Introduction
In 1611, Thomas Coryat of Odcombe, Somerset, noted in his account of a five-month journey undertaken three years previously through Europe that: “Amongst many other strange fishes that I have observed in their market places [Venice], I have seen many Torteises [sic], whereof I never saw but one in all England” (Coryat 1611: 395). By the late 19th century, however, the importation of tortoises into Britain had become a major commercial enterprise. Henry Mayhew writing about the street sellers of tortoises in London in his 1861 book London Labour and the London Poor observed that (Mayhew 1861: 80):

“The number of tortoises sold in the streets of London is far greater than might be imagined, for it is a creature of no utility, and one which is inanimate in this country for half its life.

Of live tortoises, there are 20,000 annually imported from the port of Mogadore in Morocco.

They are a freight of which little care is taken, as they are brought over principally as ballast in the ship’s hold, where they remain torpid.

They are bought for children and to keep in gardens [...] and when properly fed on lettuce leaves, spinach, and similar vegetables, or on white bread sopped in water, will live a long time. If the tortoise be neglected in a garden and no access to his favourite food he will eat any green thing that comes in his way and so may commit ravages.”

My intention in this article is to track the expansion of the trade in tortoises (but not tortoiseshell) from the medieval period through to the late 19th century and contextualise this against the backdrop of the trade in exotic animals and the rise of pet keeping, using a combination of written sources and zooarchaeological evidence (the analysis of animal bones from archaeological sites).
Where are the tortoises?

Thomas Coryat’s claim that tortoises were absent in Britain in the early 17th century is borne out by current evidence: in the medieval period, tortoises are not documented as pets (Walker-Meikle 2012) and no tortoise bones have been recovered from archaeological sites. The latter is somewhat surprising given the enormous number of analysed animal bone assemblages with occupation spanning this period (for central England see Albarella and Pirnie 2008) and the fact that archaeological evidence exists for the movement of other animals. Such movements occurred for a number of reasons: animals were introduced to ‘improve’ local livestock, for economic or social benefit and as exotics/curiosities (after Albarella 2007: 134).

Analysis of measurements of animal bones from archaeological sites reveals increases in the size of domesticated animals on some sites from as early as the later 14th century – prefiguring the ‘improvements’ of the Agricultural Revolution by almost 400 years (Thomas 2005a; Thomas et al. 2013). For some species it is clear that this was brought about by the introduction of new types of livestock from outside Britain, a phenomenon acknowledged in early modern husbandry manuals (e.g. Worlidge 1698). By the 16th and 17th century, evidence exists for the selection of particular physical attributes: a good example is provided by archaeological evidence for crested chickens (akin to the contemporary Polish breed), which are characterised by a cerebral hernia (Gál et al. 2010).

During the medieval and post-medieval periods a number of important species were introduced to Britain for their economic and social benefit. Examples include rabbits (Oryctolagus cuniculus) and fallow deer (Dama dama). While both of these were introduced by the Romans, neither successfully established permanent breeding populations; however, they did so following their reintroduction by the Normans in the 12th century (Sykes 2010; Sykes & Curl 2010). Both species were highly-regarded game animals throughout the medieval period and legitimate access was restricted to the elite (Thomas 2007). Some birds were also introduced for their economic benefit during the medieval and early modern periods. Examples include the guinea-fowl (Numida meleagris) and the turkey (Meleagris gallopavo) which reached Britain by the 16th century (Poole 2010). Like fallow deer and rabbit they were initially only affordable to the elite. However, the establishment of local populations of breeding birds soon hastened their democratisation and widespread consumption (Fothergill 2014).

Exotic animal bones are not abundant in archaeological assemblages of the medieval and early modern periods; however, the fact that they are occasionally recovered adds particular significance to the absence of the tortoise. The bones of primates provide indications of trade with or travel to parts of Europe with abundant tortoise populations. For example, Barbary
apes (Macaca sylvanus), common to Algeria and Morocco, were recovered from a context dated c. AD 1300 at Southampton and from medieval/post-medieval deposits in London (Noddle 1975; Pipe 1992). Perhaps even more surprising, an elephant (Loxodonta elephas) ulna radiocarbon dated to AD 1290-1410, was excavated from the fill of a cess pit in Chester (Smith 2008: 354). By the early modern period trade routes expanded, as evidenced by the presence of a South American capuchin monkey (Cebus nigrivittatus) and the remains of a juvenile terrapin (Emydidae or Bataguridae family) retrieved from 17th-century deposits in London (Armitage 1981; Armitage et al. 2005). Given the maritime context of these animals (i.e. the ports of London and Southampton), it seems likely that these were brought back (alive or dead) as curiosities by merchant sailors. While there is a disappointing absence of bones belonging to exotic birds kept for their colourful plumage, two parrot bones were recovered from a pit dated to the mid-late 17th century from the site of Norwich Castle (Albarella et al. 2009). Unfortunately, it was not possible to determine the species and thus where these birds originated. Other animals were clearly introduced to populate menageries. For example, a North African Barbary lion (Panthera leo leo) and a leopard (Panthera pardus), ranging in date from the 13th to the 17th centuries, were excavated from deposits connected to the Royal Menagerie at the Tower of London (O’Regan et al. 2006). Other animals were probably introduced as pets for the elite. Partial guinea pig (Cavia porcellus) skeletons were recovered from Hill Hall manor, Essex, dated 1574-5, and from a middle-class property in the Belgian town of Mons dated to the end of the 16th century or the beginning of the 17th century (Hamilton-Dyer 2009; Pigière et al. 2012). Notably, these discoveries are contemporary with a recently discovered portrait that illustrates three Elizabethan children, with a brown and white guinea pig being held by the central figure (NPG 2013).

Given the presence of other exotic animals in the archaeological record, the question that demands an answer is: why are tortoises missing? One possibility is that their absence reflected prevailing attitudes. In the Old Testament tortoises were described as unclean and often symbolized evil and darkness:

“There also shall be unclean unto you among the creeping things that creep upon the earth: the weasel, and the mouse, and the tortoise after his kind” (Lev. 11: 29).

The early Christian scholar St Jerome (c. AD 342-420) recounted that the tortoise moves sluggishly because it is “burdened and heavy with its own weight . . . signifying the grievous sin of the heretics” (Toynbee 1973: 223). Such attitudes may have been reinforced following the rediscovery of Classical
scholarship during the Renaissance: the 1st-century AD Roman writer Seneca classed the tortoise as a sluggish and loathsome beast; in late Greek the word for tortoise meant dweller in Hell; an early Christian curse tablet is addressed to “the most unclean spirit of a tortoise”; and tortoises were represented in art as the “embodiment of evil in combat” (Toynbee 1974, 222). Given the pervasiveness of Christian doctrine in medieval society (Cohen 1994), it is perhaps no surprise that there was little interest in keeping tortoises. This may be evidence of a long-standing tradition: tortoises are rarely featured in domestic scenes in Greek art (Calder 2011) and there are no documented named pet tortoises in Roman writing (Toynbee 1974, 222).

**The first tortoises in Britain**

The 17th century seems to mark a watershed in the trade in tortoises across Europe, a consequence of the opening up of new routes and changing attitudes towards animals (Thomas 1983). The first documented pet tortoise in Britain was acquired by Archbishop Laud in London in 1633; the carapace of this can still be viewed at Lambeth Palace. Archbishop Laud was executed in 1644, but the tortoise lived until 1753 when he was accidentally despatched by a gardener during his hibernation (Young 2003: 125): evidenced by the cracked carapace.

Reference to another tortoise imported into Britain in the late 17th century is made in a letter by A.B.C. to Mr. Urban published on January 22nd 1793 in the *Gentleman's Magazine*:

> “In Vol. LXII. p. 879, there is an error, I suppose, of the press, in the letter from Mr. Jermy [sic], respecting his tortoise. The name of the place is Bayfield, not Rayfield. This tortoise was brought by Mr. Robert Swallow from Smyrna [on the Aegean coast of Anatolia, modern day Turkey] in 1683, and given by him to Mr. Jermy, of Bayfield, in Norfolk, in July 1686. She yearly, in November, went under ground, where she remained until the latter end of March. In May she made a hole in a gravel walk, and therein usually laid nine eggs. She was found dead in the earth, April 1743. You may depend upon the truth of the account.”

Tortoises were also being moved around Europe to satisfy growing curiosity about the natural world (George 1980). Louis XIV had two tortoises within his menagerie at Versailles in 1671 and dissected tortoises are featured in Claude Perrault’s treatise on animal anatomy (Perrault 1688). Tortoises also appear in Edward Topsell’s *The History of Four-Footed Beasts* (1607) and the reprinted version *The History of Four-Footed Beasts and Serpents* (1658): effectively, a condensed and translated version of Conrad Gessner’s monumental *Historiae Animalium* (1551) (Fig. 1). Archaeological discoveries provide further evidence of scientific interest in tortoises: in the 17th-century garden of a
monastic boarding school in Augsburg, Germany, the appendicular skeleton and carapace of a land tortoise was recovered (Thomas 2010). As the tortoise was found alongside human bones that were drilled through the joints, it seems plausible to suggest that they originated from the school’s natural sciences collection.

**Slow-moving interest**

No who’s-who of famous tortoises is complete without mention of Timothy. In 1770 the naturalist Gilbert White (author of a Natural History of Selbourne) inherited this Mediterranean tortoise from his aunt (Highfield & Martin 1989; Lee 1999). White’s uncle originally purchased Timothy from a sailor in Chichester for 2s 6d around 1740.

The continued rarity of tortoises in this period is exemplified by the fact that in 1810 The Times newspaper ran a feature on a tortoise living in the garden of the Bishop of Peterborough that was supposedly over 200 years old (Chambers 2004: 175), although records suggest that it was more likely purchased in the mid-18th century (Lee 1999).

The first archaeological evidence for a tortoise in Britain comes from the site of the Royal London Hospital and provides evidence for continued scientific interest in these animals. The hospital was founded in 1740 and archaeological evidence suggests that an associated burial ground was in use between 1820 and 1854 (Morris et al. 2011). Some of the animal bone
from the site is waste from the hospital kitchens, which provides insight into the diet of patients and staff. However, many of the animal bones appear to originate from an anatomy school attached to the hospital. As well as domestic animals (cattle, sheep, horses, dogs, cats and rabbits), some of which showed evidence of dissection and articulation, a number of exotic species were present, including: the skull of a guinea pig; a headless monkey (possibly a mona monkey – *Cercopithecus mona*), originating from west Africa, around Nigeria; a partial skeleton of a tortoise, identified as a Hermann’s tortoise (*Testudo hermanni*); and a single tortoise humerus from an unknown non-European species (Morris *et al.* 2011). A smaller, but comparable, assemblage was recovered from an early to mid-19th-century burial ground beneath St. Pancras International, where the carapace of a tortoise was recovered along with the remains of a dissected walrus (*Odobenus rosmarus cf divergens*) (Pipe & Emery 2011).

**A commercialised tortoise trade**

By the end of the 19th century, the importation of tortoises into Britain had become commercialised as Henry Mayhew accounted in 1861. The scale of this trade is typified by the following advertisement published on the 3rd December 1881 in *The Era* by William Cross, a major importer of wild animals in Liverpool: “A cargo of tortoises has just arrived, and may be had for 25s a 100 wholesale. They sell at 1s each easy. This is while they last.” Certainly, the general public must have been sufficiently familiar with tortoises to appreciate the humour of a Punch cartoon published in 1869 with a caption that reads:

“Railway porter (to old lady travelling with a menagerie of pets). ‘Station master say, mum, as cats is “dogs”, and rabbits is “dogs”, and so’s parrots; but this ere “turtis” is a insect, so there ain’t no charge for it!’ ”

Archaeological support for the keeping of tortoises as pets is evidenced at Stafford Castle, Staffordshire (Thomas 2010). Here, a tortoise humerus (upper arm bone) was recovered from a levelling layer within the keep’s courtyard and dated to c. 1875-1900 (Fig. 2). Although the appendicular bones of tortoises are difficult to tell apart, the shape of this bone closely matches the spur-thighed tortoise (*Testudo graeca*) and derives from an animal that was about 15cm in length. The fact that the tortoise was recovered alongside many cat and dog skeletons suggests that these were pets of the caretakers of the castle, buried within the keep. Another tortoise bone belonging to the *Testudo* genus – this time a femur – was recovered from the nearby Dudley Castle, West Midlands (Fig 3); unfortunately, the specimen was poorly provenanced and can only be dated to after 1750.
Fig. 2. Tortoise humerus from Stafford Castle, Staffordshire.
Fig. 3. Tortoise femur from Dudley Castle, West Midlands.
At the very end of the 19th century, it was clear that tortoises were being translocated for reasons other than companionship. The *Edinburgh Evening News* on Saturday 22nd January 1898 reports (British Newspaper Archive 2013): “Who but a Parisian would conceive the idea of bejewelling miniature live tortoises. ‘All Paris’ is talking about this newest craze.” This ‘craze’ involved precious stones being mounted and clipped onto the carapaces of live tortoises with a gold chain and pin, which permitted the wearing of the live tortoise as a brooch. Doubtless this fashion was short-lived and there is no evidence that it made its way across the Channel; nevertheless, it emphasises further the commodification of tortoises in this period.

The stimulus for the dramatic rise in the tortoise trade in the late 19th century is unclear, although the centrality of Galapagos tortoises in the development of Charles Darwin’s theory of evolution (Darwin 1845), their increased frequency within literature (Young 2003: 132) and the acquisition (and marketing) of giant tortoises within zoological collections (e.g. Illustrated London News 1852: 117) may have heightened their popular appeal. We might also view the expanded trade in tortoises as part of a wider growth of interest in exotic animals facilitated by “the rise of science and the rise of Empire”, and reflected in the proliferation of travelling menageries, circuses, zoological gardens and private menageries (Simons 2012: 8). By the 1870s, London had become the foremost centre in Europe for the trade in exotic animals (Velten 2013: 145) and in 1895 there were 118 animal dealers listed in the Post Office Directories for the city (Simons 2012: 49). The commercialised trade in tortoises may have been fuelled further by changes in attitudes towards animals and in particular companion animals during the 19th century (Ritvo 1994; Thomas 2005b, 2010). Such changes included: adoption of the notion that animals had souls and thus beloved pets could be reunited with the family in the afterlife (testified by the emergence of the pet cemetery (Howell 2002)); the appearance of legislation to prevent animal cruelty (e.g. Martin’s Act 1822); and the advent of societies dedicated to the protection of animals (e.g. the Society for the Prevention of Cruelty to Animals, which later became the Royal Society for the Protection of Cruelty to Animals, was founded in 1824).

By the turn of the 20th century, thousands of land tortoises were shipped each year. In Britain they were so cheap (costing as little as sixpence) that they served as fair-ground prizes (Young 2003: 103). Because there was little understanding of how to look after tortoises, only one or two per cent of those sold in Britain could be expected to survive their first year (Young 2003: 104). By 1964, over two million Mediterranean spur-thighed tortoises were imported into the UK. Twenty years later, following a European Economic Community regulation, the trade in spur-thighed, Hermann’s and marginated tortoises (*Testudo marginata*) was prohibited (EEC Regulation 3636/82; Highfield 1990: 6).
Conclusions
While the bones of tortoises remain rare on archaeological sites in Britain, when interrogated alongside written sources they disclose an interesting story about the longevity, diversity and complexity of our relationships with exotic animals. Initially reviled, tortoises became desired and traded as exotica amongst the wealthy by the later 17th century. They were exploited as objects of scientific curiosity and commoditised as pets by the late 19th and early 20th century. It is deeply tragic that the growing desire by ordinary people in Victorian Britain to keep animals as pets contributed to the translocation of millions of animals and threatened their existence in the wild.

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Bibliography

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