leader of the Celtic band that stormed Delphi was Brennus, with Cambutis (another Celtic chieftain or a spelling variation of Cimbalus?) leading the infamous assault on Callium characterized by notorious autrocities, prior to marching to Delphi.

According to Appian, frogs, plagues, and pestilence were to follow. It is possible that, if Appian is correct, then the Cimbri headed back to Jutland in 278 BC – a time when there was a great increase in the number of votive offerings involving the sacrifice of humans. Appian recorded that later, the god visited the Celts with an earthquake and overthrew their cities, and did not abate the calamity until these also fled from their abodes and make an incursion into Illyria among their fellow – culprits, who had been weakened by the plague. While robbing the Illyrians they caught the plague and again took to flight and plundered their way to the Pyrenees (p. 4). Pausanius described earthquakes and rock slides that kept the Celts from plundering Delphi. Other sources make it clear that valuables were in fact taken from Delphi. Justinius (quoting Pompeius Trogus) specifically noted that a group of the Tectosages retreated from Delphi and moved west to settle in Toulouse (in the south of France near the Pyrenees) where they deposited the treasures from Delphi in sacred lakes. Then in 106 BC, Caepio led his Roman forces to put down a revolt by the Volcae Tectosages, and ordered the lakes to be drained, apportioning the votive offerings of Delphi treasures to himself. Strabo as well as Justinius attributed Caepio's later misfortunes to the wrath of Appolo since the venerated valuables were once again disturbed (Cunliffe, 1997). The events subsequent to 279 BC thwarted Cetlic expansionism in the area except the influx of three tribes to Anatolia and the Thylian settlement on the Black Sea. It may be of some consequence that an area in Northwest Jutland, very heavily settled in the late Bronze Age, is still called "Thy" most authors (e.g., Hall, see later) ascribing this name to the supposed former residence of the Teutones. At any rate, the Celtic remenants in the area appear to have moved north and grouped together to form the Scoridici tribe of Illyria. Theodossiev (2004) has marshaled considerable archaeological data to shed more light on the specifics of the Illyrian – Thracian connection. Cinnioglu et al. (2004) in a comprehensive study of Anatolian Ychromosome haplotypes found 14.5% R-M269 overall, but only 21% of these are even potentially from Western European sources (the others likely resident from Neolithic times) which, assuming that some variety of R-P312 was characteristic of the Galatians, begs the question as to what ultimately happened to this group.

The archaeological record supports the historical record in that there is a sudden influx of Danubian artifacts (in other words a back migration) during the 3<sup>rd</sup> Century BC in the

west as far as southern France, the territory of the Belgae – and north to Jutland. Hence it is likely that both the Tectosages of Toulouse and the Cimbri and other unnamed tribes headed west shortly after 279 BC to establish themselves in other locations or those previously vacated.

It is interesting to note that the respected author Hubert (1934) stated during the La Tene period, <u>until</u> about **300 BC**, there was little evidence of cultural equivalency in the artifact assemblage or burial customs between those residing in Northern Jutland and Central Europe. However by this date what is seen in Jutland becomes more and more what one would find in the Alpine regions to the south.

The evident connections with Thrace and Illyria in the 3<sup>rd</sup> Century and continuing through the 1<sup>st</sup> provide a clear <u>fourth hypothesis that after the attack on the Greek</u> shrine of Delphi the Cimbri amalgamated with other Celts from Central Europe and Illyria, and returned to Jutland about 278 BC. It is to the archaeological record noted below that we must turn to determine whether there is any confirmatory evidence for the hypothesis suggested by the historical record.

The middle of the Pre – Roman Iron Age also brings a continuation of the tradition of bog offerings of valuable items. One type particularly characteristic of Cimbri country is the bronze "crown neck ring" with a very distinctive closing device. Here, *the distribution of the type goes on from the root of Jutland towards the south east over Poland and all the way to Romania and the Ukraine* (Kaul, 2003, p. 32). There is also a *fine gold neck ring from a bog at Dronninglund, Vendsyssel, North Jutland, must also be assumed to be an import, in this case from southeastern Europe or the Black Sea area, which also may be the case with two cauldron – shaped gold pendants from bogs in Vejle County, Jutland* (Kaul, p. 36). This data could be used to support Appian's statements about involvement in the attack on Delphi, and but a small portion of the looted treasure from that location. Kaul concludes that, *Neither before nor after the Late Pre – Roman Iron Age has such a quantity of valuable objects been found in the bogs* (p. 36). It is noteworthy that during the *Pre – Roman Iron Age cremation was universal in Denmark – there were no inhumation graves* (Kaul, p. 42).

However, the earliest <u>weapons deposits</u> trace to the Pre-Roman Iron Age deposits at Kragebolle, Fyn and Thorsbjerg Bog from southern Jutland where offerings extend over a period of 500 years (Todd, 2004).

At approximately the same time as the above ( $3^{rd}$  Century BC), the <u>Braa Cauldron</u> found near Horsens (south of Arhus) in East Jutland (at the southern border of what was once Cimbri territory) was manufactured. It is classic Celtic, of bronze, and was possibly used in human sacrifices described by Classic authors as being characteristic of the Cimbri (perhaps the Grauballe Man found nearby was sacrificed over this very cauldron). This remarkable item of about 600 liters capacity was apparently manufactured in Moravia from whence Celtic people had moved after their expulsion from Greece (in some way related to the Delphi expedition?) from a single sheet of bronze with three large owl – shaped mounts with suspension rings on the iron rim, and with 6 cast ox heads riveted in pairs below each ring. According to some archaeologists the cauldron had not been ritually sacrificed, but rather had been deliberately broken in pieces and buried in a pit, along with the axe that presumably did the deed. However, Jensen (1982) believes it was ritually deposited, and possibly in the 1<sup>st</sup> Century BC. It would be interesting to find a securely dated axe of the same type to ascertain when the Cauldron was demolished.

The similarities between the Braa Cauldron, and artifacts found in Eastern Europe, has been discussed by archaeologists working in that region. Szabo (1991) writes, *The Moravian heartland has yielded one of the unchallenged masterpieces of Celtic art, the bronze vase discovered at Brno-Malomerice. The close links between this vase and the cauldron of Bra are of particular significance* (p.333).

All these items are from what Lauring (1957) calls the "Celtic Iron Age" in Denmark. He also notes that the finger rings found in Jutland during this interval differ from all others found in other parts of Denmark and Scandinavia suggesting a local culture had developed there.



The Braa Cauldron dated to circa 3<sup>rd</sup> Century BC. Considering the dating, it is possible that the cauldron was used in the sacrifice of the Grauballe Man.

The artistic elements seen on the Braa Cauldron are reflected in sundry bronze fibulae and torcs and bronze belts - locally made - from the same period. Kaul has reported that the torques (torcs) of this era (Celtic aristocracy and warriors of Central Europe wore them around their necks) in Denmark showed the "whorls indicative of Celtic influence" on the end beads (Danish Ministry of Foreign Affairs). The pottery styles are Celtic in this period (early La Tene). North Jutlandic ceramics are, according to Kaul, characterized by "deeply incised chevrons" - which may be a marker of the Cimbri ceramics. Perhaps the most dramatic Celtic artifacts, however, relate to a chief's grave at Kraghede with articles of Celtic manufacture and inspiration from the Late La Tene period such as a pottery drinking vessel showing a Celtic hunting scene and done in the dotted lines technique. He was buried with a four - wheeled chariot – although the burial was a cremation, therefore much was destroyed and distorted. What seems clear is that although the place was Denmark, the burial was precisely that which one would expect at this period of an aristocratic Celtic male from the Celtic homeland of the Upper Danube. In the "Encyclopedia of the Celts" the author concludes that, In the course of La Tene II and III the contacts between Denmark and the Celts were strengthened, and even after the Celts had lost their political independence they remained a source of cultural inspiration to the peoples of the north during the first two centuries AD.

Martens (2000) has reported that Himmerland and Vendsyssel formed a local group during the Early Pre – Roman Iron Age. During the Late Pre – Roman Iron Age, Vendsyssel developed a number of special traits, while Himmerland seems to have become a sort of intermediary between this "Kraghede – Group" and the more southerly parts of Jutland. Many of the particular traits of the Kraghede – Group appeared later in the other parts of Jutland. Vendsyssel thus apparently occupied an avantgarde position during the transitional phase from the Pre – Roman to the Roman Iron Age. In looking at the sequence in this development Martens flagged a transition, a discontinuity, where a Celtic inspired dress style was evident and the introduction of weaponry, tools, and abundant pottery in the grave furniture. These traits occurred particularly early in Central Poland and in Vendsyssel. This may suggest a folk migration from Central Poland to Vendsyssel circa 300 BC with a corridor extending in both directions and as far south as the Black Sea bringing people southward. This would be consistent with a historically recorded migration of Celtic people as far as Macedonia during the time of Alexander the Great, which was a prelude to later invasions of the area of Celts coming from the north and from the west (see above). It can be surmised that what is known as the "Karaghede – Group" to the archaeological community is the progenitor of the historical Cimbri whose center of cultural gravity shifted from Vendsyssel southward toward the end of the Pre – Roman Iron Age.

In a recent article in *Antiquity*, Daniel discussed the work of Conrad Engelhardt, who excavated many of the important Danish Iron Age sites and published a book on the subject in 1866. According to Engelhardt the "Danish Early Iron Age" began in 250 BC. *He discussed whether the changes implicit in the Early Iron Age were the result of pacific intercourse or commercial relations with nations of higher civilization, rejects these, and says 'the higher state of civilization was the result of an invasion, for in no other way can the sudden appearance of damascened weapons, of materials hitherto unknown, of* 

*horses, arts and letters, be satisfactorily explained*' (p. 137). Since then there have been opinions for and against this invasionist view. Other archaeologists attribute all the evidence as relecting cultural diffusion (e.g., Klindt – Jensen). What this does not explain, however, is the suddenness with which this full Celtic "package" or "ensemble" appears in Jutland. Importantly, there is no gradual transition as would be expected if there was a cultural exchange slowly radiating north.

Ca. 300 to 100 BC - Unfortunately there is no clear dating for the very famous Gundestrup Cauldron. It was made of sliver (which was a metal used by Thracian, not Celtic artisans), and the style is distinctly Thracian suggesting that it was perhaps made as a gift for a powerful Celtic ally. Possibly this item was crafted by the Autarienses, the tribe allied to the Cimbri during their campaign against Delphi in 279 BC and who in fact did move to live among the Getae and Basternae along the Thracian Danube, east of their parent Scordisci nation. This item includes scenes of Celtic life in the most incredible detail. Note for example that the warriors have bird crests and other adornments on their helmets shown on the picture below. This detail agrees perfectly with the verbal descriptions of Plutarch noted later, and the 3<sup>rd</sup> Century BC archaeological find from Ciumesti, Romania (on the eastern Celtic fringe) where the gigantic wings of the bird ornament on the helmet actually flap when the rider is moving. Hence a date of manufacture in the 3<sup>rd</sup> Century would be suggested by this data; although most scholars assign a date in the 2<sup>nd</sup> or 1<sup>st</sup> Centuries BC. The Cauldron was found, carefully dismantled, and apparently ritually offered, in a peat bog in Himmerland, the home of the The Danish Ministry of Foreign Affairs (1981) calls this artifact, another Cimbri. splendid monument to the Cimbrian period (p. 62). The latter source speculates that it was offered to the Cimbrian god of war either as a thanksgiving at some time, or as way of placating the gods after news of the disasterous reverses in Italy in 101 BC arrived home, or when they became uneasy at the presence of the Roman navy in their waters during the time of Augustus (p. 63).

The Gundestrup Cauldron shows Celtic warriors in full military attire, both cavalry and infantry; various deities with arms raised in the air, and one with horns and a torc (depiction of the Celtic god Cernunnos – "the antlered one"); also the depiction of a bull sacrifice; and array of animals; as well as a human figure riding a dolphin. Some of the scenes resemble very closely those seen in items from the Indus Valley civilization, and others such as the Irish Tain Bo Cuailnge myth. Altogether one of the most impressive Iron Age finds anywhere. Perhaps it was a votive offering to support the massive undertaking next described. This is also the period where votive offerings of animals, objects and humans proliferate in Jutland.

About 23 AD Strabo, quoting Posidonius, elaborated on some of the rituals of the Cimbri, which can also be seen on the Cauldron. He says, Writers report a custom of the Cimbri to this effect: Their wives, who would accompany them on their expeditions, were attended by priestesses who were seers; these were grey-haired, clad in white, with flaxen cloaks fastened on with clasps, girt with girdles of bronze, and bare-footed; now sword in hand these priestesses would meet with the prisoners of war throughout the camp, and having first crowned them with wreaths would lead them to a brazen vessel of

about twenty amphorae; and they had a raised platform which the priestess would mount, and then, bending over the kettle, would cut the throat of each prisoner after he had been lifted up; and from the blood that poured forth into the vessel some of the priestesses would draw a prophecy, while still others would split open the body and from an inspection of the entrails would utter a prophecy of victory for their own people; and during the battles they would beat on the hides that were stretched over the wicker-bodies of the wagons and in this way produce an unearthly noise (Northvegr translation, II.3).

It is interesting that the above description may be represented in the detail appearing on one of the plates of the Gundestrup Cauldron. Both sources appear to accord well with the archaeological data (e.g., Braa Cauldron) and the fate of the Graubelle Man, noted earlier, who was probably "sacrificed" in this manner. However, recently some authors have suggested that the "cauldron scene" on the Gundestrup Cauldron could represent the "rebirth" of warriors after death on the battlefield, as described in Irish mythology (e.g., Allen, 2007).



Complete Gundestrup Cauldron re-assembled from plates taken apart and used as a votive offering, perhaps prior to the significant 120 BC undertaking.



One of the plates of the Cauldron illustrating aspects of Celtic military activities. The animal festoons on the helmets of the riders was described by Classical authors and found in archaeological contexts.



Detail of above plate from the Gundestrup Cauldron showing a sacrificial scene which mimics what is described in relation to Cimbri behvior by Classical authors.

A recent edition of *Acta Archaeologica* provides an extensive metallurgical study and other detailed analyses (Nielsen et al., 2005). An article in the same journal by Kaul (1995) describes the cauldron specifically in relation to the Cimbri (however this article is unavailable to the present author). There are also articles and books such as that of Jens Braaten entitled, "Kimbrerne: Historie, teorier og myter om Himmerlands kimbrere: kimbrertoget, Borremose-fµstningen og Gundestrup-karret en sammenhµng?" (1988). There does not appear to be a summary or abstract in English so it is difficult to assess the degree of importance of this and other work, only available in Danish, to the present research.

What is less well understood is the rationale in relation to other more "mundane" votive deposits that are more or less continuous from the Bronze Age to the Migration Period in northern Jutland. Objects labeled "idols" made out of wood in a somewhat crude human – like form involving forked sticks and carved wooded phallic symbols are often surrounded by animal bones (e.g., dog skulls) or scattered human bone with broken pottery, stones, axes and sundry other items. Similar finds have been found in Thuringia, Germany. There must have been a long but undocumented tradition surrounding these items. One of many examples is Hedeliskaer north of Arhus, Jutland. A further discussion of this subject is beyond the scope of the present work, but is amply described in Kaul (2003). It should be noted that while the emphasis here is Jutland, very similar finds are found on the islands (e.g., Funen) to the east which are also part of modern Denmark.

Another entirely Celtic item that dates from this time period (or somewhat later) is the impressive highly decorated Dejbjerg wagons – two chariots (4 wheels, one smaller than the other) from Praestegardmos, Ringkobing Fjord in Northwestern Jutland, but which show stylistic continuitity with Central Europe, and are entirely Celtic in design. Part of the bronze fittings includes the image of a face (with the limed hair look typical of warriors who spiked and whitened it Celtic - style) and a large mustache. They had been carefully dismantled and laid out on dry ground doubtless as a votive offering (Lauring, 1957). It is also here that a very significant hall was located from this era until it burned in the 4<sup>th</sup> Century AD and the consensus is that Dejdjerg was a location of some significance (Hansen, 1996). It is noteworthy that the wagons have parallels not only in Central Europe, but more particularly in Jutland and Fyn. Stylistically they resemble items found in burial contexts in Husby in Schleswig, Fredbjerg in central north Jutland, Karahede in northern Jutland, and Dankirke in southwest Jutland, as well as Langa on Fyn. The similarities between one of the wagons from Dejbjerg, the Fredbjerg wagon and the Langa wagon are so close that they are probably products of the same workshop (Kaul, 1991, p. 536). The link between the assemblages of these regions (Jutland and Fyn) and the Rhine Valley in Northern Gaul is striking (Todd, 2004). They also appear to conform to the description of the wagons used in the ritualistic ceremonies of worship to the goddess Nerthus as described by Tacitus.

Interestingly both known Pre – Roman Iron Age <u>fortified settlements</u> in Denmark are in North Jutland within the territory of the Cimbri. The Borremose complex near Ars in

western Himmerland is the larger of the two very similar complexes, and asserted to have belonged to the Cimbri (Royal Danish Ministry of Foreign Affairs, 1981). Similarly, Starcke in his "Denmark in World History" (1968) states, In Borremose in Himmerland, an ancient Cimbrian fortress has been discovered (p. 56). Its fortifications (with a double walled palisade) were used between 300 - 100 BC (with a moat 18 feet wide and six feet deep below the six foot ramparts and pockmarked with deep holes and sharp bayonet sticks to deter intruders), and surrounded by a man – made lake. After a short period of abandonment, about 50 BC it became a permanent but unfortified village with the moat being gradually filled in during the period up to 1 AD. Radiocarbon dating of a bayonet – shaped piece of wood found at a cult site at the Borremose settlement belongs, to the beginning of the fortification period. More specifically, the object is dated to about 220 BC (Tauber, 1964, p. 219). A sample of Sphanum peat (with Comarum) which was obtained from just below a sand layer (suggesting village abandonment), points to about 130 BC for deposition. Similar analyses suggest a second period of settlement lasting from about 40 BC to 110 AD (plus or minus about 100 years). Furthermore, the entrance was made easier by constructing a solid stone-built roadway across the old ford, what is one of the finest road constructions of Danish prehistory (by the Cimbrians who "stayed home" according to the Royal Danish Ministry of Foreign Affairs, p. 61). This causeway (edged with large flat stones) wide enough to accommodate wagons (the Deibierg Wagons were from this area) over a bank and ditch leading to what was once an island cut out of the peat. There were at least 32 longhouses in the complex within the 260 by 500 foot enclosure, making it one of the biggest and best preserved Iron Age villages It is perhaps noteworthy that a measuring stick was found at this site with known. notches exactly corresponding to half a Greek foot (not the Roman version) suggesting that, the Celts may well have passed on a knowledge of the classical Greek unit of measurement (ibid, p. 62). It would make sense that this awareness arrived with the Cimbri upon their return from the Greek world circa 278 BC.

Another excellent source for information about Borremose is Scarre (1998). There is apparently little doubt that the Cimbri called this place home, and it may have been the domain of Boirix, and perhaps Lugius (see below) resided at Lyngsmose. Lyngsmose (150 to 50 BC) is very similar but smaller (having only 17 houses or other buildings) and is located north of Limfjord in Vendsyssel. Both were surrounded by earth and post ramparts, and moats whose muddly bottom contained numerous small hidden sharp wooden stakes.



"Recent" extensive archaeological work by Martens (1994) has provided a somewhat different interpretation of the site (see <u>here</u>). The above photo is from this study. Quoting Martens, "The Hjortspring find [boat sacrifice circa 250 BC] indicates that a super-local power in the Early Pre-Roman Iron Age can consist of at least ten villages. However, the importance of the Borremose centre appears, due to the many unusual finds, to be of an even larger scale. In the Early Roman Iron Age Himmerland together with Vendsyssel formed a distinctive local culture province which, however, is already visible in the material from the Early Pre-Roman Iron Age. This indicates that cultural units of regional size were already under formation during the PreRoman Iron Age. Therefore, the central location of the Borremose site taken into consideration, it seems reasonable to suggest that it was the central place of all Himmerland. The name of this landscape probably derives from the Cimbri, the earliest mentioned form being "Hi'mber Syssel". The enclosed village at Borremose could therefore be the central place of the Cimbri, the terminal date almost coinciding with the assumed date of the start of their migration - the last quarter of the 2nd century BC" (p.273).

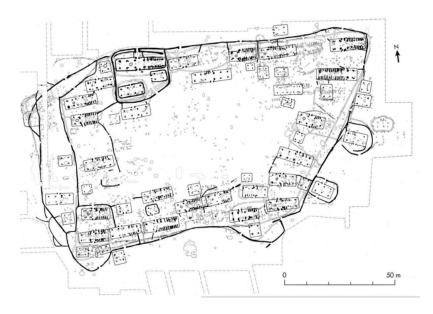
What Martens appears to mean by "many unusual finds" are the large number of sacrificial or votive finds in the immediate area such as the bog bodies and treasures such as the Gundestrup Cauldron.

It does not appear that the cemeteries associated with Borremose have been discovered to this point.



Map of Borremose and Himmerland Area

Further south is the village of Hodde, in western Jutland north of Ribe, occupied from 150 BC to 1 AD, which is similar to the others above, and likely connected to the Cimbri. Hodde was very large with 27 houses within a palisaded enclosure.



Plan of Hodde

Note the apparent chief's house top left above (1<sup>st</sup> Century BC). One author reported that the village burned down (cause unknown) circa 20 AD (T. Douglas Price, (Oxford, 2015, pp.262-263). However Jensen (1982, pp.206-209) describes the many phases of Hodde as a "wandering village", moving about within a "little hill island" facing a meadow (typical of most villages of this time) from circa 1 AD until the 4<sup>th</sup> Century (and perhaps longer), moving a short distance every 4 or 5 generations. Other villages of the same era have been discovered and the pattern is strikingly similar. Examples include Osterbolle in northern Jutland, and Drengsted and Dankirke (the latter existing until at least the 5<sup>th</sup> Century) in southwestern Jutland. Jensen further states that, "*None of the settlements in this south-west Jutland region date back more than a century before the birth of Christ*"; and that the southern coastal region (e.g., around Ribe) experienced, "*the explosive expansion of settlement which took place in the centuries around the birth of Christ*" (p.210). If only it were possible to associate each of these villages with the tribal units described by the Greek and Roman writers.

It is interesting that 15 miles to the east of Hodde, another village of this era was established near Vorbasse in the 1<sup>st</sup> Century BC. It moved 8 times within a .6 mile radius, and the modern village of Vorbasse is the likely successor. There are cemeteries associated with each phase of the settlement. Essentially the village shows relative continuity from the 1<sup>st</sup> Century BC until modern times. See <u>here</u> for the Hvaas, 1983 article which was summarized by Price (2015).

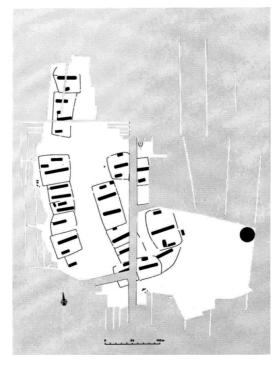


Fig. 5. The village in the 4th century A.D. The black dot indicates the position of the cemetery.

Vorbasse

Perhaps this is a settlement of the Cimbri who did not leave circa 118 BC on the multi – year perambulation throughout Europe (see below).

About 20 miles north of Vorbasse is the Hedegard site which is primarily 1<sup>st</sup> Century BC to 1<sup>st</sup> Century AD. What makes it of particular interest is the large quantities of very ornate Roman military gear found in graves there. This may or may not be a Cimbri site, but is is surely a stong candidate. An example from one of the graves is the dagger and scabbard below.

As the the region of Denmark with the largest number of sites which begin to flourish about 1 AD, and which are less mobile, are found in northwestern Jutland in the Thy region north of the Limfjord. There are 46 contemporaneous villages dating up to the  $3^{rd}$  Century AD clustered within a 500 square km area. Clearly there was a large population in certain regions of Jutland from 1 AD onwards – about the time that the remnants of the Cimbri and their allies returned from the south after their long perambulation described in detail below.



The article by Madsen (1996/97) can be seen here.

There are many other villages of this nature scattered about Jutland and dating from various phases of the Iron Age, but the above is a sample of what can be expected. See Parker Pearson, 1993 <u>here</u> for a comprehensive overview of many of these sites.

118 - 101 BC - The Great and Infamous Odyssey of the Cimbri: The Cimbri, according to Greek and Roman historians (e.g., Clitarchus), experienced a tidal wave and subsequent flood of their lands in Jutland (others say an earthquake). Some authors such as Strabo dismiss this as unlikely (perhaps because the Mediterranean Sea to which he was accustomed does not have tides). However, the Royal Danish Ministry of Foreign Affairs, in their "Denmark: Introduction - Prehistory" (1981) publication, describes how the disasterous climate and geological phenomenon can be read in the bogs, and while *the* lower levels are dark, firm and hard, as well as much decomposed, there is above them, the borderline suddenly and sharply defined, a loose, almost unconverted mass of light – brown peat, popularly called 'dog meat'. It consists entirely of sphagnum, which needs plenty of moisture in order to grow. Elsewhere at the time the bogs were covered with sand, gravel and clay (p. 52). This sounds very much like the inundation of the sea or other disaster involving torrential rains, and it is concluded that this event precipitated the emigration of a substantial part of the Cimbri, Teutones and Ambrones. Plutarch reported that the Cimbri army included 300,000 armed warriors (although this is perhaps an exaggeration), plus their women and children, so overpopulation was likely also a motive. Thus, they set off to try their luck at finding land to settle. Their restless perambulations are nothing short of amazing.

The Cimbri appear to have followed the well - traveled "Amber Road" which crosses the Danube River at Carnuntum (near Vienna within Boii territory) to the country of apparent distant relatives, the Boii and Scordisci, who were none too happy in relation to the "visit". One of their first stops may have been among people well known to them over the centuries, and possible kin. It is known that, The Celtic oppidium Stare Hradisko in Moravia, for example, was and important place of collection for Baltic amber in the first century BC (Jensen, 1982, p. 243). In a somewhat circuitous route they descended to the Danube and Bohemia and Hungary as far as Croatia by 113 BC but were turned back They apparently approached their old comrades from the Delphi (Burns, 2003). campaign, "their fellow culprits" the Illyrians (presumably the part - Celtic Scordisci or Auterienses of Thrace) who, according to Appian, they robbed, caught the plague from them, then headed west toward the Pyrenees (Appian, "Illyrian Wars", p. 4). This may however, be of questionable accuracy since, sometime between 125 and 100 BC a village named Teutoburgium (Dalj) emerged in the Balkans, within the territory of the Scordisci (a mixed Celtic, Thracian, Illyrian people), in what is today Croatia (Jovanovic and Popovic, 1991) – perhaps signifying the settlement of some of the migrants in that area.

In **109 BC** the Teutones, Cimbri and the Tigurini (a tribe of the Celtic Helvetii) requested land (in southern Gaul) of the Roman officials in return for military service but were adamantly refused (Burns, 2003). They then linked up with Ambrones neighbors at the River Main where they stayed for 4 years, largely near Greinberg. Clearly they had enough time (105 to 109 BC) to found colonies. The "mysterious" <u>Toutonenstein</u> was found on the top of Greinberg, near Miltenberg close to Frankfurt and within the walled enclosure there. This is a 5 meter - high obelisk in two parts with the following recorded: *Inter Toutonos C A H I* (with the latter letters positioned vertically under the first T in Toutonos). This item has caused a great deal of puzzling by scholars over the years but not to much avail. This may be a memorial or boundary marker relating to the arrival in that location of the Teutones circa 107 BC, but its origins are shrouded in mystery. It is curious that memorals to the Cimbri auxillaries of the Roman Army should be found in the same enclosure 300 years later (see below).



Migration route of Cimbri, circa 118 to their defeat at Vercellae in 101 BC.

Burns (2003) discusses the fact that at the time that 300,000 Cimbri warriors were in the vicinity, the large "oppida" (fortified settlements, often on a hilltop) of Manching and Kelheim in Bavaria were abandoned or severely depleted. This demise may be a coincidence or reflect the fact that the Cimbri overcame the defences; or many occupants joined the expedition; or the leaders hired the Cimbri as mercenaries against other competing oppida. It is also perhaps noteworthy that large coin hoards in this vicinity (south Germany) are dated to this time, namely Lautenrach, Schonaich, and Langenau. A main gate for Manching has been dendochronologically dated to 105 BC – all of this

appears to link up chronologically with the presence of overwhelming numbers of northern Celts (see p.397, note 48).

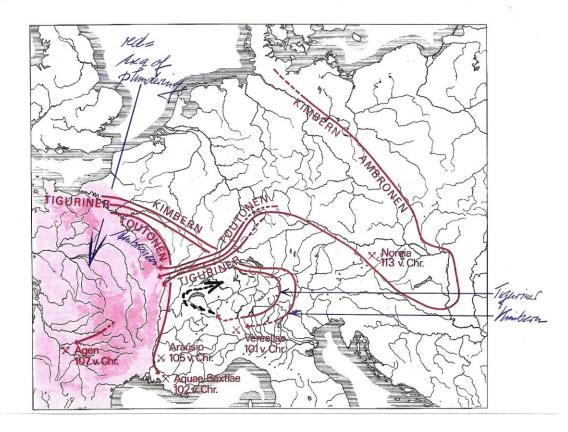
If later locations are any indication, the Teutones may have resided on Sealand and south of the Baltic Sea, somewhat inland immediately to the east of the Jutland Peninsula. The Ambrones are said to have come from the Zuider Zee region to the west of the Jutland Peninsula (where the Cherusi were residing at the time of Pliny the Elder was penning his descripton of the tribes of the north). Festus (2<sup>nd</sup> Century etymologist) reported that they were a, *Gallic nation which, after having lost its residences in consequence of a sudden overflow of the sea, resorted to live with the plunderers* (Book 1). Starcke (1968) associates them with the Island of Fehmern – Imbre, and believes that the remenants are the Ymbres of Widsith circa 500 AD (see later). Multiple sources agree that the Cimbri occupied at this time all of what was then known to the Classical authors as the Cimbric Cheronese (Peninsula). An inspection of the map below shows that the Cimbri made a "beeline" for the Celtic territory. They remained entirely within this perimeter during the extent of their oddesy – perhaps reflecting their desire to settle among fellow Celts.

After the complete destruction of the Roman Army under Papirius Carpio in 113 BC at Noreia in eastern Celtic territory, it was four years later, in 109 BC, that the confederation of northern Celtic forces had similar success with three Roman Armies in Provence.

The Cimbri and Teutones looped around France, supposedly leaving about 6,000 warriors in Belgae, along the River Sambre near Namur, to guard the baggage train. These were to become the Aduatuci, the nemesis of Ceasar at a later date. He describes their relationship to the Cimbri in Book 2, Chapter 29 of the "Gallic Wars". Appian, in this "The Gallic Wars" said that the Nervii, residing among the Belgae tribes, *were descendants of the Cimbri and Teutones* (Epit.4). This topic will be revisted later.

Each of the tribes frequently split up, and absorbed components of other Celtic groups such as the Helvetii, Tigurini, Tectosages, and Arverni (Ellis, 1990). The Cimbri crossed the Pyrennes into Spain, then east to Alpine Germany and Switzerland. Here in the La Tene heartland they spent a 3 - year sojourn and in 105 BC they exterminated an estimated 80,000 Romans at Orange, and after dividing their forces (with the result that the Teutones and Ambrones were entirely defeated), the Cimbri focused on Italy via a march through the Brenner Pass of the Northern Alps. Classical authors describe this episode in consummate detail. For example, the Cimbri used their shields (white in color) to "toboggan" down the hillsides. The logistics of transportation with hundreds of thousands of people moving through snow covered alpine passes was doubtless very "challenging". However, instead of making a bee line toward a defenseless Rome the Cimbri concentrated on plunder and on July 3<sup>rd</sup>, 101 at Vercellae (Vercelli in Piedmont) they, led by their king Boirix, were forced into a battle with the well – prepared Romans and were routed and lost 120,000 with 60,000 sold into slavery. Both leaders, Boirix and Lugius, were killed. In the meanwhile they struck terror in the hearts of the "invincible" Roman Empire and presaged later "barbarian" attacks.

An interesting passage by Florius provides insight into the psychological makeup of the Cimbri. In III.3 he reported that the Roman commander Marius *was obliged to sustain an engagement with their wives, as well as themselves; who, entrenching themselves on all sides with wagons and cars, fought from them, as from towers, with lances and poles.* Plutarch (circa 75 AD) provided more details as follows: *But as they pursued those that fled to their camp they witnessed a most fearful tragedy; the women, standing in black clothes on their wagons, slew all that fled, some their husbands, some their brethren, others their fathers; and strangling their little children with their own hands, threw them under the wheels and the feet of the cattle, and then killed themselves. They tell of one who hung herself from the end of the pole of a wagon, with her children tied dangling at her heels. The men, for want of trees, tied themselves, some to the horns of the oxen, others by the neck to their legs, that so pricking them on, by the starting and springing of the beasts, they might be torn and trodden to pieces. Yet for all they thus massacred themselves, above sixty thousand were taken prisoners, and those that were slain were said to be twice as many.* 



The Battle of Vercellae and its aftermath for the Cimbri and Tigurini allies

So many authors spoke of this event and the Cimbri it is impossible here to mention them all. There is considerable ethnographic data embedded in the writings of the Classical authors, as reflected in the content of the above paragraph. It might be worth quoting Plutarch (XI.3) again in that he described the Cimbri with, *their great stature, their light-blue eyes*, adding that the Germans call robbers "Cimbri". He also described their attire for battle as follows, *They wore helmets representing the heads of wild beasts, and other* 

unusual figures, and crowned with a winged crest, to make them appear taller. They were covered with iron coats of mail, and carried white glittering shields. Each had a battleaxe; and in close fight they used large heavy swords. In the "Ancient Greek Online Library" the translation differs in some essentials. Here instead of a battle - axe, every one had two darts and further chain mail was not noted but instead, breastplates of iron (p. 13). This situation is actually very common. Documents written in Greek or Latin often have wildly diverging English translations.

Plutach attributed the Cimbri defeat to a combination of the heat and the sun in their eyes. Florius provided another reason why the Cimbri may have been defeated, after so many victories. He reported that they engaged in, *feeding on bread and dressed meat, and drinking wine, in the softest tract of Italy.* (Chapter III.3)

<u>What Happened After the Battle?</u>: Some sources imply that all were killed or enslaved. One of the best Roman historians, Appian, is very clear about the matter. He stated that, *Being reduced to extreme weakness, and for that reason excluded from every land, they returned home, inflicting and suffering many injuries on the way* ("The Illyrian Wars", p. 4). It is also highly probable that some remained in Jutland when the "excess population" departed.

It appears that Marius collected the weapons of the Cimbri to bring in triumph to Rome. Laurent – Vibert (1908) discusses the evidence in relation to a Cimbric shield that supposedly hung over a bank in the Forum. It apparently had a huge caracture – like head painted on it. Oddly Thierry (1928) and Guizot (1869) give a date of 167 BC for this object based on a supposed inscription, and which Thierry interprets as an indication that the word Cimbri was used as a synonym for Gaulic at this time (relating to the peoples of the Po River region). The evidence presented by Laurent – Vibert is entirely consistent with a dating of 101 BC for the "Scutum Cimbricum" (Cimbri shield). Of course one might assume that this item along with any other trophies of the Cimbri campaign are long gone.

Appian, writing circa 145-165 AD, discussed the distribution of the lands in the region the Romans, *now called Gaul: this had been seized by the Cimbri, a Celtic people, but Marius had recently expelled them and appropriated the territory for Rome as it was no longer in Cimbri possession* (P. 29), but had been given to the men who were soldiers under Marius.

<u>Alleged Italian Cimbri Survivors of the Vercellae Disaster, and Related Genetic Studies:</u> It appears that some survivors found their way back to Jutland but there are reports that some settled in Italy where what is purportedly their language is still spoken by some in scattered regions such as Lessinia and most specifically Giazza in the Verona District. It is claimed that the Cimbri language remains virtually intact in these regions – but the word "Germanic" is often applied, and the "confusion" may result from their name "Zimber" relating to the woodworking to those who some believe are 13<sup>th</sup> Century immigrants from Bavaria. Until recently it was unclear whether the tradition of Cimbri descent could be verified. As noted, there was still a substantial group remaining in the original home (how many returned there or never left is unknown), where Greek and Roman observers soon reported them being firmly ensconced on the northern tip of the Jutland Peninsula of Denmark (as noted below). There are many websites, largely written in Italian, which are devoted to the history, culture and language of this Italian minority population. It is most fortunate that the matter has been deemed to be of sufficient importance that medical as well as population geneticists have explored the matter in recent studies.

Pozzato et al. (2001) compared the rates of haemochromatosis (an iron storage disease - HFE), and the presence of two genes known to be associated with the condition, in two populations assumed to share a common ancestry – Celts from Denmark and from Italy. They reported that, *The Cimbri, a Celtic tribe originating from Denmark, settled on the Asiago plateau, the Celts were defeated by the legions of the Roman Republic........ (p. 449).* The authors found significant similarities in the prevalence of HFE mutations in both peoples "of Celtic origin".

In terms of population genetics, the first study by Borglum et al. (2002) compared the mtDNA (mitochondrial DNA; maternal lineage) of the Cimbri of Denmark and those of Italy. No noteworthy similarities or differences were detected. Considering that many of the refugees were likely male, a 2007 study by the same combined Danish and Italian team (Borglum et al.) investigated the Ychromosome similarities and differences comparing and contrasting both groups known as Cimbri. The Danish Cimbri were from Himmerland in the northern part of Jutland, the authors being careful to sample from those whose paternal ancestors had resided in the area from at least 4 to beyond 10 generations. The two Cimbri groups failed to show any biological relationship to each other but the "Danish Cimbri" were similar to those residing in nearby regions of Denmark. This finding does not rule out the presence of some Cimbri from the army defeated in 101 BCE, but the numbers were unlikely to have been large. However, until the above samples are tested for the U152/S28 (and DF27/S250) mutations the question will still be open - but this haplogroup is also found in substantial numbers in Bavaria – so we may never know if the tradition of the Italians residing in Asiago has any substance.

The Cimbri have been implicated in the <u>development of the Runic script</u> of the Germanic area. The so called "<u>Cimbrian thesis</u>" maintains that the Cimbri who returned to Jutland from the above perambulation carried with them knowledge obtained via their contact with North Italic and Mediterranean peoples and established a system of writing that was used in Iron Age Scandinavia. This is just one of many competing hypotheses relating to the matter, although a consensus is developing that it was via a Celtic influence that Runic or "futhark" script (the only form of writing used in Scandinavia until Christian times) arrived in the north (Mees, 1999). As can be seen in the above maps, during the wandering c.107 BC the Cimbri – Teutons were in the area of Southern France and across the Pyrenees Mountains deep into Spain – both areas "rich" in Y Haplogroup R-DF27. Some of these local people may have joined the large army and ultimately some returned with the Cimbri to Jutland in 101 BC.

Certainly the Cimbri were allied with Celtic tribes such as the Helvetii and allied or subordinate tribes such as the Tigurini. To the immediate east of these people were the Vendelici and 4 subtribes in the Rhaetian area of Switzerland and Bavaria. There are many interpretations of the origin of the word Vendsyssel, which is the province furthest north in Jutland (above the Limfjord). For example, although a majority of scholars consider the home of the Vandals who were to terrorize Europe during the Age of Migrations (5<sup>th</sup> Century AD) at Vendel in Sweden, others have posited that their origins lay in Vendsyssel. However, the place name of Vendsyssel could relate to the Vendelici of the Celtic homeland; either as the place of origin of the Vendelici, or the destination of some of them after the defeat of 101 BC.

Koch (2007) in his "An Atlas for Celtic Studies" places the Teutones near Wurzburg immediately above the Helvetii and the Vendilici. It is possible that some of the survivors could have settled here (perhaps among kinfolk); or along the Saale River in Thuringia where the border wth the Germanic Suebi was situated. Here, 100 years later, the Angrivarii (a group associated with the Angles and Warnii of Schleswig) came to the attention of the Romans prior to the Battle of Teutoburg Forest (9 AD). The names of the chiefs of the Cimbri during the campaigns of 113 to 101 BC were Lugius (of the Lugii tribe), and Boirix (King of the Boii). These two tribes are immediately proximal to the Angrivarii territory (as noted by Tacitus and others). A Celtic settlement site near the later documented lands of the Angrivarii (Anglevarii) here is Lugidunum within the territory of the Lugii. This suggests a relationship between these two tribes and the Cimbri and that some of their people may have resided in Thuringia, and others on the Cimbri Cheronese (Jutland).

It is unfortunate that at present there is not enough data to offer any definitive interpretations. For example, even if the males in this area were to be found to be predominantly R-U152/S28, this could refect the presence of Cimbri survivors of the defeat of 101 BC, or simply the fact that this area is the apparent "homeland" and "heartland" of R-U152/S28 from the Bronze Age or earlier sources; and with the first Cimbrian – Anglian settlers to England (Oppenheimer, 2006).

<u>Conclusions about the Origins of the Cimbri</u>: It is noteworthy here that the primary Cimbri leader in 101 BC was named "King of the Boii" (a Celtic tribe from Bohemia), and a second was "King of the Gaesatae" of the Rhone Valley in Gaul. Both tribes also had long associations with Italy. Kruta (2004) concluded that this was, *a last attempt to return to Italy on the part of some Boii* (p.108) from where they had been defeated and sent packing from their settlements at Bologna in the 3<sup>rd</sup> Century. It may be noteworthy that circa 232 BC the native Italian Cisalpine Celtic Insubres employed the Boii and the Gaesatae as mercenaries (Kruta, 2004). This, along with the many above noted historical and archaeological facts linking the Cimbri to the peoples of Illyria, Moravia, and Bohemia, points to <u>an eastern origin</u>. However subsequent to 113 BC there may have been considerable mixing with other Celtic tribes such as the Gaesatae, plus the Helvetii. In summary, four hypotheses suggest that the ancestors of the Cimbri may have been:

- 1) <u>members of the Unitice Culture in the Bronze Age</u> following the Amber Road north before1500 BC. This hypothesis can be rejected on numerous grounds, although a small sprinkling of ancestors via this source cannot be ruled out.
- 2) part of the documented westward migration of Cimmerian warriors after their expulsion from the Middle East by the Thraco - Scythians circa 650 BC. This hypothesis stands on a weak footing on the basis of population genetics, and the archaeology would suggest at most a small migration.
- 3) <u>Celts whose culture in Lausitz and region was disrupted by the Scythians and who deserted their villages circa 500 BC</u> and migrated north to kin in Jutland.
- 4) <u>Celts (Bituriges) who were led by Segovesus left Bourges (France) between 616 579 BC and settled in the Hercynian Forest (see Livy). Those in Moravia became the Boii tribe (see Posidonius). Some had moved to Jutland by 325 BC when the Cimbri first became known to history.</u> From here some set out circa 290 BC to invade Macedonia and Greece before turning back and ending up in Jutland, perhaps with a mixed group of other Celts.
- 5) <u>a 2<sup>nd</sup> or 1<sup>st</sup> Century BC amalgam of Boii, Gaesatae, Helvetii, Tigurini, Arverni, Tectosages, Vendelici and other Central European Celtic and Ibero</u> <u>– Celtic tribes</u> fused before and during the Cimbrian return to Jutland in 101 BC after the defeat at Vercellae (bringing more R-U152/S28 and R-DF27/S250 Y-DNA to the area).

These hypotheses are not mutually exclusive - all could all apply to a greater or lesser degree, however the last two are the most persuasive.

## <u>The Cimbri in Belgium – the Charudes, Nervii and the Aduatuci:</u>

**58 BC** - 24,000 Harudes (doubtless Charudes – see below) crossed the Rhine under the command of Ariovistus supposedly of the Suevi (although this was a "generic" word for Germanics). He demanded of Caesar one third of the Celtic lands for his allies the Harudes. The later began to devastate the lands of the Roman allies the Aedui. When word reached Ceasar about these forces under the command of Nasua and Cimbrius (clearly Cimbri - Celtic names), he was forced to act. A battle was about to ensue however, Caesar claims the Germanics did not attack in force because their wise women had pronounced from their divinations that they should not engage in battle before the new moon. This behavior is recorded as being a part of the process in the Cimbri decisions about battles and suggests that the Harudes may be an offshoot of the Cimbri. The coallition of Germanic / Celtic forces was defeated and some crossed the Rhine and others were dispersed, so some may have remained in Belgium, others moved to Lower Saxony (see later), and some traveled back to Jutland. The geographical name Harz Haeret or Hads Herred may relate to settlements there. The Medieval names Hardboer and Hardsyssel (Harthe – Syssel) may suggest that some of the group ultimately moved from the East to the West coast of Jutland below Limfjord and concentrated in this region (see cartographic evidence later). Medieval place names may not be the best guide to ancient tribal locations as coincidence could easily play a major role.

**57 BC** - The Aduatuci resided next to the Eburones and other Belgic tribes (see map below) and according to Caesar in Section 29-30, Book 2, they were descended from 6000 Cimbri and Teutones (considering the tribal name, probably the Teutones) who were left east of the Rhine River near Namur to guard the baggage train that could not be taken with the main group. They were now residing at Aduatuca (perhaps Mount Falise), a fortified oppidium (hill fort) on the River Meuse near modern Tongren, and had a total of 19,000 warriors. In the ensuing battle 4,000 Aduatuci were killed outright and, after a siege, Ceasar breached the walls and 53,000 were immediately sold into slavery and taken in chains to Rome.



Map of Belgica, showing the positions of the supposed Cimbri – related Aduatuci and Nervii.

The tide turned for Caesar in his dealings with the numerous and powerful Nervii, a Belgae tribe residing to the immediate west of the Aduatuci. In 57 BC they *killed all his tribunes and centurions* before succumbing to the renewed efforts of Caesar. Appian, in his important work, "The History of Rome: The Gallic Wars", reported that the *Nervii were the descendants of the Cimbri and Teutones* (Epit.4). It is unclear whether this is accurate since Caesar described the Aduatuci in these terms but not so the Nervii. What

might support Appian's claim, however, is the fact that the Nervii built a new civitas in 275 AD which was called Cambrai.

**54** BC – Ambiorix, the chief of the Eburones (the name is reminiscent of the Ambrones, the participants with the Cimbri and Teutones in the 118 to 101 BC odyssey) was clearly a Celtic name although Ceasar said the Eburones were of Germanic origin. It is possible that the Eburones and Ambrones were the same people. In 54 BC Ambiorix led his people to defeat an entire Roman Legion of 5500 men (all were killed). They resided in the same territory as the Aduatuci, which may hark back to the earlier alliance between the Ambrones and Cimbri. The region is known as Limburg in Belgium and Holland. There is of course a resemblance between Limburg and Limfjord – but whether that is coincidence or planned is unknown. Ultimately the Eburones were defeated by Ceasar and dispersed. One group that includes their lineal descendants is the Tungri (the name of the Belgian city of Tongren coming from this source) who were later residing at Aduatuca (home of the Aduatuci) with some employed as Auxillaries in the Roman military establishment, serving at Hadrian's Wall in Northumberland (see below).

53 BC – It is clear that the Aduatuci survived the disaster of 57 BC intact as a tribe since in Book VI, 2 Caesar reported that, The Nervii, the Aduatuci, and the Menapii were in arms and had been joined by the German tribes on the west bank of the Rhine. The entire matter of the relationship between the Eburones, the Aduatuci, the Tungri, and the Charudes becomes unclear upon closer inspection. In descriptions of the Thuringia or Harz Mountains, there is a tradition that some of the Harudes moved to this area of Lower Saxony in Germany. A people of this name are found here until at least 850 AD. One quote is as follows, After the yearbooks from Fulda to the year 852 the resin gau [low mountains] by the Haruden and called after them the Harudengau (Harudorum pagus) was inhabited. Harud, from which hard, hard, became resin, means forest, forest mountains, and the Haruden is on or inhabitants of the Harud. Furthermore, At the end of the third century AD, the Hermunduri were allied to the Alemans under a new name, the Juthungi. The northern group later merged with the Thuringians. Some view the Juthungi and the Jutes as equivalent. Their name is later associated with the founding of Bavaria, as is that of the Thuringians. This subject is explored again in a discussion of the identity of the Jutes in another study (see Jutes here) by the present author. Further research on these groups is beyond the scope of the present work. The upshot is that there also may be Cimbri and / or Teutones descendants residing in Belgium, Saxony and Bavaria to this day. The evidence is far from compelling.

## Roman Iron Age: 1 to 500 AD

**5** AD – Although the Cimbrian peoples were clearly decimated by the events of 101 BC, the nation was still firmly established in the area where they originated at the time of Christ. Their location was reported about 5 AD when the Emperor Augustinius outfitted a fleet under the command of his foster son Tiberius to explore the northern regions. In the "Deeds of the Devine Augustinius", as inscribed on a bronze column in Rome in 14 AD, he related that, *My fleet sailed from the mouth of the Rhine eastward as far as the lands of the Cimbri to which, up to that time, no Roman had ever* 

penetrated either by land or by sea, and the Cimbri and Charydes and Semnones and other peoples of the Germans of that same region through their envoys sought my friendship and that of the Roman people. The same information is etched on stone on the "Monumentum Ancyranum" in Ankara, Turkey. The Charudes may have occupied the Jutland Peninsula (immediately below the Cimbri circa 150 AD, see later) at this date, but their relationship to the Cimbri is unclear unless one assumes they are of the same nation as the name of one of their leaders was Cimbrius at the time of Ceasar. The Seminones were the head tribe of the Germanic Suevi and resided between the Elbe and Oder Rivers, east of the Longobardi, as described 50 years later by Tacitus.

Posidonius and later Strabo reported that the Cimbri, *sent as a present to Augustus the most sacred kettle in their country, with a plea for his friendship and for an amnesty of their earlier offences, and when their petition was granted they set sail for home* (Strabo, 23 AD, II.1). This is presumably an appeasement gesture occasioned by their behavior towards the Romans 100 years previous. It is interesting to note that at this time their most sacred possession was a cauldron – hence Celtic traditions still prevailed at this time. Furthermore, they arrived by boat to meet Augustus, indicating that they were presumably well familiar with this mode of transportation.

The Battle of Teutoburg Forest took place in **9 AD**, as the Romans were marching to subdue Germanic tribes who balked at offering tribute. Over three days in September the battle raged. The result was that three of the 29 Roman Legions (the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup>) under the command of Publius Varus, 20,000 Roman Legionnaires, were destroyed by a confederacy of "Teutonic" peoples led by Arminius, the chief of the Cherusi. Whether "Teutoburg" has anything to do with the Teutones is unknown.

**The Cimbri as Roman Soldiers**: Although specifics are lacking, it is likely that the Cimbri served from about **20 AD to 420 AD** in <u>Roman Legions</u> as mercenaries, perhaps even earlier after the visit of Tiberius. In "Roma – Victrix" there are entries for Auxilliaries which acted as support to the Legionnaires. Included are "Cimbriani" with information that they were *in Moesia Secunda in the IV and V century*. Also, there is a description for "Cimbrorum", partially translated from Latin, as follows: *Dis Manibus Flavius Civilis miles former member Cimborium here visit annos XX Flavius Copiusfratri dulcissimo*. Also, *Dis Manibus Flvius Ianwarius exs numero Cimborum here visit annos LX* (AE 1983, 0246 / AE 1969-70). The meaning is not clear but it may be that the Cimbriani Auxilliaries were posted at an unspecified place at **20 and 60 AD**. Furthermore "Cimbriani" may refer to any group from the Cimbric Peninsula, or the Cimbri nation alone. More information on this topic will be included respecting <u>191 to 283 AD</u> below.

**23 AD** – It is in approximately this year that Strabo wrote his "Geography". Fortunately, the sections relating to the Cimbri have survived and give snipits of information relating to these people. For example, he wrote that, *As for the Cimbri, some things that are told about them are incorrect and others are extremely improbable. For instance, one could not accept such a reason for their having become a wandering and piratical folk as this-that while they were dwelling on a Peninsula they were driven out of their habitations by* 

*a great flood-tide; for in fact <u>they still hold the country which they held in earlier times</u> (II.1). Strabo goes on at length about tides, and in a rambling critique of other authors and tries, rather unconvincingly, to demonstrate that the Cimbri were unlikely to embark on a mass exodus for this reason alone. His description of the Cimbri priestesses was noted earlier.* 

43 AD – Pomponius Mela of Spain in his "Description of the World", Chapter III, 31-32 describes entering the Codanus Bay (Baltic Sea), where, There the sea runs a narrow course like a strait, then, curving, it promptly adapts to a long brow of land. On the bay are the Cimbri and the Teutoni; farther on, the farthest people of Germany, the Hermiones. Mela's work has survived intact (we are not dependent on excerpts via later authors). His source for some of what he wrote may, as was the case for Pliny the Elder, have been the little - known Greek geographer Philemon writing circa 325 BC. Hence his descriptions should be considered reasonably accurate. He notes that the "Codan Bay" is full of islands of various sizes, including the Haemodes group with the biggest and the most fertile being Codanovia (which can only be Sealand), but is called "Scadinavia" in another source (see Grane, 2003). A specific quote from Mela (iii.54) is, In the gulf which we have called Codanovia, still occupied by the Teutoni; it surpasses the other islands both in fertility and in size. A map of Europe relating to Mela's work shows the Cimbri occupying the extent of a truncated peninsula, and the Teutones residing not only on Codanovia but also the Continental area immediately to the south. This data should be considered when attempting to determine the ethnic background of the aristocrats of Sealand who later formed the major Scandinavian dynasty of the era between the Roman Iron Age and the Migration Period (see below).

<u>The Cimbri and the People of Wales:</u> It may be appropriate now to pause and consider the possible link between Wales and Jutland. It was noted earlier that the Welsh call themselves Cymry, which, according to some, is equivalent to Cimbri. It appears that in **61 AD** the Northwest corner of Wales on Anglesey (Island of Mon) became the last holdout of the Belgae aristocracy and the primary Druid priests and priestesses among them.

Markale (1976) reported that, During the consulship of Cesonius Petus and Petronius Turpilianus, i.e. in 61 A.A., Suetonius Paulinus, the commander in chief of the Roman forces, 'prepared to attack the island of Mona which was inhabited by courageous men and provided a refuge for exiles' (Tacitus, Annals, XIV, 29). Presumably the reason for this Roman assault was that the exiles were directing British resistance from Mona; and these exiles, as Tacitus goes on to tell us, were druids. Also, In fact the island of Mona or Anglesey (Welsh Mon) was held to be the very center of druidism. It was a blessed, sacred spot, akin to the Other World islands of Celtic tradition, more precious in mythical than in real terms. As such it was bound to be a fertile island, and in the 12<sup>th</sup> century Welsh chronicler Giraldus Cambrensis calls it the 'mother of Cambria''' (p. 159).

When the Romans began the attack they met with people whose behavior was identical to that noted in relation to the Cimbri. Tacitus related that, "*The enemy army was ranged* 

along the shore like a forest of weapons and soldiers among which women ran ceaselessly about like furies, shrieking imprecations, with black robes and disheveled hair and torches in their hands. All around stood druids with their hands raised to the sky, howling wild curses". After the battle was over, the sacred woods in which they practiced their cruel rites were destroyed; it was their custom to sprinkle the alters with the blood of their prisoners and to consult the gods by way of human entrails (Annals, XIV, 30).

Here there is a Lake with a rock shelf called Llyn Cerrig Bach where large amounts of what appear to be votive offerings have been found. The bones of every imaginable animal were apparently sacrificed here, and although used over time the most elegant offerings come from the late 1<sup>st</sup> Century (and end at that point). According to Powell in his book, "The Celts", this would coincide with the Roman assault on this aristocratic – druidic refuge "last stand" with members of the Belgae Catuvellaunian Royal House (residing south and west of the Ardennes and the Aduatuci in the 1<sup>st</sup> Centures BC to AD) holding out. Most of the late votive offerings were attributable to the Belgae (which also includes the Aduatuci and Eburones), and the Catuvellauni (House of Cunobelinus) genealogies are consistent with this view.

Onguls is associated by tradition as a Scandinavian name and why the name would remain thus rather than the original Celtic "Mons" if not a Germanic colony makes little sense. The name very likely means "Isle of the Angles" since early documentary sources indicated that the Northumbrian Angles took over this territory sometime after the 5<sup>th</sup> Century, and the author calls the Angles "Onghuls" (Ninnius, 1016). In addition, there have been a series of recent archaeological discoveries of Angle (see earlier noted study by present author) as well as Viking settlements – more evidence than in most of the Danelaw - that is requiring a re-evaluation of how much Scandinavian settlement actually occurred here. The best source for an evaluation of available evidence is Mark Redknap, "Vikings in Wales: An Archaeological Quest" (2000). He makes a very sound argument for Danish Viking (hence possibly Cimbri) settlement on Anglesey. Hence the population here may be a combination of Anglian and Viking as well as aboriginal people.

**Circa 77 AD** - Pliny the Elder wrote his "Natural History" wherein he lists the Ingevones as one of five German Confederacies. It was composed of the Cimbri, Teutons, and Chauci. The latter resided on the North Sea east of Jutland, but had no apparent tribal connection to the other two in any other record. Pliny's attribution would only make sense if he meant the Charudes (a very understandable error for a non – native speaker of the languages). This suggests a possible ethnic link in that the common ancestor (probably symbolic) of all was supposed to be Ingwiz. It is interesting that the symbol of Ingwiz was a chevron, which is precisely the symbol found as characteristic of North Jutland pottery with "deeply incised chevrons" (diamond shaped with a solid border) in the Iron Age Cimbri territory (see Kaul).

There is also a cryptic reference in an old English Rune poem as follows, *Ing was first amidst the East Danes so seen, until he went eastward over the sea. His wagon ran after.* 

*Thus the Heardings named that hero.* It has also been proposed that Yngvi is the progenitor of the Ynglinga Dynasty of Sweden and later Norway. Hence were the Royal Houses of these countries somehow connected to the Charudes? It is likely that the "East Danes" or Heardings were the "Hardings", Charudes (although the geography does not fit), who resided in Jutland and possibly in Hordaland, Norway (see later).

After listing the three tribes beloinging to the Ingevones, Pliny, before listing the tribes belonging to the Herminones (e.g., Suevi), notes, *Proximi autem Rheno Istavaeones; quorum pars Cimbri mediterranei* (Latham, 1851, p.cxxviii). Hence there was another group of Cimbri residing at this time somewhere in the upper Rhine River area. These people are not further identified.

Furthermore, in his description of the Baltic Pliny describes Codanus Bay, which extends from what appears to be the Skattigat to the Baltic with the centerpiece being "Scatinavia" which is an island (probably Sealand), with the Hillivone people and 500 villages, and Aenigia beyond this (perhaps Skane). In addition Cylipene Bay is mentioned, with the island of Latrim next to a bay called Lagnum, "a region bordering on the Cimbris". Perhaps this is "Lugnum", named after the Celtic god Lug – and meaning perhaps "home of Lug". Recall that Lugius was one of the leaders on the 113 to 101 BC Cimbri expedition. Also the "promontory of Cimbrorum" extends well into the sea forming a peninsula (probably Skagen at the tip of Jutland or that which juts out to the east near Arhus) that was called Tastris. On the west side of Jutland were 23 islands known to the Roman military, the most impressive being Burcana, with other "amber islands" such as Glaesaria (also known as Austeravia near Actania) (Liber IV, xiii, 96-97).

**Circa 80 AD** – At this point it may be appropriate to note that valuable items from the Roman Iron Age and into the Migration Period tend to be infrequently deposited in bogs and wetlands, as was typical of the previous eras, but more so in graves. An opulent banqueting set consisting of everything a Roman senator might have for his table was found in a male grave dated to around 80 AD in Hoby on the Island of Lolland. The array of items is missing only a single wine cater to make it complete. Scenes from Roman or Greek life and legend (e.g., Achilles) are portrayed on the silver cups. They were made near Capua, Italy and include the Greek maker's name and mark as well as the inscription "Silius", who was a Roman commander in north Germania AD 14 to 21. To make the find even more intriguing, at Bendstrup near Randers, Jutland (in Cimbri territory), 150 kilometers north of Hoby, is the grave of a female "magnate" who was buried with the cater that may have made the above set complete, along with other items such as gilded fibulae made south of the Danube. Perhaps she was the daughter of the Hoby prince. Clearly Jutland and the Cimbri – Charudes were far from isolated in the backwash – they included an aristocratic elite who probably formed part of a local dynasty. It appears that women buried in other parts of what would later become Denmark also reflected their wealth and status with rather unusual objects not seen in the graves of poorer members of their sex – items such as fossilized sea – urchins which set apart those of likely noble status. There is even continuity between the wealthy of Limfjord and Sweden and Norway in terms of Roman grave goods. The aristocratic complex whose epicenter is on

Sealand is characterized by extremely rich grave goods, has been labelled the "Himlingoje Dynasty" by Storgaard (2003) and Forte et al. (2005). Cimbriani Legionnaires are a possible primary vector of these Roman goods. One find from Hedegard in eastern Central Jutland is particularly noteworthy. A large and very rich cremation grave contains a dagger and highly ornamented sheath (shown above) from the 1<sup>st</sup> Century AD that is unique in all Scandinavia. This item is a Roman Legionnaire's dagger given only to officers (Watt, 2003). A further discussion of the archaeological evidence in relation to the Scandinavian aristocracy will be saved for later.

98 AD - Tacitus wrote "Germanica", which may have been heavily influenced by the now lost manuscript of Posidonius. Tacitus wrote about the lands of the northern Germanics, at least in part, from his own investigations. After noting the Longobards, he named the tribes that worshiped Nerthus via a sanctuary on an island. These were, The neighboring Reudigni, and the Avions, Angli, Varini, Eudoses, Suardones, and Nuithones, are defended by rivers or forests. Nothing remarkable occurs in any of these; except that they unite in the worship of Hertha, or Mother Earth; and suppose her to interfere in the affairs of men, and to visit the different nations. In an island of the ocean stands a sacred and unviolated grove, in which is a consecrated chariot, covered with a veil, which the priest alone is permitted to touch. Tacitus indicated that all these peoples worshiped Nerthus at an Island – based sanctuary. The cult was supposed by some to be centred on the Island of Sealand at Lejde, others assert Rugen, and still others Heligoland. The map below (an interpretation not a direct source) shows these groups in context. It is noteworthy that the Cimbri were not on the list, yet are noted separately (see below). There are, however, many names with the root of Nerthus found in Vendsyssel in Northern Jutland but their link with the sacred site is unclear. It is tempting to link the Deibierg wagons with the above description.

If one realizes that Tacitus appears to be naming from east to west, and is probably, after the Angli, heading up the Jutland Peninsula and associated islands, then the following may apply from south to north: Reudingni (along the Baltic Coast), the Avions, the Angli in Schelswig and surround, the Varini (unknown), then north to the Eudoses (Jutes?), then the Suardones (Charudes?), the Nuithones (Teutones?), and finally the Cimbri in the north. The Teutones could be on Sealand – the physical locations are not given so one is left to guess based on the sequence of the list in relation to geography.

One fact that is immediately apparent is that these tribal groups do not appear to agree well with those listed by Ptolemy 50 years later. What might make sense, however, is to look at the list as reflecting an east to west orientation. The Langobards are enumerated, the Reudgnions (e.g., at or near Rugen Island), then the Aviones (probably the Ambrones the confederates of the Cimbri in the 1<sup>st</sup> Century and thought to reside at or near the North Frisian Islands). Next come the Angles and Varinians who likely resided along Jutland, in the central and southern areas and adjacent islands. Hence the upper central and northern areas of Jutland and proximal islands would be occupied by the Jutes, the Charudes, the Teuroni, and the northern most regions, the Cimbri (although it may have fragmented into some or all of the above - mentioned groups).



Map that attempts to summarize the verbal descriptions of Tacitus.

After discussing the Cheruscans Tacitus stated that, In the same quarter of Germany, adjacent to the ocean, dwell the Cimbri; a small state at present, but great in renown. Of their past grandeur extensive vestiges still remain, in encampments and lines on either shore, from the compass of which the strength and numbers of the nation may still be computed, and credit derived to the account of so prodigious an army. It was in the 640th year of Rome that the arms of the Cimbri were first heard of, under the consulate of Caecilius Metellus and Papirius Carbo.

See <u>Land Defences</u> below for a discussion of the features to which Tacitus likely refers. It can be concluded that by the end of the 1<sup>st</sup> Century AD the Cimbri, as a tribe, had diminished in size.

Tacitus appears very impressed with these people stating that for 210 years they have terrorized Rome more than the Carthaginians, Spain, Gaul or the Parthians. His other comments appear to refer to the Germans in general. Burns (2003, p.70) states that Tacitus was referring to "oppidia" (fortified settlements) on both sides of the Rhine River – but questions the authenticity of this statement since the Cimbri are not known to have built oppidum in their supposed homeland of Jutland. To the present author, Tacitus appears to be referring to both shores of Jutland and perhaps adjacent islands.

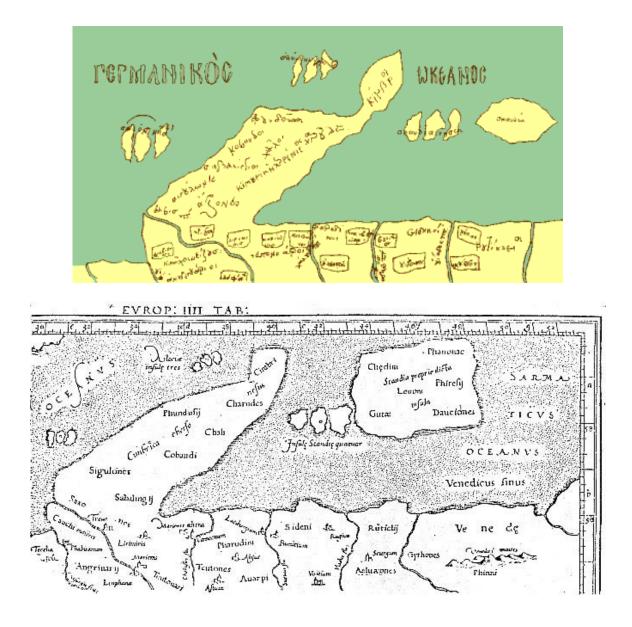
**150** AD – Greek astronomer, mathematician and geographer Ptolemaeus (Ptolemy) in his book "Geographike Huphegesis" (Geographic Manual) describes the Cimbrians as a

people who lived further north than all other peoples on a peninsula to the north of the River Elbe (50 years after the descriptions of Tacitus). The earliest extant version of the accompanying map appears to be the from 1466 and shows all of the nations or tribes noted by Ptolemy (not so in all later versions) with the Cimbric Cheronesus, the three islands including Sealand called Scandia Insula z, and the area that seems to be Skane in Sweden as simply Scandia. A discussion of the tribal groups noted will follow later. The Ulm document dated to 1482 that appears to show the "Cimbrinie" peninsula, and three islands to the east with names inscribed on two of them - Fanmanni? and to the south Leudone? What appears to be Norway and Sweden are shown, as well as Gotland. From this point all future maps appear to incorporate a blend of Ptolemy and "up to date" information making them of dubious value. For example, a version from 1503 (Johannes Schott) shows Sealand as "Scandia" and portrays the land to the north as the territory of the Norbegia, Suetin, Gottie, and Dana. Jutland is labeled "Dana". Ptolemy never mentioned the Dana, but did note the Dauciones (Dankiones) who Dilke (1984) identifies with the Danes.

Using just the descriptions (and coordinates, such as they are), it seems that Ptolemy placed the Cimbric Peninsula at a 45 degree angle towards the east and hence Fyn would likely have been considered as part of Jutland (Grane, 2003) and it becomes difficult (impossible?) to place any tribes in the area with much confidence.

The two maps below are of unknown provenance but are true to Ptolemy. The first is in Greek giving the impression of greater antiquity – but includes no information about the peoples residing in the Western Scandia. Here the Kobandoi are shown residing on the eastern side of the Peninsula. The second map is in Latin, but here the Cobandi are shown in a far eastern location. To confuse matters, both the Western Sealand cluster and Eastern Skane (Sweden) are labeled as Scandia – the former as "Insula Scandia granneur"?; and the other as "Scandia propriadissla? Insula". However, there is a great amount of detail in the sense of the named tribes in the latter Scandia being truest to the verbal descriptions of Ptolemy (although missing one tribe) – however some were likely residing on Sealand and the other islands. The translation reads, *And this is called Scandia locally and is occupied by the Chaideini, in the east by the Faucona, and the Firaisi, and in the south by the Goutii and Dauciones, and in center by the Leuvoni.* The latter two may be the Danes and Seuoni (Swedes) in Sealand and Sweden respectively.

However, combining all these geographic – ethnographic sources, the most correct interpretation would seem to have the Fundosi (Eudosi or people of Funnen?) and Charudes as possible tribal units of the Cimbri – Teutones at the time (circa 77 to 150 AD) - although the Chaloi and the Cobandi are also "possibles". The exact words (in one of three Greek to Latin translations available to the author) from Chapter X are as follows: *thence the Saxons through the palisades of the Cimbrian peninsula; in the same peninsula above the Saxons on the west are the Sigulones, then the Sabalingi, then the Cobandi, above them the Chali, and above these to the west are the Fundusi, and to the east the Charudes. Of all these the Cimbri are the farthest north. Another translation has, while the Foundousi still to the west of these, are more to the east of the Charoudi, while at the very north, the Cimbri.* 



Two maps, the first is in Greek lettering and the second is in Latin, which show similar but not identical detail in relation to the tribes of Jutland.

Ptolemy provided precise latitude and longitude coordinates for physical features and towns but not tribal locations, so they must be reconstructed on the basis of his verbal descriptions.

Despite the archaeological evidence (see later) showing extensive rich burials and the epicenter of a Scandinavian Empire on the Danish Islands it is unusual that Ptolemy did not appear to note any tribal groups here, unless he mistook the maze of islands east of Jutland as being within the latter. In looking at the Jutland Peninsula, the list he gives seems simply too large to fit in that relatively small area. The Challi may well be located

in Halland, Sweden. It is tempting to link the Kobandoi with Kobenhagen on Sealand along with the Dauciones (Danes). If the Fundusi were interpreted as being located on Funen (note similarity to Fundusi), this might make more sense especially if they are east of the Charudes. Needless to say this is very confusing unless we take Ptolemy more or less verbatim as the most parsimonious explanation. Also we know that the Charudes were an important tribal group known from the time of Ceasar and one of the three (along with the Cimbri and Semnones) prominent tribes in the area as recorded by Augustus in 16 AD. It is consistent with Ptolemy to see them as the group in East Jutland opposite Funen who, based on archaeological evidence (see later), appear to be the most powerful and prominent group on the Jutland Peninsula (this region later noted as the territory of the Angles).

The Teutones were only recorded immediately to the south of Sealand on the Baltic mainland (in contrast to Mela's interpretation). Part of the problem in accuracy here is that, Ptolemy's information came from various seafarers and traders who sometimes perhaps gave descriptions in different languages (Grane, 2003, p. 139). It does not help that the Teutones are not mentioned by this name in later records. The only reference is to a, centuries old population of wandering or semi – sedentary merchants in the Dutch – Belgian Campine region that is known as the Teuten, and as Tiotten or Todden across the border in German Westphalia, as well as the Tattare of Halland, Sweden (a former Danish region). Genetic testing of these groups and the finding of the U152/S28 and DF27/S250 markers would support the alleged connection. Perhaps a better candidate for the people of the Himlingoje Dynasty are the Dauciones shown on Scandia (which appears to represent the combined Sealand and Skane, Sweden via Pliny's Hilleviones with 500 villages), who are the Danes who came to rule all of Denmark by circa 500 AD. They may be the insular Teutones who took their name from their leader at this time (Dan the Magnificent being the legendary founder of the Danes). It is tempting to see them as the "Tuatha de Dannan" of Irish mythology – the group that is said to have been chased from Ireland by the incoming Iberian Celts. It might be of some consequence to mention here that Saxo Grammaticus's statement that the people of what was in the Middle Ages Denmark are descendants of "brothers" Dan and Angul. The Danes descending from the former and the Angles from the latter.

<u>Relationship of Charudes to the Cimbri – A First Look</u>: It is unclear as to whether the Charudes and Jutes were Germanic or Celtic tribes who migrated from the south to the Cimbric (later Jutland) Peninsula during the 1<sup>st</sup> Century BC, Scandinavians from Norway / Sweden, or were tribal units of the Cimbri – the Aduatuci can be named with some hesitancy in the latter capacity. There are simply insufficient record sources upon which to base reasonable assertions. The Charudes have been recorded as residing east of the Rhine River from the time of Ceasar. They were differentiated from the Cimbri circa 5 AD when the latter, the Charudes and the Seminones were mentioned by Augustus. Hence they were a separate entity residing somewhere in the vicinity, but not necessarily on the Cimbric (Jutland) Peninsula. If the Fundusii are the Eudoses noted before and after, then they are likely the "Jutes" which eventually appear to have become a generic name for those residing on the Jutland Peninsula. It is also possible that the Fundusii gave their name to the Island of Funen (Fyn) east of Jutland just off the coast of Himmerland.

DNA testing of Hordaland, Norway (where an unknown number of Charudes were apparently residing in Viking times as will be seen later) and Kent, England (where the Jutes are known to have settled) could help affirm their identity in relation to the Cimbri. This issue will be addressed again later.

Archaeological Evidence of Settlement Patterns, Aristocratic Dynasties, Coins and Local Warfare: Storgaard (2003) documented the changing patterns of settlement during the 2<sup>nd</sup> Century with improved agricultural procedures, private land, large farms composed of enclosed units as well as larger villages complete with a professional soldier class, plus specialized craftsmen. Also local aristocracies developed who had ties via strategic marriages with other aristocrats across the breadth of the Germanic world. The latter could be seen via an examination of burial customs and specific grave goods (largely Roman in origin) showing the network of links. Storgaard reasons that the strikingly rich burials dated to the interval between 1 AD and 40 AD located on the west and east coasts of Jutland, with the most spectacular discovery at Hoby (noted above) relate to the land and sea expedition of Tiberius in 5 AD. Hence in return for the Cimbri request for an alliance with the Romans (and the offer of their sacred cauldron), Tiberius presented the local aristocracy with very costly Roman silver and bonze goods as well as coins. From this time through the end of the Late Roman Iron Age Roman prestige goods were used as a sign of aristocratic display both in life (feasting) and in death (grave goods). Centers of power were developed to re-distribute these goods and control the distribution networks. It seems that most of the aristocrats were decking themselves out in Roman gear (in peace or in war), until these trade goods dried up in the 4<sup>th</sup> and 5<sup>th</sup> Centuries at which point local goods seem to have taken center stage and it was no longer considered necessary to employ ostentatious display to reinforce the status of the individual or the lineage (Green, 2007).

By the time of Ptolemy's important description of the tribes of Germanica, circa 150 AD, a power center for the region had been established at Himlingoje in eastern Sealand (circa 150 to 320 AD). The burial complex suggest very strongly that this may have been the most powerful aristocracy in the entire region as reflected in the sheer magnificence of the grave goods furnished with the departed (e.g., arm and finger rings of gold). Their control of the amber trade may explain the profound wealth. The earlier years of this very rich dynastic family is unknown, but they appear to have been the focal point of an Empire that stretched from western Norway to Gotland Sweden with the centers of power being at Gotland, southeast Sealand, eastern Funen, plus the south side of Limfjord and the west central areas of Jutland. This is also the pattern of the densest distribution of Roman imported goods at this time (Storgaard, 2003, Figs. 8 and 9) with both East Sealand and Funen having more of these than their neighbors in Northern Jutland. The distinctive rosette fibula (clips) and snake - head rings found across the "Scandinavian Empire" point to shared symbolism radiating out from Sealand, and women of this family who were married out to local aristocratic families, and at least one far - flung connection to the male Goth aristocracy in Rudka, Ukraine. Other archaeological evidence suggests continued interaction between this aristocratic complex and the Goths and Sarmatians of the Black Sea. Storgaard maintains that the evidence points to this family being in support of the Romans via mercenary troops during the Marcomannic Wars (166 – 180 AD). It will be recalled that the Cimbriani Auxilliary troops were operative around this time and likely included those from the region that was later to become Denmark. Since the Cimbri were likely at one time the most powerful nation in the area, it makes sense that they spawned a number of tribes or families who spread across the region. However, their allies, and probable kin, the Teutones are more likely candidates as they are recorded in 43 AD as residing on the Island of Codonovia (Sealand). If the Ychromosome markers U152/S28 and DF27/S250 turn up on Funen (Charudes) / Fyn (which it has in limited testing) and Sealand (Teutones / Dauciones) in sizeable numbers this would tend to support the argument of a substrate of Celtic Cimbri and Teutone within the island Danish population.

The aristocratic families, while no longer showing the same wealth in grave goods, continued to be a strong force in the region and were allied (especially the Sealand and Funen families) with Elbe – Germanic aristocrats, particularly the Thuringian princes (e.g., snake – headed rings found in both places). Perhaps this is what ultimately led the Juthunga to move north to the southern Jutland Peninsula and control the area (whether by elite domination or folk movement is unknown) at the beginning of the Migration Period when the Roman Empire had disintegrated. The distribution of these princely grave finds of the later Roman Iron Age is noteworthy in that they are well represented in the Lower Elbe region and Funen as well as Sealand, but not a single example is recorded for northern Jutland (Storgaard, 2003, Fig. 13).

However, during the 3<sup>rd</sup> and 4<sup>th</sup> Centuries a "punch ornamented silver fibulae" links the aristocrats from southwestern Jutland, eastern Jutland, the Limfjord area, southeastern Funen, northern Sealand to southern Norway. Items in the Sosdala style link familes from the Black Sea in a belt leading to Norway and Sweden. There is no evidence that at this time the Cimbri took a leading role in the region – perhaps their time in the sun was passed. This is at this time when the Hun invasion of 375 AD triggered the movement of the Goths from the Black Sea, ushering in the Migration Period that ultimately led to, for example the Angle colonization of England and the Viking Age. It is at this time that the finds from grave goods show a significant shift in princely centers of power, as reflected in graves with Roman import goods, from Eastern Jutland, Lolland, and west Fyn to eastern Fyn and the Stevns area of Sealand. There is some evidence that the latter was the site of goods exchange and aristocratic control (with graves becoming less and less wealthy as one moves away from this nucleus) that extended throughout Scandinavia, reflecting the situation on Lolland in the Early Roman Iron Age. A little later, in the Late Roman Iron Age (4<sup>th</sup> and 5<sup>th</sup> Centurues) the shift in wealth is to the elite settlement sites such as Gudme – Lundborg in Eastern Funnen, but a drop in the goods found in eastern Sealand. Similarly at Dankirke Jutland on the west coast of Jutland and across from Fyn where a trade center as well as the site of the Migration era home of a local magnate is situated (Hodges and Bowden, 1998). This could have been the precursor to Ribe, first noted in the records in 860 AD, but probably settled in the 8<sup>th</sup> Century (Gibbion, 2006). Evidence of its settlement continues through the 6<sup>th</sup> and 7<sup>th</sup> Centuries (Henderson, 2000). However only southeast Fyn and Sealand retained their "status" through the Early German Iron Age (Green, 2007). Another affluent site of this time likely involved in trading networks (e.g., Frankish glass) is Dejbjerg south of Limfjord on the west coastal area of Jutland (Segschneider) – the early Cimbri region.

Funen (Fyn) appears to have the "edge" in relation to the sheer magnificence of its sites. For example, there is a 200 hectares concentration of perhaps 100 or more farmsteads situated on the southeastern part of the island. Here is also found burial sites seldom matched in the sheer opulence of the finds. For example, one grave near Vimose contains items such as five lion headed fasteners each with two chains attached to a "puzzle piece" with three garnets. This site is situated within a 5 - kilometer swath between inland Gudame "god's home" (a cult site from the 3<sup>rd</sup> Century to Medieval times) and the sea where its coastal emoporium, Lundeborg, is sited. Particularly noteworthy is the 10 kilograms of gold found there; along with large deposits of Roman solidi, silver coins and import items dating from 200 to 800 AD, with the peak between **300** and **550** AD, all suggesting to Todd (2004) a potential royal residence site. He also asserted that, The mass of gold and silver finds from several sites at Gudame is astonishing and so far without parallel in Germania (p.97). It is here that the "king's hall", at 154 feet by 33 feet this is the largest building yet discovered in Northern Europe dating to the 4<sup>th</sup> and 5<sup>th</sup> Centuries, was discovered. Todd further wrote that, On the island of Fyn as a whole some 100 aurei and soldi have been recorded, most of them from two groups. One is dated to the mid - fourth century arrived from the Danube region. The other is dated to the late fourth century and derived from the Lower Rhine provinces. This variation may relate to changing patterns of recruitment to the Roman forces (p.211). Elsewhere this author uses "Lower Rhine" to mean the higher reaches south toward Switzerland. It will be seen below that the Cimbri units serving as Roman auxillaries or legionnaires have been documented in Bulgaria (Moesia) in the early 5<sup>th</sup> Century: and in the Rhine area in the late 3<sup>rd</sup> Century. It has been estimated that this one location could have mustered about 100 warriors and 6 ships, which with the other settlements on the island may have made it virtually impregnable (although the sacrificial sites here suggest that it would not stop some groups from trying to overwhelm the area if chance permitted). This complex may have been a staging area for raids during both the Migration period and the Viking era. After the Migration era this area is characterized by the large number of "gold-grubbe" thin gold foil votive offerings, dating to the 6<sup>th</sup> and 7<sup>th</sup> Centuries, apparently replacing the bracteates. These gold pendant coins with for example a "head over animal" (Bracteate C) surrounded by runic inscriptions are found scattered about the Gudme complex until the Migration period, and are thought to represent cult items relating to the worship of Odin (hence perhaps the proximity to Odense on Fyn). These are also commony found throughout the territories of the Angle and Jute kings in England.

The year **536 AD** was when the "dust veil" descended on Northern Europe and beyond. The evidence suggests that there were crop failures and massive hardship due to this climatological factor. It is about this time (it is impossible to date most finds precisely) that there is an increase in the gold hoards of bracteates scabbord mounts, arm rings and square headed brooches and so on in locations such as Fyn (specifically Gudme II and Killerpu). It may be wondered if this was a votive offering to the gods to bring back the

sun. Axboe (2002) has argued that this whirlwind of giving may explain the relative lack of gold in the following Vendel period.

Todd (2004) writes, *Celtic forms are also evident in German metalwork, in some cases at a surprisingly late date. It has long been remarked that some of the motifs on the Gallehus horns* [drinking horns found in southern Jutland] *of about AD 400 are drawn from a Celtic repertoire* (p.132). One might conjecture that this reflects the continuing cultural conservatism in the Cimbri and related peoples prior to their absorbtion into what became the largely Scandinavian amalgam of Danish peoples.

A related approach is exploring the <u>distribution of coins</u> to assess the degree of association with the Roman Empire during the era under discussion. Storgaard (2003) compared the number of different types of Roman coins found across the various zones in the Baltic Region. In the 1<sup>st</sup> and 2<sup>nd</sup> Centuries Northern Jutland was surpassed only by Southern Jutland in the assessed intensity of the connection to the Roman Empire. This peaked in the 3<sup>rd</sup> Century, and dropped precipitously in the 4<sup>th</sup> Century while Southern Jutland continued to dominate in this category. It is also implied that the center of aristocratic power shifted first to Sealand and Lolland, and later to Funen (see p. 107, Fig. 1). This may perhaps reflect a decline in the fortunes of the Cimbri as the Migration Period approached, or that the Cimbri had splintered into many smaller units.

Similarly, a systematic examination of burial customs with specific weapon types may reveal regional differences and reflect tribal territories. A mapping of these features has shown that there appear to be cultural areas with stable boundaries, for example North Jutland with its center of power in the Limfjord area during the Early Iron Age (the time before and after the Cimbri – Teuton migrations of the 1<sup>st</sup> Century BC). In the case of burial types, we see a clear line in Jutland dividing the peninsula crosswise around *Horsens* – *Vejle, corresponding very roughly to a boundary between the respective areas* where the urn graves and cremation pits predominated in the Pre – Roman Iron Age and to the boundary between a dominant cremation and inhumation custom in the Early *Roman Iron Age.* In the Pre – Roman Iron Age North Jutland urn cremation pits typically include a single – edged sword and a large or small lance as well as low conical shield bosses. There are striking parallels between the assemblages at the island of Bornholm and Vendsyssel (north of Limfjord) that are so striking that they cannot be coincidental. In South Jutland, below Vejle, the double - edged sword of the La Tene type, with a lance and spiked shield boss, in urn burials are ubiquitous. By the early part of the Roman Iron Age North Jutland differs from all other regions and with a common cultural burial tradition in South Jutland and the adjacent islands of Funen and Lolland extending into North Germany. Curiously there are no weapon graves at this time from Sealand. This may relate to the report of Tacitus that the tribe of the Suiones (Leuones?), situated in the ocean itself, had lost the right to bear arms and all weapons were locked away and only a slave had access. The intra Jutland differences are accentuated in the latter part of the Early Roman Iron Age, whereas in the Late Roman Iron Age there is cultural homogeneity in Jutland. The weapon - grave custom dies out by the 3rd Century (Watt. 2003, p. 183-190). Hence the demarcation shown via this evidence source may indicate the dividing line between the Cimbri in the north of Jutland, the Charudes in the central area, and tribes such as the Angeli to the south - but it can no longer be detected by 300 AD. There are also <u>hoards</u> of gold jewelry and scrap in the same area and with a similar date.

Jutland was developing an extensive <u>infrastructure</u> at this time with an extensive road system fanning out from the Haervejen (military road) up the spine of the Peninsula to Linholm Hoje on Limfjord. It was most extensive in the Himmerland area. There was also what might be termed coastal highways also, generally from the head of one fjord to the next. The building material included wooden planks, interlaced sticks, rock, and the use of a variety of building techniques, some of which were identical to Roman method of paving.

Interesting and informative structures were making an appearance at this time including <u>sea defensive barriers in fjords</u>. Three have been identified in southeast coastal Jutland, two in Haderslev Fjord (370 - 418 AD) and one in Kolding Fjord, as well as on Fyn. The oak tree barrier structures make it impossible to enter the fjords without a guide. These appear to be located south of the territory of the Charudes and Angles. In general this must have been a time where local warfare and conflicts escalated as fortifications and sacrifices of the possessions of those defeated escalates and probably plays a role in the ultimate movement of whole villages to Britain, first as Angles and Jutes from the more southerly areas of Jutland, then as Danish Vikings from Limfjord and surrounds. It is also probably in this era when the Charudes left to settle Hordaland, Norway (described later).

<u>Land defences</u> are much more common in Northern Jutland and take the form of long ramparts and stockades with earthworks, a moat, and pole fences – sometimes up to 12 km in length. Some may have been boundary markers between tribal groups, and others may have had a defensive use. Perhaps these are the "monuments" of the Cimbri hey day as described by Tacitus (see previous description).

Considering the apparent need to have preparations for attack, two fortified settlements relate to the Pre – Roman and Early Roman Iron Age were noted above – in particular Borremose. There is also a village dismantled to create a stockade at Priorslokke which is consistent with the, "*encampments and lines on either shore*" of which Tacitus speaks, Also the early 1<sup>st</sup> Century fortified (with ditch and palisade) settlement known as Priorslokke, a settlement of some 47 houses on a promontory jutting into the mouth of Horsens Fjord on the east side of Jutland, would be consistent with this description. It is situated in close association with probable hinterland Illerup Adal and Porsmose sacrificial offering sites noted below. It seems to have been in use from mid 1<sup>st</sup> Century to about 200 AD (Norgard Jorgensen, 2003). As to the "lines", perhaps Tacitus was referring to the ramparts at Olgerdigit and AE Vold in Southern Jutland. The defensive ditch at Olgerdigit covers some 8 miles. Another defensive ditch at Vendeldiget in western Jutland is more than 2 miles in length. Also perhaps included would be the, "massive naval barricade at Gudso Vig on Jutland near the Island of Funen. All date to this period (Price, 2015, p.289, 316).

War with other Scandinavians and Votive Deposits in Bogs: Most of the information about local warfare comes from votive deposits in bogs. Other than the previously noted inland site at Als where a votive offering of the Hjortspring Boat and military gear (e.g., shields and helmets) for about 20 men was found and dated to circa 350 BC, there have been many other finds of such offerings. One of the earliest, from the 1<sup>st</sup> Century AD is the Alken Enge site by the Illerup River on the edge of Lake Mosse. Here over 75 hectares is spread the remains of perhaps 380 primarily young males, most showing a violent end via cutting or blunt force instruments, as noted by Holst et al., "Direct evidence of a large Northern European Roman period martial event and postbattle corpse manipulation", PNAS, 2018 (see here). Clearly this was a cultic site where the remains of skeletonized enemies were later thrown into the lake, presumably by the locals. Some weapons were also found at this site such as broken or bent swords and knives, but no gear such as belt buckles or other clothing items. The authors report that the metallurgical analysis shows "a local Jutish provenance" (p.5922). This presents the possibility that this event was between two groups or tribes residing in Jutland – perhaps one was Cimbri. Clearly this rare find should be a strong candidate for ancient DNA testing. Unfortunately in this most recent investigation, there were few skulls found (with their teeth and petrous bone rich in DNA) among the skeleton parts. This was but one of many such combat events occurring until the Migration Period of the 5<sup>th</sup> Century.



Illerup sites near Skanderborg

This area continued to be employed as a votive site for battle victories (?). Just "next door" (see map above) are the unparalleled finds from a site near at Illerup Adal Lake – however there were no human skeletons found here. Perhaps the remains were taken to Mosso Lake for "disposal". It is now little more than a bog in eastern Jutland near Arhus (Cimbri or Charudes territory) where an astounding 15,000 items have been recovered and dating from 200 to 500 AD. Items had been ritually destroyed by for example bending or breaking swords. Most were spears, shields and items of war. One of the largest finds there included over 1000 weapons dated to circa 200 AD, many with the name Wagnijo written in Scandinavian runic writing – but part of the weapons were Roman and apparently had finishing touches added, in this case, in Norway. Other items found in this cluster are even more diagnostic. 124 combs were found and these have

only been seen in graves in Tryti near Sognefjord, Norway - the country (Northwest coast) where attacks came from, or occurred in during the 1<sup>st</sup> to 3<sup>rd</sup> Centuries. It has been estimated that if a defensive attack occurred locally 1000 warriors in 50 ships took part in this ill - fated venture that resulted in the local people completely annihilating the Scandinavian attackers and probably hanging all survivors in nearby trees. However, although damaged animal bone is found in these deposits, there is no human bone - no evidence of the 1000 warriors. Hence it is entirely possible that all of these objects were brought back from a successful expedition to Norway and ritually offered at a bog near the home community. Some researchers have concluded that this does not make sense due to the effort of transport. However, this is precisely what the Romans did, bringing the "war booty" back in triumph to Rome and laid out all the items for public viewing (as seen on Trajan's Column and the Arch of Titus). It is not unreasonable to view the behavior of the residents of Jutland to be similar to that of the Romans since they had become familiar with them via the direct meeting with Tiberius within Cimbri territory, the military service of the Cimbri in the Roman army, and extensive trade. Archaeologists have yet to come to an agreement as to whether these finds represent the results of offensive or defensive activities, although a consensus is building that the burned items may tie in with the former and the unburned items reflect the latter (Ilkjaer, 2003). See Hansen (2003) for a detailed and balanced consideration of the meaning of these finds.



Part of the Illerup Adal military gear that had been ritually sacrificed.

Seen in the above photo are shield bosses (in total 300 of iron, 30 of bronze, and 5 of silver), a spear, a comb, rope and assorted other gear.

This archaeological data is strongly consistent with the observations of Orosius ("History of the World") relating to the behavior of the Cimbri after their victory over the Romans at Orange in 105 BC. He stated that, *Following a strange and unusual vow, they began to destroy all that they had taken. Clothing was cut to pieces and thrown away. Gold and silver was thrown into the river, the breastplates of men were cut to pieces, horsegear smashed and the animals drowned in whirlpools. The men were hanged from trees with nooses round their necks.* 

Other early attacks came from Poland and Sweden. It is also possible to analyze other finds that came subsequent to the  $3_{rd}$  Century and it appears that, *Successive waves of attackers came from Norway, Sweden, Uppland (in present – day Sweden) and Finland from the fourth century on* (p.39). It appears that on each occasion the local population was well - prepared for the attacks and succeeded in defending the homeland from the invaders; and / or was very prolific in demolishing enemy forces away from home.

Nearby sacrificial finds are noteworthy. About **250** AD at Ejsbol across from the Island of Fyn (Funen), a massive find of Roman weapons (e.g., 160 shields; 62 knives) was discovered in a peat bog. Of these types of sites in Denmark over half have been found in eastern Jutland.

Another example dating from the same era was on the Island of Fyn itself, where a very partial excavation of the Vimose bog gave up over 4000 items primarlily of a military nature (e.g., a vast array of metal helmets, a complete suit of chain mail, and weapons of all sorts with many being bent or broken). Many items, including a wooden griffin head with a red and blue flag on a wooden pole are clearly Roman, and likely reflect the gear of those who had served as Roman auxiliaries. Some spurs indicate that there were mounted soldiers as well as infantry. Other items such as combs (one with a runic inscription dated to 160 AD), jewlery items, a gaming board, meat forks, every imaginable tool, wagon wheels and wooden bowls were also among the discoveries. The sheer diversity of the finds is staggering. As with many such sites, there were multiple depositions over time. Three large events and several smaller ones between the 2<sup>nd</sup> and 3<sup>rd</sup> Centuries can be observed. The finds themselves are highly similar to those of other sites such as Nydam below. Based on "The number of scabbard fittings", the largest attack would have included about 300 men. As to swords, "Some of the hilts or pommels were of elephant ivory, used to decorate the finest Roman swords" (Price, 20115, pp.300-1). Forte et al. (2005) believe that sacrificial finds like this of Roman items between the third and sixth centuries reflects the warfare between groups of Scandinavians. Price (2015) sees the artifact array at Vimose as pointing to assailants including a German warrior aristocracy and an origin of the conquered army to the south in parts of Germany or Poland".

The Nydam bog finds are even more impressive, with three different boat "offerings" from about 200 to 350 AD. However the site is in extreme southern Jutland near the German border (i.e., within the territory of the Angles). See Price, 2015, pp.296-300 for further details. What is noteworthy here is that stylistic analysis of the "captain's seat",

as well as the planks of the wooden boat, show that they were from eastern Sweden (Mid – Baltic area). Later deposits to circa 475 AD included, for example, considerable horse gear, and a group of 36 highly ornate swords and items suggesting a Roman connection.

One wonders whether the 5<sup>th</sup> Century massacre (men, women, children) at the Sandby Borg ringfort on the Island of Oland off the eastern coast of Sweden can be seen as an escalation of this pattern of attacks (perhaps revenge being the motive). In this case the entire community was violently killed and the bodies left where they lay - no "loot" seems to have been taken, as reported by Alfsdottir et al., "<u>A moment frozen in time:</u> <u>Evidence of a late fifth-century massacre at Sandby Borg</u>", Antiquity, 2019 (see here). An ancient DNA study of the remains has been published by Rodriguez-Varela et al., Cell, 2023 entitled, "<u>The genetic history of Scandinavia from the Roman Iron Age to the present</u>" (see here). The results suggest that this community was of Mid or Eastern Baltic origin. It seems that only intense anger could explain this pattern – was this community responsible for an attack on Jutland, and "made to suffer" for this choice? It appears that the perpetrators left no clues as to their identity – but the Nydam finds points to Jutland as a possible source of the attackers.

Ilkjaer (2003) analyzed the distribution of the bog finds of Roman Iron Age military equipment and concluded that finds are scattered across southern Scandinavia, *but with centers of gravity in East Jutland and on Funen* (p. 45).

Looking at Jutland as a whole, it appears evident from the archaeological data of all types that the true "center of gravity" in the Roman Iron Age was eastern Central Jutland adjacent to Funen. It is perhaps noteworthy that this is the region (Jelling) that emerged in the Viking Era emerged as the home of the Danish Royal line (from Gorm the Old). Whether the tribal group was the Charudes, and whether they had earlier branched off from the Cimbri but of the same ancestry, must be given serious consideration. However, everything described above ends fairly abruptly in the closing years of the 5<sup>th</sup> Century.

The most recent attempt to collate and correlate the disparate archaeological finds circa **250 to 550 AD** is that of Hall (2007) who concluded that the following were likely tribal units:

- 1) South Jutland, Funen, and West Sealand.
- 2) North Jutland and Oslo Fjord (Norway).
- 3) Central Jutland.
- 4) East Sealand and Southwest Sweden.

Archaeological distinctions disappear by the late  $5^{\text{th}}$  and  $6^{\text{th}}$  Centuries suggesting that Denmark became a relatively unified area under the control of a central authority.

<u>**Place Names and Tribal Groups</u>**: Hall (2007) provides a fairly standard interpretation of place names in Jutland still in evidence today in relation tribes identified by the Classical authors noted earlier (syssel means land of):</u>

- 1) Himmersyssel (Himbersyssel in Old Danish) = Cimbri.
- 2) Thysyssel = Teutoni.
- 3) Vendsyssel = Vandalli.
- 4) Hardsyssel = Harudi.

Starcke (1968) notes that, *Himmerland's position as a province (syssel): <u>Himmersyssel</u>, and archaeological finds in the districts, indicate that the area between Limfjord, <i>Hvalpsund and Mariagerfjord was the <u>home of the Cimbrians</u>. The probability that this is correct is so great that it is recognized nowadays by most investigators (pp. 56-57)* 

While the association of <u>Thy and Teutone</u> is commonly accepted, assigning the locality in relation to the Teutoni may be stretching linguistic rules to the limit – plus the fact that there is no Classical author who has placed the Teutoni in that location, but rather on Sealand or the mainland below this island. Thy is apparently Old Norse for "the people" which would fit for the Teutones – prior to the historic period? However, a Celtic colony of Thylia on the Black Sea was established in 278 BC (Davies, 2000).

This latter point (no confirming evidence) should also be made concerning "Vend" and Vandalii – although it offers an intriguing possible origin (if not Vendel in Sweden) for those people who, like the Cimbri, caused so much anguish for Rome (sacking the City in 455 AD from their bases in North Africa). It could just as well refer to the Wends, a Slavic people with some associations to Jutland. However, Schoelkopf (2007), writing in German, has discussed how the Cimbri tended to find allies in the Celtic world and posits that this may be because they were a Celtic people related to the Helvetii (and Tigurini) of Switzerland and southern Baden-Wurttemburg, Germany; and the "Vindeliker" (Vendelici) of eastern Switzerland and southern Bavaria. This <u>Central European Celtic Vendel tribe</u> provides a more logical group from which to draw a name for the northernmost part of the Jutland Peninsula – thus "<u>land of the Vendels</u>".

The only reference for the geographical location of the Charudes is Ptolemy who has them residing on the eastern side of Jutland (which might include Funen) whereas Hardsyssel is found on the western side below Limfjord. There is, however, near Randers the "Hundred of Harz". On balance, it seems reasonable to conclude that the term refers to "land of the Charudes".

Starcke states that there are village names in Hardsyssel not found anywhere in Denmark, and names with common ending such as –lev not seen there. In relation to the former he cites – Hee, No, naur, Tim, and Lem. Town names in Gaul include Nodens, Narbonne, and Lemonum. It would appear that these are <u>Celtic prefixes for places</u>. Their residence below the Cimbri, in an area rich in archaeological heritage, and in the vicinity of where the Kings of Denmark from Gorm the Old had their home (in Jelling), is suggestive. Early descendants of Gorm are Hardecanute and Hardegon which, according to Lis Jacobsen (quoted by Starcke, p. 59), points to a Harudi origin for the Royal family.

<u>Military Service, Religious Observances, and Possible Settlement at Greinberg in</u> <u>the Late (Roman) Iron Age</u>: It is evident that from before 20 AD (see above) until the destruction of the Roman Empire the Cimbri served in the Roman Legions in one capacity or another. The following inscriptions were found on stelae (upright stone monuments) on the top of Greinberg, Miltenberg near Frankfurt. These record their military presence there and their veneration of the god Mercury, which is the Roman equivalent of the Celtic god Lugus (Kondratiev, 1997).

In Honorem Domus Divinæ Mercurio Cimbriano Mansuetinius Se[† Centurio Cohortis I Sequanorum et Rauricorum Sigillum Mercuri Posuit (?) Aproniano et Bradua Consulibus

> In Honorem Domus Divinæ Mercurio Cimbriano Felix (?) Centurio Legionis Præpositus Numeri Esploratorum Sei Opensium Posuit Duobus Aspris (?) Consulibus

The above two inscriptions relate to the employment of the Cimbri as Centurions in the Roman Legions. Also noted are the Raurici and Sequani, Celtic tribes of the region. In the year **191 AD** Aproniano et Bradua were elected Consuls so the first of the two above stelae provide a very clear date when the Cimbri were assigned to that location. As to the second, two other inscriptions relating to Duobus Aspris Consulibus mean Duke Aspris, Consul date to **212 AD**. A similar monument found at Miltenberg is dated to **240 AD**.

A stelae was found on the west slope of the hillside at Greinberg reads,

In Honorem Domus Divinæ Deo Mercurio Cimbriano Aedem Cum Signo Tettius Perpetuius Carus Votum Soluit Liben Laetum Merito

Carus was Emperor between 282 and 283 AD and so these artifacts can be put in context and given a date. Others include:

The two complete inscriptions were found on the same hilltop where mysterious Toutonenstein had also been found within what once likely enclosed a cultic site. Another similar dedication to Mercury by the Arverna, one of the most powerful Gaulish Celtic tribes, whose stronghold was at present day Lyons, France was also found here ("Corpus Inscriptionum Latinarum – Epigraphia Monumentale Gallo – Romana").

Burns (2003), in discussing two of the above monuments stated that, *inscriptions found* on Roman votive statuettes, one discovered in Roman territory along the Main River and another in Baden near Heidelberg, proclaim that the dedicators were themselves Cimbri (p.69).

The Romans equated the Celtic god Lugh ("the long armed one" – or "raven – god" among other interpretations) with Mercury, who was according to Caesar *was the most popular god of Gaul* (Rankin, 1987, p. 234). Recall that one of the Cimbri chiefs in 101 BC was Lugius. There are 10 figures on the Gundestrup Cauldron (see earlier) of male (one female) deities holding their arms up in the air, bent at the elbows. For example, one is holding the back legs of a deer in each hand, and another has a raven perched immediately above the right hand. This takes on greater significance in relation to a find of a rock carving in the Greinberg, Heidelberg area (near Hirschorn). This image (unfortunately much worn) apparently represents Lugh with a raven on his right shoulder. Earlier descriptions of Druids (Celtic priestly class), such as those on the Island of Mon during the Roman invasion, have them with their arms raised in the air.

The association of the Cimbri with the area around Greinberg dates from before 107 BC to after 283 AD. Hence there is every reason to believe that their presence there may have been associated with settlement, to the extent that the population of the region may include a sizeable number of those whose ancestors were Cimbri from Jutland. Due to the probable high levels of R-U152/S28 and R-DF27/S250 Ychromosomes associated with the aboriginal Celts (e.g., Averni) in the surrounds it may be difficult to parse out those arising from each of the two proposed source populations.



The rock carving, shown on the left, is known as "Hirshorn II". On the right is a plate from the Gundestrup Cauldron

The rock carving above is located above a spring (the association of sacred springs with Celtic religion is well known). Lugh is often associated with a raven. It is not possible to offer a clear date for this artifact (Standortdatenbank. Text from Sudhessischen Post, Heppenheim, 1950, pp. 3-16).

There is another nearby stelae on the Heilingenberg near Heidelberg which reads *Mercurio Cimbrio* then some uninterpretable script (Dessau, 1902). It may be associated with the above stone figure of Lug.

It can be concluded that the <u>Cimbri still retained their Celtic culture</u> (at least in part), until at least **283 AD** with the documented worship of Lugus.

Two versions of the "Notitia Dignitarium" were recorded in Latin, describing details of the Roman government and military administrative organization current to that time. Although there are no extant copies written before the 14<sup>th</sup> Century, the data does have internal and external consistency and may be considered reliable. Under the Military Commanders section, the Empire is divided into Eastern and Western divisions. In sections entitled "Magister Peditum" there are 123 shields illustrated, each pertaining to a military unit; and "Comes Africae" 32 duplicated shields are shown. These would be the patterns on the shields carried by soldiers in each of the respective units. There appear to be early (circa 400 AD) and late (circa 420 AD) versions. In the former the Cimbriani are listed as Military Auxiliares under the command of the Duke of Second Moesia (Northeast Bulgaria). They appear to have been promoted to the elite group of 12 Palatine Legions (of 127 total) under the "Master of Foot" (in other words infantry regiment) and placed under the command of the Count of Africa by about 420. There were Celtae and Germaniciai groups so the Cimbri clearly are differentiated from both. The shield associated with these Cimbriani groups is a simple red - mauve background with a gold center and a gold surround. There are works in German and other languages that have explored the role of the Cimbriani, and Benseddik (1981) apparently describes their activities in Algeria, specifically the town of Setif, east of Algiers. A more comprehensive view of the participation of the Cimbriani in the Roman Legions, written in German by Scharf (2001), is also unavailable to the present author.



Cimbrian shield as shown in the "Notitia Dignitorium" circa 400 AD.

Considering the huge quantities of Roman goods appearing in Jutland and the Danish Isles at this time (early years after the birth of Christ and noted earlier), this activity of a few thousand Cimbri sending items home, or bringing their accumulated wealth back upon retirement as a Legionnaire, would go a long way to explaining what has been found in archaeological contexts noted above.

Some supposed Cimbri and Teutone descendants via the Atuatuci / Tungri and Nervi of Belgium (Ardennes Region) were employed by the Romans according to the "Notitia". It has been recorded that, *The document mentions the Tribune of the First Cohort of Tungri stationed along Hadrians Wall at Vercovicium (now known as Housesteads, Northumberland), who had been mentioned on four military diplomata dating to the beginning of the 2nd century, as well as on altars and in descriptions, even on one of the Vindolanda writing tablets. The cohort was split in Hadrianic times to form a Second* 

*Cohort of Tungri as well, both cohorts 1000 men strong.* Dedications were to the goddess Minerva; whereas those of the Nervi (specifically noted as "Germans") were to Jupiter.

Historical Sources Relating to Events in Jutland in the Late Iron Age: Some of the historical sources allude to events reflected in the archaeological finds. One source which "should" be of assistance in illustrating the relationship of the people of Jutland, and those residing in the rest of what is today Denmark, is Saxo Grammaticus. He wrote "Gesta Danorum" in the 12<sup>th</sup> Century (supposedly a comprehensive history of Denmark). Unfortunately, he generally refers only to Sealand and seldom mentions Jutland. In addition, there are three men named Dan in his saga and a profound lack of clarity. In considering the independence or not of Jutland, on one occasion he notes, At this time Horwendil and Feng, whose father Gerwendil had been governor of the Jutes, were appointed in his place by Rorik to defend Jutland. But Horwendil held the monarchy for three years, and then, to will the height of glory, devoted himself to roving. Later he notes how upon the return of one of these men the "Palace burned" suggesting an overlordship of Jutland from Zealand. Concerning the same individuals Saxo speaks of the "kingdom" of Jutland" which was ruled by Wiglek, who had a long and prosperous administation. Elsewhere Jutland is noted as "the chief district of his realm" (Denmark). It is unclear whether at this time the population of Jutland was composed at least partly of Slavs (e.g., Poles) as he speaks as if the "Sclavs" are the common people there. In the final chapter of the book Saxo calls the Jutlanders, "a presumptuous race" and how they conspired against the Zealanders with the people of Skane in Sweden and Ragnar responded by crushing the Skane folk at "the stead of Whiteby" and then dealt with the Jutlanders "who dwelt near the Lim – fjord." In general, the work tends to confuse not clarify as there is not a single date in the entire work upon which to pin events – although somewhat greater success can be obtained in relation to the Angles (in another study noted above by the present author).

"Chronicon Lethrense" (written circa 1170 AD) helps to narrow down the dates somewhat. The author recorded that Danish King Rorik Slengenborre was succeeded by his son Wighlek, the father of Wermund, the father of Offa (d. c. 456 AD). Thus Rorik and Horvendill would have been born about 310 and **340** AD respectively (assuming that there is more fact than myth in these works). Saxo relates that Horvendill of Jutland killed Koll, King of Norway while on a raiding expedition – which may tie in with the Illerup Adal archaeological finds of Norwegian military votive offerings (noted previously). Rorik's daughter Garutha married Horvendill and had a son "Ambleth" (Saxo) or "Amblothe" (Chronicon) – Shakespeare's Hamlet. He became ruler of Jutland perhaps **380** AD. His name, Amhlaoibh is the Celtic version of the Scandanavian Olaf (Kenner, 1989), he spent his youth with the King of England, and married a Scottish queen – suggesting possible Celtic ties.

"Heimskringla: History of the Norse Kings" was written circa 1230 AD by Snorre Sturlason of Iceland. It is viewed as a series of sagas but there is internal and external consistency indicating that the work should be considered a historical resource but occasionally interwoven with Norse myth. This work is replete with references to Jutland,

Limfjord and the Jutes but much of it relates to the time after the Norman invasion. It appears that Jutland was subject to repeated invasions from other Danes, Swedes or Norwegians. For example about **450** AD Domaldi the Swedish king who was "the foe of the Jutes" was sacrificed. Sometime around **480** AD Jorund the King of the Swedes at Uppsala *harried round about in Jutland and in the autumn went into the Limfjord, where he harried, he lay with his ships in Oddasund* [western part of Limfjord]. However, *when the men of the country became aware of it, they gathered from all quarters with big and little ships. Then was Jorund overthrown and his ship cleared* and was hanged. One wonders if these events and the votive depositions at Illerup Adel are connected. Although the dating is imprecise it does appear that in the 5th Century the Cimbri were the enemies of the Swedes of the Ynglinga Dynasty (who may have considered Jutland to be "their" territory if they originated here). Later, about this time Ottar, the son of Swedish King Egil, brought a fleet of warships to Limfjord and "burned and laid waste the land" at Vendel north of the fjord until killed by the Danish reinforcements.

Other information of interest is that in the same century a "sea king" of Norway named Salve "had great possessions in Jutland" and he called upon the men of this region to assist him defeat the Swedes under Eystein in a district called Lovund when the men of Jutland surrounded the house where the latter was staying and burned it to the ground – a poem saying, *The King was burned By Jutish men.* Salve's sense of entitlement could stem from Charudes ancestry if from Hordaland.

Jordanes, "The Origins and Deeds of the Goths", otherwise known as "Getica" was written about 551 AD, and is based largely or in part on the larger but now lost work of Cassiodorus written about 530 AD. He refers to the work of Ptolemy and Mela to determine the location of Scandza, which he views as an island, and with a view toward expanding on the seven tribes noted by Ptolemy. He begins with the Adogit in the far north and names tribes coming south including those who apparently live in Skane, Sweden or nearby including the "Theustes, Vagoth, Bergio, Hallin, Liothida". The Hallin likely resided in Halland but most of the others are hard to place. In listing a total of 29 tribes, he mentions that the Suetidi are of this stock and excel the rest in stature. However, the Dani, who trace their origin to the same stock, drove from their homes the Heruli ....... One would be hard pressed to identify a putative Jute, Angle, Cimbri, or Charude in the list, although Jordanes likely only wished to identify those who were residing in what he considered to be Scandza. If perchance the Herules were the Harudes, an identification not made by other authors, this would change the picture considerably since the Herules appear and disappear on the world's stage in a mysterious manner at a time when some Harudes supposedly migrate to Norway, and Herules join the Ostrogoths in their adventures on the Black Sea. The gaps and inconsistencies are very frustrating in exploring all available Classical sources since seldom is a clear answer available - just a "reasonable hypothesis".

<u>Some Cimbri and Charudes May Have Migrated to Norway:</u> Based on available sources, after about **550 AD** the central and northern Jutland Peninsula was occupied only by the groups recorded as Jutes or Danes. While the local population probably simply

amalgamated and emerged with the latter names, it appears that an unknown number of Cimbri and Charudes may have left Jutland prior to the above date.

Some Cimbri appear to have migrated to the <u>Viken or Oslofjord</u> immediately across the Scatigatt Strait from Northern Jutland. This could have occurred as early as the Bronze Age or as late as the Viking Age. It is known from genetic studies that R-U152/S28 males presently reside in this area, but as yet have not been found in other areas of Norway. Although many sources may be cited, one will suffice here. Sawyer (2000) stated that, *The Danes were particularly eager to have hegemony over Viken, the land flanking Oslo Fjord, a district of great value in part for the iron that the Danes would obtain there. If, as seems likely, the word Viking originally referred to the inhabitants of Viken, it could explain why the English, and only they, called Scandinavian pirates Vikings, because England was the natural objective for men from Viken who chose exile as raiders rather than accept Danish overlordship (p. 28). This may have direct relevance for the settlement of England – if this area is a major source of Viking invaders.* 

Certainly some of the Danish / Norse Vikings came from Oslo Fjord, but there was another area in Norway which has been associated with the Charudes tribe and which may explain the presence of R-U152/S28 in some families with aboriginal (place or farm) surnames in Orkney (if indeed the Cimbri and Charudes are related).

Hordaland surrounds what is presently the city of Bergen – which did not exist at the time of the Vikings. According to the Wikipedia entry for Hordaland, in considering the name given to this geographical area in Western Norway, The first element is the plural genitive case of hordar, the name of an old Germanic tribe (see Cherudes). The last element is land as in 'land, region'. Similarly the entry for Kinsarvik (a place in Hordaland) the following is given under the history of the Vikings of the area. In the time of Julius Ceasar a clan known as Charudes was reported to live in the Jutland region of Denmark. The people were reported to be involved in many battles and thereby had a tradition of warfare. At about the time as the fall of Rome and the arrival of the Huns there was a great movement of people in Europe. The Charudes were squeezed between the Angles, Saxons, and the Jutes. The clan, which was by now referred to as Horder or Harding left Denmark and settled in Scotland, Iceland and the area around what is now Kinsarvik Norway setting up an independent kingship. The state of Hordaland and the region of Hardanger are named for this people. Hardangerfjord is in Hordaland, and there is a village called Ytre, which might be associated with the Jutes, but etymologists will have to decide the likelihood here. Jordanes in "Getica" used as his source Cassiodorus writing circa 520 AD and named the people of Hordaland the "Harothi". When a larger genetic sampling of the area (preferably including ancient DNA), and specifically in and around Kinsarvik, is undertaken it is possible that there will be a good representation of R-U152/S28 and perhaps R-DF27/S250 (the possible Celtic - Cimbri markers in the north) although by that time the Charudes were undoubtedly a mixed group that included other haplogroups such as R-U106, and I-M253 which are common in Norway and Denmark (the latter has been demonstrated at high frequency in a number of studies of Denmark - including Northern Jutland).

It is interesting that the very first recorded Viking raid in Britain, which occurred in 789 AD near Portchester on the south coast of England, involved men from Hordaland. It was recorded that, "there came for the first time three ships of Northmen from Hordaland...... who slew the king's representative. According to the narrative, *Those were the first ships of Danish men which came to the land of the English*. It has typically been assumed that a mistake must have been made and these were Norwegians, but perhaps Danish reflects the Charudes origin of these people. The actual name of these people in the Anglo-Saxon Chronicles (Lund Ms.) is "Herethas", *dwellers in the Norse Hordaland on the Hardangerfjord. From their ravages Hiruaith comes to be the Irish name for Norway* (Chambers, 1912, p. 214). Chambers identifies them with the "Hord a Jotlandic", the inhabitants of the Hardesyssel area and the Charudes of Ptolemy.

Complications still remain, however, in that it is possible that the Charudes came from Hordaland to Jutland (e.g., in the 1<sup>st</sup> Century BC), not the other way around.

Northern Germanic Peoples at the Time of the Anglo – Saxon Migrations to **England**: In the old Anglo – Saxon poem by Widsith, the ruler of each group of North Germans, apparently in the 5<sup>th</sup> Century or during the Age of Migrations, is reported. For example "Sceafthere Ymbrum, Sceafa Longbeardum" which statement in Latin clearly applies to the men who led the people of the Island of Imbre and Lombards respectively. Also Widsith said that "Thyle [led] the Rondingas" (probably the people of Randers, Jutland). Others noted include Breoca the Brondingas, Billing the Wernas. Oswine ruled the Eowan and Gefwolf the Jutes; Finn son of Folcwalda the tribe of the Frisians. Sigehere ruled the Sea-Danes for a very long while, Hnæf the Hocingas. Alewih was the head of the Danes. The Hocingas are probably the Herules named after Ochus, one of their chiefs. Widsith provides different names for the rulers of the Jutes, and various Danes for example. The leaders so named are likely from the "Heroic Age" so may not reflect leadership current at the time of writing. He also said that Offa (d. c. 456 AD) ruled the Angles so the poem content can be dated to this time although the mention of Viking leaders suggests a later date for the writing (9th Century). Note that many have confused this Offa with the Offa of Mercia who built Offa's Dyke to keep out the Welsh. The mention of Finn and Hnaef links this work to the time of the first recorded migrations of the Jutes to Britain. Thus the Cimbri, Harudes and other tribes noted by Ptolemy as residing on the Cimbric Cheronesis appear to have lost their identity and are subsumed under the name Dane (although "Jutes" seems to hold on for a time).

In summary, the leaders of those who would be at a later date likely be termed Danes are:

Getwulf – Jutes Sigehere – Sea Danes Alewih – Danes

It may be helpful to compare this data to the "Skjoldungasaga" by Arngrimur Jonsson composed in 1597 where the brother - in - law of the above Offa (d. 456) was one Dan who originally ruled in Jutland, then conquered Zealand from King Aleif (Alewih in

Widsith?) and became the first king of a united Denmark. Other sagas of the time generally agree with the essentials. Snorre stated that his full name was Dan Milillati (the "Magnificent" or "Proud"). Thus it appears that the people of Jutland were the original Danes – a view reflected in the irrefutable fact that Harald Bluetooth, son of Gorm the Old of Jelling, Jutland was the first Christian king of Denmark. This may, however, be more myth than fact since a candidate tribe seen at the time of Ptolemy in what is today Sealand or Skane, Sweden is found in the Dauethones who may have migrated to Jutland before **500** AD. Others have suggested that the name came from the residence of the Herules at the Danube, among other guesses.

The well – known poem "Beowulf", written by an anonymous author probably in the 8<sup>th</sup> Century weaves together fantasy (dragon slaying) and fact (extensive information about the above Finn and Hnaef is included). In his translation of this work in 2007, Child states the following, *The Danes, in allusion to their valor, wide dominions, or their ruling house (the Scyldings, or descendants of Scyld), are called Spear – Danes, Ring – or Arm – or – Danes, Bright Danes; East - , West, South, and North – Danes; Scyldings, Victor – Scyldings, etc. They are also called Hrethmen and Ingwines (p. 93).* Harothi and Charudes have been linked as noted above.

It is also interesting to note that in Beowulf the Danes are known as Ingwines, harking back to Pliny's statement earlier that the Ingeviones included the Cimbri, Teutones and Chauci (possibly Charudes). Specifically, the Crossley-Holland (1999) translation writes, *Then the King of the Danes, Ing's descendants, presented the horse and weapons to Beowulf, bade him use them well and enjoy them* (p.100). In the Child (2007) translation the version reads, *And then the prince of the Ingwines gave Beowulf the right over both of these* (p.114). This might imply that the Danes were composed largely, at least at the princely level, of the Cimbri and kin.



The Jutland Peninsula.

# **Timeline for Viking Era Jutland, Denmark and England**

**500** – **850** AD - The time between the departure of the Jutes for England and the beginning of the Viking era is a blank on the screen of Jutland – except what can be inferred from the Medieval "sources" noted above. It is likely that this was a time of relative tranquility at home as reflected in settlement patterns and burial rituals (a return to cremation burials with minimal burned grave goods and mounds or stones placed so as to represent a ship), especially in northern Jutland.

**The Cimbri Slip from View**: At some point the Cimbrian Peninsula (as it was known in Classical Times) became the Jutland Peninsula in later records, presumably reflecting the status of the Jutes as the major nation there. The Greek, Latin, Celtic, or Germanic versions of the names used in various records make it difficult to be sure of the equivalency of groups. By the time of Ptolemy in 150 AD the Cimbri were "much reduced" in size, and this is the last record of them as a tribal unit – except possibly for their role as Roman auxiliaries to the 3<sup>rd</sup> Century AD. It appears that between that between 150 AD and about 400 AD they became subsumed under the broad category of **Jute** (see Jute here for a study of this group). There is no evidence when the Jutes became dominant in the area and the Danes took control of the entire region, or that the Cimbri left Jutland. Genetic continuity in Jutland would gain support if it could be shown that the peoples of this area differ in some significant way from those who reside in adjacent areas.

The regional name in Denmark of Himmerland (south and north of Limfjord) today reflects the earlier residence of Cimbrian groups. The name Hardsyssel is thought to reflect the Charudes of Ptolemy's time (also known as Harudes) of the area so it is expected that some tribal descendants will still be found here. Similarly the Chaloi (tribal unit closest to the Charudes at the time of Ptolemy) are purported to be the group after whom the Halland area of Sweden (just south of the Oslofjord, Vestfold area of Norway) was named. Hence it is possible that testing here may reveal the presence of U152/S28 (or DF27/S250) males. A further analysis of the Borglum et al. (2007) data (see below) with the Germanic U106 and La Tene U152/S28 Ychromosome markers may go a long way toward answering this question. There are difficulties with this approach though as it appears that during the Anglo–Saxon raids whole villages uprooted themselves and moved to England so there is no guarantee that the population there today are lineal descendants of those of earlier times – although it is probable to at least some limited degree.

This (Migration Period, 5<sup>th</sup> - 6<sup>th</sup> Century) is the time when the use of bogs as sites for the deposition of valuable items, bog bodies, pottery vessels, and sacrificial rituals at "sacred sites" came to and end in Jutland. Kaul (2003) asserts that the sacrifices continued, but in association with the residences of the local aristocracy and on dry land so there is little to nothing left but random finds to tell the tale of what occurred. Every author comments that the years between about **500 and 800 AD** are an almost total mystery in Denmark. Bog offerings disappear after 475 AD, settlements are abandoned or are only sporadically

used, the grave finds become sparse, and fail to show the wealth of but a few years earlier (e.g., Jensen, 1982). It is evident that either <u>Jutland was largely abandoned</u>, or it is simply not possible to find evidence of human activity in this region. As stated by Jensen (1982), "After c.500 AD the archaeological record completely fails us, and as yet no villages from the sixth and seventh centuries have been found in Denmark. We can pick up the thread again in the course of the eighth century, after which evolution leads to the great village complexes of the Viking Age". Jensen calls this, "an unfortunate gap in the archaeological record" (p.220).

To date no one has come up with an explanation of the hiatus between the Migration Period and the Viking Era (when evidence of settlements, often the same ones apparently abandoned 200 years earlier, re-appear) – although surely the great migrations to England and elsewhere play a role in this phenomenon. It can be said with confidence that the territory of the Angles in Schleswig and surrounds (southern Jutland) was abandoned and that the people migrated as a group to England to form the various Angle dynasties. The documentary evidence (e.g., the Venerable Bede, an Angle, who said that the territory was still unoccupied at the time he wrote - 731 AD), as well as the archaeological evidence (there is little in Schleswig or nearby that would show any human activity until the Danevirk was built just prior to 800 AD. A rare discovery in 1880 near Randers is that of the burial of a wealthy female and can be dated by coin finds to the 6<sup>th</sup> or 7<sup>th</sup> Centuries. The grave goods were as ornate as in earlier times. For example, gold leaf coated glass beads, as well as a knife, scissors and a whetstone, and her costume had been made with gold thread (article in the New York Times, 22 May 1880).

It is not known how and under what circumstances the Cimbri disappeared as a nation or tribal group. It may relate to the above noted events. As noted above, it is known that the "a great change in the cult practice took place around 500 AD when the use of bogs and lakes for offerings stopped". This date marks the first appearance of the name "Dane" in the records. Emigration of large numbers of their people is one likely reason. Furthermore, recent studies of the material culture of Jutland has led most archaeologists to conclude that a Danish kingdom probably appeared not later than at the end of the Migration period, in the sixth century. This has been attributed to a process of amalgamation of several tribal units into a confederation under Danish hegemony, later developing into a more coherent kingdom (Nasman, 2000, p. 5). Hence those remaining in Jutland became Jutes and Danes, absorbed by the largest remaining tribe. Ultimately the amalgam included Danes, originally centered in Sealand, who likely absorbed the peoples of North Jutland, Skane and Halland in Sweden and Vestford in Norway. The historical sources are unfortunately unhelpful in this rather dark period in the history of Denmark, and alternative interpretations can be made.

There has been some reinterpretation of the evidence of late showing how Jutland settlement patterns may have changed to an amalgamation of smaller farms (e.g., at Vorbasse) and a continuation of the estates of local chieftains (e.g., Dankirke). However a detailed analysis at Borre in Vestfold Norway has shown more straightforward evidence of continuity. For example, burial mounds from 600 to 900 AD (including ornate ship burials), are probably the burial mounds of generations of a royal dynasty who may have

controlled local trade (via Kaupang) through regions of Denmark. Meanwhile in Denmark prior to 714 the English missionary Wilibrand commented on the wild Danish tribes and their king Ongendus, who may have founded Ribe and / or Hedeby about 700 AD (Halle, 2003).

It appears that there was a gradual shift away from massive attacks on Scandinavian neighbors to local piracy then subsequently the realization that there were easy and rich pickings abroad for those inclined to adventure. It was likely a time of shifting alliances much as was seen during the entire "Viking Era". It was also a time of advancements in agriculture, and the development of large trading centers such as Birka, and closer to home, Hedeby and Ribe. Large villages from the 8<sup>th</sup> Century were also found along the Limfjord, such as Bejsebakken, Lindholm Hoje, and Aggersborg (Jensen, 1982). Some settlement sites have a much longer history for example the Gudme – Lundborg complex on Fyn, and the massive Stavensager settlement of about 150 hectares near Randers in northeastern Jutland which provides evidence of continuous occupation from about 400 AD to 1200 AD. It has produced an artifact assemblage that would rival that of Gudme (jewelry to weapons to everyday functional items), and evidence of being a very multifaceted area that likely participated in trade and manufacturing as well as raiding across the North Sea. The excavations have only begun and the data (early results published 2006) will be analyzed in more detail in 2009 (University of Nottingham).



Copper amulet of Freya (perhaps a mold for the "gold-grubbe" on left, and a "gold-grubbe" votive offering found at Stavensager

It was not until the 7<sup>th</sup> Century that the lands which at one time belonged to the Angles were reoccupied to any substantial degree. This was the time that the trading settlement of Hedeby was established in the Schelswig area. It was also at this time that the Vorbasse settlement, apparently abandoned by the Angles in the 5<sup>th</sup> Century, is reestablished. Also, six kilometers away at Schuby was an agricultural settlement in use between the 9<sup>th</sup> and 14<sup>th</sup> Centuries that is only now coming to light. The nearby settlement of Kosel (3 kilometers north of the Danvirke in Schleswig) was commenced in

the Migration period, but abandoned between the  $6^{th}$  and  $8^{th}$  Centuries to be revived in the  $9^{th}$  (Hamerow, 1989).

One hint at a continuation of the rich princly graves into the Viking era on Fyn is the Ladby boat burial which is similar to that at Borre, Oseberg and Gotstad in the Vik at Oslofjord. It appears to have been disturbed and the human remains taken elsewhere (only small bones being left). And its dating to 900 to 925 does make one wonder if this selective desecration had something to do with the Jelling Dynasty of Central Jutland (and all of Denmark). Perhaps when the family became Christian, they moved the body to the church at Jelling (this is only one of a number of possible interpretations). The ship burial is also very reminiscent of the Anglo-Saxon burial found at Sutton Hoo in East Anglia.

It was **777 AD** before a united Denmark appeared on the world's stage when a rebellious Saxon chieftain took refuge with King Sigfred (who was recognized as such by Charlemagne) of Denmark. By 811, with the "Viking Era" underway, it was King Hemming who, having replaced the deceased Sigfred, negotiated a peace treaty with Charlemagne (Nasman, 2000).

The attack on the monastery at Lindesfarne in Northumbria in **793 AD** ushered in the Viking Era. Again large – scale movements of population from the Jutland Peninsula and elsewhere in Denmark became a tidal wave. Initially the goal appears to have been plunder, but ultimately the main focus was on locating land on which to settle the soldiers and presumably families who arrived from Denmark.

## Picking Up the Story in England

**850** AD + – History: In this year the Danish Vikings changed tactics from the hit and run approach to one where they lingered. It was this year that the Danish Vikings established a winter camp at Thanet in Kent (ironic since this area was the first documented settlement of Anglo-Saxons 400 years earlier). The size of the sea – based forces sent to England increased to the point where in 865 they wintered in East Anglia and obtained horses to use in the spring land campaigns - on sea and land the Danes were highly mobile. It was at this time that the term "The Great Army" was used in reference to the Danes in England. After over – wintering in Repton in 873 - 874, the Great Army split up and Ivar the Boneless's men were led by his brother Halfdane. In 876 the entry in the "Anglo - Saxon Chronicle" states that the latter "shared out the lands of the Northumbrians" including York. In 877 some of this branch of the Army went to Mercia and settled the land there. The portion of the Great Army composed of Danes under the leadership of Guthrum returned to the Eastern regions of England in East Anglia and in 879 the land there was divided among his followers. Thus the northern, middle, and southern sections of what was to become known as the Danelaw came to have new and permanent land owners who were Danes. This apparently means that the great estates were divided into manor farms and, although not stated explicitly, it is likely that the size of the holding apportioned to the individual soldier would be a reflection of his status. Although the land - owning families can likely trace their ancestry to this group; it is known that Danish immigrants continued to arrive "in large numbers" during the 10<sup>th</sup> Century, thereby creating a true Anglo – Scandinavian culture in East Anglia (e.g., Hall, 2007). Even in **945** the Jutland peoples were still under the gun from foreign invaders (yet ironically were adopting that role elsewhere such as England). Here King Hacon of Norway arrived in Jutland and slew many of the people there sending the survivors "far up into the land". Time and again Limfjord seems to be a gathering place and a battle ground in the Scandinavian wars for dominance. As late as **1027** King Canute of Denmark and England was known as "King of the Jutes" as he was about to embark on a campaign against Norway. History, either sources relating to Denmark or England, however, does not provide any information about the specific geographical origins of members of the Great Army. It is to other sources that we must turn.

<u>Archaeology:</u> Two burial sites relating to the Great Army have emerged. One is at Repton, Derbyshire and is located within the area where the group over – wintered in 873 – 874 AD. Their fortifications include as a "gate" the church and mausoleum of the Mercian Anglo – Saxon Royal family. Some of these inhumation burials have been tested for strontium – oxygen isotope analysis of teeth that shows where the individual originated. Budd et al. examined three skulls and the conclusion was that two, including one buried with a hammer of Thor pendant (classic Viking symbol), were consistent with what one would find in "northwestern Jutland"; whereas the other was more similar to the composition expected in "eastern Sweden". The finger ring worn by the latter is similar to those seen at Birka in Sweden or "at Frykat in north Jutland."

It appears that the two components of the Danish army may have selected two modes of burial. As while the burials at Repton may have contained some "pagan" features (such as grave goods including the Hammer of Thor), the burials were near the shrine of St. Wystan and the orientation of the bodies was in the typical Christian fashion – likely people who were hedging their bets and associating with both traditions.

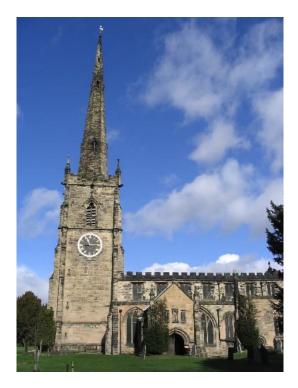
See Dawn M. Hadley and Julian D. Richards, "The Viking Great Army and the Making of England" (Thames & Hudson, London, 2021) for the most up to date information on this subject.



Lindholm Hoje, Viking Era cremation burials, many surrounded by stones to mimic the outline of a ship. View across the Limfjord to Aalborg.



The pictures above show, in a clockwise direction from the bottom, the amulet "Hammer of Thor" found around the neck of warrior buried at Repton, his skull, and a facial reconstruction.



St. Wystan Church in Repton, Derbyshire. Outside the chancel wall of this building the grave of the above Viking warrior was found.

Turning to archaeological analysis of the Heath Wood, Ingleby, Derbyshire barrow cemetery (all cremations) further confirmation is obtained. It is clear that the two sites of Repton and Ingleby are associated – the latter provides a very clear view of the former from a natural promontory – but the burial practices were extraordinarily different to the point where it appears that two groups or elements within the Danish army are represented – likely reflecting the leadership. Julian D. Richards (2004), who completed the major archaeological work at Heath Wood – Ingleby, agrees with Shetelig (1954) that *the resemblance between Heath Wood and the north Juland sites was so striking that those cremated at Heath Wood must have come from north of the Limfjord* (p.91). Richards summarizes the research, stating that, *In Denmark cremation cemeteries are mainly found in northern Jutland, at sites such as Asted, Kirkelund, Ris, Fattiggard, Horby, Lindholm Hoje, Oslos and Hojstrup* (p.95). The reason why in England there are so few cremation burials or others that can be associated with the Vikings is, according to Richards, entirely due to, *The rapid conversion of Scandinavian settlers*, then choosing burial in a churchyard in a manner indistinguishable from their Anglo – Saxon neighbors.



Excavation of the Heath Wood, Ingleby Viking "Great Army" cremation burial site.

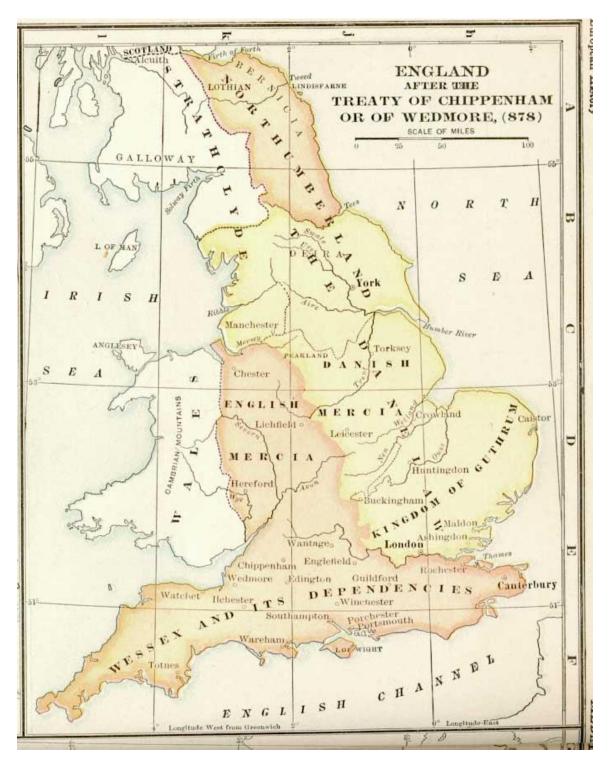
However, what is the evidence concerning the two groups? Which went to Northumbria and which to East Anglia? Records generally agree that the Repton church site is associated with Ivar the Boneless - early reports noting the remains of a "nine foot" warrior around which about 250 bodies were arranged (found just outside the ditch and bank enclosure). Many of these likely became the bones found under the charnel mound. In 874 the group under Ivar's joint leader Halfdan; and another led by Guthrum (with Oscetel and Anwend) split up at this time never to be re-united. There were two distinct groups and clearly one was more "conservative" than the other, preferring all the pagan rites of home. Richards speculates that it was Guthrum's group who are buried in the Heath Wood site (a war cemetery in which 40 high ranking warriors were memorialized some being cremated in situ and others brought from elsewhere). If this is correct it gives a very strong link to northern Jutland for those who settled in East Anglia when it was partitioned in 879 (after Guthrum and 30 of his leaders accepted baptism setting the stage for rapid Christianization of their followers) – they being from the territory that was the homeland of the Cimbri. Therefore it is probable that the descendants of the Cimbri may have made up some proportion of the Danish settlers in the parts of the Danelaw including Suffolk (Guthrum likely being buried in the church in Hadleigh).

There is little doubt that both groups included Cimbri descendants. There is further archaeological evidence that is very informative in relation to the origins of the Danish Vikings. At Skerne in East Yorkshire archaeologists have found ritually deposited (not having been slaughtered for food) animal bones (horses, cattle, sheep and dogs), as well as four knives, a spoon, and adze and a Viking sword with scabbard associated with a bridge or jetty of some kind (Dent, 1984). Hence what is seen is a continuation of the traditions of the Cimbri from Jutland in pre – Viking times, which also reflect the

traditions of the ancient Central European La Tene Celtic peoples of Lake Neuchatel, Switzerland.

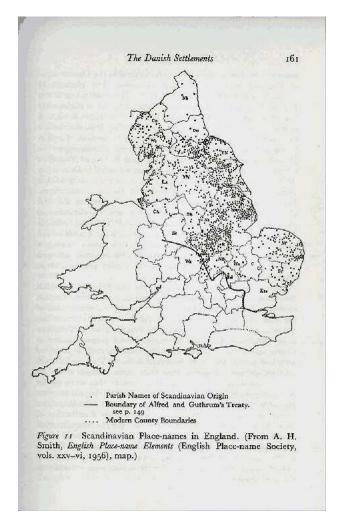
# The Danelaw





Two maps illustrating the Danelaw in England where the Danes settled, and ruled from 876 to 1066. The second map shows the concentration of Scandinavian place names.

Until recently, despite a very thorough examination of the then available evidence relating to the Norwegian and Danish occupations of England, little of substance could be concluded. It was acknowledged that the Scandinavians, although having an obvious impact on the naming of villages (e.g., those ending in by, thorpe or having a Danish / Anglo – Saxon name such as Grimston), common every day words in the language today such as egg and window, that there were relatively few archaeological remains to assess their impact. Some have questioned whether there was any significant population movement to the Danelaw. In relation to this viewpoint, Starcke (1968) asserted that, *The pronouns of daily speeh – they, them, their, our, - are Danish as are adjectives such as same and both, and the adverb for, and certain auxillary verbs and prepositions. This is further evidence of the massive scale of the colonization, since so many traces could not otherwise have been preserved in the language (p. 200).* A re-evaluation of the matter has begun to occur occasioned by the emergence of new data which points to a noteworthy influence of the Cimbri – Danes.



Map showing the concentration of Scandinavian place names in England.

It appears that when Guthrum and 30 of his chiefs were baptized this set the stage for the men of his army to follow suit. For example if Danes wished to marry Anglo - Saxon

women and achieve status in the community they would also have to adopt at least the trappings of Christianity and all that entails (including burial practices). Thus the Scandinavians appear to largely have seamlessly integrated into the local communities even in the first generation.

Richards, in examining the archaeological evidence, notes that about 15,000 metal objects surface every year in Norfolk alone (often via metal detectors) and that a substantial number of these are "Viking Era". He reports many more finds such as a bronze strike a light with two horses and a rider similar to finds in Russia; a 9th Century sword (likely a votive offering) from the River Wensum in Norfolk; and a stirrup from Kilverstone, Norfolk - it being likely that the Danish introduced the East Anglians to the stirrup. Richards believes that these may have belonged to members of the "Great Army". Hall (2007) has noted the profusion of finds in Norfolk recently of "Hammers of Thor" pendants suggesting a much greater Danish influence on East Anglian culture than had previously been recognized.

A re-evaluation of the historical and archaeological evidence relating to settlement patterns is revealing. One site of particular interest is Middle Harling in Norfolk which for example is providing evidence that rather than just a ruling elite, there was continuing contact with Scandinavia and that many of the settlers were "peasant farmers" (in other words the consensus is building that the actual numbers of Danes in the Danelaw was likely more than previously assumed). Furthermore, settlements appear to have consolidated during the Viking period around individual parish churches (in previous eras settlements moved around frequently). Work is continuing on the *change in tenurial* / settlement patterns in the rural Danelaw via recent efforts at Cottam in Yorkshire (Hall, 2000, p. 153), and Wharham Percy in Yorkshire (Hall, 2007). There is also a developing interest in the "archaeology of lordship" and the continuing work at Goltho in Lincolnshire where a probable aristocratic manor was established at about the time the Danes were likely to be establishing permanent dwellings after the land was assigned to the members of the "Great Army" (Hall, 2000). Based on available evidence Hall concludes that the Scandinavian takeover in the Danelaw transformed the pre-existing pattern of land - ownership. Its effects included the breaking up of the big estates.....and the creation of an extended class of 'small landed gentry' who.....had ownership rights in *perpetuity* (p. 155). Even the parish churches typically thought of as Medieval may have seen their beginnings in the first years after the arrival of the Danes as they divided the large Anglo – Saxon estates into smaller (parish) units and attempted to assert their claims to the lands assigned to them (Hall, 2007).

Kleinman (2005) has explored the development of regionalism in the era after the settlement of the Danes in East Anglia. In speaking of the literary work "Lazamon's Brut", he reported that, *These complex relationships are particularly apparent when we look at the intimate connections between Scandinavian ethnicity and eastern regional identity in Lazamon's time. The legacy of Scandinavian settlement helped establish the regional character of eastern England in the form of distinct dialect features, names for people and places, legal and administrative terms, and patterns of social organization. Scandinavian - derived literary and folk traditions, such as the Legend of Haveloc the* 

Dane, continued to flourish after the Norman Conquest, probably aided by the opportunities for cultural exchange afforded by the flourishing mercantile relationship between Scandinavia and eastern England. The region also boasted and extraordinary proportion of freemen. Kleinman asserts that a Scandinavian identity was still apparent in 13th Century East Anglia. Quoting Hadley he noted that, the descendants of Scandinavian settlers might not be fully integrated even as late as the 1290s. Starcke (1968) concluded that within the Danelaw, Nordic personal names were retained for at least three centuries after the Norman Conquest had caused direct communication with the Scandinavian countries to dwindle (p. 199). Curiously at this time even respected historians such as William of Malmesbury espouse negative cultural stereotypes of the Danes. Cruelty, ferocity, and drunkeness are commonly noted.

There are clearly a considerable number of descendants of Danish – Cimbri Y-ancestors who trace their lineage to the Danelaw and Kent County, England. An estimate of the probable absolute number is as yet unavailable.

What are some of the other indicators of Cimbri ancestry in the male line? Α Scandinavian surname such as Falke or even Johnson may be one indicator, and a Danelaw place name as a surname would be another. Considering that 1100 plus years have elapsed since the Danish settlement, and that in many cases surnames were not adopted until the 13<sup>th</sup> Century, and that an unknown number of non – paternity events have occurred to disrupt the direct link via surname, this if far from an infallible indicator. If one's ancestors can be traced to the Middle Ages to a village surrounded by Danish place names this would up the probability. In addition, in some cases the family will still have retained their status (e.g., not Norman but still accorded the privilege of being buried in the local church) and own land that may have been recorded in the Domesday Book of 1086 – the village having one or more recorded owners with Danish names such as Grim or Rorik and including freemen known as "sokemen" - which points to Danish settlement. However, some families may have been small traders and merchants or tilled the land for richer Danish overlords and perambulated about the Danelaw over the years. Hence while one may be able to locate "hints" of one sort or another, at this point the surest data source is perhaps the genetic markers U152/S28 and DF27/S250. At some point other markers may be located and linked to the Cimbri, but as of the date of writing there is nothing comparable that can potentially parse out Cimbri from other Scandinavians, Anglo - Saxons, Roman occupiers, or native Celtic Britons. Alas even here nothing here is certain, only that one can report that on a "balance of probabilities" an ancestor is Cimbri. It is doubtful that "beyond any reasonable doubt" will apply since there will always be less likely, but possible, scenarios to explain the evidence.

Clearly Danish – Cimbric traditions live on in the culture, folklore and language of the region of the Danelaw (e.g., East Anglia). Their descendants continue to reside in the English homeland as well as the colonies around the world that arose from the settlement of peoples from the counties and shires of eastern England. Perhaps concluding with the words of Winston Churchill would be apropos. He said, *Here I may mention – in speaking of the character of the British people – that that which the British people owe to* 

the ancient Danes we did not regard as a debt at that time, and there was considerable controversy on what was going on. – The Danish sailors from the long ships who fought ashore in England as soliders brought with them into England a new principle represented by a class, the peasant – yeoman proprietor. The sailors became soldiers, the soldiers became farmers. The whole of the East of England thus had seen a class of cultivators who, except for purposes of common defence, owed allegiance to none; independence and discipline were thus conjoined. Particularly in East Anglia did this sturdy, outstanding stock take root (quoted in Starcke, 1968, pp. 209-210).

<u>Chronology of R-U152/S28</u>: This section largely summarizes what was discussed above in the history and archaeology sections of the current work.

The first appearance of this marker (its "U" designation will be used to retain clarity) is not known but was likely sometime during the Unitice culture at a time that was clearly "proto – Celtic".

- Bell Beaker, Neolithic, Copper and Bronze Age period (2800 1800 BCE) which appeared to begin in the west (Iberia) and merged with an eastern version (Hungary). The available ancient DNA samples (see later for an extensive look at this data source) show that R-L2 was the predominant haplogroup of this period.
- 2) Unitice, Copper and Bronze Age culture (2300 1800 BCE) emerged from the east such as present-day Czechia.
- 3) Urnfield, Bronze and Iron Age culture (1300 750 BCE) was also a phenomenon which has its origins in Eastern Europe.
- 4) Hallstaatt, Iron Age culture (900 400 BCE) began in Austria and spread west to Switzerland and beyond.
- 5) La Tene, Iron Age culture (450 BCE 1 CE) was predominant in Gaul and Southern Germany and expanded north to Belgium and Scandinavia, west to Iberia, south to Cisalpine Italy, and largely Gall movement via the Danube Valley to Anatolia, the Balkans and Ukraine. There appears to have been some expansion to the British Isles at this time (e.g., the Arras culture of Yorkshire), but no known migration to Ireland although there was cultural sharing.

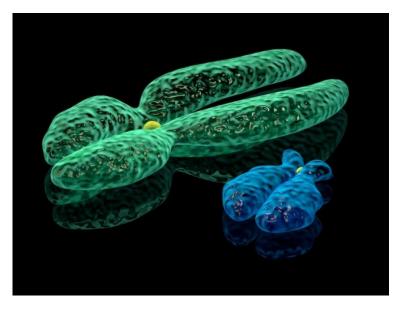
The above were all largely Central European Celtic groupings. It will take further research to outline comparable associations for R-DF27/S250.

## **DNA Findings**

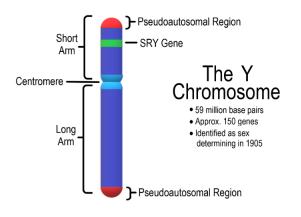
<u>The Y Chromosome</u>: In addition to 22 pairs of autosomes (which include most of the human DNA and coding genes), there are two sex chromosomes – the X and the Y. In general females of the species have two X chromosomes, and males have an X and a Y

chromosome – the Y being inherited from the father and his father and so on in the direct paternal line back to the beginnings of the species.

The Y is among the smallest chromosome and includes about 63 genes along the 57,227,415 base pairs of the building blocks of DNA, adenine, guanine, cytosine, and thymine (AGCT) along the double helical shaped strands. One gene, the SRY, codes for "maleness". If born with this gene then generally one becomes a biological male (e.g., development of testis), otherwise an individual is born who is typically female (always a few exceptions – which are not germane to the discussion here).



X chromosome on upper left, Y chromosome on right



## **Characteristics of the Y**

A good review paper on the structure and function of the Y can be found here.

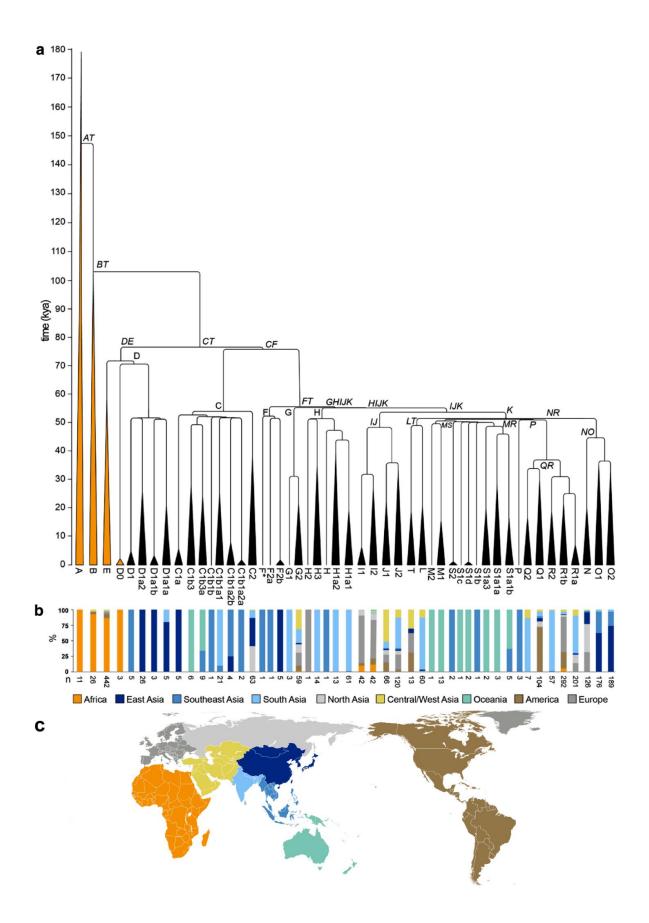
<u>The Y and Ancestry</u>: In addition to its key role in human development, the Y also includes factors which can tell the story of a person's regional and ethnic ancestry, and

their relationship to other males who may be related (e.g., whether they are likely say a third cousin, sharing the same great great grandparents). Commercial testing of STR (short tandem repeat) markers (e.g., a male has 25 ACCCTGGAT repeats at a marker named say DYS270) allow the comparison of the results for two males on for example 37 such markers. A 36/37 match would suggest a relatively close relationship, somewhere between first degree and say 8<sup>th</sup> degree relatives in the direct male line. While this testing can be informative within a genealogical time frame (e.g., since parish registers were first begun – typically in the 16<sup>th</sup> Century), it will falter in the attempt to explore distant ethnic ancestry (e.g., whether geographical origins are to be found in Switzerland or Ireland). This is where SNP (single nucleotide polymorphism) testing can offer potential answers.

All human males today descend from an African man who lived perhaps 200,000 years ago in East Africa and whose descendants spread to every corner of the globe. His haplogroup was named Haplogroup A (there are still Africans today who possess this haplogroup). At that point or soon thereafter humans began to migrate out of Africa and new haplogroups emerged when mutations occurred and that male had male descendants who carried the same mutation whose progeny are still here today.

Every 50 to 130 years (a wide estimate) a new mutation will appear on the Y chromosome of a male lineage. All descendants in the male line will carry that mutation (usually harmless). Thus, many thousands of years ago a male, likely living east of modern Turkey, developed a mutation that is today called M269 within the broader category of R1b (a distant descendant of the original group A). This mutation is currently found in over 40% of the males in Western Europe, and in locations such as Western Ireland it comprises over 90% of the male haplogroups. There are over 110 million males in Europe (primarily Western Europe) who are members of one of the M269 subclades.

The haplogroup distribution map below shows the world and regional distribution of haplogroup R1b (5<sup>th</sup> notation from right of the "a" part of the diagram). The percentage of R1b (the reason for using a series of letters and numbers to designate a haplogroup will be explained later) in Europe can be seen along the 5<sup>th</sup> bar from the right in "b". R1b is the basic grouping into which R-DF27/S250 and R-U152/S28 as well as its "downstream" descendants such as R-L20/S144 fall.



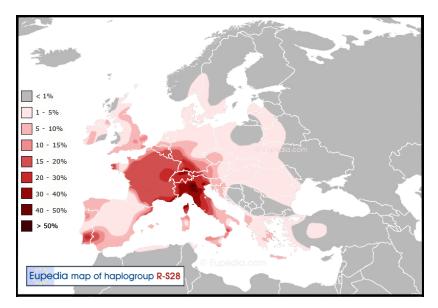
#### Haplogroup R-U152/S28

Branchings of M269 occurred after about 3000 BCE/BC as a large wave of Indo-European speaking individuals made their way westward from the steepes between the northern Caspian and northern Black Seas and fanned out across Europe. Early in the Bronze Age (about 2000 BCE) we find descendant R-U106/S21 concentrated in Northern Germany and Scandinavia; R-L21/S145 focused in the British Isles; R-DF27/S250 in Iberia and Southern France; and R-U152/S28 in the Central European and Alpine areas such as Switzerland and adjacent countries including Italy. The latter is typically called the "Alpine – Celtic" or "Italo – Celtic" haplogroup (e.g., see here), due to the strong association between this DNA marker and regions that historical and archaeological sources have shown to be Central European Celtic. Therefore, in learning of the Celtic Cimbri people residing in Jutland, the author hypothesized that they originated in the Celtic (likely Alpine) area, and many would have Ychromosome haplogroup R-U152/S28 and subclades, rather than the more typically "Germanic" haplogroups such as R-U106/S21 or R-M253. Hence the <u>rationale for the author's hypothesis of the Cimbri – R-U152/S28 link</u>.

More detail about Y-DNA with a focus on ancestry testing can be found <u>here</u>.

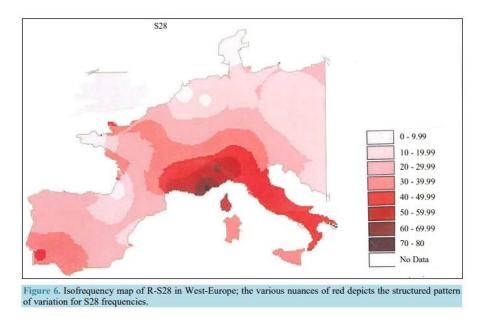
First it is important to note that today many thousands of Y SNPs have been discovered, and each is placed into the "Y Tree" using a series of letters and numbers such as R1b. See <u>here</u> for the most up to date tree of the International Society of Genetic Genealogy.

**Distribution of R-U152/S28 Today**: The focus in this study is on the descendants of R1b-M269 > U152/S28, and how and when its descendant lines (subclades) came to England and all the British Isles. As we will see later, only securely dated ancient DNA findings will hold a clear answer to these questions.



An excellent overview of the history of R-U152/S28 (or simply U152/S28), which is also known as R-S28 (the designation used when the marker was first discovered) is found at Eupedia here, and in the diagram above which reflects the modern day distribution of the haplogroup. The history of the discovery of this marker, and the current author's involvement, can be seen here. Some authors, particularly in ancient DNA studies, use "U152/S28" to designate the haplogroup. Despite the author's role in the discovery of "S28" and subclades, the equivalent "U152" designation will also be used in the current study due to its prevalence in academic studies, as well as being the term used by FTDNA who currently lead the field in commercial Ychromosome testing.

It appears that the most recent relevant academic study is that of Lucotte (2015). The general results are seen in the map below:



Lucotte concluded that, "the most elevated R-S28 values are concentrated at the interior of the Alps mountains in continental Italy". Hotspots were southwest France and Northern Italy. Unfortunately, R-U158/S28 was not broken down into subclades – as in almost universally the case with all of the academic studies in the field. Published work can be found on the Family Tree DNA U152/S28 and Subclades Project "Results" page here.

The most useful data has emerged from the Family Tree DNA (FTDNA) "Haplogroup U152/S28 and Subclades" Project (see <u>here</u>). Thanks go out to Richard Rocca, Steve Gilbert and Tibor Feher who are administrators of this Project for the immense assistance that they have provided over the years.

Early in the study of this haplogroup the author kept a database, which included results from the testing of customers from companies including FTDNA and EthnoAncestry which was kept up to date until 2011 (see <u>here</u>). To that date the haplogroup has been

seen in a band in the east from Greece through Poland, Ukraine, Turkey and Kazakhstan; southern and less so northern Germany, Italy, parts of France (mostly eastern), Benelux, Switzerland (the Alpine Region, ancestral home of the Celtic Helvetii, being a "hotspot") and west to the Bay of Biscay in France and the Celtic speaking area of Iberia – all consistent with the range of the La Tene Celts of the Iron Age.

<u>**R-U152/S28 in England</u></u>: Soon after the discovery of R-S28 by Dr. James F. Wilson, he came to term this an "eastern marker" in England. The primary locations where it was observed hugged the eastern, and to a lesser extent southern coastal areas of England. Reference to the above maps shows that the same general distribution pattern is seen today in the British Isles. Its presence in Ireland can most parsimoniously be explained as a function of the Middle Ages movement to that area by the Normans and later the English, as well as the Plantation Scottish in the north. Some contribution may also have occurred due to the earlier Viking settlements.</u>** 

One fact is likely of some importance with respect to England, that being that a disproportionate number from here and their Colonial descendants have had commercial testing – it is a very popular hobby with this group. However we are less likely to have a clear picture of the pattern in for example countries in Eastern Europe, as well as France, at least at this time. This could be problematic when the goal is to be able to state with some certainty the origins of the haplogroup in the British Isles. As we shall see it did not originate there, nor is there any evidence that R-U152/S28 males were residing in the British Isles prior to the Iron Age.

**R-U152/S28 in Scandinavia**: In a small research sample of those identified as R-M269 from all regions of Norway, the subclade marker R-U152/S28 was found immediately north of Jutland in Southeast Norway, but was not observed elsewhere in the country (whereas R-U106 predominates among those who are in the R-M269 category according to this, albeit small, sample), and only a single R-U152/S28+ example was found in a much larger sample from Friesland, west of the Jutland Peninsula on the North Sea.

Despite very limited testing of Scandinavians for the subclades of R-M269, commercial testing by Family Tree DNA and 23andMe has found U152/S28 (ancestral U152/S28 as well as downstream subclades) in Norwegians from the mouth to the head of Oslofjord, as well as Swedes from the area east of Oslofjord, and Norwegians along the western aspect of this region known as the Vik or Vestfold. The Danish R-U152/S28 is found primarily in the ancient Cimbri territory along the eastern aspect of northern Jutland (north and south of Limfjord), as well as Funen / Fyn. There is an immense gap between these Scandinavians and their Y genetic brethren in any direction. There have been few R-U152/S28 men reported anywhere in the surrounds until central and particularly southern Germany where there is a strong concentration of this haplogroup.

A significant problem here is that population genetics studies of Denmark suffer from four shortcomings. First sample sizes are small. Second, the genotyping is too far upstream to be useful (generally not extending downstream to U152/S28). Third, only

one study has attempted to parse Denmark into regions. Four, the academic studies have tapered off such that there does not appear to be a relevant study since the above Lucotte 2015 study.

Earlier Myres et al. (2007) employed a Danish sample in their study of two haplogroups, J1 and R1b3 (R-M269). Of the 113 males, 34.5% were R-M269 (clearly10 – 15% lower than in other studies). In this study they examined two subclades, M405 (S21 / U106) and M467 (S29 / U198). Of the R-M269 group, 49% were R-U106+, 2% were R-U198+ (a variety of S21) and 49% were R-M269 (except the previous two subclades). Of the latter (the approximately half not R-U106) it is expected that some will be R-U152/S28 and the rest R-P312\*.

The 2011 Myres et al. study finds hotspots of R-U152/S28 in the Alpine regions of Italy and across Switzerland (confirming the findings of most other studies). In terms of Denmark, they found zero of this haplogroup in their sample of Denmark East, Denmark Island East, and Denmark West. However, in terms of the area associated with the Cimbri there are numbers that are expected and could explain a sizeable proportion of the haplogroup in Britain via migrations during the time of the Angles and the Viking era. In Denmark North and Denmark South East the percentages are 4.8 and 4.5 respectively.

A more recent study which includes R-U152/S28 is that of Busby et al., 2011. They combine the above data of Myres et al. and others with their own dataset and conclude that this haplogroup is most highly concentrated in the Alps. They also show that of the Norway sample (from Hemsedalsvegen east of Bergen), 3.6% of the sample were R-U152/S28. Unfortunately they combined two regions of Denmark from the Myres et al. study and arrived at a South West Denmark percentage of 2% confounding the two and reducing the South East from the 4.5% seen in Myres et al. Here, however, the Busby study defined (by latitude and longitude) the region where the samples were obtained and the Northern Denmark sample showing 4.8% came from Store Habendal south of Skagen and west of Frederickshavn (Cimbri country). The South West sample was given the coordinates of Odense on Funen / Fyn (again within the tribal orbit of the Cimbri). The above figures accord well with the data seen in the R-U152/S28 database and associated Google map of the author showing these two locations as the only ones with R-U152/S28 samples found in the databases accessible to the author (e.g., the Family Tree DNA U152 Haplogroup Project) – as noted above.

A resources page for this haplogroup, created by the author (albeit now somewhat dated), can be seen <u>here</u>.

If the hypothesis noted earlier, that the Cimbri began as a unique Celtic tribe, but over time became a mélange of Central and Eastern European Celtic tribes constituted circa 101 BC is valid, then there should be considerable variability in the genetic make up of the Cimbri of Denmark, Vestfold, and England. Preliminary data found in a database created by the author shows that the R-U152/S28 genetic haplotypes of England are indeed what appears to be an amalgam of what is seen in those from other parts of the La Tene Celtic world (e.g., Switzerland, Northern Italy, Eastern Europe). The importance of these subgroups will be explored later. In addition, likely from an early date, the Cimbri merged with Germanic groups and thus haplogroups such as R-U106/S21 and I1a-M253 would potentially make up the majority of the Cimbri Iron and Roman (Imperial) Age haplogroups.

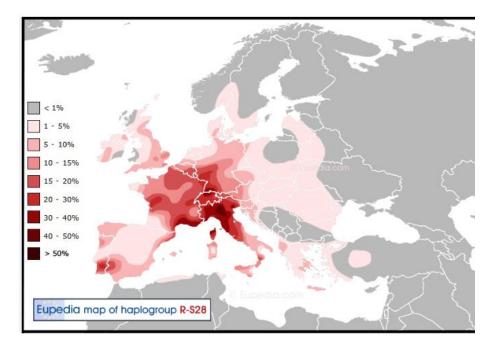
The Possible Conflation of Viking Dane and Angle from the Jutland **Peninsula**: It must be noted that there is another possible explanation for the distribution of R-U152/S28 and R-DF27/S250 in England that relates to the Jutland Peninsula - the possible Ychromosome composition of the Angles from the southern neck region of Jutland. This area was entirely abandoned after about 475 AD when the Angles migrated en masse to England. Their historical and archaeological record show the geographical extent of their kingdoms from the 5th Century (at precisely the time the settlements in the Angelin area are abandoned). The evidence of their migration from Jutland to England is seen via similar jewelry (e.g., cruciform brooches), shield styles, bracateate coin pendants, rune inscriptions found in both the Angle regions and contemporary artificats in England – but not in the Saxon parts of England or the Lower Saxony sites in Germany. Clearly close consideration must be given to the possibility that some of the R-U152/S28 and R-DF27/S250 in England arrived from Jutland prior to the Viking era. A problem is that it will not be possible to assess the Ychromosome structure of circa 500 AD in the neck region of the Jutland Peninsula since the area was completely deserted for possibly two hundred years - leading to population replacement likely from Sealand and other areas of Denmark. It is also unknown what relationship the Angles had to the Cimbri, although they may be their direct descendants. This matter is taken up in some detail in another article by the author (see Angles here). Thus, until recently (e.g., 2015) all DNA statements must of necessity have been tentative inferences based on modern samples from living people in Scandinavia and England.

To date the academic community has largely failed to provide useful information on the array of U152/S28 subgroup markers related to the **current distribution** of males across Europe. This problem has been addressed in the work of the current author (as noted above – but now somewhat out of date), and more importantly the FTDNA "U152 and Subclades Project". Among the most common of these subclades are R-U152/S28 > Z36; R-U152/S28 > L2, R-U152/S28 > R-L2 > Z49, and R-U152/S28 > L2 > L20/S144.



Distribution in England of all subclades of R-U152/S28 in England as of 2016

To see a detailed view of above map from FTDNA's "R-U152 and Subclades Project" see <u>here</u>.



In the map above from Eupedia, R-U152/S28 appears to "snake" up into Denmark then across the Kattegat Strait to Norway and Sweden where is is seen at somewhat lower levels. Also, note the eastern and southern England distribution in the British Isles.



Continental European Distribution of all Subclades of R-U152/S28 as of 2016

To view detailed map above from the "R-U152 and Subclades Project" at FTDNA see <u>here</u>.

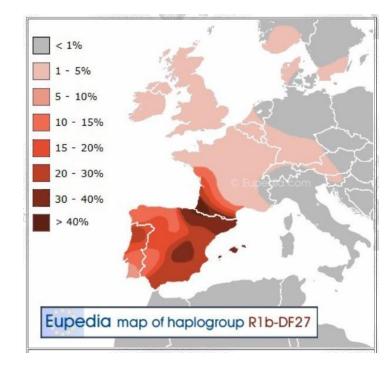
As can be seen in this map, even today R-U152/S28 in Scandinavia is geographically isolated from others of this haplogroup, with a very low density in the gap Northern Germany between Frankfurt – am - Main and Denmark

## Haplogroup DF27/S250

#### Distribution of DF27/S250 Today:

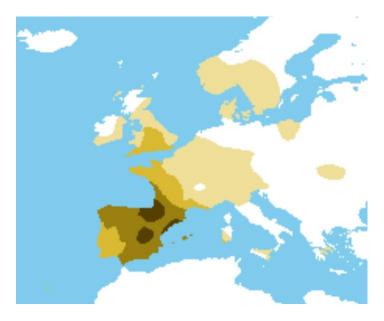
A recent study of this haplogroup and subclades is Sole-Morata et al., 2017 (see <u>here</u>). The abstract below provides the background of DF27/S250:

"We found that R1b-DF27/S250 is present in frequencies ~40% in Iberian populations and up to 70% in Basques, but it drops quickly to 6-20% in France. Overall, the age of R1b-DF27/S250 is estimated at ~4,200 years ago, at the transition between the Neolithic and the Bronze Age, when the Y chromosome landscape of W Europe was thoroughly remodeled. In spite of its high frequency in Basques, Y-STR internal diversity of R1b-DF27/S250 is lower there, and results in more recent age estimates; NE Iberia is the most likely place of origin of DF27/S250. Subhaplogroup frequencies within R1b-DF27/S250 are geographically structured, and show domains that are reminiscent of the pre-Roman Celtic/Iberian division."



Below is the distribution map from Eupedia:

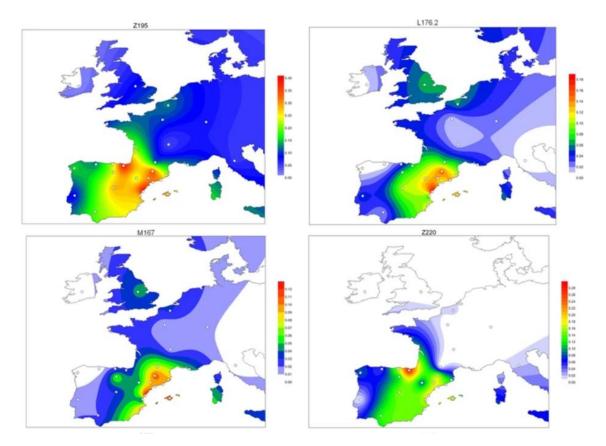
Map from Eupedia of the Distribution of R-DF27



Map of the Distribution of R-DF27 from Wikipedia Commons

Note the gap between Belgium and Northern Germany and the Scandinavian countries shown in both of the above maps. As with R-U152/S28, haplogroup R-DF27 is largely "isolated" within Scandinavia as would be the case if the current hypothesis re the Cimbri was correct.

The distribution of DF27/S250 and subclades from the Sole-Morata et al. study is seen below:



To date it appears that the two subclades of R-DF27/S250 are R-ZZ12 and R-Z195. The latter is seen in the top left map. There appears to be some confusion as to where the above L176.2 haplogroup fits in the phylogenetic tree, however it seems as if it is within the ZZ12 grouping, below Z176. R-Z195 includes two subclades below R-Z198, R-SRY2627 most common in the Pyrenees area at the juncture of Spain and France; and R-L165 which has been found in Scandinavia and Scotland.

# The focus for the rest of the study will be on R-U152/S28 > L20/S144/S144, based on the ancient DNA findings to be discussed later.

# $\underline{R\text{-}U152/S28} > \underline{L2} > \underline{L20/S144/S144}$

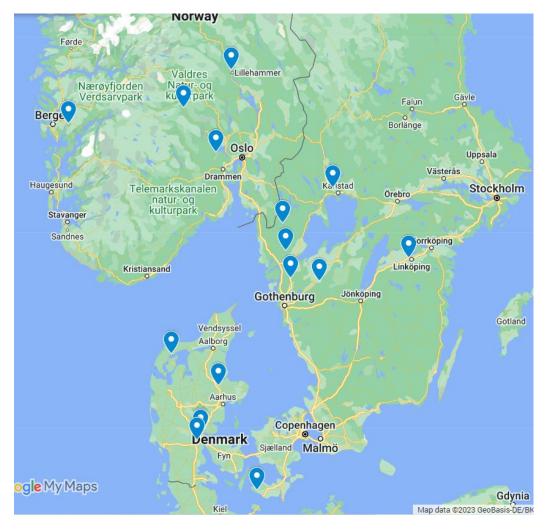
**Subclade R-L20/S144 Today**: Various maps portray the distribution of this SNP in modern times. These include maps from Family Tree DNA's <u>R-U152/S28 and Subclades</u>

Project as seen <u>here</u>, and <u>here</u>, as well as from YSeq <u>here</u>. While the first two maps are a few years out of date, the picture here is of a SNP that is widespread, although not in Eastern Europe. It appears that the "hotspot" is Switzerland and the Alpine area, and along both sides of the Rhine River decreasing in numbers further north. In addition there are a significant number in Central and Western France, as well as England (although the latter is to a large extent influenced by the fact that this is an area where testing is "popular" among Brits and Colonials and so the numbers may be inflated in relation to say Sweden). Also, recently many more R-L20/S144 have surfaced in locations such as Scandinavia. For example, there are three R-L20/S144 individuals from the region in southwestern Sweden, a few miles north of Gothenburg; and two from eastern Oslofjord Vik. Similarly, in Denmark there are R-L20/S144 males from Randers north of Aarhus; Agard west of Odense; one from north of Veile and one south of Veile west of Odense; and Tillitse, Lolland – none shown in the map below.



The distribution of R-L20/S144 today among those who have tested at FTDNA as of 2016

The above map is from the FTDNA "U152 and Subclades Project" and can be seen in detail <u>here</u>. Note the cluster in Berry, France around Bourges from whence, circa 600 BC, members of the Bituriges Tribe led by Segovesus settled in the Hercynian Forest region (Black Forest to Chechia).



The Distribution of R-L20/S144 in Scandinavia to 2022

See <u>here</u> to view detailed view of above map created by the current author.

A reasonable question relating to the current distribution of the haplogroup would be whether this pattern represents what would have been seen at the time of the Anglo-Saxon and Viking "migrations" to England. What is likely, but to an unknown degree, is that there was at one time many more R-L20/S144 individuals living east of England but due to the above movements of people during the Middle Ages, there are fewer living today in the counties of origin of the migrants. A test of this hypothesis would be to examine the ancient DNA samples which, in the last 7 years, have gone from a handful of individuals to beyond 4,000 from all areas of the world, but particularly in Europe. What has driven this expansion is technological advances which have led to the ability to test skeletal samples many thousands of years old using upwards of one million SNP markers and high throughput equipment – as well as many very talented geneticists who have devoted their careers to this subject.

#### Some Technical Details re the R-L20/S144/S144 Designation:

# Genetichomeland.com

Mapping Technology for DNA, Surname & Genealogy Research

Marker Name(s)	Notes	Identification	Ancestral <sup>7</sup>	Derived <sup>8</sup>	Chrom osome	Position (hg38) <sup>1</sup>	Positio (hg19)
R-L20 L20 S14 4 rs7067305	Found in haplogroup R1b under U152 on ISOGG, YFull, and FTDNA trees. hg38 Ref does not match ancestral allele value. Example is ancient DNA sample VK373 from 11th century Viking grave in Galgedil, Denmark. Note that an L20 lineage was one of the three samples used to compose the hg19 and hg38 human reference sequences. Phylogenetic Parent: Z367 / S255 View Pedigree View Map of descendants (Requires Registration Login) Phylogenetic Children: BY203086 BY204733 BY34065 BY5690 BY61198 BY69713 CTS9733 FGC54100 FT251781 FT340981 S23900 Z1909 Z291 NIH DBSNP b153 GRCh38p12 ClinVar? Position hg18: 12741292	Thomas Krahn, FTDNA	G	A	Y	12110586	142312

The above chart indicates the position along the Y chromosome where R-L20/S144 is situated, its "rs" code and other important details. It also lists "descendant lines" which must be very up to date since it includes BY61198 and the other recently discovered branches or terminal markers. There is one error in the above in that the SNP was discovered by Dr. James F. Wilson of the University of Edinburgh.

For the purposes of genetic genealogy there are two descriptors that are most important.

1) Every Y SNP mutation (marker) is given a short hand name. In this case it is L20/S144 or S144. One of the "children" of L20/S144 is BY61198 which is a terminal marker for both the ancient DNA sample from Rookery Hill (see below), and the present author (see here). It is located at Y chromosome position 6901207 (Build HG38) where the ancestral C has been converted to a T. However, according to Family Tree DNA, I14538, the present author, and anyone else who tests positive for this SNP also share 31 "private" named mutations along the Y chromosome. It is estimated to have branched off a man who was R-L20/S144\* (the Asterix means that there are no other phylogenetically significant markers) about 50 CE (i.e., about 2000 years ago). Downstream of BY61198 is found a SNP known as BY55987, which has been detected in two closely related individuals but they either don't know or have not reported their paternal line country of origin. It is estimated that their SNP branched off BY61198 about 200 years ago (see here). It should be noted that while the author has 12 "private SNPs", the BY55987 individuals have 21 mutations from BY61198 and three "private SNPs" (i.e., 24 private variants if only one individual had tested) - more on this later.

2) For research purposes all Y SNPs are given a unique letter and number designation reflecting its position on the Y phylogenetic tree. This work is updated every few years by the International Society of Genetic Genealogists (ISOGG), see here. The current version, used in the most recent studies, is Version 15.73 (2020) wherein L20/S144/ is given the tag of R1b1a1b1a1a2b1a1 – or either R-L20/S144 or R1b-L20/S144 for clarity. Generally those who test to a deeper phylogenetic level will be assigned a "terminal SNP" below R-L20/S144 (or assigned R-L20/S144\* if no other downstream markers are detected).

**<u>Recent Techological Advances</u>**: It is recognized that the details above will need to be amended, as new information becomes available, and sources must be added, but the major facts and most of the conclusions appear to rest on solid ground. Fortunately, since earlier versions of this manuscript were written, the technology has changed dramatically (e.g., chip arrays of over one million markers replacing direct sequencing), and new results are much more revealing than anything published before.

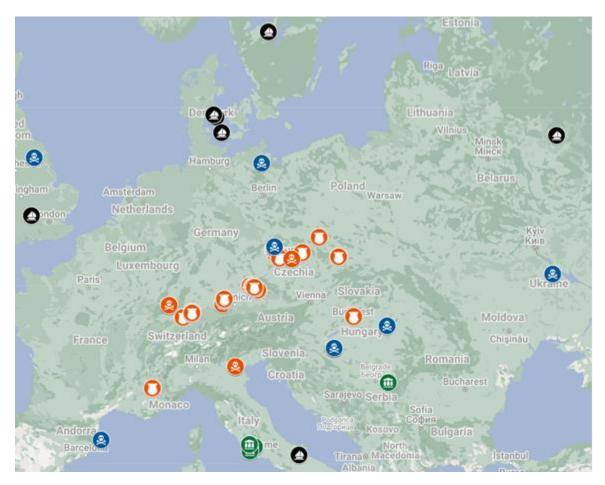
Clearly all studies of European Y chromosomes, whether current populations or ancient DNA have until now been "inadequate" for one reason or another (e.g., genotyping to a level which is uninformative). Recent developments have changed the picture in a dramatic way, although few academic studies of modern populations have been reported. If the resources are available, population geneticists are now able to delve deeply into Y chromosomes and explore markers far "downstream" of for example M269 (the very "generic" marker found in 33% or more of European males) and the autosomal DNA of the 22 pairs of chromosomes – both for current groups and ancient DNA from samples thousands of years old.

#### Ancient DNA

Since about 2015 advances in technology, including the ability to "dig deeply" into Y chromosome haplogroups beyond the standard generic M269, and even delve into the many newly discovered markers that characterize the U152/S28 phylogenetic tree, have revolutionized the understanding of the historical and pre-historical landscape of, for example, Europe. What is perhaps most astounding is that today we are able to use essentially the same technological advances and apply them to very early archaeological samples. Recently the DNA sequences of Neanderthal and Denisovian individuals who lived in Europe and Asia over 40,000 years ago have been published. It is now known that individuals outside Africa have about 2% to 4% of their genomes inherited from these early hominids – via inter breeding with modern humans. Hence if we can locate skeletal samples from say the Medieval era (e.g., 800 AD), or the Hallstatt - Celtic era (e.g., 800 BC), if the samples are reasonably well preserved then we can provide data equivalent to that we can obtain from anyone donating a sample today.

Fortunately the authors of ancient DNA studies have recognized the importance of parsing the major Y haplogroups into subclades. Breaking down R-U152/S28 into the varieties seen most commonly in ancient DNA and today, we note the following. R-

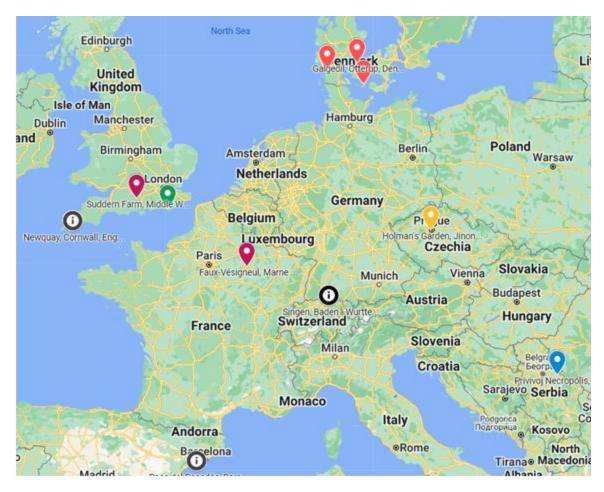
U152/S28 did not get quite as much "traction" in terms of descendant lines as one of its "children" (R-L2/S139) although R-Z36 in particular has many descendants today. The R-U152/S28 downstream marker R-L2/S139 is heavily represented in ancient DNA samples as seen in the map <u>here</u> by Richard Rocca. R-L2/S139 includes subgroupings with large descendant groups, such as R-Z49 as well as R-L20/S144. As noted earlier, the focus of the current study will be on R-L20/S144 due to the importance of the ancient DNA findings relating to the Anglo-Saxons and the Vikings of Denmark.



Ancient DNA Findings of all Subclades of R-U152/S28 across Europe

To view full detailed map from FTDNA's "R-U152 and Subclades Project" see here.

It is perhaps noteworthy that the ancient DNA sample shown at the far lower right of the above map, dated to 768-431 BC, was determined to be haplogroup R-U152/S28 > L2/S139 and a member of the Scythian cultural group. This links up with the Scythian and Cimmerian hypotheses noted earlier in this manuscript.



Ancient DNA Findings for R-L20/S144

To view detailed perspective of above the above map, created by the current author, see <u>here</u>.

#### Bronze and Iron Age Burials in Continental Europe and the UK:

In relation to the contents of the present paper, the published ancient DNA data (see the <u>map of Ancient DNA</u> finds by Richard Rocca at the Family Tree DNA U152/S28 and Subclades Project) is extremely informative – and bodes well for future studies. Many of the finds have been attributed to the Bell Beaker cultural tradition circa 2800 BC to 1800 BC. The apparent earliest R-U152/S28 find to date is recorded in Olalde et al., 2018 (see below) where a Bavarian sample from the Middle Bronze Age Tumulus Culture is dated to 2572 – 2512 BC. Since R-DF27/S250 is found so widely distributed across Europe by the Bronze Age, <u>the focus here will be on R-U152/S28 and subclades</u>. An exemption will be made for the Patterson, Gretzinger and Margaryan studies below since they offer a glimpse into the potential contribution of both haplogroups at the time of the Anglo-Saxon and Danish Viking migrations to England.

The bulk of these key ancient DNA finds have been published by Olalde et al., 2018 in an article entitled, "*The Beaker Phenomenon and the Genomic Transformation of Northwest* 

<u>Europe</u>" – see here. It is necessary to access the raw data via the Excel Supplementary Tables to view the specific haplogroups (beyond the more generic S116/P312 described in the text). Here we see that, for example, in the United Kingdom most of the samples are R-L21/S145 (no R-U152/S28 or R-DF27/S250). Even today L21/S145 reaches its virtual saturation point in Ireland (most Irish are L21/S145 or a subgroup of same) – and extends in a decreasing cline across Britain to the east coast where it is considerably less prevalent. This stands in stark contrast to the Continent where the samples in the Central and Western regions are largely R-U152/S28 > L2/S139 (37 of the total in this study). No R-L20/S144 was detected in any sample in this study (despite the majority of samples being tested for this marker). These areas are also regions of high concentration of this haplogroup R-L2/S139 today – although much less so in the east (e.g., Hungary). The Bell Beaker culture was succeeded by the Unetice Culture, described earlier (with map) in this paper. Thus, these burials perhaps represent proto – Celtic individuals.

In a paper entitled, "<u>Genetic transition in the Swiss Late Neolithic and Early Bronze Age</u>" by Furtwangler et al., (Nature Communications, 2020), as seen <u>here</u>, they report ancient DNA data from 96 burials dated between 4500 to 2000 BC. All samples were recovered from cemeteries between Alsace, Southern Germany, and the Swiss Plateau. Here we find 10 samples that could be genotyped as R-U152/S28 > L2. No R-DF27 samples were reported. Patterson et al. reanalyzed an R-L2/S139 sample in their study and found it to be R-L20/S144 – which if correct, may mean that others who were originally labelled L2/S139 were actually R-L20/S144. The author contacted the "Big Y 700" specialist at FTDNA and they confirmed that they were unable to validate any subclades below R-L2/S139.

As to the Bronze Age as well as the Iron Age, in the study by Patterson et al., entitled, "*Large-scale migration into Britain during the Middle to Late Bronze Age*" (Nature, 2021), as seen here, he provided data on samples from across Europe. He reported, among many R-L2, one R-L20/S144 > S1610 from Jinonice, Prague, Czechia dated at between 2200 and 1600 BCE. There was also one Iron Age Continental sample from Faux – Vesigneul, Marne Region, France which was R-L20/S144 > Z1909.

<u>**R-U152/S28**</u>: Based on the findings of this study, it seems clear that <u>no R-U152/S28</u> appear in the UK until the Iron Age. No Bronze Age samples of this haplogroup have been located in the British Isles. However, the findings suggest that during the Iron Age, R-U152/S28 individuals began to appear in the UK as follows - with individual, location of find, date, and subclade noted:

 $\frac{I16440 - Cornwall}{Z150 > Y3140 > Y10984 > FGC12385} > Z41150 > Z49 > Z142/S211 > Z150 > Y3140 > Y10984 > FGC12385$ 

<u>I19873 - Kent</u> - 400 to 200 BCE - L2/S139 > Z41150 > Z49 > Z142/S211 > Z150 > BY3616

 $\frac{I20589 - Oxford}{Z52} - 400 \text{ to } 200 \text{ BCE} - L2 > Z49 > Z142 > Z51 > L562 > Z57 > Z148 > Z52$ 

<u>I16422 – Southern Scotland</u> – 364 to 121 BCE – L2/S139

<u>I20982 – Hampshire</u> – 450 BCE to 1 CE – L20/S144 > Z1909 > A1510

 $\frac{113758 - East Yorkshire}{113758 - East Yorkshire} - 400 \text{ to } 50 \text{ BCE} - L2 > FGC13617 > FGC13633$  $\frac{114097 - North Yorkshire}{162 \text{ BCE to } 26 \text{ CE} - L2/S139 > BY42653 > Y3964 > A1718 > A1717 > L196/Y179997$  $\frac{119208 - Oxford}{19047} - 382 \text{ to } 205 \text{ BCE} - L2 \text{ [cannot be confirmed by other sources]}$ 119047 - Cambridge - 1 to 50 CE - L2 [cannot be confirmed by other sources]

<u>**R-DF27/S250**</u>: Here we see that this haplogroup appears in England during the Bronze Age – specifically in the south and west of the country. Specifically, a R-ZZ12 from Cornwall (1381-1056 calBCE), ZZ12 from Wiltshire (1518-1425 calBCE), Z195 from Somerset (2200-1400 calBCE). By the Iron Age R-DF27/S250 had spread across England from Cornwall to Kent to Yorkshire as well as to Ireland. 15 of the samples are ZZ12; 1 of the samples is Z195.

Concerning the **Roman (Imperial) Era**, few samples from the UK have been assessed. However the findings from a noteworthy "Romano – Briton" burial site from near York, Yorkshire, England dating to between 200 and 400 AD has been published. In the study by Martiniano et al., 2016 entitled, "Genomic signals of migration and continuity in Britain before the Anglo-Saxons" as seen here, the authors explored the autosomal, mtDNA and Y chromosome DNA of 7 males, all of whom were decapitated. It is thought that this group may have been Roman soldiers. Five had "local" (Brithonic) Y chromosomal haplogroups (varieties of R-L21), whereas one had a variety of haplogroup J, and appeared by virtue of the autosomal DNA to have been from the Middle East. The other Y chromosome "outlier" was a R-U152/S28 > L2 individual – although whether local in origin or from the Continent cannot be discerned based on the autosomal DNA. Perhaps this individual was a Roman auxiliary soldier from the Continent, or a descendant of a probable Brythonic group from Yorkshire with cultural links to the Parisi or Belgae of the Continent - as described in the "Hypotheis C" article by the present author. Irrespective, the above two studies suggest that U152/S28, particularly the L2/S139 subclade, was in the United Kingdom before the main Anglo-Saxon migration beginning circa 447 AD.

#### Anglo-Saxon Burials in England and Continental Europe:

In a recent ancient DNA study published (22 September 2022), Gretzinger et al., "<u>*The Anglo-Saxon migration and the formation of the early English gene pool*" (see here), the authors used 1,240,000 SNPs to explore the genomes of 460 ancient Northwestern Europeans to a sample of 278 individuals from England. They used the Y SNPs from the entire panel and compared them to the v.15.73 (2019-2020) version of the ISOGG Y haplogroup tree. The data was automatically assigned to a haplogroup, although they apparently did some degree of manual analysis. Unless the BAM full file of SNPs was consulted then the assignments might be off to some degree. Fortunately, at least 3 genetic genealogists did perform the complete analysis (S.S., Webb, Alex W.). Here the path to R-U152/S28 and subclades was verified, and any downstream SNPs not "seen" by the authors were noted.</u>

In this study, using 460 total samples, 182 were from Ireland, Denmark, the Netherlands, and Germany, with 278 individuals from England, where there was only one R-U152/S28 individual reported.

#### R-U152/S28

The Continent: Individual number, location of cemetery, haplogroup -

IND003, Alt-Inden, North Rhine, Westphalia, Germany, R-L2 > Z258 IND017, Alt-Inden, North Rhine, Westphalia, Germany, R-L2 > BY13147 ADN007, Hanover-Anderten, Lower Saxony, Germany, R-L2 > Z49 > FGC22963 ADN012, Hanover-Anderten, Lower Saxony, Germany, R-L2 > Z258 GR0005, Groningen, Groningen, Netherlands, R-U152/S28 > PF6658 > BY3642 > BY3654 > FT86144 > BY3851 > FT116711 > FT114029 > BY3631 > BY41129

England: Individual number, location of cemetery, haplogroup –

I14538, Rookery Hill, Bishopstone, Sussex, England, R-L20/S144 > BY61198

#### R-DF27/S250

The Continent: Individual number, location of cemetery, haplogroup -

 $\frac{SWG006, Schleswig, Schelswig - Holstein, Germany}{SWG006, Schleswig, Schelswig - Holstein, Germany}, Z195 > Z274 > Z209 > FGC83504 > Z295 > S25783 > CTS4065 > FGC15712 > FT4470 > FT202151 \\ \underline{GR0024, Groningen, Groningen, Netherlands}, Z195 > Z198 > ZS312 > Z267 > SRY2627 > Z200 > Z202 > Z205 > Z206 > Z208 > Z207 > CTS9762 > CTS4299 > FTC6662 > BY33788 > FT185253$ 

England: Individual number, location of cemetery, haplogroup -

<u>SED020, Sedgeford, Norfolk, England</u>, Z195 > Z274 > Z209 > FGC83504 > Z295 > S25783 > CTS4065 > FGC15712 > FGC15710 > CTS10029 > BY3190 > FGC29721 > CTS4183 > BY31939 <u>KIL027, Kilteasheen, Ireland</u>, Z195 > Z274 > DF17 > FT126392 > FT126883 >

FT153727 > FT153450 KIL004, Kilteasheen, Ireland, ZZ12 > FTT1 > FGC78762 > ZZ19\_1 > Z31644 > FTT96

> BY21043 > BY21033

<u>KIL047, Kilteasheen, Ireland</u>, ZZ12 > FTT1 > FGC78762 > ZZ19\_1 > Z31644 > FTT96 > BY21043 > BY21033

It is instructive that so few **<u>R-U152/S28 and subclades</u>** samples were found in this study. I14538 was from an early (early 5<sup>th</sup> Century to late 6<sup>th</sup> Century) Anglo-Saxon cemetery from Rookery Hill, Bishopstone, Sussex, on the south coast of England. There is little archaeological information available (although it exists in various locations), but with a Quoit Broach being noted and an array of other diagnostic information, it would appear that the individual in Grave 43 was likely a mercenary associated with the British king Vortigen's interaction with the Jutish Princes, "Hengest and Horsa" and the Jutish people were given territory in a specific treaty area between the Ouse and Cuckmere Rivers (Jolliffe, 1933; Cunliffe, 1997). The date, place and time suggesting that this was a settlement of people who would be known as Jutes. It is a bit of a coincidence that the very rare R-L20/S144 > BY61198 SNP is precisely the same as that of the author.

Since R-U152/S28, R-L2, and R-L20/S144 are considered to be "Central European Alpine - Celtic" or "Italo - Celtic" it is important to show that these haplogroups were / are to be found in Scandinavia – particularly what is today Denmark and other areas which may have spawned the Anglo-Saxons who migrated to England beginning in the early 5<sup>th</sup> Century, as well as the Danish Vikings post 793 CE. As shown earlier in this study, the Jutes were were from Jutland, and likely descendants of the Celtic Cimbri people of the Jutland Peninsula (called by Roman writers the Cimbric Cheronesus).

It is unclear why so few R-U152/S28 individuals are found in the Gretzinger et al. study, however one problem is the fact that in Jutland from the late Bronze Age through Anglo-Saxon times, the overwhelming number of burials there are cremation. This is true of many, especially Anglo-Saxon cemeteries such as Sprong Hill, Norfolk where there were 2259 cremation burials and 57 (later) inhumation burials. Thus if the overwhelming number of Angle burials are cremation – our chance of being able to sample their Y chromosome haplogroups becomes problematic. There were no samples in this study from for example northern or central Jutland, which compounds the problem. Only with much larger and broader sampling will it be possible to make more definitive statements.

As to <u>**R-DF27/S250 and subclades**</u>, there is a bit of murkiness since both ZZ12 and Z195 have been in Britain since the Bronze Age. However there are some observations that are pertinent since clearly, there were a sizeable number of both subclades which arrived in England during the Anglo-Saxon migrations. The samples with this haplogroup do not show any less Continental Northern European (CNE) than other haplogroups. The other categories are Continental Western European (CWE), and

Western British Isles (WBI). For example BUK018 shows 0.91 CNE and 0.08 CWE and BUK022 is 0.64 CNE, 0.35 CWE, 0 WBI. However, BUK023 with the same subclade as the latter, is 0 CNE, 0.60 CWE, 0.40 WBI.

In addition, Rookery Hill, Sussex sample I14537 differs only in the terminal SNP (CTS11567 > FT110856) from Buckland, Dover, Kent sample BUK040 (CTS11567 > BY31431). Both are likely Jutes and may be from the same region.

Here, as with R-U152/S28, there were few Continental samples which tested positive for R-DF27/S250. There was one from Groningen, Netherlands who was Z195. The second one was SWG006 from Schleswig, Rathausmarkt in Germany (in what was once Angle territory) who was a close match in terms of having a SNP FGC15712 above the terminal SNP compared to SED020 from Sedgeford, Norfolk (each has differing downstream terminal SNPs). The later was also CNE = 1.0. Perhaps SED020 originated in the same Schleswig area as SWG006 prior to migrating to England.

It is possible that the R-DF27/S250 arrived in Jutland at any point from the Bronze Age on, however probability wise, it seems that their arrival during the Medieval migrations may have been tied to a Cimbri origin.

In supporting the hypothesis under consideration in the current study, what is most pertinent to the present work, is the recent study of Viking era genomes from across the "Viking world".

## Viking Era Genomes:

A landmark study of 2020 entitled "<u>Population genomics of the Viking world</u>" (Margaryan et al.) (seen <u>here</u>) explored the genomic structure of those who peopled Scandinavia and the diaspora during the Viking Age (c. 750 to 1050 AD). They used an a 26,083 biallelic SNP (single nucleotide polymorphism) array and were able to place each male Y chromosome into a category from the ISOGG (International Society of Genetic Genealogy) phylogenetic tree. This study is one of only a few to use the unprecedented depth of analysis that has become available by 2015 – even for modern samples, let alone samples 1000 or more years old. As with the Olalde et al., 2018 study noted above, in order to view the "deep" haplogroup levels of each sample it is necessary to refer to the Excel Supplementary materials (file 04). It is also necessary to convert the letter – number sequences such as R1b1a1b1a1a2b to the more manageable short hand versions, in this case R-L2/S139 or R-U152/S28 > L2/S139. R1b1a1b1a1a2b1a1 translatates to R-L20/S144 or R-U152/S28 > L2/S139 > L20/S144.

England: Location (Date), Y haplogroups, number

- 1) <u>Dorset, Ridgeway Hill (970-1025 AD)</u>: I1a-M253 (2); Q1b-M242 (1); R-L21 (1); R-DF27 (1); R-U106 (2); R1a-Z284 (3)
- 2) <u>Oxford, St. John's College (880-1000 AD)</u>: I1a-M253 (9); R-DF27 (2); R-U152 (1); R-L151 > Y47841 (1); R-U106 (4); R1a-Z284 (2); BT-M42 (1); I2a (2)

The two Vikings sites in England are mass graves where it appears that the dead warriors were simply "dumped" into a pit after what was likely a battle with the locals. The Y haplogroups suggest that the attackers likely came from what is today Norway. The R1a-Z284 and Q1b-M242 haplogroups are very rare in Denmark (then and now), but R1a-Z284 is relatively common in Norway (about 25%) and largely restricted to this country and Sweden (about 12%) as well as the Viking diaspora – but not in Denmark. See Lall et al., 2021 here; and Underhill et al., 2014 here for further information.

Viking World: As expected by the present author, although not most others in the genetic genealogy community, there were individuals with the "Continental Alpine-Celtic" ("Italo-Celtic") Y Haplogroups of R-U152/S28 and derivatives R-L2/S139 and R-L20/S144 among the Viking Age "ancient DNA" samples from Denmark and southwestern Sweden – as well as a Dane from Oxford, UK. A similar situation prevails with R-DF27/S250. Some of the most relevant findings as they relate to the Cimbri and Y Haplogroups R-U152/S28 and R-DF27/S250 include the observation that in Viking Age (VA) Scandinavia, "Many individuals from southwestern Sweden (e.g., Skara) cluster with Danish present-day individuals from the eastern islands (Funen, Zealand), skewing towards the 'Swedish' cluster with respect to early and more western Danish VA individuals (Jutland)." Skara is inland but just east of the tip of the Jutland Peninsula. Furthermore, "We also observe several individuals with large amounts of South **European ancestry** in Denmark and southwest Sweden during the Viking period." An inspection of the raw data shows that it was common for those VA individuals from Funen and associated areas to have much higher amounts of Southern European ancestry (e.g., 20%) than those from for example western Norway. This finding of Southern European or "Italy-Like" ancestry is entirely consistent with the hypothesis being advanced in the present paper since the Cimbri appear to have originated in southcentral Europe (e.g., as the Boii from the modern Czech Republic and Northern Italy, and/or the tribes from Switzerland, Southern France and possibly Spain). Also, after the defeat of 101 BC at the hands of the Romans, the historical record shows that the remnants, originally from eastern Jutland, Funen and proximal islands, were accompanied back to the Jutland region by Swiss Celtic tribes such as the Helveti. It is predicted that no matter what the Y chromosome Haplogroup, the people residing in the Funen and Jutland area would have, via Cimbri ancestry, a larger Southern European contribution to their genomes than those from for example western Norway.

The specific <u>**R-U152/S28**</u> and downstream findings for each sample number are as follows (Sample Number; Haplogroup; Location of Find; Major Autosomal Ancestry included). There were originally (when study first published) only 5 R-U152/S28 samples, but now with a more detailed analysis and re-testing, there are 10. HT is Haplotree SNPs, and YF is YFull - identified SNPs. More in depth haplogroup testing of the R-L20/S144 samples is included below. These samples are still being analyzed so the SNPs below are likely to be added to or amended over time:

VK177 = R-U152/S28 > BY3549 > A520 > BY220332 > FT31867; HT=R-FT31867; YF=R-B83: <u>Oxford, UK</u> - 28% "UK-Like"; 36% "Danish-Like"; 33% "Italy-Like". Sample size 22 (all male). Date c.1000 AD.

VK159 = R-U152/S28 > Z36 > A7966 > A7982; HT=R-FT145844; YF=R-A12417: <u>Pskov, Russia</u>. Date c.1000 AD. No autosomal data.

VK40 = R-U152/S28 > L2 > Z49 > Z142 > Z12222 > FT38430 > BY1701 > BY166438; HT=R-BY166438; YF=R-Y3140: <u>Skara, Varnhem, Sweden</u> - 21% "UK-Like", 67% "Danish-Like". Sample size 31. Date c.1050 AD.

VK138 (AQQ) = R-U152/S28 > L2 > Z49 > Z142 > Z51 > L562 > Z57 > S1491; HT=R-S149; YF=R-S1491: <u>Galgedil, Funen, Denmark</u> - No autosomal data. Sample size 16 (10 males). Date c.950 AD.

VK273 = R-U152/S28 > L2 > FTA2489 > BY61747; HT=R-BY61747; YF=R-FT186424: <u>Gnezdovo, Russia</u> – 36% "Danish-Like"; 50% "Polish-Like"; 1% "Italy-Like". Date c.1000 AD.

VK335 = R-U152/S28 > L2 > Z49 > Y107974 > BY39347 > FT304388; HT=R-FT304388; YF=R-Y56490: <u>Oland, Sweden</u> – 1% "UK-Like"; 61% "Danish-Like"; 24% "Italy-Like". Date c.950 AD.

VK286 = R-U152/S28 > L2 > Z258 > Z367 > L20 > Z1909 > S10708; HT=R-S10708; YF=R-Y6789: <u>Bogovej, Langeland, Denmark</u> - 23% "Danish-Like"; 63% "Italy-Like". Sample size 13 (8 males). Date c.950 AD.

VK326 (K1578) = R-U152/S28 > L2 > Z258 > Z367 > L20 > CTS9733 > S1505 > Y52895; HT=R-Y52895; YF=R-Y58552: <u>Ribe, Jutland, Denmark</u> – 12% "UK-Like"; 56% "Danish-Like"; 31% "Italy-Like". Sample size 9 (5 males). Date c.950 AD.

VK373 (BER) = R-U152/S28 > L2 > Z258 > Z367 > L20; HT=R-L20/S144; YF=R-Y82494: <u>Galgedil, Funen, Denmark</u> - 69% "Danish-Like"; 23% "Italy-Like". Sample size 16 (10 males). Sample size 16, (10 males). Date c.950 AD.

As to the **<u>R-DF27/S250 autosomal data</u>**, the following results were recorded:

VK87 = R-DF27/S250 > DF27 > Z195 > Z198; HT=R-Z198; YF=R-Z262: <u>Hesselbjerg</u>, <u>Denmark</u> – 41% "UK-Like"; 29% "Danish-Like"; 9% "Swedish-Like"; 3% "Norwegian-Like"; 19% Italy-Like".

VK261 = R-DF27/S250 > ZZ12\_1 > FGC78762 > ZZ19\_1 > Z31644 > FGC78763 > FGC13128 > BY64643; HT=R-BY64643; YF=R-Y11498: <u>Dorset, England</u> – 35% "UK-Like"; 32% "Danish-Like"; 4% "Norwegian-Like"; 3% "Polish-Like"; 25% "Italy-Like".

$$\label{eq:VK147} \begin{split} VK147 = R-DF27/S250 > Z195 > Z274 > DF17 > CTS13028 > FT44718 > FGC14113 > \\ BY31082 > Y31431 > Y75899; \ HT=R-Y75899; \ YF=R-Y31431: \ \underline{Oxford, \ England} - 10\% \end{split}$$

"UK-Like"; 48% "Danish-Like"; 7% "Swedish-Like"; 18% "Norwegian-Like"; 7% "Polish-Like"; 9% "Italy-Like"; 2% "Finnish-Like".

VK166 = R-DF27/S250 > Z195 > Z198 > Z312 > Z267 > SRY2627 > Z200 > Z202 > Z205 > CTS606 > FT406551 > CTS5337 > CTS3555 > BY814 > Z29713 > A7101 > Y30608 > BY67003 > BY129880 > BY45170; HT=R-BY45170; YF=R-Y30608: Oxford, England – 24% "UK-Like"; 27% "Danish-Like"; 8% "Swedish-Like"; 32% "Italy-Like"; 9% "Finnish-Like".

VK365 = R-DF27/S250 > ZZ12\_1 > BY3289 > Y6954 > Y6951 > Y6949 > Y15637 > BY34800; HT=R-BY34800; YF=R-6951: <u>Bogovej, Denmark</u> – 7% "UK-Like"; 11% "Danish-Like"; 7% "Norwegian-Like"; 3% "Polish-Like"; 72% "Italy-Like".

VK329 = R-DF27/S250 > Z195 > Z274 > Z209 > FGC83504 > Z295 > S25783 > CTS4065 > S16864 > S18894; HT=R-S18894; YF=R-S18894: <u>Ribe, Denmark</u> – 19% "UK-Like"; 46% "Danish-Like"; 3% "Norwegian-Like"; 2% "Polish-Like"; 29% "Italy-Like".

VK403 = R-DF27/S250 > Z195 > Z198 > ZS312 > Z267 > SRY2627 > Z200 > Z202 > Z205 > Z206 > BY3222; HT=R-BY3222; YF=R-Z206: <u>Skara, Sweden</u> – 37% "UK-Like"; 10% "Danish-Like"; 3% "Swedish-Like"; 18% "Norwegian-Like"; 32% "Italy-Like".

What is evident from the wealth of inter - disciplinary data is that all of the Viking Age R-U152/S28 and R-DF27/S250 burials have ancestry from Denmark. Even the R-L2 individual from Skara, Sweden (and perhaps the R-DF27/S250 individual) likely had origins (at some unknown time) in Denmark. The DNA evidence supports the observation (found in Margaryan) by the archaeological investigator Maria Vretemark that, the entire Vastergotland area (including Varnhem – Skara), is "a region that had long been part of the Danish sphere of influence." Galgedil on Funen Island (R-L2/S139 and R-L20/S144 samples) and Bogovej on Langeland Island (R-L20/S144 and R-ZZ12 samples) as well as Ribe (R-L20/S144 and R-Z195 samples), on the west coast of Jutland, and the R-Z195 sample from Hesselbjerg in central Jutland were likely within the Cimbri original territory. No graves on the east side of Jutland (Funen is an extension of this land mass) were explored for the purposes of the Margaryan study.

Since the Venerable Bede, an Angle, recorded that the ancestral land of his people was still abandoned in his day (791 AD), it is possible that many of the R-U152/S28 Cimbri descendants from the Angle region left Jutland (as Jutes and Angles) for England during the Anglo – Saxon Era. Hence it is likely that inhumation cemeteries in Jutland dating to say 500 AD would include a mixture of Y chromosome Haplogroups, but potentially a significant number of R-U152/S28 and R-DF27/S250 individuals whose male line lineage could be traced to Central Europe in the Iron Age. It is noteworthy that the DNA of the R-U152/S28 and R-DF27/S250 samples although strongly "Danish-Like", included an "Italy-Like" component ranging from 23% to 61% (R-U152/S28) and 9% to

72% (R-DF27/S250). This suggests an isolated population whose origins in the Iron Age or earlier may have been the Alpine region among the Celtic tribes such as the Heleveti.

The most informative of the above samples, in terms of the hypothesis being examined in the current study, are the three R-L20/S144 individuals, plus the Jutish Anglo-Saxon individual all of whom had their origins in what is today in Denmark, in the region where the Cimbri once resided, meaning Jutland and the eastern offshore islands such as Funen.



Map showing the location of the ancient R-L20/S144 Denmark samples from the Margaryan study.

A study by Rodriguez-Varela et al., Cell, 2023 entitled, "<u>*The genetic history of Scandinavia from the Roman Iron Age to the present*</mark>" (see here) included, "48 new and 249 published ancient genomes". Unfortunately there are no new ancient DNA samples from Denmark or Norway over this broad period, and those from Sweden are largely late Medieval and from eastern regions. There is no feasible way, based on what is presented in this study, to access the Modern Scandinavian data.</u>

## Conclusion

This study represents the major component of a trilogy established in 2006, offering three hypotheses to explain the presence of Y chromosome haplogroup R-U152/S28 and subclades in the British Isles, particularly England. In 2023 the author added haplogroup

R-DF27/S250 and subclades to the study. Much of the content in the current study has described the historical, linguistic, and archaeological data which describe the Cimbri Tribe of the Jutland Peninsula in Denmark.

The data from ancient DNA studies between 2020 and 2022 has provided a reasonably clear answer to support one or the other hypothesis. The weight of the evidence at present is **not consistent** with either hypothesis A or B wherein the author posited that a majority of R-U152/S28 and R-DR27/S250 did not arrive in England <u>until</u> the <u>Viking</u> migrations of the 9<sup>th</sup> Century or the earlier <u>Anglo-Saxon migrations</u> of the 5<sup>th</sup> Century. More data is needed before truly definitive statements can be made – particularly in relation to the Viking Era in England.

Largely based on ancient DNA, the data available to date <u>is consistent</u> with the **hypothesis** C which proposed that during the **Iron Age** a large influx of R-U152/S28 (and R-DF27/S250) came to England, likely from the <u>Belgica and Celtica La Tene as</u> well as Iberian areas of the Continent. It is likely that this group did include Cimbri descendants (e.g., via the Aduatuci or Nervii Tribes), however currently there is no way to determine whether or not a person's Y chromosome from this source is definitively linked to the Cimbri. The picture may change with advances in ancient DNA testing – but that remains to be seen.

#### **Subclade Analysis**

It appears that Y chromosome subclades, and an exploration of the SNPs along the route to the terminal SNP, have the potential to provide the answers that genetic genealogists seek. Using both modern and ancient samples to plot the locations of matches, it may be possible to zero in on the early location of the patriline. This may be easier for some haplogroups than others, but the details remain to be seen.

**<u>R1a-Z284</u>**: An example is the origin of the haplogroup of the author's maternal grandfather, whose own grandfather was from the Shetland Islands, via an analysis of an array of SNP markers between R-Z284 and the terminal SNP, R-BY161189. The following are the SNP names, with country and number of matches:

R-BY161189 – Scotland (2); R-Y64062 – Norway (1); R-YP4345 – Norway (2), Ireland (1), Scotland (1), Russian Federation (1), Ukraine (1); R-S6790 – Norway (1), Sweden (1); R-CTS4179 – Norway (16), Sweden (11), Scotland (11), England (10), Ireland (4), Northern Ireland (4), Finland (2).

It appears that the Williamson ancestor arrived in the Shetland Islands circa 800 AD, and shares an ancestor in common with the R-YP4345 group above about 600 AD (according to the "Discover Haplogroup Reports" feature of Family Tree DNA). It is clear that Norway stands out in every category with Sweden generally being next in terms of number of matches – as well as the "diaspora" countries known to have been settled by Norse (e.g., Scotland) and Swedish (e.g., Ukraine) Vikings. The 37 Y-STR testing of many years ago shows a predominance of close matches to those from the Western -

Norwegian Fjords (those whose relatives likely settled as Vikings in Shetland circa 800 AD), and again from Sweden. If one wishes a high degree of specificity, it will be necessary to wait until there have been ancient Y-DNA studies of the late Iron Age and Viking Era genomes of the area to better pinpoint which fjord is the likely ancestral home.

**R-U152/S28 and R-DF27/S250**: As to the two haplogroups which have been front and center in the current manuscript, the ancient DNA evidence to date indicates a high probablity that someone whose Y chromosome is a member of either of thse haplogroups, and from the British Isles, is a descendant of the Belgae or Celtic groups to the south (e.g., France and Iberia). However, at present, with subclades such as R-U152/S28 > L20/S144 > **BY61198** and DF27/S250 > Z195 > **FGC15712** there is some hope for a high likelihood answer in relation to the hypothesis of an origin in Jutland. In addition, apparently DF27/S250 > Z195 > L165 shows a clear connection to Scandinavia - although that observation via genetic genealogists on DNA forums has yet to be confirmed. Other subclades and terminal SNPs will ultimately be linked to this part of Denmark (and perhaps other regions of Scandinavia). However, it will typically be necessary for those with male line ancestry to the British Isles, as with the R1a-Z284 example above, to also use locational cues (e.g., here whether the ancestral home is within the Danelaw), as well as surname analysis, and traditional genealogical techniques, merged with Y-DNA subclade analysis of modern populations, in order to determine the most likely source of their particular British Isles R-U152/S28 or R-DF27/S250 Y chromosome.

As the sample sizes increase, and more "Dark Age" / "Medieval" cemeteries in (for example) England and Denmark are explored <u>using ancient DNA technology</u>, the wish to find the early ancestral home of an individual whose known patriline originates in England, could soon be realized. With that goal in mind, in seeking Celtic Cimbri connections (the original goal of the present study), it will be essential that the Y chromosome testing of modern and ancient individuals be as deep (comprehensive) as possible, using all known SNPs, within major identified lineages such as R-U152/S28 and R-DF27/S250.

<u>Caveat Concerning Subclade Interpretation</u>: It must be noted that an analysis of subclades may not afford a crystal clear answer to the questions of interest. In an inspection of the "U152 and Subclades Project" at FTDNA, under R-L20/S144 > Z1909 > ... > FT40040 there is a customer from Norway; and FT40040 > BY34042 we find customers from Belgium, France and England. Referring to FTDNA's "Discovery" feature for R-FT40040 the breakdown by country is Scotland (16), England (6). The age of the SNP is estimated as about 950 BCE. As to R-BY34042 we see that the countries included are Scotland (2), France (1) with an age estimate of about 900 BCE. The author has no explanation of the difference as to country distribution between the two FTDNA sources. Furthermore, if perchance there is an ancient DNA sample from say Denmark found to have a terminal SNP of R-FT40040 or R-BY34042, this muddies finding the most parsimonious interpretation as to the link with those alive today, and the likely

migrations that must have occurred to explain the geographical distribution of the SNP today.

#### **Final Thoughts**

Studies such as Margaryan et al. (2020) have shown that both of the above haplogroups are found in Jutland and the islands to the east in Denmark during the Viking Era. What is as yet unclear is the degree of migration of R-U152/S28 and R-DF27/S250 to the British Isles during the Viking Era. There is, however evidence from the Gretzinger et al. (2022) study that more R-DF/S250 arrived in England during the Anglo-Saxon Era than R-U152/S28 but the absolute numbers are elusive to this time. It is the Patterson et al. (2021) study which solidifies the hypothesis that much (most?) of both haplogroups arrived in the British Isles during the Iron Age from La Tene Europe (the Continent).

A question likely of interest to both academics and genetic genealogists is whether the Cimbri (of Himmerland and Vendsyssel in the north), as well as likely kin the Teutones (possibly of Thy in the west) and the Charudes (of Hardesyssel in the central region) were of Celtic origin from Central and Southern Europe. An answer would be available with the exploration of the hundreds of known cemeteries in Jutland that date to the Iron Age Era between 100 BC and 400 AD. Here, using ancient DNA technology with samples from grave sites over a broad area from Central to Northern Jutland, the Y chromosome haplogroups of the males in each grave can be determined, and results reported with a large enough sample size to be confident of the findings and the conclusions. What can be said at this time is that a good start has been made with Viking Era samples from Denmark, but nothing is yet available in relation to the Iron age and the Anglo-Saxon Era from this part of the world (only Schleswig in Germany from the southern - most region of the Jutland Peninsula has been sampled).

Ancient DNA provides evidence linking the author's very rare Y chromosome terminal SNP R-BY61198 (which is immediately below haplogroup R-L20/S144) to Jutland, Denmark via a sample from a 5<sup>th</sup> Century Anglo-Saxon grave (archaeological data) in an area of England settled by Jute mercinaries (historical data). The most recent common ancestor is circa 50 AD (analysis by FTDNA). The author's ancestors had a Scandinavian surname (Falke), were found in the coastal Danelaw in the Middle Ages, situated in an area where most of the village names were Scandinavian, and who were wealthy shipbuilders. The sum total of the available data, from multiple sources, points to a Y chromosome origin via a Danish Viking ancestor probably from Jutland. However, as is common in science, data from a future publication may require discarding the current hypothesis. However, what would "seal the deal" is if an ancient DNA sample from, for example, a Danish Viking site in England, or from an Iron Age to Viking Era individual from Scandinavia, were to possess say 3 to 5 of the 12 "private mutations" on the Y chromosome that the author possesses (see Faux Y-DNA here). A find that conforms to this specification would lead to the reasonable conclusion that the ancient DNA sample is a probable direct ancestor. As is often the case, luck will play a major role in determining whether this scenario is ever realized.

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