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Irish Late Iron Age Equestrian Equipment in its Insular and Continental Context

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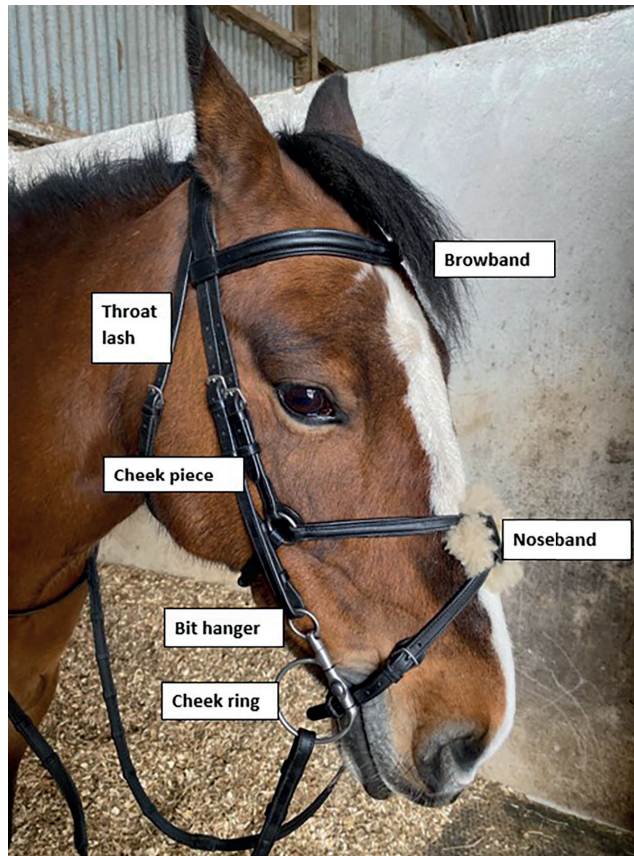
The hardcore equestrians who fed in through all of this, reminding me that the horse is timeless. Thanks to Dr Caroline Benoite of Neue Schule tack, and the crew of Old Mill saddlery, and of course Christina and co. at Bracken Equestrian! Summer Jackson (and Dancer, Prince, Equinox and Blue Moon), and Jurjen Draaisma, and his Roman charger, Magic. The men of metal, Dr. David Dungworth, and Peter Webster of the Copper Alliance. The ineffable McClay Library staff at Queen's University Belfast, who work miracles. The ride-or-dies, who kept me on my feet: Dr Brian Scott, who arrived like a wizard, exactly when he had to; Prof. Aidan O'Sullivan and Dr Steve Davis; Anne Given; Deborah Jane Curtis and her 'Auntie' Jane Gribbon aka 'Wheels', chasing the end of the Iron Age round Derry and North Antrim by following rivers and rainbows; Oisín Murphy-Lawless, supplier of 'Marvels' and music; Dr Lorna Jane Richardson; Dr Ruth Carden, Dr Eoin Sullivan; The (Twilight) Beastie Boys, Dr Ross Barnett and Jan Freedman; Spencer Gavin Smith; Marc and Rachel Barkman-Astles, for escapades around Northumberland; Dr Xenia Pauli-Jensen; Aurelian Burlot of UCC; Dr. Roeland Paardekooper and Mgr J. Katerina Dvoráková of EXARC; Kim Biddulph. Last, but not least, old friends Philip Powell and Ivor Kenny.

So much which lay forgotten for so many years, of so many great horses, lived again in memory; Gypsy, Clipper, Herbie, Joker, George, Quincy, Rambler — all schoolteachers about human and horse. More recently, JR, Flame, Bhan. I was transported back to being the very small, silent (and rather odd) child, who loved to get lost in grey misted fields of horses, imagining what the past must have been like. There is always going to be a special magic of kindness and earthiness in a stable, and centuries of peace to be tapped into when hanging over a fence, watching horses put out to graze after work. That connects us to the past – I don't believe our ancestors were any different in how they felt. I think, occasionally, the 'silent people' of the Iron Age started to speak a little by the end of this, as they found common ground, talking of their horses to a horsie person.

The biggest thanks of course, goes to Kathleen and Jordana Maguire, who listened and knew when to feed me and haul me out of the Iron Age. As for the small terrier who had his mouth measured for British bits? It happened, his name's Finbar and he's an affenpinscher.

The story, really, has only started. Here's to the next gallop!

Glossary



Parts of a bridle. Photograph by Carol Dunlop, McClay Library Queen's University Belfast. Modelled by Roxy.

Behind the bit: When a horse carries its head low to avoid actions of the hands or contact with a bit.

Bosal: A type of noseband used with a hackamore (bitless bridle).

Canon: Metal (or sometimes rubber) elongated links which make up the mouthpiece of a bit.

Cavesson: A simple noseband of a bridle. Cavesson bridles have a noseband attached to a slip head that passes through the browband and sits underneath the headpiece of the bridle. The cavesson noseband is a single strap of leather that fits around the horse's muzzle.

Cheek piece: Confusingly, this can be two pieces of a bridle — one, the strapping which runs down the side of the equids face, to connect with noseband and/or bit hanger, or can also be the (usually) metal fitting (such as all the permutations of cheek rings, or shanks in the case of double bridles) which connects to the reins and noseband. Context is usually self-evident as to which is which!

Chifney: A circular bit which fits into the mouth of a horse, sometimes with a plate to hold the tongue flat. Part of it remains below the jaw. It has three points of rein contact, and often used on horses which are difficult to handle, such as stallions at stud.

Collection: State of perfect balance resulting from defined flexion of the haunches, which leads to elevation of the front end. The horse is so fully responsive it can commence movement in any direction as required.

Curb Bit: Bit fitted with cheek piece/shanks and a curb chain, which fits the chin groove. Uses leverage on the lower jaw. In a double bridle, a curb is used with a snaffle bit as well.

Double Bridle: A bridle, often used for formal occasions such as showing, which has two bits (snaffle and curb) giving the rider a greater degree of control than a single bit.

Double joint snaffle: Snaffle with a centre link between both cannons, inside the mouth, which spreads rein pressure across the mouth and not to the palate.

Eggbutt cheek ring: A cheek ring which has only limited movement within the outer cannon aperture. Results in a more direct and speedy contact with the mouth of a horse.

Fiadore: A special knot on the hackamore that exerts pressure at the rear of jaws, while also acting as a keeper, in a similar to a throatlatch.

Forward on the bit: When a horse is fully engaged and interacting with the rider via the bit

Grackle: A noseband which fits in a figure of eight shape, across the nose, to prevent a horse from rejecting a bit but opening its mouth and slipping the bit. They also apply pressure evenly over a larger area making breathing easier.

Hackamore: A bitless bridle of various designs used in breaking and training.

Harness: The equipment fitted to a horse or equid which is to be used to pull a vehicle.

Haute école: The discipline of training a horse to perform complex and graceful movements, derived originally from a horse's natural gaits, but exaggerated. Believed to be military in origins, with defensive purposes. Dressage taken to its limits and performed for display of harmony between horse and rider.

Kehlberge: Archaic hybrid device combining the effects of a martingale and headstall

Loose cheek ring: A cheek ring which can rotate fully in the outer cannon aperture. Softer action but can nip the mouth of a horse.

Martingale: A combination of strapping and buckles designed to control a horse's head carriage and act as an additional form of control by preventing head tossing, where the rider could be hit in the face by the horse's poll or upper neck. There are three main modern types: the standing, the running, and the German martingale. Each of these are used for different reasons. All can assist in preventing bad head carriage habits or as remedial equipment.

Mecate: A hackamore or bosal bridle rein or rope.

Mullen mouth bit: Single bar bit, no joints. A very simple form of 'soft' bit.

Ported snaffle: A double jointed snaffle with arched cannons.

Psalia/Psalion: An archaic form of metallic head stall, with inflexible noseband and side panels, used to maximise control. Often used by Roman military.

Shank/cheek piece: Bars attached to the outer part of a bit, to create added leverage on a horses' mouth. Associated with curb bits.

Single joint snaffle: Simple snaffle with two cannons connected within the mouth of a horse, resulting in pressure on the palate when reins are employed.

Snaffle: A bit which does not use leverage via shanks. It is identifiable with a ring on either side for reins to fit into, and acts with direct pressure on the mouth of a horse.

Tack: Equipment fitted on horses and other equines to facilitate their use as domesticated animals, regardless of whether it is for riding or driving. Saddles, stirrups, bridles, halters, reins, bits, harnesses, martingales, and breastplates are all forms of horse tack. Equipping a horse is referred to as tacking up.

Chapter 1

‘For want of a horse, the rider was lost’: An introduction to Irish Iron Age tack

*For the want of a nail the shoe was lost,
For the want of a shoe the horse was lost,
For the want of a horse the rider was lost,
For the want of a rider the battle was lost,
For the want of a battle the kingdom was lost,
And all for the want of a horseshoe-nail.*

Traditional rhyme.

Introducing the Iron (Age) horse

There is a well-known archaeological adage, that if the purpose of an object cannot be identified, it must be either horse harness or ritual. Despite well over two hundred pieces of late prehistoric Irish bits and Y-pieces having been found across Ireland and England, no exclusive and intense study of these artefacts has ever been carried out. The Irish Y-piece in particular has been unfortunate enough to be categorised as both ritual *and* horse harness due to this lack of attention. This is a strange omission, as from the languid afternoon parades of thoroughbreds at the Dublin Horse Show to the sturdy cobs and working horses of the Lammas horse fair at Ballycastle, Ireland has traditionally considered itself to have a long and passionate association with the horse.

This research provides the first exclusive analysis of the practical use of horses within Late Iron Age Ireland, by examining the equestrian assemblages in Ireland, and comparing them with contemporaneous objects in Britain and Europe, thereby placing them in a wider context. The working hypothesis has been that the uniquely shaped Irish tack components were introduced because of cultural intrusions from other regions of Europe, but were interpreted in a unique manner, achieving a regional identity of their own.

One of the major themes throughout the research is to discern where those influences may have come from.

The use of the domestic horse appears to occur relatively late in Irish prehistory, with artefactual evidence suggesting an apex of activity during the Late Iron Age and not a great deal before. Tack appears suddenly in the Irish archaeological record, during the first two centuries AD. Britain, Ireland and mainland Europe all have slightly different developmental chronologies during the Iron Age. The standard scale for the British Iron Age was once Cunliffe’s chronology (2005: 652), with a starting date of around the mid-8th century BC, which is contemporary with Hallstatt C phase in Europe. More recent research by Hamilton *et al.* (2015) shows a more complex situation, with some regions undergoing an ‘earliest’ Iron Age around the 10th to 9th centuries BC (Hamilton *et al.* 2015: 636), an Early Iron Age between 600 and 400 BC, leading to a Developed Iron Age between 400 BC and 100 BC, which was concurrent with most of the La Tène phases in Europe. This was then followed by a brief Late Iron Age of 100–50 BC, before the arrival of Roman influences from Julius Caesar’s first expedition in 55 BC. As these dates appear to be substantiated by more recent Bayesian models from settlements across Britain (Hamilton *et al.* 2015), they have been used as a standard chronology for Britain in this research.

<i>Britain</i>	<i>La Tène/European</i>	<i>Germania</i>	<i>Ireland</i>
Middle Iron Age Pre 100 BC	La Tène B, C and D1	Pre-Roman junction Bronze and Iron Ages	Developed Iron Age 400 BC to AD 1
Late Iron Age 80 to 20 BC	La Tène D2	Pre-Roman Iron Age	Late Iron Age AD 1 to 400
Pre-Conquest 20 BC to AD 40	Roman Conquest period	Pre-Roman Iron Age	Late Iron Age AD 1 to 400
Early Roman AD 40 to 65	Roman controlled Europe	Roman-period Iron Age	Late Iron Age AD 1 to 400
AD 70 to 100	Roman controlled Europe	Roman-period Iron Age	Late Iron Age AD 1 to 400
AD 100 +	Roman controlled Europe	Roman-period Iron Age	Late Iron Age AD 1 to 400

Table 1.1 Comparative timeline of Ireland and Europe’s Iron Age phases (after Maguire 2018).

Ireland's Iron Age has been more problematic, with great uncertainty of exactly when technological transitions occurred. An approximate chronology has been proposed by Becker (2012: 3), with an Early Iron Age between 700 and 400 BC, a Developed Iron Age from 400 BC to AD 1, and a Late Iron Age from AD 1 to AD 400 although these loose temporal classifications are unsatisfactory at best (Table 1.1).

Recently, Scott (2019) has suggested that some phalera from the Late Bronze Age may have fitted on bridles, which will require further examination. There are no examples of metal bits found in contexts of the Developed Iron Age or Late Bronze Age in Ireland, as there are in Wetwang and Garton Slack in Yorkshire or earlier at Washingborough, Lincolnshire, and Heathery Burn, in Durham (Britnell 1976: 31). This point did not go unnoticed by Raftery (1974: 9) who speculated that the impetus for the creation of bits and hackamores in Ireland occurred within a brief period, with insular innovation taking over afterwards, the result being the distinctive objects we see today in museums. Yet we have not known what the trigger was, or when, why, or how it started. England, Wales, and the Continent have a watershed chronological marker provided by Roman occupation, but Iron Age Ireland lacks such a certain boundary, having myth and metalwork aplenty, but little else of any certainty.

Past studies have included the objects as part of a bigger theme of metalwork (Raftery 1983) or incorporated them with British material (Palk 1991), but no research has sought to examine the reasons for, and mechanisms of, the sudden appearance of tack in the Irish archaeological record.

For anyone who has worked around horses and spent time polishing and cleaning bridles in tack rooms, handling the ancient bits invokes wistfulness, as the use-wear patterns share the same tactile qualities as modern used bits. It is easy to feel which animals were forward on the rein, which hung on it; both good training and bad habits are stories written into the use-wear on metal, and as such, one can never forget these bits were worn by living, breathing creatures. Their riders were also flesh and blood, people accomplishing tasks with their horses. This perhaps, is the key to the ultimate rationale behind this research — to find a way to bring at least some of Raftery's (1994: 112) 'invisible people' of the Irish Iron Age into focus, through a relatable, human filter of their lives.

A highly practical equestrian approach has been taken throughout, blending stable-yard experience with techniques such as GIS and morphometrics. The choice of tack made by a rider or driver tells a great deal about what jobs they want the horse to perform. You do not

choose a small Smart car with an engine of around 68 kW to do the same job as a Land Rover, which requires up to 400 kW to perform its tasks. So too, tack is designed, fitted and used for specific types of horses and types of jobs. The bits and Y-pieces examined for this book have been analysed to gain an understanding of why specific bit types were chosen and further developed, how they fitted on a horse, why they were designed and decorated thus, and what these choices can tell us about the changes occurring in Ireland during the Late Iron Age, thereby fleshing out at least one aspect of a poorly understood period of history.

Keeping a domestic horse requires knowledge of training, welfare, as well as the knowledge gained of how to ride or drive it. It also requires a particular landscape and specialised maintenance, which leads to a particular lifestyle of equestrianism. By examining design and technological development of the equipment, we can place the Irish Iron Age equestrians within a wider context of trade and communication, as the influences which contributed to the uniquely designed Irish pieces were derived from various sources across Europe and Britain. Tracing these influences through distribution and deposition patterns shows Iron Age Ireland to be a very different place than once considered, actively influenced by the technological and cultural changes introduced by the expansion of the Roman Empire, and will also contribute to a better, more realistic understanding of Ireland's relationship with Roman Britain and the wider Empire.

Research questions: aims and objectives

The relationship between horses and humans is a vitally important one. From the 16th century BC onwards, The Egyptian Pharaohs exploited the military advantage afforded by horse and chariot, as did the kings of the later Assyrian empire (McMiken 1990: 76–77), and subsequently the rulers of Hellenic Greece and the Achaemenid Empire of the 5th and 4th centuries BC. Further, the added mobility provided by the horse allowed for cultural expansion and increased trade. Eventually, agricultural work was also boosted using equids to pull ploughs and transport goods. As such, equestrian equipment has been present in Europe from the 3rd millennium BC (Anthony and Brown 1989: 99–101), with regional and cultural alterations in design, but not in function.

Raftery (1984: 57) classified the presence of horse-riding equipment within Irish Iron Age contexts as signposts of a major societal upheaval in Ireland's later prehistoric period. This upheaval may be related to the regrowth of forests which is sometimes referred to as the Late Iron Age Lull (Plunkett 2009). Something changed in the lifestyles of the upper echelons of society by the last

decades BC, but we do not know what it was, or what it meant for those living through it. The objects which have survived within archaeological contexts of this time are mostly made of metal; weapons, cauldrons, horned head-dresses, pins, and equestrian equipment, all made with great skill.

Compared to contemporaneous tack in Europe, the Irish bits display extraordinarily high levels of sophistication and understanding of the equine physiognomy. This in itself may indicate that, chronologically, they were a final stage in product design, which had started with much earlier European equine paraphernalia, but Iron Age contexts have all too often been disturbed and reused sites. A high proportion of finds made by 19th century antiquarians lack any details of provenance, adding to the contextual problems. Essentially, knowing *when* to look is as important as knowing *where*, and this has held back progress on understanding the Iron Age in Ireland. Establishing a chronology for when Irish bits and Y-pieces first appear in the Irish archaeological record has been of tantamount importance.

The questions tackled here are designed to build on each other, from the most basic questions of how the tack fitted, how and why it was used, through to looking for decoration parallels across England and Europe. The aims then extend further, to examine equestrian equipment as objects from a specific time and place, using an examination of distribution, context and deposition through GIS and modified Historic Landscape Characteristic methods. The Irish equestrian equipment then is finally placed within 'the big picture' by comparisons to similar equipment in Britain and north western Europe, suggesting the origins of the pieces, but also telling part of their own unique story. The overarching question asked through this research has been, how the bridle assemblages were used, why, and what can this tell of their origins and the people who used them?

It was understood from the beginnings of this research that one single homogenous system of analysis would never answer all the research questions posed. Apart from earlier studies by Haworth (1969; 1971) and Raftery (1983), there was little previous research to build upon. However, these previous works provided the catalysts for ideas, although they became filtered through the lens of living with and working with horses.

The steps required to achieve this start with the creation of a comprehensive and up-to-date record of all known tack components, specifically documenting dimensions, weights, use-wear, decoration, and damage/modifications. Indications of repeated stresses and pressure on the metal objects demonstrates how the Irish bit and Y-piece bridle assemblages were fitted

and used, which allows some idea as to what kinds of horses they were used on. Measurement of functional mouthpieces of the bits offer estimations of the size of animals used in the Irish Iron Age.

These are practical stable-yard methods of analysing tack. It is more problematic to attempt to identify the origins of the unique Irish tack style. Using art styles to build a chronology is problematic in Ireland, as the time lag between European La Tène styles and insular interpretations is variable. However, by using comparison of decorative designs and morphometrics, with comparable designs sought across prehistoric Britain and Europe, fresh perspectives on extra-insular influences can be found.

It is also important to assess what features, both natural and anthropogenic, Irish tack finds are associated with, and analyse if the distribution patterns can indicate possible networks associated with use of the horse. This has been done by using distribution maps for individual object types, along with Geographical Information Systems (GIS) technology. A hot spot model has been devised using ArcGIS 10.3.1 software, to show the relatedness of artefact clusters to a particular feature, the trackways or *sligheann* mentioned in ancient annals. This model was chosen, as the tack types would appear to be contemporary to within a few decades of each other, so time-lapse density models would be of little use. Most known provenances are named only as townlands, so therefore Nearest Neighbour Analysis would not be likely to return any better results. The kernel density model has also been used as a background to underpin the mapping finds distribution points, allowing comparisons without visual clutter. To test another potential link, the nodal points of the *Sligheann*, Iron Age/Early Medieval roads or trackways, mentioned in the *Annals of the Four Masters*, have also been placed over the kernel model map, indicating a possible relationship.

Previous research had suggested that tack was mostly found in wetlands. The use of primary and secondary source literature indicates a more complex set of depositional circumstances, questioning the predominance of wetlands as more details of sites were discovered. Using the methods employed to create HLC's (Historic Landscape Characteristics), as set out by the Irish Heritage Council (Lambrick *et al.* 2013) a set of generalised natural and artificial features have been drawn up, categorising the find-spots according to one or several of these features. This was then combined with information gleaned from antiquarian literary sources, and the early O.S. maps of 1829-1841, to gain insight into any lost features. This has allowed a precise examination of the kinds of landscape features

with which equestrian equipment was most frequently associated.

The rationale for this study is examined in the literature review of **Chapter Two**, which identifies issues of past research, which have prevented advancement in the investigation of equestrianism in Irish archaeology. Establishing a chronology has been dogged by the adoption of a faux Irish Celtic identity, mostly manufactured from the 18th century onwards, to create an Irishness to politically counteract the effect of Imperial Britishness (Kiberd 1997: 21–27). These issues, combined with a general lack of enthusiasm or ‘horsiness’ created a detrimental knock-on effect, resulting in a lack of questioning past chronological paradigms, as well as Ireland’s interactions with Roman Europe.

No prior equestrian knowledge is assumed on the part of the reader, so **Chapter Three** gets down to the nuts and bolts of basic lorinery, with a thorough explanation of what a bit is, how it functions, why there are different bits for different purposes and how this relates to any examination of prehistoric equestrian equipment. These are important concepts underpinning the core of the research, as an understanding of the choice of a bit style reveals a great deal about what the driver or rider wishes the animal to do, as well as how it fitted and what the bridle assemblage would have looked like. Past studies such as Raftery’s (1983) were based on a limited knowledge of how to measure the functional part of a mouthpiece. **Chapter Three** clarifies this, and allows a full analysis based on measurements of the estimated sizes of the horses wearing the bits, indicating some surprises in range. This diversity shows the presence of different types or breeds, which may open fresh discourse on native breeds and imported bloodlines.

With the practicalities of form, fit and function of the bits and Y-pieces explained, **Chapter Four** allows the next phase of external examination of the bits and Y-pieces, looking at the two kinds of decoration present on Irish tack — the delicate relief work cast into the objects, usually of an insular La Tène-derivative style, and the actual shape of the Irish bits, which are very different from anything else in Europe. The combinations of embellished designs on specimens found within hoards are examined, to assess if there are indications of associated designs or symbols within types, and if the combinations can suggest a chronological evolution of design.

The distinctive arched mouthpiece and the extended lip-guard of the Haworth/Raftery Types D and E have been referred to as being duck-shaped and dragonesque, but with Jope (1955: 46) and Warner (2013/14: 276) agreeing that their style owed much to Romano-British trumpet

brooches. This distinctive shape, with its bulb and fold arch, would have been hidden within the mouth of the horse, suggesting it but held a covert symbolic meaning. Analogues of shape and symbolism are sought, and found, with origins in both Europe and Britain, with confirmation of Roman influences on the morphology of the bits. A more complex story is indicated regarding the cast relief decoration symbols of bit and Y-piece, with symbolism from pre-Roman Britain and Europe.

With the beginnings of a chronology in place, **Chapter Five** examines the distribution patterns of tack, looking at the distribution of types for any temporal differences, which could suggest which bits came first in the development sequence. The distribution maps are then used to inform a GIS model of kernel density, to assess meaningful regularities in the finds of tack. From this model a new idea of defined routes and paths is developed, which may possibly represent the Irish road systems known as the *sligheann*, as recorded in the O’Donovan translation of the *Annals of the Four Masters* (1856: 102). The evidence of use-wear on bits discussed in Chapter Three indicates riding as the most likely means of transport, which would fit well with the idea of roads across Ireland, patrolled by a military elite. This may suggest insular interpretation of Roman infrastructure and allows some speculation on the reasons for tack depositions.

Jørgensen (2003: 12–17) has considered the wetland and moorland tack deposits of Denmark and northern Germany as actions representing periods of intensified conflict, resulting in war booty depositions. Certainly, the actions of the Cimbri in the south of France, in 105 BC, with the mass slaughter of the vanquished and destruction of their weapons (Grane 2003: 146) parallels the weapon and tack hoards found in Danish and Germanic bogs. Even if this war-booty model is used as a template for other European depositions, there are regional and temporal differences to what was placed within the liminal spaces of bog and wetland (Bradley 2000: 55), possibly indicating changes in society, and that what was once appropriate and valuable declined in votive value. This also appears to be the case with Irish depositions (Bradley 2000: 56). Therefore, deviations from earlier patterns of votive deposition within the landscape can indicate societal changes.

After placing the objects in their own landscape, **Chapter Six** takes a sweeping overview of Late Iron Age and Roman European equitation. This comparison with European tack acts as a cultural compass, pointing the direction of the influences which entered Ireland and acted as a catalyst for the development of the unique Irish tack. There are also indications that influences did not just enter Ireland, but left it also, as Irish Iron Age bits inspired their own re-interpreted copies in other

parts of the Roman Empire of the first two centuries AD.

Chapter Seven summarises the conclusions of research, indicating areas where new questions have arisen.

A final note is necessary before proceeding to the main body of the research. As stated, this research uses a hands-on equestrian approach for the details on bit functions, riding styles and fit. The terminology used

throughout to describe types of bits and functions is not archaeological, but equestrian (British Horse Society 1968; 1991; 1992; 2003; 2006). The commonly used archaeological nomenclatures of 'horse gear' or 'horse furniture' are unrecognised terms in equitation. Therefore, this research uses 'tack' to refer to all fitted equestrian equipment, and 'harness' specifically for driving, which would be convention within equestrian literature.