

HUMBOLDT-UNIVERSITÄT ZU BERLIN



LEBENSWISSENSCHAFTLICHE FAKULTÄT

INSTITUT FÜR BIOLOGIE

MASTERARBEIT

ZUM ERWERB DES AKADEMISCHEN GRADES

MASTER OF SCIENCE

"Körpergrößentrends in fossilen Landschildkröten aus dem Neogen"

"Body size trends in Neogene testudinid tortoises"

vorgelegt von

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geb. am 18.05.1991 in Freudenstadt

angefertigt in der Arbeitsgruppe Paläozoologie

am Institut für Biologie/Museum für Naturkunde

Berlin, im September 2017

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1 Introduction

Body size has been of interest to researchers for a long time (Haldane, ..., Peters, ...), because it is a universal trait, that can be easily measured in most organisms. Moreover, it is linked to and influenced by many ecological and evolutionary processes, although the underlying mechanisms are often complex. Some basic questions deal with the issue of optimal body size: is there one for every organism and if so, how is it determined, how does it evolve? Animals → magnitudes of body size, many have their greatest body size right now, possible maximum has not been reached! BUT reptiles not

- optimal body size

- evolutionary models???

- maximum body size

- megafauna

- human-induced extinction / climate

- reptile "megafauna" → large turtles (archelon) → giant tortoises!

- have been abundant on continents and islands in former times. no longer, only on islands.

in earlier publication fossil testudinids were grouped into two genera, based on size: small = testudo, large = geochelone. By now, most areas have been revised: America = Hesperotestudo and Chelonoidis (Galapagos), Europe = Cheirogaster or better: Titanochelon, Africa = Aldabrachelys, Chersina, Asia = Geochelone ??

Evolution of tortoises: - where did they originate, how did they spread? → floated to islands
→ relationship with humans → tortoises/turtles as food - whaling industry - tortoise extinctions
→ only on Galapagos and Aldabra giant tortoises → which went extinct within the last couple of years? → which are associated with humans? what about climate? → largest extant continental tortoise: Centrochelys sulcata (80 cm)

- Body size as a trait (read Smith, Smith & Lyons) and over time why is it interesting? is there an optimal body size for every organism? how can it be determined? (→ stasis??)

- evolutionary models (read Gene Hunt's paper and Posada, 2003) → make sense of evolutionary modes: * stasis * unbiased random walk * generalized random walk

- body size in tortoises - distribution of tortoises (?) - giant tortoises well suited for drifting on ocean currents (Meylan, 2000)

OR - mammal megafauna extinctions → giant tortoises

- human and climatic influence

- purpose of this work: determine body size trends in tortoises and identify evolutionary mode

(if possible). what lead to extinction?

read:

body size:

Smith and Lyons

Smith et al., 2016

megafauna extinctions:

Sandom et al., 2014

Schuster and Schüle, 2000

using paleontological data:

Willis et al., 2010

Willis and Fortey, 2000

tortoise/turtle overview.

Rhodin et al., 2015

Lapparent de Broin, 2001

Perez-Garcia/Vlachos/Lujan etc.

2 Material & Methods

2.1 Data collection

I collected data on body size of fossil testudinids from the Miocene until recent times. The body size data set includes 26 fossil genera, comprising over 100 fossil species. The majority of the data was obtained from the primary literature (Table S17). To find relevant publications, I relied mostly on the references listed in the FosFarBase (Böhme and Ilg, 2003), the Paleobiology Database (<http://paleobiodb.org>), and the review on fossil turtles and tortoises by Rhodin et al. (2015). Furthermore, the FosFarBase provided fossil occurrences of testudinids all over the world, including their exact localities and age (Table ??). The FosFarBase (<http://www.wahre-staerke.com/>, last accessed 23.03.2017) contained 769 testudinid occurrences from 647 localities between the Eocene (33.9 - 56 mya) and the Holocene (Fig. 1). Of those, 641 occurrences from 534 localities were of relevant age (Miocene to Holocene). However, although the FosFarBase already contained a lot of fossil occurrences, the literature review showed that additional data not recorded in the FosFarBase was readily available in the existing literature. The final body size data set includes 376 data records from 193 localities, of which 106 localities are present in the FosFarBase.

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only on
CD?

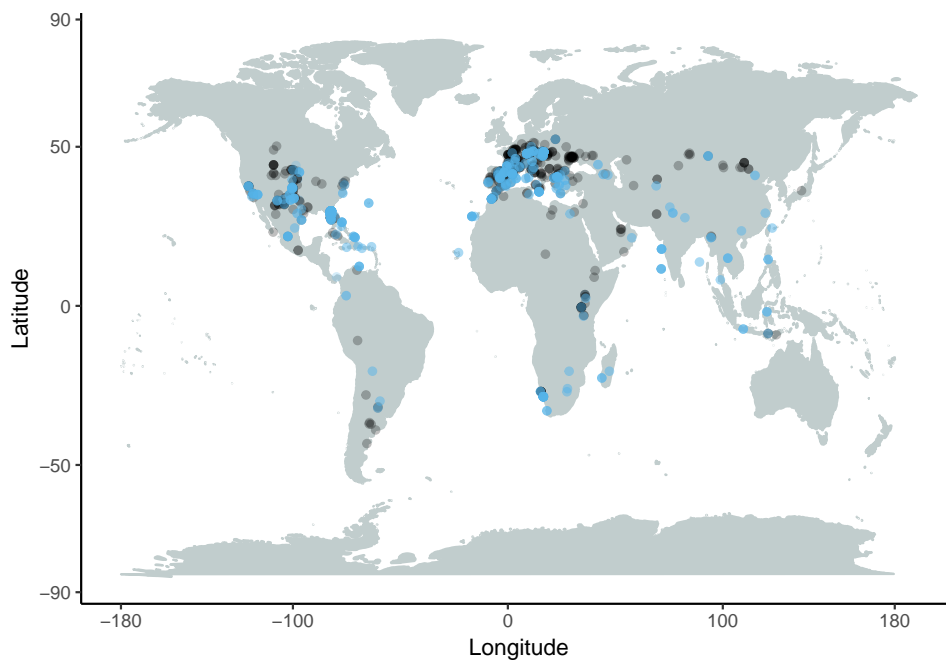


Figure 1: Map displaying all fossil occurrences of testudinids from the Eocene to the Holocene according to the FosFarBase, with color indicating whether body size data was available (blue) or not (black).

For extant testudinid taxa, I measured dry material ($n = 67$) from the collection of the Museum für Naturkunde zu Berlin (MfN) with an accuracy of the first decimal (unless stated otherwise) using calipers. In addition, body size data ($n = 173$) from the literature was included (Table S18).

2.2 Body size estimation

Body size is reported as straight carapace length (SCL) in mm. When SCL for fossil taxa was not available from the primary literature, it was estimated ($n = 254$) either from plastron length (PL) or appendicular elements (Table S17). For carapace length estimations based on plastron length, the measurements from the MFN collection material were used to calculate the ratio between SCL and PL. Since the SC/PL ratio did not show a significant difference among species (Kruskal Wallis Test, $P > 0.05$; SCL/PL between 0.95 - 1.47), a single general ratio (SCL/PL = 1.1) was calculated for all testudinids and hence used for the SCL estimations unless stated otherwise (Table S17). For estimations based on femora and humeri, ratios based on data provided by Hutterer et al. (1998) and Franz et al. (2001), respectively, were used. A number of publications did not state measurements but instead provided scaled figures of the fossil remains, from which either SCL directly or PL, humeri, or femora lengths for estimating SCL could be measured.

2.3 Analyses

All subsequent analyses were performed with R 3.4.1 (R Core Team, 2017), including the packages dplyr (Wickham et al., 2017) to prepare the data for the analysis and ggplot2 (Wickham, 2009) to create figures. The R package vegan (Oksanen et al., 2017) was used to create randomized sample-based accumulation curves, which show the increase in individuals, species or genera per sampling unit and are therefore used to determine if sampling is sufficient or not in terms of covering diversity and richness (Thompson and Withers, 2003). Most commonly these accumulation curves are conducted at the individual or species level, but they can also be applied to higher taxa like families and genera (Gotelli and Colwell, 2011, 2001). The accumulation curves also give information about species richness, relative abundance and diversity (Thompson and Withers, 2003). Typically a species accumulation curve shows a steep initial slope followed by gradual plateauing until converging to an asymptote, when the maximum number of species has been reached. However, this shape can be affected in several ways, for

example when a lot of rare species opposed to only a few abundant species are present or if sampling is conducted on a large geographical scale, the inflection point may be lower and the following slope towards the asymptote may be rather long or an asymptote may not be reached at all within figure margins (Gotelli and Colwell, 2011, 2001). Since the data set in this study relies on literature, references were used as a sampling unit (x-axis). Sampling accumulation curves were created both at the species and the genus level, since genera of fossil testudinids are relatively well resolved whereas determination on the species level is still obscure in some cases, because fossil species are frequently based on single individuals that are often incompletely preserved as well (Brattstrom, 1961; de Lapparent de Broin, 2001). Since genera were better sampled than species (Fig. 3, S2 (a) - (b)), all subsequent analyses were performed on the generic level. Additional sampling accumulation curves for the continents were created (Fig. S2 (c) - (i)), to check if subsequent analyses could be applied to these subgroups.

figure
neces-
sary?

2.3.1 Descriptive statistics

To explore the structure of the data set normalized histograms with density curves and box-plots of the entire data set and several subgroups (fossil vs. modern, insular vs. continental) were created. Descriptive statistics like mean, median, variance, skewness and kurtosis were calculated with the R package moments (Komsta and Novomestky, 2015) (Table S14) for the raw and log-transformed data. While mean, median and variance describe the location and distribution of a data set, skewness and kurtosis are referred to as 'shape statistics', which give information about symmetry (skewness) and the weight of the tails compared to the rest of the distribution, i. e. outliers will result in a higher kurtosis. However, the accuracy and suitability of these shape statistics has been debated, since sample size, extreme values and homogeneity of the data impact their results and uncertainties are higher than when mean and median are used (McNeese, 2016; Bai and Ng, 2005). Especially for small sample sizes, the histograms might provide more reliable information about the structure of the data set than skewness and kurtosis (McNeese, 2016).

The Wilcoxon Rank Sum Test (unpaired data) was used to test for differences in body size between modern and fossil taxa as well as between insular and continental taxa. To be able to compare different subgroups, a random subsample (1000 repeats) of the respective larger subgroup was taken to compare equal sample sizes. For the majority of random subsamples, the median coincided with the real median (see Appendix E), therefore subsamples were assumed

to reflect the actual sample and subsequently used for statistical comparisons. The Kruskal-Wallis test was used to test for differences among subsamples, e. g. body size per time bin and body size per continent. As post-hoc test, a multiple comparison (Siegel and Castellan, 1988) was conducted to identify which groups differed significantly from each other.

2.3.2 Body size trends over time

To investigate trends in body size over time, the R package *paleoTS* (Hunt, 2015) was used. Data were split into time bins according to stratigraphic stages (Table 1, Fig. 2), with the exception of the two lower stages of the Miocene, which were considered as one time bin, because the last bin otherwise would have contained only 2 data records. To prevent sampling bias and because sampling accumulation curves showed that the genus level was better sampled than the species level, the mean SCL per genus was calculated before summarising mean SCL per time bin for the timescale analysis. The *paleoTS* plots display the mean trait over time and can be fitted to different evolutionary models: stasis, where the trait mean fluctuates around a steady mean (no change), generalized random walk (GRW), where the trait mean increases or decreases over time (directional change) or unbiased random walk (URW), where the trait mean changes over time but not in a way where these changes accumulate and move the trait mean in a specific direction (non-directional change). Model fits are based on maximum-likelihood estimation and model support is reported as Akaike Information Criterion (AICc), with the lowest values indicating the best suited model. Additionally, Akaike weights are reported, which give the proportional support for each model. *paleoTS* plots and model-fitting was performed for the entire data set, continental, and insular genera subsets. The same approach was repeated for European and Eurasian genera for all data, as well as continental and insular genera separately.

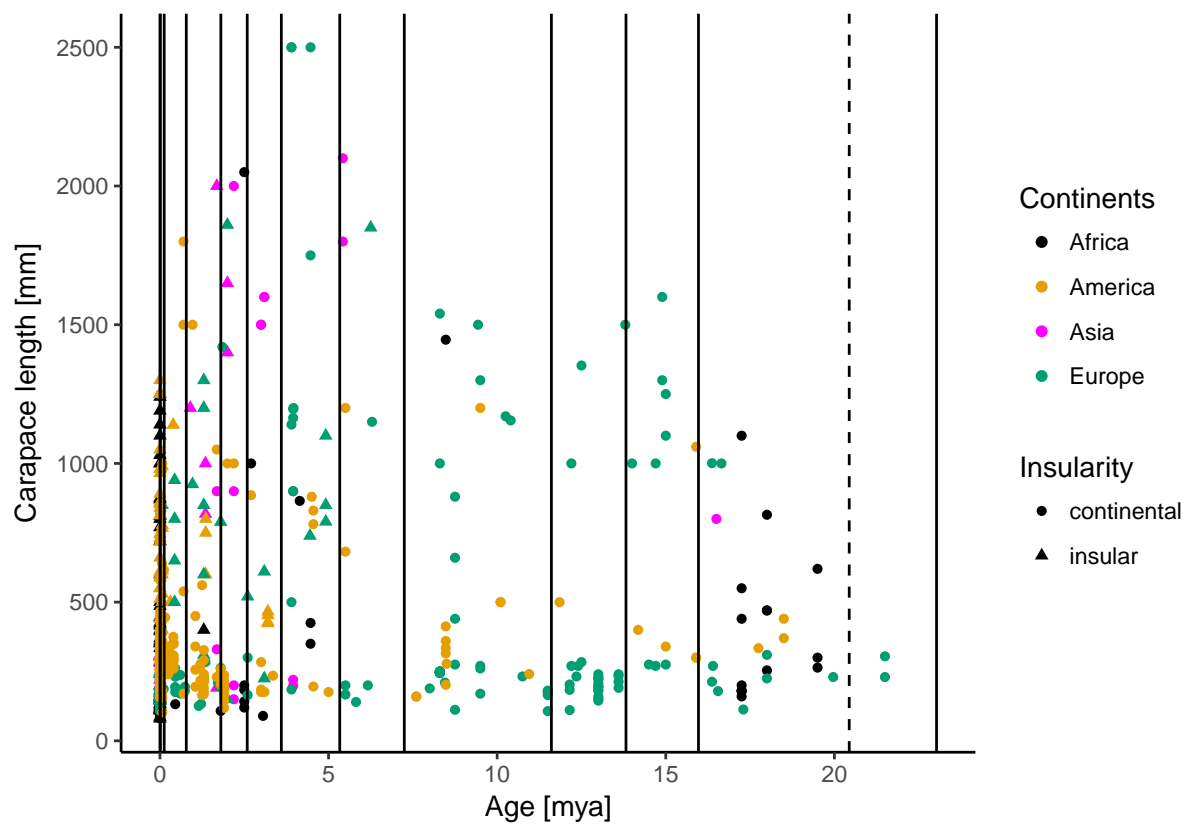


Figure 2: Scatterplot of carapace length over time, indicating insular (triangle) and continental (circles) and colour indicating continents. Straight lines indicate stratigraphic stages which were used as time bins, the dashed line indicates the border between the two stages of the Lower Miocene, which were considered as one time bin.

Table 1: Time ranges, mean age per bin, corresponding stratigraphic stages and epochs, and respective sample sizes (on individual, species and genus level).)

| Age Range [mya] | Mean Age [mya] | Stages | Epochs | n (Individuals) | n (Species) | n (Genera) |
|-----------------|----------------|-----------------------|--------------------|-----------------|-------------|------------|
| 0 - 0.0117 | 0.00585 | Modern | Modern | 254 | 66 | 18 |
| 0.0117 - 0.126 | 0.06885 | Upper Pleistocene | Upper Pleistocene | 50 | 18 | 8 |
| 0.126 - 0.781 | 0.45350 | Middle Pleistocene | Middle Pleistocene | 53 | 13 | 7 |
| 0.781 - 1.81 | 1.29350 | Lower Pleistocene | Lower Pleistocene | 57 | 27 | 12 |
| 1.81 - 2.59 | 2.19700 | Gelasian | Lower Pleistocene | 33 | 15 | 9 |
| 2.59 - 3.6 | 3.09400 | Piacencian | Upper Pliocene | 24 | 15 | 10 |
| 3.6 - 5.33 | 4.46600 | Zanclean | Lower Pliocene | 31 | 17 | 8 |
| 5.33 - 7.25 | 6.28900 | Messinian | Upper Miocene | 12 | 9 | 6 |
| 7.25 - 11.6 | 9.42700 | Tortonian | Upper Miocene | 46 | 20 | 9 |
| 11.6 - 13.8 | 12.71400 | Serravallian | Middle Miocene | 27 | 8 | 6 |
| 13.8 - 16 | 14.89500 | Langhian | Middle Miocene | 18 | 14 | 9 |
| 16 - 23 | 19.50000 | Burdigalian/Aquitania | Lower Miocene | 31 | 15 | 9 |

3 Results

3.1 Sample-based accumulation curves

The sample-based accumulation curve (SAC) on the generic level shows a relatively low initial slope and a long upward slope to the asymptote, which does not reach full saturation (Fig. 3). Although the SAC does not completely plateau, considering the large area covered and the high number of rare genera in the dataset, it can be considered well enough sampled for our purposes. In contrast, the species accumulation curves, both per reference and per locality, show only a slight initial increase and, for the same number of references/sampling units, are far from reaching an asymptote (Fig. S2 (a), (b)). Since there are less genera than species, it is to be expected that genera reach an asymptote earlier than species. Accumulation curves for individual continents show that Europe reflects the trend of the overall dataset, with a long upward slope after the inflection point, whereas the other continents require further sampling (Fig. S2 (c) - (i)). For this reason, the timescale analysis was only conducted for Europe and Eurasia, but not for the other continents.

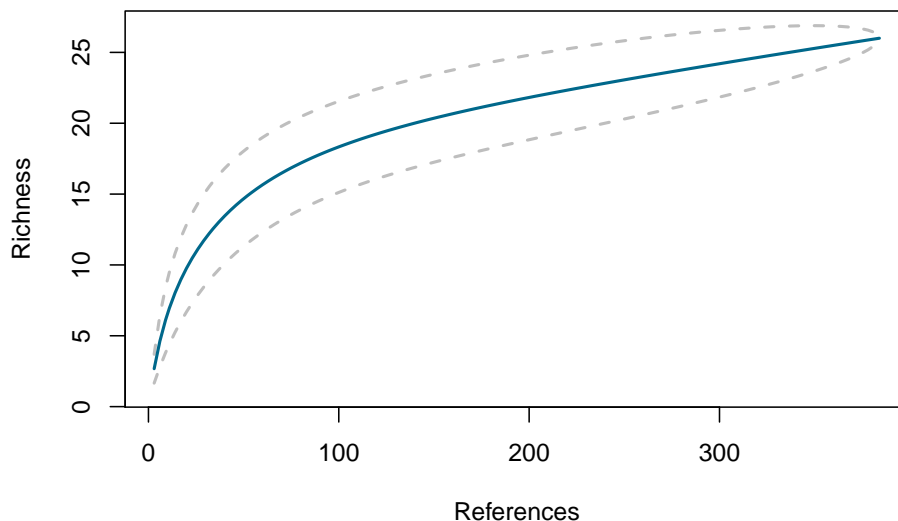


Figure 3: Sample-based accumulation curve of fossil genera per reference. Dashed lines represent the confidence interval.

3.2 Descriptive statistics

The histograms indicate that testudinid body size is not normally distributed (Fig. 4), which is supported by QQ-Plots for raw as well as log-transformed data (Fig. S3). The body size distribution is moderately right-skewed (Table S14), with a higher frequency of smaller body sizes.

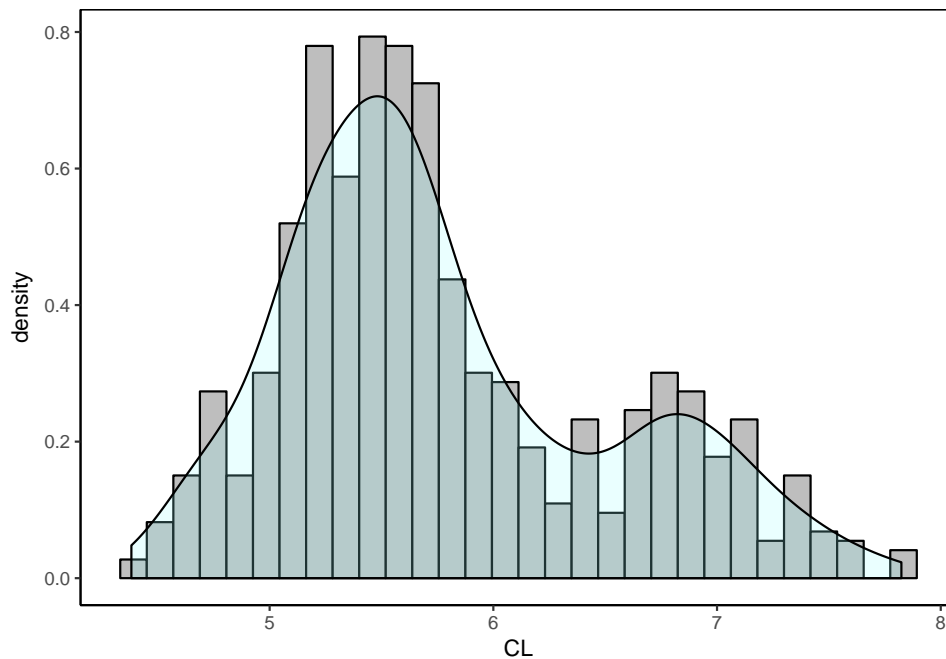


Figure 4: Body size distribution of complete data set. Bimodally distributed and right-skewed.

This pattern is also apparent when splitting the data set into fossil and modern taxa (Fig. 5 (a)). Considering insularity, body size distribution is right-skewed for continental taxa, but left-skewed for insular species, meaning larger body size occurs with a higher frequency than smaller body size on islands. Insular taxa are also left-skewed when only considering fossil taxa, but modern insular taxa have a skewness close to 0, indicating a symmetric distribution (Table S14). Kurtosis suggests light tails with no/few outliers ($kurtosis < 3$) for insular and modern insular species, whereas continental species have a heavy tail ($kurtosis > 3$; Table S14).

The histograms show a bimodal distribution, which is also apparent on most sublevels, except for modern insular species (Fig. S4 (a)). Body size distributions are similar, right-skewed and bimodal, for the four continents and reflect the overall trend (Fig. S4 (b)).

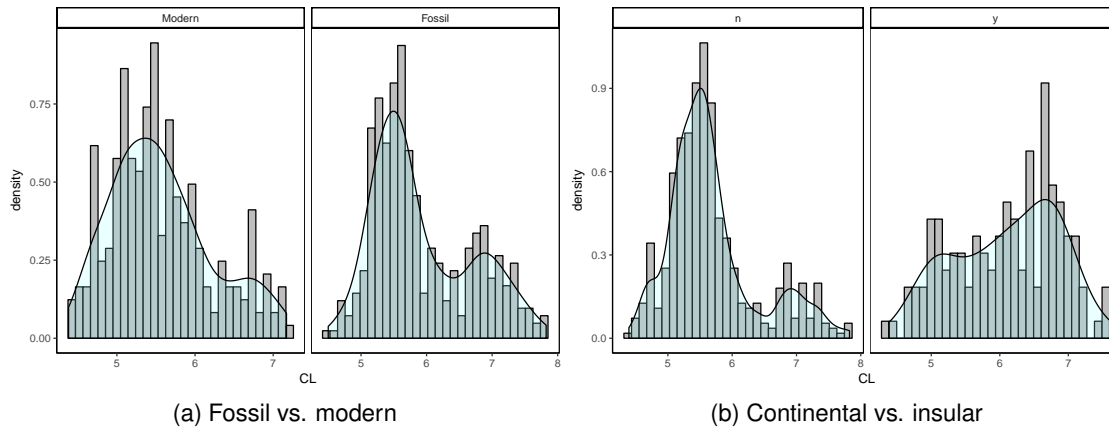


Figure 5: Histograms for fossil vs. modern and continental vs. insular data.

Mean body size differs significantly across time bins (Kruskal Wallis Test, $\chi^2 = 71.441$, $P < 0.01$; Fig. 6). The multiple comparison test showed that modern median body size is smaller than body size in the Upper Pleistocene. There is no difference in body size within the Pleistocene and Pleistocene body size does not differ from body size in the Upper Miocene. Seravallian body size is smaller than Langhian body size in the Middle Miocene, but Langhian body size is not different from Lower Miocene body size.

Comparison of modern and fossil testudinids showed that modern tortoises are significantly smaller than fossil ones (Wilcoxon Rank Sum Test, $W = 22318$, $P < 0.01$; Fig. 7). Furthermore, continental testudinids are significantly smaller than insular taxa (Wilcoxon Rank Sum Test, $W = 13854$, $P < 0.01$; Fig. 7). These results can even be considered in combination: modern continental taxa are smaller than fossil continental taxa (Wilcoxon Rank Sum Test, $W = 8046$, $P < 0.01$; Fig. S5) and modern insular taxa are smaller than fossil insular taxa (Wilcoxon Rank Sum Test, $W = 631.5$, $P < 0.01$; Fig. S5))

Finally, body size differs among continents (Kruskal Wallis Test, $\chi^2 = 34.343$, $P < 0.01$; Fig. 8). The multiple comparison test showed that African testudinids differ significantly from the other three continents in body size. American testudinid body size is comparable to that of Asia, but differs from those of Africa and Europe. Furthermore, Asian and European testudinids are similar in body size. Since only Europe/Eurasia are well sampled, these relationships could change with further sampling. ??

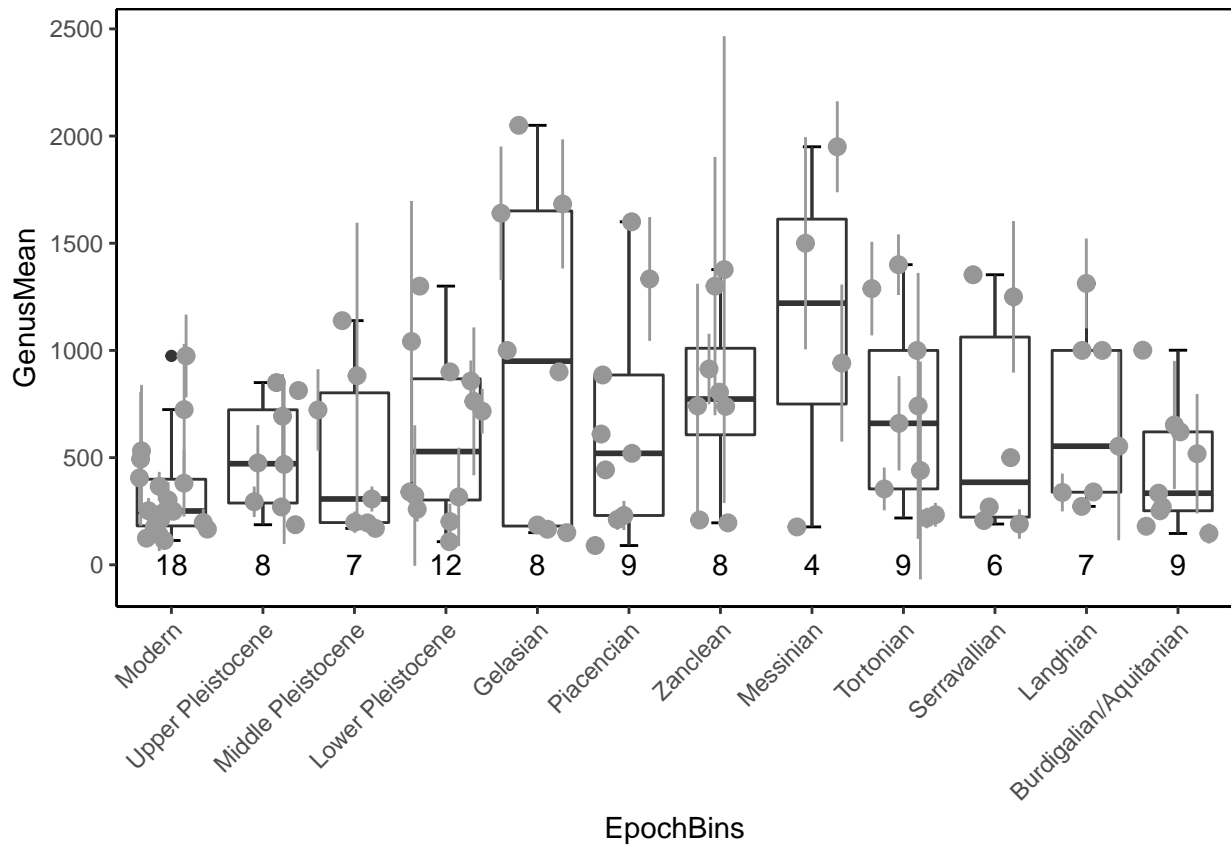


Figure 6: Boxplots of mean CL per time bin, including mean and sd CL for each genus (as pointrange).

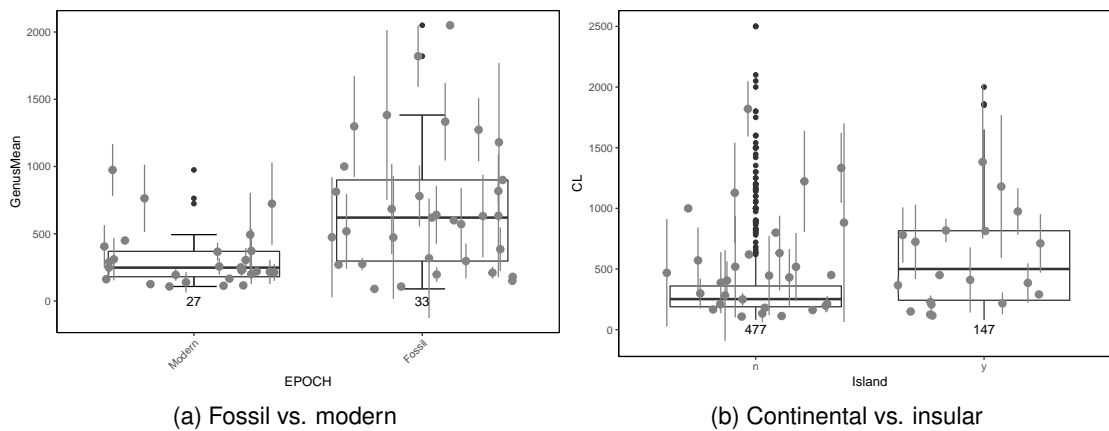


Figure 7: Boxplots of CL split into fossil vs. modern (a) and cotinental vs. insular (b)

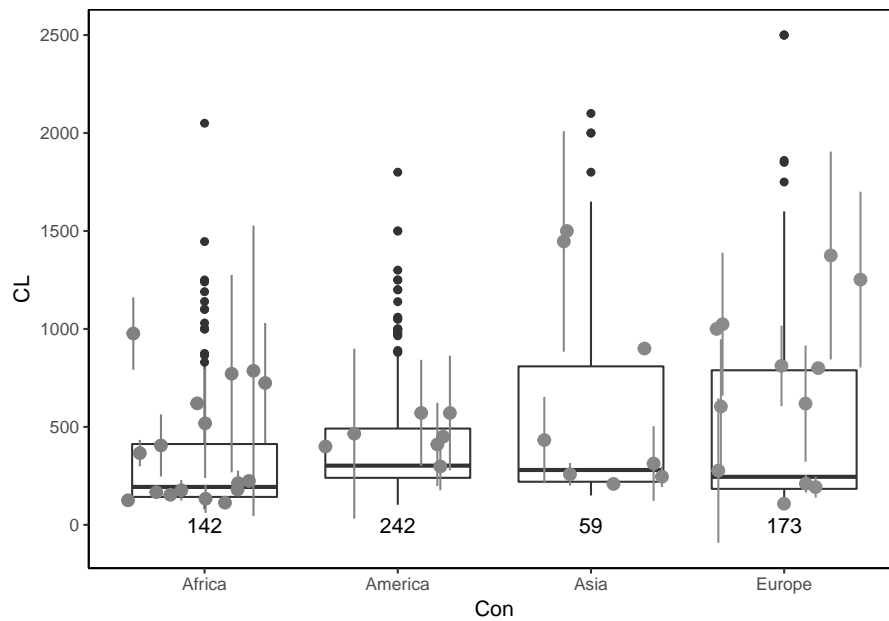


Figure 8: Boxplot: body size on different continents, genera summarised

3.3 paleoTS analysis

3.3.1 complete dataset

Fitting of the three evolutionary models favoured stasis for the entire data set, although model support was only 51 % followed by 33 % support for the unbiased random walk (Fig. 9, Table S1). When solely considering continental genera, the best-fitting model was the unbiased random walk, but again not ideally supported with 55 % (Fig. 10, Table 3). In contrast, insular genera are best described by stasis, which was very well supported (100 %; Fig. 11, Table 4)).

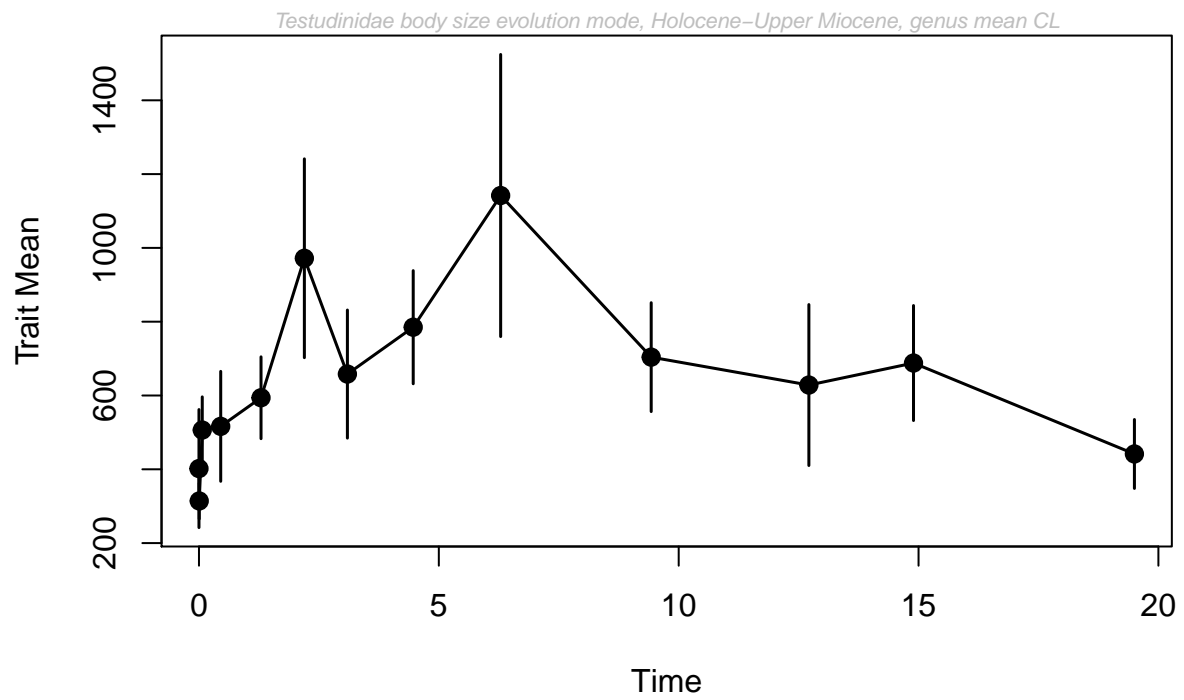


Figure 9: paleoTS plot with genus mean, all

Table 2: Model-fitting results for testudinidae, genera, all

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -81.31790 | 2 | 167.9691 | 0.161 |
| URW | -82.05721 | 1 | 166.5144 | 0.332 |
| Stasis | -80.16802 | 2 | 165.6694 | 0.507 |

3.3.2 continental dataset (excluding insular species)

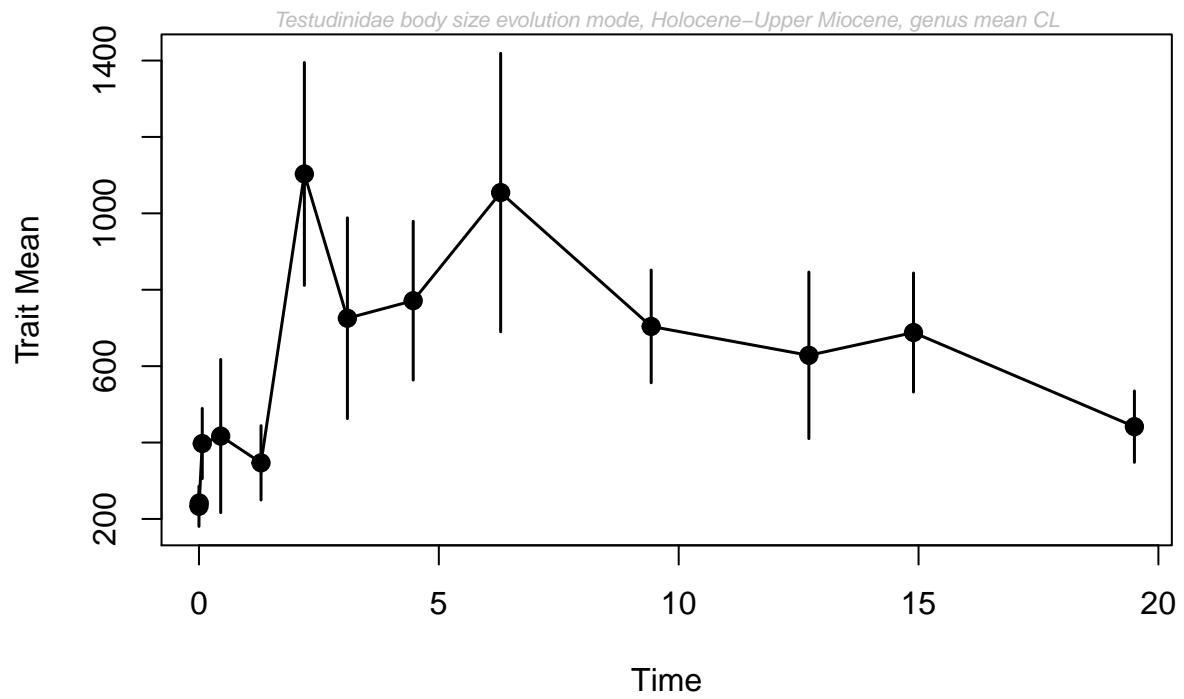


Figure 10: paleoTS plot with genus mean, continental

Table 3: Model-fitting results for testudinidae, genera, continental

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -82.26287 | 2 | 169.8591 | 0.300 |
| URW | -83.12577 | 1 | 168.6515 | 0.548 |
| Stasis | -82.93984 | 2 | 171.2130 | 0.152 |

3.3.3 insular dataset (excluding continental)

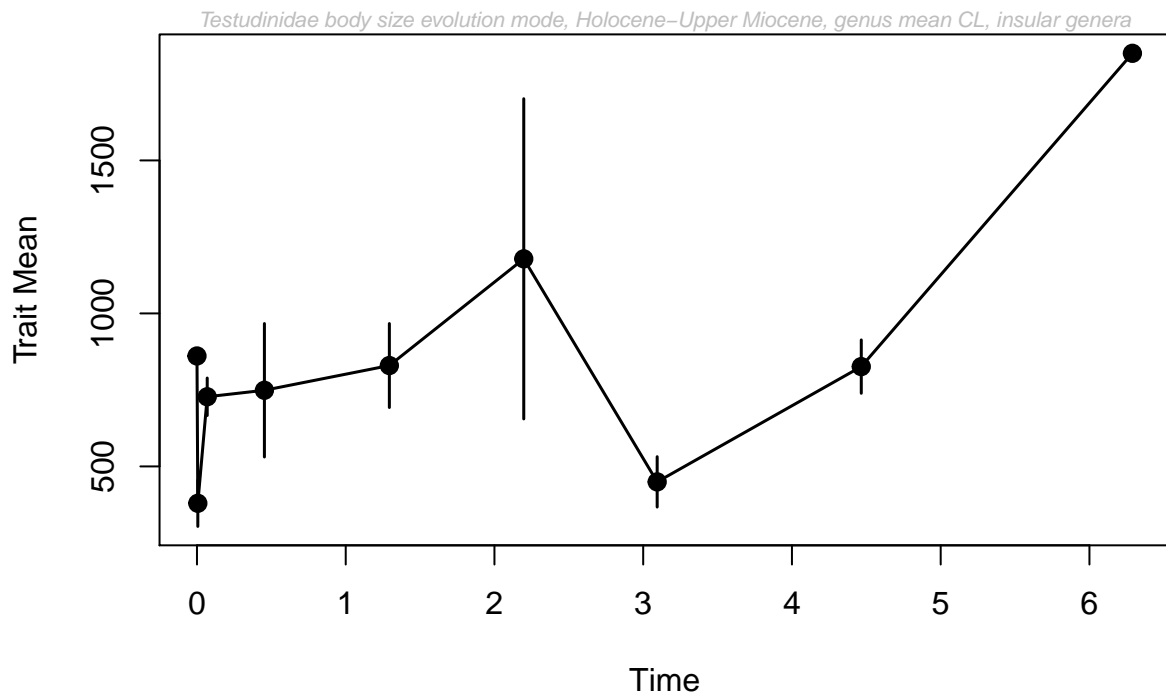


Figure 11: paleoTS plot with genus mean, insular

Table 4: Model-fitting results for testudinidae, genera, insular

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -68.57344 | 2 | 143.5469 | 0 |
| URW | -75.76576 | 1 | 154.1982 | 0 |
| Stasis | -60.41581 | 2 | 127.2316 | 1 |

3.3.4 per continent

3.3.4.1 Europe, genera

When repeating the analysis for European taxa only, all three groups – complete, continental and insular data – are best described by stasis with a model support between 92 - 99 % (Fig. 12, S8, S9; Tables 5, S6, S8).

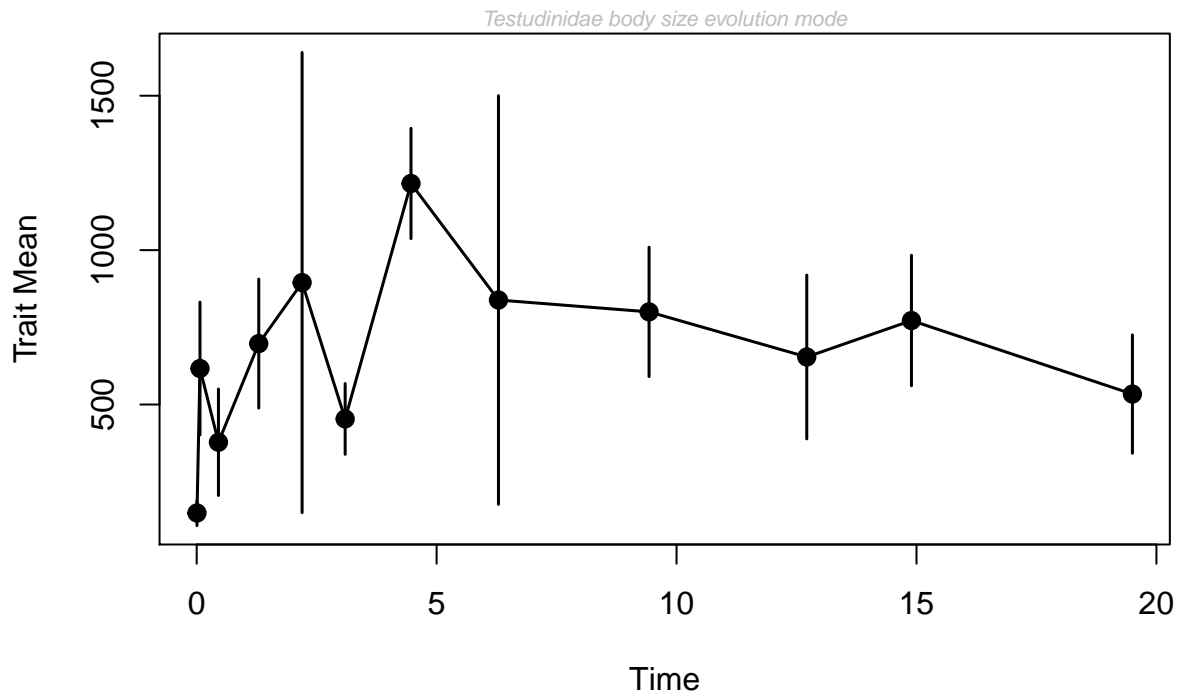


Figure 12: Genera, Europe

Table 5: Model-fitting results for testudinidae, genera, Europe

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -84.14010 | 2 | 173.7802 | 0.006 |
| URW | -85.90727 | 1 | 174.2590 | 0.005 |
| Stasis | -79.01365 | 2 | 163.5273 | 0.990 |

3.3.4.2 Eurasia, genera

For Eurasia, the entire data as well as continental genera are best described by the unbiased random walk, although the model support is weak again. Continental species still have a better support (78 %; Fig. S10, Table S11) than all Eurasian data with only 56 % (Fig. 13, Table 6). Insular Eurasian species, however, conform to stasis again, although with lower support values (68 %; Fig. S11, Table S13).

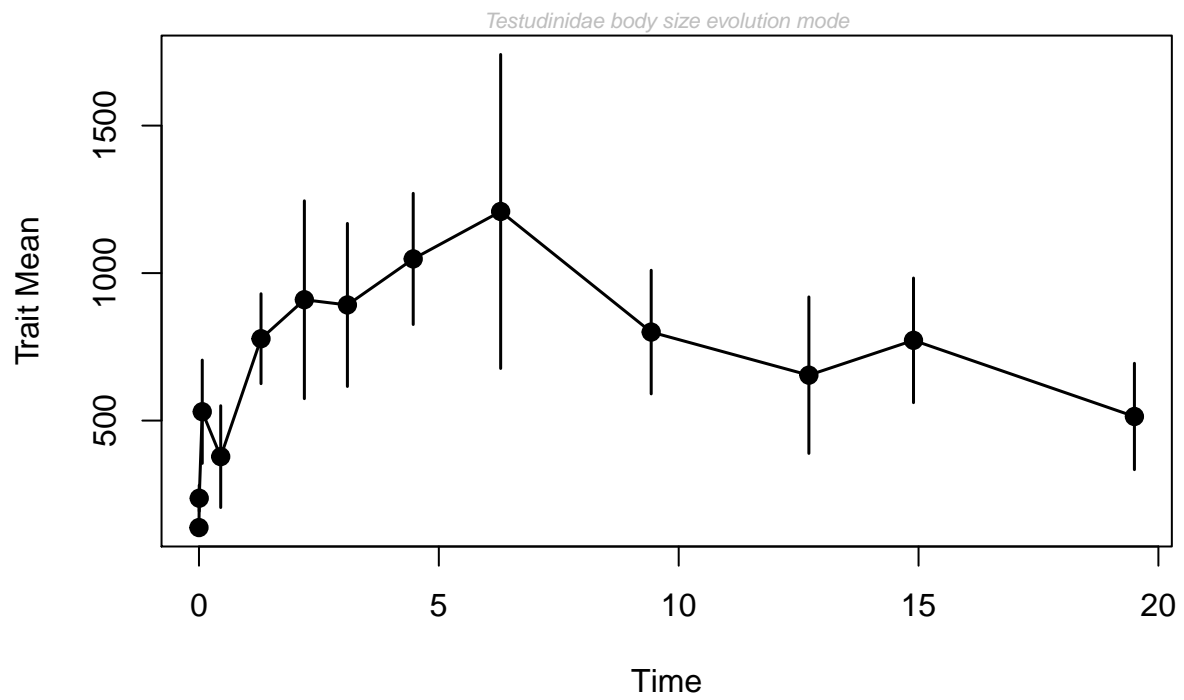


Figure 13: paleoTS, genera, Eurasia

Table 6: Model-fitting results for testudinidae, genera, Eurasia

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -85.25195 | 2 | 175.8372 | 0.149 |
| URW | -85.39072 | 1 | 173.1814 | 0.562 |
| Stasis | -84.58890 | 2 | 174.5111 | 0.289 |

4 Discussion

4.1 Completeness of data set

completeness of data set/benefits of additional sampling (SACs) - how much of the "actual" data is represented by our data set?

4.2 Population structure?

4.3 Time-scale analysis

→ what does model support depend on? what does a relatively low model support mean?

- study would benefit from more sampling! (SAC, model supports paleoTS)
- include more data, not only literature but actually measure shells/other skeletal elements

→ maybe gather further data to more reliably estimate body sizes

- include shapes/geometric morphometrics → volume/body mass?
- paleoTS → is designed to deal with incomplete data (FOSSIL)
- unbiased random walk on continents → CL fluctuates more than on islands → "giant" forms

completely disappeared in comparison to insular species

- what can influence distribution: climate, selective pressures, diet, intra-specific competition (Madagascar)

- I guess: climate affects body size reduction, but extinctions were human-driven → Aldabra/Galapagos (whaling industry) → mammal megafauna was hunted to extinction by humans

Aldabra tortoise: no evidence of size increase, probably originate from giant continental tortoises (large tortoises are able to float: bouyancy and fasting endurance)

5 References

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Appendix A Geographical and stratigraphic distribution of body size data

Body size data was available from all four continents, where testudinidae occur, and over a time period of 20 mya (Fig. S1, Table 1).

→ samples all over the world and over the whole time period with more or less equally distributed sample sizes (over time bins, continents are uneven → see SAC)

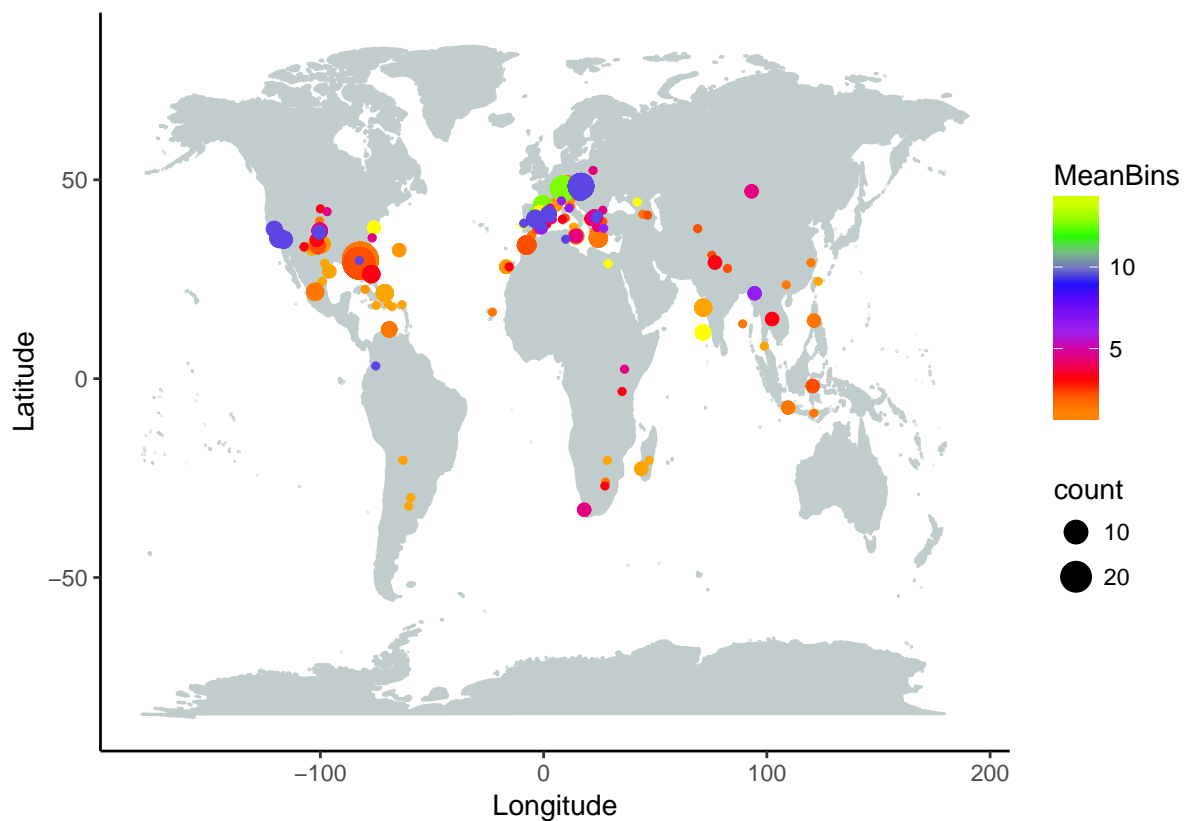


Figure S1: Map displaying all localities for which body size data for testudinids was available in the literature. Size of points denotes sample size, color denotes approximate age.

Appendix B Sampling accumulation curves

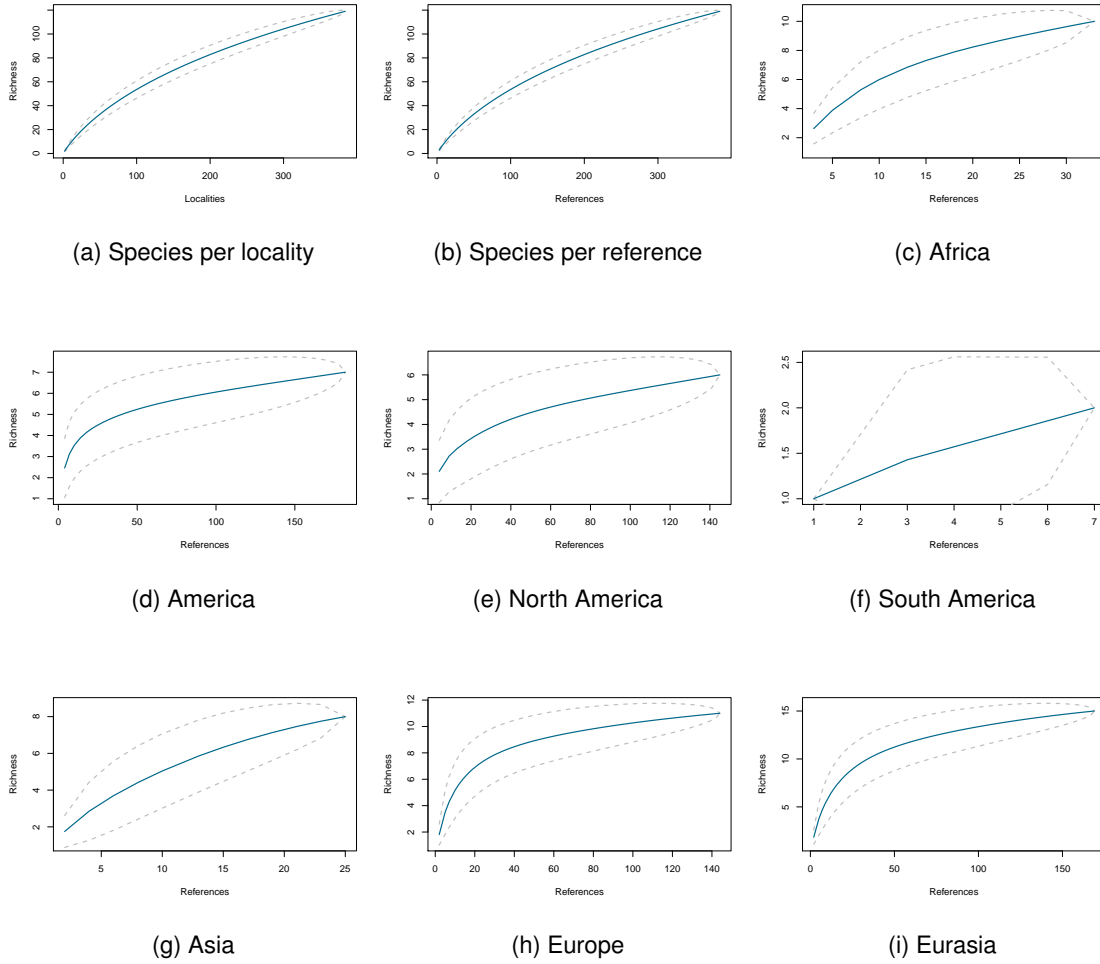


Figure S2: Sampling accumulation curves: (a) - (b) Species are not sufficiently sampled, regardless of sampling unit. (c) - (i) Sampling Accumulation Curves on generic level per continent. Only Europe (h) and Eurasia (i) are sufficiently sampled. Dashed lines represent the confidence interval.

Appendix C Histograms

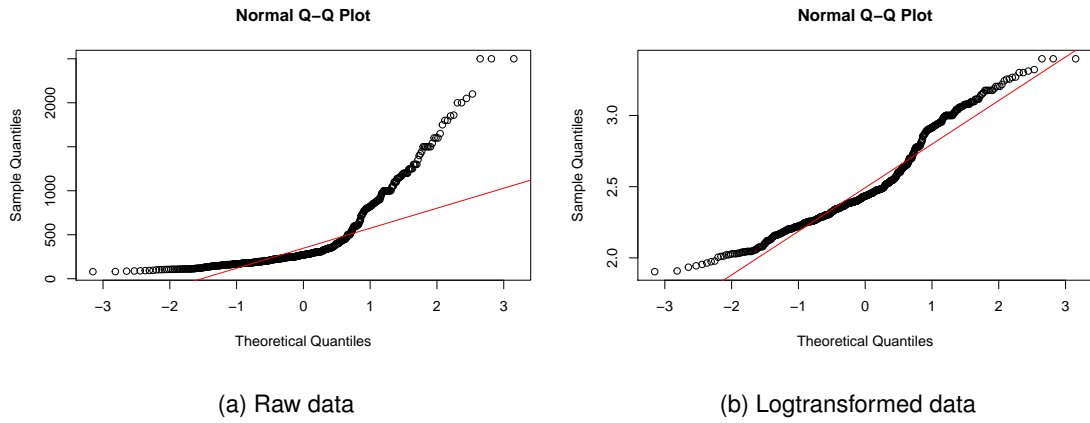


Figure S3: Visual test for normal distribution. In case of normally distributed data, the black circles should follow the red line, which is not the case for either raw data (a) nor logtransformed data (b). Therefore, data is not normally distributed.

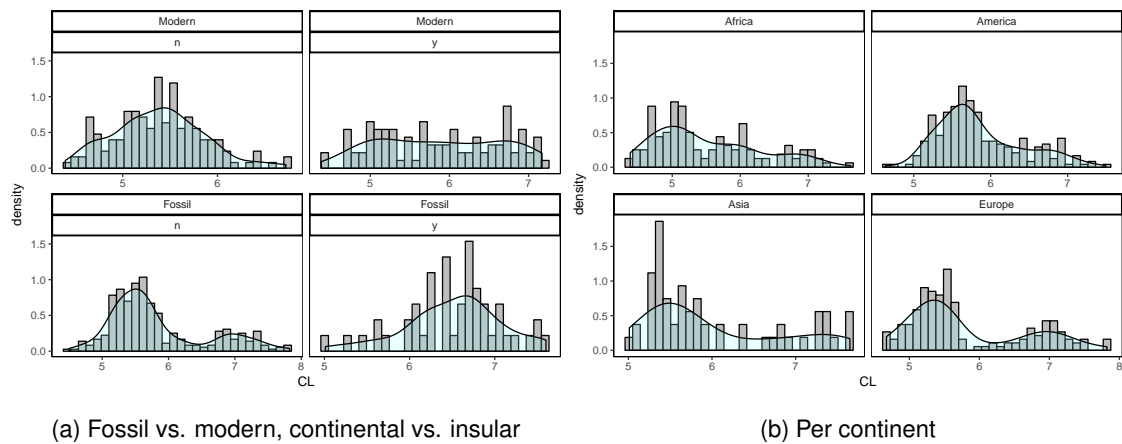


Figure S4: Histograms for several subgroups of the dataset.

Appendix D Boxplots

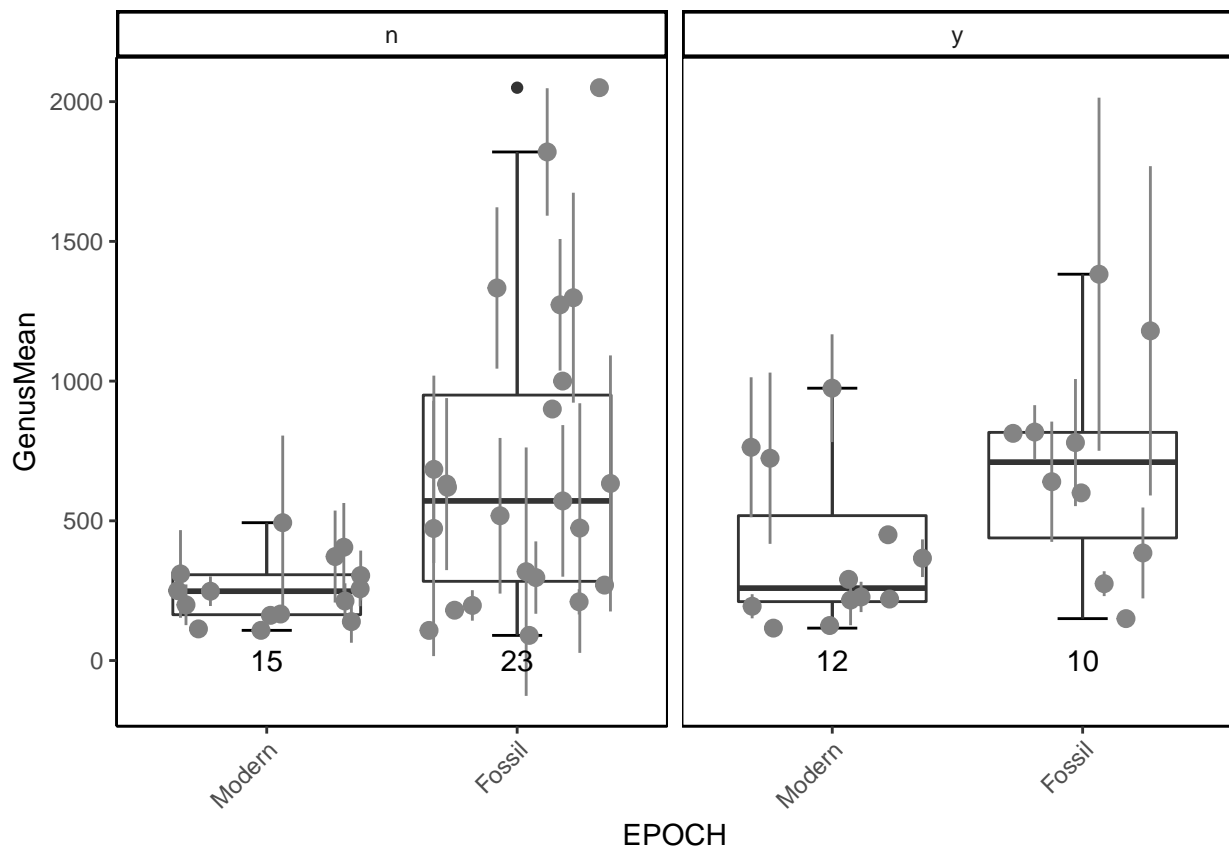


Figure S5: Boxplots fossil vs. modern, continental vs. insular species.

Wilcoxon Rank Sum Test (unpaired data):

modern continental < fossil continental ($P = 4.8532266 \times 10^{-8}$)

modern insular < fossil insular ($P = 0.0018564$)

Appendix E Random Sampling

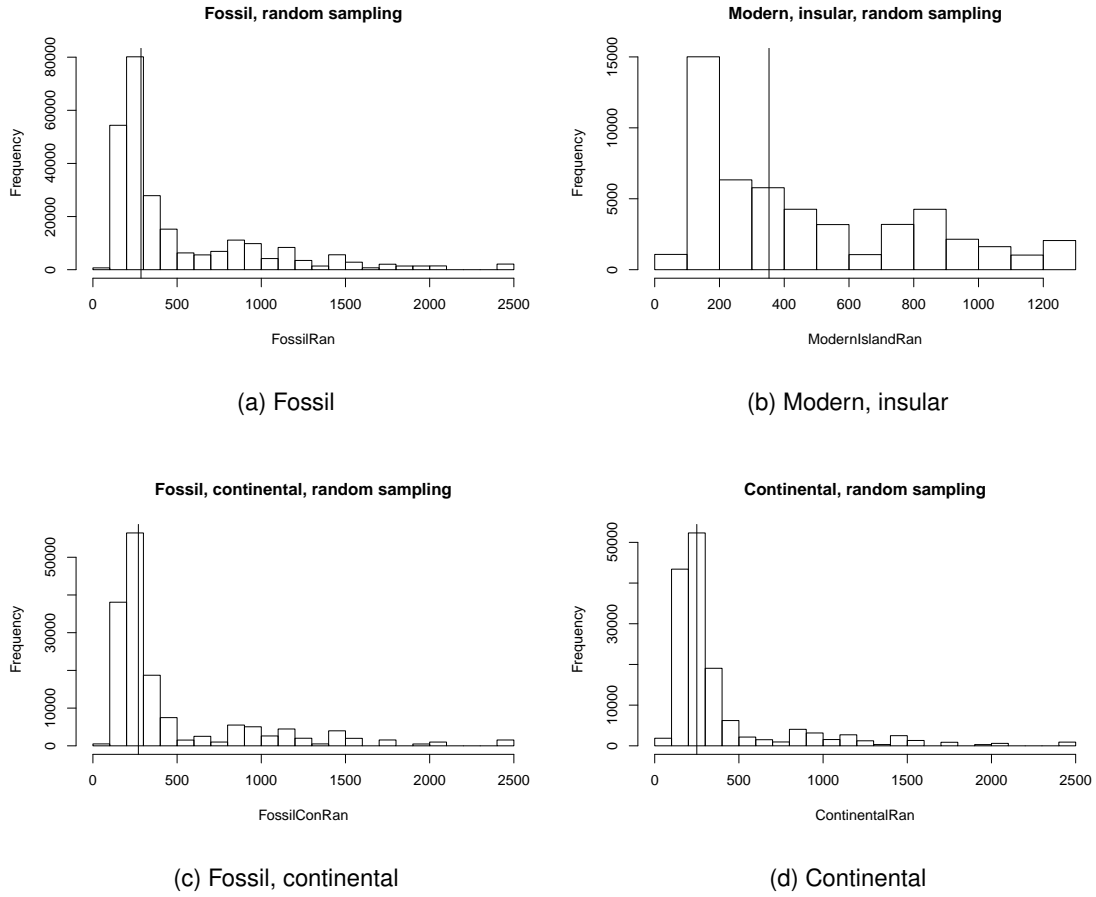


Figure S6: Random sampling for several subgroups. For (a), (c), and (d) the random sample reflects the real sample, for (b) this is not the case.

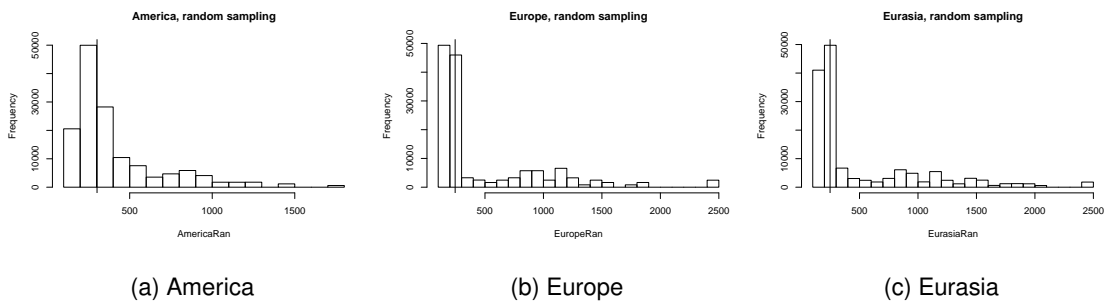


Figure S7: Random sampling for different continents. All random samples reflect the real sample.

Appendix F paleoTS

all (continental and insular)

Table S1: paleoTS object, all data

| tt | mm | vv | nn |
|------------|-----------|-----------|----|
| 0.0000005 | 401.9641 | 102306.64 | 4 |
| 0.0058500 | 314.1859 | 42607.58 | 18 |
| 0.0688500 | 506.3265 | 64620.11 | 8 |
| 0.4535000 | 516.4053 | 155241.85 | 7 |
| 1.2935000 | 593.8669 | 147507.20 | 12 |
| 2.1970000 | 971.8850 | 580540.76 | 8 |
| 3.0940000 | 658.0826 | 271043.73 | 9 |
| 4.4660000 | 785.0792 | 187937.61 | 8 |
| 6.2890000 | 1141.9375 | 584378.85 | 4 |
| 9.4270000 | 703.9570 | 195766.19 | 9 |
| 12.7140000 | 628.3020 | 285258.36 | 6 |
| 14.8950000 | 687.9619 | 169914.58 | 7 |
| 19.5000000 | 441.5420 | 78467.65 | 9 |

continental (excluding insular species)

Table S2: paleoTS object, continental

| tt | mm | vv | nn |
|-----------|-----------|------------|----|
| 0.0000005 | 233.1680 | 8331.753 | 3 |
| 0.0058500 | 241.7917 | 13004.928 | 15 |
| 0.0688500 | 397.4606 | 50619.392 | 6 |
| 0.4535000 | 416.9341 | 200982.124 | 5 |
| 1.2935000 | 346.8484 | 66240.066 | 7 |
| 2.1970000 | 1103.1067 | 595507.933 | 7 |
| 3.0940000 | 725.4156 | 414253.291 | 6 |

| | tt | mm | vv | nn |
|--|------------|-----------|------------|----|
| | 4.4660000 | 771.3833 | 259173.082 | 6 |
| | 6.2890000 | 1054.4375 | 531455.932 | 4 |
| | 9.4270000 | 703.9570 | 195766.185 | 9 |
| | 12.7140000 | 628.3020 | 285258.362 | 6 |
| | 14.8950000 | 687.9619 | 169914.577 | 7 |
| | 19.5000000 | 441.5420 | 78467.646 | 9 |

insular (excluding continental)

Table S3: paleoTS object, insular

| | tt | mm | vv | nn |
|--|-----------|-----------|-----------|----|
| | 0.0000005 | 860.9268 | 0.00 | 1 |
| | 0.0058500 | 379.5354 | 68570.44 | 12 |
| | 0.0688500 | 727.5938 | 14997.58 | 4 |
| | 0.4535000 | 748.8333 | 142649.08 | 3 |
| | 1.2935000 | 829.6744 | 112964.44 | 6 |
| | 2.1970000 | 1178.3333 | 821158.33 | 3 |
| | 3.0940000 | 449.4375 | 27058.77 | 4 |
| | 4.4660000 | 826.1667 | 15196.06 | 2 |
| | 6.2890000 | 1850.0000 | 0.00 | 1 |

Europe, genera

Table S4: paleoTS object, Europe

| | mm | nn | vv | tt |
|--|----------|----|------------|---------|
| | 148.8559 | 2 | 3338.406 | 0.00585 |
| | 616.6667 | 3 | 138802.333 | 0.06885 |
| | 377.8167 | 3 | 89203.953 | 0.45350 |
| | 697.3717 | 5 | 218431.974 | 1.29350 |

| mm | nn | vv | tt |
|-----------|----|-------------|----------|
| 895.0000 | 2 | 1110050.000 | 2.19700 |
| 453.3333 | 3 | 39433.333 | 3.09400 |
| 1215.8667 | 5 | 159317.256 | 4.46600 |
| 838.3750 | 2 | 875495.281 | 6.28900 |
| 800.0508 | 6 | 263434.389 | 9.42700 |
| 653.9625 | 5 | 351634.528 | 12.71400 |
| 772.0000 | 5 | 223154.375 | 14.89500 |
| 533.8533 | 5 | 183706.682 | 19.50000 |

Europe, genera, continental

Table S5: paleoTs object, Europe, continental

| mm | nn | vv | tt |
|-----------|----|-------------|----------|
| 149.5381 | 2 | 3450.8267 | 0.00585 |
| 187.0000 | 1 | 0.0000 | 0.06885 |
| 205.4750 | 2 | 198.0050 | 0.45350 |
| 204.9292 | 2 | 23.1767 | 1.29350 |
| 1420.0000 | 1 | 0.0000 | 2.19700 |
| 232.5000 | 1 | 0.0000 | 3.09400 |
| 1475.6667 | 3 | 57926.3333 | 4.46600 |
| 663.3750 | 2 | 473607.7812 | 6.28900 |
| 800.0508 | 6 | 263434.3893 | 9.42700 |
| 653.9625 | 5 | 351634.5281 | 12.71400 |
| 772.0000 | 5 | 223154.3750 | 14.89500 |
| 533.8533 | 5 | 183706.6821 | 19.50000 |

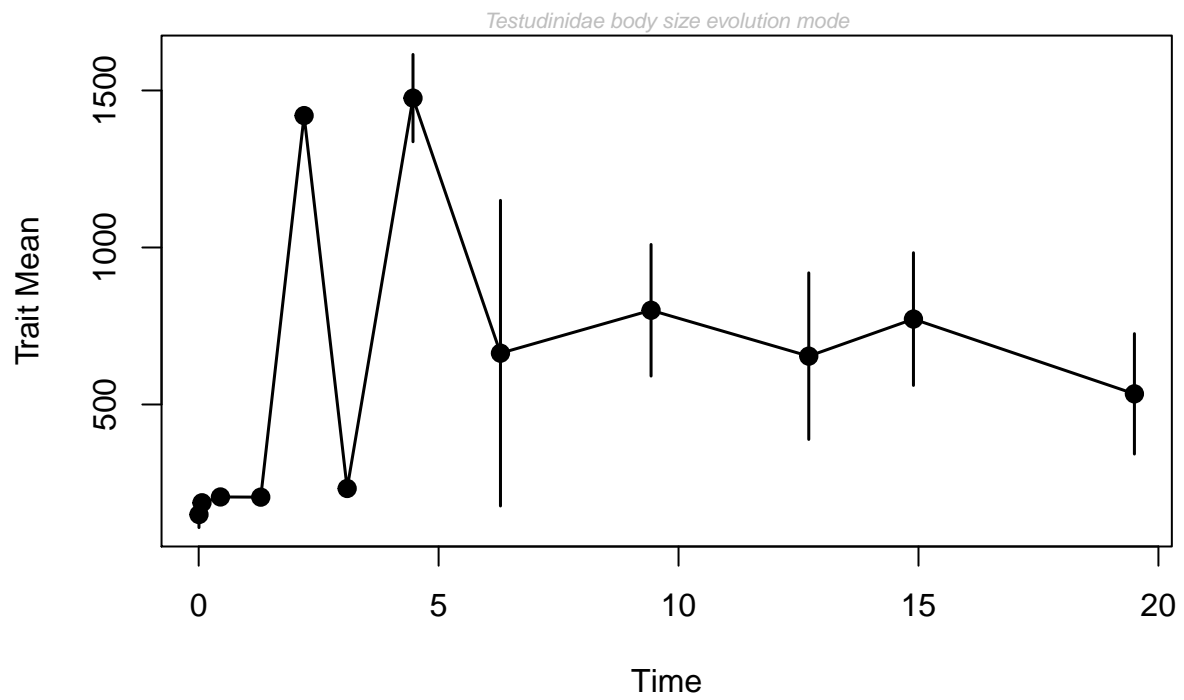


Figure S8: paleoTS, genera, Europe, continental

Table S6: Model-fitting results for testudinidae, genera, Europe, continental

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -87.93137 | 2 | 181.3627 | 0.009 |
| URW | -92.56882 | 1 | 187.5821 | 0.000 |
| Stasis | -83.21073 | 2 | 171.9215 | 0.991 |

Europe, genera, insular

Table S7: paleoTs object, Europe, insular

| mm | nn | vv | tt |
|----------|----|--------|---------|
| 187.5077 | 1 | 0.00 | 0.00585 |
| 831.5000 | 2 | 684.50 | 0.06885 |
| 722.5000 | 1 | 0.00 | 0.45350 |

| mm | nn | vv | tt |
|-----------|----|------------|---------|
| 835.0833 | 4 | 168423.36 | 1.29350 |
| 1005.0000 | 2 | 1462050.00 | 2.19700 |
| 451.6667 | 3 | 40558.33 | 3.09400 |
| 826.1667 | 2 | 15196.06 | 4.46600 |
| 1850.0000 | 1 | 0.00 | 6.28900 |

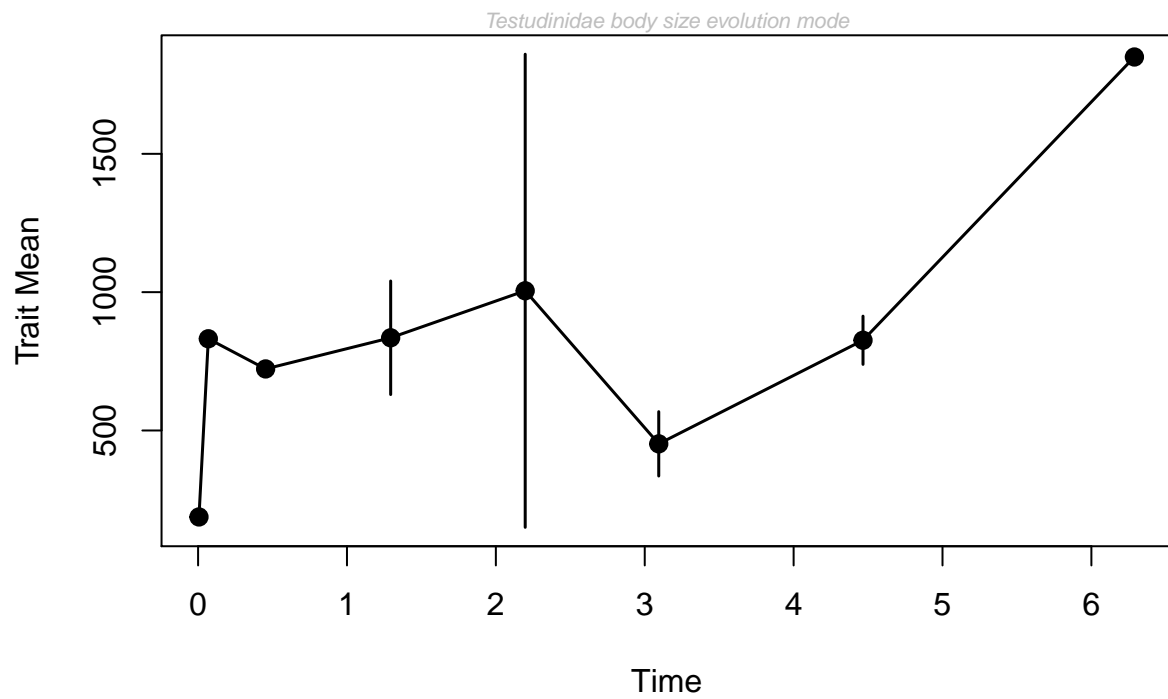


Figure S9: paleoTS, genera, Europe, insular

Table S8: Model-fitting results for testudinidae, genera, Europe, insular

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -67.12192 | 2 | 141.2438 | 0.000 |
| URW | -57.51634 | 1 | 117.8327 | 0.074 |
| Stasis | -52.89638 | 2 | 112.7928 | 0.926 |

Eurasia, genera

Table S9: paleoTS object, Eurasia

| | tt | mm | vv | nn |
|------------|-----------|----|------------|----|
| 0.0000005 | 137.2637 | | 0.000 | 1 |
| 0.0058500 | 236.8217 | | 9760.467 | 5 |
| 0.0688500 | 530.0000 | | 122579.333 | 4 |
| 0.4535000 | 377.8167 | | 89203.953 | 3 |
| 1.2935000 | 777.5579 | | 162641.142 | 7 |
| 2.1970000 | 909.6667 | | 562217.222 | 5 |
| 3.0940000 | 892.0000 | | 381770.000 | 5 |
| 4.4660000 | 1048.0556 | | 296417.219 | 6 |
| 6.2890000 | 1208.9167 | | 849651.021 | 3 |
| 9.4270000 | 800.0508 | | 263434.389 | 6 |
| 12.7140000 | 653.9625 | | 351634.528 | 5 |
| 14.8950000 | 772.0000 | | 223154.375 | 5 |
| 19.5000000 | 513.8533 | | 162399.349 | 5 |

Eurasia, genera, continental

Table S10: paleoTS object, Eurasia, continental

| | tt | mm | vv | nn |
|-----------|-----------|----|------------|----|
| 0.0000005 | 137.2637 | | 0.000 | 1 |
| 0.0058500 | 238.0120 | | 9654.865 | 5 |
| 0.0688500 | 228.5000 | | 3444.500 | 2 |
| 0.4535000 | 205.4750 | | 198.005 | 2 |
| 1.2935000 | 595.5388 | | 191487.404 | 4 |
| 2.1970000 | 1044.5833 | | 442006.250 | 4 |
| 3.0940000 | 1110.8333 | | 581102.083 | 3 |
| 4.4660000 | 1159.0000 | | 439728.667 | 4 |
| 6.2890000 | 1092.2500 | | 788605.188 | 3 |

| | tt | mm | vv | nn |
|--|------------|----------|------------|----|
| | 9.4270000 | 800.0508 | 263434.389 | 6 |
| | 12.7140000 | 653.9625 | 351634.528 | 5 |
| | 14.8950000 | 772.0000 | 223154.375 | 5 |
| | 19.5000000 | 513.8533 | 162399.349 | 5 |

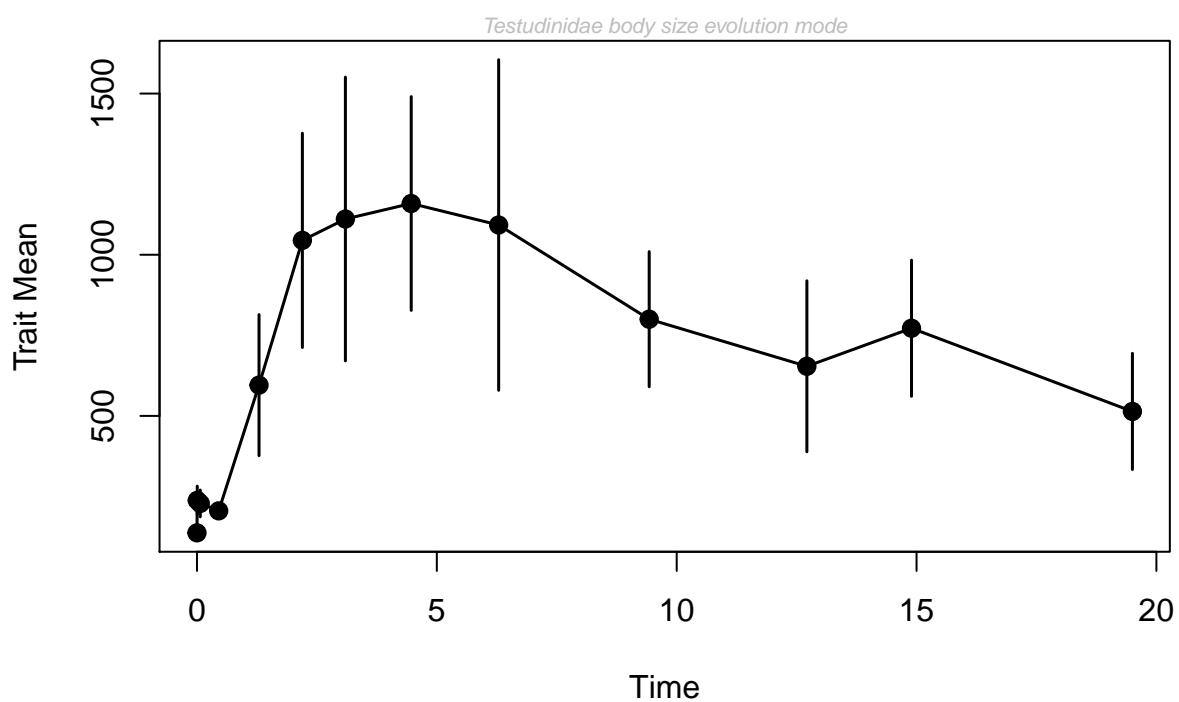


Figure S10: paleoTS, genera, Eurasia, continental

Table S11: Model-fitting results for testudinidae, genera, Eurasia, continental

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -82.20698 | 2 | 169.7473 | 0.222 |
| URW | -82.42344 | 1 | 167.2469 | 0.776 |
| Stasis | -87.19538 | 2 | 179.7241 | 0.002 |

Eurasia, genera, insular

Table S12: paleoTS object, Eurasia, insular

| tt | mm | vv | nn |
|------------|-----------|------------|----|
| 0.0000005 | 137.2637 | 0.000 | 1 |
| 0.0058500 | 271.4596 | 5668.485 | 4 |
| 0.0688500 | 644.3333 | 105436.333 | 3 |
| 0.4535000 | 722.5000 | 0.000 | 1 |
| 1.2935000 | 882.0356 | 105684.077 | 6 |
| 2.1970000 | 953.6667 | 652233.889 | 5 |
| 3.0940000 | 891.0000 | 383430.000 | 5 |
| 4.4660000 | 620.4444 | 134562.926 | 3 |
| 6.2890000 | 1900.0000 | 5000.000 | 2 |
| 19.5000000 | 800.0000 | 0.000 | 1 |

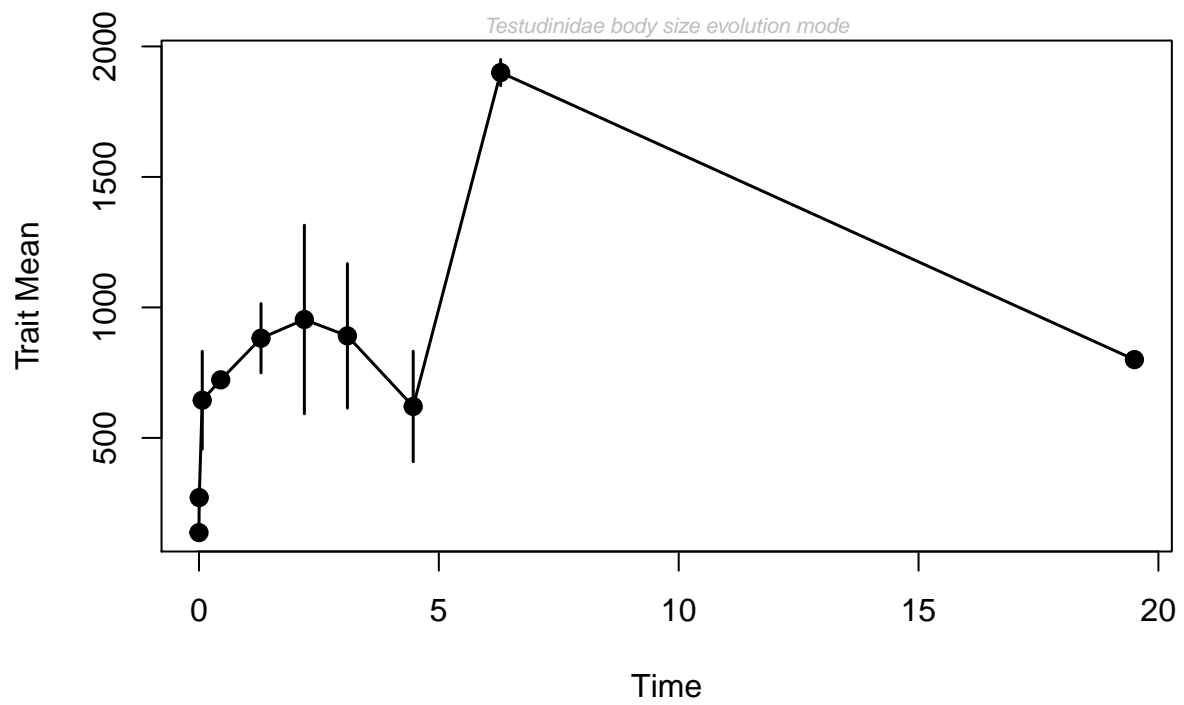


Figure S11: paleoTS, genera, Eurasia, insular

Table S13: Model-fitting results for testudinidae, genera, Eurasia, insular

| | logL | K | AICc | Akaike.wt |
|--------|-----------|---|----------|-----------|
| GRW | -69.56419 | 2 | 145.1284 | 0.193 |
| URW | -71.67437 | 1 | 145.9202 | 0.130 |
| Stasis | -68.31026 | 2 | 142.6205 | 0.677 |

Appendix G Tables

Table S14: General statistics of body size data: all, per time bin, insular and continental, per continent (all referring to CL: min, max, variance, mean, logmean, median, logmedian, skewness, logskewness, kurtosis, logkurtosis)

| nCL | min | max | var | mean | logm | med | logmed | skew | logsk | kurt | logku | Variable |
|-----|--------|------|-----------|-------|------|-------|--------|------|-------|-------|-------|------------------------|
| 616 | 80.00 | 2500 | 164537.80 | 437.2 | 2.5 | 270.5 | 2.4 | 2.14 | 0.69 | 8.00 | 2.73 | all |
| 253 | 80.00 | 1300 | 67485.50 | 330.3 | 2.4 | 242.0 | 2.4 | 1.83 | 0.58 | 5.87 | 2.69 | Modern |
| 49 | 102.44 | 1250 | 69690.66 | 445.9 | 2.6 | 334.7 | 2.5 | 1.20 | 0.24 | 3.61 | 2.56 | Upper Pleistocene |
| 53 | 132.00 | 1800 | 97910.83 | 387.1 | 2.5 | 292.9 | 2.5 | 3.03 | 1.52 | 12.24 | 5.55 | Middle Pleistocene |
| 57 | 107.80 | 2000 | 161948.82 | 463.5 | 2.5 | 263.0 | 2.4 | 1.74 | 0.73 | 5.76 | 2.40 | Lower Pleistocene |
| 31 | 118.90 | 2050 | 411224.51 | 555.2 | 2.5 | 194.9 | 2.3 | 1.31 | 0.93 | 3.12 | 2.11 | Gelasian |
| 21 | 90.00 | 1600 | 270535.82 | 610.6 | 2.6 | 428.0 | 2.6 | 1.00 | 0.14 | 2.50 | 1.99 | Piacencian |
| 26 | 176.00 | 2500 | 476162.71 | 955.2 | 2.9 | 857.5 | 2.9 | 1.11 | -0.40 | 3.56 | 2.30 | Zanclean |
| 10 | 140.00 | 2100 | 602611.21 | 948.9 | 2.8 | 916.0 | 2.9 | 0.26 | -0.22 | 1.49 | 1.29 | Messinian |
| 45 | 107.00 | 1540 | 175470.12 | 462.7 | 2.5 | 250.0 | 2.4 | 1.49 | 0.81 | 3.74 | 2.54 | Tortonian |
| 27 | 111.00 | 1500 | 126060.40 | 337.7 | 2.4 | 220.0 | 2.3 | 2.49 | 1.77 | 7.77 | 5.30 | Serravallian |
| 14 | 270.00 | 1600 | 230451.33 | 747.9 | 2.8 | 700.0 | 2.8 | 0.30 | 0.03 | 1.55 | 1.18 | Langhian |
| 30 | 113.00 | 1100 | 76288.76 | 406.8 | 2.5 | 302.4 | 2.5 | 1.27 | 0.45 | 3.45 | 2.26 | Burdigalian/Aquitanian |
| 253 | 80.00 | 1300 | 67485.50 | 330.3 | 2.4 | 242.0 | 2.4 | 1.83 | 0.58 | 5.87 | 2.69 | Modern |
| 363 | 90.00 | 2500 | 219004.66 | 511.7 | 2.6 | 285.6 | 2.5 | 1.83 | 0.68 | 6.11 | 2.42 | Fossil |
| 469 | 81.00 | 2500 | 157808.79 | 392.9 | 2.5 | 250.0 | 2.4 | 2.65 | 1.07 | 10.57 | 3.74 | continental |
| 147 | 80.00 | 2000 | 160834.35 | 578.5 | 2.6 | 500.0 | 2.7 | 1.02 | -0.27 | 3.95 | 2.05 | insular |

Table S14 – continued from previous page

| nCL | min | max | var | mean | logm | med | logmed | skew | logsk | kurt | logku | Variable |
|-----|--------|------|-----------|-------|------|-------|--------|------|-------|------|-------|------------|
| 157 | 81.00 | 830 | 17009.02 | 244.0 | 2.3 | 221.0 | 2.3 | 1.92 | 0.29 | 8.09 | 2.98 | modern-con |
| 96 | 80.00 | 1300 | 118641.09 | 471.5 | 2.6 | 353.0 | 2.5 | 0.82 | 0.01 | 2.47 | 1.77 | modern-ins |
| 312 | 90.00 | 2500 | 212116.79 | 467.9 | 2.5 | 270.0 | 2.4 | 2.11 | 0.96 | 7.25 | 2.96 | fossil-con |
| 51 | 150.00 | 2000 | 180825.40 | 780.0 | 2.8 | 750.0 | 2.9 | 1.11 | -0.40 | 4.02 | 3.18 | fossil-ins |
| 142 | 80.00 | 2050 | 112417.26 | 347.7 | 2.4 | 193.5 | 2.3 | 2.10 | 0.68 | 7.97 | 2.48 | Africa |
| 242 | 102.44 | 1800 | 82209.71 | 415.0 | 2.5 | 302.2 | 2.5 | 1.92 | 0.75 | 6.79 | 2.91 | America |
| 59 | 150.00 | 2100 | 323123.20 | 585.5 | 2.6 | 280.0 | 2.4 | 1.43 | 0.85 | 3.61 | 2.24 | Asia |
| 173 | 107.00 | 2500 | 254222.84 | 491.2 | 2.5 | 245.0 | 2.4 | 1.86 | 0.81 | 6.30 | 2.34 | Europe |

Table S15: Overview over genera (modern and fossil) per time bin, with sample sizes and mean CL.

| EpochBins | Genus | n | meanCL |
|--------------------|----------------|----|-----------|
| Modern | Aldabrachelys | 12 | 974.5833 |
| Modern | Astrochelys | 14 | 366.2143 |
| Modern | Centrochelys | 3 | 493.3333 |
| Modern | Chelonoidis | 45 | 531.5178 |
| Modern | Chersina | 15 | 176.2667 |
| Modern | Cylindraspis | 5 | 724.0000 |
| Modern | Geochelone | 8 | 252.1250 |
| Modern | Gopherus | 23 | 302.4839 |
| Modern | Hesperotestudo | 1 | 250.0000 |
| Modern | Homopus | 7 | 139.2857 |
| Modern | Indotestudo | 16 | 242.9875 |
| Modern | Kinixys | 15 | 213.0667 |
| Modern | Malacochersus | 2 | 166.5000 |
| Modern | Manouria | 9 | 380.7778 |
| Modern | Psammobates | 17 | 113.4118 |
| Modern | Pyxis | 16 | 124.1875 |
| Modern | Stigmochelys | 6 | 405.3333 |
| Modern | Testudo | 39 | 197.5436 |
| Upper Pleistocene | Centrochelys | 1 | 850.0000 |
| Upper Pleistocene | Chelonoidis | 11 | 693.1818 |
| Upper Pleistocene | Eurotestudo | 1 | 187.0000 |
| Upper Pleistocene | gen. | 1 | 813.0000 |
| Upper Pleistocene | Geochelone | 2 | 475.0000 |
| Upper Pleistocene | Gopherus | 22 | 294.1545 |
| Upper Pleistocene | Hesperotestudo | 10 | 468.2760 |
| Upper Pleistocene | Indotestudo | 1 | 270.0000 |
| Middle Pleistocene | Centrochelys | 4 | 722.5000 |
| Middle Pleistocene | Chelonoidis | 1 | 1139.0000 |

Table S15 – *continued from previous page*

| EpochBins | Genus | n | meanCL |
|--------------------|----------------|----|-----------|
| Middle Pleistocene | Eurotestudo | 4 | 195.5250 |
| Middle Pleistocene | Geochelone | 1 | 170.0000 |
| Middle Pleistocene | Gopherus | 33 | 307.0721 |
| Middle Pleistocene | Hesperotestudo | 5 | 882.0000 |
| Middle Pleistocene | Testudo | 5 | 198.7400 |
| Lower Pleistocene | Centrochelys | 4 | 762.5000 |
| Lower Pleistocene | Cheirogaster | 2 | 857.0000 |
| Lower Pleistocene | Chelonoidis | 3 | 716.6667 |
| Lower Pleistocene | Eurotestudo | 4 | 201.5250 |
| Lower Pleistocene | gen. | 1 | 900.0000 |
| Lower Pleistocene | Geochelone | 1 | 340.0000 |
| Lower Pleistocene | Gopherus | 13 | 316.8077 |
| Lower Pleistocene | Hesperotestudo | 16 | 323.0562 |
| Lower Pleistocene | Megalochelys | 5 | 1041.8800 |
| Lower Pleistocene | Psammobates | 1 | 107.8000 |
| Lower Pleistocene | Testudo | 6 | 259.1667 |
| Lower Pleistocene | Titanochelon | 1 | 1300.0000 |
| Gelasian | Centrochelys | 1 | 2050.0000 |
| Gelasian | Eurotestudo | 1 | 150.0000 |
| Gelasian | Gopherus | 15 | 185.7467 |
| Gelasian | Hesperotestudo | 2 | 1000.0000 |
| Gelasian | Manouria | 1 | 900.0000 |
| Gelasian | Megalochelys | 3 | 1683.3333 |
| Gelasian | Testudo | 6 | 166.0000 |
| Gelasian | Titanochelon | 2 | 1640.0000 |
| Piacencian | Aldabrachelys | 3 | 1333.3333 |
| Piacencian | Centrochelys | 1 | 610.0000 |
| Piacencian | Chelonoidis | 4 | 442.7500 |
| Piacencian | Gopherus | 1 | 885.5000 |

Table S15 – *continued from previous page*

| EpochBins | Genus | n | meanCL |
|--------------|----------------|----|-----------|
| Piacencian | Hesperotestudo | 5 | 211.1600 |
| Piacencian | Homopus | 1 | 90.0000 |
| Piacencian | Megalochelys | 2 | 1600.0000 |
| Piacencian | Testudo | 3 | 230.0000 |
| Piacencian | Titanochelon | 1 | 520.0000 |
| Zanclean | Caudochelys | 2 | 805.5000 |
| Zanclean | Centrochelys | 3 | 913.3333 |
| Zanclean | Cheirogaster | 1 | 739.0000 |
| Zanclean | Ergilemys | 2 | 209.0000 |
| Zanclean | Geochelone | 6 | 741.0000 |
| Zanclean | Hesperotestudo | 1 | 195.8000 |
| Zanclean | Testudo | 5 | 1377.0000 |
| Zanclean | Titanochelon | 6 | 1300.0000 |
| Messinian | Hesperotestudo | 2 | 941.0000 |
| Messinian | Megalochelys | 2 | 1950.0000 |
| Messinian | Testudo | 4 | 176.7500 |
| Messinian | Titanochelon | 2 | 1500.0000 |
| Tortonian | “Hadrianus” | 1 | 1000.0000 |
| Tortonian | Cheirogaster | 3 | 1288.3333 |
| Tortonian | gen. | 3 | 660.0000 |
| Tortonian | Geochelone | 3 | 741.3333 |
| Tortonian | Gopherus | 6 | 354.0000 |
| Tortonian | Hesperotestudo | 4 | 439.9750 |
| Tortonian | Paleotestudo | 3 | 233.6667 |
| Tortonian | Testudo | 20 | 218.3050 |
| Tortonian | Titanochelon | 2 | 1400.0000 |
| Serravallian | Cheirogaster | 2 | 1250.0000 |
| Serravallian | gen. | 1 | 270.0000 |
| Serravallian | Gopherus | 1 | 500.0000 |

Table S15 – *continued from previous page*

| EpochBins | Genus | n | meanCL |
|-----------------------|----------------|----|-----------|
| Serravallian | Paleotestudo | 19 | 206.5789 |
| Serravallian | Testudo | 3 | 190.2333 |
| Serravallian | Titanochelon | 1 | 1353.0000 |
| Langhian | Caudochelys | 1 | 339.9000 |
| Langhian | Chelonoidis | 3 | 553.3333 |
| Langhian | Ergilemys | 1 | 1000.0000 |
| Langhian | gen. | 1 | 1000.0000 |
| Langhian | Paleotestudo | 2 | 272.5000 |
| Langhian | Testudo | 2 | 337.5000 |
| Langhian | Titanochelon | 4 | 1312.5000 |
| Burdigalian/Aquitania | Caudochelys | 1 | 334.0000 |
| Burdigalian/Aquitania | gen. | 1 | 270.0000 |
| Burdigalian/Aquitania | Geochelone | 4 | 652.5000 |
| Burdigalian/Aquitania | Impregnochelys | 1 | 620.0000 |
| Burdigalian/Aquitania | Mesocherus | 5 | 180.0000 |
| Burdigalian/Aquitania | Namibchersus | 9 | 518.1111 |
| Burdigalian/Aquitania | Paleotestudo | 2 | 146.1500 |
| Burdigalian/Aquitania | Testudo | 6 | 252.1167 |
| Burdigalian/Aquitania | Titanochelon | 1 | 1001.0000 |

Table S16: General overview over genera, with sample sizes and mean CL.

| Genus | n | meanCL |
|---------------|----|-----------|
| “Hadrianus” | 1 | 1000.0000 |
| Aldabrachelys | 15 | 1046.3333 |
| Astrochelys | 14 | 366.2143 |
| Caudochelys | 4 | 571.2250 |
| Centrochelys | 17 | 804.1176 |
| Cheirogaster | 8 | 1102.2500 |
| Chelonoidis | 67 | 571.0940 |

Table S16 – *continued from previous page*

| Genus | n | meanCL |
|----------------|-----|-----------|
| Chersina | 15 | 176.2667 |
| Cylindraspis | 5 | 724.0000 |
| Ergilemys | 3 | 472.6667 |
| Eurotestudo | 10 | 192.5200 |
| gen. | 8 | 654.1250 |
| Geochelone | 25 | 510.2800 |
| Gopherus | 114 | 298.0361 |
| Hesperotestudo | 46 | 465.3296 |
| Homopus | 8 | 133.1250 |
| Impregnochelys | 1 | 620.0000 |
| Indotestudo | 17 | 244.5765 |
| Kinixys | 15 | 213.0667 |
| Malacochersus | 2 | 166.5000 |
| Manouria | 10 | 432.7000 |
| Megalochelys | 12 | 1446.6167 |
| Mesocherus | 5 | 180.0000 |
| Namibchersus | 9 | 518.1111 |
| Paleotestudo | 26 | 210.1269 |
| Psammobates | 18 | 113.1000 |
| Pyxis | 16 | 124.1875 |
| Stigmochelys | 6 | 405.3333 |
| Testudo | 99 | 269.2465 |
| Titanochelon | 20 | 1315.2000 |

Table S17: Data set, fossil.

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|-------------------------|--------|-----------|-----------|----------|--------|--------|
| Astrochelys | Astrochelys radiata | 395.00 | m | Modern | 0.000001 | y | Africa |
| Kinixys | Kinixys belliana | 162.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates geometricus | 107.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys belliana | 157.00 | m | Modern | 0.000001 | n | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 870.00 | m | Modern | 0.000001 | y | Africa |
| Kinixys | Kinixys belliana | 174.00 | m | Modern | 0.000001 | n | Africa |
| Stigmochelys | Stigmochelys pardalis | 345.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates geometricus | 92.00 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 179.30 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 170.00 | m | Modern | 0.000001 | n | Africa |
| Testudo | Testudo kleinmanni | 144.00 | m | Modern | 0.000001 | n | Africa |
| Malacochersus | Malacochersus tornieri | 153.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates oculifer | 119.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys homeana | 193.00 | m | Modern | 0.000001 | n | Africa |
| Cylindraspis | Cylindraspis vosmaeri | 500.00 | m | Modern | 0.000001 | y | Africa |
| Homopus | Homopus aerolatus | 88.00 | m | Modern | 0.000001 | n | Africa |
| Stigmochelys | Stigmochelys pardalis | 405.00 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 162.00 | m | Modern | 0.000001 | n | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|--------------------------|--------|-----------|-----------|----------|--------|--------|
| Kinixys | Kinixys belliana | 180.00 | m | Modern | 0.000001 | n | Africa |
| Astrochelys | Astrochelys radiata | 285.00 | m | Modern | 0.000001 | y | Africa |
| Kinixys | Kinixys erosa | 400.00 | m | Modern | 0.000001 | n | Africa |
| Astrochelys | Astrochelys radiata | 242.00 | m | Modern | 0.000001 | y | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 810.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis planicauda | 126.00 | m | Modern | 0.000001 | y | Africa |
| Cylindraspis | Cylindraspis indica | 600.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates tentorius | 111.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys erosa | 164.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys erosa | 271.00 | m | Modern | 0.000001 | n | Africa |
| Indotestudo | Indotestudo travancorica | 224.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates oculifer | 101.00 | m | Modern | 0.000001 | n | Africa |
| Homopus | Homopus signatus | 94.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys belliana | 194.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys belliana | 230.00 | m | Modern | 0.000001 | n | Africa |
| Stigmochelys | Stigmochelys pardalis | 720.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys homeana | 223.00 | m | Modern | 0.000001 | n | Africa |
| Kinixys | Kinixys lobatsiana | 200.00 | m | Modern | 0.000001 | n | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|------------------------|---------|-----------|-------------------|----------|--------|--------|
| Kinixys | Kinixys natalensis | 160.00 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 202.00 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 351.00 | m | Modern | 0.000001 | y | Africa |
| Homopus | Homopus femoralis | 168.00 | m | Modern | 0.000001 | n | Africa |
| Centrochelys | Centrochelys sulcata | 215.00 | m | Modern | 0.000001 | n | Africa |
| Astrochelys | Astrochelys yniphora | 307.00 | m | Modern | 0.000001 | y | Africa |
| Chersina | Chersina angulata | 181.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates tentorius | 145.00 | m | Modern | 0.000001 | n | Africa |
| Stigmochelys | Stigmochelys pardalis | 315.00 | m | Modern | 0.000001 | n | Africa |
| Pyxis | Pyxis planicauda | 160.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates antiquorum | 107.80 | m | Lower Pleistocene | 1.800000 | n | Africa |
| Stigmochelys | Stigmochelys pardalis | 350.00 | m | Modern | 0.000001 | n | Africa |
| Aldabrachelys | Aldabrachelys abrupta | 1000.00 | mo | Modern | 0.002000 | y | Africa |
| Chersina | Chersina angulata | 181.90 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates tentorius | 116.00 | m | Modern | 0.000001 | y | Africa |
| Astrochelys | Astrochelys yniphora | 415.00 | m | Modern | 0.000001 | y | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 770.00 | m | Modern | 0.000001 | y | Africa |
| Chersina | Chersina angulata | 160.00 | m | Modern | 0.000001 | n | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|--------------------------|--------|-----------|------------------------|-----------|--------|--------|
| Chersina | Chersina angulata | 148.00 | m | Modern | 0.000001 | n | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 720.00 | m | Modern | 0.000001 | y | Africa |
| Astrochelys | Astrochelys yniphora | 426.00 | m | Modern | 0.000001 | y | Africa |
| Astrochelys | Astrochelys radiata | 334.00 | m | Modern | 0.000001 | y | Africa |
| Centrochelys | Centrochelys sulcata | 830.00 | m | Modern | 0.000001 | n | Africa |
| Pyxis | Pyxis arachnoides | 144.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis arachnoides | 86.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis arachnoides | 154.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis arachnoides | 110.00 | m | Modern | 0.000001 | y | Africa |
| Namibchersus | Namibchersus namaquensis | 254.00 | m | Burdigalian/Aquitanian | 18.000000 | n | Africa |
| Pyxis | Pyxis planicauda | 132.00 | m | Modern | 0.000001 | y | Africa |
| Homopus | Homopus boulengeri | 110.00 | m | Modern | 0.000001 | n | Africa |
| Pyxis | Pyxis planicauda | 134.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis planicauda | 120.00 | m | Modern | 0.000001 | y | Africa |
| Homopus | Homopus solus | 109.00 | m | Modern | 0.000001 | n | Africa |
| Centrochelys | Centrochelys sulcata | 435.00 | m | Modern | 0.000001 | n | Africa |
| Pyxis | Pyxis arachnoides | 110.00 | m | Modern | 0.000001 | y | Africa |
| Pyxis | Pyxis arachnoides | 80.00 | m | Modern | 0.000001 | y | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|------------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Astrochelys | Astrochelys radiata | 305.00 | m | Modern | 0.000001 | y | Africa |
| Stigmochelys | Stigmochelys pardalis | 297.00 | m | Modern | 0.000001 | n | Africa |
| Namibchelys | Namibchelys aff. namaquensis | 1100.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 875.00 | m | Modern | 0.000001 | y | Africa |
| Namibchelys | Namibchelys aff. namaquensis | 550.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Chersina | Chersina angulata | 166.40 | m | Modern | 0.000001 | n | Africa |
| Chersina | Chersina angulata | 171.60 | m | Modern | 0.000001 | y | Africa |
| Chersina | Chersina angulata | 136.00 | m | Modern | 0.000001 | n | Africa |
| Geochelone | Geochelone stromeri | 425.00 | m | Zanclean | 4.466000 | n | Africa |
| Testudo | Testudo sp. | 184.00 | mf | Gelasian | 2.500000 | n | Africa |
| Geochelone | Geochelone stromeri | 350.00 | m | Zanclean | 4.466000 | n | Africa |
| Namibchelys | Namibchelys namaquensis | 264.00 | m | Burdigalian/Aquitanian | 19.500000 | n | Africa |
| Pyxis | Pyxis arachnoides | 150.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates oculifer | 103.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates oculifer | 105.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates geometricus | 118.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates geometricus | 105.00 | m | Modern | 0.000001 | n | Africa |
| Testudo | Testudo oughlamensis | 120.00 | mo | Gelasian | 2.500000 | n | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|-------------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Astrochelys | Astrochelys radiata | 355.00 | m | Modern | 0.000001 | y | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 800.00 | m | Modern | 0.000001 | y | Africa |
| Namibchersus | Namibchersus aff. namaquensis | 440.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Chersina | Chersina angulata | 153.50 | m | Modern | 0.000001 | n | Africa |
| Cylindraspis | Cylindraspis triserrata | 1100.00 | m | Modern | 0.000001 | y | Africa |
| Astrochelys | Astrochelys yniphora | 486.00 | m | Modern | 0.000001 | y | Africa |
| Chersina | Chersina angulata | 161.30 | m | Modern | 0.000001 | y | Africa |
| Aldabrachelys | “Aldabrachelys” laetoliensis | 1000.00 | mo | Piacencian | 2.703000 | n | Africa |
| Geochelone | Geochelone sp. | 1446.00 | eh | Tortonian | 8.476000 | n | Africa |
| Kinixys | Kinixys sp. | 268.00 | ef | Modern | 0.009500 | n | Africa |
| Aldabrachelys | Aldabrachelys grandidieri | 1240.00 | m | Modern | 0.001500 | y | Africa |
| Testudo | Testudo aff. kenitrensis | 142.00 | mf | Gelasian | 2.500000 | n | Africa |
| Testudo | Testudo sp. | 200.00 | mf | Gelasian | 2.500000 | n | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 1190.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates tentorius | 95.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates tentorius | 81.00 | m | Modern | 0.000001 | n | Africa |
| Pyxis | Pyxis planicauda | 114.00 | m | Modern | 0.000001 | y | Africa |
| Mesocheirus | Mesocheirus orangeus | 160.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|----------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Pyxis | Pyxis planicauda | 148.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates oculifer | 111.00 | m | Modern | 0.000001 | n | Africa |
| Geochelone | Geochelone crassa | 865.00 | mf | Zanclean | 4.145000 | n | Africa |
| Pyxis | Pyxis arachnoides | 111.00 | m | Modern | 0.000001 | y | Africa |
| Impregnochelys | Impregnochelys pachytectis | 620.00 | m | Burdigalian/Aquitanian | 19.500000 | n | Africa |
| Mesocherus | Mesocherus orangeus | 200.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Namibichersus | Namibichersus namaquensis | 815.00 | m | Burdigalian/Aquitanian | 18.000000 | n | Africa |
| Chersina | Chersina angulata | 120.00 | m | Modern | 0.000001 | n | Africa |
| Namibichersus | Namibichersus namaquensis | 300.00 | m | Burdigalian/Aquitanian | 19.500000 | n | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 1140.00 | m | Modern | 0.000001 | y | Africa |
| Astrochelys | Astrochelys radiata | 400.00 | m | Modern | 0.000001 | y | Africa |
| Aldabrachelys | Aldabrachelys grandidieri | 1250.00 | mo | Modern | 0.001500 | y | Africa |
| Astrochelys | Astrochelys yniphora | 446.00 | m | Modern | 0.000001 | y | Africa |
| Cylindraspis | Cylindraspis peltastes | 420.00 | m | Modern | 0.000001 | y | Africa |
| Psammobates | Psammobates geometricus | 165.00 | m | Modern | 0.000001 | n | Africa |
| Mesocherus | Mesocherus orangeus | 180.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Psammobates | Psammobates oculifer | 147.00 | m | Modern | 0.000001 | n | Africa |
| Cylindraspis | Cylindraspis inepta | 1000.00 | m | Modern | 0.000001 | y | Africa |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|--------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Centrochelys | Centrochelys atlantica | 400.00 | mo | Lower Pleistocene | 1.300000 | y | Africa |
| Aldabrachelys | Aldabrachelys gigantea | 1030.00 | m | Modern | 0.000001 | y | Africa |
| Homopus | Homopus aerolatus | 300.00 | m | Modern | 0.000001 | n | Africa |
| Psammobates | Psammobates oculifer | 107.00 | m | Modern | 0.000001 | n | Africa |
| Namibchersus | Namibchersus namaquensis | 470.00 | m | Burdigalian/Aquitanian | 18.000000 | n | Africa |
| Astrochelys | Astrochelys yniphora | 370.00 | m | Modern | 0.000001 | y | Africa |
| Centrochelys | Centrochelys marocana | 2050.00 | mo | Gelasian | 2.500000 | n | Africa |
| Kinixys | Kinixys spekii | 220.00 | m | Modern | 0.000001 | n | Africa |
| Homopus | Homopus fenestratus | 90.00 | mo | Piacencian | 3.056500 | n | Africa |
| Malacochersus | Malacochersus tornieri | 180.00 | m | Modern | 0.000001 | n | Africa |
| Homopus | Homopus signatus | 106.00 | m | Modern | 0.000001 | n | Africa |
| Mesocheirus | Mesocheirus orangeus | 180.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Testudo | Testudo kenitrensis | 132.00 | mo | Middle Pleistocene | 0.453500 | n | Africa |
| Mesocheirus | Mesocheirus orangeus | 180.00 | mo | Burdigalian/Aquitanian | 17.250000 | n | Africa |
| Astrochelys | Astrochelys yniphora | 361.00 | m | Modern | 0.000001 | y | Africa |
| Namibchersus | Namibchersus namaquensis | 470.00 | m | Burdigalian/Aquitanian | 18.000000 | n | Africa |
| Geochelone | Geochelone elegans | 208.00 | m | Modern | 0.000001 | n | Asia |
| Geochelone | Geochelone elegans | 245.00 | m | Modern | 0.000001 | n | Asia |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|--------------------------|---------|-----------|-------------------|----------|--------|------|
| Geochelone | Geochelone elegans | 221.00 | m | Modern | 0.000001 | n | Asia |
| Geochelone | Geochelone elegans | 220.00 | m | Modern | 0.000001 | y | Asia |
| Geochelone | Geochelone elegans | 221.00 | m | Modern | 0.000001 | n | Asia |
| Geochelone | Geochelone platynota | 222.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo forstenii | 202.00 | m | Modern | 0.000001 | y | Asia |
| Megalochelys | Megalochelys sondaari | 1000.00 | ec | Lower Pleistocene | 1.350000 | y | Asia |
| Indotestudo | Indotestudo forstenii | 309.00 | m | Modern | 0.000001 | y | Asia |
| Megalochelys | Megalochelys atlas | 1650.00 | mo | Gelasian | 2.000000 | y | Asia |
| Indotestudo | Indotestudo forstenii | 199.00 | m | Modern | 0.000001 | y | Asia |
| Indotestudo | Indotestudo elongata | 244.20 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo travancorica | 244.20 | m | Modern | 0.000001 | n | Asia |
| Testudo | Testudo graeca | 300.00 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria impressa | 165.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo elongata | 276.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo elongata | 235.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo elongata | 208.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo elongata | 166.00 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria impressa | 350.00 | m | Modern | 0.000001 | n | Asia |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|--------------------------|---------|-----------|-------------------|----------|--------|------|
| Testudo | Testudo graeca | 250.00 | m | Modern | 0.000001 | n | Asia |
| Testudo | Testudo graeca | 280.00 | m | Modern | 0.000001 | y | Asia |
| Manouria | Manouria emys | 212.00 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria emys | 445.00 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria emys | 330.00 | m | Modern | 0.000001 | n | Asia |
| Megalochelys | Megalochelys atlas | 2000.00 | mo | Gelasian | 2.190500 | n | Asia |
| Testudo | Testudo changshanensis | 330.00 | mo | Lower Pleistocene | 1.684500 | n | Asia |
| Indotestudo | Indotestudo forstenii | 200.50 | m | Modern | 0.000001 | y | Asia |
| Testudo | Testudo horsfieldii | 280.00 | m | Modern | 0.000001 | n | Asia |
| Megalochelys | Megalochelys sondaari | 818.00 | ec | Lower Pleistocene | 1.350000 | y | Asia |
| Indotestudo | Indotestudo travancorica | 249.70 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria punjabiensis | 900.00 | mo | Gelasian | 2.190500 | n | Asia |
| Megalochelys | Megalochelys sp. | 1200.00 | ev | Lower Pleistocene | 0.900000 | y | Asia |
| Indotestudo | Indotestudo elongata | 270.00 | m | Upper Pleistocene | 0.037000 | n | Asia |
| Ergilemys | Ergilemys oskarkuhni | 220.00 | m | Zanclean | 3.950000 | n | Asia |
| Megalochelys | Megalochelys atlas | 1600.00 | mo | Piacencian | 3.094000 | n | Asia |
| Geochelone | Geochelone platynota | 300.00 | m | Modern | 0.000001 | n | Asia |
| Aldabrachelys | Aldabrachelys ? sp. | 1500.00 | mo | Piacencian | 3.000000 | n | Asia |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|--------------------------|---------|-----------|------------------------|-----------|--------|------|
| Indotestudo | Indotestudo travancorica | 219.60 | m | Modern | 0.000001 | n | Asia |
| Megalochelys | Megalochelys sp. | 191.40 | m | Lower Pleistocene | 1.684500 | y | Asia |
| Manouria | Manouria oyamai | 450.00 | mo | Modern | 0.011000 | y | Asia |
| Indotestudo | Indotestudo elongata | 219.60 | m | Modern | 0.000001 | n | Asia |
| Megalochelys | Megalochelys atlas | 1800.00 | m | Messinian | 5.423000 | n | Asia |
| Testudo | Testudo transcaucasia | 150.00 | mo | Gelasian | 2.190500 | n | Asia |
| Megalochelys | Megalochelys atlas | 1600.00 | mo | Piacencian | 3.094000 | n | Asia |
| Manouria | Manouria emys | 600.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo travancorica | 331.00 | m | Modern | 0.000001 | n | Asia |
| Geochelone | Geochelone sp. | 800.00 | ev | Burdigalian/Aquitanian | 16.500000 | n | Asia |
| Manouria | Manouria impressa | 275.00 | m | Modern | 0.000001 | n | Asia |
| Indotestudo | Indotestudo elongata | 360.00 | m | Modern | 0.000001 | n | Asia |
| Manouria | Manouria emys | 600.00 | m | Modern | 0.000001 | n | Asia |
| Ergilemys | Ergilemys oskarkuhni | 198.00 | m | Zanclean | 3.950000 | n | Asia |
| Megalochelys | Megalochelys sp. | 2000.00 | m | Lower Pleistocene | 1.684500 | y | Asia |
| Megalochelys | Megalochelys atlas | 1400.00 | mo | Gelasian | 2.000000 | y | Asia |
| Geochelone | Geochelone elegans | 380.00 | m | Modern | 0.000001 | n | Asia |
| gen. | gen. indet. | 900.00 | mo | Lower Pleistocene | 1.684500 | n | Asia |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|--------------------------|---------|-----------|--------------------|----------|--------|---------|
| Testudo | Testudo ranovi | 200.00 | mo | Gelasian | 2.190500 | n | Asia |
| Aldabrachelys | Aldabrachelys ? sp. | 1500.00 | mo | Piacencian | 3.000000 | n | Asia |
| Megalochelys | Megalochelys atlas | 2100.00 | mo | Messinian | 5.423000 | n | Asia |
| Chelonoidis | Chelonoidis sp. | 550.00 | m | Modern | 0.001000 | y | America |
| Gopherus | Gopherus morafkai | 299.00 | m | Modern | 0.000001 | n | America |
| Hesperotestudo | Hesperotestudo bermudae | 500.00 | m | Middle Pleistocene | 0.310000 | y | America |
| Chelonoidis | Chelonoidis monensis | 500.00 | m | Upper Pleistocene | 0.064500 | y | America |
| Chelonoidis | Chelonoidis alburyorum | 453.00 | m | Piacencian | 3.201500 | y | America |
| Chelonoidis | Chelonoidis marcanoi | 614.00 | eh | Upper Pleistocene | 0.069000 | y | America |
| Chelonoidis | Chelonoidis marcanoi | 767.00 | eh | Upper Pleistocene | 0.069000 | y | America |
| Gopherus | Gopherus flavomarginatus | 450.00 | m | Lower Pleistocene | 1.050000 | n | America |
| Chelonoidis | Chelonoidis alburyorum | 428.00 | m | Piacencian | 3.201500 | y | America |
| Chelonoidis | Chelonoidis marcanoi | 778.00 | eh | Upper Pleistocene | 0.069000 | y | America |
| Chelonoidis | Chelonoidis sombrerensis | 990.00 | m | Upper Pleistocene | 0.069000 | y | America |
| Geochelone | Geochelone sp. | 340.00 | mo | Lower Pleistocene | 1.050000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 1500.00 | mo | Lower Pleistocene | 0.966000 | n | America |
| Gopherus | Gopherus flavomarginatus | 400.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis alburyorum | 466.00 | m | Piacencian | 3.201500 | y | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|-------------------------|---------|-----------|--------------------|----------|--------|---------|
| Chelonoidis | Chelonoidis sp. | 600.00 | mo | Upper Pleistocene | 0.069000 | y | America |
| Chelonoidis | Chelonoidis sp. | 400.00 | mo | Upper Pleistocene | 0.069000 | y | America |
| Gopherus | Gopherus berlandieri | 195.00 | m | Lower Pleistocene | 1.050000 | n | America |
| Chelonoidis | Chelonoidis sp. | 440.00 | mo | Modern | 0.001000 | y | America |
| Chelonoidis | Chelonoidis marcanoi | 530.00 | eh | Upper Pleistocene | 0.069000 | y | America |
| Chelonoidis | Chelonoidis cubensis | 1139.00 | ef | Middle Pleistocene | 0.393500 | y | America |
| Chelonoidis | Chelonoidis sp. | 800.00 | mo | Lower Pleistocene | 1.357000 | y | America |
| Gopherus | Gopherus berlandieri | 240.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis sp. | 660.00 | mo | Modern | 0.001000 | y | America |
| Chelonoidis | Chelonoidis sp. | 512.00 | mo | Modern | 0.001000 | y | America |
| Chelonoidis | Chelonoidis sp. | 854.00 | mo | Modern | 0.001000 | y | America |
| Chelonoidis | Chelonoidis sp. | 750.00 | mo | Lower Pleistocene | 1.357000 | y | America |
| Chelonoidis | Chelonoidis alburyorum | 424.00 | m | Placencian | 3.201500 | y | America |
| Chelonoidis | Chelonoidis sp. | 550.00 | mo | Modern | 0.001000 | y | America |
| Gopherus | Gopherus donlatoi | 580.00 | mo | Modern | 0.000175 | n | America |
| Hesperotestudo | Hesperotestudo bermudae | 270.00 | m | Middle Pleistocene | 0.310000 | y | America |
| Gopherus | Gopherus berlandieri | 256.30 | m | Lower Pleistocene | 1.050000 | n | America |
| Chelonoidis | Chelonoidis sp. | 600.00 | mo | Lower Pleistocene | 1.357000 | y | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|---------------|---------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Ergilemys | Ergilemys sp. | 1000.00 | m | Langhian | 14.000000 | n | Europe |
| Testudo | Testudo graeca | 195.00 | mf | Lower Pleistocene | 1.770000 | n | Europe |
| Eurotestudo | Eurotestudo aff. hermanni | 194.70 | mf | Middle Pleistocene | 0.740000 | n | Europe |
| Centrochelys | Centrochelys burchardi | 940.00 | mo | Middle Pleistocene | 0.435000 | y | Europe |
| Titanocheilon | Titanocheilon bacharidisi | 1164.00 | m | Zanclean | 3.950000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 159.50 | m | Serravallian | 13.000000 | n | Europe |
| Testudo | Testudo horsfieldii | 111.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo marginata | 210.00 | m | Lower Pleistocene | 1.720000 | n | Europe |
| Testudo | Testudo graeca | 178.20 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo graeca | 200.00 | mf | Messinian | 5.500000 | n | Europe |
| Testudo | Testudo lunellensis | 260.70 | mf | Middle Pleistocene | 0.450000 | n | Europe |
| Testudo | Testudo sp. | 500.00 | mo | Zanclean | 3.900000 | n | Europe |
| Testudo | Testudo sp. | 200.00 | mf | Messinian | 6.165000 | n | Europe |
| Testudo | Testudo hermanni | 143.50 | m | Modern | 0.000001 | y | Europe |
| Pyxis | Pyxis arachnoides | 108.00 | m | Modern | 0.000001 | n | Europe |
| Eurotestudo | Eurotestudo hermanni | 237.60 | mf | Middle Pleistocene | 0.600000 | n | Europe |
| Testudo | Testudo marginata | 246.00 | m | Modern | 0.000001 | n | Europe |
| Paleotestudo | Paleotestudo sp. | 179.30 | m | Burdigalian/Aquitanian | 16.550000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|------------------------|--------|-----------|------------------------|-----------|--------|--------|
| Centrochelys | Centrochelys burchardi | 500.00 | mo | Middle Pleistocene | 0.435000 | y | Europe |
| Testudo | Testudo graeca | 167.00 | m | Messinian | 5.500000 | n | Europe |
| Testudo | Testudo marginata | 290.00 | m | Modern | 0.000001 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 191.00 | mf | Serravallian | 13.600000 | n | Europe |
| Testudo | Testudo hermanni | 130.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo hermanni | 138.50 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo kalksburgensis | 230.00 | m | Burdigalian/Aquitanian | 19.965000 | n | Europe |
| Testudo | Testudo marginata | 250.00 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo marginata | 242.50 | m | Modern | 0.000001 | y | Europe |
| Cheirogaster | Cheirogaster sp. | 925.00 | ef | Lower Pleistocene | 0.965000 | y | Europe |
| Testudo | Testudo marginata | 246.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo horsfieldii | 123.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo marginata | 246.70 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo marginata | 241.70 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo hermanni | 195.00 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo hermanni | 250.00 | m | Modern | 0.000001 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 203.00 | m | Serravallian | 12.150000 | n | Europe |
| Testudo | Testudo horsfieldii | 114.00 | m | Modern | 0.000001 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|--------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Testudo | Testudo horsfieldii | 132.00 | m | Modern | 0.000001 | n | Europe |
| Centrochelys | Centrochelys robusta | 1200.00 | ev | Lower Pleistocene | 1.300000 | y | Europe |
| Testudo | Testudo hermanni | 183.30 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo hermanni | 196.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo hermanni | 176.90 | m | Modern | 0.000001 | n | Europe |
| Titanochelon | Titanochelon bacharidisi | 900.00 | mo | Zanclean | 3.950000 | n | Europe |
| gen. | gen. indet. | 1000.00 | mo | Langhian | 14.700000 | n | Europe |
| gen. | gen. indet. | 270.00 | mo | Serravallian | 12.200000 | n | Europe |
| Paleotestudo | Paleotestudo cf. antiqua | 113.00 | mf | Burdigalian/Aquitanian | 17.300000 | n | Europe |
| Testudo | Testudo graeca | 194.60 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo lunellensis | 231.00 | ev | Middle Pleistocene | 0.453500 | n | Europe |
| Testudo | Testudo lunellensis | 176.00 | mo | Middle Pleistocene | 0.453500 | n | Europe |
| Testudo | Testudo hermanni | 168.30 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo sp. | 2500.00 | mf | Zanclean | 3.900000 | n | Europe |
| Testudo | Testudo burgenlandica | 275.00 | m | Tortonian | 8.750000 | n | Europe |
| Testudo | Testudo kalksburgensis | 275.00 | m | Langhian | 14.500000 | n | Europe |
| Titanochelon | Titanochelon bolivari | 1150.00 | m | Messinian | 6.289000 | n | Europe |
| Paleotestudo | Paleotestudo cf. sp. | 270.00 | mo | Langhian | 14.700000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|------------------------|---------|-----------|------------------------|-----------|--------|--------|
| gen. | gen. indet. | 880.00 | m | Tortonian | 8.750000 | n | Europe |
| Eurotestudo | Eurotestudo globosa | 263.00 | m | Lower Pleistocene | 1.800000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 195.00 | mf | Serravallian | 13.000000 | n | Europe |
| Testudo | Testudo sp. | 1200.00 | mf | Zanclean | 3.960000 | n | Europe |
| Centrochelys | Centrochelys burchardi | 650.00 | mo | Middle Pleistocene | 0.435000 | y | Europe |
| Centrochelys | Centrochelys robusta | 850.00 | ev | Lower Pleistocene | 1.300000 | y | Europe |
| Testudo | Testudo catalaunica | 232.00 | m | Serravallian | 12.350000 | n | Europe |
| Geochelone | Geochelone sp. | 1000.00 | m | Burdigalian/Aquitanian | 16.650000 | n | Europe |
| Geochelone | Geochelone s. l. | 1750.00 | mo | Zanclean | 4.466000 | n | Europe |
| Eurotestudo | Eurotestudo hermanni | 170.50 | mf | Middle Pleistocene | 0.600000 | n | Europe |
| Testudo | Testudo hermanni | 160.00 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo hermanni | 157.00 | m | Modern | 0.000001 | y | Europe |
| gen. | gen. indet. | 270.00 | mo | Burdigalian/Aquitanian | 16.400000 | n | Europe |
| Testudo | Testudo hermanni | 161.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo marginata | 242.50 | m | Modern | 0.000001 | y | Europe |
| Centrochelys | Centrochelys robusta | 1100.00 | mo | Zanclean | 4.917000 | y | Europe |
| Testudo | Testudo rectogularis | 213.00 | mo | Burdigalian/Aquitanian | 16.370000 | n | Europe |
| Testudo | Testudo kalksburgensis | 225.00 | mo | Burdigalian/Aquitanian | 18.000000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|-----------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Testudo | Testudo marginata | 400.00 | m | Modern | 0.000001 | n | Europe |
| Testudo | Testudo brevittesta | 300.00 | mf | Piacencian | 2.600000 | n | Europe |
| Testudo | Testudo sp. | 232.10 | m | Tortonian | 10.750000 | n | Europe |
| Testudo | Testudo horsfieldii | 136.00 | m | Modern | 0.000001 | n | Europe |
| Titanochelon | Titanochelon cf. bolivari | 1300.00 | ev | Langhian | 14.895000 | n | Europe |
| Testudo | Testudo marginata | 290.00 | m | Lower Pleistocene | 1.300000 | y | Europe |
| Testudo | Testudo hermanni | 147.00 | m | Modern | 0.000001 | n | Europe |
| Eurotestudo | Eurotestudo hermanni | 187.00 | mf | Upper Pleistocene | 0.110500 | n | Europe |
| Eurotestudo | Eurotestudo aff. hermanni | 179.30 | mf | Middle Pleistocene | 0.740000 | n | Europe |
| Titanochelon | Titanochelon cf. perpiniana | 1001.00 | mo | Burdigalian/Aquitanian | 16.370000 | n | Europe |
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |
| Testudo | Testudo amiatiae | 140.00 | mo | Messinian | 5.815000 | n | Europe |
| Cheirogaster | Cheirogaster cf. gymnesica | 789.00 | mo | Lower Pleistocene | 1.800000 | y | Europe |
| Eurotestudo | Eurotestudo hermanni | 126.00 | mf | Lower Pleistocene | 1.150000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 283.80 | mf | Serravallian | 12.500000 | n | Europe |
| Cheirogaster | Cheirogaster sp. | 1000.00 | mo | Serravallian | 12.200000 | n | Europe |
| Paleotestudo | Paleotestudo cf. sp. | 270.00 | mo | Serravallian | 12.400000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 240.00 | mf | Serravallian | 13.600000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|-----------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Paleotestudo | Paleotestudo antiqua | 195.00 | m | Serravallian | 13.000000 | n | Europe |
| Titanochelon | Titanochelon bolivari | 1353.00 | mo | Serravallian | 12.500000 | n | Europe |
| Testudo | Testudo hermanni | 154.00 | m | Modern | 0.000001 | n | Europe |
| Centrochelys | Centrochelys robusta | 600.00 | ev | Lower Pleistocene | 1.300000 | y | Europe |
| Paleotestudo | Paleotestudo antiqua | 185.00 | mf | Serravallian | 13.000000 | n | Europe |
| Titanochelon | Titanochelon schafferi | 2500.00 | mo | Zanclean | 4.466000 | n | Europe |
| Testudo | Testudo promarginata | 310.00 | mf | Burdigalian/Aquitanian | 18.000000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 206.00 | mf | Serravallian | 13.000000 | n | Europe |
| Testudo | Testudo steinheimensis | 227.70 | mf | Serravallian | 13.000000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 234.00 | mf | Serravallian | 13.600000 | n | Europe |
| Centrochelys | Centrochelys robusta | 850.00 | mo | Upper Pleistocene | 0.066000 | y | Europe |
| Testudo | Testudo promarginata | 230.00 | mf | Burdigalian/Aquitanian | 21.500000 | n | Europe |
| Titanochelon | Titanochelon sp. | 1420.00 | mo | Gelasian | 1.850000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 240.00 | m | Serravallian | 13.000000 | n | Europe |
| Titanochelon | Titanochelon aff. schafferi | 1860.00 | m | Gelasian | 2.000000 | y | Europe |
| Testudo | Testudo hermanni | 200.00 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo steinheimensis | 111.00 | m | Serravallian | 12.150000 | n | Europe |
| Titanochelon | Titanochelon perpini | 1140.00 | m | Zanclean | 3.900000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|---------------------------|---------|-----------|--------------------|-----------|--------|--------|
| Testudo | Testudo cf. graeca | 185.00 | m | Zanclean | 3.900000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 145.00 | mf | Serravallian | 13.000000 | n | Europe |
| Cheirogaster | Cheirogaster sp. | 1170.00 | m | Tortonian | 10.250000 | n | Europe |
| Testudo | Testudo cf. promarginata | 250.00 | m | Tortonian | 8.300000 | n | Europe |
| Titanochelon | Titanochelon bolivari | 1100.00 | mo | Langhian | 15.000000 | n | Europe |
| Centrochelys | Centrochelys robusta | 790.00 | ef | Zanclean | 4.917000 | y | Europe |
| Titanochelon | Titanochelon cf. bolivari | 1600.00 | ef | Langhian | 14.895000 | n | Europe |
| Eurotestudo | Testudo hermanni | 133.10 | mf | Lower Pleistocene | 1.220000 | n | Europe |
| Testudo | Testudo hermanni | 176.60 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo s. s. | 189.00 | m | Tortonian | 8.000000 | n | Europe |
| Centrochelys | Centrochelys robusta | 850.00 | mo | Zanclean | 4.917000 | y | Europe |
| Testudo | Testudo lunellensis | 194.00 | mf | Middle Pleistocene | 0.450000 | n | Europe |
| Testudo | Testudo hermanni | 173.00 | m | Modern | 0.000001 | y | Europe |
| Paleotestudo | Paleotestudo antiqua | 229.00 | mf | Serravallian | 13.000000 | n | Europe |
| Cheirogaster | Cheirogaster sp. | 1500.00 | e | Serravallian | 13.800000 | n | Europe |
| Testudo | Testudo catalaunica | 181.00 | m | Tortonian | 11.500000 | n | Europe |
| gen. | gen. indet. | 813.00 | ef | Upper Pleistocene | 0.012500 | y | Europe |
| Titanochelon | Titanochelon cf. bolivari | 1500.00 | mf | Tortonian | 9.433000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|--------------------------|---------|-----------|-------------------|-----------|--------|--------|
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 213.00 | mf | Serravallian | 13.600000 | n | Europe |
| Testudo | Testudo sp. | 2500.00 | mf | Zanclean | 3.900000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 180.00 | m | Serravallian | 13.000000 | n | Europe |
| Paleotestudo | Paleotestudo sp. | 270.00 | mf | Tortonian | 9.500000 | n | Europe |
| Testudo | Testudo hermanni | 220.00 | mf | Lower Pleistocene | 1.300000 | n | Europe |
| Paleotestudo | Paleotestudo sp. | 170.00 | mf | Tortonian | 9.500000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 183.70 | m | Serravallian | 12.150000 | n | Europe |
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |
| Eurotestudo | Eurotestudo cf. hermanni | 150.00 | mo | Gelasian | 2.000000 | y | Europe |
| Cheirogaster | Cheirogaster gymnesica | 739.00 | ef | Zanclean | 4.450000 | y | Europe |
| Titanochelon | Titanochelon bolivari | 1300.00 | mf | Tortonian | 9.500000 | n | Europe |
| Testudo | Testudo graeca | 210.00 | mf | Tortonian | 8.450000 | n | Europe |
| Cheirogaster | Cheirogaster richardi | 1155.00 | mo | Tortonian | 10.400000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 275.00 | mf | Langhian | 15.000000 | n | Europe |
| Testudo | Testudo cf. promarginata | 250.00 | m | Tortonian | 8.300000 | n | Europe |
| Titanochelon | Titanochelon bacharidisi | 900.00 | mo | Zanclean | 3.950000 | n | Europe |
| Titanochelon | Titanochelon bacharidisi | 1196.00 | m | Zanclean | 3.950000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|--------------|------------------------|---------|-----------|------------------------|-----------|--------|--------|
| Paleotestudo | Paleotestudo antiqua | 152.00 | m | Serravallian | 13.000000 | n | Europe |
| Cheirogaster | Cheirogaster sp. | 1540.00 | ef | Tortonian | 8.300000 | n | Europe |
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |
| Paleotestudo | Paleotestudo antiqua | 220.00 | mf | Serravallian | 13.000000 | n | Europe |
| gen. | gen. indet. | 660.00 | m | Tortonian | 8.750000 | n | Europe |
| Testudo | Testudo pecorinii | 225.00 | m | Piacencian | 3.094000 | y | Europe |
| Testudo | Testudo catalaunica | 107.00 | m | Tortonian | 11.500000 | n | Europe |
| Titanochelon | Titanochelon schafferi | 1850.00 | m | Messinian | 6.250000 | y | Europe |
| Testudo | Testudo catalaunica | 175.00 | m | Tortonian | 11.500000 | n | Europe |
| Titanochelon | Titanochelon sp. | 520.00 | mo | Piacencian | 2.600000 | y | Europe |
| Testudo | Testudo promarginata | 304.70 | mf | Burdigalian/Aquitanian | 21.500000 | n | Europe |
| Titanochelon | Titanochelon gymnesica | 1300.00 | ef | Lower Pleistocene | 1.300000 | y | Europe |
| Testudo | Testudo burgenlandica | 112.00 | m | Tortonian | 8.750000 | n | Europe |
| Centrochelys | Centrochelys vulcanica | 610.00 | mo | Piacencian | 3.094000 | y | Europe |
| Testudo | Testudo brevittesta | 165.00 | mf | Piacencian | 2.600000 | n | Europe |
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |
| gen. | gen. indet. | 440.00 | m | Tortonian | 8.750000 | n | Europe |
| Testudo | Testudo sp. | 245.00 | m | Tortonian | 8.300000 | n | Europe |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|---------|-----------|--------------------|-----------|--------|---------|
| Eurotestudo | Eurotestudo hermanni | 284.00 | mf | Lower Pleistocene | 1.350000 | n | Europe |
| Testudo | Testudo hermanni | 145.90 | m | Modern | 0.000001 | y | Europe |
| Testudo | Testudo cf. promarginata | 250.00 | m | Tortonian | 8.300000 | n | Europe |
| Testudo | Testudo cf. promarginata | 250.00 | m | Tortonian | 8.300000 | n | Europe |
| Testudo | Testudo marginata | 310.00 | m | Lower Pleistocene | 1.300000 | y | Europe |
| Testudo | Testudo cf. promarginata | 250.00 | m | Tortonian | 8.300000 | n | Europe |
| Paleotestudo | Paleotestudo sp. | 261.00 | mf | Tortonian | 9.500000 | n | Europe |
| Testudo | Testudo catalaunica | 165.00 | m | Tortonian | 11.500000 | n | Europe |
| "Hadrianus" | "Hadrianus sp." | 1000.00 | m | Tortonian | 8.300000 | n | Europe |
| Titanochelon | Titanochelon bolivari | 1250.00 | mo | Langhian | 15.000000 | n | Europe |
| Centrochelys | Centrochelys burchardi | 800.00 | m | Middle Pleistocene | 0.435000 | y | Europe |
| Gopherus | Gopherus polyphemus | 217.90 | mo | Lower Pleistocene | 1.200000 | n | America |
| Gopherus | Gopherus polyphemus | 238.90 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus polyphemus | 102.44 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 327.60 | mo | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 284.90 | m | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 276.60 | mo | Lower Pleistocene | 1.200000 | n | America |
| Gopherus | Gopherus praecedens | 360.00 | mo | Upper Pleistocene | 0.069000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|---------|-----------|-------------------|-----------|--------|---------|
| Gopherus | Gopherus polyphemus | 278.00 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 236.70 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus polyphemus | 273.24 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 302.40 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 268.80 | m | Modern | 0.000001 | y | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 425.00 | mo | Upper Pleistocene | 0.012000 | n | America |
| Gopherus | Gopherus polyphemus | 334.70 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 300.00 | m | Modern | 0.000001 | y | America |
| Gopherus | Gopherus polyphemus | 350.00 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 258.30 | mo | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 180.40 | m | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus flavomarginatus | 371.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus polyphemus | 284.90 | mo | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 188.00 | mo | Upper Pleistocene | 0.012000 | n | America |
| Gopherus | Gopherus ? sp. | 500.00 | m | Serravallian | 11.850000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 168.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Gopherus | Gopherus agassizii | 400.00 | m | Modern | 0.000001 | n | America |
| Hesperotestudo | Hesperotestudo orthopygia | 1200.00 | mo | Messinian | 5.500000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|--------------------------|---------|-----------|--------------------|----------|--------|---------|
| Gopherus | Gopherus polyphemus | 353.30 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus sp. | 202.80 | mo | Lower Pleistocene | 1.800000 | n | America |
| Gopherus | Gopherus polyphemus | 387.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus polyphemus | 279.94 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 224.10 | mo | Lower Pleistocene | 1.800000 | n | America |
| Gopherus | Gopherus polyphemus | 268.90 | mo | Lower Pleistocene | 1.200000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 639.00 | m | Upper Pleistocene | 0.060000 | n | America |
| Gopherus | Gopherus flavomarginatus | 281.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus polyphemus | 252.56 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 293.00 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus polyphemus | 155.50 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 260.50 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus polyphemus | 256.44 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 1000.00 | mo | Gelasian | 2.000000 | n | America |
| Geochelone | Geochelone sp. | 350.00 | ef | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 181.00 | mo | Gelasian | 1.900000 | n | America |
| Geochelone | Geochelone sp. | 600.00 | mo | Upper Pleistocene | 0.012500 | y | America |
| Gopherus | Gopherus polyphemus | 303.00 | m | Modern | 0.000001 | y | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|--------|-----------|-------------------------|-----------|--------|---------|
| Gopherus | Gopherus polyphemus | 342.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus sp. | 256.08 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus sp. | 180.90 | mo | Gelasian | 1.900000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 232.76 | m | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 181.00 | mo | Gelasian | 1.900000 | n | America |
| Geochelone | Geochelone tedwhitei | 440.00 | m | Burdigalian/Aquitainian | 18.500000 | n | America |
| Gopherus | Gopherus polyphemus | 239.80 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 974.00 | ep | Upper Pleistocene | 0.060000 | n | America |
| Gopherus | Gopherus polyphemus | 260.11 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 204.40 | mo | Gelasian | 1.900000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 192.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Gopherus | Gopherus sp. | 194.90 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus polyphemus | 391.90 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 259.50 | mo | Lower Pleistocene | 1.800000 | n | America |
| Geochelone | Geochelone sp. | 170.00 | mf | Middle Pleistocene | 0.700000 | n | America |
| Gopherus | Gopherus sp. | 230.10 | mo | Lower Pleistocene | 1.800000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 224.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Hesperotestudo | Hesperotestudo equicomis | 340.00 | ev | Middle Pleistocene | 0.300000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|---------|-----------|--------------------|-----------|--------|---------|
| Hesperotestudo | Hesperotestudo incisa | 228.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Gopherus | Gopherus flavomarginatus | 303.00 | m | Modern | 0.000001 | n | America |
| Testudo | Testudo sp. | 400.00 | mo | Langhian | 14.181000 | n | America |
| Gopherus | Gopherus pertenuis | 1050.00 | mo | Lower Pleistocene | 1.684500 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 231.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 327.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 241.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 250.00 | e | Modern | 0.007500 | n | America |
| Gopherus | Gopherus polyphemus | 352.00 | mo | Upper Pleistocene | 0.012000 | n | America |
| Hesperotestudo | Hesperotestudo johnstoni | 235.00 | m | Placencian | 3.350000 | n | America |
| Gopherus | Gopherus polyphemus | 274.30 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus flavomarginatus | 222.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus sp. | 241.90 | mo | Lower Pleistocene | 1.800000 | n | America |
| Gopherus | Gopherus sp. | 216.37 | m | Modern | 0.000001 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 1200.00 | ev | Tortonian | 9.500000 | n | America |
| Gopherus | Gopherus polyphemus | 257.80 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 282.70 | m | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo campester | 1000.00 | mo | Gelasian | 2.190500 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|--------|-----------|--------------------|----------|--------|---------|
| Hesperotestudo | Hesperotestudo incisa | 216.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Hesperotestudo | Hesperotestudo mlynarskii | 203.50 | m | Lower Pleistocene | 1.250000 | n | America |
| Geochelone | Geochelone sp. | 880.00 | m | Zanclean | 4.500000 | n | America |
| Gopherus | Gopherus polyphemus | 431.48 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus polyphemus | 308.00 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus mohavetus | 315.00 | m | Tortonian | 8.476000 | n | America |
| Gopherus | Gopherus sp. | 264.11 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus sp. | 118.90 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus polyphemus | 337.30 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus sp. | 163.50 | mo | Gelasian | 1.900000 | n | America |
| Caudochelys | Caudochelys rexfordensis | 830.00 | m | Zanclean | 4.550000 | n | America |
| Hesperotestudo | Hesperotestudo riggsi | 159.50 | mo | Tortonian | 7.600000 | n | America |
| Gopherus | Gopherus polyphemus | 306.00 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 561.00 | m | Lower Pleistocene | 1.250000 | n | America |
| Geochelone | Geochelone sp. | 176.00 | e | Zanclean | 5.000000 | n | America |
| Gopherus | Gopherus sp. | 218.80 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus agassizi | 252.00 | m | Upper Pleistocene | 0.025500 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 180.00 | m | Lower Pleistocene | 1.300000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|------------------------------|---------|-----------|------------------------|-----------|--------|---------|
| Caudocheilus | Caudocheilus williamsi | 334.00 | m | Burdigalian/Aquitanian | 17.750000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 290.40 | m | Lower Pleistocene | 1.300000 | n | America |
| Gopherus | Gopherus sp. | 245.40 | mo | Lower Pleistocene | 1.800000 | n | America |
| Gopherus | Gopherus polyphemus | 301.97 | mo | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo incisa | 212.00 | m | Lower Pleistocene | 1.300000 | n | America |
| Gopherus | Gopherus sp. | 188.30 | mo | Gelasian | 1.900000 | n | America |
| Hesperotestudo | Hesperotestudo crassiscutata | 1250.00 | ev | Upper Pleistocene | 0.012000 | n | America |
| Gopherus | Gopherus polyphemus | 350.83 | mo | Middle Pleistocene | 0.400000 | n | America |
| Hesperotestudo | Hesperotestudo riggsi | 176.00 | m | Piacencian | 3.000000 | n | America |
| Gopherus | Gopherus polyphemus | 304.70 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus sp. | 143.90 | mo | Gelasian | 1.900000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 176.00 | mf | Piacencian | 3.100000 | n | America |
| Gopherus | Gopherus polyphemus | 260.51 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus sp. | 241.56 | m | Modern | 0.000001 | n | America |
| Hesperotestudo | Hesperotestudo orthopygia | 682.00 | mo | Messinian | 5.500000 | n | America |
| Hesperotestudo | Hesperotestudo wilsoni | 226.00 | m | Upper Pleistocene | 0.018000 | n | America |
| Gopherus | Gopherus sp. | 211.31 | m | Modern | 0.000001 | n | America |
| Gopherus | Gopherus polyphemus | 304.20 | mo | Upper Pleistocene | 0.069000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|----------------------------|--------|-----------|----------------------|-----------|--------|---------|
| Hesperotestudo | Hesperotestudo oelrichi | 283.80 | m | Piacencian | 3.000000 | n | America |
| Gopherus | Gopherus laticaudatus | 375.00 | mo | Middle Pleistocene | 0.396350 | n | America |
| Gopherus | Gopherus mohavetius | 334.50 | m | Tortonian | 8.476000 | n | America |
| Hesperotestudo | Hesperotestudo riggsi | 159.50 | mo | Tortonian | 7.600000 | n | America |
| Caudocheilus | Caudocheilus rextroadensis | 781.00 | m | Zanclean | 4.550000 | n | America |
| Gopherus | Gopherus polyphemus | 267.00 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 295.90 | mo | Middle Pleistocene | 0.400000 | n | America |
| Hesperotestudo | Hesperotestudo riggsi | 195.80 | m | Zanclean | 4.550000 | n | America |
| Gopherus | Gopherus polyphemus | 324.00 | mo | Upper Pleistocene | 0.069000 | n | America |
| Gopherus | Gopherus sp. | 182.30 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus polyphemus | 294.16 | mo | Upper Pleistocene | 0.069000 | n | America |
| Hesperotestudo | Hesperotestudo alleni | 240.90 | m | Tortonian | 10.950000 | n | America |
| Gopherus | Gopherus polyphemus | 283.41 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 272.48 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo riggsi | 185.00 | m | Piacencian | 3.000000 | n | America |
| Geochelone | Geochelone tedwhitei | 370.00 | m | Burdigalian/Aquitian | 18.500000 | n | America |
| Gopherus | Gopherus ? sp. | 500.00 | m | Tortonian | 10.100000 | n | America |
| Gopherus | Gopherus sp. | 209.60 | mo | Gelasian | 1.900000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|--------------------------|---------|-----------|--------------------|-----------|--------|---------|
| Gopherus | Gopherus polyphemus | 308.20 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus polyphemus | 314.60 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus sp. | 193.30 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus sp. | 188.70 | mo | Gelasian | 1.900000 | n | America |
| Gopherus | Gopherus polyphemus | 302.40 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 292.00 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 306.00 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo turgida | 230.00 | mo | Lower Pleistocene | 1.684500 | n | America |
| Gopherus | Gopherus polyphemus | 272.57 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus polyphemus | 322.63 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus flavomarginatus | 278.00 | m | Modern | 0.000001 | n | America |
| Geochelone | Geochelone sp. | 500.00 | m | Tortonian | 10.100000 | n | America |
| Cuodochelys | Cuodochelys ducateli | 339.90 | m | Langhian | 15.000000 | n | America |
| Gopherus | Gopherus polyphemus | 292.94 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 348.70 | mo | Middle Pleistocene | 0.400000 | n | America |
| Hesperotestudo | Hesperotestudo sp. | 1500.00 | mo | Middle Pleistocene | 0.700000 | n | America |
| Gopherus | Gopherus polyphemus | 285.20 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus mohavetus | 412.50 | m | Tortonian | 8.476000 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|----------------|---------------------------|---------|-----------|--------------------|----------|--------|---------|
| Hesperotestudo | Hesperotestudo sp. | 1800.00 | mo | Middle Pleistocene | 0.700000 | n | America |
| Gopherus | Gopherus polyphemus | 285.60 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus canyonensis | 885.50 | m | Piacencian | 2.700000 | n | America |
| Gopherus | Gopherus polyphemus | 253.70 | mo | Middle Pleistocene | 0.250000 | n | America |
| Gopherus | Gopherus polyphemus | 293.57 | mo | Middle Pleistocene | 0.400000 | n | America |
| Gopherus | Gopherus mohavetus | 202.00 | m | Tortonian | 8.476000 | n | America |
| Gopherus | Gopherus mohavetus | 360.00 | m | Tortonian | 8.476000 | n | America |
| Gopherus | Gopherus agassizi | 445.00 | mo | Middle Pleistocene | 0.156000 | n | America |
| Gopherus | Gopherus polyphemus | 539.00 | mf | Middle Pleistocene | 0.700000 | n | America |
| Gopherus | Gopherus polyphemus | 283.00 | mo | Middle Pleistocene | 0.250000 | n | America |
| Hesperotestudo | Hesperotestudo mlynarskii | 165.00 | m | Lower Pleistocene | 1.250000 | n | America |
| Gopherus | Gopherus flavomarginatus | 246.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 169.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 296.50 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 242.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 200.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 253.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis denticulata | 333.40 | m | Modern | 0.000001 | n | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|-------------|-------------------------|---------|-----------|-------------------|-----------|--------|---------|
| Chelonoidis | Chelonoidis carbonaria | 247.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 186.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 157.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis sp. | 1000.00 | mo | Upper Pleistocene | 0.069000 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 333.40 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis nigra | 745.70 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis carbonaria | 290.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis sp. | 300.00 | mo | Langhian | 15.900000 | n | America |
| Chelonoidis | Chelonoidis denticulata | 365.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 183.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis denticulata | 317.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chilensis | 169.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis hoodensis | 813.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis phantastica | 860.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis lutzae | 830.00 | m | Upper Pleistocene | 0.038500 | n | America |
| Chelonoidis | Chelonoidis nigra | 1300.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis becki | 1050.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis nigra | 595.00 | m | Modern | 0.000001 | y | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|-------------|--------------------------|---------|-----------|-------------------|-----------|--------|---------|
| Chelonoidis | Chelonoidis sp. | 300.00 | mo | Langhian | 15.900000 | n | America |
| Chelonoidis | Chelonoidis chilensis | 450.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis darwini | 965.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis nigra | 731.30 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis denticulata | 616.00 | m | Upper Pleistocene | 0.120000 | n | America |
| Chelonoidis | Chelonoidis duncanensis | 840.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis denticulata | 820.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis abingdonii | 980.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis sp. | 1060.00 | ec | Langhian | 15.900000 | n | America |
| Chelonoidis | Chelonoidis nigra | 588.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis carbonaria | 189.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis chathamensis | 890.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis chilensis | 222.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 593.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis denticulata | 333.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis nigra | 610.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis vicina | 1250.00 | m | Modern | 0.000001 | y | America |
| Chelonoidis | Chelonoidis nigra | 717.00 | m | Modern | 0.000001 | y | America |

Table S17 – continued from previous page

| Genus | Taxon | CL | estimated | EpochBins | Age | Island | Con |
|-------------|-------------------------|--------|-----------|-----------|----------|--------|---------|
| Geochelone | Geochelone hesternae | 278.00 | m | Tortonian | 8.500000 | n | America |
| Chelonoidis | Chelonoidis denticulata | 377.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis denticulata | 466.00 | m | Modern | 0.000001 | n | America |
| Chelonoidis | Chelonoidis carbonaria | 226.00 | m | Modern | 0.000001 | n | America |

Table S18: Data set, extant, measured from collection

| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|---------------|------------------------|-----------|-------|-------|-------|------|-------|-------|------|-----------|--------|--------|---|
| Kinixys | Kinixys belliana | ZMB 37388 | 162.0 | 16.20 | 22.5 | 15.5 | 21.5 | 164.0 | 12.6 | m | n | Africa | freshly measured (MFN collection) |
| Aldabrachelys | Aldabrachelys gigantea | ZMB 51996 | 770.0 | 77.00 | 106.0 | 52.0 | 112.0 | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys yniphora | - | 426.0 | 42.60 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Centrochelys | Centrochelys sulcata | ZMB 63203 | 215.0 | 21.50 | 29.5 | 16.5 | 27.0 | 214.0 | 14.8 | m | n | Africa | freshly measured (MFN collection) |
| Malacochersus | Malacochersus tornieri | ZMB 63174 | 153.0 | 15.30 | 17.0 | 10.5 | 14.0 | 149.0 | 9.8 | m | n | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys radiata | - | 395.0 | 39.50 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis arachnoides | ZMB 37616 | 110.0 | 11.00 | 15.0 | 8.0 | 14.0 | 75.0 | 7.6 | m | y | Africa | freshly measured (MFN collection) |
| Kinixys | Kinixys homeana | ZMB 17747 | 193.0 | 19.30 | 25.0 | 14.0 | 21.0 | 175.0 | 11.8 | m | n | Africa | freshly measured (MFN collection) |
| Aldabrachelys | Aldabrachelys gigantea | ZMB 47494 | 870.0 | 87.00 | 116.0 | 57.0 | 110.0 | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates tentorius | ZMB 28782 | 111.0 | 11.10 | 15.0 | 8.5 | 14.0 | 95.0 | 7.9 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | ZMB 25439 | 119.0 | 11.90 | 17.0 | 9.0 | 14.5 | 99.0 | 8.4 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | ZMB 37472 | 107.0 | 10.70 | 15.0 | 8.4 | 13.5 | 106.0 | 8 | m | n | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys yniphora | - | 307.0 | 30.70 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Homopus | Homopus aerolatus | ZMB 229 | 88.0 | 8.80 | 10.5 | 6.9 | 9.0 | 78.0 | 6.1 | m | n | Africa | freshly measured (MFN collection) |
| Homopus | Homopus signatus | ZMB 63173 | 94.0 | 9.40 | 12.5 | 7.7 | 11.0 | 82.0 | 5.6 | m | n | Africa | freshly measured (MFN collection) |
| Kinixys | Kinixys belliana | ZMB 63191 | 194.0 | 19.40 | 25.5 | 12.5 | 19.0 | 173.0 | 12 | m | n | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys radiata | - | 285.0 | 28.50 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Kinixys | Kinixys belliana | ZMB 63192 | 174.0 | 17.40 | 24.5 | 11.5 | 20.5 | 143.0 | 11.1 | m | n | Africa | freshly measured (MFN collection) |
| Kinixys | Kinixys belliana | ZMB 63193 | 157.0 | 15.70 | 21.0 | 9.9 | 16.5 | 141.0 | 9.4 | m | n | Africa | freshly measured (MFN collection) |
| Aldabrachelys | Aldabrachelys gigantea | ZMB 37545 | 810.0 | 81.00 | 110.0 | 52.0 | NA | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | ZMB 49400 | 162.0 | 16.20 | 21.5 | 10.9 | 17.5 | 170.0 | 9.2 | m | n | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | ZMB 63181 | 170.0 | 17.00 | 23.0 | 11.4 | 19.0 | 169.0 | 10 | m | n | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | ZMB 63183 | 120.0 | 12.00 | 17.0 | 8.6 | 15.5 | 118.0 | 7.3 | m | n | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | ZMB 63182 | 136.0 | 13.60 | 18.0 | 9.9 | 16.0 | 138.0 | 8 | m | n | Africa | freshly measured (MFN collection) |
| Kinixys | Kinixys erosa | ZMB 63190 | 164.0 | 16.40 | 21.0 | 11.2 | 16.5 | 163.0 | 10.6 | m | n | Africa | freshly measured (MFN collection) |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|---------------|--------------------------|-----------|--------|--------|-------|------|-------|-------|------|-----------|--------|--------|--|
| Centrochelys | Centrochelys sulcata | ZMB 37387 | 435.0 | 43.50 | 54.0 | 29.9 | 53.0 | 405.0 | 29.1 | m | n | Africa | freshly measured (MFN collection) |
| Indotestudo | Indotestudo travancorica | ZMB 37717 | 224.0 | 22.40 | 28.0 | 15.2 | 23.0 | 200.0 | 15.4 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | ZMB 37344 | 405.0 | 40.50 | 55.0 | 27.0 | 50.5 | 350.0 | 24.3 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | ZMB 63235 | 315.0 | 31.50 | 43.5 | 23.4 | 39.0 | 298.0 | 22.1 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | ZMB 37495 | 297.0 | 29.70 | 41.5 | 21.4 | 36.0 | 271.0 | 19.2 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | ZMB 42400 | 345.0 | 34.50 | 46.5 | 24.0 | 40.0 | 285.0 | 21.3 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | ZMB 63232 | 350.0 | 35.00 | 46.0 | 23.9 | 45.0 | 303.0 | 21.1 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates geometricus | ZMB 192 | 92.0 | 9.20 | 13.5 | 7.1 | 13.0 | 68.0 | 6.3 | m | n | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | - | 181.9 | 18.19 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Aldabrachelys | Aldabrachelys gigantea | ZMB 47443 | 800.0 | 80.00 | 105.0 | 51.5 | 105.0 | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys yniphora | - | 415.0 | 41.50 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Astrochelys | Astrochelys yniphora | - | 370.0 | 37.00 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Aldabrachelys | Aldabrachelys gigantea | ZMB 51995 | 1030.0 | 103.00 | 138.0 | NA | NA | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Aldabrachelys | Aldabrachelys gigantea | ZMB ??? | 720.0 | 72.00 | 105.5 | 55.0 | 117.0 | NA | NA | m | y | Africa | freshly measured (MFN collection) |
| Cylindraspis | Cylindraspis triserrata | - | 1100.0 | 110.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Cylindraspis | Cylindraspis vosmaeri | - | 500.0 | 50.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Astrochelys | Astrochelys radiata | - | 334.0 | 33.40 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Astrochelys | Astrochelys radiata | - | 305.0 | 30.50 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Centrochelys | Centrochelys sulcata | - | 830.0 | 83.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Psammobates | Psammobates geometricus | ZMB 186 | 105.0 | 10.50 | 13.5 | 7.4 | 13.0 | 90.0 | 6.9 | m | n | Africa | freshly measured (MFN collection) |
| Astrochelys | Astrochelys radiata | - | 242.0 | 24.20 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Psammobates | Psammobates tentorius | ZMB 37627 | 116.0 | 11.60 | 15.0 | 9.4 | 14.5 | 117.0 | 8.9 | m | y | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates tentorius | ZMB 50571 | 95.0 | 9.50 | 12.0 | 7.3 | 12.0 | 79.0 | 7 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates tentorius | ZMB 14766 | 81.0 | 8.10 | 10.5 | 6.8 | 10.0 | 67.0 | 5.9 | m | n | Africa | freshly measured (MFN collection) |
| Pyxis | Pyxis planicauda | - | 114.0 | 11.40 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis planicauda | - | 134.0 | 13.40 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis planicauda | - | 120.0 | 12.00 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|---------------|-------------------------|-----------|--------|--------|------|------|------|-------|------|-----------|--------|--------|--|
| Psammobates | Psammobates oculifer | ZMB 16399 | 111.0 | 11.10 | 16.0 | 8.8 | 14.0 | 108.0 | 7.9 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | ZMB 14772 | 101.0 | 10.10 | 15.0 | 8.0 | 14.0 | 98.0 | 7.3 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | ZMB 24261 | 103.0 | 10.30 | 14.0 | 8.2 | 13.5 | 100.0 | 7.8 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | ZMB 37623 | 105.0 | 10.50 | 14.5 | 7.9 | 13.5 | 93.0 | 7.4 | m | n | Africa | freshly measured (MFN collection) |
| Kinxys | Kinxys belliana | ZMB 37489 | 180.0 | 18.00 | 24.0 | 12.0 | 20.5 | 176.0 | 11.8 | m | n | Africa | freshly measured (MFN collection) |
| Pyxis | Pyxis planicauda | - | 160.0 | 16.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Psammobates | Psammobates geometricus | ZMB 50568 | 107.0 | 10.70 | 15.0 | 7.9 | 14.5 | 79.0 | 7.3 | m | n | Africa | freshly measured (MFN collection) |
| Aldabrachelys | Aldabrachelys gigantea | - | 875.0 | 87.50 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Aldabrachelys | Aldabrachelys gigantea | - | 1190.0 | 119.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 202.0 | 20.20 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 351.0 | 35.10 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Astrochelys | Astrochelys yniphora | - | 446.0 | 44.60 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | ZMB 37393 | 160.0 | 16.00 | 20.0 | 10.0 | 17.5 | 158.0 | 9.2 | m | n | Africa | freshly measured (MFN collection) |
| Kinxys | Kinxys erosa | ZMB 50198 | 271.0 | 27.10 | 31.5 | 18.5 | 26.0 | 231.0 | 15.9 | m | n | Africa | freshly measured (MFN collection) |
| Chersina | Chersina angulata | ZMB 37392 | 181.0 | 18.10 | 22.5 | 11.6 | 19.0 | 177.0 | 9.7 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates oculifer | - | 147.0 | 14.70 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Psammobates | Psammobates tentorius | - | 145.0 | 14.50 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Pyxis | Pyxis arachnoides | - | 150.0 | 15.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Psammobates | Psammobates geometricus | ZMB 185 | 118.0 | 11.80 | 18.0 | 9.1 | 16.5 | 112.0 | 8.2 | m | n | Africa | freshly measured (MFN collection) |
| Stigmochelys | Stigmochelys pardalis | - | 720.0 | 72.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 179.3 | 17.93 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Astrochelys | Astrochelys radiata | - | 355.0 | 35.50 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis planicauda | - | 126.0 | 12.60 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Testudo | Testudo kleinmanni | - | 144.0 | 14.40 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Cylindraspis | Cylindraspis indica | - | 600.0 | 60.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Astrochelys | Astrochelys yniphora | - | 361.0 | 36.10 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Astrochelys | Astrochelys yniphora | - | 486.0 | 48.60 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|---------------|-------------------------|-----------|--------|--------|------|------|------|-------|-----|-----------|--------|--------|--|
| Pyxis | Pyxis planicauda | - | 148.0 | 14.80 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis arachnoides | - | 111.0 | 11.10 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis arachnoides | - | 110.0 | 11.00 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis arachnoides | - | 80.0 | 8.00 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Kinixys | Kinixys lobatsiana | - | 200.0 | 20.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Pyxis | Pyxis arachnoides | - | 86.0 | 8.60 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Pyxis | Pyxis arachnoides | - | 154.0 | 15.40 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Kinixys | Kinixys homeana | - | 223.0 | 22.30 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Homopus | Homopus femoralis | - | 168.0 | 16.80 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Pyxis | Pyxis planicauda | - | 132.0 | 13.20 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Homopus | Homopus aerolatus | - | 300.0 | 30.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Homopus | Homopus boulengeri | - | 110.0 | 11.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Kinixys | Kinixys erosa | - | 400.0 | 40.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | ZMB 37479 | 148.0 | 14.80 | 20.0 | 10.1 | 17.0 | 142.0 | 9.5 | m | n | Africa | freshly measured (MFN collection) |
| Psammobates | Psammobates geometricus | - | 165.0 | 16.50 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Homopus | Homopus solus | - | 109.0 | 10.90 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Malacochersus | Malacochersus tornieri | - | 180.0 | 18.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 153.5 | 15.35 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Pyxis | Pyxis arachnoides | - | 144.0 | 14.40 | NA | NA | NA | NA | NA | m | y | Africa | Pedrono, M., & Smith, L. L. (2013). Overview of the |
| Kinixys | Kinixys belliana | - | 230.0 | 23.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Aldabrachelys | Aldabrachelys gigantea | - | 1140.0 | 114.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Astrochelys | Astrochelys radiata | - | 400.0 | 40.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 166.4 | 16.64 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 171.6 | 17.16 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Cylindraspis | Cylindraspis peltastes | - | 420.0 | 42.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Chersina | Chersina angulata | - | 161.3 | 16.13 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Homopus | Homopus signatus | - | 106.0 | 10.60 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|--------------|--------------------------|-----------|--------|--------|------|------|------|-------|------|-----------|--------|--------|--|
| Kinixys | Kinixys spekii | - | 220.0 | 22.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Cylindraspis | Cylindraspis inepta | - | 1000.0 | 100.00 | NA | NA | NA | NA | NA | m | y | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Kinixys | Kinixys natalensis | - | 160.0 | 16.00 | NA | NA | NA | NA | NA | m | n | Africa | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Geochelone | Geochelone elegans | ZMB 63222 | 208.0 | 20.80 | 29.5 | 14.6 | 28.5 | 199.0 | 13.3 | m | n | Asia | freshly measured (MFN collection) |
| Geochelone | Geochelone elegans | ZMB 37523 | 245.0 | 24.50 | 32.0 | 16.6 | 32.0 | 228.0 | 14.6 | m | n | Asia | freshly measured (MFN collection) |
| Geochelone | Geochelone elegans | ZMB 63220 | 221.0 | 22.10 | 32.0 | 16.0 | 31.0 | 179.0 | 13.5 | m | n | Asia | freshly measured (MFN collection) |
| Geochelone | Geochelone elegans | ZMB 63221 | 220.0 | 22.00 | 31.0 | 15.4 | 27.0 | 209.0 | 14 | m | y | Asia | freshly measured (MFN collection) |
| Geochelone | Geochelone elegans | ZMB 63218 | 221.0 | 22.10 | 31.5 | 15.1 | 30.0 | 203.0 | 13.7 | m | n | Asia | freshly measured (MFN collection) |
| Geochelone | Geochelone platynota | ZMB 6096 | 222.0 | 22.20 | 29.5 | 15.1 | 27.0 | NA | MA | m | n | Asia | freshly measured (MFN collection) |
| Manouria | Manouria emys | - | 600.0 | 60.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo forstenii | - | 202.0 | 20.20 | NA | NA | NA | NA | NA | m | y | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo travancorica | - | 249.7 | 24.97 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo forstenii | - | 309.0 | 30.90 | NA | NA | NA | NA | NA | m | y | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo elongata | - | 360.0 | 36.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo forstenii | - | 199.0 | 19.90 | NA | NA | NA | NA | NA | m | y | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo elongata | - | 244.2 | 24.42 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo travancorica | - | 244.2 | 24.42 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Manouria | Manouria impressa | ZMB 63172 | 165.0 | 16.50 | 20.0 | 12.9 | 18.0 | 157.0 | 10.5 | m | n | Asia | freshly measured (MFN collection) |
| Indotestudo | Indotestudo elongata | ZMB 50492 | 276.0 | 27.60 | 33.0 | 19.4 | 28.5 | 246.0 | 17.1 | m | n | Asia | freshly measured (MFN collection) |
| Indotestudo | Indotestudo elongata | ZMB 63175 | 235.0 | 23.50 | 30.5 | 16.0 | 29.5 | 202.0 | 14.4 | m | n | Asia | freshly measured (MFN collection) |
| Indotestudo | Indotestudo elongata | ZMB 4174 | 208.0 | 20.80 | 26.0 | 13.4 | 20.0 | 180.0 | 11.6 | m | n | Asia | freshly measured (MFN collection) |
| Indotestudo | Indotestudo elongata | ZMB 6106 | 166.0 | 16.60 | 21.0 | 11.3 | 18.0 | 151.0 | 11.3 | m | n | Asia | freshly measured (MFN collection) |
| Manouria | Manouria emys | - | 600.0 | 60.00 | NA | NA | NA | NA | NA | m | n | Asia | Karl, H., & Staesche, U. (2007). Fossile Riesen-Lar |
| Testudo | Testudo graeca | - | 250.0 | 25.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo graeca | - | 280.0 | 28.00 | NA | NA | NA | NA | NA | m | y | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Manouria | Manouria emys | ZMB 49049 | 212.0 | 21.20 | 26.5 | 16.5 | 25.0 | NA | NA | m | n | Asia | freshly measured (MFN collection) |
| Manouria | Manouria emys | ZMB 37350 | 445.0 | 44.50 | 52.0 | 32.0 | 50.0 | 455.0 | 29.8 | m | n | Asia | freshly measured (MFN collection) |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|-------------|--------------------------|-----------|-------|-------|------|------|------|-------|------|-----------|--------|---------|--|
| Manouria | Manouria emys | ZMB 37342 | 330.0 | 33.00 | 40.5 | 26.7 | 37.0 | 330.0 | 23.4 | m | n | Asia | freshly measured (MFN collection) |
| Indotestudo | Indotestudo travancorica | - | 331.0 | 33.10 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo travancorica | - | 219.6 | 21.96 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Indotestudo | Indotestudo forstenii | - | 200.5 | 20.05 | NA | NA | NA | NA | NA | m | y | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo horsfieldii | - | 280.0 | 28.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Manouria | Manouria impressa | - | 350.0 | 35.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Geochelone | Geochelone elegans | - | 380.0 | 38.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Manouria | Manouria impressa | - | 275.0 | 27.50 | NA | NA | NA | NA | NA | m | n | Asia | Karl, H., & Staesche, U. (2007). Fossile Riesen-Lar |
| Indotestudo | Indotestudo elongata | - | 219.6 | 21.96 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Geochelone | Geochelone platynota | - | 300.0 | 30.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo graeca | - | 300.0 | 30.00 | NA | NA | NA | NA | NA | m | n | Asia | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus flavomarginatus | - | 400.0 | 40.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus morafkai | - | 299.0 | 29.90 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus berlandieri | - | 240.0 | 24.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo horsfieldii | ZMB 63259 | 111.0 | 11.10 | 14.0 | 10.0 | 15.0 | 108.0 | 9.5 | m | n | Europe | freshly measured (MFN collection) |
| Pyxis | Pyxis arachnoides | ZMB 37615 | 108.0 | 10.80 | 15.0 | 7.9 | 13.0 | 96.0 | 7.1 | m | n | Europe | freshly measured (MFN collection) |
| Testudo | Testudo marginata | - | 241.7 | 24.17 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo horsfieldii | ZMB 63258 | 123.0 | 12.30 | 14.5 | 10.9 | 15.0 | 121.0 | 9.8 | m | n | Europe | freshly measured (MFN collection) |
| Testudo | Testudo hermanni | - | 183.3 | 18.33 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 176.9 | 17.69 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo horsfieldii | ZMB 63257 | 114.0 | 11.40 | 14.5 | 10.2 | 14.0 | 110.0 | 9.9 | m | n | Europe | freshly measured (MFN collection) |
| Testudo | Testudo marginata | - | 246.7 | 24.67 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo hermanni | - | 196.0 | 19.60 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo hermanni | - | 143.5 | 14.35 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo graeca | - | 194.6 | 19.46 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo hermanni | - | 200.0 | 20.00 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 250.0 | 25.00 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |

Table S18 – continued from previous page

| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|----------|---------------------|------------|-------|-------|------|------|------|-------|------|-----------|--------|---------|--|
| Testudo | Testudo marginata | - | 246.0 | 24.60 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo marginata | - | 242.5 | 24.25 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo marginata | - | 246.0 | 24.60 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 147.0 | 14.70 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo marginata | - | 290.0 | 29.00 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo marginata | - | 250.0 | 25.00 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 145.9 | 14.59 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo graeca | - | 178.2 | 17.82 | NA | NA | NA | NA | NA | m | n | Europe | Willemssen, R. E., & Hailey, A. (2003). Sexual dimor |
| Testudo | Testudo marginata | - | 400.0 | 40.00 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo horsfieldii | ZMB 63255 | 136.0 | 13.60 | 18.0 | 13.0 | 16.5 | 129.0 | 12.2 | m | n | Europe | freshly measured (MFN collection) |
| Testudo | Testudo horsfieldii | ZMB 63256 | 132.0 | 13.20 | 17.0 | 12.4 | 17.0 | 133.0 | 11.3 | m | n | Europe | freshly measured (MFN collection) |
| Testudo | Testudo hermanni | - | 168.3 | 16.83 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 160.0 | 16.00 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 154.0 | 15.40 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 138.5 | 13.85 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 173.0 | 17.30 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo marginata | - | 242.5 | 24.25 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 195.0 | 19.50 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 157.0 | 15.70 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 176.6 | 17.66 | NA | NA | NA | NA | NA | m | y | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 130.0 | 13.00 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Testudo | Testudo hermanni | - | 161.0 | 16.10 | NA | NA | NA | NA | NA | m | n | Europe | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus polyphemus | - | 300.0 | 30.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus sp. | MVZ 210020 | NA | NA | NA | NA | NA | 219.6 | NA | m | n | America | Biewer J., Sankey J., Hutchison H., Garber D., 2016 |
| Gopherus | Gopherus sp. | MVZ 210003 | NA | NA | NA | NA | NA | 192.1 | NA | m | n | America | Biewer J., Sankey J., Hutchison H., Garber D., 2016 |
| Gopherus | Gopherus polyphemus | - | 288.8 | 26.88 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., |
| Gopherus | Gopherus sp. | MVZ 120004 | NA | NA | NA | NA | NA | 196.7 | NA | m | n | America | Biewer J., Sankey J., Hutchison H., Garber D., 2016 |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|-------------|--------------------------|--------------|-------|-------|------|------|----|-------|----|-----------|--------|---------|--|
| Gopherus | Gopherus sp. | MVZ 210009 | NA | NA | NA | NA | NA | 232.8 | NA | m | n | America | Biewer J., Sankey J., Hutchison H., Garber D., 2016 |
| Gopherus | Gopherus sp. | MVZ 210010 | NA | NA | NA | NA | NA | 240.1 | NA | m | n | America | Biewer J., Sankey J., Hutchison H., Garber D., 2016 |
| Gopherus | Gopherus agassizii | - | 400.0 | 40.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus flavomarginatus | KU 39415 | 303.0 | 30.30 | NA | 23.2 | NA | NA | NA | m | n | America | Legler, 1959 |
| Gopherus | Gopherus polyphemus | - | 308.0 | 30.80 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus polyphemus | - | 303.0 | 30.30 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus polyphemus | - | 387.0 | 38.70 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus polyphemus | - | 342.0 | 34.20 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus flavomarginatus | USNM 61253 | 222.0 | 22.20 | NA | 16.6 | NA | 212.0 | NA | m | n | America | Legler, 1959 |
| Gopherus | Gopherus flavomarginatus | USNM 61254 | 371.0 | 37.10 | NA | 29.2 | NA | 358.0 | NA | m | n | America | Legler, 1959 |
| Gopherus | Gopherus polyphemus | - | 238.9 | 23.89 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Gopherus | Gopherus flavomarginatus | USNM 60976 | 246.0 | 24.60 | NA | 21.2 | NA | 252.0 | NA | m | n | America | Legler, 1959 |
| Gopherus | Gopherus flavomarginatus | IU 42953 | 281.0 | 28.10 | NA | 22.0 | NA | NA | NA | m | n | America | Legler, 1959 |
| Gopherus | Gopherus flavomarginatus | IU 42954 | 278.0 | 27.80 | NA | 21.4 | NA | NA | NA | m | n | America | Legler, 1959 |
| Chelonoidis | Chelonoidis nigra | USNM 51069 | 588.0 | 58.80 | 68.3 | 44.5 | NA | 506.0 | NA | m | y | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis nigra | USNM1 102904 | 610.0 | 61.00 | 67.5 | 44.4 | NA | 515.0 | NA | m | y | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis carbonaria | - | 593.0 | 59.30 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Chelonoidis | Chelonoidis abingdonii | - | 980.0 | 98.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Chelonoidis | Chelonoidis denticulata | - | 333.4 | 33.34 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Chelonoidis | Chelonoidis chilensis | UF33604 | 169.0 | 16.90 | 21.5 | 13.2 | NA | 161.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis chilensis | UF33618 | 186.0 | 18.60 | 25.0 | 14.7 | NA | 169.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis nigra | - | 717.0 | 71.70 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |
| Chelonoidis | Chelonoidis chilensis | UF33617 | 169.0 | 16.90 | 22.8 | 14.6 | NA | 162.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis carbonaria | UF27384 | 242.0 | 24.20 | 31.7 | 15.5 | NA | 219.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis carbonaria | UF33597 | 253.0 | 25.30 | 31.7 | 15.3 | NA | 215.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis nigra | USNM1 222494 | 595.0 | 59.50 | 68.0 | 43.6 | NA | 533.0 | NA | m | y | America | Franz, R., & Franz, S. E. (2009). A new fossil land tortoise from the Miocene of the Caribbean |
| Chelonoidis | Chelonoidis carbonaria | - | 333.4 | 33.34 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., 1959 |

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| Genus | Taxon | CollNr | SCL | CCL | SCW | CCW | CH | PL | PW | estimated | Island | Con | Reference |
|-------------|--------------------------|---------|--------|--------|------|------|----|-------|----|-----------|--------|---------|---|
| Chelonoidis | Chelonoidis carbonaria | UF5259 | 226.0 | 22.60 | 28.7 | 12.9 | NA | 198.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis becki | - | 1050.0 | 105.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | UF33661 | 333.0 | 33.30 | 38.0 | 21.4 | NA | 305.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | UF61931 | 317.0 | 31.70 | 41.2 | 18.5 | NA | 291.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | UF33670 | 365.0 | 36.50 | 47.0 | 22.0 | NA | 326.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chilensis | UF33603 | 183.0 | 18.30 | 23.4 | 14.5 | NA | 166.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis nigra | - | 731.3 | 73.13 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chilensis | - | 200.0 | 20.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis carbonaria | UF48278 | 247.0 | 24.70 | 33.9 | 15.5 | NA | 214.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis carbonaria | - | 296.5 | 29.65 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis carbonaria | - | 290.0 | 29.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis carbonaria | UF33596 | 189.0 | 18.90 | 24.7 | 12.1 | NA | 174.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis nigra | - | 745.7 | 74.57 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chathamensis | - | 890.0 | 89.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | UF19242 | 466.0 | 46.60 | 59.7 | 26.5 | NA | 410.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | UF23231 | 377.0 | 37.70 | 47.1 | 23.8 | NA | 334.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis denticulata | - | 820.0 | 82.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis duncanensis | - | 840.0 | 84.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chilensis | - | 222.0 | 22.20 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chilensis | UF33600 | 157.0 | 15.70 | 20.8 | 11.9 | NA | 145.0 | NA | m | n | America | Franz, R., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis phantastica | - | 860.0 | 86.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis vicina | - | 1250.0 | 125.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis hoodensis | - | 813.0 | 81.30 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis nigra | - | 1300.0 | 130.00 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis darwini | - | 965.0 | 96.50 | NA | NA | NA | NA | NA | m | y | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |
| Chelonoidis | Chelonoidis chilensis | - | 450.0 | 45.00 | NA | NA | NA | NA | NA | m | n | America | Itescu, Y., Karraker, N. E., Raia, P., Pritchard, P. C., & Franz, S. E. (2009). A new fossil land turtle from the |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|----------|----------|------------|--------|----------------|------------------------------|------------------------------------|
| Kabyle 2 km N, Yambol Region | Bulgaria | 42.54720 | 26.48430 | 0.0020 | Testudo | Testudo sp. | Linnaeus, 1758 |
| El Harhoura 2 (Temara) | Morocco | 33.95220 | -6.92590 | 0.0050 | Testudo | Testudo graeca | Linnaeus, 1758 |
| El Harhoura 2 (Temara) | Morocco | 33.95220 | -6.92590 | 0.0050 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Guenfouda Cave (Ghar Zeboui, ??????), Jerada Province | Morocco | 34.43300 | -2.00000 | 0.0060 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Zebbug and Gahr Dalam Cave deposits | Malta | 35.88970 | 14.44250 | 0.0660 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Rancho La Brea, California | USA | 34.05220 | -118.24300 | 0.0240 | Gopherus | Gopherus ? sp. | Rafinesque, 1832 |
| Blackwater Loc. No. 1, Roosevelt County, New Mexico | USA | 34.00000 | -103.50000 | 0.0110 | Hesperotestudo | Hesperotestudo cf. wilsoni | (Mistead, 1956) |
| Pendejo Cave, Rough Canyon on Fort Bliss land, 21 km east of Orogrande, Otero County, New Mexico | USA | 32.41670 | -105.91670 | 0.0350 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Robledo Cave, west side of the Robledo Mountains, Doña Ana County, New Mexico | USA | 33.00000 | -106.50000 | 0.0110 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Schulze Cave Fauna, Edwards County, Texas | USA | 30.30000 | -99.90000 | 0.0150 | Hesperotestudo | Hesperotestudo cf. wilsoni | (Mistead, 1956) |
| Arredondo IIA, Alachua County, Florida | USA | 29.60000 | -82.40000 | 0.0690 | Hesperotestudo | Hesperotestudo incisa | (Hay, 1916) |
| Orange Lake 2 miles south, Marion County, Florida | USA | 29.40000 | -82.20000 | 0.0690 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Pecos River near Melena and Acme, 10-15 km NE Roswell, Chaves County, New Mexico | USA | 33.47000 | -104.53000 | 0.1560 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Reddick IA+B, Marion County, Florida | USA | 29.10000 | -82.30000 | 0.0690 | Gopherus | Gopherus polyphemus | (Daudin, 1803) |
| Reddick IA+B, Marion County, Florida | USA | 29.10000 | -82.30000 | 0.0690 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Friesenhahn Cave, Bexar County, Texas | USA | 29.00000 | -98.00000 | 0.0180 | Hesperotestudo | Hesperotestudo wilsoni | (Mistead, 1956) |
| Clear Creek Local Fauna, Denton County, Texas | USA | 33.20000 | -97.10000 | 0.0280 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Ingleside Local Fauna, San Patricio County, Texas | USA | 27.00000 | -96.00000 | 0.0600 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Kénitra, Guilloux quarry, near Rabat | Morocco | 34.30000 | -6.60000 | 0.4535 | Testudo | Testudo kenitrensis | Gmira, 1993 |
| Cova de Gràcia, Park Güell, Barcelona | Spain | 41.41360 | 2.15280 | 0.4535 | Testudo | Testudo lunellensis | Almera & Bofill, 1903 |
| Rock-Cavities, Gibraltar Peninsula | England | 36.12030 | -5.34190 | 0.9650 | Cheirogaster | Cheirogaster sp. | Beigounioux, 1935 |
| Caverna de Gràcia, Güell park, Barcelona | Spain | 41.40000 | 2.15000 | 0.4500 | Testudo | Testudo lunellensis | Almera & Bofill, 1903 |
| Cragin Quarry Local Fauna, Meade County, Kansas | USA | 37.22420 | -100.41760 | 0.3000 | Hesperotestudo | Hesperotestudo equicomus | (Hay, 1917) |
| Saint-Estève-Janson, l'Escale Cave (Bouches du Rhône) | France | 43.68330 | 5.38330 | 0.6000 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Soave, Zoppegga 2 cave, Verona | Italy | 45.42000 | 11.25000 | 0.7400 | Eurotestudo | Eurotestudo aff. hermanni | (Gmelin, 1789) |
| Leisey Shell Pit 1A, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Leisey Shell Pit 1A, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo mynarskii | (Auffenberg, 1998) |
| Leisey Shell Pit 2, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo mynarskii | (Auffenberg, 1998) |
| Sima del Elefante TE14, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 1.2200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Monte Tuttavista VII mustelide, Sardinia | Italy | 40.38330 | 9.70000 | 2.0000 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Dmanisi | Georgia | 41.32000 | 44.35000 | 1.7700 | Testudo | Testudo graeca | Linnaeus, 1758 |
| White Rock local fauna, Republic County, Kansas | USA | 39.90000 | -97.70000 | 2.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Capo Mannu near San Vero Milis, base of D4 dune, Sardinia | Italy | 40.04090 | 8.38450 | 2.1970 | Testudo | Testudo pecorinii | Defino, 2008 (p.123-126, figs.5-6) |
| Lesbos Island, F-Site | Greece | 39.50000 | 26.50000 | 2.0000 | Titanochelon | Titanochelon aff. schafferi | (Szalai, 1931) |
| Ahi al Oughlam (near Casablanca) | Morocco | 33.59310 | -7.61640 | 2.5000 | Testudo | Testudo aff. kenitrensis | Gmira, 1993 |
| Ahi al Oughlam (near Casablanca) | Morocco | 33.59310 | -7.61640 | 2.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Cova de Ca Na Relá, Eivissa, Ibiza | Spain | 38.90910 | 1.42670 | 2.6000 | Titanochelon | Titanochelon cf. gymneisuscs | (Bate, 1914) |
| Sabertooth Cave, Lecanto 2A, Citrus County, Florida | USA | 28.80000 | -82.20000 | 0.0690 | Gopherus | Gopherus polyphemus | (Daudin, 1803) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|-----------|-----------|------------|--------|----------------|------------------------------|----------------------------|
| Stazione Ferroviaria, Comiso (RG), Sicily | Italy | 36.93330 | 14.60000 | 0.4130 | gen. | gen. Indet. | Gray, 1825 |
| Contrada Amunziata, Ragusa (RG), Sicily | Italy | 36.91670 | 14.73330 | 0.4135 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Contrada Castellazzo, Vittoria (RG), Sicily | Italy | 36.95000 | 14.53330 | 0.4135 | gen. | gen. Indet. | Gray, 1825 |
| Qesem Cave ~12 km east of Tel Aviv, western slopes Samaria hills | Israel | 32.11000 | 34.98000 | 0.3100 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Caverna de Gràcia, Güell park, Barcelona | Spain | 41.40000 | 2.15000 | 0.4500 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| Caverna de Gràcia, Güell park, Barcelona | Spain | 41.40000 | 2.15000 | 0.4500 | Eurotestudo | Eurotestudo pyrenaica | (Depéret & Commezan, 1890) |
| Sima del Elefante TE18+TE19, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 0.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Sima del Elefante TE11, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 1.2200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Sima del Elefante TE12, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 1.2200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Sima del Elefante TE13, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 1.2200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Sima del Elefante TE9, Sierra de Atapuerca, Burgos | Spain | 42.33000 | -3.51000 | 1.2200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Pirro Nord (Cava dell'Erba, Cava Piro), Apricena, Apulia Italy | Italy | 41.80190 | 15.38470 | 1.5000 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Ahi al Oughlam (near Casablanca) | Morocco | 33.59310 | -7.61640 | 2.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Lewisville Site, Denton County, Texas | USA | 33.00000 | -97.00000 | 0.0280 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Libertador San Martín north bank Ensenada stream, 15 km E Diamante, Entre Rios Province | Argentina | -32.08760 | -60.48630 | 0.1200 | Chelonoidis | Chelonoidis denticulata | Linnaeus 1766 (p. 325) |
| Sandajla near Pula | Croatia | 44.86830 | 13.84800 | 0.0685 | Testudo | Testudo graeca | Boulenger, 1891 |
| Valle de Fontchevade, Charente | France | 45.68070 | 0.48000 | 0.8250 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Bate Cave, Reithymnon | Greece | 35.36470 | 24.47140 | 0.0685 | Testudo | Testudo marginata | Schoepfi, 1792 |
| Süttö Upper Pleistocene strata, Gerecse Mountains | Hungary | 47.75000 | 18.45000 | 0.0685 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Caprine, Rome | Italy | 41.90000 | 12.48330 | 0.3550 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Monsummano | Italy | 43.86670 | 10.81670 | 0.8250 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Palombara Marcellina, Rome | Italy | 41.90000 | 12.48330 | 0.3550 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Sternatia, Lecce | Italy | 40.38330 | 18.18330 | 0.0685 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Tarquina, Rome | Italy | 41.90000 | 12.48330 | 0.3550 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Torre del Pagliaccetto, Rome | Italy | 41.90000 | 12.48330 | 0.0685 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| El Harhoura 1 (Tennara) | Morocco | 33.95000 | -6.93330 | 0.1050 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Crevene Stijena Cave, Petrovica | Serbia | 43.11280 | 19.33030 | 0.0685 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Crevene Stijena Cave, Petrovica | Serbia | 43.11280 | 19.33030 | 0.0685 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Crevene Stijena Cave, Petrovica | Serbia | 43.11280 | 19.33030 | 0.0685 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Cueva del Boquete de Zafarraya, Sierra de Alhama, Málaga | Spain | 36.96670 | -4.13330 | 0.0685 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Cueva Horá (Darro, Granada) | Spain | 37.35000 | -3.30000 | 0.0685 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Brown Sand Wedge Local Fauna, Roosevelt County, New Mexico | USA | 34.00000 | -103.50000 | 0.0060 | Hesperotestudo | Hesperotestudo wilsoni | (Mistead, 1956) |
| Domebo Local Fauna, Caddo County, Oklahoma | USA | 36.00000 | -100.00000 | 0.0110 | Hesperotestudo | Hesperotestudo wilsoni | (Mistead, 1956) |
| Arredondo IIA, Alachua County, Florida | USA | 29.60000 | -82.40000 | 0.0690 | Hesperotestudo | Hesperotestudo crassiscuiata | (Leidy, 1889) |
| Melbourne, Brevard County, Florida | USA | 28.10000 | -80.60000 | 0.0690 | Hesperotestudo | Hesperotestudo crassiscuiata | (Leidy, 1889) |
| Salt Creek, 4.7 mi S and 5.7 mi. W Orla, Reeves County, Texas | USA | 31.78000 | -103.99000 | 0.0130 | Gopherus | Gopherus cf. sp. | Rafinesque, 1832 |
| Shelter Cave (LACM 1010, UTEP 30), Dona Ana County, New Mexico | USA | 33.00000 | -106.50000 | 0.0215 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Vero Beach, Indian River County, Florida | USA | 27.60000 | -80.40000 | 0.0560 | Gopherus | Gopherus polyphemus | (Daudin, 1803) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|-----------|----------|------------|--------|----------------|------------------------------|------------------|
| Vero Beach, Indian River County, Florida | USA | 27.60000 | -80.40000 | 0.0560 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| U-Bar Cave Late Wisconsin, Hidalgo County, New Mexico | USA | 31.60000 | -108.40000 | 0.0175 | Geochelone | Geochelone cf. sp. | Rafinesque, 1832 |
| Gorham's cave IIb, Gibraltar Peninsula | England | 36.12030 | -5.34190 | 0.0200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Gruta do Caldeirão, Tomar | Portugal | 39.60070 | -8.41380 | 0.0200 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Gruta do Escoural, Évora | Portugal | 38.57000 | -7.91000 | 0.0200 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Sims Bayou Local Fauna, Harris County, Texas | USA | 29.00000 | -95.00000 | 0.0200 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Megentry Peccary Cave, Crawford County, Indiana | USA | 38.33000 | -86.55000 | 0.0370 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Sabertooth Camel Maze, Dry Cave (UTEP 5), Eddy County, New Mexico | USA | 32.00000 | -104.00000 | 0.0255 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Sabertooth Camel Maze, Dry Cave (UTEP 5), Eddy County, New Mexico | USA | 32.00000 | -104.00000 | 0.0255 | Hesperotestudo | Hesperotestudo wilsoni | (Mistead, 1956) |
| U-Bar Cave Mid Wisconsin, Hidalgo County, New Mexico | USA | 31.60000 | -108.40000 | 0.0315 | Geochelone | Geochelone cf. sp. | Rafinesque, 1832 |
| Gruta Nova de Columbeira, Bombaral | Portugal | 39.30510 | -9.19530 | 0.0275 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Gorham's cave IV, Gibraltar Peninsula | England | 36.12040 | -5.34200 | 0.0330 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Moore Pli, Dallas County, Texas | USA | 32.70000 | -96.70000 | 0.0290 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Gruta da Figueira Brava, Arrábida | Portugal | 38.56800 | -9.14800 | 0.0300 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Room of the Vanishing Floor, Dry Cave (UTEP 26, 27), Eddy County, New Mexico | USA | 32.00000 | -104.00000 | 0.0335 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Easley Ranch Local Fauna, Foard County, Texas | USA | 34.00000 | -99.00000 | 0.0550 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Easley Ranch Local Fauna, Foard County, Texas | USA | 34.00000 | -99.00000 | 0.0550 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Ingleside Local Fauna, San Patricio County, Texas | USA | 27.00000 | -96.00000 | 0.0600 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Cova del Rincoceront, eastern Garraf Massif, Can'Aymenich quarry, Casteldelfs | Spain | 41.27360 | 1.96090 | 0.1105 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Hopwood Farm Site, near Fillmore, Montgomery County, Illinois | USA | 39.13000 | -89.28000 | 0.1000 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Peace Creek, Florida | USA | 26.91730 | -82.14260 | 0.1000 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Cueva del Camino Sectar Central, Pinilla del Valle, Madrid | Spain | 40.92540 | -3.80630 | 0.0910 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Cueva del Camino Sectar Nord, Pinilla del Valle, Madrid | Spain | 40.92540 | -3.80630 | 0.0920 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| San Vito Lo Capo K22, Sicily | Italy | 38.20000 | 12.75000 | 0.1500 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Mealhada, Coimbra | Portugal | 40.37810 | -8.45210 | 0.1200 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Vanguard Cave, Gibraltar Peninsula | England | 36.12030 | -5.34190 | 0.1200 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Raebia, Atambua area, Timor | Indonesia | -9.10000 | 124.90000 | 0.4535 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Marjan | Croatia | 44.87360 | 15.27690 | 0.4135 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Loreto di Venosa, Potenza | Italy | 40.63330 | 15.80000 | 0.8835 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Spinagallo Cave, Siracusa, Sicily | Italy | 37.06670 | 15.30000 | 0.4135 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Riparo di Visogliano (TS) | Italy | 45.78000 | 13.65000 | 0.4500 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Slaughter Canyon Cave, Eddy County, New Mexico | USA | 32.00000 | -104.00000 | 0.2090 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Dry Cave Fauna, Eddy County, New Mexico | USA | 32.40000 | -104.50000 | 0.2900 | Gopherus | Gopherus agassizi | (Cooper, 1861) |
| Dry Cave Fauna, Eddy County, New Mexico | USA | 32.40000 | -104.50000 | 0.2900 | Hesperotestudo | Hesperotestudo wilsoni | (Mistead, 1956) |
| Luneil-Viel, Mas des Caves (Hérault) | France | 43.68330 | 4.13330 | 0.3200 | Eurotestudo | Eurotestudo aff. hermanni | (Gmelin, 1789) |
| Butler Spring XI Ranch (KU Locality 7), Meade County, Kansas | USA | 37.00000 | -100.00000 | 0.3000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Butler Spring XI Ranch (UM-K2-62), Meade County, Kansas | USA | 37.00000 | -100.00000 | 0.3000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Butler Spring XI Ranch (UM-K3-59), Meade County, Kansas | USA | 37.00000 | -100.00000 | 0.3000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|-----------|----------|------------|--------|----------------|------------------------------|-------------------------|
| Butler Spring XI Ranch (UM-K3-59), Meade County, Kansas | USA | 37.00000 | -100.00000 | 0.3000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Nye Sink Local Fauna, Beaver County, Oklahoma | USA | 36.00000 | -100.00000 | 0.3000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Alcamo travertini (TP) | Italy | 37.98330 | 12.96670 | 0.5900 | gen. | gen. Indet. | Gray, 1825 |
| Grotta Marasà (PA) | Italy | 38.00000 | 13.00000 | 0.5900 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Angus Local Fauna (UNSM No-101), Nuckolls County, Nebraska | USA | 40.00000 | -98.00000 | 0.4000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Berends Local Biota, Beaver County, Oklahoma | USA | 36.00000 | -100.00000 | 0.4000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Kanopolis Local Fauna, Ellsworth County, Kansas | USA | 38.00000 | -98.00000 | 0.4000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Arkalon Local Fauna, Seward County, Kansas | USA | 37.00000 | -100.00000 | 0.6000 | Gopherus | Gopherus | Rafinesque, 1832 |
| Arkalon Local Fauna, Seward County, Kansas | USA | 37.00000 | -100.00000 | 0.6000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Cava Dell'Erba Apricena, Foggia | Italy | 41.45000 | 15.56670 | 1.1700 | Eurotestudo | Eurotestudo ex. gr. hermanni | (Gmelin, 1789) |
| Cava Pirro Apricena, Foggia | Italy | 41.45000 | 15.56670 | 1.1700 | Eurotestudo | Eurotestudo ex. gr. hermanni | (Gmelin, 1789) |
| Valdemino Cave, 20-24 (Borgio Verezzi, Liguria) | Italy | 44.16330 | 12.45230 | 0.7000 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Gilliland local fauna, Burnett Ranch, 7 miles W of Vera, Knox County, Texas | USA | 33.80000 | -99.50000 | 0.7000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Casimba de Jatibonica, Santa Clara Province | Cuba | 21.95000 | -79.17000 | 1.3000 | Testudo | Testudo cubensis | Leidy, 1868 |
| Chapepote spring at Banos de Ciego Montero, Santa Clara Province | Cuba | 22.34000 | -80.40000 | 1.3005 | Testudo | Testudo cubensis | Leidy, 1869 |
| Tangí Talo, Dhozo Dhalu, Flores | Indonesia | -8.70000 | 121.10000 | 1.3000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Hato Nuevo, Matanzas Province | Cuba | 23.05000 | -81.50000 | 1.3015 | Testudo | Testudo cubensis | Leidy, 1870 |
| Wolo Sege, Flores | Indonesia | -8.69060 | 121.09970 | 1.0200 | Colossochelys | Colossochelys sp. | Falconer & Cauley, 1844 |
| Gervasio 5 (FG) | Italy | 41.80000 | 15.40000 | 1.4000 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Leisey Shell Pit 1A, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Gopherus | Gopherus polyphemus | (Daudin, 1803) |
| Leisey Shell Pit 2, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Leisey Shell Pit 3, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Leisey Shell Pit 3A, Hillsborough County, Florida | USA | 27.70000 | -82.50000 | 1.2500 | Hesperotestudo | Hesperotestudo crassiscutata | (Leidy, 1889) |
| Cueva de la Victoria-1 (CV-1), Carthagène, Murcia | Spain | 37.61670 | -0.86670 | 1.1500 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Mesilla Basin Fauna C, Doña Ana County, New Mexico | USA | 33.00000 | -106.50000 | 1.3500 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Mesilla Basin Fauna C, Doña Ana County, New Mexico | USA | 33.00000 | -106.50000 | 1.3500 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| El Paso, eastern side of the Franklin Mountains and along the Rio Grande, El Paso County, Texas | USA | 31.76000 | -106.49000 | 1.4000 | Gopherus | Gopherus ? sp. | Rafinesque, 1832 |
| Tijeras Arroyo, Bernalillo County, New Mexico | USA | 35.01670 | -106.61670 | 1.4000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Barranco León 5 (BL-5=Capa D), Dépression de Guadix-Baza, Grenade | Spain | 37.50000 | -3.00000 | 1.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Sierra de Quibas, Abanilla, Murcia | Spain | 38.30000 | -1.05000 | 1.3500 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| La Union, Doña Ana County, New Mexico | USA | 32.00000 | -106.70000 | 1.7000 | Gopherus | Gopherus cf. sp. | Rafinesque, 1832 |
| La Union, Doña Ana County, New Mexico | USA | 32.00000 | -106.70000 | 1.7000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Pearson Mesa near Virden, Hidalgo County, New Mexico | USA | 31.50000 | -108.50000 | 1.7000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Lakonia | Greece | 36.90000 | 22.60000 | 1.7200 | Testudo | Testudo marginata | Schoepff, 1792 |
| Kisiláng, Fejer | Hungary | 47.00000 | 18.40000 | 1.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Figline, Upper Valdarno | Italy | 43.61670 | 11.46670 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| Il Tasso, S. Giovanni (AR), Upper Valdarno | Italy | 43.00000 | 11.00000 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| Le Mignale, Upper Valdarno | Italy | 43.00000 | 11.00000 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|--------------|----------|------------|--------|----------------|-----------------------------|-------------------------------------|
| Le Ville, Upper Valdarno | Italy | 43.48330 | 12.08330 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| L'Inferno, Upper Valdarno | Italy | 43.00000 | 11.00000 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| Montecarlo, Upper Valdarno | Italy | 42.86670 | 10.68330 | 1.8000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| Big Springs Gravel Pit (UNSM Ap-103), Antelope County, Nebraska | USA | 42.40000 | -98.20000 | 2.0000 | Hesperotestudo | Hesperotestudo oelrichi | Holman, 1972 |
| Montoussé 5, Hautes Pyrenees | France | 43.06670 | 0.41670 | 1.9500 | Eurotestudo | Eurotestudo cf. hermanni | (Gmelin, 1789) |
| Varshets 6 km NNE, Michajlovrad Province | Bulgaria | 43.21670 | 23.28330 | 2.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| MacAsphalt Shell Pit, Sarasota County, Florida | USA | 27.40000 | -82.50000 | 2.2500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| St. Petersburg Times Site, Pinellas County, Florida | USA | 27.80000 | -82.70000 | 2.2500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Kelatchay (Dushak) | Turkmenistan | 37.80000 | 58.50000 | 2.2000 | Agriornemys | Agriornemys horsfieldii | (Gray, 1844) |
| Es Pujol d'es Fum, Formentera | Spain | 38.72350 | 1.45520 | 2.6000 | Titanochelon | Titanochelon cf. gymnesicus | (Bate, 1914) |
| Kryshanovka 1 | Ukraine | 46.56000 | 30.79170 | 2.6000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Abime de la Fage, Correze | France | 45.36670 | 1.88330 | 0.4135 | Eurotestudo | Eurotestudo hermanni | (Gmelin, 1789) |
| Hortus Cave, Valflaunès, Herault | France | 43.79980 | 3.87460 | 0.0685 | Testudo | Testudo sp. | Linnaeus, 1758 |
| The Chang area, Chaloem Pra K'iat district, Nakhon Ratchasima Province | Thailand | 14.98740 | 102.33520 | 3.0000 | Aldabrachelys | Aldabrachelys ? sp. | Loveridge & Williams, 1975 |
| North Cita Canyon (Middle Stratum), Randall County, Texas | USA | 34.90000 | -101.60000 | 2.7000 | Gopherus | Gopherus canyonensis | (Johnston, 1937) |
| Cita Canyon, UGMP V-3721, Harrell Ranch, Randall County, Texas | USA | 34.90000 | -101.60000 | 3.3500 | Hesperotestudo | Hesperotestudo johnstoni | Auffenberg, 1962 |
| Caballo Local Fauna, Palomas Basin, Sierra County, New Mexico | USA | 32.97000 | -107.31000 | 2.0000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| Caballo Local Fauna, Palomas Basin, Sierra County, New Mexico | USA | 32.97000 | -107.31000 | 2.0000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Cita Canyon, UGMP V-3721, Harrell Ranch, Randall County, Texas | USA | 34.90000 | -101.60000 | 3.3500 | Gopherus | Gopherus canyonensis | (Johnston, 1937) |
| Las Tunas, Baja California Sur | Mexico | 23.18330 | -109.18330 | 3.2500 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Novaya Etulia 2 | Moldova | 45.52000 | 28.44000 | 2.8000 | Testudo | Testudo cernovi | Khozatskiy, 1948 |
| Epanomi (EPN I), western Chalkidiki Peninsula, Thessaloniki area | Greece | 40.40460 | 22.89800 | 3.9500 | Titanochelon | Titanochelon bacharidisi | (Viachos, Tsoukala & Corsini, 2014) |
| Epanomi (EPN II), western Chalkidiki Peninsula, Thessaloniki area | Greece | 40.40460 | 22.89800 | 3.9500 | Titanochelon | Titanochelon bacharidisi | (Viachos, Tsoukala & Corsini, 2014) |
| Altan-Teli main fossiliferous bed (Dzereg valley) | Mongolia | 47.10000 | 93.16670 | 3.9500 | Ergilemys | Ergilemys oskarkuhni | M'zynarski, 1968) |
| Nea Kalikratia, western Chalkidiki Peninsula, Thessaloniki area | Greece | 40.31460 | 23.04620 | 3.9500 | Titanochelon | Titanochelon bacharidisi | (Viachos, Tsoukala & Corsini, 2014) |
| Nea Michaniona, western Chalkidiki Peninsula, Thessaloniki area | Greece | 40.47310 | 22.83850 | 3.9500 | Titanochelon | Titanochelon bacharidisi | (Viachos, Tsoukala & Corsini, 2014) |
| Milia, Grevena, W Macedonia | Greece | 40.17910 | 21.47560 | 2.6000 | Testudo | Testudo brevitesia | Viachos & Tsoukala, 2016 |
| Milia, Grevena, W Macedonia | Greece | 40.17910 | 21.47560 | 2.6000 | Titanochelon | Titanochelon sp. | Pérez-García & Viachos, 2014 |
| Sand Draw local fauna, Brown County, Nebraska | USA | 42.70000 | -100.00000 | 3.0000 | Hesperotestudo | Hesperotestudo oelrichi | Holman, 1972 |
| Sawrock Canyon local fauna, Seward County, Kansas | USA | 37.00000 | -100.00000 | 3.0000 | Hesperotestudo | Hesperotestudo riggsi | (Hibbard, 1944) |
| Cala Es Pous near Ciutadella, Minorca | Spain | 40.05000 | 3.82600 | 4.4500 | Titanochelon | Titanochelon gymneisucs | (Bate, 1914) |
| Serrat-d'en-Vacquer near Perpignan, Pyrénées-Orientales | France | 42.88000 | 2.86000 | 3.9000 | Titanochelon | Titanochelon perpiniana | (Dépéret, 1885) |
| Megalo Emvolon 1 (MEV), 20 km SW Thessaloniki | Greece | 40.50170 | 22.81770 | 3.9000 | Testudo | Testudo cf. graeca | Linnaeus, 1758 |
| Megalo Emvolon 1 (MEV), 20 km SW Thessaloniki | Greece | 40.50170 | 22.81770 | 3.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| W7?e 1 | Poland | 52.35000 | 22.15000 | 3.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Punta Nati near Ciutadella, Minorca | Spain | 40.05060 | 3.82570 | 4.4500 | Titanochelon | Titanochelon gymnesicus | (Bate, 1914) |
| Lee Creek Mine, Yorktown Sample, Beaufort County, North Carolina | USA | 35.40000 | -76.80000 | 4.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Rexroad local fauna (Fox Canyon locality 3), Meade County, Kansas | USA | 37.20000 | -100.30000 | 4.5500 | Caudochelys | Caudochelys rexroadensis | (Oelrich, 1952) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|-----------|-----------|------------|--------|----------------|----------------------------|-----------------------------|
| Rexroad local fauna (Fox Canyon locality 3), Meade County, Kansas | USA | 37.20000 | -100.30000 | 4.5500 | Hesperotestudo | Hesperotestudo riggsi | (Hibbard, 1944) |
| Santee, Knox County, Nebraska | USA | 42.00000 | -97.00000 | 5.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| W??e 1 | Poland | 52.35000 | 22.15000 | 3.9000 | Eurotestudo | Eurotestudo globosa | (Portis, 1890) |
| W??e 1 | Poland | 52.35000 | 22.15000 | 3.9000 | Eurotestudo | Eurotestudo hermami | (Gmelin, 1789) |
| Farola Monte Hermoso, 12 km SW Pehuén C  Beach, Buenos Aires Province | Argentina | -39.00830 | -61.50280 | 3.9650 | Testudo | Chelonoidis australis | Linnaeus, 1758 (p. 198) |
| Palomas Creek Fauna, Palomas Basin, Sierra County, New Mexico | USA | 33.05000 | -107.30000 | 2.8000 | Gopherus | Gopherus sp. | Rafinesque, 1832 |
| UCMP V6327, La Porteria, Kettleman Hills, Kings County, California | USA | 35.90000 | -119.90000 | 3.1000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Laetoli | Tanzania | -2.99620 | 35.35240 | 3.2550 | Geochelone | Geochelone laetoliensis | Meylan & Auffenberg, 1987 |
| Laetoli | Tanzania | -2.99620 | 35.35240 | 3.2550 | Sigmochehlys | Sigmochehlys brachygularis | (Meylan & Auffenberg, 1987) |
| Sand Draw local fauna, Brown County, Nebraska | USA | 42.70000 | -100.00000 | 3.0000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Sand Draw local fauna, Brown County, Nebraska | USA | 42.70000 | -100.00000 | 3.0000 | Caudochelys | Caudochelys sp. | Auffenberg, 1963 |
| Cuchillo Negro Creek Local Fauna, Engle Basin, Sierra County, New Mexico | USA | 33.19500 | -107.25700 | 3.1000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Elephant Butte Lake Fauna, Engle Basin, Sierra County, New Mexico | USA | 33.20000 | -107.20000 | 3.1000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Las Higuerauelas, Acolea de Calatrava, Ciudad Real | Spain | 38.98830 | -4.08570 | 3.2000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Las Higuerauelas, Acolea de Calatrava, Ciudad Real | Spain | 38.98830 | -4.08570 | 3.2000 | Titanochelon | Titanochelon bolivari | (Hern ndez Pacheco, 1971) |
| Dikika (DIK-1) | Ethiopia | 11.10000 | 40.60000 | 3.3300 | Centrochehlys | Centrochehlys sp. | Gray, 1872 |
| Jambol, Tenovo or General Insovo sandstone quarries | Bulgaria | 42.48000 | 26.51000 | 4.4500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Montpellier, H rault | France | 42.60840 | 3.87930 | 4.4500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Perpignan et sa r gion, Pyr n es-Orientales | France | 42.68330 | 2.88330 | 3.9000 | Eurotestudo | Eurotestudo pyrenaica | (Dep ret & Domezan, 1890) |
| Perpignan et sa r gion, Pyr n es-Orientales | France | 42.68330 | 2.88330 | 3.9000 | Titanochelon | Titanochelon perpiniana | (Dep ret, 1885) |
| Serrat-d'en-Vacquer near Perpignan, Pyr n es-Orientales | France | 42.88000 | 2.88000 | 3.9000 | Eurotestudo | Eurotestudo pyrenaica | (Dep ret & Domezan, 1890) |
| Musaid right bank of Big Satcha River, Vulkaneshty Region | Moldova | 45.82060 | 28.50500 | 3.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Novo-Savitzkaya | Moldova | 46.80610 | 29.86860 | 3.9000 | Testudo | Testudo cernovi | Khozaitskiy, 1948 |
| Liventsovka horizon 5, near Rostov-on-Don | Russia | 47.24000 | 39.71000 | 3.7000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Novopetrovka | Ukraine | 47.04170 | 29.86500 | 4.4500 | Testudo | Testudo sp. | Linnaeus, 1758 |
|  alia | Turkey | 40.25000 | 32.55000 | 4.0000 | Testudo | Testudo sp. | Gray, 1825 |
| Ptolemais 6A = Notio 1 (NO 1) | Greece | 40.50000 | 21.75000 | 3.9400 | gen. | gen. indet. | Gray, 1825 |
| Ptolemais 6B = Notio 1 | Greece | 40.50000 | 21.75000 | 3.9400 | gen. | gen. indet. | Gray, 1825 |
| Ptolemais 6C = Notio 1 (NO 1) | Greece | 40.50000 | 21.75000 | 3.9400 | gen. | gen. indet. | Gray, 1825 |
| Tchelopetchene 1 (sand facies) | Bulgaria | 42.73330 | 23.48330 | 4.6500 | Testudo | Testudo sp. | Linnaus, 1758 |
| El Arquillo 3 (ARQ3) | Spain | 40.40000 | -1.10000 | 4.0300 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Kanapoi | Kenya | 3.54000 | 35.87000 | 4.0700 | Geochelone | Geochelone crassa | (Andrews, 1914) |
| Kanapoi | Kenya | 3.54000 | 35.87000 | 4.0700 | Geochelone | Geochelone cf. sp. | Fitzinger, 1835 |
| Kanapoi | Kenya | 3.54000 | 35.87000 | 4.0700 | Sigmochehlys | Sigmochehlys sp. | Gray, 1873 |
| Nikolskoe | Moldova | 46.87550 | 29.86140 | 4.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Aramis, ARA-VP-6/500, Middle Awash Valley | Ethiopia | 9.00000 | 40.16670 | 4.4000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Devil's Nest Airstrip, Knox County, Nebraska | USA | 42.00000 | -97.00000 | 5.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Devil's Nest Airstrip, Knox County, Nebraska | USA | 42.00000 | -97.00000 | 5.0000 | Hesperotestudo | Hesperotestudo aff. sp. | Williams, 1950 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|---------|----------|------------|---------|----------------|---------------------------------|-----------------------------|
| Santee, Knox County, Nebraska | USA | 42.00000 | -97.00000 | 5.0000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Devil's Nest Airstrip, Knox County, Nebraska | USA | 42.00000 | -97.00000 | 5.0000 | Caudochelys | Caudochelys aff. rexroadensis | (Oelrich, 1952) |
| Kuchurgan | Ukraine | 46.75000 | 29.98330 | 5.0500 | Testudo | Testudo cernovi | Khozatskiy, 1948 |
| Kuchurgan | Ukraine | 46.75000 | 29.98330 | 5.0500 | Titanochelon | Titanochelon ex. gr. perpiniana | (Depéret, 1885) |
| Osztramos 1C | Hungary | 48.52500 | 20.75830 | 5.1650 | Testudo | Testudo ? sp. | Linnaeus, 1758 |
| Buis Ranch Local Fauna, Beaver County, Oklahoma | USA | 36.80000 | -100.50000 | 7.6000 | Hesperotestudo | Hesperotestudo riggsi | (Hibbard, 1944) |
| UCMP V71137, Turlock Lake 10, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| UCMP V81248, Turlock Lake 11, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Allatini, eastern part of Thessaloniki, western Chalkidiki peninsula | Greece | 40.58990 | 22.97160 | 5.5000 | Testudo | Testudo graeca | Linnaeus, 1758 |
| Pylea, eastern part of Thessaloniki, western Chalkidiki peninsula | Greece | 40.59940 | 22.98760 | 5.5000 | Testudo | Testudo graeca | Linnaeus, 1758 |
| As Sahabi | Libya | 30.16670 | 20.83330 | 5.5000 | Centrochelys | Centrochelys aff. sulcata | (Miller, 1779) |
| Yepómëra, Chihuahua | Mexico | 28.80000 | -108.00000 | 4.7500 | Gopherus | Gopherus cf. sp. | Rafinesque, 1832 |
| UCMP V65711, Turlock Lake General, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| UCMP V6878, Turlock Lake, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| UCMP V71138, Dallas-Warner Reservoir 1, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| UCMP V90007, Turlock Lake 13, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| UCMP V90008, Turlock Lake 14, Stanislaus County, California | USA | 37.60000 | -120.60000 | 5.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Withlacoochee River Site 4A, Marion County, Florida | USA | 28.80000 | -82.30000 | 5.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Konfidisch | Austria | 47.16670 | 16.35000 | 8.7500 | gen. | - | Gray, 1825 |
| Konfidisch | Austria | 47.16670 | 16.35000 | 8.7500 | Testudo | Testudo burgenlandica | Bachmayer & Mlynarski, 1983 |
| Teiritzberg (T1 = 001/D/C), Korneuburg Basin, Lower Austria | Austria | 48.36670 | 16.33330 | 16.5500 | Paleotestudo | Paleotestudo sp. | Lapparent de Broin, 2000 |
| Eggenburg-Schindergaben, Lower Austria | Austria | 48.63330 | 15.81700 | 19.9650 | Testudo | Testudo kalksburgensis | Toula, 1896 |
| Holzmannsdorfberg bei St. Marein | Austria | 47.01670 | 15.66670 | 10.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| McGehee Farm near Newberry, Alachua County, Florida | USA | 29.70000 | -82.60000 | 10.9500 | Hesperotestudo | Hesperotestudo alleni | (Auffenberg, 1996) |
| Wessington Springs local fauna, Jerauld County, South Dakota | USA | 44.10000 | -98.60000 | 11.5000 | gen. | gen. indet. | Gray, 1825 |
| Iron Canyon Fauna, Mojave Desert, Kern County, California | USA | 35.30000 | -118.50000 | 11.8500 | Gopherus | Gopherus ? sp. | Rafinesque, 1832 |
| Chafé, Segovia | Spain | 41.33890 | -4.42500 | 13.8000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Cerro del Otero, Palencia | Spain | 42.01010 | -4.52870 | 12.5000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| La Ciesma 1, Aragón | Spain | 41.86000 | -1.80000 | 12.2000 | gen. | gen. indet. | Gray, 1825 |
| La Ciesma 1, Aragón | Spain | 41.86000 | -1.80000 | 12.2000 | Titanochelon | Titanochelon cf. boliviari | (Hernández Pacheco, 1971) |
| El Buste, Aragón | Spain | 41.88600 | -1.60290 | 12.4000 | Paleotestudo | Paleotestudo cf. sp. | Lapparent de Broin, 2000 |
| Steinheim a. Albuch | Germany | 48.69390 | 10.06780 | 13.0000 | Testudo | Testudo steinhimensis | Staesche, 1931 |
| Hohenhöwen, Engen, Hegau, southwestern Germany | Germany | 47.83560 | 8.74900 | 13.0000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Wien-Kalksburg | Austria | 48.12000 | 16.26000 | 14.5000 | Testudo | Testudo kalksburgensis | Toula, 1896 |
| Belomechetskaya | Russia | 44.40000 | 41.93330 | 14.0000 | Erglenys | Erglenys sp. | Oskhivadze, 1972 |
| Sansan, Gers (lake) | France | 43.90000 | -0.50000 | 13.6000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Alcalá de Henares, Cerro del Viso (Barranco de los Mártires y Santos de la Humosa), Madrid | Spain | 40.48820 | -3.31340 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1917) |
| Vallecas, Madrid | Spain | 40.38150 | -3.62240 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|----------|-----------|------------|---------|----------------|-------------------------------|---------------------------|
| Tarazona de Aragón | Spain | 41.90250 | -1.72520 | 14.7000 | gen. | gen. indet. | Gray, 1825 |
| Tarazona de Aragón | Spain | 41.90250 | -1.72520 | 14.7000 | Paleotestudo | Paleotestudo cf. sp. | Lapparent de Broin, 2000 |
| Randle Cliff, Calvert County, Maryland | USA | 38.66650 | -76.52980 | 15.4000 | Floridemys | Floridemys hursli | Weems & George, 2013 |
| Burgerbachobel 1 near Wippertsweiler | Germany | 47.80180 | 9.45040 | 15.0000 | Titanochelon | Titanochelon vitodurana | (Biedermann, 1862) |
| Monteagudo, Aragón | Spain | 41.96270 | -1.69220 | 16.4000 | gen. | gen. indet. | Gray, 1825 |
| Sandeizhausen | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectangularis | Schleich, 1981 |
| Sandeizhausen unterer Geröllmergel (B) | Germany | 48.62830 | 11.79600 | 16.3700 | Titanochelon | Titanochelon cf. perphiana | (Dépéret, 1885) |
| Kirchdorf an der Iller | Germany | 48.07280 | 10.14240 | 16.6500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Arrisdrit | Namibia | -28.55000 | 16.50000 | 17.2500 | Mesocherius | Mesocherius orangeus | Lapparent de Broin, 2003 |
| Arrisdrit | Namibia | -28.55000 | 16.50000 | 17.2500 | Namibchersus | Namibchersus aff. namaquensis | (Stromer, 1926) |
| Thomas Farm Local Fauna, Gilchrist County, Florida | USA | 29.70000 | -82.60000 | 18.5000 | Geochelone | Geochelone tedwhitei | (Williams, 1953) |
| Auchas | Namibia | -28.55000 | 16.50000 | 18.0000 | Namibchersus | Namibchersus namaquensis | (Stromer, 1926) |
| Elisabethfeld (= Elisabeth Bay) area, northern Sperrgebiet | Namibia | -26.91610 | 15.18380 | 19.5000 | Namibchersus | Namibchersus namaquensis | (Stromer, 1926) |
| Samos 1 | Greece | 37.80000 | 26.90000 | 6.2500 | Titanochelon | Titanochelon schafferi | (Szalai, 1931) |
| Santa-Vittoria d'Alba | Italy | 44.70000 | 7.93330 | 6.1650 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Torrente Melacce, Cingiano (GR) | Italy | 42.88330 | 11.40000 | 5.8150 | Testudo | Testudo sp. | Linnaeus, 1758 |
| San Nicolas, UCMF locality V4536 | Colombia | 3.20000 | -75.20000 | 8.5000 | Geochelone | Geochelone hesternia | Auffenberg, 1971 |
| Prottes | Austria | 48.38960 | 16.74540 | 8.3000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Prottes | Austria | 48.38960 | 16.74540 | 8.3000 | Testudo | Testudo cf. promarginata | Reinach, 1900 |
| Prottes | Austria | 48.38960 | 16.74540 | 8.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Crevillente 2 | Spain | 38.27000 | -0.80000 | 8.3000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Crevillente 2 | Spain | 38.27000 | -0.80000 | 8.3000 | Testudo | Testudo catalaunica | (Battaler, 1926) |
| UCMP V-3952, Ingram Creek site 8, Stanislaus County, California | USA | 37.60000 | -120.80000 | 9.5000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Ricardo Fauna, Mojave Desert, Kern County, California | USA | 35.30000 | -118.50000 | 10.1000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Ricardo Fauna, Mojave Desert, Kern County, California | USA | 35.30000 | -118.50000 | 10.1000 | Gopherus | Gopherus ? sp. | Rafinesque, 1832 |
| El Lugarejo (Arévalo), Ávila, Castilla | Spain | 41.05600 | -4.71690 | 10.2500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Hostalets de Piñola, Barcelona province, Cataluña, Vallés-Penedés basin | Spain | 41.53490 | 1.76850 | 10.4000 | Cheirogaster | Cheirogaster richardi | (Bergounioux, 1938) |
| Kohfidisch | Austria | 47.16670 | 16.35000 | 8.7500 | Protestudo | Protestudo csakvarensis | Szalai, 1934) |
| Teititzberg (T1 = 001/D/C), Korneuburg Basin, Lower Austria | Austria | 48.36670 | 16.33330 | 16.5500 | gen. | gen. indet. | Gray, 1825 |
| Fuensaldaña, Valladolid | Spain | 41.70800 | -4.76420 | 12.5000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Illescas, Toledo | Spain | 40.12650 | -3.84890 | 12.5000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Illescas, Toledo | Spain | 40.12650 | -3.84890 | 12.5000 | Titanochelon | Titanochelon cf. bolivari | (Hernández Pacheco, 1971) |
| La Cistérniga, Valladolid | Spain | 41.59730 | -4.65490 | 12.5000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Puente de la Princesa, Madrid | Spain | 40.38890 | -3.69840 | 14.0000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Villalcón, Palencia | Spain | 42.29320 | -4.85520 | 14.0000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Coca cemetery, Segovia | Spain | 41.21940 | -4.52880 | 12.8500 | Titanochelon | Titanochelon cf. bolivari | (Hernández Pacheco, 1971) |
| Przeworno I | Poland | 50.68050 | 17.18330 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Barajas, Madrid | Spain | 40.48390 | -3.56790 | 15.0000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|-----------|-----------|------------|---------|----------------|---------------------------|--|
| Barajas, Madrid | Spain | 40.48390 | -3.56790 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Ciudad Universitaria, Madrid | Spain | 40.44670 | -3.73020 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Henares 1, Los Santos de la Humosa, Madrid | Spain | 40.45060 | -3.44270 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Puente de los Franceses, Madrid | Spain | 40.43370 | -3.73580 | 15.0000 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Puente de los Franceses, Madrid | Spain | 40.43370 | -3.73580 | 15.0000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Vallecas, Madrid | Spain | 40.38150 | -3.62240 | 15.0000 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Egelhoff Ranch Local Fauna, Keya Paha County, Nebraska | USA | 42.00000 | -100.00000 | 14.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1863) |
| Plum Point, Calvert County, Maryland | USA | 38.00000 | -76.00000 | 15.0000 | Caudochelys | Caudochelys ducateii | (Collins & Lynn, 1936) |
| Furth 460m | Germany | 48.60000 | 12.03330 | 15.2250 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Puttenhausen E | Germany | 48.61220 | 11.77730 | 16.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Puttenhausen B | Germany | 48.61220 | 11.77730 | 16.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Puttenhausen A | Germany | 48.61220 | 11.77730 | 16.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ba'ra Dolina in Veřky Krtíš | Slovakia | 48.20730 | 19.34780 | 17.4000 | gen. | gen. indet. | Gray, 1825 |
| Fosso della Fittaia 2013, Baccinello-Cinigiano Basin, Tuscany | Italy | 42.68330 | 11.33330 | 7.3500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Prottes | Austria | 48.38960 | 16.74540 | 8.3000 | Ergilemys | Ergilemys sp. | Okhivadze, 1972 |
| Crevillente 2 | Spain | 38.27000 | -0.80000 | 8.3000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Autovía A6, Arévalo, Ávila | Spain | 41.05270 | -4.70010 | 10.2500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Hammerschmiede 1 | Germany | 47.92730 | 10.59150 | 11.1800 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Hammerschmiede 5 (HAM 5) | Germany | 47.92730 | 10.59150 | 11.6200 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Salinas Grandes de Hidalgo, Atreucó, La Pampa | Argentina | -37.20000 | -63.60000 | 7.9000 | Chelonoidis | gen. indet. | Fitzinger, 1835 |
| Toros-Menalla, Djurab desert (TM 266) | Chad | 16.25000 | 17.48750 | 7.0400 | gen. | gen. indet. | Gray, 1826 |
| Patos (= Acre 6, LACM Locality 4611), Assisbrasil County, Acre | Brazil | -10.90000 | -69.90000 | 9.4300 | Chelonoidis | Chelonoidis sp. | Fitzinger, 1835 |
| Götzendorf | Austria | 48.01670 | 16.58330 | 9.8600 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Vösendorf-Brunn, near Wien | Austria | 48.20000 | 16.36000 | 10.3500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Atzelsdorf, 35 km NE Vienna, Lower Austria | Austria | 48.51030 | 16.54420 | 11.1500 | Testudo | Testudo cf. burgenlandica | Bachmayer & Mlynarski (1983) |
| Elbiswald | Austria | 46.68780 | 15.24890 | 15.2200 | Paleotestudo | Paleotestudo mellingi | Peters, 1868 |
| Karingarab D. wardi level | Namibia | -27.00000 | 15.50000 | 11.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin Fde, 2003: Miocene Chelonians |
| North of Gypsum Plate Pan D. wardi level | Namibia | -27.00000 | 15.50000 | 12.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin, 2003 |
| Roollepel D. wardi level | Namibia | -27.00000 | 15.50000 | 11.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin, 2003 |
| Tataru?-Brusturi | Romania | 47.15000 | 22.25000 | 10.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Jebel Semama | Tunisia | 35.33330 | 8.83330 | 10.0000 | Testudo | Testudo semenensis | Bergounioux, 1945-1955 |
| Küçükçekmece | Turkey | 40.98330 | 28.76670 | 10.6500 | Testudo | Testudo cf. sp. | Linnaeus, 1758 |
| Höwenegg | Germany | 47.90000 | 8.75000 | 10.3000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1953 |
| Höwenegg | Germany | 47.90000 | 8.75000 | 10.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ecoparc de Can Mata (els Hostalets de Pierola), Vallés-Penedés basin, Cataluña | Spain | 41.53280 | 1.80320 | 10.7000 | Titanochelon | Titanochelon boliviari | (Hernández Pacheco, 1971) |
| Petersbuch 14 | Germany | 48.97790 | 11.19090 | 11.3000 | gen. | gen. indet. | Gray, 1825 |
| Sant Quirze de Terrassa/de Gallinets (del Vallés), Barcelona | Spain | 41.38330 | 2.18330 | 11.3000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Grisev (Khmelitsk area, Shepetovski district) | Ukraine | 49.97500 | 27.16000 | 11.5270 | Protestudo | Protestudo sp. | Chkhikvadze, 1970 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|-------------|----------|------------|---------|----------------|-------------------------------|---------------------------|
| Sofca (125) - F 434 | Turkey | 39.16670 | 30.18330 | 12.1500 | gen. | gen. indet. | Gray, 1825 |
| Can Mata (els Hostalets de Pierola), Vallès-Penedés basin, Cataluña | Spain | 41.51920 | 1.72830 | 11.9000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Nombrevilla 2. NOM 2 | Spain | 41.07000 | -1.21000 | 11.8900 | Paleotestudo | Paleotestudo cf. antiqua | (Brom, 1831) |
| Gratkorn, clay pit St. Stefan, Styria | Austria | 47.13720 | 15.34890 | 12.1000 | Testudo | Testudo kalksburgensis | Toula, 1896 |
| Gratkorn, clay pit St. Stefan, Styria | Austria | 47.13720 | 15.34890 | 12.1000 | Testudo | Testudo cf. steinheimensis | Staesche, 1931 |
| Bois de Fabregues, Aups, Var | France | 43.62840 | 6.22480 | 12.5000 | Cheirogaster | Cheirogaster cf. sp. | Bergounioux, 1935 |
| Abocador de Can Mata (els Hostalets de Pierola)(ACMBDA), Vallès-Penedés basin, Cataluña | Spain | 41.51920 | 1.72830 | 12.7500 | Cheirogaster | Cheirogaster df. richardi | (Bergounioux, 1931) |
| La-Grive-Saint-Alban (MHL7), Isère | France | 45.58000 | 5.26000 | 12.6000 | Testudo | Testudo ex. gr. antiqua | Bronn, 1831 |
| Toril 3A, TOR 3A, near Daroca, Zaragoza province | Spain | 41.13330 | -1.38330 | 12.1300 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Toril 3B, TOR 3B, near Daroca, Zaragoza province | Spain | 41.13330 | -1.38330 | 12.1400 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Oehningen, oberer Bruch, Schlierberg N Oehningen-Wangen | Germany | 47.67600 | 8.92510 | 12.8500 | Testudo | Testudo scutella | (Meyer, 1845) |
| Steinheim a. Albuch | Germany | 48.69390 | 10.06780 | 13.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Fort Niobrara, UCMP V-3218, Cherry County, Nebraska | USA | 42.80000 | -100.80000 | 12.9500 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1863) |
| Valentine Railway Quarry A, UNSM Cr 12, Cherry County, Nebraska | USA | 42.80000 | -100.80000 | 12.9000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Valentine Railway Quarry B, UNSM Cr 13, Cherry County, Nebraska | USA | 42.80000 | -100.80000 | 12.9000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Coca-Villeguillo, Segovia | Spain | 41.25000 | -4.57750 | 13.5000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Ullikon-Schlieren, quarry on road, near Zürich | Switzerland | 47.38200 | 8.44730 | 13.5000 | Titanochelon | Titanochelon vitodurana | (Biedermann, 1862) |
| Veltheim-Winterthur | Switzerland | 47.51240 | 8.71700 | 13.5000 | Titanochelon | Titanochelon vitodurana | (Biedermann, 1862) |
| Myers Farm, Webster County, Nebraska | USA | 40.00000 | -98.00000 | 13.1000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Myers Farm, Webster County, Nebraska | USA | 40.00000 | -98.00000 | 13.1000 | Hesperotestudo | Hesperotestudo cf. orthopygia | (Cope, 1878) |
| Mysualmas | Kazakhstan | 45.90000 | 55.25000 | 13.7000 | gen. | gen. indet. | Gray, 1825 |
| DISC Cluster Sites, conglomerate, Fort Polk, Louisiana | USA | 31.08030 | -93.20120 | 13.4000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Goldberg near Pflaumloch, Nördlinger Ries (without number) | Germany | 48.85970 | 10.47530 | 14.1500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Kirberg b. Baizhausen - Tongrube | Germany | 48.22500 | 10.50140 | 14.1500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Kirberg b. Baizhausen - Tongrube | Germany | 48.22500 | 10.50140 | 14.1500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Petersbuch 31 - oben | Germany | 48.97790 | 11.19090 | 13.6000 | gen. | gen. indet. | Gray, 1825 |
| Ursberg (nördliche Sandgrube) | Germany | 48.26110 | 10.45170 | 14.1500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Somosaguas Sur, Madrid Basin | Spain | 40.42440 | -3.79230 | 13.9000 | gen. | gen. indet. | Gray, 1825 |
| Hottell Ranch rhino quarries, Banner County, Nebraska | USA | 41.50000 | -103.80000 | 15.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Lassé, Maine-et-Loire | France | 47.53780 | 0.01160 | 15.0000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Pontigné-les-Buisseaux, Maine-et-Loire | France | 47.54000 | -0.04010 | 15.0000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Vieux-Collonges, Saint-Cyr-au-Mont-d'Or, Rhône, France | France | 45.75000 | 4.85000 | 15.7500 | gen. | gen. indet. | Gray, 1825 |
| Vieux-Collonges, Saint-Cyr-au-Mont-d'Or, Rhône, France | France | 45.75000 | 4.85000 | 15.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Calle Moratines, Madrid | Spain | 40.40270 | -3.70360 | 15.0000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Calle Paseo de Moret, Madrid | Spain | 40.43400 | -3.72190 | 15.0000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| La Barranca, Zaragoza | Spain | 41.60000 | -0.90000 | 14.5000 | Paleotestudo | Paleotestudo cf. antiqua | (Brom, 1831) |
| Paracuellos de Jarama, Madrid | Spain | 40.50570 | -3.53020 | 15.0000 | Titanochelon | Titanochelon cf. bolivari | (Hernández Pacheco, 1971) |
| Bohlinger Schlucht 6 | Germany | 47.70600 | 8.89000 | 14.3500 | gen. | gen. indet. | Gray, 1825 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|---------|----------|------------|---------|----------------|---------------------------|-------------------|
| Stätzing | Germany | 48.40000 | 10.96670 | 14.5000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Bonlanden, Illertal | Germany | 48.06860 | 10.07470 | 14.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Bonlanden, Illertal | Germany | 48.06860 | 10.07470 | 14.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Georgensmünd, Reznat-Alt Mühl-Stausee | Germany | 49.19600 | 11.01000 | 14.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Hambach 6C | Germany | 50.90000 | 6.45000 | 14.7000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Unterszell 1a | Germany | 48.38330 | 11.01670 | 14.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Norden Bridge Local Fauna, Brown County, Nebraska | USA | 42.80000 | -100.00000 | 14.5000 | Geochelone | Geochelone nordensis | Holman, 1973 |
| Norden Bridge Local Fauna, Brown County, Nebraska | USA | 42.80000 | -100.00000 | 14.5000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Laimering 3 | Germany | 48.38960 | 11.08850 | 14.6000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ziemetshausen 1e | Germany | 48.29390 | 10.53030 | 14.6000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Dénezé-sous-le-Lude, Maine-et-Loire | France | 47.53300 | 0.13300 | 15.9000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Noyant-sous-le-Lude, Maine-et-Loire | France | 47.51700 | 0.11700 | 15.9000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Pontlevoy-Thenay, Loir-et-Cher | France | 47.40000 | 1.20000 | 15.4000 | Ergilemys | Ergilemys sp. | Chkhvadze, 1972 |
| Pontlevoy-Thenay, Loir-et-Cher | France | 47.40000 | 1.20000 | 15.4000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Savigné-sur-Lathan, Indre-et-Loire | France | 47.45000 | 0.31700 | 15.9000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Arsening (shallow lake) | Germany | 48.53330 | 11.30000 | 20.9000 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Edelbeuren-Schlachberg | Germany | 48.08900 | 10.02330 | 14.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Griesbeckerzell 1a | Germany | 48.44680 | 11.05430 | 14.8000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Griesbeckerzell 1a | Germany | 48.44680 | 11.05430 | 14.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Tobel Oelhalde Nord 1 | Germany | 48.04130 | 9.83060 | 14.8000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Tobel Oelhalde Süd | Germany | 48.04130 | 9.83060 | 14.8000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Tobel Oelhalde Süd | Germany | 48.04130 | 9.83060 | 14.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ziemetshausen 1b | Germany | 48.29390 | 10.53030 | 14.8000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Ziemetshausen 1b | Germany | 48.29390 | 10.53030 | 14.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ziemetshausen 1g | Germany | 48.29390 | 10.53030 | 14.8000 | gen. | gen. indet. | Gray, 1825 |
| Valdemoros 3B, VA 3B | Spain | 41.09000 | -1.48200 | 14.8400 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Derching 1b (unten) | Germany | 48.40910 | 10.97190 | 14.9000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Edelbeuren-Maurerkopf | Germany | 48.09620 | 10.03110 | 14.9000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Edelbeuren-Maurerkopf | Germany | 48.09620 | 10.03110 | 14.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Castelnau d'Arbieu, Gers | France | 43.88330 | 0.70000 | 15.8500 | Cheirogaster | Cheirogaster cf. sp. | Beigounioux, 1935 |
| Benistobel (Kohl-tobel) | Germany | 47.79570 | 9.44290 | 15.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Biberach-Jordanbad | Germany | 48.07480 | 9.82220 | 15.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Burgerbachtobel 1 near Wippertsweiler | Germany | 47.80180 | 9.45040 | 15.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Burgerbachtobel 1 near Wippertsweiler | Germany | 47.80180 | 9.45040 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ettishofener Ach between Inn-tobel and Berg-Ettishofen | Germany | 47.82330 | 9.59010 | 15.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Ettishofener Ach between Inn-tobel and Berg-Ettishofen | Germany | 47.82330 | 9.59010 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Griesbeckerzell 1b | Germany | 48.44680 | 11.05430 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Heggbach am Buchhaldenberg, Maseheim, near Biberach | Germany | 48.14070 | 9.88710 | 15.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|-----------|-----------|-----------|---------|----------------|----------------------------|----------------------------------|
| Heggbach am Buchhaldenberg, Maseheim, near Biberach | Germany | 48.14070 | 9.88710 | 15.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Hotterloch-Tobel SW Ravensburg | Germany | 47.76960 | 9.56860 | 15.0000 | Paleotestudo | Paleotestudo antiqua | (Bronn, 1831) |
| Lattertobel | Germany | 47.82910 | 9.42970 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ochsenhausen am Heselberg, Baustelle Remmele | Germany | 48.06870 | 9.95670 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Schmalegger Tobel | Germany | 47.80930 | 9.53320 | 15.0000 | Geochelone | Geochelone cf. sp. | Fitzinger, 1835 |
| Schmalegger Tobel | Germany | 47.80930 | 9.53320 | 15.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Ziemeishausen 1d | Germany | 48.29390 | 10.53030 | 15.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Ziemeishausen 1f | Germany | 48.29390 | 10.53030 | 15.0000 | gen. | gen. indet. | Gray, 1825 |
| Grund near Hollabrunn (Collection Schaffer) | Austria | 48.61670 | 16.06670 | 15.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Petersbuch 41 | Germany | 48.97790 | 11.19090 | 15.2000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Eberstein 2 (unter Weg) | Germany | 48.53050 | 11.53690 | 15.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Untereichen-Altenstadt 585m | Germany | 48.18330 | 10.11670 | 15.3000 | Ergilemys | Ergilemys sp. | Chkhvadze, 1972 |
| Untereichen-Altenstadt 585m | Germany | 48.18330 | 10.11670 | 15.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Coldspring Trinity River Local Fauna, San Jacinto County, Texas | USA | 30.00000 | -95.00000 | 15.5000 | Hesperotestudo | Hesperotestudo sp. | Williams, 1950 |
| Chesapeake Beach RR Station, Maryland | USA | 38.67990 | -76.53240 | 15.7000 | Caudochelys | Caudochelys ducateii | (Collins & Lynn, 1936) |
| Oberbernbach a | Germany | 48.47160 | 11.12840 | 15.7000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Oggenhof near Häder | Germany | 48.35800 | 10.76060 | 15.7000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Moratilla 2. MOR 2 | Spain | 40.63330 | -2.03330 | 15.7800 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Gisselshausen 1b | Germany | 48.71090 | 12.01800 | 15.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Gisselshausen 1a | Germany | 48.71090 | 12.01800 | 15.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Häder | Germany | 48.35630 | 10.63890 | 16.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Sainbach (bei Ichenhofen) | Germany | 48.51670 | 11.10000 | 15.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Culebra Reach, Station 1998 + 00, 600 feet W of center line of Panama Canal | Panama | 9.10000 | -79.70000 | 17.5000 | gen. | gen. indet. | Gray, 1825 |
| Chubut Valley south side between Gaiman and Dolavon, Patagonia | Argentina | -43.28560 | -65.58220 | 19.5000 | Testudo | Testudo gringorum | Simpson, 1942 (p. 1-3, fig. 1.2) |
| Leithagebirge between Au and Loretto | Austria | 47.91510 | 16.53580 | 18.0000 | Testudo | Testudo kalksburgensis | Toula, 1896 |
| Marsolan, Gers | France | 43.95000 | 0.55000 | 18.0000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Neuville-aux-Bois, Loiret | France | 48.06700 | 2.05000 | 18.0000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Unterempenbach 1d | Germany | 48.63040 | 11.74730 | 16.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Wackersdorf Westfeld | Germany | 49.31670 | 12.18330 | 17.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Altheim-Breitenlau 2 | Germany | 48.32830 | 9.79170 | 16.2650 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Eggingen-Schleiche B | Germany | 48.35220 | 9.85210 | 16.2650 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Eggingen-Schleiche B | Germany | 48.35220 | 9.85210 | 16.2650 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Walda 2 (oben) | Germany | 48.61090 | 11.09080 | 16.1000 | Ergilemys | Ergilemys sp. | Chkhvadze, 1972 |
| Walda 2 (oben) | Germany | 48.61090 | 11.09080 | 16.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Sandelzhausen | Germany | 48.62830 | 11.79600 | 16.3700 | Titanochelon | Titanochelon cf. perphiana | (Depéret, 1885) |
| Sandelzhausen oberer Geröllmergel (D2) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Sandelzhausen oberer Geröllmergel (E) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Sandelzhausen unterer Geröllmergel (B) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|---------|----------|-----------|---------|--------------|------------------------------------|-----------------|
| Sandelzhausen unterer Geröllmergel (C1) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Sandelzhausen unterer Geröllmergel (C2) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Sandelzhausen unterer Geröllmergel (C3/D1) | Germany | 48.62830 | 11.79600 | 16.3700 | Testudo | Testudo rectogularis | Schleich, 1981 |
| Maßendorf | Germany | 48.59710 | 12.44930 | 16.3000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Maßendorf | Germany | 48.59710 | 12.44930 | 16.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Walda 1 (unten) | Germany | 48.61090 | 11.09080 | 16.3000 | Ergilemys | Ergilemys sp. | Ochkvadze, 1972 |
| Walda 1 (unten) | Germany | 48.61090 | 11.09080 | 16.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| San Roque 3. SR 3 | Spain | 41.10000 | -1.49500 | 16.3300 | Geochelone | Geochelone aff. sp. | Fitzinger, 1835 |
| Kleinbersdorf, Wolmuth-Sandgrube (010/G/Liegendes), Korneuburg Basin, Lower Austria | Austria | 48.50000 | 16.40000 | 16.5500 | gen. | - | Gray, 1825 |
| Obergänsersdorf (OG2), Korneuburg Basin, Lower Austria | Austria | 48.41670 | 16.36670 | 16.5500 | gen. | gen. indet. | Gray, 1825 |
| Teritzberg (001/X/C), Korneuburg Basin, Lower Austria | Austria | 48.36670 | 16.33330 | 16.5500 | gen. | gen. indet. | Gray, 1825 |
| Teritzberg (001/X/C), Korneuburg Basin, Lower Austria | Austria | 48.36670 | 16.33330 | 16.5500 | Paleotestudo | Paleotestudo angustithyoplastralis | |
| Weinsteig (107), Korneuburg Basin, Lower Austria | Austria | 48.45000 | 16.40000 | 16.5500 | gen. | gen. indet. | Gray, 1825 |
| Weinsteig (107/S/B), Korneuburg Basin, Lower Austria | Austria | 48.45000 | 16.40000 | 16.5500 | gen. | gen. indet. | Gray, 1826 |
| Puttenhausen 2 | Germany | 48.61220 | 11.77730 | 16.4000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Randecker Maar | Germany | 48.56670 | 9.53333 | 16.8250 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Contres, Loir-et-Cher | France | 47.41810 | 1.42870 | 17.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Schießen | Germany | 48.29740 | 10.24320 | 16.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Schießen | Germany | 48.29740 | 10.24320 | 16.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Schönenberg near Jettingen | Germany | 48.37190 | 10.40960 | 16.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Schönenberg near Jettingen | Germany | 48.37190 | 10.40960 | 16.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Illerkirchberg 1 | Germany | 48.31000 | 10.04600 | 16.8500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Illerkirchberg 1 | Germany | 48.31000 | 10.04600 | 16.8500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Langenmosen | Germany | 48.60670 | 11.21410 | 16.7000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Eitersheim | Germany | 48.82030 | 11.32030 | 16.8000 | gen. | gen. indet. | Gray, 1825 |
| Eitersheim | Germany | 48.82030 | 11.32030 | 16.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Can Mas near El Papiol, Barcelona province, Cataluña, Vallés-Penedés basin | Spain | 41.43330 | 2.01670 | 17.3000 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Aerotrain a Chevilly pres d'Artenay (Loiret) | France | 48.05000 | 1.85000 | 17.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Baigneaux-en-Beauce (Eure-et-Loir) | France | 48.10000 | 2.15000 | 17.2500 | Paleotestudo | Paleotestudo mellingi | (Peters, 1868) |
| Suèvres aux Imberts, Loir-et-Cher | France | 47.67000 | 1.47000 | 17.2500 | Ergilemys | Ergilemys bruneti | Broin, 1977 |
| Suèvres aux Imberts, Loir-et-Cher | France | 47.67000 | 1.47000 | 17.2500 | Paleotestudo | Paleotestudo mellingi | (Peters, 1868) |
| Erkerstshofen 1 | Germany | 48.97970 | 11.22500 | 17.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Erkerstshofen 2 | Germany | 48.97970 | 11.22500 | 17.2500 | Ergilemys | Ergilemys sp. | Ochkvadze, 1972 |
| Freudenegg 2 Baggersee | Germany | 48.33330 | 10.01670 | 17.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Freudenegg 3 Baggersee | Germany | 48.33330 | 10.01670 | 17.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Freudenegg 3 Baggersee | Germany | 48.33330 | 10.01670 | 17.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Gerlenhofen | Germany | 48.20000 | 10.02000 | 17.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Günzburg 2/1 Umgehungsstrasse Sande | Germany | 48.45600 | 10.27680 | 17.0000 | gen. | gen. indet. | Gray, 1825 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|---------|----------|-----------|---------|--------------|--------------------------|--------------------|
| Günzburg 2/2 Umgehungstr höhere Bereiche der Sande | Germany | 48.45600 | 10.27680 | 17.0000 | gen. | gen. indet | Gray, 1825 |
| Günzburg 2/5 Umgehung Sande im Süden Aufschluss | Germany | 48.45600 | 10.27680 | 17.0000 | gen. | gen. indet | Gray, 1825 |
| Günzburg 2/6 Umgehung Sande im Norden Aufschluss | Germany | 48.45600 | 10.27680 | 17.0000 | gen. | gen. indet | Gray, 1825 |
| Petersbuch 4 | Germany | 48.97790 | 11.19090 | 17.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Djebel Zelten | Libya | 28.50000 | 20.00000 | 17.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Torralba de Ribota (Zaragoza) | Spain | 41.58330 | -1.00000 | 18.5050 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| La Romieu, Gers | France | 44.20000 | 0.90000 | 17.2000 | gen. | gen. indet. | Gray, 1825 |
| Forsthart | Germany | 48.63580 | 13.03140 | 17.2000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Béon 1 (Montréal-du-Gers) | France | 43.95000 | 0.20000 | 17.6500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Béon 1 (Montréal-du-Gers) | France | 43.95000 | 0.20000 | 17.6500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Reisensburg near Günzburg | Germany | 48.46200 | 10.31400 | 17.4500 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Reisensburg near Günzburg | Germany | 48.46200 | 10.31400 | 17.4500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Petersbuch 7 | Germany | 48.97790 | 11.19090 | 17.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Pamunkey River, between King William and New Kent Counties, Virginia | USA | 37.61640 | -77.09630 | 17.7500 | Cautochelys | Cautochelys williamsi | (Auffenberg, 1964) |
| Pollack Farm Site near Cheswold, Kent County, Delaware | USA | 39.23460 | -75.57270 | 17.7500 | Cautochelys | Cautochelys williamsi | (Auffenberg, 1964) |
| Rauscheröd near Passau, Bavaria | Germany | 48.55650 | 13.26020 | 17.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Hiwegi loc. R 1 | Kenya | -0.40000 | 34.20000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Hiwegi loc. R 106 | Kenya | -0.40000 | 34.20000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Hiwegi loc. R 3 | Kenya | -0.40000 | 34.20000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Hiwegi loc. R 5 | Kenya | -0.40000 | 34.20000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Mfangano | Kenya | -0.45000 | 34.05000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Nira and Kachuku near Karungu | Kenya | -0.90000 | 34.25000 | 17.8000 | Geochelone | Geochelone crassa | (Andrews, 1914) |
| Rangoye, Uyoima peninsula lake Victoria | Kenya | -0.30000 | 34.30000 | 17.8000 | gen. | gen. indet. | Gray, 1825 |
| Langenau 1 | Germany | 48.50030 | 10.12190 | 17.7750 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Langenau 2 | Germany | 48.50030 | 10.12190 | 17.7750 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Langenau 2 | Germany | 48.50000 | 10.10000 | 17.7750 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Langenau 2 | Germany | 48.50000 | 10.10000 | 17.7750 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Eggingen-Mittelhart | Germany | 48.35230 | 9.85980 | 17.8750 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Eggingen-Mittelhart | Germany | 48.35230 | 9.85980 | 17.8750 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Grimmelfingen | Germany | 48.22000 | 9.56000 | 18.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Walangani | Kenya | -0.45000 | 34.05000 | 17.9000 | gen. | gen. indet. | Gray, 1825 |
| Kiahera loc. R 120 | Kenya | -0.40000 | 34.20000 | 18.0000 | gen. | gen. indet. | Gray, 1825 |
| Chilleurs-aux-Bois, Loiret (Burdigallan) | France | 48.06670 | 2.13330 | 19.0000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Chitenay, Loir-et-Cher | France | 47.50000 | 1.36670 | 18.5000 | Testudo | Testudo cf. promarginata | Reinach, 1900 |
| La Brosse, Maine-et-Loire | France | 47.23000 | 0.22000 | 19.0000 | Testudo | Testudo cf. promarginata | Reinach, 1900 |
| Mauvières, Marcilly-sur-Maulne, Indre-et-Loire | France | 47.55000 | 0.33000 | 18.5000 | Testudo | Testudo cf. promarginata | Reinach, 1900 |
| Stubersheim 3 | Germany | 48.59470 | 9.91390 | 19.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Thomas Farm Local Fauna, Glitchrist County, Florida | USA | 29.70000 | -82.60000 | 18.5000 | Geochelone | Geochelone cf. sp. | Rafinesque, 1832 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|-------------|-----------|------------|---------|---------------|-------------------------------|---------------------------------|
| Baltringen | Germany | 48.16670 | 9.86670 | 18.6000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Baltringen | Germany | 48.16670 | 9.86670 | 18.6000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Fiskus | Namibia | -26.90000 | 15.40000 | 19.5000 | Namibichersus | Namibichersus namaquensis | (Stromer, 1926) |
| Glastal | Namibia | -26.90000 | 15.40000 | 19.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin, 2003 |
| Grillental, northern Sperrgebiet | Namibia | -26.98330 | 15.35000 | 19.5000 | Namibichersus | Namibichersus cf. namaquensis | (Stromer, 1926) |
| Langental, northern Sperrgebiet | Namibia | -26.90000 | 15.40000 | 19.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin, 2003 |
| Marsland Quadrangle, Box Butte County, Nebraska | USA | 42.40000 | -103.30000 | 19.9000 | gen. indet. | gen. indet. | Gray, 1825 |
| Auriver, Haute-Garonne | France | 43.35060 | 1.47320 | 20.7500 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Grépiac, Haute-Garonne | France | 43.40490 | 1.44790 | 20.7500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Grépiac, Haute-Garonne | France | 43.40490 | 1.44790 | 20.7500 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Landes-le-Gaulois, Loir-et-Cher | France | 47.65410 | 1.18380 | 20.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Tréteau, Allier | France | 46.38820 | 3.52490 | 21.0000 | gen. indet. | gen. indet. | Gray, 1825 |
| Barbotan-les-Thermes (Gers) | France | 44.20000 | 0.40000 | 20.7500 | Cheirogaster | Cheirogaster cf. sp. | Bergounioux, 1935 |
| Marcoin, Volvic, Puy-de-Dôme | France | 45.87270 | 3.03950 | 21.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Saint-Gérard-le-Puy, Allier | France | 46.25810 | 3.51200 | 21.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Saint-Gérard-le-Puy, Allier | France | 46.25810 | 3.51200 | 21.5000 | Ergilemys | Ergilemys aff. bruneti | Broin, 1977 |
| Saint-Gérard-le-Puy, Allier | France | 46.25810 | 3.51200 | 21.5000 | Testudo | Testudo promarginata | Reinach, 1900 |
| Wallenried Channel, 10 km N Fribourg | Switzerland | 46.88160 | 7.10650 | 21.7500 | gen. indet. | gen. indet. | Gray, 1825 |
| Montaigu-le-Blin, La Chacotte, Allier | France | 46.32000 | 3.52000 | 22.0000 | gen. indet. | gen. indet. | Gray, 1825 |
| Pechbonnieu, Haute-Garonne | France | 43.70280 | 1.46650 | 22.7500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Pechbonnieu, Haute-Garonne | France | 43.70280 | 1.46650 | 22.7500 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Saulcet, Allier | France | 46.33000 | 3.27000 | 22.5000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Toledo Bend Dam, Newton County, Texas | USA | 31.00000 | -93.00000 | 23.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Paulhiac, Lot-et-Garonne | France | 44.56190 | 0.82040 | 23.0300 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Chiquimil, Catamarca | Argentina | -28.00000 | -66.00000 | 5.5000 | Geochelone | Chelonoidis gallardoi | Rovereto, 1914 (p. 115) |
| Stanianzi | Bulgaria | 43.06250 | 22.92260 | 6.1650 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Brisghella Cava Monticino | Italy | 44.21670 | 11.76670 | 5.6650 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Gretoni, Stazione Monte Amiata (SI) | Italy | 42.96670 | 11.55000 | 5.8150 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Polenzo section along Tanaro River, Verduno, Piedmont Italy | Italy | 44.68580 | 7.93140 | 5.4400 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Altan-Teli Oshi horizon (Dzereq valley) | Mongolia | 47.10000 | 93.16670 | 8.3150 | Ergilemys | Ergilemys devjakini | (Khodzatsky & Narmandakh, 1975) |
| Polgárdi 2 | Hungary | 47.05000 | 18.30000 | 5.7500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Autovía A-30, Murcia | Spain | 37.99100 | -1.14570 | 6.3000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Casa Castillo near Jumilla, Murcia | Spain | 38.46470 | -1.42310 | 6.3000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Tudorovo | Moldova | 46.43500 | 30.04250 | 6.3000 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Venta del Moro (Gabriel Basin) | Spain | 39.48330 | -1.35000 | 5.8000 | gen. indet. | gen. indet. | Gray, 1825 |
| Kuyalnik | Ukraine | 46.56000 | 30.74000 | 6.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Shkodova Gora | Ukraine | 46.46670 | 30.73330 | 6.0250 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Cliffs in the Paraná eastern riverside near Paraná, Entre Rios | Argentina | -31.70000 | -60.40000 | 7.5000 | gen. | - | Gray, 1825 (p. 210) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|-------------------------|-----------|------------|--------|---------------|---------------------------|--------------------------|
| Megalo Rema near Palomillos | Greece | 38.45000 | 22.02000 | 6.5000 | Testudo | Testudo marmorum | Gaudry, 1862 |
| Cava Monticino, near Brisigella, Emilia-Romana | Italy | 44.21670 | 11.76670 | 8.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Lothagam 1 | Kenya | 2.88300 | 36.06600 | 6.5000 | Geochelone | Geochelone cf. sp. | Fitzinger, 1835 |
| Lothagam 2 | Kenya | 2.88300 | 36.06600 | 6.5000 | Geochelone | Geochelone cf. sp. | Fitzinger, 1835 |
| Lukeino | Kenya | 0.80000 | 35.90000 | 6.3000 | gen. | gen. indet. | Gray, 1825 |
| Barranco del Cigarrón (B-Cg1), S El Palmar, Murcia | Spain | 37.91510 | -1.17080 | 6.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Hamra | United Arabian Emirates | 23.10000 | 52.52500 | 7.0000 | Centrochelys | Centrochelys aff. sulcata | (Miller, 1779) |
| Jebel Dhannah | United Arabian Emirates | 24.15000 | 52.60000 | 7.0000 | Centrochelys | Centrochelys aff. sulcata | (Miller, 1779) |
| Kihal | United Arabian Emirates | 24.12000 | 52.85000 | 7.0000 | Centrochelys | Centrochelys aff. sulcata | (Miller, 1779) |
| Shuwalhat | United Arabian Emirates | 24.10000 | 52.44000 | 7.0000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| El Hatillo, 1.5 km north of, Falcón State | Venezuela | 11.22000 | -70.23000 | 8.8000 | gen. | gen. indet. | Gray, 1825 |
| Bajo Giuliani, La Pampa | Argentina | -36.68100 | -64.37500 | 7.9000 | Chelonoidis | Chelonoidis sp. | Fitzinger, 1835 (p. 112) |
| Quehué, La Pampa | Argentina | -37.12640 | -64.50890 | 7.9000 | Chelonoidis | | Fitzinger, 1835 |
| Tardosbánya 3 | Hungary | 47.66670 | 18.45000 | 7.2500 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Chimishlia | Moldova | 46.52000 | 28.78420 | 7.0400 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Taraklia | Moldova | 46.22000 | 28.22670 | 7.0400 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Azmaka quarry 2.5 km NNE Chirpan | Bulgaria | 42.23710 | 25.33580 | 7.0000 | Testudo | Testudo marmorum | Gaudry, 1862 |
| Morskaya 2 locality of the Sea of Azov region | Russia | 47.28330 | 39.10000 | 7.2500 | gen. | gen. Indet. | Gray, 1825 |
| Kalimantsi 2-4 | Bulgaria | 41.45750 | 23.47390 | 7.6000 | Testudo | Testudo cf. antiqua | Bronn, 1831 |
| Kalimantsi 2-4 | Bulgaria | 41.45750 | 23.47390 | 7.6000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Montagne du Lubéron à Cucuron, Vaucluse et Alpes-de-Haute-Provence | France | 43.79500 | 5.45000 | 7.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Montagne du Lubéron à Cucuron, Vaucluse et Alpes-de-Haute-Provence | France | 43.79500 | 5.45000 | 7.5000 | Titanochelon | Titanochelon leberonensis | (Déperet, 1890) |
| Aubignas 1+2, Ardèche | France | 44.58330 | 4.61670 | 8.0250 | Testudo | Testudo ambariacensis | Deperet, 1894 |
| Chobruchi | Moldova | 46.60030 | 29.70830 | 7.3650 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Novoeizavetovka | Ukraine | 47.15000 | 30.40550 | 7.3300 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Yurievka | Ukraine | 46.94560 | 36.27500 | 8.0750 | gen. | gen. indet. | Gray, 1825 |
| Ambérieu-en-Bugey, Ain | France | 45.95000 | 5.35000 | 8.5000 | Testudo | Testudo ambariacensis | Deperet, 1894 |
| Csákvár, Esterházy Cave, Fejér Province | Hungary | 47.40000 | 18.45000 | 8.2000 | Protestudo | Protestudo csakvarensis | (Szalai, 1934) |
| Dorn-Dürkheim, Giloth Quarry, about 25 km S Mainz | Germany | 49.76860 | 8.26970 | 8.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Belka | Ukraine | 46.89400 | 30.42000 | 7.9000 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Saint-Bauzile, Ardèche | France | 44.68050 | 4.68710 | 8.5000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Rooilepel D. Iaini level | Namibia | -27.00000 | 15.50000 | 8.0000 | Namibichersus | Namibichersus sp. | Lapparent de Broin, 2003 |
| Kamenica nad Hronom | Slovakia | 47.83150 | 18.72380 | 9.5000 | Testudo | Testudo aff. sp. | Linnaeus, 1758 |
| Greibeniki 1 | Ukraine | 46.89200 | 29.82500 | 8.1500 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |
| Dove Spring Fauna, Mojave Desert, Kern County, California | USA | 35.30000 | -118.50000 | 8.5000 | Geochelone | Geochelone sp. | Fitzinger, 1835 |
| Dove Spring Fauna, Mojave Desert, Kern County, California | USA | 35.30000 | -118.50000 | 8.5000 | Gopherus | Gopherus ? sp. | Rafinesque, 1832 |
| Kainary | Moldova | 46.67890 | 29.04610 | 8.4000 | Protestudo | Protestudo sp. | (Chkhikvadze, 1970) |
| Novoukrainka 1 (= Budenovka) | Ukraine | 46.81500 | 30.28300 | 8.1500 | Protestudo | Protestudo bessarabica | (Riabnin, 1918) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|----------|----------|-----------|---------|----------------|---------------------------|---------------------------|
| Montredon, Aude | France | 43.23600 | 2.38820 | 8.9500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Udabno | Georgia | 41.49220 | 45.38670 | 8.9500 | Centrochelys | Centrochelys sp. | Gray, 1872 |
| Krivoi Rog | Ukraine | 47.91670 | 33.35000 | 8.9500 | Testudo | Testudo ? sp. | Linnaeus, 1758 |
| Sabadell | Spain | 41.55000 | 2.10000 | 10.0000 | Paleotestudo | Paleotestudo ? antiqua | (Bronn, 1831) |
| Saint-Fons, Rhône | France | 45.70910 | 4.85320 | 10.0000 | Paleotestudo | Paleotestudo cf. antiqua | (Bronn, 1831) |
| Poc'e?ti right side Ikel River valley | Moldova | 47.24500 | 28.67960 | 9.5000 | Protestudo | Protestudo sp. | Chkhikvadze, 1970 |
| Autovia Orbital de Barcelona B-40 (B40OV/S4K), Vallés-Penedés basin, Cataluña | Spain | 41.53310 | 1.94260 | 10.3000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Autovia Orbital de Barcelona B-40 (B40OV/S4K), Vallés-Penedés basin, Cataluña | Spain | 41.53310 | 1.94260 | 10.3000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Can Filiuà, Santa Perpètua, Vallés Occidental, Barcelona | Spain | 41.53330 | 2.18190 | 10.3000 | Cheirogaster | Cheirogaster richardi | (Bergounioux, 1938) |
| Can Gavarrà, Polinyà, Vallés Occidental, Barcelona | Spain | 41.55710 | 2.15780 | 10.3000 | Cheirogaster | Cheirogaster richardi | (Bergounioux, 1938) |
| Can Vinyalets, Barcelona | Spain | 41.53320 | 2.18190 | 10.3000 | Cheirogaster | Cheirogaster richardi | (Bergounioux, 1938) |
| Cerro de los Batallones, Madrid | Spain | 40.17940 | -3.72460 | 9.5000 | Paleotestudo | Paleotestudo sp. | Lapparent de Broin, 2000 |
| Cerro de los Batallones, Madrid | Spain | 40.17940 | -3.72460 | 9.5000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Djebel Krechem el Artsouma | Tunisia | 35.50000 | 9.00000 | 10.3050 | Geochelone | Geochelone sp. | Fizinger, 1835 |
| Love Bone Bed along State Road 241 near Archer, Alachua County, Florida | USA | 29.60000 | -82.50000 | 9.2500 | Geochelone | Geochelone sp. | Fizinger, 1835 |
| Varnitza | Moldova | 46.86410 | 29.46920 | 9.6000 | Protestudo | Protestudo moldavica | Chkhikvadze & Lungu, 1979 |
| Bushor 1 | Moldova | 46.92250 | 28.26830 | 9.7000 | Protestudo | Protestudo csakvarensis | (Szalai, 1934) |
| Kallia | Moldova | 46.90420 | 29.37530 | 9.7000 | Protestudo | Protestudo csakvarensis | (Szalai, 1934) |
| Borský Svätý Jur | Slovakia | 48.24000 | 17.20000 | 9.6500 | Protestudo | Protestudo csakvarensis | (Szalai, 1934) |
| Arevalillo River (Arévalo), Ávila | Spain | 40.59350 | -5.37790 | 10.2500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Arévalo, Ávila, Castilla | Spain | 41.06670 | -4.72500 | 10.2500 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1917) |
| Benavente, Zamora | Spain | 42.00340 | -5.67840 | 10.5500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| WaKeeney Local Fauna (UM-K6-59 on the Lowell Hillman Ranch), Trego County, Kansas | USA | 39.10000 | -99.80000 | 10.0000 | Geochelone | Geochelone sp. | Fizinger, 1835 |
| WaKeeney Local Fauna (UM-K6-59 on the Lowell Hillman Ranch), Trego County, Kansas | USA | 39.10000 | -99.80000 | 10.0000 | Hesperotestudo | Hesperotestudo orthopygia | (Cope, 1878) |
| Lapushna | Moldova | 46.88420 | 28.41190 | 9.8000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Valles de Fuentidueña, Segovia Province | Spain | 41.41670 | -4.00000 | 10.4000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Valles de Fuentidueña, Segovia Province | Spain | 41.41670 | -4.00000 | 10.4000 | Testudo | Testudo aff. catalaunica | (Batailler, 1926) |
| Valles de Fuentidueña, Segovia Province | Spain | 41.41670 | -4.00000 | 10.4000 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Estació Depuradora d'Agües Residuals Sabadell Riü-Ripoll, Cataluña, Vallés-Penedés basin | Spain | 41.55000 | 2.10000 | 10.5500 | Cheirogaster | Cheirogaster richardi | (Bergounioux, 1938) |
| Hostalets de Pièrola Superior, Barcelone province, Cataluña, Vallés-Penedés basin | Spain | 41.53490 | 1.78850 | 10.5500 | Titanochelon | Titanochelon bolivari | (Hernández Pacheco, 1971) |
| Rudabanya (grey green marl 5C) | Hungary | 48.38330 | 20.63330 | 10.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Rudabánya, Borsod-Abaúj-Zemplén Province (all) | Hungary | 48.38330 | 20.63330 | 10.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Hammerschmiede 3 | Germany | 47.92730 | 10.59150 | 11.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Prairéai, Vaumas, Allier | France | 46.44600 | 3.63000 | 24.2500 | gen. | gen. indet. | Gray, 1825 |
| Langy, Allier | France | 46.26730 | 3.46970 | 22.1000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Veauche, Loire | France | 45.56230 | 4.27560 | 25.0000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Toulouse Puits Borderouge niveau inférieur, Haute-Garonne | France | 43.60000 | 1.43330 | 23.1150 | Erglemys | Erglemys bruneti | Broin, 1977 |
| La Milloque, HauteIage, Lot-et-Garonne | France | 44.32000 | 0.78000 | 23.5000 | Erglemys | Erglemys bruneti | Broin, 1977 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|------------|----------|-----------|---------|--------------|-----------------------------|---------------------------|
| Oberleichtersbach | Germany | 50.35000 | 10.05000 | 24.0000 | Geochelone | Geochelone aff. sp. | Fitzinger, 1835 |
| Oberleichtersbach | Germany | 50.35000 | 10.05000 | 24.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Créchy, Allier | France | 46.26670 | 3.41670 | 23.0650 | Ergilemys | Ergilemys bruneti | Broin, 1977 |
| Dieupertale, Tarn-et-Garonne | France | 43.86190 | 1.26960 | 23.5150 | gen. | gen. indet. | Gray, 1825 |
| Moissac 2, Tarn-et-Garonne | France | 44.10390 | 1.08500 | 23.4150 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Moissac 2, Tarn-et-Garonne | France | 44.10390 | 1.08500 | 23.4150 | gen. | gen. indet. | Gray, 1825 |
| Peublanc, Sorbier, Allier | France | 46.36630 | 3.63640 | 23.0300 | gen. | gen. indet. | Gray, 1825 |
| Venelles 35 km N Marseille | France | 43.62000 | 5.48000 | 23.0650 | gen. | gen. indet. | Gray, 1825 |
| Hautesvignes, Lot-et-Garonne | France | 44.45910 | 0.34440 | 23.3500 | gen. | gen. indet. | Gray, 1825 |
| Mine des Rois, Daller et Pont-du-Château, Puy-de-Dôme | France | 45.78420 | 3.25840 | 23.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Saint-Thomas, Hautefage, Lot-et-Garonne | France | 44.35570 | 0.77130 | 23.5000 | gen. | gen. indet. | Gray, 1825 |
| Aktau Chul'adyr Formation Lower Member | Kazakhstan | 44.06670 | 79.36670 | 26.1000 | gen. | gen. indet. | Gray, 1825 |
| Coderet, Bransat, Allier | France | 46.30000 | 3.28330 | 24.0000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Gannat, Allier (shallow lake) | France | 46.10000 | 3.20000 | 24.0000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Pech-Desse, Moulliac, Tarn-et-Garonne, Phosphorite du Quercy | France | 44.40000 | 1.60000 | 24.3000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Pech-Desse, Moulliac, Tarn-et-Garonne, Phosphorite du Quercy | France | 44.40000 | 1.60000 | 24.3000 | gen. | gen. indet. | Gray, 1825 |
| Paali Nala level 1, Balochistan | Pakistan | 28.85000 | 69.21670 | 24.5000 | gen. | gen. Indet. | Gray, 1825 |
| Pech-du-Fraysse, Saint-Projet, Tarn-et-Garonne, Phosporites du Quercy | France | 44.75000 | 2.66670 | 24.9000 | Cheirogaster | Cheirogaster phosphoritarum | Bergounioux, 1935 |
| Pech-du-Fraysse, Saint-Projet, Tarn-et-Garonne, Phosporites du Quercy | France | 44.75000 | 2.66670 | 24.9000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Pech-du-Fraysse, Saint-Projet, Tarn-et-Garonne, Phosporites du Quercy | France | 44.75000 | 2.66670 | 24.9000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| Paali Nala level C2, Balochistan | Pakistan | 28.85000 | 69.21670 | 25.5000 | gen. | gen. Indet. | Gray, 1825 |
| Marseille, Saint-André, Bouches-du-Rhône | France | 43.45000 | 5.45000 | 26.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Marseille, Saint-André, Bouches-du-Rhône | France | 43.45000 | 5.45000 | 26.5000 | gen. | gen. indet. | Gray, 1825 |
| Le Crozatier, Brons, Cantal | France | 45.04020 | 3.15070 | 28.0000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Le Crozatier, Brons, Cantal | France | 45.04020 | 3.15070 | 28.0000 | Testudo | Testudo sp. | Linnaeus, 1758 |
| North Mesa, Shara Murun region, Inner Mongolia | China | 43.00000 | 112.00000 | 31.0000 | Testudo | Testudo ulanensis | Gilmore, 1931 |
| Twin Oboes, Shara Murun region, Inner Mongolia | China | 43.00000 | 112.00000 | 31.0000 | Testudo | Testudo nanus | Gilmore, 1931 |
| Ardyn Obo basin, Chinese Postroad | Mongolia | 45.00000 | 110.00000 | 31.0000 | Ergilemys | Ergilemys insolitus | (Matthew & Granger, 1923) |
| Ardyn Obo basin, Chinese Postroad | Mongolia | 45.00000 | 110.00000 | 31.0000 | Testudo | Testudo demissa | Gilmore, 1931 |
| Ardyn Obo basin, Chinese Postroad | Mongolia | 45.00000 | 110.00000 | 31.0000 | Testudo | Testudo kaiseni | Gilmore, 1931 |
| Promontory Bluff (Sair Usu 150- Kalgan 350 miles) | Mongolia | 45.00000 | 110.00000 | 31.0000 | Ergilemys | Ergilemys insolitus | (Matthew & Granger, 1923) |
| Le Garouillas, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 28.7500 | Cheirogaster | Cheirogaster nov. sp. | - |
| Neschers à La Sauvetat, Puy-de-Dôme | France | 45.59920 | 3.17100 | 28.8500 | gen. | gen. indet. | Gray, 1825 |
| Rigal-Jouet, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 28.7500 | gen. | gen. indet. | Gray, 1825 |
| Saint-Germain-Lembron, Puy-de-Dôme | France | 45.45850 | 3.23870 | 28.8500 | gen. | gen. indet. | Gray, 1825 |
| Vaumas, Allier | France | 46.44610 | 3.63030 | 28.8500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Espenhain near Leipzig | Germany | 51.18000 | 12.47000 | 30.2500 | gen. | gen. indet. | Gray, 1825 |
| Bournonde-Saint-Pierre, Auvergne, Haute-Loire | France | 45.34870 | 3.32530 | 31.0000 | Tarascelon | Tarascelon gigas | (Bravard, 1844) |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|---|------------|----------|------------|---------|-----------------|-----------------------------|------------------------------------|
| Puy-laurens, Tarn | France | 43.57140 | 2.01380 | 29.5000 | gen. | gen. indet. | Gray, 1825 |
| Saint-Vivien-de-Monségur, Gironde | France | 44.61570 | 0.17010 | 30.5000 | gen. | gen. indet. | Gray, 1825 |
| Talagay (Tayzhuzgen section) | Kazakhstan | 47.59840 | 84.00000 | 30.2500 | Ergilemys | Ergilemys saikenensis | (Chkhikvadze, 1972) |
| Los Barros quarry, 4 km SE Ávila | Spain | 40.63080 | -4.65870 | 31.0000 | Cheirogaster | Cheirogaster ? sp. | Bergounioux, 1935 |
| Pichovet, Vachères, Lubéron, Provence-Alpes-Côte d'Azur | France | 43.90000 | 5.60000 | 29.7000 | gen. | gen. indet. | Gray, 1825 |
| Itardies (Caylus, Tarn-et-Garonne) | France | 44.23330 | 1.78330 | 30.5000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Mounayne, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 30.5000 | gen. | gen. indet. | Gray, 1825 |
| Pech-Crabit, Bach, Lot, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 30.6000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Pech-Crabit, Bach, Lot, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 30.6000 | gen. | gen. indet. | Gray, 1825 |
| Roqueprune, Mouillac, Tarn-et-Garonne, Phosphorites du Quercy | France | 44.61670 | 0.03330 | 30.5000 | gen. | gen. indet. | Gray, 1825 |
| La Plante 2, Concois, Lot, Phosphorite du Quercy | France | 44.40000 | 1.60000 | 31.8000 | gen. | gen. indet. | Gray, 1825 |
| Mas de Got A, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 31.8000 | gen. | gen. indet. | Gray, 1825 |
| Mas de Got B, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 31.8000 | gen. | gen. indet. | Gray, 1825 |
| AMNH quarries A, B, C, Fayyum | Egypt | 29.50000 | 30.90000 | 31.8000 | gen. | gen. indet. | Gray, 1825 |
| Gua Teg | Mongolia | 43.50000 | 108.00000 | 32.6500 | Gigantochersina | Gigantochersina ammon | Andres in Andrews & Beadnell, 1903 |
| Neumühle near Weinheim/Alzey | Germany | 49.73610 | 8.06530 | 32.9500 | Ergilemys | Ergilemys insolitus | (Matthew & Granger, 1923) |
| Thaylinit, Dhofar | Oman | 17.00000 | 54.00000 | 32.5000 | gen. | gen. indet. | Gray, 1825 |
| Ravet-Lupo, Caylus, Lot, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 33.2000 | gen. | gen. indet. | Gray, 1825 |
| Ruch, Gironde | France | 44.77550 | -0.03920 | 33.1000 | gen. | gen. indet. | Gray, 1825 |
| Sainte-Marthe, Eymet, Dordogne | France | 44.67850 | 0.39680 | 33.1000 | gen. | gen. indet. | Gray, 1825 |
| Soumaille, Pardailhan, Lot-et-Garonne | France | 44.66710 | 0.25980 | 33.2500 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Aubrelong 1, Phosphorites du Quercy, Lot | France | 44.40000 | 1.60000 | 33.5000 | Cheirogaster | Cheirogaster cf. sp. | Bergounioux, 1935 |
| Kalgan area | China | 41.00000 | 115.00000 | 32.5000 | Testudo | Testudo kalganensis | Gilmore, 1931 |
| Quercy (Phosphorites du Quercy) | France | 44.20000 | 1.50000 | 32.0000 | Cheirogaster | Cheirogaster phosphoritarum | Bergounioux, 1935 |
| Quercy (Phosphorites du Quercy) | France | 44.20000 | 1.50000 | 32.0000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Baby 2, Saint-André-et-Appelles, Gironde | France | 44.81200 | 0.21330 | 33.9500 | Cheirogaster | Cheirogaster maurini | Bergounioux, 1935 |
| Haunsberg near St. Pankraz, Salzburg | Austria | 47.76560 | 14.20790 | 50.0000 | Titanochelon | Titanochelon steinbacheri | Karl, 1996 |
| Swift Current Creek, southern Saskatchewan | Canada | 50.20000 | -107.60000 | 44.5000 | gen. | gen. indet. | Gray, 1826 |
| Korablik Klinkerish | Kazakhstan | 48.00000 | 84.50000 | 34.2000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Ardyn Obo (Ergelyeen Dzo), SE Gobi | Mongolia | 43.50000 | 109.00000 | 34.2000 | Ergilemys | Ergilemys insolitus | (Matthew & Granger, 1923) |
| Saint-Capraise-d'Eymet, Dordogne | France | 44.70870 | 0.50320 | 33.9500 | gen. | gen. indet. | Gray, 1825 |
| Sainte-Néboile, Bédier, Lot | France | 44.58330 | 1.93330 | 35.5500 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Escamps, Phosphorites du Quercy | France | 44.40000 | 1.58330 | 34.4000 | gen. | gen. indet. | Gray, 1825 |
| Lostange, Beduer, Lot | France | 44.58110 | 1.94840 | 34.4000 | Dithyrosternon | Dithyrosternon sp. | Pictet & Humbert, 1869 |
| Lostange, Beduer, Lot | France | 44.58110 | 1.94840 | 34.4000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |
| Rosières, Escamps, Lot, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 34.4000 | gen. | gen. indet. | Gray, 1825 |
| Sainte-Croix-de-Brignon, Gard | France | 43.98890 | 4.21660 | 35.0000 | Ergilemys | Ergilemys aff. sp. | Ckhikvadze, 1972 |
| Sindou D, Phosphorites du Quercy | France | 44.40000 | 1.60000 | 35.0000 | Ergilemys | Ergilemys sp. | Ckhikvadze, 1972 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|------------|----------|------------|---------|-----------------|----------------------------|--|
| Cója, Cerâmica da Carriça | Portugal | 40.27010 | -7.97810 | 35.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Paris Montmartre | France | 48.86670 | 2.33330 | 35.2000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| La Débruge = Butte de Sainte Radegonde (pres d'Apt, Gargas, Vaucluse) | France | 43.90000 | 5.38330 | 35.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| La Grave, Bonsac, Gironde | France | 45.01130 | -0.22510 | 35.5000 | Cheirogaster | Cheirogaster sp. | Bergounioux, 1935 |
| Langlès, Saint-Martin-de-Villieréal, Lot-et-Garonne | France | 44.64470 | 0.82040 | 35.5000 | gen. indet. | gen. indet. | Gray, 1825 |
| Santiago Yolomécatl, Oaxaca | Mexico | 17.47000 | -97.56000 | 36.5000 | Hadrianus | Hadrianus aff. sp. | Cope, 1872 |
| Santiago Yolomécatl, Oaxaca | Mexico | 17.47000 | -97.56000 | 36.5000 | Stylenys | Stylenys sp. | Leidy, 1851 |
| Calif Creek near Eastend, Saskatchewan | Canada | 49.00000 | -109.00000 | 36.9000 | gen. | gen. indet. | Gray, 1825 |
| Rocourt-Saint-Martin, Aisne | France | 49.15000 | 3.38330 | 38.5000 | gen. | gen. indet. | Gray, 1825 |
| Rocourt-Saint-Martin, Aisne | France | 49.15000 | 3.38330 | 38.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Myaing UCMF locality V6204 | Myanmar | 21.60000 | 94.80000 | 38.5000 | gen. | gen. indet. | Gray, 1825 |
| Thardaung kyitchaung, UCMF locality V78090 | Myanmar | 21.92000 | 94.56000 | 38.5000 | gen. | gen. indet. | Gray, 1825 |
| Chéry-Chartrouve (Aisne) | France | 49.26670 | 3.61670 | 37.7000 | Erglemys | Erglemys sp. | Chkhikvadze, 1972 |
| Grisolles, Est du Bassin de Paris, Aisne | France | 49.15000 | 3.35000 | 37.7000 | gen. | gen. indet. | Gray, 1825 |
| Castres, Bassin de l'Agout, Tarn | France | 43.60520 | 2.24090 | 39.0000 | Hadrianus | Hadrianus castrensis | (Bergounioux, 1935) |
| Lautrec, Tarn | France | 43.70560 | 2.13590 | 39.0000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Robiac, Saint-Mamert, Gard | France | 44.26670 | 4.13330 | 39.0000 | gen. | gen. indet. | Gray, 1825 |
| Robiac, Saint-Mamert, Gard | France | 44.26670 | 4.13330 | 39.0000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Nala, Tondela, Viseu | Portugal | 40.57480 | -8.03980 | 38.5000 | Cheirogaster | Cheirogaster ? sp. | Bergounioux, 1935 |
| Mazatorón, Soria Province, Castilla y León | Spain | 41.50000 | -2.10000 | 39.5000 | Pelorocheleon | Pelorocheleon soriana | Pérez-García, Ortega & Jiménez Fuentes, 2016 |
| Geiseltal near Halle (Mücheln), Sachsen-Anhalt | Germany | 51.33390 | 11.83180 | 44.5000 | Pelorocheleon | Pelorocheleon eocaenica | (Hummel, 1935) |
| Issel, Département Aude | France | 43.46670 | 1.98330 | 42.4000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Le Guépelle, Saint-Witz, Val d'Oise | France | 49.08420 | 2.53550 | 42.5000 | Erglemys | Erglemys sp. | Chkhikvadze, 1972 |
| La Défense, Hauts-de-Seine | France | 48.90000 | 2.23330 | 43.6000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Aigues-Vives 2, Hérault | France | 43.33750 | 2.81790 | 43.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Jumencourt, Aisne | France | 49.50860 | 3.35630 | 43.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Bouxwiller, Bas-Rhin | France | 48.81670 | 7.48330 | 45.0000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Stena | Kazakhstan | 47.50000 | 84.80000 | 48.0000 | Hadrianus | Hadrianus oballensis | Chkhikvadze, 1972 |
| Saint-Papoul NE Carcasonne, Aude | France | 43.33330 | 2.03330 | 52.2000 | Fontainecheleon | Fontainecheleon cassouleti | (Claude & Tong, 2004) |
| North Fork, Wapiti Valley north Shoshone River (NF-5 Wapiti III), Park County, Wyoming | USA | 44.30000 | -109.00000 | 49.4500 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| UCMP V98009, Uinta County, Wyoming | USA | 41.00000 | -110.00000 | 49.4000 | Hadrianus | Hadrianus corsoni | (Leidy, 1871) |
| Cuis (Marne) | France | 49.00000 | 3.96670 | 49.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Grauves (Marne) | France | 48.96670 | 3.96670 | 49.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Mancy, Marne | France | 48.98370 | 3.93510 | 49.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Monthelon, Marne | France | 48.98330 | 3.93330 | 49.5000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| Andarak 1, Osh Region | Kyrgyzstan | 39.74990 | 69.49160 | 52.0000 | Hadrianus | Hadrianus vialovi | (Chkhikvadze, 1994) |
| Andarak 2, Osh Region | Kyrgyzstan | 39.79000 | 69.49000 | 50.5000 | Hadrianus | Hadrianus vialovi | (Chkhikvadze, 1994) |
| Khayzhin-Ula 2 | Mongolia | 44.20000 | 100.00000 | 52.0000 | Kansuchelys | Kansuchelys sp. | Ye, 1963 |

| Locality | Country | Latitude | Longitude | Age | Genus | Taxon | Author |
|--|----------|----------|------------|----------|-----------|----------------------|--------------|
| North Fork, Wapiti Valley north Shoshone River (NF-16 Wapiti II), Park County, Wyoming | USA | 44.30000 | -109.00000 | 52.8500 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| North Fork, Wapiti Valley north Shoshone River (NF-17 Wapiti II), Park County, Wyoming | USA | 44.30000 | -109.00000 | 52.8500 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| North Fork, Wapiti Valley north Shoshone River (NF-3 Wapiti II), Park County, Wyoming | USA | 44.30000 | -109.00000 | 52.8500 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| North Fork, Wapiti Valley north Shoshone River (NF-8 Wapiti II), Park County, Wyoming | USA | 44.30000 | -109.00000 | 52.8500 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| UCMP V70251, Patrick Draw S, Sweetwater County, Wyoming | USA | 41.70000 | -109.00000 | 52.9000 | Hadrianus | Hadrianus majusculus | Hay, 1904 |
| UCMP V70251, Patrick Draw S, Sweetwater County, Wyoming | USA | 41.70000 | -109.00000 | 52.9000 | Hadrianus | Hadrianus sp. | Cope, 1872 |
| UCMP V74024, Turtle Graveyard General, Sweetwater County, Wyoming | USA | 41.00000 | -108.00000 | 52.9000 | Hadrianus | Hadrianus majusculus | Hay, 1904 |
| Tsagan-Khushu (Naran member, layer 2) | Mongolia | 43.45500 | 100.37000 | 56.1100 | gen. | gen. indet. | Gray, 1825 |
| Kaseki-Kabe near Shiramine, Kuwajima, Hakusan City, Ishikawa Prefecture, Honshu | Japan | 36.20000 | 136.63300 | 122.0000 | gen. | gen. indet. | Gray, 1825 |
| Cedazo local fauna, Aguascalientes, Mexico | Mexico | 21.82401 | -102.36874 | 1.0500 | Gopherus | Gopherus pargensis | Mooser, 1980 |

Acknowledgements

Declaration of Authorship