**Appendix S2 – Data acquisition + PRISMA diagram**

We used *Google scholar* database to perform an electronic search using different combinations of the key words “Egg size”, “turtle reproduction”, “breeding”, “nest”, “clutch size”, “egg width”. Studies from all dates were considered as evolutionary characteristics of species do not usually change within the relevant time for a literature search. Only full‐text reports in English, Spanish and Portuguese were considered. Study eligibility was assessed by one investigator. A secondary search was conducted on the reference list of these publications as well as on the list of publications that have cited the previous accessed one. The search continued until the limit of four articles containing information on the same ecological data for each species.

We used the PRISMA checklist (Moher et al. 2011) as a guide for quality reporting of our review.

Data used was based on a combination of the information available (e.g., smallest and biggest clutch sizes reported, even if from different sources) or based on the most common attribution for each species (e.g., species that are found both in land and water but most commonly in water were addressed with this kind of habitat for the related analysis). Data from captivity was considered as the characteristics of interest are mostly supposed to be inheritable and we considered possible bias to be irrelevant. Selected data is available at appendix 1 of the supplemental material. Any other specific bias considered is described on the “comments” column.

**Identification of studies via databases and registers**

Records removed *before screening*:

Duplicate records removed (n = 0)

Records marked as ineligible by automation tools (n = 0)

Records removed for other reasons (n = 0)

Records identified from:

Databases (n = 1)

Registers (n ~ 98)

**Identification**

Records screened

(n ~ 98)

Records excluded

(n ~ 17)

Reports sought for retrieval

(n = 81)

Reports not retrieved

(n = 0)

**Screening**

Reports assessed for eligibility

(n = 81)

Reports excluded for not containing relevant information:

(n = 24)

Studies included in review

(n = 57)

**Included**

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