



RESEARCH  
PAPER

## Late bloomers and baby boomers: ecological drivers of longevity in squamates and the tuatara

Inon Scharf<sup>1\*</sup>, Anat Feldman<sup>1</sup>, Maria Novosolov<sup>1</sup>, Daniel Pincheira-Donoso<sup>2</sup>, Indraneil Das<sup>3</sup>, Monika Böhm<sup>4</sup>, Peter Uetz<sup>5</sup>, Omar Torres-Carvajal<sup>6</sup>, Aaron Bauer<sup>7</sup>, Uri Roll<sup>8</sup> and Shai Meiri<sup>1\*</sup>

<sup>1</sup>Department of Zoology, Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel, <sup>2</sup>Laboratory of Evolutionary Ecology of Adaptations, School of Life Sciences, University of Lincoln, Lincolnshire, UK, <sup>3</sup>Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, Kota Samarahan, Malaysia, <sup>4</sup>Institute of Zoology, Zoological Society of London, London, UK, <sup>5</sup>Center for the Study of Biological Complexity, Virginia Commonwealth University, Richmond, VA, USA, <sup>6</sup>Escuela de Ciencias Biológicas, Pontificia Universidad Católica del Ecuador, Apartado 17-01-2184, Quito, Ecuador, <sup>7</sup>Department of Biology, Villanova University, Villanova, PA, USA, <sup>8</sup>School of Geography and of the Environment, University of Oxford, UK

\*Correspondence: Inon Scharf and Shai Meiri, Department of Zoology, Faculty of Life Sciences, Tel Aviv University, 69978 Tel Aviv, Israel.  
E-mails: scharfi@post.tau.ac.il (IS); uncschai@post.tau.ac.il (SM)  
The first and second authors contributed equally to this work.

### ABSTRACT

**Aim** Longevity is an important life-history trait, directly linked to the core attributes of fitness (reproduction and survival), yet large-scale comparative studies quantifying its implications for the ecology and life history of ectotherms are scarce. We tested the allometry of longevity in squamates and the tuatara, and determined how longevity is related to key environmental characteristics and life-history traits. Predictions based on life-history theory are expected to hold true for ectotherms, similarly to mammals and birds.

**Location** World-wide.

**Methods** We assembled from the literature a dataset of the maximum longevity of more than a thousand squamate species, representing c. 10% of their known species diversity, their phylogenetic relationships and multiple life-history and ecological variables. Correcting for phylogeny, we modelled the link between squamate longevity and both key life-history traits, such as body mass and age at first reproduction, and important environmental factors, such as latitude and primary productivity within species distributional ranges.

**Results** Large-bodied species live for longer than small ones, but body size explains far less of the variance in longevity than it does in mammals and birds. Accounting for body size, squamate brood frequency is negatively correlated with longevity, while age at first reproduction is positively correlated with longevity. This points to a continuum of slow-to-fast life-history strategies. Squamates in high latitudes and cold regions live for longer, probably because a shorter season of activity translates to slower development, older age at first reproduction and hence to increased longevity. Individuals live longer in captivity than in the wild. Herbivorous and omnivorous squamates live for longer than carnivorous ones. We postulate that low-quality nutrition reduces growth rates, promotes a relative decline in reproductive rates and thus prolongs life.

**Main conclusions** Our results support key predictions from life-history theory and suggest that reproducing more slowly and at older ages, being herbivorous and, plausibly, lowering metabolism, result in increased longevity.

### Keywords

**Body size, fast-slow continuum, lifespan, NPP, phylogenetic comparisons, reproduction, reptiles, temperature, trade-off.**

## INTRODUCTION

Longevity in animals is a highly variable trait, influenced by 'intrinsic' and 'extrinsic' environmental factors. There are three common intrinsic explanations for animal longevity.

1. The mutation accumulation theory suggests that the strength of natural selection decreases with age, because most reproduction occurs when animals are young. Thus, ageing is not under strong natural selection because the animal has already completed most of its reproduction (Hughes & Reynolds, 2005).
2. The antagonistic pleiotropy theory states that some genes encode phenotypes that are beneficial early in life but encode other traits that are harmful in advanced age (Ljubuncic & Reznick, 2009).
3. The 'rate of living theory', postulates that metabolic rate is negatively correlated with longevity because animals with high metabolic rates accumulate harmful metabolic by-products faster than those with lower metabolic rates (Sohal, 1986; Wilkinson & South, 2002; but see Møller, 2008, for an opposite reasoning).

All theories of ageing emphasize the trade-off between somatic maintenance and reproduction (often termed 'the disposable soma theory'; Kirkwood, 2001; Ljubuncic & Reznick, 2009), leading to a negative correlation between reproductive investment and longevity.

The most important environmental component affecting longevity is extrinsic mortality caused by various ecological pressures such as predation, famine and parasites (Healy *et al.*, 2014; Valcu *et al.*, 2014). Such extrinsic mortality is expected to lead to reproduction at an early age, and here intrinsic causes of ageing come into play. Animals reproducing early are exposed to the accumulation of age-specific harmful mutations or mutations with a pleiotropic effect, benefiting young animals but harming older ones (Stearns, 1992; Partridge & Gems, 2006). Mutations that are expressed late in life will mostly escape selection in animals that reproduce at a young age, but will be strongly selected against in animals that reproduce at older ages. Empirical evidence for faster ageing in populations suffering from a high predation threat compared with species/populations enjoying a low threat is mixed (summarized in Williams *et al.*, 2006; but see also Valcu *et al.*, 2014). Differences also exist in the specific process of senescence: while most species show either a gradual or abrupt decrease in performance with age, some appear not to age, such as some hydras and sea urchins (Kirkwood, 2001; Ebert, 2008).

A number of interspecific studies of birds and mammals have observed prolonged longevity with increasing body size (e.g. Lindstedt & Calder, 1976, 1981; Wilkinson & South, 2002; Speakman, 2005a; Healy *et al.*, 2014; Valcu *et al.*, 2014). Correcting for body mass, different key traits, such as age at first reproduction and level of sociality, also correlate with longevity (e.g. Prothero, 1993; Wasser & Sherman, 2010). In general, early, frequent and/or intensive reproduction is associated with decreased longevity (e.g. Kirkwood, 2001). Such life-history trade-offs have been termed the 'fast-slow continuum' (e.g. Bielby *et al.*, 2007; de Magalhães *et al.*, 2007).

There has been much experimental work on the longevity of several invertebrate species in order to study theories of ageing and the cost of reproduction (e.g. the reproduction-longevity trade-off; Kirkwood, 2001; Flatt, 2011; Scharf *et al.*, 2013). Comparative interspecific studies of ectotherm longevity, however, are very rare (but see, e.g., Hutchings & Morris, 1985). In reptiles, comparative studies that include longevity do exist, but they are limited to a few, closely related species (e.g. Werner *et al.*, 1993; Bauwens & Díaz-Uriarte, 1997; Bronikowski, 2008). Therefore there is a strong need to test whether large groups of ectotherms follow the same trade-offs described for the insect model organisms, and whether the emerging patterns resemble those of other vertebrates. In addition, the 'fast-slow continuum' could be particularly interesting with respect to reptile ecology, as reptile lineages show fundamental differences in their mode of reproduction, i.e. viviparity and oviparity, with differential investment in the offspring (Shine, 2005), clutch or litter size (e.g., Seigel & Fitch, 1984; Kratochvíl & Kubička, 2007) and the frequency of laying clutches (e.g. Andrews & Rand, 1974; Meiri *et al.*, 2012). Such differences in life history are predicted to be correlated with longevity.

Climate and environmental gradients are known to affect the life history of ectotherms (Shine, 2005) and could, therefore, be an important factor linked to reptile longevity. At higher latitudes, reptile activity seasons are shorter, probably bringing about slower growth, older age at maturation and increased longevity, as suggested for some squamate species (Blouin-Demers *et al.*, 2002; Arribas, 2004; Tomašević-Kolarov *et al.*, 2010). Conversely, animals at higher latitudes, especially those with a complex life cycle, sometimes 'hurry up' to complete their development before winter arrives (e.g. Gotthard *et al.*, 1999). Furthermore, higher latitudes are associated with cooler temperatures and, consequently, a slower rate of living, as shown for various animals such as fish and flies (Valenzano *et al.*, 2006; Conti, 2008). In cold areas animals often hibernate. During hibernation predation is minimal and metabolism is much reduced, lowering mutation rates and oxidative damage. Both extrinsic and intrinsic mortality are therefore reduced in cold and high-latitude regions, which could lead to prolonged life spans.

Net primary productivity (hereafter NPP) could influence longevity, since animals in regions of low NPP may be more food-restricted. Therefore, they are likely to grow more slowly and, consequently, mature later and live for longer. Diet may also affect longevity through differences in the nutritive value of the food or the danger in obtaining it. Wilkinson & South (2002) suggested that predatory bats should have shorter lives than bats feeding on fruits or nectar, but failed to demonstrate such an association. In contrast, evidence for differences in longevity between granivorous, frugivorous and insectivorous birds is mixed. Examining hundreds of bird species, Wasser & Sherman (2010) demonstrated that herbivorous birds live for longer than their omnivorous and carnivorous counterparts. They reasoned that herbivorous birds have a lower extrinsic mortality than carnivorous ones. The latter may also become injured while pursuing prey and are more likely to acquire parasites through

Variable	Prediction	Justification
Body size	+	Growing to a large size postpones reproduction
Latitude	+	Rate of life (metabolism), hibernation
NPP	–	Rate of life, postponing reproduction
Data origin	Captive > wild	Abundant food, veterinary treatment, no predators
Age at first reproduction	+	Many arguments, e.g. the mutation accumulation theory
Mode of reproduction	Viviparous > oviparous	Rate of life and reproduction intensity
Body temperature	–	Rate of life
Diet	Herbivores > carnivores	Predation risk, metabolic rate
Activity time	Nocturnal > diurnal	Rate of life, predation risk

‘+’ and ‘–’ stand for a positive and a negative correlation, respectively.

their diet. This would lead, according to the ageing theory, to reduced longevity of carnivores (Hughes & Reynolds, 2005; Williams *et al.*, 2006).

We analyse the interplay between longevity in lepidosaurs (Lepidosauria, Haeckel, 1866: a clade including Rhynchocephalia and Squamata, i.e. the tuatara, snakes, amphisbaenians and lizards) and other life-history traits, in light of the theories of ageing explained above, testing seven predictions (Table 1). (1) we predict a positive relationship between lepidosaur longevity and both body mass and age at first reproduction. It takes larger species longer to start reproducing, and hence ageing should start at a later stage than for smaller species. (2) we predict longevity to be positively correlated with latitude, and negatively correlated with mean annual temperature. High temperature should lead to a high metabolic rates, and thus to a fast rate of living that could shorten life (Sohal, 1986). The opposite holds true in cold environments where animals often hibernate. High temperature can also lead to faster growth in ectotherms and to a smaller adult size (‘the temperature–size rule’; Kingsolver & Huey, 2008), and consequently to shorter life span.

(3) we predict that lepidosaurs in regions of low NPP require more time to reach maturity. Resource scarcity could also lead to slower metabolic rates, to longer development times and to the postponement of reproduction in favour of growth and somatic maintenance; this combination should result in longer life. (4) following Meiri *et al.* (2013), we predict a negative relationship between longevity and body temperature. This also leads us to predict that nocturnal species live for longer than similar-sized diurnal species. Both lower body temperature and nocturnal activity time may lead to a longer life span, owing to a slower rate of living, expressed in slower activity, metabolism, growth and reproduction. (5) we expect a negative correlation between longevity and reproduction intensity (number of broods per year and clutch or litter size), based on the predicted trade-off between reproduction and longevity, either due to pleiotropic effects or to accumulation of harmful mutations. (6) viviparous lepidosaurs are expected to mature later, to have slow reproduction and hence to live longer than oviparous species and species having multiple, small offspring. While oviparous females can

**Table 1** Summary of predictions for the link between different intrinsic and extrinsic variables and lepidosaur longevity. For more detailed explanation, please see the text.

have multiple clutches, viviparous females are often limited to a single litter or less each season (Shine, 2005; Meiri *et al.*, 2012). (7) we test for a link between lizard diet (carnivorous, herbivorous and omnivorous) and longevity. While all snakes are carnivorous, lizards have diverse diets; most species are carnivorous, but some are omnivorous or herbivorous (Pough, 1973). Similar to Wasser & Sherman (2010), we expect higher longevity in herbivorous lizards after correcting for size, because they may develop more slowly, leading to delayed reproduction, and have reduced extrinsic mortality, because of the lower risks involved in foraging.

## METHODS

### Data collection

We assembled a dataset on the maximum longevity of 1014 species (672 lizards, 336 snakes, five amphisbaenids and the tuatara, *Sphenodon punctatus*), belonging to 50 of the 67 lepidosaur families currently recognized world-wide (taxonomy follows Uetz, 2014). Data are from the literature, supplemented by data on animals born or kept at the Meier Segals Garden for Zoological Research, and now residing in the Steinhardt Museum of Natural History, Tel Aviv University (Tables S1–S3 in Supporting Information). Longevity data are the maximum age (in years) reported for each species. For captive animals that were caught as adults, we calculated longevity by adding the minimum age at first reproduction to those data. For example, Montanucci (1983) reported that an adult *Phrynosoma douglasii* was kept for 5.25 years in captivity; as the species takes 2 years to reach adulthood we used a conservative longevity value of 7.25 years. In some cases, reported life spans are shorter than the time other sources report it takes a species to reach maturity [e.g., Carey & Judge (2000) report the longevity of *Cyclura pinguis* as 3.2 years, whereas Iverson *et al.* (2004) report that this species takes 4–9 years to reach sexual maturity]. We omitted such cases from the dataset.

For each species, we collected literature data on body size, earliest age at first reproduction, field body temperature of

**Table 2** Longevity as a function of body mass for the different lepidosaur clades (non-phylogenetic analyses). The effects of mass ( $F_{1,996} = 500.9$ ), infraorder ( $F_{9,996} = 17.42$ ) and their interaction ( $F_{7,996} = 4.55$ ) are all significant ( $P < 0.0001$  for all).

Clade	<i>n</i>	Longevity (mean; range)	$R^2$	Slope $\pm$ 1 SE	<i>t</i>	<i>P</i>	$\lambda$	Intercept $\pm$ 1 SE
Acrodontia	93	7.6; 0.5–33	0.224	0.236 $\pm$ 0.046	5.1	< 0.0001	0.548	0.373 $\pm$ 0.130
Amphisbaenia	5	10.7; 1.8–16	0.050	0.110 $\pm$ 0.277	0.4	0.717	0	0.744 $\pm$ 0.481
Anguimorpha	48	15.9; 2.5–62	0.195	0.161 $\pm$ 0.048	3.3	0.002	0.234	0.656 $\pm$ 0.153
Gekkota	171	9.3; 1.1–50	0.142	0.254 $\pm$ 0.048	5.3	< 0.0001	0.514	0.606 $\pm$ 0.109
Iguania	113	9.7; 1–60	0.355	0.327 $\pm$ 0.042	7.81	< 0.0001	0.278	0.187 $\pm$ 0.102
Laterata	95	7.6; 0.9–28	0.224	0.222 $\pm$ 0.045	4.9	< 0.0001	0.363	0.443 $\pm$ 0.110
Rhynchocephalia	1	91	–	–	–	–	–	–
Sauria	672	9.4; 0.5–62	0.22	0.257 $\pm$ 0.019	13.8	< 0.0001	0.628	0.443 $\pm$ 0.114
Scincimorpha	152	9.6; 1.25–44	0.076	0.318 $\pm$ 0.041	7.8	< 0.0001	0.624	0.357 $\pm$ 0.121
Serpentes	336	15.8; 3.4–47.5	0.073	0.097 $\pm$ 0.019	5.1	< 0.0001	0.409	0.840 $\pm$ 0.080

active individuals, reproductive mode (viviparous versus oviparous), clutch or litter size and brood frequency, diet (herbivorous, omnivorous or carnivorous) and activity time (diurnal, nocturnal or cathemeral; see Table 2 for sample sizes and Tables S1–S3 for data and references). We further recorded whether data were from captive or wild individuals. While animals in captivity usually get better access to food and medical treatment, the specific requirements of each species are sometimes difficult to fulfil (Mason, 2010). Furthermore, many records of captive animals, but fewer records of animals in the wild, are based on animals that were still alive at the time data were collected (e.g. many species in Slavens & Slavens 1999); the *Heloderma suspectum* specimens at the Meier Segals Garden for Zoological Research, Tel Aviv University is, likewise, still alive and well, at the age of at least 40).

Body size data for lizards are based on maximum snout–vent length (SVL, in mm) of individual species, because this is the commonest measure of lizard size reported in the literature. For snakes, body size is mainly based on maximum total length (TL, in mm). We converted body lengths to masses using clade-specific allometric relationships from Meiri (2010) (for lizards and amphisbaenians) and Feldman & Meiri (2013) (for snakes). Body masses better reflect the true size of animals than body length when examined over animals with highly different shapes, such as lizards and snakes. We updated these equations for some clades as required by taxonomic changes, or when better data became available. Thus, we used equations developed by Pincheira-Donoso *et al.* (2011) for *Liolaemus* and *Phymaturus*, Novosolov *et al.* (2013) for Gekkonidae *sensu stricto*, Sphaerodactylidae, Eublepharidae and *Anolis*, and Meiri *et al.* (2013) for limbed Anguidae. For the gekkotan clades Carphodactylidae, Diplodactylidae and Phyllodactylidae, for the Tropicuridae (*sensu stricto*) (Uetz, 2014) and for the snake clades Colubridae (*sensu stricto*) Dipsadidae, Natricidae, Pythonidae and Typhlopidae, we developed new allometric equations (Tables S4–S6).

Age at first reproduction can vary considerably across individuals, depending on a number of factors such as the climatic conditions within a species' range or the time in the year an

individual hatched (i.e. whether an individual hatched from an early or a late clutch). We thus use the average age at first reproduction. For clutch or litter size and brood frequency we use species means, if available, or midpoints (e.g. the average between the largest and smallest known clutches) if means are not reported. Similarly, we use a midpoint of the largest and smallest mean if multiple means were reported. Diet is treated as a trichotomy with carnivorous lepidosaurs defined as those that do not take a substantial amount of plants (i.e. only occasionally and irregularly feed on plant material, or take < 10% of plants in the diet, if quantitative data are available). Species feeding mainly on plant material (> 50% of the diet) are treated as herbivorous and those between the two extremes (10–50% plants in the diet) are considered omnivorous. Some lizards shift their diet from carnivory to herbivory during ontogeny (see, e.g., Pough, 1973). However, because most of these species are large and long lived, we think that the adult diet, as used here, is most representative of their diet.

We mapped the global distribution of each species using published maps and locality data, museum records and expert-drawn maps (see <http://www.gardinitiative.org/index.html>). For each species we determined the latitudinal range centroid in ArcGIS10 (ESRI, 2013) and used the absolute value of latitude. For the calculation of environmental parameters we intersected species maps with average mean annual temperature within  $0.16^\circ \times 0.16^\circ$  grid cells from Hijmans *et al.* (2005), and recorded the average temperature of the species range. In a similar fashion, we intersected species ranges with NPP data (in  $\text{g C m}^{-2} \text{ year}^{-1}$ ) from Imhoff *et al.* (2004).

### Phylogenetic analyses

For the phylogenetic comparative analyses we mainly relied on the recently published and dated phylogeny of over 4000 lepidosaur species by Pyron & Burbrink (2014) which has 897 of the 1014 species in our dataset. We repeated all analyses for all 1014 species by adding the other 117 species to this tree, according to phylogenetic data available in other works, or according to taxonomic affiliation (Tables S1 & S3). We repeated each test

twice, once with the dated Pyron & Burbrink (2014) 897-species tree and once with the inclusive (1014 species) tree, for which we did not have data on branch lengths. Because the results of the two sets of analyses are, for the most part, qualitatively similar, we focus on the outcome of the analysis of the dated tree, and discuss the results obtained with the 1014-species tree only when they are qualitatively different.

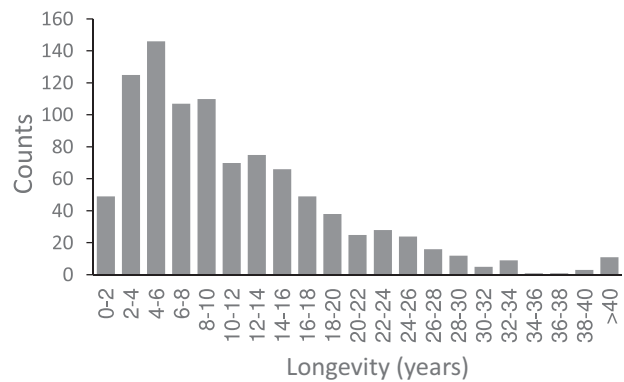
In all statistical tests we accounted for shared ancestry using phylogenetic generalized least square (PGLS) tests, adjusting the strength of phylogenetic non-independence using the maximum likelihood value of the scaling parameter value  $\lambda$  (Pagel, 1999), implemented in the R package 'caper' (Orme *et al.*, 2012). Pagel's  $\lambda$  represents the magnitude of the phylogenetic signal in the data or, for regression models, the model residuals, and ranges between zero (no signal) and one (a signal consistent with Brownian motion).

### Statistical analysis

We  $\log_{10}$  transformed data on body mass, longevity, age at first reproduction, clutch or litter size, the number of broods per year and NPP in order to normalize residuals and reduce heteroscedasticity. All statistical tests were performed using R 2.15.2 (R Development Core Team, 2013).

To test for a link between body mass and longevity we regressed longevity on body mass. To investigate the interclade differences we repeated this test (longevity versus mass, not corrected for phylogeny) for seven lepidosaur clades: Acrodontia, Anguimorpha, Gekkota, Iguania, Laterata, Scincomorpha and Serpentes (snakes). Amphisbaenia, Scolecophidia and Rhynchocephalia were not included in these analyses because of the small sample size (Table 2). We used a phylogenetic ANCOVA to test for differences between clades in the relationship between mass and longevity. We did not test for mean annual temperature as it was tightly correlated with latitude ( $R^2 = 0.70$ ), and latitude explained more of the variance in longevity. We had data on the mass, diet, mode of reproduction, latitude and NPP of all species. For activity time we lacked data for four species: *Eryx tataricus*, *Myrrophis chinensis*, *Lygophis anomalus* and *Sphaerodactylus pimentata*. To be able to use these species in our multivariate models we classify the first two as nocturnal and the latter two as diurnal, based on the behaviour of closely related species. For 31 species we cannot tell whether longevity data are from captive specimens or relate to longevity in the wild. Because data from captive individuals are much more common (818 species versus 165 from the wild in the rest of the dataset), and because data from the wild are usually well flagged as such, we arbitrarily ascribe the origin of the data for these 31 species as derived from captive individuals. Analyses omitting these species give qualitatively similar results (not shown).

We first conduct ANCOVA to test which of these seven variables [mass, latitude, NPP, captivity versus nature, diet, activity time and mode of reproduction (with two levels, oviparous versus viviparous; species with mixed reproductive strategies were assigned to the predominant mode, e.g. viviparity for



**Figure 1** Frequency distribution of the maximum longevity of the 1014 species in the dataset.

*Zootoca vivipara*] are related to longevity, using a backwards stepwise elimination procedure (based on  $P$ -values at  $\alpha = 0.05$ ). We then examine the other variables (clutch size, hatchling/neonate size, number of broods per year, age at first reproduction, and body temperature) by adding them to the minimum adequate model of the previous step, one at a time (because the database for each comprises a different subset of species).

### RESULTS

The frequency distribution of lepidosaur longevity is depicted in Fig. 1. The lepidosaur clades differ significantly ( $F_{9,1003} = 17.0$ ,  $P < 0.0001$ ) in the intercept and slopes of their body mass versus longevity (Table 2). Although the slope is always positive, the clades can be divided into two groups: low slopes from 0.11 to 0.14 (Amphisbaenia, Anguimorpha, Laterata and Serpentes) and high slopes from 0.26 to 0.31 (Acrodontia, Scincomorpha, Iguania and Gekkota; Table 2). The scaling exponent between longevity and body mass for all lepidosaurs is  $0.202 \pm 0.009$  (95% CI = 0.185–0.219).

We found that mass, latitude, NPP, data source (captivity versus wild) and diet are related to longevity, whereas activity time ( $P = 0.22$ ) and mode of reproduction ( $P = 0.12$ ) are not. Larger lepidosaurs and those inhabiting higher latitudes and regions with low NPP live for longer (Table 3), in accordance with our first three hypotheses. Omnivorous lepidosaurs live for c. 20% longer than carnivorous ones (corrected for the other six factors), and herbivorous lepidosaurs live for c. 20% longer than omnivores (Table 3). Finally, longevity is longer in captive individuals than in those studied in the wild by c. 13% (species for which we do not know whether records are from captivity or from the wild live even longer than captives, but are considered captive in all subsequent analyses). This five-predictor model explains 23.2% of the variation in longevity ( $\lambda = 0.69$ ,  $n = 897$ ; Table 3).

Hatchling size and age at first reproduction are positively correlated with longevity when added to the five-predictor model (Table 4). Clutch size and the number of broods per year were negatively correlated with longevity when added to this



model, but adding body temperature to the model revealed no correlation between temperature and longevity (Table 4).

Analysing the full 1014-species dataset, we obtain qualitatively very similar results (i.e. the same factors were significant, with the same sign; Table 5), with two main differences: (1) NPP and data type were dropped from the full model (i.e. only mass, diet and latitude were retained); (2) in addition to the effects of age at first reproduction, the number of broods per year, clutch size and hatchling/neonate size, body temperature had a significant, negative relationship with longevity ( $n = 437$ , slope  $-0.005 \pm 0.002$ ,  $t = -2.1$ ,  $P = 0.033$ ,  $\lambda = 0.423$ ,  $R^2 = 0.379$ ). Interestingly, when adding the life-history factors to this model, data origin (wild or captive) regained significance (with captive specimens living longer) in all models (Table 5).

## DISCUSSION

Our comparative study, including more than a thousand species across all major lepidosaur groups (except dibamid lizards), supports central predictions derived from the evolutionary theory of ageing (Hughes & Reynolds, 2005). Our results suggest that lepidosaur species exhibit a spectrum of life-history strat-

egies, bounded by two extremes of fast and slow growth and reproduction rates. We found that long-living lepidosaurs are generally characterized by 'slow' life-history traits: delayed and infrequent reproduction, smaller clutches, larger hatchlings and colder body temperatures. As expected, the environment has a strong impact on longevity, and lepidosaurs at higher latitudes, and perhaps in less productive regions, live longer. Captive individuals live for longer than individuals in the wild, plausibly because of the absence of predators and the availability of veterinary care.

As predicted by theory, larger lepidosaur species live for longer. This logical pattern derives from the trade-off between growth and reproduction: growing to a large size delays reproduction because development takes longer, and it selects for longer life. Similar patterns have long been known for mammals and birds (e.g. Austad & Fischer, 1991; Healy *et al.*, 2014). Our results fit the expectation for a scaling exponent between longevity and body mass of 0.15 to 0.33 (calculated for mammals and birds; e.g. Speakman, 2005a). Nevertheless, we demonstrate large differences among clades, with gekkotans and iguanians having steeper slopes, and anguimorphs, snakes and members of the Laterata (lacertids, teiids, gymnophthalmids) having relatively shallow slopes. Furthermore, the generally accepted slope of 0.25 lies above the confidence interval exhibited by all lepidosaurs.

It is accepted that ageing is caused by the accumulation of free radicals and oxidants, both by-products of metabolism (Barja, 2004; Buttemer *et al.*, 2010). Yet the exact mechanism leading larger animals to live longer remains unclear, as many physiological traits correlate with body size (discussed in Speakman, 2005b). Body mass alone explained much less of the variance in lepidosaur longevity than in birds and mammals (e.g. 14 and 16% using the partial and full dataset versus over 60% in endotherms; de Magalhães *et al.*, 2007). Because mass explains little variation other life-history, environmental and clade-specific traits are likely to have a stronger effect on lepidosaur longevity than on endotherm longevity. We suggest that body temperatures of both active and inactive lepidosaurs, through their effects on metabolic rates, could also be major determinants of reptile longevity (see below).

Several components of fecundity were correlated with longevity. High investment in reproduction, expressed in frequent, large clutches is correlated with short life. The reproduction

**Table 3** The basic model, with the five variables included in all analyses [body mass, latitude, net primary productivity (NPP), captive/wild and diet].

Factor	Estimate	SE	<i>t</i>	<i>P</i>
Intercept (carnivorous species, in captivity)	1.209	0.333	3.6	0.0003
In the wild	-0.058	0.024	-2.4	0.019
Diet (herbivorous species)	0.166	0.056	3.0	0.003
Diet (omnivorous species)	0.083	0.026	3.1	0.002
Body mass	0.198	0.015	13.4	< 0.0001
Latitude	0.005	0.001	5.3	< 0.0001
NPP	-0.060	0.026	-2.3	0.021

Estimates for body mass, latitude and NPP are slopes; estimates for diet and captive/wild individuals are intercepts. The first row is the intercept for carnivorous species in captivity. For species measured in the wild, for herbivores and for omnivores the intercept is calculated by adding the estimate value in the corresponding row. *t* and *P*-values for these categories refer to differences from specimens measured in captivity, and from carnivorous species.

**Table 4** The relationship between longevity and life history factors, when these are added independently to a model containing diet, status (captive/wild), body mass, latitude and NPP.

Factor	Slope $\pm$ 1 SE	<i>t</i>	<i>P</i>	<i>n</i>	<i>R</i> <sup>2</sup> with factor	<i>R</i> <sup>2</sup> without factor	$\lambda$
Hatchling size	0.171 $\pm$ 0.033	5.3	< 0.0001	714	0.291	0.241	0.61
Age at first reproduction	0.479 $\pm$ 0.049	9.8	< 0.0001	378	0.540	0.390	0.46
No. of yearly broods	-0.172 $\pm$ 0.053	3.3	0.001	512	0.333	0.311	0.57
Clutch size	-0.139 $\pm$ 0.041	3.4	0.0007	849	0.254	0.241	0.71
Body temperature	-0.004 $\pm$ 0.003	1.5	0.128	402	0.379	0.357	0.42

**Table 5** The minimum adequate model for the full 1014-species dataset and tree.

	Slope/ intercept	SE	<i>t</i>	<i>P</i>
Body mass	0.204	0.014	14.8	< 0.0001
Latitude	0.007	0.001	7.9	< 0.0001
Carnivorous species, captive	0.412	0.082	5.1	< 0.0001
Carnivorous species, in the wild*	0.371	0.024	-1.7	0.084
Herbivorous species†	0.590	0.049	3.7	0.0002
Omnivorous species†	0.506	0.025	3.8	0.0001

$n = 1014$  species,  $\lambda = 0.461$ ,  $R^2 = 0.247$ .

Body mass and latitude estimate are slopes, all other are intercepts.

\*SE, *t* and *P*-values are for difference from captive individuals.

†SE, *t* and *P*-values are for difference from carnivorous species; intercept is for captive individuals.

versus longevity trade-off is a common life-history feature which has been mainly measured within species (e.g. Seigel *et al.*, 1987; Stearns, 1992; Scharf *et al.*, 2013). Tinkle (1969), however, showed an interspecific trade-off between total offspring number per season and annual survivorship of 18 lizard species, explaining that reproduction entails some risk which affects survivorship.

Ectotherm development and body size are strongly influenced by temperature ('the temperature-size rule'; e.g. Kingsolver & Huey, 2008). Longevity is often shorter in warmer conditions, a phenomenon usually studied intraspecifically under controlled conditions (e.g. Valenzano *et al.*, 2006). The reason could be faster growth rate, leading to faster accumulation of harmful metabolic by-products and also earlier reproduction. Recent studies have differentiated between the habitat temperature and the actual body temperature of lizards (Meiri *et al.*, 2013), and the latter may have a higher impact on ectotherm survival (Conti, 2008). Latitude explains more of the variance in longevity than annual temperatures because it is correlated with additional climate components, such as precipitation, day length and season length. It has already been suggested that lizards at higher altitudes and latitudes live longer (e.g. Tomašević-Kolarov *et al.*, 2010). The latitude-longevity link may not be solely and directly related to temperature but to season length, and to lepidosaurs being inactive during longer periods of the year (e.g. Arribas & Galan, 2005). Inactivity is helpful in cold seasons when food supply is insufficient to support physiological body maintenance. Metabolism is further lowered on cold nights when animals are not foraging even during the active season when days are hot, reducing predation risk and intrinsic drivers of ageing. All these factors result in delayed growth and hence delayed reproduction, and longer life. The same factors may drive the correlation between NPP and longevity: animals having access to plenty of food would require a shorter development time and could start reproducing earlier, leading to reduced longevity. In spite of the statistical significance, NPP explained little of the variance in longevity. Moreover, the link between NPP and longevity disappeared when using the

inclusive tree, requiring further caution with respect to this result.

Herbivores live for longer than carnivores of a similar size. Ingestion of a protein-rich diet (meat) may lead to faster growth, earlier and more intense reproduction and hence to shortened longevity (i.e. a faster life). This explanation was evoked by Fisher *et al.* (2001) while interpreting their results that herbivorous marsupials live for longer, have smaller litters and grow slowly. This pattern, however, is not supported by studies on birds. While it is difficult to evaluate the quality of food, African granivorous birds had shorter lives than insectivorous and nectarivorous birds consuming food with a lower fat content (Peach *et al.*, 2001). It is tempting to suggest a connection between poor nutrition and longevity through caloric restriction. The latter is a well-known factor, extending longevity in various organisms (e.g. Mair & Dillin, 2008). Although we have only indirect support for that, we see it as a fruitful direction for future research. Notably, in some species, no dietary effect on survival has been detected (e.g. bats; Wilkinson & South, 2002).

The longevity of lepidosaurs is greater in captivity, where predators are absent, food is in excess, veterinary care is available, movement is reduced and few risks are present (Mason, 2010). This is, however, not always the case, because the conditions required for animals in captivity are not always met.

Our dataset provides the first large-scale comparative study of longevity in ectotherms. However, a few words of caution are in order. We used the maximum known longevity for each species. Maxima are problematic because they are often based on very few individuals, usually kept in captivity, and they imply little about ageing processes. Furthermore, maxima are extremely sensitive to sample size, and we often found that a new literature source more than doubled a previous maximum estimate of a species' longevity. This is not easy to account for, as sample sizes are not recorded for most species [see Valcu *et al.* (2014) for an attempt to correct maximum longevity for how many times a species is mentioned in scientific publications as a proxy for how well known it is]. Most field guides and reptile care books simply state that members of a species can live to a certain age (e.g. Brown, 2012). Other reports are often anecdotal, for example for a marked specimen to have been found after a certain time (e.g. Bringsøe, 1998) without reference to the number of individuals originally marked; or a compilation will only state the age of a living or a dead individual (e.g. Slavens & Slavens, 1999). Such large compilations often cite one another, but little attention seems to be paid to obvious problems (such as maximum longevity apparently below the age at first reproduction). While we avoided such blatant errors here, undoubtedly some poor-quality data still remain.

Some of the data, both from captivity and from the wild, relate to individuals that were still alive when their longevity was reported (studies based on skeletochronology usually obtain longevity estimates from dead individuals). The often low quality of the data may explain why we only found a weak relationship between longevity and some factors that are often

assumed to affect it. The relatively low amount of variance explained by body size, and the often substantial differences found between closely related species, may, in part, be an artefact of often poor data quality. That said, maximum longevity is the commonest metric of longevity in comparative studies (Prothero, 1993; Wilkinson & South, 2002; de Magalhães *et al.*, 2007; Valcu *et al.*, 2014; Healy *et al.*, 2014, among others). The strengths of this study are its large scope and broad taxonomic sampling. The sources of error in such macroecological studies tend to average out (Brown, 1995). Nevertheless, as with other comparative studies (see discussion in Scharf & Meiri, 2013), we can only suggest a mechanism but not experimentally support it.

In summary, our results support fundamental predictions of life-history theory by showing a link between age at first reproduction, rate of reproduction and longevity. Moreover, environmental variables, related to season length and availability of food, are suggested to delay reproduction and increase longevity, in accord with our expectations. Body temperature and mean latitude of the distributional range are independently correlated with longevity (they are only loosely intercorrelated; Meiri *et al.*, 2013), and animals in captivity live for longer than wild ones. We also found a difference in longevity between herbivorous and carnivorous lepidosaurs with respect to reproductive age: herbivorous lepidosaurs probably consume poorer food, hence reach maturity later and thus live longer. Future experiments could test this by feeding a set of lepidosaur species with different diets and exploring the consequences for growth and time to maturity. This study presents for the first time longevity patterns of a large dataset of ectotherms and opens many avenues for further research on the attributes that govern longevity in ectotherms.

## ACKNOWLEDGEMENTS

The research leading to this paper was partially funded by the People Programme (Marie Curie Actions) of the European Union's Seventh Framework Programme (FP7/2007–2013) under REA grant agreement no. [333442] to I.S. and an Israel Science Foundation grant 1005/12 to S.M. D.P.D. thanks the University of Lincoln for a Research Investment Fund (RIF) grant. We are grateful to Gavin Thomas, Adam Algar, Kevin Healy and two anonymous referees for their fruitful and constructive comments.

## REFERENCES

- Andrews, R. & Rand, A.S. (1974) Reproductive effort in anoline lizards. *Ecology*, **55**, 1317–1327.
- Arribas, O.J. (2004) Characteristics of the reproductive biology of *Iberolacerta aurelioi* (Arribas, 1994). *Herpetozoa*, **17**, 3–18.
- Arribas, O.J. & Galan, P. (2005) Reproductive characteristics of the Pyrenean high-mountain lizards: *Iberolacerta aranica* (Arribas, 1993), *I. aurelioi* (Arribas, 1994) and *I. bonnali* (Lantz, 1927). *Animal Biology*, **55**, 163–190.
- Austad, S.N. & Fischer, K.E. (1991) Mammalian aging, metabolism, and ecology: evidence from the bats and marsupials. *Journal of Gerontology*, **46**, B47–B53.
- Barja, G. (2004) Free radicals and aging. *Trends in Neuroscience*, **27**, 595–600.
- Bauwens, D. & Díaz-Uriarte, R. (1997) Covariation of life-history traits in lacertid lizards: a comparative study. *The American Naturalist*, **149**, 91–111.
- Bielby, J., Mace, G.M., Bininda-Emonds, O.R.P., Cardillo, M., Gittleman, J.L., Jones, K.E., Orme, C.D.L. & Purvis, A. (2007) The fast–slow continuum in mammalian life history: an empirical reevaluation. *The American Naturalist*, **169**, 748–757.
- Blouin-Demers, G., Prior, K.A. & Weatherhead, P.J. (2002) Comparative demography of black rat snakes (*Elaphe obsoleta*) in Ontario and Maryland. *Journal of Zoology*, **256**, 1–10.
- Bringsøe, H. (1998) Observations on growth and longevity in *Uromastyx aegyptia* (Forsskal, 1775) in the Negev Desert, southern Israel (Reptilia: Sauria: Agamidae). *Faunistische Abhandlungen, Staatliches Museum für Tierkunde, Dresden*, **21**, 19–21.
- Bronikowski, A.M. (2008) The evolution of aging phenotypes in snakes: a review and synthesis with new data. *Age*, **30**, 169–176.
- Brown, D. (2012) *A guide to Australian dragons in captivity*. Reptile Publications, Burleigh, Qld.
- Brown, J.H. (1995) *Macroecology*. University of Chicago Press, Chicago, IL.
- Buttemer, W.A., Abele, D. & Costantini, D. (2010) From bivalves to birds: oxidative stress and longevity. *Functional Ecology*, **24**, 971–983.
- Carey, J.R. & Judge, D.S. (2000) *Longevity records: life spans of mammals, birds, amphibians, reptiles and fish*. Odense University Press, Odense.
- Conti, B. (2008) Considerations on temperature, longevity and aging. *Cellular and Molecular Life Sciences*, **65**, 1626–1630.
- Ebert, T.A. (2008) Longevity and lack of senescence in the red sea urchin *Strongylocentrotus franciscanus*. *Experimental Gerontology*, **43**, 734–738.
- ESRI (Environmental Systems Resource Institute) (2013) *ArcGIS 10.2*. ESRI, Redlands, CA.
- Feldman, A. & Meiri, S. (2013) Length–mass allometry in snakes. *Biological Journal of the Linnean Society*, **108**, 161–172.
- Fisher, D.O., Owens, I.P.F. & Johnson, C.N. (2001) The ecological basis of life history variation in marsupials. *Ecology*, **82**, 3531–3540.
- Flatt, T. (2011) Survival costs of reproduction in *Drosophila*. *Experimental Gerontology*, **46**, 369–375.
- Gotthard, K., Nylin, S. & Wiklund, C. (1999) Seasonal plasticity in two satyrine butterflies: state-dependent decision making in relation to daylength. *Oikos*, **84**, 453–462.
- Healy, K., Guillerme, T., Finlay, S., Kane, A., Kelly, S.B.A., McClean, D., Kelly, D.J., Donohue, I., Jackson, A.L. & Cooper, N. (2014) Ecology and mode-of-life explain lifespan variation



- in birds and mammals. *Proceedings of the Royal Society B: Biological Sciences*, **281**, 20140298.
- Hijmans, R.J., Cameron, S.E., Parra, J.L., Jones, P.G. & Jarvis, A. (2005) Very high resolution interpolated climate surfaces for global land areas. *International Journal of Climatology*, **25**, 1965–1978.
- Hughes, K.A. & Reynolds, R.M. (2005) Evolutionary and mechanistic theories of aging. *Annual Review of Entomology*, **50**, 421–445.
- Hutchings, J.A. & Morris, D.W. (1985) The influence of phylogeny, size and behaviour on patterns of covariation in salmonid life histories. *Oikos*, **45**, 118–124.
- Imhoff, M.L., Bounoua, L., Ricketts, T., Loucks, C., Harriss, R. & Lawrence, W.T. (2004) Global patterns in human consumption of net primary production. *Nature*, **429**, 870–873.
- Iverson, J.B., Hines, K.N. & Valiulis, J.M. (2004) The nesting ecology of the Allen Cays rock iguana, *Cyclura cychlura inornata* in the Bahamas. *Herpetological Monographs*, **18**, 1–36.
- Kingsolver, J.G. & Huey, R.B. (2008) Size, temperature and fitness: three rules. *Evolutionary Ecology Research*, **10**, 251–258.
- Kirkwood, T.B.L. (2001) Sex and ageing. *Experimental Gerontology*, **36**, 413–418.
- Kratochvíl, L. & Kubička, L. (2007) Why reduce clutch size to one or two eggs? Reproductive allometries reveal different evolutionary causes of invariant clutch size in lizards. *Functional Ecology*, **21**, 171–177.
- Lindstedt, S.L. & Calder, W.A. III (1976) Body size and longevity in birds. *Condor*, **78**, 91–94.
- Lindstedt, S.L. & Calder, W.A. III (1981) Body size, physiological time, and longevity of homeothermic animals. *Quarterly Review of Biology*, **56**, 1–16.
- Ljubuncic, P. & Reznick, A.Z. (2009) The evolutionary theories of aging revisited – a mini-review. *Gerontology*, **55**, 205–216.
- de Magalhães, J.P., Costa, J. & Church, G.M. (2007) An analysis of the relationship between metabolism, developmental schedules, and longevity using phylogenetic independent contrasts. *Journal of Gerontology*, **62A**, 149–160.
- Mair, W. & Dillin, A. (2008) Aging and survival: the genetics of life span extension by dietary restriction. *Annual Review of Biochemistry*, **77**, 727–754.
- Mason, G.L. (2010) Species differences in responses to captivity: stress, welfare and the comparative method. *Trends in Ecology and Evolution*, **25**, 713–721.
- Meiri, S. (2010) Length–weight allometries in lizards. *Journal of Zoology*, **281**, 218–226.
- Meiri, S., Brown, J.H. & Sibly, R.M. (2012) The ecology of lizard reproductive output. *Global Ecology and Biogeography*, **21**, 592–602.
- Meiri, S., Bauer, A.M., Chirio, L., Colli, G.R., Das, I., Doan, T.M., Feldman, A., Herrera, F.-C., Novosolov, M., Pafilis, P., Pincheira-Donoso, D., Powney, G., Torres-Carvajal, O., Uetz, P. and Van Damme, R. (2013) Are lizards feeling the heat? A tale of ecology and evolution under two temperatures. *Global Ecology and Biogeography*, **22**, 834–845.
- Møller, A.P. (2008) Relative longevity and field metabolic rate in birds. *Journal of Evolutionary Biology*, **21**, 1379–1386.
- Montanucci, R.R. (1983) Breeding, captive care and longevity of the short-horned lizard *Phrynosoma douglassi*. *International Zoo Yearbook*, **23**, 148–156.
- Novosolov, M., Raia, P. & Meiri, S. (2013) The island syndrome in lizards. *Global Ecology and Biogeography*, **22**, 184–191.
- Orme, C.D.L., Freckleton, R.P., Thomas, G.H., Petzoldt, T., Fritz, S.A. & Isaac, N.J.B. (2012) *Caper: comparative analyses of phylogenetics and evolution* in R. R package version 0.5. Available at: <http://CRAN.R-project.org/package=caper>.
- Pagel, M. (1999) Inferring the historical patterns of biological evolution. *Nature*, **401**, 877–884.
- Partridge, L. & Gems, D. (2006) Beyond the evolutionary theory of ageing, from functional genomics to evo-gero. *Trends in Ecology and Evolution*, **21**, 334–340.
- Peach, W.J., Hammer, D.B. & Oatley, T.B. (2001) Do southern African songbirds live longer than their European counterparts? *Oikos*, **93**, 235–249.
- Pincheira-Donoso, D., Fox, S.F., Scolaro, J.A., Ibarhüengoytia, N., Acosta, J.C., Corbalan, V., Medina, M., Boretto, J., Villavicencio, H.J. & Hodgson, D.J. (2011) Body size dimensions in lizard ecological and evolutionary research: exploring the predictive power of mass estimation equations in two Liolaemidae radiations. *Herpetological Journal*, **21**, 35–42.
- Pough, F.H. (1973) Lizard energetics and diet. *Ecology*, **54**, 837–844.
- Prothero, J. (1993) Adult life span as a function of age at maturity. *Experimental Gerontology*, **28**, 529–536.
- Pyron, R.A. & Burbrink, F.T. (2014) Early origin of viviparity and multiple reversions to oviparity in squamate reptiles. *Ecology Letters*, **17**, 13–21.
- R Development Core Team (2013) R: a language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing.
- Scharf, I. & Meiri, S. (2013) Sexual dimorphism of heads and abdomens: different approaches to ‘being large’ in female and male lizards. *Biological Journal of the Linnean Society*, **110**, 665–673.
- Scharf, I., Peter, F. & Martin, O.Y. (2013) Reproductive trade-offs and direct costs for males in arthropods. *Evolutionary Biology*, **40**, 169–184.
- Seigel, R.A. & Fitch, H.S. (1984) Ecological patterns of relative clutch mass in snakes. *Oecologia*, **61**, 293–301.
- Seigel, R.A., Huggins, M.M. & Ford, N.B. (1987) Reduction in locomotor ability as a cost of reproduction in gravid snakes. *Oecologia*, **73**, 481–485.
- Shine, R. (2005) Life-history evolution in reptiles. *Annual Review of Ecology, Evolution and Systematics*, **36**, 23–46.
- Slavens, F.L. & Slavens, K. (1999) *Reptiles and amphibians in captivity: breeding, longevity, and inventory*. Slaveware Publishing, Seattle, WA.
- Sohal, R.S. (1986) The rate of living theory: a contemporary interpretation. *Insect aging* (ed. by K.G. Collatz and R.S. Sohal), pp. 23–44. Springer Verlag, Berlin.

- Speakman, J.R. (2005a) Body size, energy metabolism and lifespan. *Journal of Experimental Biology*, **208**, 1717–1730.
- Speakman, J.R. (2005b) Correlations between physiology and lifespan – two widely ignored problems with comparative studies. *Aging Cell*, **4**, 167–175.
- Stearns, S.C. (1992) *The evolution of life histories*. Oxford University Press, London.
- Tinkle, D.W. (1969) The concept of reproductive effort and its relation to the evolution of life histories of lizards. *The American Naturalist*, **103**, 501–516.
- Tomašević-Kolarov, N., Ljubisavljević, K., Polović, L., Džukić, G. & Kalezić, M.L. (2010) The body size, age structure and growth pattern of the endemic Balkan mosor rock lizard (*Dinarolacerta mosorensis* (Kolombatović, 1886)). *Acta Zoologica Academiae Scientiarum Hungaricae*, **56**, 55–71.
- Uetz, P. (2014) *The Reptile Database*. Available at: <http://reptile-database.reptarium.cz> (accessed 4 April 2014).
- Valcu, M., Griesser, D.M., Nakagawa, S. & Kempenaers, B. (2014) Global gradients of avian longevity support the classic evolutionary theory of ageing. *Ecography*, **37**, 930–938.
- Valenzano, D.R., Terzibas, E., Cattaneo, A., Domenici, L. & Cellerino, A. (2006) Temperature affects longevity and age-related locomotor and cognitive decay in the short-lived fish *Nothobranchius furzeri*. *Aging Cell*, **5**, 275–278.
- Wasser, D.E. & Sherman, P.W. (2010) Avian longevities and their interpretation under evolutionary theories of senescence. *Journal of Zoology*, **280**, 103–155.
- Werner, Y.L., Frankenberg, E., Volokita, M. & Harari, R. (1993) Longevity of geckos (Reptilia: Lacertilia: Gekkonoidea) in captivity: an analytical review incorporating new data. *Israel Journal of Zoology*, **39**, 105–124.
- Wilkinson, G.S. & South, J.M. (2002) Life history, ecology and longevity in bats. *Aging Cell*, **1**, 124–131.
- Williams, P.D., Day, T., Fletcher, Q. & Rowe, L. (2006) The shaping of senescence in the wild. *Trends in Ecology and Evolution*, **21**, 458–463.
- Additional references to data sources used in this study can be found in Tables S2, S3 & S7.

## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher's web-site.

**Table S1** Data for all species included in the analysis.

**Table S2** References for longevity data.

**Table S3** References for the phylogenetic tree.

**Table S4** Mass equations and methods.

**Table S5** Lizard data for the mass equations.

**Table S6** Snake data for the mass equations.

**Table S7** References for the mass equations.

## BIOSKETCHES

**Inon Scharf** is a senior lecturer at the Department of Zoology, Tel Aviv University, Israel. He is interested in the behaviour, life history and thermal ecology of ectotherms and insects in particular; he has recently become interested in acclimation to unfavourable climate and its costs.

**Shai Meiri** is an associate professor at the Department of Zoology, Tel Aviv University, Israel. He is interested in trait evolution, the tempo and mode of evolution, the evolutionary implications of biogeography, vertebrate evolution and functional diversity. Together with I.S. he is currently studying possible effects of climate change on various taxa, using museum specimens.

Editor: Gavin Thomas

**Supplementary material for the  
manuscript "Late bloomers and baby  
boomers: ecological drivers of longevity in  
squamates and the tuatara"**

Table S1	Data of all species included in the analysis
Table S2	References for longevity data
Table S3	References for the phylogenetic tree
Table S4	Mass equations & methods
Table S5	Lizards data for the mass equations
Table S6	Snakes data for the mass equations
Table S7	References for the mass equations

sub-order	infraorder	Family	species (q)	Longevity (years)	log mass	log hatching m	Activity	det	mode of oviposition	chick size	broods per year	Body temperature (°C)	maturity (months)	latitude	log NPP (g/ha)	character (mass)	mass equation (from Meiri 2011)	longevity (years)	data source
Amphibia	Amphibia	Amphibia	<i>Amblystoma</i>	15.2	3.01	0.18	Cathemeral	Carnivorous	Oviparous	6.5	1.0	25.0	NA	12.9	11.8	SVL	$Y = 1.25X - 0.1$	15.2	De Magalhães and Cost Pyron and Burbrink 2014
Amphibia	Amphibia	Amphibia	<i>Monopeltis capensis</i>	1.8	1.50	-1.09	Diurnal	Carnivorous	Viviparous	2.0	NA	NA	27.9	11.3	SVL			15.2	Slavens and Slaven 1999Pyron and Burbrink 2014
Amphibia	Amphibia	Blainiidae	<i>Blanus cinereus</i>	16.0	1.22	-0.99	Diurnal	Omnivorous	Oviparous	1.5	1.0	22.8	NA	39.3	11.3	SVL	$Y = 1.25X - 0.1$	16.0	De Magalhães and Cost Pyron and Burbrink 2014
Amphibia	Amphibia	Amphibia	<i>Amphispelta</i>	6.3	0.99	0.49	Cathemeral	Carnivorous	Oviparous	6.5	2.0	NA	39.8	11.3	SVL			6.3	TAUM
Amphibia	Rhynchochelya	Tropoglossidae	<i>Tropoglossi viagnanii</i>	14.0	1.15	0.41	Cathemeral	Carnivorous	Oviparous	3.5	0.8	22.0	30.0	34.0	11.0	SVL	$Y = 1.25X - 0.1$	14.0	Slavens and Slaven 1999Pyron and Burbrink 2014
Rhynchochelya	Rhynchochelya	Sphenodontidae	<i>Sphenodontis punctatus</i>	91.0	1.11	0.67	Nocturnal	Carnivorous	Oviparous	9.4	0.2	13.5	144.0	36.7	10.6	SVL	$Y = 1.25X - 0.1$	91.0	Moore et al. 2007
Sauria	Acrodonia	Agamidae	<i>Agama</i>	10.0	1.11	0.67	Nocturnal	Carnivorous	Oviparous	9.4	0.2	13.5	144.0	36.7	10.6	SVL	$Y = 1.25X - 0.1$	10.0	TAUM
Sauria	Acrodonia	Agamidae	<i>Acantoshaurus armatus</i>	2.1	1.82	-0.23	Diurnal	Carnivorous	Oviparous	12.0	NA	NA	NA	19.2	11.5	SVL	$Y = 1.25X - 0.1$	2.1	Slavens and Slaven 1999Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Acantoshaurus crassicauda</i>	2.6	1.96	NA	Diurnal	Carnivorous	Oviparous	14.0	NA	NA	NA	6.3	10.9	SVL	$Y = 1.25X - 0.1$	2.6	Slavens and Slaven 1999Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Agama aculeata</i>	2.2	1.58	-0.38	Diurnal	Omnivorous	Oviparous	12.8	2.0	NA	NA	27.5	11.3	SVL	$Y = 1.25X - 0.1$	2.2	Hughes 1988
Sauria	Acrodonia	Agamidae	<i>Agama</i>	9.1	0.91	0.19	Diurnal	Omnivorous	Oviparous	3.8	2.0	NA	35.9	11.3	SVL			9.1	http://www.reptilespecies.com
Sauria	Acrodonia	Agamidae	<i>Agama candiupata</i>	9.6	2.04	NA	Diurnal	Omnivorous	Oviparous	NA	NA	NA	NA	0.1	11.8	SVL	$Y = 1.25X - 0.1$	9.6	TAUM
Sauria	Acrodonia	Agamidae	<i>Agama etiolata</i>	2.1	0.99	NA	Diurnal	Carnivorous	Oviparous	9.5	NA	NA	NA	18.0	11.1	SVL	$Y = 1.25X - 0.1$	2.1	Hughes 1988
Sauria	Acrodonia	Agamidae	<i>Agama karmensis</i>	1.1	1.26	NA	Diurnal	Carnivorous	Oviparous	NA	NA	NA	NA	17.8	10.5	SVL	$Y = 1.25X - 0.1$	1.1	Captivity Slavens and Slaven 1999Leach et al. 2009 and taxonomy
Sauria	Acrodonia	Agamidae	<i>Agama impudicus</i>	6.0	1.76	-0.34	Diurnal	Carnivorous	Oviparous	11.8	2.0	NA	12.0	27.7	10.4	SVL	$Y = 1.25X - 0.1$	6.0	De Magalhães and Cost Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Agama lionotus</i>	4.0	1.86	-0.23	Diurnal	Carnivorous	Oviparous	10.3	NA	NA	NA	2.1	11.7	SVL	$Y = 1.25X - 0.1$	4.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Agama mivocata</i>	4.0	2.00	-0.15	Diurnal	Carnivorous	Oviparous	NA	NA	NA	NA	3.6	11.7	SVL	$Y = 1.25X - 0.1$	4.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Agama</i>	5.9	1.90	0.00	Diurnal	Omnivorous	Oviparous	6.5	2.0	NA	20.1	11.3	SVL			5.9	TAUM
Sauria	Acrodonia	Agamidae	<i>Agama reupellii</i>	3.2	1.30	-0.78	Diurnal	Carnivorous	Oviparous	NA	NA	NA	NA	5.2	11.1	SVL	$Y = 1.25X - 0.1$	3.2	Captivity
Sauria	Acrodonia	Agamidae	<i>Amblybulus maricatus</i>	4.0	1.67	-0.19	Diurnal	Carnivorous	Oviparous	5.6	2.5	35.4	10.5	32.5	11.6	SVL	$Y = 1.25X - 0.1$	4.0	Nature
Sauria	Acrodonia	Agamidae	<i>Agama</i>	1.7	1.58	-0.11	Diurnal	Omnivorous	Oviparous	4.8	NA	NA	12.0	33.3	11.6	SVL	$Y = 1.25X - 0.1$	1.7	Nature
Sauria	Acrodonia	Agamidae	<i>Calotes versicolor</i>	5.0	1.91	-0.58	Diurnal	Carnivorous	Oviparous	13.7	2.5	30.9	9.0	23.3	11.3	SVL	$Y = 1.25X - 0.1$	5.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Chlamydosaurus kingii</i>	15.0	2.79	0.42	Diurnal	Carnivorous	Oviparous	12.0	2.0	34.8	30.0	18.2	11.3	SVL	$Y = 1.25X - 0.1$	15.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus decurtatus</i>	9.0	1.23	-0.21	Diurnal	Carnivorous	Oviparous	4.8	NA	NA	NA	32.2	10.9	SVL	$Y = 1.25X - 0.1$	9.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus fionii</i>	10.0	1.32	-0.17	Diurnal	Carnivorous	Oviparous	3.6	1.3	32.4	NA	32.7	11.0	SVL	$Y = 1.25X - 0.1$	10.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus fordsii</i>	2.0	0.65	-0.51	Diurnal	Carnivorous	Oviparous	2.3	2.5	37.0	9.1	31.2	10.9	SVL	$Y = 1.25X - 0.1$	2.0	Nature
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus isolepis</i>	2.0	1.12	-0.40	Diurnal	Carnivorous	Oviparous	3.8	2.5	40.5	7.5	23.8	10.9	SVL	$Y = 1.25X - 0.1$	2.0	Nature
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus maculatus</i>	3.5	0.90	-0.35	Diurnal	Carnivorous	Oviparous	3.2	2.0	38.4	10.0	29.7	10.9	SVL	$Y = 1.25X - 0.1$	3.5	Nature
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus</i>	11.0	1.69	-0.07	Diurnal	Omnivorous	Oviparous	6.9	2.0	37.7	NA	25.0	10.9	SVL	$Y = 1.25X - 0.1$	11.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Cnemidophorus ornatus</i>	11.0	1.30	-0.03	Diurnal	Carnivorous	Oviparous	3.1	2.0	38.1	22.5	30.9	11.2	SVL	$Y = 1.25X - 0.1$	11.0	unclear
Sauria	Acrodonia	Agamidae	<i>Diploporus nobilis</i>	3.2	1.14	-0.35	Diurnal	Carnivorous	Oviparous	6.0	1.5	NA	NA	27.9	11.4	SVL	$Y = 1.25X - 0.1$	3.2	Heatewell and Taylor 1999Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Diploporus</i>	4.0	0.90	0.00	Diurnal	Omnivorous	Oviparous	3.6	1.5	32.3	12.0	34.0	11.5	SVL	$Y = 1.25X - 0.1$	4.0	Boisduval and Reijnen 2008
Sauria	Acrodonia	Agamidae	<i>Draaco volans</i>	3.0	1.32	-0.40	Diurnal	Carnivorous	Oviparous	4.5	1.5	29.3	8.5	2.0	11.6	SVL	$Y = 1.25X - 0.1$	3.0	Nature
Sauria	Acrodonia	Agamidae	<i>Hydrosaurus amblydactylus</i>	24.4	3.04	NA	Diurnal	Herbivorous	Oviparous	7.5	6.0	NA	NA	2.7	11.5	SVL	$Y = 1.25X - 0.1$	24.4	Captivity Slavens and Slaven 1999Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Hydrosaurus pustulatus</i>	15.2	2.75	1.15	Diurnal	Herbivorous	Oviparous	7.5	3.5	NA	NA	14.5	11.4	SVL	$Y = 1.25X - 0.1$	15.2	Captivity
Sauria	Acrodonia	Agamidae	<i>Hydrosaurus</i>	1.0	0.97	NA	Diurnal	Herbivorous	Oviparous	NA	NA	NA	NA	29.0	11.7	SVL	$Y = 1.25X - 0.1$	1.0	Slavens and Slaven 1999Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Hypsilurus boydii</i>	10.0	2.12	0.12	Diurnal	Carnivorous	Oviparous	3.0	1.5	NA	24.0	17.4	11.6	SVL	$Y = 1.25X - 0.1$	10.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Hypsilurus spinipes</i>	10.0	1.73	-0.19	Diurnal	Carnivorous	Oviparous	5.0	1.5	19.0	24.0	30.5	11.8	SVL	$Y = 1.25X - 0.1$	10.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Lankalia</i>	2.0	1.78	-0.26	Diurnal	Carnivorous	Oviparous	1.5	2.0	29.4	16.0	21.0	11.7	SVL	$Y = 1.25X - 0.1$	2.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Lankalia nana</i>	8.9	2.10	0.28	Diurnal	Herbivorous	Oviparous	10.0	2.0	27.2	NA	30.4	10.5	SVL	$Y = 1.25X - 0.1$	8.9	Captivity
Sauria	Acrodonia	Agamidae	<i>Lankalia ruberulata</i>	7.4	1.91	-0.30	Diurnal	Omnivorous	Oviparous	9.4	NA	NA	NA	33.0	11.1	SVL	$Y = 1.25X - 0.1$	7.4	Captivity
Sauria	Acrodonia	Agamidae	<i>Leiolopis belliana</i>	5.6	2.14	0.21	Diurnal	Omnivorous	Oviparous	6.0	NA	NA	NA	4.6	11.4	SVL	$Y = 1.25X - 0.1$	5.6	Captivity
Sauria	Acrodonia	Agamidae	<i>Leiolopis</i>	1.0	1.59	0.31	Diurnal	Herbivorous	Oviparous	1.0	NA	NA	NA	32.2	11.0	SVL	$Y = 1.25X - 0.1$	1.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Lerista scintillans</i>	3.5	2.19	0.36	Diurnal	Omnivorous	Oviparous	3.7	NA	NA	NA	6.8	11.7	SVL	$Y = 1.25X - 0.1$	3.5	Captivity
Sauria	Acrodonia	Agamidae	<i>Moloch horridus</i>	13.8	1.64	-0.07	Diurnal	Carnivorous	Oviparous	7.3	1.0	32.9	24.0	25.2	10.9	SVL	$Y = 1.25X - 0.1$	13.8	Captivity
Sauria	Acrodonia	Agamidae	<i>Parasaurus mitchelli</i>	15.0	1.97	0.10	Diurnal	Omnivorous	Oviparous	8.5	1.5	34.0	NA	24.0	11.0	SVL	$Y = 1.25X - 0.1$	15.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Parasaurus lehmanni</i>	4.0	1.91	0.03	Diurnal	Omnivorous	Oviparous	10.0	2.0	NA	10.0	38.9	10.8	SVL	$Y = 1.25X - 0.1$	4.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Parasaurus stoliczkae</i>	10.0	2.16	0.67	Diurnal	Omnivorous	Oviparous	NA	NA	NA	36.0	40.8	10.6	SVL	$Y = 1.25X - 0.1$	10.0	Nature
Sauria	Acrodonia	Agamidae	<i>Phrynosophus gattuso</i>	5.0	0.80	-0.51	Diurnal	Omnivorous	Oviparous	3.2	2.0	NA	15.5	46.6	10.7	SVL	$Y = 1.25X - 0.1$	5.0	Nature
Sauria	Acrodonia	Agamidae	<i>Phrynosophus vivivorus</i>	1.6	0.50	-0.29	Diurnal	Omnivorous	Oviparous	3.0	1.5	37.0	15.0	37.0	11.5	SVL	$Y = 1.25X - 0.1$	1.6	Bouček 1979
Sauria	Acrodonia	Agamidae	<i>Phrynosophus percarus</i>	5.0	0.67	-0.59	Diurnal	Carnivorous	Oviparous	4.5	2.5	38.0	10.5	36.5	10.9	SVL	$Y = 1.25X - 0.1$	5.0	Nature
Sauria	Acrodonia	Agamidae	<i>Phrynosophus thorbaldi</i>	8.0	0.62	-0.46	Diurnal	Omnivorous	Viviparous	2.2	1.0	32.0	16.0	34.3	10.8	SVL	$Y = 1.25X - 0.1$	8.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Phrynosophus</i>	18.0	1.50	0.39	Cathemeral	Carnivorous	Oviparous	10.5	1.5	28.4	24.0	28.8	10.3	SVL	$Y = 1.25X - 0.1$	18.0	Langewiesche and Kastle 2002Pyron and Burbrink 2014
Sauria	Acrodonia	Agamidae	<i>Pogona barbata</i>	13.0	2.59	0.01	Diurnal	Omnivorous	Oviparous	16.8	2.0	31.6	24.0	30.3	11.5	SVL	$Y = 1.25X - 0.1$	13.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Pogona minor</i>	6.0	2.08	0.10	Diurnal	Omnivorous	Oviparous	6.5	2.0	34.0	24.0	24.5	10.9	SVL	$Y = 1.25X - 0.1$	6.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Pogona vitticeps</i>	12.0	2.59	0.15	Diurnal	Omnivorous	Oviparous	20.8	3.5	34.6	24.0	27.3	10.9	SVL	$Y = 1.25X - 0.1$	12.0	unclear
Sauria	Acrodonia	Agamidae	<i>Pseudis</i>	4.0	1.82	0.00	Diurnal	Omnivorous	Oviparous	3.0	1.5	32.3	NA	24.0	11.5	SVL	$Y = 1.25X - 0.1$	4.0	Captivity
Sauria	Acrodonia	Agamidae	<i>Pseudis</i>	6.2	1.50	-0.23	Diurnal	Carnivorous	Oviparous	5.3	1.0	39.0	12	21.3	10				



Sauria	Gekkota	Diplodactylidae	<i>Molepeltis kuharzewi</i>	25.0	1.18	NA	Nocturnal	Carnivorous	Viviparous	NA	NA	NA	42.0	11.1	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	NZ Lizard database, InlPyron and Burbink 2014		
Sauria	Gekkota	Diplodactylidae	<i>Nautinus elegans</i>	23.0	0.84	NA	Diurnal	Carnivorous	Viviparous	1.5	1.0	NA	NA	37.4	11.4	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Anatolians and Whittall/Pyron and Burbink 2014	
Sauria	Gekkota	Diplodactylidae	<i>Nautinus elegans</i>	15.0	0.41	NA	Diurnal	Carnivorous	Viviparous	2.0	1.0	NA	44.5	11.0	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993		
Sauria	Gekkota	Diplodactylidae	<i>Nautinus elegans</i>	23.0	1.24	NA	Diurnal	Herbivorous	Viviparous	1.0	1.0	NA	18.0	35.0	11.2	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Nautinus manauanus</i>	30.0	1.03	-0.05	Diurnal	Carnivorous	Viviparous	1.9	1.0	23.8	48.0	41.8	11.2	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Hare et al. 2007	
Sauria	Gekkota	Diplodactylidae	<i>Nautinus manauanus</i>	16.0	1.24	0.0	Diurnal	Carnivorous	Viviparous	2.0	1.0	NA	48.0	11.5	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014		
Sauria	Gekkota	Diplodactylidae	<i>Nautinus radialis</i>	13.0	0.87	NA	Diurnal	Omnivorous	Viviparous	2.0	NA	29.6	NA	42.2	11.4	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Diplodactylidae	<i>Nautinus stellatus</i>	10.0	1.01	NA	Diurnal	Carnivorous	Viviparous	2.0	1.0	22.9	21	41.3	11.6	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Nehalifera robusta</i>	8.0	1.09	-0.06	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	27.3	11.5	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014		
Sauria	Gekkota	Diplodactylidae	<i>Nehalifera robusta</i>	21.2	1.44	0.0	Nocturnal	Carnivorous	Oviparous	2.0	4.5	13.0	25.7	11.0	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbink 2014		
Sauria	Gekkota	Diplodactylidae	<i>Oedura monilis</i>	14.0	1.28	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	1.5	NA	30.0	24.4	11.5	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Oedura monilis</i>	22.0	1.13	-0.05	Nocturnal	Carnivorous	Oviparous	2.0	2.0	21.8	25.0	27.7	11.6	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Wilson 2012	
Sauria	Gekkota	Diplodactylidae	<i>Oedura monilis</i>	18.0	1.40	0.0	Nocturnal	Carnivorous	Oviparous	2.0	NA	15.0	NA	21.0	11.2	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Rhacodactylus auriculatus</i>	8.0	1.61	0.16	Nocturnal	Omnivorous	Oviparous	2.0	4.5	NA	NA	21.5	11.5	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Rhacodactylus leachianus</i>	30.0	2.68	0.64	Nocturnal	Omnivorous	Oviparous	1.5	6.0	NA	24.0	21.5	11.5	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Rhynchodactylus ornatus</i>	2.8	0.56	-0.58	Nocturnal	Carnivorous	Oviparous	2.0	3.5	30.7	11.0	25.0	10.9	SVL	Diplodactylidae (Meiri, unpublished)	Nature	Reid 1999	
Sauria	Gekkota	Diplodactylidae	<i>Strophurus bairdi</i>	7.0	1.16	-0.29	Nocturnal	Carnivorous	Oviparous	2.0	7.0	26.2	36.0	26.2	10.9	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Greer 2010	
Sauria	Gekkota	Diplodactylidae	<i>Strophurus elderi</i>	4.7	0.35	-0.89	Nocturnal	Carnivorous	Oviparous	2.0	2.0	27.2	NA	25.9	10.8	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Strophurus strophurus</i>	1.7	0.95	-0.45	Nocturnal	Carnivorous	Oviparous	2.0	NA	25.3	NA	25.7	10.8	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Diplodactylidae	<i>Tropidurus spinulosus</i>	1.09	1.81	0.0	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	37.0	10.8	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Greer 2010	
Sauria	Gekkota	Diplodactylidae	<i>Woodworthia brannani</i>	42.0	1.01	-0.31	Nocturnal	Carnivorous	Viviparous	2.0	NA	11.5	48	43.2	10.8	SVL	Diplodactylidae (Meiri, unpublished)	Nature	Letnik and Whitaker 2014	
Sauria	Gekkota	Diplodactylidae	<i>Woodworthia chrysostrigata</i>	9.0	0.84	NA	Cathedral	Carnivorous	Viviparous	2.0	1.0	NA	NA	39.5	11.7	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014	
Sauria	Gekkota	Diplodactylidae	<i>Woodworthia maculata</i>	37.0	1.16	-0.64	Nocturnal	Omnivorous	Viviparous	1.9	0.8	19.7	48.0	39.8	11.3	SVL	Diplodactylidae (Meiri, unpublished)	Captivity	NZ Lizard database, InlPyron and Burbink 2014	
Sauria	Gekkota	Eublepharidae	<i>Colonyx bairdi</i>	5.0	0.74	-0.77	Nocturnal	Carnivorous	Oviparous	2.0	2.5	28.1	12	28.6	11.1	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	Aguiar and Garcia 2010Pyron and Burbink 2014	
Sauria	Gekkota	Eublepharidae	<i>Colonyx reticulatus</i>	11.9	1.57	-0.06	Nocturnal	Carnivorous	Oviparous	2.0	3.0	NA	NA	18.2	11.8	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Eublepharidae	<i>Colonyx reticulatus</i>	8.9	1.22	0.01	Nocturnal	Carnivorous	Oviparous	2.0	2.0	28.0	30	28.0	11.0	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Kratovich and Frynka 2002	
Sauria	Gekkota	Eublepharidae	<i>Eublepharis macularius</i>	15.2	0.94	-0.51	Nocturnal	Carnivorous	Oviparous	2.0	2.0	26.1	11.0	32.4	10.9	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Eublepharidae	<i>Eublepharis macularius</i>	29.0	2.02	0.34	Nocturnal	Carnivorous	Oviparous	2.5	2.5	NA	13.0	26.8	10.9	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	Bauer 2013	
Sauria	Gekkota	Eublepharidae	<i>Goniurosaurus karrooensis</i>	9.4	1.31	-0.26	Nocturnal	Carnivorous	Oviparous	2.0	3.0	26.0	20	26.7	10.7	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014	
Sauria	Gekkota	Eublepharidae	<i>Hemidactylus cinctus</i>	16.2	1.97	0.26	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	12.0	11.2	11.5	SVL	Eublepharidae (Novoslov et al. 2013)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Atractodes carolinensis</i>	3.6	0.75	NA	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	29.6	11.0	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Atractodes transvaalicus</i>	2.1	0.90	-0.31	Nocturnal	Carnivorous	Oviparous	1.5	NA	NA	NA	19.8	11.5	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Allonyx schweinfurthi</i>	6.2	1.46	-0.16	Nocturnal	Omnivorous	Oviparous	1.5	NA	NA	NA	4.6	10.9	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Allophylax papirus</i>	3.5	0.23	-0.84	Nocturnal	Carnivorous	Oviparous	1.5	3.0	25.2	12.0	46.5	10.6	SVL	Gekkonidae (Novoslov et al. 2013)	Nature	Szefer and Golubev Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Blepharidactylus maculatus</i>	1.5	0.75	NA	Cathedral	Carnivorous	Oviparous	2.0	NA	NA	NA	29.6	11.0	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Blepharidactylus sakalava</i>	8.0	1.33	0.59	Cathedral	Carnivorous	Oviparous	NA	NA	NA	NA	21.3	11.7	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Bunopus blanfordi</i>	6.0	0.7	-0.6	Cathedral	Carnivorous	Oviparous	NA	NA	0.0	NA	0.0	0.0	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	TALM	
Sauria	Gekkota	Gekkonidae	<i>Chromolaikma nigricans</i>	18.8	1.41	0.0	Nocturnal	Carnivorous	Oviparous	1.9	3.0	29.6	12.0	25.6	11.0	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Chondrodactylus bhombini</i>	6.1	1.28	-0.34	Nocturnal	Carnivorous	Oviparous	2.0	1.5	29.8	NA	31.0	11.0	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Christina marmorata</i>	12.8	0.85	-0.92	Nocturnal	Omnivorous	Oviparous	1.8	1.0	24.0	24.0	33.7	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	De Magalhães and Cost Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Ciampi waldbergi</i>	5.5	0.69	NA	Nocturnal	Carnivorous	Oviparous	2.0	NA	25.1	NA	23.1	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	TALM	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	1.34	0.17	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	15.0	17.0	11.6	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	4.8	1.55	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	4.9	11.8	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	4.0	0.68	-0.40	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	15.0	11.6	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Brown 2012	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.24	NA	Nocturnal	Carnivorous	Oviparous	NA	NA	NA	NA	14.5	11.6	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Amatai and Boskika 2010Pyron and Burbink 2014	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Omnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Bauer et al. 2004	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA	NA	22.3	11.3	SVL	Gekkonidae (Novoslov et al. 2013)	Captivity	Werner et al. 1993	
Sauria	Gekkota	Gekkonidae	<i>Cyrtopodan marmorata</i>	10.0	0.73	-0.20	Nocturnal	Carnivorous	Oviparous	2.0	NA	NA								

Sauria	Iguania	Dactyloidae	<i>Anolis curvatus</i>	1.5	0.99	-0.88	Durnal	Carnivorous	Oviparous	1.0	18.0	27.9	7.0	13.0	11.7	SVL	Anolis (Novoslov et al. 2013)	Nature	Fitch 1973	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis carolinensis</i>	9.3	2.06	0.21	Durnal	Omnivorous	Oviparous	1.0	NA	NA	NA	18.0	11.7	SVL	Anolis (Novoslov et al. 2013)	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis aeneus</i>	16.5	1.7	-0.36	Durnal	Omnivorous	Oviparous	1.0	NA	22.0	NA	22.0	11.7	SVL	Anolis (Novoslov et al. 2013)	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis gerrardi</i>	10.0	1.72	-0.36	Durnal	Omnivorous	Oviparous	1.0	NA	9.5	20.0	11.3	SVL	unclear	Henderson and Powell 1996	Pyron and Burbrink 2014		
Sauria	Iguania	Dactyloidae	<i>Anolis geminus</i>	3.0	0.78	-0.37	Durnal	Carnivorous	Oviparous	1.0	NA	18.6	11.8	10.0	11.6	SVL	Anolis (Novoslov et al. 2013)	Nature	Myiata 2013	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis hemionulus</i>	10.0	0.96	-0.36	Durnal	Carnivorous	Oviparous	1.0	NA	24.3	11.8	11.6	SVL	Anolis (Novoslov et al. 2013)	Nature	Henderson and Powell 1996	Pyron and Burbrink 2014	
Sauria	Iguania	Dactyloidae	<i>Anolis harrisii</i>	1.5	0.42	-0.98	Durnal	Carnivorous	Oviparous	1.1	NA	27.7	5.0	9.0	11.6	SVL	Anolis (Novoslov et al. 2013)	Nature	Fitch 1973	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis intermedius</i>	2.0	0.52	-0.88	Durnal	Carnivorous	Oviparous	1.0	11.0	25.5	5.0	10.1	11.8	SVL	Anolis (Novoslov et al. 2013)	Nature	Savage 2002	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis leachi</i>	7.0	1.57	-0.57	Durnal	Carnivorous	Oviparous	1.0	NA	NA	17.0	10.8	SVL	Anolis (Novoslov et al. 2013)	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014	
Sauria	Iguania	Dactyloidae	<i>Anolis lineatus</i>	1.0	1.10	-0.99	Durnal	Carnivorous	Oviparous	1.0	NA	25.5	5.0	11.4	11.7	SVL	Anolis (Novoslov et al. 2013)	Nature	Andrews 1979	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis lineatopus</i>	1.0	0.91	-0.68	Durnal	Carnivorous	Oviparous	1.0	18.0	29.3	5.0	18.0	11.5	SVL	Anolis (Novoslov et al. 2013)	Captivity	Snyder and Bowler 1992	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis latopalmatus</i>	2.9	2.14	NA	Durnal	Omnivorous	Oviparous	1.0	NA	29.4	NA	22.0	11.5	SVL	Anolis (Novoslov et al. 2013)	Captivity	Snyder and Bowler 1992	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis lewisi</i>	1.5	1.54	1.31	Durnal	Carnivorous	Oviparous	1.0	NA	NA	NA	11.4	11.6	SVL	Anolis (Novoslov et al. 2013)	Captivity	Slavens and Slavers 1999	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis percarus</i>	5.3	1.25	-0.63	Durnal	Omnivorous	Oviparous	1.0	NA	32.1	NA	21.8	11.6	SVL	Anolis (Novoslov et al. 2013)	Captivity	Rogner 1997	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis roquet</i>	6.7	1.12	-0.62	Durnal	Omnivorous	Oviparous	1.0	25.5	26.5	10.6	15.0	11.1	SVL	Anolis (Novoslov et al. 2013)	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis sagrei</i>	8.0	0.94	-1.05	Durnal	Carnivorous	Oviparous	1.5	20.0	30.7	12.0	19.0	11.6	SVL	Varanidae	Captivity	Anderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis sabbadii</i>	1.2	1.34	-0.95	Durnal	Carnivorous	Oviparous	1.0	NA	31.5	NA	19.0	11.6	SVL	Aceros (Novoslov et al. 2013)	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis smallwoodi</i>	3.9	2.13	NA	Durnal	Omnivorous	Oviparous	1.0	NA	NA	20.0	11.4	SVL	Anolis (Novoslov et al. 2013)	Captivity	Anderson and Powell 1996	Pyron and Burbrink 2014	
Sauria	Iguania	Dactyloidae	<i>Anolis stratulus</i>	1.6	0.68	NA	Durnal	Carnivorous	Oviparous	1.0	NA	30.0	NA	18.3	11.5	SVL	Anolis (Novoslov et al. 2013)	Nature	Reagan 1992	Pyron and Burbrink 2014
Sauria	Iguania	Dactyloidae	<i>Anolis taylori</i>	1.0	1.14	-0.29	Durnal	Carnivorous	Oviparous	1.5	20.0	20.0	18.5	11.7	SVL	Anolis (Novoslov et al. 2013)	Captivity	Fuchs 1973	Pyron and Burbrink 2014	
Sauria	Iguania	Iguanidae	<i>Amblyrhynchus cristatus</i>	28.0	3.87	1.77	Durnal	Herbivorous	Oviparous	2.3	0.5	31.7	41.0	0.6	10.9	SVL	Iguanidae	Nature	Wikelski and Thom 2000	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Brachylophus fasciatus</i>	12.4	2.83	1.26	Durnal	Herbivorous	Oviparous	3.9	1.5	NA	12.0	17.7	11.2	SVL	Iguanidae	Captivity	TAMM	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Brachylophus vittatus</i>	14.0	2.75	1.32	Durnal	Herbivorous	Oviparous	4.0	5.0	32.0	30.0	17.1	11.0	SVL	Iguanidae	Captivity	Reid 2006	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Coniophthorus barbatus</i>	60.0	3.72	1.65	Durnal	Herbivorous	Oviparous	10.0	1.0	34.9	138	0.8	10.9	SVL	unclear	Charles Darwin Research	Pyron and Burbrink 2014	
Sauria	Iguania	Iguanidae	<i>Cnemidophorus bakeri</i>	13.8	3.13	NA	Durnal	Herbivorous	Oviparous	10.0	NA	NA	16.1	10.8	SVL	Iguanidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014	
Sauria	Iguania	Iguanidae	<i>Cnemidophorus taylori</i>	5.6	2.83	0.64	Durnal	Herbivorous	Oviparous	7.0	NA	NA	18.0	11.7	SVL	Iguanidae	Captivity	Slavens and Slavers 1999	Pyron and Burbrink 2014	
Sauria	Iguania	Iguanidae	<i>Cnemidophorus hemiphaeus</i>	13.0	3.44	NA	Durnal	Herbivorous	Oviparous	24.0	1.0	37.1	36.0	24.1	10.8	SVL	Iguanidae	Nature	Grismer 2002	Lee Giss Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cnemidophorus palmeri</i>	10.3	3.11	NA	Durnal	Herbivorous	Oviparous	11.0	1.0	NA	NA	15.2	11.9	SVL	Iguanidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cnemidophorus pictus</i>	8.2	3.43	0.91	Durnal	Herbivorous	Oviparous	44.5	1.0	NA	36.0	18.0	11.6	SVL	Iguanidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cnemidophorus tigris</i>	14.0	3.70	0.83	Durnal	Herbivorous	Oviparous	14.0	1.0	36.7	37.0	34.1	11.8	SVL	Iguanidae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cyclura carinata</i>	14.0	3.75	1.35	Durnal	Herbivorous	Oviparous	4.3	1.0	37.7	78.0	21.6	10.9	SVL	Iguanidae	Nature	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cyclura cornuta</i>	22.9	4.04	1.68	Durnal	Herbivorous	Oviparous	14.7	1.0	NA	72.0	18.9	11.7	SVL	Iguanidae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cyclura cybota</i>	40.0	4.07	1.51	Durnal	Herbivorous	Oviparous	6.4	0.7	NA	144.0	24.1	10.8	SVL	Iguanidae	Nature	Iverson et al. 2004	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cyclura lewisi</i>	34.0	4.25	1.84	Durnal	Herbivorous	Oviparous	2.0	1.0	NA	80.0	24.7	11.3	SVL	Iguanidae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Cyclura rileyi</i>	9.2	3.42	1.23	Durnal	Herbivorous	Oviparous	3.8	NA	NA	NA	23.3	10.8	SVL	Iguanidae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Dipsosaurus dorsalis</i>	14.6	2.20	0.67	Durnal	Herbivorous	Oviparous	4.5	1.0	39.6	52.0	31.8	10.8	SVL	Iguanidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Dipsosaurus salsus</i>	20.0	2.54	-0.55	Durnal	Herbivorous	Oviparous	1.0	1.0	36.0	15.0	16.0	11.0	SVL	Iguanidae	Nature	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Iguana iguana</i>	28.0	3.91	1.32	Durnal	Herbivorous	Oviparous	28.8	1.0	34.8	40.5	5.8	11.8	SVL	Iguanidae	Captivity	Rogner 1997	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Saurornis ater</i>	39.0	2.71	0.81	Durnal	Herbivorous	Oviparous	7.8	0.8	37.1	54.0	33.4	10.8	SVL	Iguanidae	Nature	Sullivan and Sullivan 2000	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Saurornis hispidus</i>	17.2	3.14	1.24	Durnal	Herbivorous	Oviparous	21.8	0.7	NA	NA	29.3	10.7	SVL	Iguanidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Iguanidae	<i>Saurornis diadematus</i>	22.0	3.29	1.24	Durnal	Herbivorous	Oviparous	28.0	0.9	36.0	28.0	26.6	10.6	SVL	Iguanidae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Leiocephalidae	<i>Leiocephalus barahonensis</i>	4.7	1.26	NA	Durnal	Omnivorous	Oviparous	2.1	NA	36.1	NA	18.0	11.3	SVL	Tropiduridae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Leiocephalidae	<i>Leiocephalus carinatus</i>	10.8	1.83	0.14	Durnal	Omnivorous	Oviparous	4.0	NA	34.4	NA	22.2	11.4	SVL	Tropiduridae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Leiocephalidae	<i>Leiocephalus schreibersii</i>	2.3	1.57	0.81	Durnal	Omnivorous	Oviparous	3.0	NA	NA	19.0	19.0	11.5	SVL	Tropiduridae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Leiocephalidae	<i>Leiocephalus schreibersii</i>	10.0	1.56	-0.13	Durnal	Carnivorous	Oviparous	2.5	NA	36.3	NA	20.0	11.6	SVL	Tropiduridae	Captivity	Henderson and Powell 1996	Pyron and Burbrink 2014
Sauria	Iguania	Leiocephalidae	<i>Pristidactylus achoolensis</i>	11.0	1.53	NA	Durnal	Omnivorous	Oviparous	3.0	NA	NA	36.0	31.8	11.5	SVL	Polychrotidae	Nature	Simch et al. 2002	Frost et al. 2013
Sauria	Iguania	Liolaemidae	<i>Liolaemus nitidus</i>	4.5	1.59	NA	Durnal	Omnivorous	Oviparous	8.0	NA	35.2	NA	33.1	11.0	SVL	Liolaemidae, Pinciera-Donoso et al. 2011	Captivity	TAMM	Pyron and Burbrink 2014
Sauria	Iguania	Liolaemidae	<i>Liolaemus</i>	2.4	1.57	-0.47	Durnal	Carnivorous	Oviparous	4.0	0.4	41.0	25.0	26.7	11.5	SVL	Liolaemidae, Pinciera-Donoso et al. 2011	Captivity	Guinea et al. 2013	Pyron and Burbrink 2014
Sauria	Iguania	Liolaemidae	<i>Liolaemus guilmei</i>	7.0	1.36	NA	Durnal	Carnivorous	Oviparous	NA	1.0	34.2	20.5	26.7	11.0	SVL	Liolaemidae, Pinciera-Donoso et al. 2011	Nature	Halloy 2006	Pyron and Burbrink 2014
Sauria	Iguania	Liolaemidae	<i>Phymaturus pallanus</i>	12.0	1.75	0.44	Durnal	Carnivorous	Viviparous	2.8	0.5	33.3	NA	34.6	11.0	SVL	Phymaturus, Pinciera-Donoso et al. 2011	Captivity	Eisenberg and Werning	Pyron and Burbrink 2014
Sauria	Iguania	Ophidiidae	<i>Ophiodon variegatus</i>	16.0	1.75	0.81	Durnal	Carnivorous	Oviparous	4.0	1.0	35.0	24.0	26.7	11.5	SVL	Liolaemidae, Pinciera-Donoso et al. 2011	Captivity	Guinea et al. 2013	Pyron and Burbrink 2014
Sauria	Iguania	Ophidiidae	<i>Ophrys cavirostris</i>	21.2	2.18	0.19	Durnal	Carnivorous	Oviparous	3.5	2.0	36.3	NA	16.8	11.7	SVL	Ophidiidae	Captivity	Tacusa et al. 2013	Pyron and Burbrink 2014
Sauria	Iguania	Ophidiidae	<i>Ophrys cavirostris</i>	9.3	2.25	0.13	Durnal	Carnivorous	Oviparous	4.0	NA	NA	NA	22.2	11.6	SVL	Ophidiidae	Captivity	De Magalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Phrynosomatidae	<i>Callosaurus draconoides</i>	5.9	1.60	0.00	Durnal	Carnivorous	Oviparous	4.3	3.0	39.3	16.5	32.9	10.9	SVL	Phrynosomatidae	Nature	Tanner and Krogh 1975	Pyron and Burbrink 2014
Sauria	Iguania	Phrynosomatidae	<i>Cyclura nana</i>	20.0	1.65	0.36	Durnal	Carnivorous	Oviparous	7.3	1.5	36.8	36.0	38.0	11.8	SVL	Phrynosomatidae	Captivity	DeMagalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Phrynosomatidae	<i>Hylacrynus maculatus</i>	5.0	1.16	-0.32	Durnal	Carnivorous	Oviparous	7.2	2.0	36.3	11.2	33.6	11.2	SVL	Phrynosomatidae	Nature	DeMagalhães and Cost	Pyron and Burbrink 2014
Sauria	Iguania	Phrynosomatidae	<i>Petrosaurus thalassius</i>	20.0	2.15	0.16	Durnal	Omnivorous	Oviparous	8.6	NA	36.0	24	26.5	10.8	SVL	Phrynosomatidae	unclear	Wikipedia; Encyclop	Pyron and Burbrink 2014
Sauria	Iguania	Phrynosomatidae	<i>Petrosaurus thalassius</i>	8																





Sauria	Scincimorpha	Xantusiidae	<i>Lepidophyma smithii</i>	5.0	1.45	-0.39	Cathedral	Herbivorous	Viviparous	8.0	NA	26.0	NA	15.5	11.7	SVL	Xantusiidae	Captivity	Mauz and Lopez-Fern Formon and Burburk 2014	
Sauria	Scincimorpha	Xantusiidae	<i>Lepidophyma insculum</i>	4.4	1.26	NA	Diurnal	Omnivorous	Viviparous	4.9	1.0	NA	NA	17.5	11.7	SVL	Xantusiidae	Captivity	Flavers and Slavons 1999Pron and Burburk 2014	
Sauria	Scincimorpha	Xantusiidae	<i>Xantusia</i>	1.5	0.81	0.82	Cathedral	Herbivorous	Viviparous	0.8	0.8	23.0	NA	6.8	11.7	SVL	Xantusiidae	Captivity	Flavers and Slavons 2010Pron and Burburk 2014	
Sauria	Scincimorpha	Xantusiidae	<i>Xantusia riversiana</i>	32.9	1.51	-0.29	Diurnal	Omnivorous	Viviparous	4.4	0.8	23.5	NA	42.0	33.0	10.7	SVL	Xantusiidae	Nature	Fellers et al. 1998 Pron and Burburk 2014
Sauria	Scincimorpha	Xantusiidae	<i>Xantusia vigilis</i>	10.9	0.83	0.07	Cathedral	Herbivorous	Viviparous	1.8	1.0	29.1	NA	34.5	33.9	10.9	SVL	Xantusiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014
Serpentes	Alethinophidia	Acrochordidae	<i>Acrochordus nasutus</i>	8.6	3.36	1.35	Nocturnal	Carnivorous	Oviparous	8.0	NA	NA	NA	24.1	11.5	TL	Acrochordidae	Captivity	general snake equation (Feldman & Meiri 2010)	
Serpentes	Alethinophidia	Acrochordidae	<i>Acrochordus javanicus</i>	5.8	3.53	1.22	Nocturnal	Carnivorous	Viviparous	27.0	NA	NA	NA	4.1	11.7	TL	Acrochordidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Acrotropis damerli</i>	26.0	3.47	1.92	Nocturnal	Carnivorous	Viviparous	8.5	NA	NA	NA	22.2	11.6	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Acrotropis madagascariensis</i>	28.4	4.12	2.33	Nocturnal	Carnivorous	Viviparous	4.0	NA	NA	NA	16.0	11.7	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Acrotropis nasuta</i>	18.0	3.55	1.66	Nocturnal	Carnivorous	Viviparous	11.0	NA	NA	NA	48.8	63.0	10.7	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014
Serpentes	Alethinophidia	Boiidae	<i>Candola uspera</i>	0.9	2.68	NA	Nocturnal	Carnivorous	Viviparous	17.0	NA	NA	NA	4.7	11.6	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Candola bilineata</i>	16.9	3.28	1.38	Nocturnal	Carnivorous	Viviparous	6.0	NA	NA	NA	10.7	11.1	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Candola boettgeri</i>	16.6	2.27	1.22	Nocturnal	Carnivorous	Viviparous	4.0	NA	NA	NA	10.7	11.1	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Charina botae</i>	26.5	2.47	0.81	Nocturnal	Carnivorous	Viviparous	5.5	0.4	14.8	NA	48	44.1	11.3	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus anguifer</i>	22.6	2.40	1.16	Nocturnal	Carnivorous	Viviparous	4.0	NA	NA	NA	22.0	11.6	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus chrysopogon</i>	14.2	3.15	NA	Nocturnal	Carnivorous	Viviparous	NA	NA	NA	NA	21.8	10.9	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus exoni</i>	21.7	2.57	NA	Nocturnal	Carnivorous	Viviparous	NA	NA	NA	NA	26.6	10.8	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus fordi</i>	24.4	2.65	NA	Nocturnal	Carnivorous	Viviparous	5.5	NA	NA	NA	18.8	11.5	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus inornatus</i>	23.9	3.91	1.57	Nocturnal	Carnivorous	Viviparous	14.0	NA	NA	NA	18.3	11.5	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus maculatus</i>	21.7	2.57	NA	Nocturnal	Carnivorous	Viviparous	NA	NA	NA	NA	21.8	11.5	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus striatus</i>	22.1	3.67	NA	Nocturnal	Carnivorous	Viviparous	18.0	NA	NA	NA	23.7	11.4	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Chilabothrus subulatus</i>	24.3	3.72	1.82	Nocturnal	Carnivorous	Viviparous	24.5	NA	NA	NA	18.0	10.8	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Corallus amabilis</i>	15.3	3.36	1.68	Nocturnal	Carnivorous	Viviparous	10.5	NA	NA	NA	10.2	11.7	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Corallus bairdii</i>	18.6	3.51	1.65	Nocturnal	Carnivorous	Viviparous	10.5	0.9	NA	NA	1.8	12.0	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Corallus boettgeri</i>	15.0	3.59	1.72	Nocturnal	Carnivorous	Viviparous	11.1	1.0	NA	NA	6.6	11.9	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Epicrates cenchria</i>	30.1	3.66	1.63	Nocturnal	Carnivorous	Viviparous	21.5	NA	NA	NA	4.0	11.9	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Epicrates rouslei</i>	23.1	3.59	1.65	Nocturnal	Carnivorous	Viviparous	15.0	NA	NA	NA	15.4	11.9	SVL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Epicrates maurus</i>	27.3	3.34	1.55	Nocturnal	Carnivorous	Viviparous	12.5	NA	NA	NA	4.8	11.8	TL	Boiidae	Captivity	Carey and Judge 2000 Rivers et al. 2011	
Serpentes	Alethinophidia	Boiidae	<i>Eryx colubrinus</i>	20.7	2.55	0.48	Nocturnal	Carnivorous	Viviparous	12.0	NA	NA	NA	9.6	11.1	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Eryx conicus</i>	28.2	2.68	0.76	Nocturnal	Carnivorous	Viviparous	10.5	NA	NA	NA	22.7	11.2	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Eryx jaculus</i>	6.2	2.82	0.41	Nocturnal	Carnivorous	Viviparous	6.0	NA	NA	NA	20.7	11.6	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Eryx johani</i>	24.4	2.68	1.21	Nocturnal	Carnivorous	Viviparous	7.0	NA	NA	NA	26.1	11.0	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Eryx tataricus</i>	24.0	2.27	NA	NA	Carnivorous	Viviparous	11.5	NA	NA	NA	39.2	10.4	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Enactes decussatus</i>	23.2	3.82	1.78	Nocturnal	Carnivorous	Viviparous	10.6	NA	NA	NA	0.5	11.9	TL	Boiidae	Captivity	De Magalhães and Cost Pyron within genus	
Serpentes	Alethinophidia	Boiidae	<i>Enactes niger</i>	23.8	3.52	1.86	Nocturnal	Carnivorous	Viviparous	30.0	1.0	NA	NA	24.7	11.7	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Enactes notatus</i>	23.6	4.40	1.73	Nocturnal	Carnivorous	Viviparous	25.0	1.0	NA	NA	24.2	11.8	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Lichanura trivirgata</i>	19.0	2.82	1.45	Nocturnal	Carnivorous	Viviparous	7.5	1.0	30.4	NA	31.3	10.9	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Lichanura madagascariensis</i>	21.8	3.12	1.42	Nocturnal	Carnivorous	Viviparous	6.0	NA	NA	NA	19.8	11.7	TL	Boiidae	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Boiidae	<i>Uroplathia continentalis</i>	17.7	2.34	NA	Nocturnal	Carnivorous	Viviparous	5.5	NA	NA	NA	14.2	11.7	TL	Boiidae	Captivity	Carey and Judge 2000 Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Arizona elegans</i>	19.1	2.70	0.53	Cathedral	Carnivorous	Oviparous	13.0	0.8	27.0	NA	42	31.6	11.0	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014
Serpentes	Alethinophidia	Colubridae	<i>Rogeria subultralis</i>	23.8	2.64	1.21	Nocturnal	Carnivorous	Oviparous	8.5	1.0	NA	NA	28.9	11.0	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Rogeria montana</i>	19.0	2.82	0.46	Nocturnal	Carnivorous	Oviparous	8.5	NA	NA	NA	2.0	2.0	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Boiga dendrophila</i>	17.0	3.08	0.46	Nocturnal	Carnivorous	Oviparous	9.5	NA	NA	NA	2.4	11.7	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Boiga irregularis</i>	19.0	2.94	0.97	Nocturnal	Carnivorous	Oviparous	5.5	NA	NA	NA	13.8	11.5	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	McFadden and Boylan, Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Boiga maculata</i>	8.2	3.32	1.54	Nocturnal	Carnivorous	Oviparous	6.0	NA	NA	NA	21.1	11.7	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Cemophorus coccineus</i>	10.4	1.86	0.57	Nocturnal	Carnivorous	Oviparous	5.5	NA	NA	NA	33.5	11.5	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Chionomantis stramineus</i>	4.0	0.68	-0.78	Nocturnal	Carnivorous	Oviparous	3.0	NA	NA	NA	29.4	10.8	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Chionomantis carolinus</i>	5.4	2.86	NA	Diurnal	Carnivorous	Oviparous	6.5	NA	NA	NA	4.7	11.9	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Carey and Judge 2000 Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Chionomantis leopoldi</i>	5.0	2.82	0.49	Diurnal	Carnivorous	Oviparous	6.0	NA	NA	NA	21.1	11.7	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Carey and Judge 2000 Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Coccyophilus helena</i>	15.0	2.64	0.65	Cathedral	Carnivorous	Oviparous	9.0	NA	NA	NA	22.4	11.3	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Coluber constrictor</i>	10.0	2.78	0.75	Diurnal	Carnivorous	Oviparous	13.6	1.0	29.6	NA	30.0	38.4	11.4	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014
Serpentes	Alethinophidia	Colubridae	<i>Erythrolamprus dorsalis</i>	21.8	3.12	1.21	Diurnal	Carnivorous	Oviparous	6.0	NA	NA	NA	24.7	11.7	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Coronella austriaca</i>	12.0	1.82	0.46	Cathedral	Carnivorous	Oviparous	9.0	0.4	31.0	NA	48	48.6	11.3	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Carey and Judge 2000 Pyron and Burburk 2014
Serpentes	Alethinophidia	Colubridae	<i>Coronella girondica</i>	16.0	1.82	-0.06	Nocturnal	Carnivorous	Oviparous	11.0	1.0	NA	NA	39.1	11.3	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Filippi and Luiselli 2000Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Dasyatis aetideus</i>	5.2	2.17	0.47	Nocturnal	Carnivorous	Oviparous	10.5	1.5	NA	NA	0.8	11.8	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Carey and Judge 2000 Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Dasyatis centroura</i>	2.8	2.17	0.46	Nocturnal	Carnivorous	Oviparous	10.5	1.5	NA	NA	0.8	11.8	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Carey and Judge 2000 Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Dasyatis acuta</i>	22.1	2.23	0.45	Nocturnal	Carnivorous	Oviparous	15.5	1.5	NA	NA	8.2	11.4	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burburk 2014	
Serpentes	Alethinophidia	Colubridae	<i>Dendrolythrus punctulatus</i>	18.0	2.83	0.75	Diurnal	Carnivorous	Oviparous	8.2	NA	NA	NA	19.9	11.4	TL	Colubridae sensu stricto (Feldman, unpublished)	Captivity	Eipper 2012 close to <i>Chrysopepla</i> (Pyron and Burburk 2014)	
Serpentes	Alethinophidia	Colubridae	<i>Diploplax taylori</i>	18.2	2.75	0.86	Diurnal	Carnivorous	Oviparous	2.0	NA	NA	NA	34.7	11.7	TL				



Serpentes	Alethinophidia	Elapidae	<i>Naja pallida</i>	20.2	2.83	0.61	Nocturnal	Carnivorous	Oviparous	10.5	NA	NA	NA	4.0	11.2	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Naja sumatrana</i>	11.4	2.32	NA	Nocturnal	Carnivorous	Oviparous	NA	NA	NA	NA	8.4	11.5	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Naja nigrescens</i>	15.5	2.75	0.76	Nocturnal	Carnivorous	Oviparous	NA	NA	NA	NA	7.4	11.5	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Notechis scaber</i>	17.0	3.13	0.55	Diurnal	Carnivorous	Viviparous	19.1	1.0	25.9	24.0	35.0	11.5	TL	Elapidae	Nature	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Ophiophagus hammon</i>	22.5	4.25	1.75	Diurnal	Carnivorous	Oviparous	33.0	NA	NA	NA	14.1	11.6	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Pseudonaja papilio</i>	18.0	3.36	0.62	Diurnal	Carnivorous	Oviparous	11.0	NA	NA	NA	21.2	11.6	TL	Elapidae	Eipper 2012	Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Oxyuranus scutellatus</i>	15.6	3.67	1.19	Diurnal	Carnivorous	Oviparous	11.4	NA	NA	NA	16.7	11.5	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Pseustes aculeatus</i>	11.1	3.46	0.98	Cathedral	Carnivorous	Oviparous	8.6	NA	NA	NA	24.3	11.0	TL	Elapidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Elapidae	<i>Pseudochis porphyrius</i>	25.0	3.13	0.85	Diurnal	Carnivorous	Viviparous	24.0	1.0	28.9	31.0	31.4	11.5	TL	Elapidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Pseudochis ruficeps</i>	12.0	2.75	0.76	Diurnal	Carnivorous	Oviparous	NA	NA	NA	NA	21.7	11.6	TL	Elapidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Pseudonaja tessellata</i>	15.0	3.23	0.70	Diurnal	Carnivorous	Oviparous	16.0	NA	NA	NA	27.2	11.4	TL	Elapidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Sata sata</i>	12.0	1.87	0.60	Nocturnal	Carnivorous	Viviparous	4.6	NA	NA	NA	24.7	11.0	TL	Elapidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Tropidochis carinatus</i>	2.40	1.87	0.60	Nocturnal	Carnivorous	Viviparous	24.0	NA	NA	NA	21.2	11.6	TL	Elapidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Elapidae	<i>Waltherisaurus seelyi</i>	11.3	2.75	1.00	Nocturnal	Carnivorous	Oviparous	13.5	NA	NA	NA	29.2	10.6	TL	Elapidae	Captivity	TALM	
Serpentes	Alethinophidia	Homalopsidae	<i>Erypon tentaculatum</i>	13.6	2.41	-0.10	Diurnal	Carnivorous	Viviparous	9.0	NA	NA	NA	10.8	11.6	TL	Homalopsidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Homalopsidae	<i>Myrophis chinensis</i>	4.2	2.49	-0.72	NA	Carnivorous	Viviparous	16.3	NA	NA	NA	26.1	11.4	TL	Homalopsidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Homalopsidae	<i>Pseudomyia polylepis</i>	0.9	2.47	0.54	Nocturnal	Carnivorous	Oviparous	11.6	NA	NA	NA	14.7	11.5	TL	Homalopsidae	Captivity	Eipper 2012	
Serpentes	Alethinophidia	Lamprophiidae	<i>Atractaspis bhambhani</i>	23.9	1.74	-0.15	Nocturnal	Carnivorous	Oviparous	5.0	NA	NA	NA	16.6	11.5	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Atractaspis engadensis</i>	11.3	1.65	NA	Nocturnal	Carnivorous	Oviparous	2.5	NA	NA	NA	24.6	10.4	TL	Lamprophiidae	Captivity	TALM	
Serpentes	Alethinophidia	Lamprophiidae	<i>Helosaurus macrotis</i>	10.9	1.47	0.11	Nocturnal	Carnivorous	Oviparous	14.5	NA	NA	NA	28.7	11.5	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Dipsosa mulleriana</i>	10.0	1.33	-0.42	Diurnal	Carnivorous	Oviparous	3.0	NA	NA	NA	26.8	10.9	TL	Lamprophiidae	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Lamprophiidae	<i>Goniomonstus capensis</i>	10.9	2.86	0.96	Nocturnal	Carnivorous	Oviparous	9.0	1.5	NA	NA	12.4	11.6	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Leiolopodon madagascariensis</i>	27.2	2.67	0.82	Diurnal	Carnivorous	Oviparous	11.5	NA	NA	NA	19.5	11.7	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Leiolopodon megalops</i>	10.9	1.47	0.11	Nocturnal	Carnivorous	Oviparous	14.5	NA	NA	NA	28.7	11.5	TL	Lamprophiidae	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Lamprophiidae	<i>Malpison insignis</i>	25.0	3.07	NA	Diurnal	Carnivorous	Oviparous	8.0	NA	NA	NA	37.5	11.0	TL	Lamprophiidae	Captivity	Amiazi and Boskila 20 Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Malpison monspessulana</i>	20.0	2.59	0.55	Cathedral	Carnivorous	Oviparous	8.0	NA	NA	NA	34	37.5	11.1	Lamprophiidae	Nature	Cantani 1994	
Serpentes	Alethinophidia	Lamprophiidae	<i>Malpison sepioides</i>	10.7	2.67	NA	Diurnal	Carnivorous	Oviparous	5.0	NA	NA	NA	23.8	10.8	TL	Lamprophiidae	Captivity	TALM	
Serpentes	Alethinophidia	Lamprophiidae	<i>Psammophis schokari</i>	8.9	2.67	0.70	Diurnal	Carnivorous	Oviparous	5.5	NA	26.7	48	24.0	10.5	TL	Lamprophiidae	Captivity	TALM	
Serpentes	Alethinophidia	Lamprophiidae	<i>Psammophis sibilans</i>	10.3	2.67	NA	Diurnal	Carnivorous	Oviparous	7.0	NA	NA	NA	11.4	11.3	TL	Lamprophiidae	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Lamprophiidae	<i>Psammophis subvittatus</i>	5.8	2.59	0.21	Diurnal	Carnivorous	Oviparous	7.0	NA	NA	NA	19.7	11.5	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Psammophis subvittatus</i>	8.3	3.25	0.21	Nocturnal	Carnivorous	Oviparous	24.0	NA	NA	NA	24.0	11.6	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Lamprophiidae	<i>Rhaphisophis oxyrhynchus</i>	13.3	2.75	0.64	Diurnal	Carnivorous	Oviparous	12.0	NA	NA	NA	8.3	11.4	TL	Lamprophiidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Loxocercidae	<i>Loxocercus bicolor</i>	32.8	3.23	NA	Nocturnal	Carnivorous	Oviparous	2.5	NA	NA	NA	14.4	11.7	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Cleopatra kirilovii</i>	8.4	1.77	0.09	Nocturnal	Carnivorous	Viviparous	11.0	NA	NA	NA	40.2	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Cleopatra kirilovii</i>	8.4	1.77	0.09	Diurnal	Carnivorous	Oviparous	4.0	NA	NA	NA	23.2	11.3	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Nariidae	<i>Natrix natrix</i>	20.0	3.45	0.53	Cathedral	Carnivorous	Oviparous	9.2	1.0	NA	NA	50.6	11.1	TL	Nariidae (Feldman, unpublished)	Captivity	Cantani 1994	
Serpentes	Alethinophidia	Nariidae	<i>Natrix tessellata</i>	14.0	2.45	0.14	Diurnal	Carnivorous	Oviparous	15.0	NA	NA	NA	41.9	11.0	TL	Nariidae (Feldman, unpublished)	Captivity	Amiazi and Boskila 20 Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Nerodia asolepis</i>	14.8	3.16	0.88	Nocturnal	Carnivorous	Oviparous	21.8	NA	NA	NA	24.2	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Nerodia fasciata</i>	9.4	3.12	0.71	Nocturnal	Carnivorous	Oviparous	22.8	NA	NA	NA	31.8	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Nariidae	<i>Nerodia rhombifer</i>	7.6	3.26	0.95	Cathedral	Carnivorous	Viviparous	28.8	NA	26.9	NA	32.2	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Nariidae	<i>Nerodia septentrionalis</i>	21.0	3.03	0.61	Cathedral	Carnivorous	Viviparous	27.2	1.0	24.8	24.0	39.5	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	Harding and Rockall Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Nerodia septentrionalis</i>	19.7	2.58	0.91	Cathedral	Carnivorous	Oviparous	28.0	1.0	NA	NA	24.9	NA	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Regina sepioides</i>	19.3	2.34	0.46	Diurnal	Carnivorous	Viviparous	11.0	1.0	NA	NA	24.0	37.5	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014
Serpentes	Alethinophidia	Nariidae	<i>Siviperis dekeyri</i>	7.0	1.53	-0.22	Nocturnal	Carnivorous	Viviparous	13.0	1.0	25.4	30	35.9	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Siviperis dekeyri</i>	4.6	1.17	0.08	Cathedral	Carnivorous	Oviparous	28.0	1.0	NA	NA	45.2	11.3	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis bahari</i>	14.0	2.02	-0.59	Diurnal	Carnivorous	Viviparous	9.0	NA	26.1	NA	41.9	11.3	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis couchii</i>	7.7	2.71	-0.22	Diurnal	Carnivorous	Viviparous	21.0	NA	NA	NA	38.5	11.4	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis cryptus</i>	10.8	2.65	0.52	Diurnal	Carnivorous	Viviparous	9.9	0.8	NA	NA	26.7	11.3	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis cryptus</i>	10.8	2.65	0.52	Cathedral	Carnivorous	Oviparous	24.0	NA	NA	NA	23.8	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis hammondi</i>	7.7	2.55	0.21	Nocturnal	Carnivorous	Oviparous	15.0	NA	NA	NA	31.8	11.2	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis marianus</i>	7.0	2.56	0.38	Cathedral	Carnivorous	Viviparous	19.0	1.0	NA	NA	30.7	11.2	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis marianus</i>	15.8	2.39	0.38	Cathedral	Carnivorous	Oviparous	15.0	NA	NA	NA	29.2	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis proximus</i>	3.6	2.75	0.22	Diurnal	Carnivorous	Viviparous	20.0	1.0	NA	NA	32.1	11.4	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis rufus</i>	8.4	2.58	0.24	Diurnal	Carnivorous	Viviparous	15.0	NA	NA	NA	45.5	11.3	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis saurus</i>	10.6	2.48	0.07	Diurnal	Carnivorous	Viviparous	11.0	1.0	26.0	30	37.4	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Thamophis saurus</i>	13.8	2.50	2.51	Cathedral	Carnivorous	Oviparous	24.0	1.0	22.5	24.2	44.2	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Virginia striatula</i>	7.2	0.94	-0.36	Cathedral	Carnivorous	Viviparous	5.3	1.0	NA	NA	24.0	33.1	11.5	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014
Serpentes	Alethinophidia	Nariidae	<i>Virginia striatula</i>	9.5	1.11	-0.50	Nocturnal	Carnivorous	Viviparous	NA	NA	27.3	NA	35.0	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Nariidae	<i>Viridovipera maculata</i>	2.0	2.65	0.38	Cathedral	Carnivorous	Oviparous	11.5	NA	NA	NA	23.9	11.6	TL	Nariidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Pythonidae	<i>Antaresia childersi</i>	25.7	2.74	1.11	Nocturnal	Carnivorous	Oviparous	6.5	NA	NA	NA	16.4	11.2	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Aspidites melanochlorus</i>	22.6	3.80	1.62	Nocturnal	Carnivorous	Oviparous	7.8	NA	NA	NA	19.1	11.2	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Brocthorchilus bairdi</i>	22.2	3.37	NA	Nocturnal	Carnivorous	Oviparous	NA	NA	NA	NA	5.1	11.4	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Brocthorchilus bairdi</i>	19.4	2.39	0.81	Nocturnal	Carnivorous	Oviparous	11.0	NA	NA	NA	23.9	11.6	TL	Pythonidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes	Alethinophidia	Pythonidae	<i>Leiyophtis oberholseri</i>	18.0	3.77	NA	Nocturnal	Carnivorous	Oviparous	11.5	NA	NA	NA	3.3	11.7	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Liasis fuscus</i>	26.8	4.01	1.83	Nocturnal	Carnivorous	Oviparous	10.3	NA	NA	NA	15.9	11.4	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Liasis fuscus</i>	20.0	3.50	1.83	Nocturnal	Carnivorous	Oviparous	11.5	NA	NA	NA	23.9	11.6	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Moralia boeleni</i>	19.0	3.77	NA	Diurnal	Carnivorous	Oviparous	7.0	NA	NA	NA	5.5	11.6	TL	Pythonidae (Feldman, unpublished)	Captivity	De Magalhães and Cost Pyron and Burbrink 2014	
Serpentes	Alethinophidia	Pythonidae	<i>Moralia kinghorni</i>	13.8	4.59	NA	Cathedral	Carnivorous	Oviparous	NA	25.2	NA	NA	14.9	11.6	TL	Pythonidae (Feldman, unpublished)	Captivity	Carey and Judge 2000	
Serpentes																				

Serpentes	Alchinhophidia	Viperidae	<i>Vipera berus</i>	19.0	2.36	0.51	Cathemeral	Carnivorous	Viviparous	8.8	0.5	NA	36.0	55.3	11.2	TL	Viperidae	Captivity	De Magalhães and Cost Pyron and Burbrink 2014
Serpentes	Alchinhophidia	Viperidae	<i>Vipera lotussei</i>	14.0	2.30	0.36	Cathemeral	Carnivorous	Viviparous	8.0	0.8	NA	NA	39.5	11.3	TL	Viperidae	Nature	Brito and Rebelo 2003 Pyron and Burbrink 2014
Serpentes	Scolocophidia	Typhlopidae	<i>Typhlops vermicularis</i>	6.2	1.60	NA	Nocturnal	Carnivorous	Oviparous	5.5	NA	34.1	NA	35.1	11.0	TL	Typhlopidae (Feldman, unpublished)	Captivity	FAUM Pyron and Burbrink 2014



uple of Hemidactyl

il. 200x



skii, close to Darevskia armeniaca in Pyron and Burbrink 2

skii, close to Darevskia armeniaca in Pyron and Burbrink 2

paper of  
Aguirre and Gatica 2010 paper  
Aguirre, T. A. and Gatica, C. A. 2010. Ficha tecnica de *Coleonyx brevis*. En: Gatica C. A. (compilador). Diagnostico de algunas especies de anfibios y reptiles del Norte de Mexico. Laboratorio de Ecologia y Biodiversidad Animal. Instituto de Ciencias Biomedicas, Universidad Autonoma de Ciudad Juarez. Bases de datos SNIB-CONABIO. Proyecto No. CK007.

Alcala 1966  
Alcala, A. C. 1966. Populations of three tropical lizards of Negros Island, Philippines. Ph.D. Thesis, Stanford University; 269 pp.

Alcala and Brown 1967  
Alcala, A. C. and Brown, W. C. 1967. Population ecology of the tropical scincoid lizard, *Emoia atrocostata*, in the Philippines. *Copeia*, 1967: 596-604.

Allison 1982  
Allison, A. 1982. Distribution and ecology of New Guinea lizards. *Monographie Biologicae*, 42: 803-813. In: Gressitt, J.L. (ed.) *Biogeography and Ecology of New Guinea*. Dr W. Junk Publishers, The Hague

Altunisik et al. 2013  
Altunisik, A., Gul, C., Ozdemir, N., Tosunoglu, M. and Ergul, T. 2013. Age structure and body size of the Strauch's racerunner, *Eremias trauchi trauchi* Kessler, 1878. *Turkish Journal of Zoology* 37: 539-543.

Amitai and Bouskila 2001  
Amitai, P. and Bouskila, A. 2001. Handbook of amphibians and reptiles of Israel. Keter Publishing House, Jerusalem. (In Hebrew).

Ananjeva et al. 2003  
Ananjeva, N. B., Smirina, E. M. and Nikitina, N. G. 2003. Dentition of *Phrynocephalus melanurus*: does tooth number depend on body size and/or age? *Russian Journal of Herpetology*, 10: 1-6.

Anastasiadis and Whitaker 1987  
Anastasiadis, J. M. and Whitaker, A. H. 1987. Longevity of free-living *Hoplodactylus maculatus* (Reptilia : Gekkonidae). *New Zealand Journal of Ecology* 10: 141-142.

Andreone and Guarino 2003  
Andreone, F. and Guarino, F. M. 2003. Giant and long-lived? Age structure in *Macroscolecus coctei*, an extinct skink from Cape Verde. *Amphibia-Reptilia* 24: 459-470.

Andrews 1979  
Andrews, R. M. 1979. Reproductive effort of female *Anolis limifrons* (Sauria: Iguanidae). *Copeia*, 1979: 620-626.

Arakelyan 2002  
Arakelyan, M. 2002. The study of age, growth, and longevity in the triploid hybrids of rock lizards of the genus *Darevskia* in Armenia. *Russian Journal of Herpetology* 9: 63-68.

Arakelyan et al. 2011  
Arakelyan, M. S., Danielyan, F. D., Corti, C., Sindaco, R. and Leviton, A. E. 2011. Herpetofauna of Armenia and Nagorno-Karabakh. Society for the Study of Amphibians and Reptiles, Salt Lake City.

Arribas 2004  
Arribas, O. J. 2004. Characteristics of the reproductive biology of *Iberolacerta aurelioi* (Arribas, 1994). *Herpetozoa* 17: 3-18.

Axtell and Axtell 1971  
Axtell, R. W. and Axtell, C. A. 1971. A new lizard (*Sceloporus jarrovii cyanostictus*) from Sierra Madre de Coahuila, Mexico. *Copeia*, 1971: 89-98.

Barbault 1974  
Barbault, R. 1974. Structure et dynamique d'un peuplement de lézards: les scincides de la savane de Lamoto (Cote d'Ivoire). *Terre Vie* 28: 352-428.

Barbault 1976  
Barbault, R. 1976. Population dynamics and reproductive patterns of three African skinks. *Copeia*, 1976: 483-490.

Barrows et al. 2010  
Barrows, C. W., Rotenberry, J. T. and Allen, M. F. 2010. Assessing sensitivity to climate change and drought variability of a sand dune endemic lizard. *Biological Conservation* 143: 731-736.

Bateman and Chung-Maccoubrey 2012  
Bateman, H. L. and Chung-Maccoubrey, A. 2012. Growth and activity of *Sceloporus cowlesi* (southwestern fence lizard). *Herpetological Review*, 43: 39-41.

Bateman et al. 2010  
Bateman, H. L., Snell, H. L., Chung-MacCoubrey, A. and Finch, D. M. 2010. Growth, activity, and survivorship from three sympatric parthenogenic whiptails (Family Teiidae). *Journal of Herpetology*, 44: 301-306.

Bauer 2013  
Bauer, A. M. 2013. Geckos. The animal answer guide. Johns Hopkins University Press. Baltimore.

Bauer et al. 2004  
Bauer, A. M., Sumontha, M., Grossmann, W., Pauwels, O. S. G. and Vogel, G. 2004. A new species of *Dixonius* (Squamata: Gekkonidae) from Kanchanaburi Province, Western Thailand. *Current Herpetology* 23: 17-26.

Bauwens and Diaz-Uriarte 1997  
Bauwens, D. and Diaz-Uriarte, R. 1997. Covariation of life-history traits in lacertid lizards: a comparative study. *American Naturalist* 149: 91-111.

Beane et al. 2010  
Beane, J. C., Braswell, A. L., Mitchell, J. C., Palmer, W. M. and Harrison, J. R. 2010. Amphibians and reptiles of the Carolinas and Virginia. Second Edition, Revised and Updated. The University of North Carolina Press, Chapel Hill.

Beck 2005  
Beck, D. D. 2005. Biology of Gila Monsters and Beaded lizards. University of California Press, Berkeley.

Beutler 1981  
Beutler, A. 1981. *Cyrtodactylus kotschy* - Agaischer Bogenfingergecko. Pages 53-74 In: Bohme, W. editor. *Handbuch der reptilien und amphibien Europas, Band 1, Echsen 1*. Akademische Verlagsgesellschaft, Wiesbaden.

Bogaerts 2006  
Bogaerts, S. 2006. First data on the reproduction of Lanza's skink, *Chalcides lanzai* Pasteur, 1967. *Podarcis* 7: 9-16.

Bogin et al. 1999  
Bogin, Y., Por-Efrati, N. and Werner, Y. L. 1999. Captive longevity in *Lacerta laevis laevis* (Reptilia: Sauria): hypothetical effects of sex, temperature and climate. *Russian Journal of Herpetology* 6: 87-91.

Bringsoe 1998  
Bringsoe, H. 1998. Observations on growth and longevity in *Uromastix aegyptia* (Forsskal, 1775) in the Negev Desert, southern Israel (Reptilia: Sauria: Agamidae). *Faunistische Abhandlungen Staatliches Museum für Tierkunde Dresden* 21 (supplement): 19-21.

Brito and Rebelo 2003  
Brito, J. C. and Rebelo, R. 2003. Differential growth and mortality affect Sexual size dimorphism in *Vipera latastei*. *Copeia*, 2003: 865-871.

Britto et al. 2001  
Britto, S. P., Abe, A. S. and Andre, D. V. 2001. *Tupinambis merianae*. Longevity. *Herpetological Review* 32: 260-261.

Brown 2012  
Brown, D. 2012. A guide to Australian dragons in captivity. Reptile Publications, Burleigh.

Brown 2012  
Brown, D. 2012. A guide to Australian geckos and pygopods in captivity. Reptile Publications, Burleigh.

Brown 2012  
Brown, D. 2012. A guide to Australian skinks in captivity. Reptile Publications, Burleigh.

Brushko 1979  
Brushko, Z. K. 1979. Longevity and age structure of a population of *Phrynocephalus mystaceus* in sand banks of the middle course of the Ili river Kazakh SSR USSR. *Ecologiya (Sverdlovsk)*, 1: 104-107.

Busack and Jaksic 1982  
Busack, S. D. and Jaksic, F. M. 1982. Autecological observations of *Acanthodactylus erythrurus* (Sauria: Lacertidae) in Southern Spain. *Amphibia-Reptilia* 3: 237-255.

Carey and Judge 2000  
Carey, J. R. and Judge, D. S. 2000. Longevity records: life spans of mammals, birds, amphibians, reptiles and fish. Odense University Press, Odense.

Castanet 1994  
Castanet, J. 1994. Age estimation and longevity in reptiles. *Gerontology*, 40: 174-192.

Castanet and Baez 1991  
Castanet, J. and Baez, M. 1991. Adaptation and evolution in *Gallotia* lizards from the Canary Islands: age, growth, maturity and longevity. *Amphibia-Reptilia* 12: 81-102.

Chapple 2003  
Chapple, D. G. 2003. Ecology, life-history, and behavior in the Australian Scincid genus *Egernia*, with comments on the evolution of complex sociality in lizards. *Herpetological Monographs* 17: 145-180.

Cicek et al. 2012  
Cicek, K., Kumas, M., Ayaz, D. and Tok, C. V. 2012. Preliminary data on the age structure of *Phrynocephalus horvathi* in Mount Ararat (Northeastern Anatolia, Turkey). *Biharian Biologist* 6: 112-115.

Cisse et al. 1977  
Cisse, M., Karns, D. R. and Karns, K. C. 1977. Aspects of the ecology of *Acanthodactylus dumerili* Sauria Lacertidae in Senegal. *Bulletin de l'Institut Fondamental d'Afrique Noire Serie A Sciences* 39: 190-218.

Cohen 2014a  
Cohen, H. 2014a. *Lamprodelphis holbrooki* (speckled kingsnake). Longevity. *Herpetological Review* 45: 61.

Cohen 2014b  
Cohen, H. 2014b. *Lamprodelphis knoblochi* (Knobloch's mountain kingsnake). Longevity. *Herpetological Review* 45: 61.

Conant and Hudson 1949  
Conant, R. and Hudson, R. G. 1949. Longevity records for reptiles and amphibians in the Philadelphia Zoological Garden. *Herpetologica*, 5: 1-8.

De Lisle 1996  
De Lisle, H. F. 1996. The natural history of monitor lizards. Krieger, Malabar.

De Magalhaes and Costa 2009  
De Magalhaes, J. P. and Costa, J. 2009. A database of vertebrate longevity records and their relation to other life-history traits. *Journal of Evolutionary Biology* 22: 1770-1774.

Dearing and Schall 1994  
Dearing, M. D. and Schall, J. J. 1994. Atypical reproduction and sexual dimorphism of the tropical Bonaire Island whiptail lizard, *Cnemidophorus murinus*. *Copeia*, 1994: 760-766.

Degenhardt et al. 1996  
Degenhardt, W. G., Painter, C. W. and Price, A. H. 1996. Amphibians and reptiles of New Mexico. University of New Mexico Press, Albuquerque.

Dubey et al. 2013  
Dubey, S., Sinsch, U., Dehling, M. J., Chevalley, M. and Shine, R. 2013. Population demography of an endangered lizard, the Blue Mountain Water Skink. *BMC Ecology* 13:e4.

- Dubos, N. 2013. New locality record for *Phelsuma grandis* (Sauria: Gekkonidae) in Reunion, in sympatry with the critically endangered *Phelsuma inexpectata*. *Herpetology Notes*, 6: 309-311.
- Dunham, A. E. 1981. Populations in a fluctuating environment: The comparative population ecology of *Sceloporus merriami* and *Urosaurus ornatus*. *Miscellaneous Publications of the Museum of Zoology, University of Michigan* 158: 1-62.
- Eipper 2012  
Eipper, S. 2012. A guide to Australian snakes in captivity. Elapids and colubrids. Reptile Publications, Burleigh.
- Eisenberg and Werning 2012  
Eisenberg, T. and Werning, H. 2012. *Phymaturus cf. palluma* in captivity: observations on its reproduction and biology. *Salamandra* 48: 198-206.
- Evans and Spencer-Hartle 2013  
Evans, I. and Spencer-Hartle, L. A. 2013. *Crotalus oreganus oreganus*. *Longevity. Herpetological Review* 44: 453.
- Fellers et al. 1998  
Fellers, G. M., Drost, C. A., Mautz, W. J. and Murphey, T. 1998. Ecology of the island night lizard, *Xantusia riversiana*, on San Nicolas Island, California. U.S. Navy Contributing Office Western Ecological Research Center.
- Filippi and Luiselli 2000  
Filippi, E. and Luiselli, L. 2000. Status of the Italian snake fauna and assessment of conservation threats. *Biological Conservation* 93: 219-225.
- Fitch 1973  
Fitch, H. S. 1973. Population structure and survivorship in some Costa Rican lizards. *Occasional Papers of the Museum of Natural History, University of Kansas* 18: 1-41.
- Fogel 2003  
Fogel, G. 2003. The art of armadillo lizards (*Cordylus cataphractus*): Fifteen years of captive observations. *Bulletin of the Chicago Herpetological Society* 38: 113-119.
- Galan 2008  
Galan, P. 2008. *Lagartija de Bocage – Podarcis bocagei* (Seoane, 1884). Version 28-01-2008. *Enciclopedia virtual de los vertebrados Espanoles*.
- Galan 2011  
Galan, P. 2011. *Iberolacerta monticola*. *Longevity. Herpetological Review* 43: 430.
- Gates 1963  
Gates, G. O. 1963. Ecology of the iguanid lizard, *Urosaurus graciosus*, in Arizona. PhD Dissertation, University of Arizona.
- Germano and Williams 2005  
Germano, D. J. and Williams, D. F. 2005. Population ecology of blunt-nosed leopard lizards in high elevation foothill habitat. *Journal of Herpetology*, 39: 1-18.
- Gharzi and Yari 2013  
Gharzi, A. and Yari, A. 2013. Age determination in the snake-eyed lizard, *Ophisops elegans*, by means of skeletochronology (Reptilia: Lacertidae). *Zoology in the Middle East*, 59: 10-15.
- Gray 2014  
Gray, B. S. 2014. *Carpophis amoenus amoenus*. *Longevity. Herpetological Review* 45: 256.
- Greer 1989  
Greer, A. E. 1989. The biology and evolution of Australian lizards. Surrey Beatty and Sons, Chipping Norton, NSW
- Greer 2005  
Greer, A. E. 2005. *Encyclopedia of Australian reptiles*. Australian Museum Online <http://www.amonline.net.au/herpetology/research/encyclopedia.pdf> Version date: 5 August 2005.
- Grismer 2002  
Grismer, L. L. 2002. Amphibians and reptiles of Baja California including its Pacific islands and the islands in the Sea of Cortes. University of California Press, Berkeley.
- Guarino 2010  
Guarino, F. M. 2010. Structure of the femora and autotomous (postpygal) caudal vertebrae in the three-toed skink *Chalcides chalcides* (Reptilia: Squamata: Scincidae) and its applicability for age and growth rate determination. *Zoologischer Anzeiger* 248: 273-283.
- Gul et al. 2014  
Gul, S., Ozdemir, N., Kumlutas, Y. and Ilgaz, C. 2014. Age structure and body size in three populations of *Darevskia rudis* (Bedriaga, 1886) from different altitudes (Squamata: Sauria: lacertidae). *Herpetozoa* 26: 151-158.
- Gutierrez et al. 2013  
Gutierrez, J. A., Piantoni, C., and Iburguegoytia, N. R. 2013. Altitudinal effects on life history parameters in populations of *Liolaemus pictus argentinus* (Sauria: Liolaemidae). *Acta Herpetologica* 8: 9-17.
- Halloy 2006  
Halloy, M. 2006. *Liolaemus quilmes*. *Longevity. Herpetological Review* 37: 88-89.
- Harbig 2000  
Harbig, P. 2000. Erste erfahrungen bei terrarienhaltung und des Laos-kielskinks, *Tropidophorus laotus* Smith. *Sauria* 22: 3-9.
- Harding and Rockafeld 2012  
Harding, J. H. and Rockafeld, K. 2012. *Nerodia sipedon* (northern watersnake). *Captive longevity. Herpetological Review* 43: 265.
- Hare et al. 2007  
Hare, K. M., Hoare, J. M. and Hitchmough, R. A. 2007. Investigating natural population dynamics of *Naultinus manukanus* to inform conservation management of New Zealand's cryptic diurnal geckos. *Journal of Herpetology* 41: 81-93.
- Hauschild and Gassner 1995  
Hauschild, A. and Gassner, P. 1995. *Skinke im terrarium*. Landbuch Verlag, Hannover.
- Heatwole and Taylor 1987  
Heatwole, H. and Taylor, J. 1987. *Ecology of reptiles*. 2nd edition. Surrey Beatty and Sons, Chipping Norton, NSW.
- Henderson and Powell 2009  
Henderson, R. W. and Powell, R. 2009. *Natural history of West Indian reptiles and amphibians*. University Press of Florida, Gainesville.
- Hoare et al. 2005  
Hoare, J. M., Stephens, C. L., Daugherty, C. H. and Phillipot, P. M. S. 2005. *Oligosoma lineoocellatum*. *Longevity. Herpetological Review* 36: 181.
- Honegger 1969  
Honegger, R. E. 1969. Notes on some amphibians and reptiles at Zurich Zoo. *International Zoo Yearbook* 9: 24-28.
- Animal Diversity Web  
[http://animaldiversity.ummz.umich.edu/accounts/Norops\\_sagrei/](http://animaldiversity.ummz.umich.edu/accounts/Norops_sagrei/)
- Hughes 1988  
Hughes, B. 1988. Longevity records of African captive amphibians and reptiles: part 2. Lizards and amphisbaenians. *The Journal of the Herpetological Association of Africa* 34: 20-24.
- Hutchinson 1993  
Hutchinson, M. N. 1993. Family Scincidae. *Fauna of Australia* 31: 1-45.
- Hutchinson et al. 2001  
Hutchinson, M., Swain, R. and Driessen, M. 2001. *Snakes and lizards of Tasmania*. University of Tasmania, Hobart.
- Iverson et al. 2004  
Iverson, J. B., Hines, K. N. and Valiulis, J. M. 2004. The nesting ecology of the Allen Cays rock iguana, *Cyclura cyclura inornata* in the Bahamas. *Herpetological Monographs*, 18: 1-36.
- Jacobsen 1982  
Jacobsen, N. H. G. 1982. The ecology of the reptiles and amphibians in the *Burkea africana* - *Eragrostis pallens* savanna of the Nyslvley Nature Reserve. MSc. Thesis, University of Pretoria.
- Jennings and Hayes 1994  
Jennings, M. R. and Hayes, M. P. 1994. Amphibian and reptile species of special concern in California. Final report. Contract 8023. Submitted to the California Department of Fish and Game, Rancho Cordova.
- Jesus 2012  
Jesus, J. 2012. Evidence of high longevity in an island lacertid, *Teira dugesii* (Milne-Edwards, 1829). First data on wild specimens. *Acta Herpetologica*, 7: 309-313.
- Jones and Lovich 2009  
Jones, L. and Lovich, R. 2009. *Lizards of the American southwest: a photographic field guide*. Rio Nuevo Publishers, Tuscon.
- Karsten et al. 2008  
Karsten, K. B., Andriamandimbarisoa, L. N., Fox, S. F. and Raxworthy, C. J. 2008. A unique life history among tetrapods: An annual chameleon living mostly as an egg. *Proceedings of the National Academy of Sciences, USA* 105: 8980-8984.
- King and Green 1999  
King, D. and Green, B. 1999. *Goanna: the biology of Varanid lizards*. New South Wales Univ. Press, Sydney, New South Wales, Australia.
- Kitchener et al. 1988  
Kitchener, D. J., How R. A. and Dell, J. 1988. Biology of *Oedura reticulata* and *Gehyra variegata* (Gekkonidae) in an isolated woodland of Western Australia. *Journal of Herpetology*, 22: 401-412.
- Langerwerf 2006  
Langerwerf, B. 2006. *Water dragons. A complete guide to Physignathus and more*. T.F.H. Publications, Neptune City.
- Laver et al. 2012  
Laver, R. J., Purwandana, D., Ariefandy, A., Imansyah, J., Forsyth, D., Ciofi, C. and Jessop, T. S. 2012. Life-history and spatial determinants of somatic growth dynamics in Komodo dragon populations. *PLoS ONE* 7(9): e45398. doi:10.1371/journal.pone.0045398
- LeBerre 2009  
LeBerre, F. 2009. *The chameleon handbook*. 3rd edition. Barron's, New York.
- Leclair and Leclair 2011  
Leclair, R. and Leclair, M. H. 2011. Life-history traits in a population of the dwarf gecko, *Sphaerodactylus vincenti ronaldi*, from a xerophytic habitat in Martinique, West Indies. *Copeia* 2011: 566-576.
- Lettink and Whitaker 2006  
Lettink, M. and Whitaker, T. 2006. *Hoplodactylus maculatus*. *Longevity. Herpetological Review* 37: 223-224.
- Iezzi 2008  
Lezzi, A. 2008. Husbandry manual for southern leaf-tailed gecko *Phyllurus platurus* Reptilia: Gekkonidae. Western Sydney Institute of TAFE, Richmond, special publication.
- Li et al. 2010  
Li, W.-R., Song, Y.-C. and Shi, L. 2010. Age determination of *Teratoscincus roborowskii* (Gekkonidae) by skeletochronology. *Chinese Journal of Zoology* 45: 79-86.
- Luis et al. 2004  
Luis, C., Rebelo, R., Brito, J. C., Godinho, R., Paulo, O. S. and Crespo, E. G. 2004. Age structure in *Lacerta schreiberi* from Portugal. *Amphibia-Reptilia* 25: 336-343.

Mallee Catchment Management Authority (Mallee lizards fieldguide)	Mallee Catchment Management Authority (Mallee lizards field guide); <a href="http://www.malleecma.vic.gov.au/resources/miscellaneous/mallee-lizard-field-guide">http://www.malleecma.vic.gov.au/resources/miscellaneous/mallee-lizard-field-guide</a>
Manicom 2010	Manicom, C. 2010. Beyond abundance: The direct and indirect effects of predation in a terrestrial trophic web. Dissertation. James Cook University, Townsville, Australia.
Marchioro et al. 2005	Marchioro, M., Nunes, J.-M. D. A. M., Ramalho, A. M. R., Molowny, A., Perez-Martinez, E., Ponsoda, X. and Lopez-Garcia, C. 2005. Postnatal neurogenesis in the medial cortex of the tropical lizard <i>Tropidurus hispidus</i> . <i>Neuroscience</i> 134: 407-413.
Mautz and Lopez-Forment 1978	Mautz, W. J. and Lopez-Forment, W. 1978. Observations on the activity and diet of the cavernicolous lizard <i>Lepidophyma smithii</i> (Sauria: Xantusiidae). <i>Herpetologica</i> , 34: 311-313.
McFadden and Boylan 2014	McFadden, M. and Boylan, T. 2014. <i>Boiga irregularis</i> (brown tree snake). Captive reproduction and longevity. <i>Herpetological Review</i> 45: 60-61.
Measey et al. 2014	Measey, G. J., Rasselimanana, A. and Herrel, A. 2014. Ecology and life history of chameleons. Pages 85-113 in Tolley, K. A. and Herrel, A. 2014. editors. <i>The biology of chameleons</i> . University of California Press, Berkeley.
Medica and Turner 1984	Medica, P. A. and Turner, F. B. 1984. Natural longevity of iguanid lizards in southern Nevada. <i>Herpetological Review</i> 15: 34-35.
Meneken et al. 2005	Meneken, B. M., Knipps, A. C. S., Layne, J. N. and Ashton, K. G. 2005. Neoseps reynoldsi. Longevity. <i>Herpetological Review</i> 36: 180-181.
Michael and Lindenmayer 2010	Michael, D. and Lindenmayer, D. 2010. Reptiles of the NSW Murray catchment. A guide to their identification, ecology and conservation. CSIRO Publishing, Collingwood, Victoria.
Mitchell 1973	Mitchell, F. J. 1973. Studies on the ecology of the agamid lizard <i>Amphibolurus maculosus</i> . <i>Transactions of the Royal Society of South Australia</i> 97: 47-76.
Mitchell 2006	Mitchell, J. C. 2006. Ernest Anthony Liner. <i>Copeia</i> , 2006: 316-320.
Miyata 2013	Miyata, K. I. 2013. Studies on the ecology and population biology of little known Ecuadorian anoles. <i>Bulletin of the Museum of Comparative Zoology</i> , 161: 45-78.
Molina-Borja and Rodriguez-Dominguez 2004	Molina-Borja, M. and Rodriguez-Dominguez, M. A. 2004. Evolution of biometric and life-history traits in lizards (Gallotia) from the Canary Islands. <i>Journal of Zoological Systematics and Evolutionary Research</i> 42: 44-53.
Montanucci 1983	Montanucci, R. R. 1983. Breeding, captive care and longevity of the Short-horned lizard <i>Phrynosoma douglassi</i> . <i>International Zoo Yearbook</i> 23: 148-156.
Moore et al. 2007	Moore, J. A., Hoare, J. M., Daugherty, C. H. and Nelson, N. J. 2007. Waiting reveals waning weight: Monitoring over 54 years shows a decline in body condition of a long-lived reptile ( <i>tuatara</i> , <i>Sphenodon punctatus</i> ). <i>Biological Conservation</i> 135: 181-188.
Mules 2012	Mules, R. D. 2012. <i>Oligosoma chloronoton</i> (green skink). Longevity, site fidelity. <i>Herpetological Review</i> 43: 488-489.
Necas 1999	Necas, P. 1999. Chameleons. Nature's hidden jewels. Edition Chimaira, Frankfurt am Main.
Olsson and Shine 1996	Olsson, M. and Shine, R. 1996. Does reproductive success increase with age or with size in species with indeterminate growth? A case study using sand lizards ( <i>Lacerta agilis</i> ). <i>Oecologia</i> 105: 175-178.
Ortega-Rubio et al. 1993	Ortega-Rubio, A., Khodaddost, M. and Servin, R. 1993. Skeletochronology in the mezquite lizard, <i>Sceloporus grammicus</i> . <i>Proceedings of the Oklahoma Academy of Science</i> 73: 31-34.
Pal et al. 2009	Pal, A., Swain, M. M. and Rath, S. 2009. Long bone histology and skeletochronology in a tropical Indian lizard, <i>Sitana ponticeriana</i> (Sauria: Agamidae). <i>Current Herpetology</i> 28: 13-18.
Pancharatna and Kumbar 2005	Pancharatna, K. and Kumbar, S. M. 2005. Bone growth marks in tropical wall lizard, <i>Hemidactylus brooki</i> . <i>Russian Journal of Herpetology</i> 12: 107-110.
Paulissen 2000	Paulissen, M. A. 2000. Life history and drought tolerance of the parthenogenetic whiptail lizard <i>Cnemidophorus laredoensis</i> (Teiidae). <i>Herpetological Natural History</i> 7: 41-57.
Pearson and Jones 1999	Pearson, D. and Jones, B. 1999. Lancelin Island skink recovery plan. Department of Conservation and Land Management, Western Australian Wildlife Management Program No. 22
Pianka and Parker 1975	Pianka, E. R. and Parker, W. S. 1975. Age-specific reproductive tactics. <i>American Naturalist</i> 109: 453-464.
Piantoni et al. 2006	Piantoni, C., Iburguengoytia, N. R. and Cussac, V. E. 2006. Growth and age of the southernmost distributed gecko of the world ( <i>Homonota darwini</i> ) studied by skeletochronology. <i>Amphibia-Reptilia</i> 27: 393-400.
Porter 1982	Porter, T. 1982. <i>Phrynosoma coronatum jamesi</i> (Coast Horned Lizards) longevity. <i>Herpetological Review</i> 13: 19.
Read 1998	Read, J. L. 1998. The ecology of sympatric scincid lizards ( <i>Ctenopus</i> ) in arid South Australia. <i>Australian Journal of Zoology</i> 46: 617-629.
Read 1999	Read, J. L. 1999. Longevity, reproductive effort and movements of three sympatric Australian arid-zone geckos. <i>Australian Journal of Zoology</i> 47: 307-316.
Reagan 1992	Reagan, D. P. 1992. Congeneric species distribution and abundance in a three-dimensional habitat: the rain forest anoles of Puerto Rico. <i>Copeia</i> , 1992: 392-403.
Regalado 2006	Regalado, R. 2006. Reproduction and growth of seven species of dwarf geckos, <i>Sphaerodactylus</i> (Gekkonidae), in captivity. <i>Herpetological Review</i> 37: 13-20.
Reidpath 2006	Reidpath, D. 2006. Husbandry manual for Fijian crested iguana <i>Brachylophus vitiensis</i> . Privately produced, Sydney.
Rodriguez-Romero et al. 2011	Rodriguez-Romero, F., Smith, G. R., Mendez-Sanchez, F., Hernandez-Gallegos, O., Nava, P. S. and Mendez de la Cruz, F. R. 2011. Demography of a semelparous, high-elevation population of <i>Sceloporus bicanthalis</i> (Lacertilia: Phrynosomatidae) from the Nevado de Toluca Volcano, Mexico. <i>The Southwestern Naturalist</i> 56: 71-77.
Rogers 1997	Rogers, K. L. 1997. Iguana iguana. Longevity. <i>Herpetological Review</i> 28: 203.
Rogner 1997	Rogner, M. 1997. Lizards. Krieger Publishing Company, Malabar, FL.
Roitberg and Smirina 2006	Roitberg, E. S. and Smirina, E. M. 2006. Age, body size and growth of <i>Lacerta agilis boemica</i> and <i>L. strigata</i> (Reptilia, Lacertidae): a comparative study of two closely related lizard species based on skeletochronology. <i>Herpetological Journal</i> 16: 133-148.
Rutherford 2004	Rutherford, P. L. 2004. Proximate mechanisms that contribute to female biased sexual size dimorphism in an anigid lizard. <i>Canadian Journal of Zoology</i> 82: 817-822.
Savage 2002	Savage, J. M. 2002. The amphibians and reptiles of Costa Rica. The University of Chicago Press, Chicago.
Schleich and Kastle 2002	Schleich, H. H. and Kastle, W. 2002. Amphibians and reptiles of Nepal. Gantner Verlag, Koenigstein.
Schleich et al. 1996	Schleich, H. H., Kastle, W. and Kabisch, K. 1996. Amphibians and reptiles of North Africa. Biology, systematics, field guide. Koeltz Scientific, Koenigstein, Germany.
Sinsch et al. 2002	Sinsch, U., Martino, A. L. and di Tada, I. E. 2002. Longevity and sexual size dimorphism of the Pampa de Achala copper lizard <i>Pristidactylus achalensis</i> (Gallardo, 1964). <i>Amphibia-Reptilia</i> 23: 177-190.
Slavens and Slavens 1999	Slavens, F. L. and Slavens, K. 1999. Reptiles and amphibians in captivity: breeding, longevity, and inventory. Slaveware Publishing, Seattle.
Smirina and Ananjeva 2007	Smirina, E. M. and Ananjeva, N. B. 2007. Growth layers in bones and acrodont teeth of the agamid lizard <i>Laudakia stoliczka</i> (Blanford, 1875) (Agamidae, Sauria). <i>Amphibia-Reptilia</i> 28: 193-204.
Smith et al. 2013	Smith, A.L., Bull, C. M. and Driscoll, D. 2013. Skeletochronological analysis of age in three 'fire-specialist' lizard species. <i>South Australian Naturalist</i> 87: 6-17.
Snider and Bowler 1992	Snider, A. T. and Bowler, J. K. 1999. Longevity of reptiles and Amphibians in North American collections. 2nd Ed. Oxford, Ohio: Society for the Study of Amphibians and Reptiles.
Stebbins and McGinnis 2012	Stebbins, R. C. and McGinnis, S. M. 2012. Field guide to amphibians and reptiles of California. Revised Edition. University of California Press, Berkeley.
Sullivan and Sullivan 2012	Sullivan, B. K. and Sullivan, K. O. 2012. Common chuckwalla ( <i>Sauromalus ater</i> ) in an urban preserve: persistence of a small population and estimation of longevity. <i>Herpetological Conservation and Biology</i> 7: 437-441.
Szczerbak and Golubev 1996	Szczerbak, N. N. and Golubev, M. L. 1996. Gecko fauna of the USSR and contiguous regions. Society for the Study of Amphibians and Reptiles, St. Louis.
Tacutu et al. 2013	Tacutu, R., Craig, T., Budovsky, A., Wuttke, D., Lehmann, G., Taranukha, D., Costa, J., Fraifeld, V. E. and de Magalhaes, J. P. 2013. Human ageing genomic resources: Integrated databases and tools for the biology and genetics of ageing. <i>Nucleic Acids Research</i> 41: D1027-D1033.
Tanner and Krogh 1975	Tanner, W. W. and Krogh, J. E. 1975. Ecology of the zebra-tailed lizard <i>Callisaurus draconoides</i> at the Nevada Test Site. <i>Herpetologica</i> 31: 302-316.
TAUM	Tel Aviv University, Zoological Museum data



- Tinkle and Dunham 1983 Tinkle, D. W. and Dunham, A. E. 1983. Demography of the tree lizard, *Urosaurus ornatus*, in Central Arizona. *Copeia*, 1983: 585-598.
- Tocher 2009 Tocher, M. D. 2009. Life history traits contribute to decline of critically endangered lizards at Macraes Flat, Otago. *New Zealand Journal of Ecology* 33: 125-137.
- Tomasevic-Kolarov et al. 2010 Tomasevic-Kolarov, N., Ljubisavljevic, K., Polovic, L., Dzukic, G. and Kalezic, M. 2010. The body size, age structure and growth pattern of the endemic balkan mosor rock lizards, *Dinarolacerta mosorensis* (Kolombatovic, 1886). *Acta Zoologica Academiae Scientiarum Hungaricae* 56: 55-71.
- Towns 1994 Towns, D. R. 1994. The role of ecological restoration in the conservation of Whitaker's skink (*Cyclodina whitakeri*), a rare New Zealand lizard (Lacertilia: Scincidae). *New Zealand Journal of Zoology*, 21: 457-471.
- Towns and Ferreira 2001 Towns, D. R. and Ferreira, S. M. 2001. Conservation of New Zealand lizards (Lacertilia: Scincidae) by translocation of small populations. *Biological Conservation* 98: 211-222.
- Tsellarius and Tsellarius 2009 Tsellarius, A. Y. and Tsellarius, E. Y. 2009. Longevity and factors of mortality in the rock lizard *Darevskia braueri* (Reptilia, Sauria) based on long-term observations in the Navagir Ridge. *Zoologiceskij Zhurnal* 88: 1276-1280.
- Uzum et al. 2014 Uzum, N., Ilgaz, C., Kumlutas, Y., Gumus, C. and Avci, A. 2014. The body size, age structure, and growth of Bosc's fringe-toed lizard, *Acanthodactylus boskianus* (Daudin, 1802). *Turkish Journal of Zoology* 38: 383-388.
- van der Reijden 2008 van der Reijden, J. 2008. The captive maintenance and breeding of *Diporiphora winneckeii* (Cane grass dragon) at the Alice Springs Desert Park. Australian Society of Zoo Keeping INC. Special Publication.
- Walker 2012 Walker, J. M. 2012. *Aspidoscelis rodecki* (Rodeck's whiptail). Life history. *Herpetological Review* 43: 330-332.
- Wapstra et al. 2001 Wapstra, E., Swain, R. and O'Reilly, J. M. 2001. Geographic variation in age and size at maturity in a small Australian viviparous skink. *Copeia*, 2001: 646-655.
- Werner 1993 Werner, Y. L. 1993. The paradoxical tree gecko of Israel. *Dactylus*, *Journal of the International Gecko Society*, 2: 29-45.
- Werner et al. 1993 Werner, Y. L., Frankenberg, E., Volokita, M. and Harari, R. 1993. Longevity of geckos (Reptilia: Lacertilia: Gekkonoidea) in captivity: an analytical review incorporating new data. *Israel Journal of Zoology* 39: 105-124.
- Wiederhecker et al. 2003 Wiederhecker, H. C., Pinto, A. C. S., Paiva, M. S. and Colli, G. R. 2003. The demography of the lizard *Tropidurus torquatus* (Squamata, Tropiduridae) in a highly seasonal neotropical savanna. *Phyllomedusa* 2: 9-19.
- Wikelski and Thom 2000 Wikelski, M. and Thom, C. 2000. Marine iguanas shrink to survive El Nino. *Nature* 403: 37-38.
- Wilms 2005 Wilms, T. 2005. *Uromastyx*. Natural history, captive care, breeding. *Herpeton, Offenbach*.
- Wilson 2010 Wilson, J. 2010. Population viability and resource competition on North Brother Island: conservation implications for tuatara (*Sphenodon punctatus*) and Duvaucel's Gecko (*Hoplodactylus duvaucelii*). MSc. Thesis,
- Wilson 2012 Wilson, S. 2012. Australian lizards. A natural history. CSIRO Publishing, Melbourne.
- Yakin and Tok 2014 Yakin, B. Y. and Tok, C. V. 2014. Age estimation of *Anatololacerta anatolica* (Werner, 1902) in the vicinity of Canakkale by skeletochronology. *Turkish Journal of Zoology* 38: 81-85.
- Yakin et al. 2012 Yakin, B. Y., Guerkan, M., Hayretoglu, S. and Tok, C. V. 2012. Preliminary data on age estimation and body size of the dwarf lizard, *Parvilacerta parva* (Boulenger, 1887) (Reptilia: Lacertilia) from Aksehir, Konya (Turkey). *Ecologia Balkanica* 4: 81-85.
- Zaldivar Riveron et al. 2002 Zaldivar Riveron, A., Schmidt, W. and Heimes, P. 2002. *Elgaria parva*. Revision de las categorias en el proyecto de norma oficial mexicana (PROY-NOM-059-2000) para las especies de lagartijas de la familia Anguillidae (Reptilia). Museo de Zoologia "Alfonso L. Herrera", Departamento de Biologia, Facultad de Ciencias, Universidad Nacional Autonoma de Mexico.
- Ziegler et al. 2010 Ziegler, T., Rutz, N., Oberreuter, J. and Holst, S. 2010. First f2 breeding of the Quince monitor lizard *Varanus melinus* Bohme and Ziegler, 1997 at the Cologne Zoo Aquarium. *Biauwak*, 4: 82-92.
- Zug et al. 1982 Zug, G. R., Barber, M. M. and Dudley, J. C. 1982. Gonadal histology and reproduction in *Carlia bicarinata* (Scincidae, Sauria, Reptilia) of the Port Moresby Area, Papua New Guinea. *Herpetologica*, 38: 418-425.

source	reference
Calvete et al. 2007	Calvete, J. J., Escolano, J. and Sanz, L. 2007. Snake venomomics of Bitis species reveals large intragenus venom toxin composition variation: application to taxonomy of congeneric taxa. <i>Journal of Proteome Research</i> , 6: 2732-2745.
de la Vega-Perez et al. 2013	de la Vega-Perez, A. H. D. Jimenez-Arcos, V. H., Manriquez-Moran, N. L. and Mendez-de la Cruz, F. R. 2013. Conservatism of thermal preferences between parthenogenetic <i>Aspidoscelis cozumela</i> complex (Squamata: Teiidae) and their parental species. <i>Herpetological Journal</i> 23: 93-104.
Douglas et al. 2007	Douglas, M. E., Douglas, M. R., Schuett, G. W., Porras, L. W. and Thomason, B. L. 2007. Genealogical concordance between mitochondrial and nuclear dnas supports species recognition of the panamint rattlesnake ( <i>Crotalus mitchelli stephensi</i> ). <i>Copeia</i> , 2007: 920-932.
Edwards et al. 2013	Edwards, S., Branch, W. R., Vanhooydonck, B., Herrel, A., Measey, G. J. and Tolley, K. A. 2013. Taxonomic adjustments in the systematics of the southern African lacertid lizards (Sauria: Lacertidae). <i>Zootaxa</i> 3669: 101-114.
Fry et al. 2003	Fry, B. G., Wuster, W., Kini, R. M., Brusic, V., Khan, A., Venkataraman, D. and Rooney, A. P. 2003. Molecular evolution and phylogeny of elapid snake venom three-finger toxins. <i>Journal of Molecular Evolution</i> 57: 110-129.
Garcia-Porta and Ord 2013	Garcia-Porta, J. and Ord, T. J. 2013. Key innovations and island colonization as engines of evolutionary diversification: a comparative test with the Australasian diplocladoid geckos. <i>Journal of Evolutionary Biology</i>
Gardner et al. 2008	Gardner, M. G., Hugall, A. F., Donnellan, S. C., Hutchinson, M. N. and Foster, R. 2008. Molecular systematics of social skinks: phylogeny and taxonomy of the Egernia group (Reptilia: Scincidae). <i>Zoological Journal of the Linnean Society</i> , 154: 781-794.
Greer and Wilson 2001	Greer, A. E. and Wilson, G. D. F. 2001. Comments on the scincid lizard genus <i>Ophiomorus</i> with a cladistic analysis of the species. <i>Hamadryad</i> 26: 261-271.
Harvey et al. 2012	Harvey, M. B., Ugueto, G. N. and Gutberlet, R. L. 2012. Review of teiid morphology with a revised taxonomy and phylogeny of the Teiidae (Lepidosauria: Squamata). <i>Zootaxa</i> 3459: 1-156.
Kay and Keogh 2012	Kay, G. M. and Keogh, J. S. 2012. Molecular phylogeny and morphological revision of the <i>Ctenotus labillardieri</i> (Reptilia: Squamata: Scincidae) species group and a new species of immediate conservation concern in the southwestern Australian biodiversity hotspot. <i>Zootaxa</i> 3390: 1-18.
Kelly et al. 2008	Kelly, C. M. R., Barker, N. P., Villet, M. H., Broadley, D. G. and Branch, W. R. 2008. The snake family Psammophidae (Reptilia: Serpentes): Phylogenetics and species delimitation in the African sand snakes (Psammophis Boie, 1825) and allied genera. <i>Molecular Phylogenetics and Evolution</i> 47: 1045-1060.
Kluge 1964	Kluge, A. G. 1964. A revision of the South American gekkonid lizard genus <i>Homonota</i> Gray. <i>American Museum Novitates</i> 2193: 1-42.
Kohler et al. 2000	Kohler, G., Schroth, W. and Streit, B. 2000. Systematics of the <i>Ctenosaura</i> group of lizards (Reptilia: Sauria: Iguanidae). <i>Amphibia-Reptilia</i> 21: 177-191.
Leache and Reeder 2002	Leache, A. D. and Reeder, T. W. 2002. Molecular systematics of the Eastern Fence Lizard ( <i>Sceloporus undulatus</i> ): a comparison of parsimony, likelihood, and Bayesian approaches. <i>Systematic Biology</i> 51: 44-68.
Leache et al. 2009	Leache, A. D., Chong, R. A., Papenfuss, T. J., Wagner, P., Bohme, W., Schmitz, A., Rodel, M.-O., Lebreton, M., Ineich, I., Chirio, L., Bauer, A. M., Eniang, E. A. and Baha El Din, S. 2009. Phylogeny of the genus <i>Agama</i> based on mitochondrial DNA sequence data. <i>Bonner Zoologische Beiträge</i> 56: 273-278.
Martinez-Mendez and Mendez-de la Cruz 2007	Martinez-Mendez, N. and Mendez-de la Cruz, F. R. 2007. Molecular phylogeny of the <i>Sceloporus torquatus</i> species-group (Squamata: Phrynosomatidae). <i>Zootaxa</i> 1609: 53-68.
Metallinou et al. 2013	Metallinou, M., Arnold, E. N., Crochet, P. A., Geniez, P. H., Brito, J. C., Lymberakis, P., Baha el Din, S., Sindaco, R., Robinson, M. and Carranza, S. 2012. Conquering the Sahara and Arabian deserts: systematics and biogeography of <i>Stenodactylus</i> geckos (Reptilia: Gekkonidae). <i>BMC Evolutionary Biology</i> 12: 258.
Morando et al. 2013	Morando, M., Avila, L. J., Perez, C. H. F., Hawkins, M. and Sites, J. W. 2013. A molecular phylogeny of the lizard genus <i>Phymaturus</i> (Squamata, Liolaemini): Implications for species diversity and historical biogeography of southern South America. <i>Molecular Phylogenetics and Evolution</i> 66: 694-714.
Nazarov et al. 2013	Nazarov, R., Melnikov, D. and Melnikova, E. 2013. Three new species of <i>Pyodactylus</i> (Reptilia: Squamata; Phyllodactylidae) from the Middle East. <i>Russian Journal of Herpetology</i> 20: 147-162.
Nicholson et al. 2005	Nicholson, K. E., Glor, R. E., Kolbe, J. J., Larson, A., Hedges, S. B. and Losos, J. B. 2005. Mainland colonization by island lizards. <i>Journal of Biogeography</i> 32: 929-938.
Nielsen et al. 2011	Nielsen, S. V., Bauer, A. M., Jackman, T. R., Hitchmough, R. A. and Daugherty, C. H. 2011. New Zealand geckos (Diplodactylidae): Cryptic diversity in a post-Gondwanan lineage with trans-Tasman affinities. <i>Molecular Phylogenetics and Evolution</i> 59: 1-22.
Poe 2004	Poe, S. 2004. Phylogeny of anoles. <i>Herpetological Monographs</i> 18: 37-89.
Rato et al. 2012	Rato, C., Carranza, S. and Harris, D. J. 2012. Evolutionary history of the genus <i>Tarentola</i> (Gekkota: Phyllodactylidae) from the Mediterranean Basin, estimated using multilocus sequence data. <i>BMC Evolutionary Biology</i> 12: 14.
Reeder et al. 2002	Reeder, T. W., Cole, C. J. and Dessauer, H. C. 2002. Phylogenetic relationships of whiptail lizards of the genus <i>Cnemidophorus</i> (Squamata: Teiidae): A test of monophyly, reevaluation of karyotypic evolution, and review of hybrid origins. <i>American Museum Novitates</i> 3365: 1-61.
Shoo et al. 2008	Shoo, L. P., Rose, R., Dougherty, P., Austin, J. J. and Melville, J. 2008. Diversification patterns of pebble-mimic dragons are consistent with historical disruption of important habitat corridors in arid Australia. <i>Molecular Phylogenetics and Evolution</i> 48: 528-542.
Solovyeva et al. 2011	Solovyeva, A. N., Poyarkov, N. A., Dunaev, E. A., Dusebeayeva, T. N. and Bannikova, A. A. 2011. Molecular differentiation and taxonomy of the sunwather toad headed <i>agama</i> species complex <i>Phrynocephalus</i> superspecies <i>helioscopus</i> (Pallas 1771) (Reptilia: Agamidae). <i>Russian Journal of Genetics</i> , 47: 842-856.
Stanley et al. 2011	Stanley, E. L., Baue, A. M., Jackman, T. R., Branch, W. R. and Mouton, P. Le F. N. 2011. Between a rock and a hard polytomy: Rapid radiation in the rupicolous girdled lizards (Squamata: Cordylidae). <i>Molecular Phylogenetics and Evolution</i> 58: 53-70.
Vieira et al. 2005	Vieira, G. H. C., Colli, G. R. and Bao, S. N. 2005. Phylogenetic relationships of corytophanid lizards (Iguania, Squamata, Reptilia) based on partitioned and total evidence analyses of sperm morphology, gross morphology, and DNA data. <i>Zoologica Scripta</i> , 34: 605-625.
Warne and Charnov 2008	Warne, R. W. and Charnov, E. L. 2008. Reproductive allometry and the size-number trade-off for lizards. <i>American Naturalist</i> 172: E80-E98.
Wood et al. 2012	Wood, P. L., Heinicke, M. P., Jackman, T. R. and Bauer, A. M. 2012. Phylogeny of bent-toed geckos (Cyrtodactylus) reveals a west to east pattern of diversification. <i>Molecular Phylogenetics and Evolution</i> 65: 992-1003.
Kratochvil and Frynta 2002	Kratochvil, L. and Frynta, D. 2002. Body size, male combat and the evolution of sexual dimorphism in eublepharid geckos (Squamata: Eublepharidae). <i>Biological Journal of the Linnean Society</i> 76: 303-314.
Nagarajan et al. 2011	Nagarajan, D., Karthik, G., Duraivelu, R. and Santhalingam, K. 2011. Phylogenetic analysis and homology based inhibitor design for short neurotoxins of forest cobra. <i>Interna Schatti, B. and Utiger, U. 2001. Hemerophis, a new genus for <i>Zamenis socotrae</i> Günther, and a contribution to the phylogeny of Old World racers, whip snakes, and related genera (Reptilia: Squamata: Colubrinae). <i>Revue Suisse De Zoologie</i> 108: 919-948.</i>
Schatti and Utiger 2001	
Stuart-Fox and Owens 2003	Stuart-Fox, D. M. and Owens, I. P. F. 2003. Species-richness is agamid lizards: chance, body size, ecology or sexual selection? <i>Journal of Evolutionary Biology</i> 16: 659-669.
Liggins et al. 2008	Liggins, L., Chapple, D. G., Daugherty, C. H. and Ritchie, P. A. 2008. A SINE of restricted gene flow across the Alpine Fault: phylogeography of the New Zealand common s
Pyron and Burbrink 2014	Pyron, R. A. and Burbrink, F. T. 2014. Early origin of viviparity and multiple reversions to oviparity in squamate reptiles. <i>Ecology Letters</i> , 17: 13-21.
Rastegar-Pouyani et al. 2013	Rastegar-Pouyani, E., Avci, A., Kumlutas, Y., Ilgaz, C. and Hosseini Yousefkhani, S. S. 2013. New country record and range extension of <i>Eremias suphani</i> Basoglu & Hell
Reed and Shine 2002	Reed, R. N. and Shine, R. 2002. Lying in wait for extinction: ecological correlates of conservation status among Australian elapid snakes. <i>Conservation Biology</i> , 16: 451-461.
Scott et al. 2004	Scott, I. A. W., Keogh, S. and Whiting, M. J. 2004. Shifting sands and shifty lizards: molecular phylogeny and biogeography of African flat lizards (Platysaurus). <i>Molecular P</i>
Sindaco et al. 2012	Sindaco, R., Metallinou, M., Pupin, F., Fasola, M. and Carranza, S. 2012. Forgotten in the ocean: systematics, biogeography and evolution of the <i>Trachylepis</i> skinks of the Soc
Wagner et al. 2011	Wagner, P., Melville, J., Wilms, T. M. and Schmitz, A. 2011. Opening a box of cryptic taxa – the first review of the North African desert lizards in the <i>Trapelus mutabilis</i>
Frost et al. 2001	Merrem, 1820 complex (Squamata: Agamidae) with descriptions of new taxa. <i>Zoological Journal of the Linnean Society</i> 163: 884-912.
Siler et al. 2014	Frost, D. R., Etheridge, R., Janies, D. and Titus, T. A. 2001. Total evidence, sequence alignment, evolution of <i>Polychrotid</i> lizards, and a reclassification of the <i>Iguania</i> (Squam
Brown et al. 2012	Siler, C. D., Lira-Noriega, A. and Brown, R. M. 2014. Conservation genetics of Australasian sailfin lizards: Flagship species threatened by coastal development and insufficient protected area coverage. <i>Biological Conservation</i> 169: 100-108.
Rocha et al. 2010	Brown, R. M., Siler, C. D., Das, I. and Min, P. Y. 2012. Testing the phylogenetic affinities of Southeast Asia's rarest geckos: Flap-legged geckos ( <i>Luperosaurus</i> ), Flying gecko
Ziegler et al. 2007	Rocha, S., Rosler, H., Gehring, P.-S., Glaw, F., Posada, D., Harris, D. J. and Vences, M. 2010. Phylogenetic systematics of day geckos, genus <i>Phelsuma</i> , based on molecular ar
McVay and Cartens 2013	Ziegler, T., Schmitz, A., Koch, A. and Bohme, W. 2007. A review of the subgenus <i>Euprepisaurus</i> of <i>Varanus</i> (Squamata: Varanidae): morphological and molecular phylogen
McLachlan 1981	McVay, J. D. and Cartens, B. 2013. Testing monophyly without well-supported gene trees: Evidence from multi-locus nuclear data conflicts with existing taxonomy in the sna
Rivera et al. 2011	McLachlan G R 1981. Taxonomy of <i>Agama hispida</i> (Sauria: Agamidae) in southern Africa. <i>Cimbebasia Ser. A</i> 5(6): 219-227
	Rivera, P. C., Di Cola, V., Martinez, J. J., Gardenal, C. N. and Chiaraviglio, M. 2011. Species delimitation in the continental forms of the genus <i>Epicrates</i> (Serpentes, Boidae)

- Richmond, J. Q., Stanford, J. W., Wood, D. A. and Fisher, R. N. 2012. An evolutionary approach to the biological management of invasive Brown Treesnakes (*Boiga irregularis*) on Guam. United States Geological Survey, Special Report. SERDP project number: 10 SISEED01-007 (SI-1733)
- Stumpel, N. and Joger, U. 2009. Recent advances in phylogeny and taxonomy of Near and Middle Eastern Vipers – an update. *ZooKeys* 31: 179-191.
- Tamar 2014 Taxonomy, phylogeny, and phylogeography of the reptile genera *Acanthodactylus* Fitzinger, 1834 and *Phoenicolacerta* (Arnold, Arribas & Carranza, 2007) (Sauria: Lacertidae). PhD dissertation, Tel Aviv University.
- Bauer, A. M., Barts, M. and Hulbert, F. 2006. A new species of the *Pachydactylus weberi* group (Reptilia: Squamata: Gekkonidae) from the Orange River, with comments on its natural history. *Salamandra* 42: 83-92.
- Bauer, A. M., Masroor, R., Titus-Mcquillan, J., Heinicke, M. P., Daza, J. D. and Jackman, T. R. 2013. A preliminary phylogeny of the Palearctic naked-toed geckos (Reptilia: Wagner, P. and Bauer, A. M. 2011. A new dwarf Agama (Sauria: Agamidae) from Ethiopia. *Breviora*, 527: 1-19.
- Graham R., R., Niemiller, M. L. and Revell, L. J. 2014. Toward a tree-of-life for the boas and pythons: Multilocus species-level phylogeny with unprecedented taxon sampling
- Hollis, J. L. 2006. Phylogenetics of the genus *Chironius* Fitzinger, 1826 (Serpentes, Colubridae) based on morphology. *Herpetologica* 62:435-45

OLS regression on log(10) transformed data

sub-order	Family	intercept	slope
lizards	Carphodactylidae	-3.445	2.353
lizards	Diplodactylidae	-4.804	3.057
lizards	Phyllodactylidae	-4.482	2.945
lizards	Tropiduridae <i>S. strictu</i>	-3.884	2.719
snakes	Colubridae	-5.548	2.539
snakes	Dipsadidae	-4.715	2.278
snakes	Natricidae	-7.456	3.303
snakes	Pythonidae	-5.216	2.652
snakes	Typhlopidae	-8.012	3.693

sexed sizes preferred to non-sexed to avoid sexual bias

when multiple sources exist, those which reports both SVL or TL and mass were preferred

when multiple sources exist, the one with the largest sample size per species was preferred - or the one less likely to SVL, Total length and mass means were preferred to range midpoints

All equations for snakes refer to total length, all equations for lizards are based on SVLs

) contain juveniles

Family	Species	Sex	n	SVL (mm)	mass (g)	source	reference
Carphodactylidae	<i>Carphodactylus laevis</i>	unsexed	not reported	110.24	28.52	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Nephrurus asper</i>	unsexed	not reported	91.84	18.42	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Nephrurus laevis</i>	unsexed	not reported	59.79	4.06	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Nephrurus levis</i>	unsexed	not reported	68.75	8.76	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Nephrurus stellatus</i>		10 (mass)	474.4	13.1	Withers et al. 2000 (mass), How et al.	How, R. A., Schmitt, L. H. and Suyanto, A. Geographical variation in the morphology of four snake species from the Lesser Sunda Islands, eastern Indonesia. <i>Biological Journal of the Linnean Society</i> 59: 439-456.
Carphodactylidae	<i>Nephrurus vertebralis</i>	unsexed	not reported	67.6	8.38	Costa et al. 2008	Costa, G. C., Mesquita, D. O., Colli, G. R. and Vitt, L. J. 2008. Niche expansion and the niche variation hypothesis: does the degree of individual variation increase in depauperate assemblages? <i>American Naturalist</i> 172: 868-877.
Carphodactylidae	<i>Phyllurus amnicola</i>	unsexed	not reported	92	13.42	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Phyllurus championae</i>	female	1	68.7	6.2	Couper et al. 2000	Couper, P. J., Schneider, C. J., Hoskin, C. J. and Covaevich, J. A. 2000. Australian leaf-tailed geckos: phylogeny, a new genus, two new species and other new data. <i>Memoirs of the Queensland Museum</i> 45: 253-265.
Carphodactylidae	<i>Phyllurus nephtys</i>	unsexed	not reported	87.17	11.56	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Phyllurus ossa</i>	unsexed	not reported	77.29	8.36	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Phyllurus platurus</i>	female	67 (SVL)/	8 86.2	14.3	Doughty and Shine 1995	Doughty, P. and Shine, R. 1995. Life in two dimensions: Natural history of the southern leaf-tailed gecko, <i>Phyllurus platurus</i> . <i>Herpetologica</i> 51: 193-201.
Carphodactylidae	<i>Saluarius cornutus</i>	unsexed	not reported	134.27	28.52	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Carphodactylidae	<i>Underwoodisaurus milii</i>	male	38	73.7	8.8	Shah 2002	Shah, B. 2002. Why do thick-tailed geckos ( <i>Underwoodisaurus milii</i> ) aggregate? Honors thesis, University of Sydney.
Diplodactylidae	<i>Amalasia lesueurii</i>	unsexed	38	43.0	2.3	Schlesinger and Shine 1994	Schlesinger, C. A. and Shine, R. 1994. Selection of diurnal retreat sites by the nocturnal gekkonid lizard <i>Oedura lesueurii</i> . <i>Herpetologica</i> 50: 156-163.
Diplodactylidae	<i>Amalasia rhombifer</i>	unsexed	not reported	56.3	3.0	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Crenadactylus ocellatus</i>	female	1	35.0	0.8	Bush 1992	Bush, B. 1992. Some records of reproduction in captive lizards and snakes. <i>Herpetofauna</i> 22: 26-30.
Diplodactylidae	<i>Dactylocnemis pacificus</i>	male	21	81.0	18.5	Parrish and Gill 2003	Parrish, G. R. and Gill, B. J. 2003. Natural history of the lizards of the Three Kings Islands, New Zealand. <i>New Zealand Journal of Zoology</i> 30: 205-220.
Diplodactylidae	<i>Diplodactylus conspiciellus</i>	unsexed	not reported	53.8	3.2	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Diplodactylus granariensis</i>	unsexed	not reported	57.7	5.0	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Diplodactylus ornatus</i>	unsexed	mass: 2; SV	47.1	2.2	Storr 1979	Storr, G. M. 1979. The <i>Diplodactylus vittatus</i> complex. Records of the Western Australian Museum 7: 391-402.
Diplodactylidae	<i>Diplodactylus polyophthalmus</i>	unsexed	mass: 6; SV	47.0	3.1	Withers et al. 2000, SVL: Boulenger	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: Boulenger, G. A. 1885. Catalogue of the Lizards in the British Museum (Nat. Hist.). I. Geckonidae, Eublepharidae, Uroplatae, Pygopodidae, Agamidae. Trustees of the British Museum, London.
Diplodactylidae	<i>Diplodactylus pulcher</i>	female	1	55.0	2.5	Bush 1992	Bush, B. 1992. Some records of reproduction in captive lizards and snakes. <i>Herpetofauna</i> 22: 26-30.
Diplodactylidae	<i>Diplodactylus tessellatus</i>	unsexed	not reported	47.3	2.2	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Hesperoedura reticulata</i>	unsexed	mass: 1; SV	60.7	2.7	Withers et al. 2000, SVL: Werner	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: Werner, Y. L. and Seifan, T. 2006. Eye size in geckos: asymmetry, allometry, sexual dimorphism, and behavioral correlates. <i>Journal of Morphology</i> 267: 1486-1500.
Diplodactylidae	<i>Hoplocladactylus davuacellii</i>	unsexed	33	144.1	81.4	Whitaker 1968	Whitaker, A. H. 1968. The lizards of the Poor Knights Islands, New Zealand. <i>New Zealand Journal of Science</i> 11: 623-651.
Diplodactylidae	<i>Lucasium albuguttatum</i>	unsexed	mass: 11; S	44.9	2.9	Withers et al. 2000, SVL: Chapman	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: Chapman, A. and Dell, J. 1985. Biology and zoogeography of the amphibians and reptiles of the Western Australian wheatbelt. Records of the Western Australian Museum 12: 1-46.
Diplodactylidae	<i>Lucasium damaeum</i>	unsexed	not reported	57.3	2.5	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Lucasium immaculatum</i>	unsexed	not reported	51.7	2.7	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Lucasium squarrosom</i>	unsexed	mass: 27; S	53.0	2.0	Withers et al. 2000, SVL: Chapman	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: Chapman, A. and Dell, J. 1985. Biology and zoogeography of the amphibians and reptiles of the Western Australian wheatbelt. Records of the Western Australian Museum 12: 1-46.
Diplodactylidae	<i>Lucasium steindachneri</i>	unsexed	not reported	55.7	2.7	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Lucasium stenodactylum</i>	unsexed	not reported	46.8	2.3	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Mokopirirakau cryptozoicus</i>	unsexed	5	86.5	17.3	Jewell and Leschen 2004	Jewell, T. R. and Leschen, R. A. B. 2004. A new species of <i>Hoplocladactylus</i> (Reptilia: Pygopodidae) from the Takitimu Mountains, South Island, New Zealand. <i>Zootaxa</i> 792: 1-11.
Diplodactylidae	<i>Nautilius manukanus</i>	female	9	75.0	8.5	Holmes 2004	Holmes, M. 2004. The female reproductive cycle of a viviparous skink, <i>Oligosoma macmurtrei</i> , in a subalpine environment. <i>Herpetologica</i> 60: 1-11.
Diplodactylidae	<i>Oedura castelnaui</i>	unsexed	not reported	92.1	15.4	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Oedura coggeri</i>	unsexed	not reported	79.0	7.3	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Oedura marmorata</i>	unsexed	not reported	83.9	12.3	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Oedura monilis</i>	unsexed	not reported	98.1	16.0	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Oedura tryoni</i>	female	3 (mass)	80.0	11.0	Bustard 1967, SVL: Dunham et al.	Dunham, A. E., Miles, D. B. and Reznick, D. N. 1988. Life history patterns in squamate reptiles. Pages 441-522 in C. Gans and R. B. Huey, eds. <i>Biology of the Reptilia</i> . Vol. 16. Ecology B. Defense and life history. Liss, New York.
Diplodactylidae	<i>Pseudohoplocladactylus australis</i>	unsexed	not reported	95.0	24.0	Brown 2012	Brown, D. 2012. A guide to Australian dragons in captivity. Reptile Publications, Burleigh.
Diplodactylidae	<i>Rhynchoedura ornata</i>	unsexed	not reported	49.4	1.9	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Strophurus assimilis</i>	female	1	62.0	4.1	Bush 1992	Bush, B. 1992. Some records of reproduction in captive lizards and snakes. <i>Herpetofauna</i> 22: 26-30.
Diplodactylidae	<i>Strophurus ciliaris</i>	unsexed	mass: 8; SV	66.8	7.7	Withers et al. 2000, SVL: Storr	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: Storr, G. M. 1988. The <i>Diplodactylus ciliaris</i> complex (Lacertilia: Gekkonidae) in Western Australia. Records of the Western Australian Museum 14: 121-133.
Diplodactylidae	<i>Strophurus elderi</i>	unsexed	not reported	38.7	1.7	Costa et al. 2008	Costa, G. C., Mesquita, D. O., Colli, G. R. and Vitt, L. J. 2008. Niche expansion and the niche variation hypothesis: does the degree of individual variation increase in depauperate assemblages? <i>American Naturalist</i> 172: 868-877.
Diplodactylidae	<i>Strophurus intermedius</i>	unsexed	mass: 3; SV	61.4	6.7	Warburg 1966, SVL: How et al.	Warburg, M. R. 1966. On the water economy of several Australian geckos, agamids, and skinks. <i>Copeia</i> , 1966: 230-235.
Diplodactylidae	<i>Strophurus krisalys</i>	unsexed	not reported	70.3	5.3	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Strophurus michaelsoni</i>	unsexed	mass: 2; SV	51.9	2.3	Withers et al. 2000, SVL: How et al.	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of <i>Diplodactylus</i> gecko in western Australia. <i>Herpetologica</i> 42: 471-482.
Diplodactylidae	<i>Strophurus spinigerus</i>	unsexed	mass: 42; S	78.3	4.8	Withers et al. 2000, SVL: How et al.	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of <i>Diplodactylus</i> gecko in western Australia. <i>Herpetologica</i> 42: 471-482.
Diplodactylidae	<i>Strophurus strophurus</i>	unsexed	mass: 34; S	71.8	6.0	Withers et al. 2000, SVL: How et al.	Withers, M. J., Shine, R., and Vitt, L. J. 2000. SVL: How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of <i>Diplodactylus</i> gecko in western Australia. <i>Herpetologica</i> 42: 471-482.
Diplodactylidae	<i>Strophurus taeniatius</i>	unsexed	not reported	43.6	1.2	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Strophurus williamsi</i>	unsexed	not reported	58.5	3.1	Vucko 2008	Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactyline and diplodactyline geckos. MSc thesis, James Cook University.
Diplodactylidae	<i>Toropuku stephensi</i>	male	23	74.0	9.6	Hare 2005	Hare, K. M. 2005. The paradox of nocturnality in lizards. PhD Dissertation, Victoria University of Wellington.
Diplodactylidae	<i>Woodworthia maculatus</i>	female	not reported	74.0	10.2	Cree and Hare 2010	Cree, A. and Hare, K. M. 2010. Equal thermal opportunity does not result in equal gestation length in a cool-climate skink and gecko. <i>Herpetological Conservation and Biology</i> 5: 271-282.
Phyllodactylidae	<i>Asaccus montanus</i>	male	1	36.4	1.0	Gardner 1994	Gardner, A. S. 1994. A new species of <i>Asaccus</i> (Gekkonidae) from the mountains of northern Oman. <i>Journal of Herpetology</i> , 28: 141-145.
Phyllodactylidae	<i>Gymnodactylus darwini</i>	unsexed	3	46.1	2.7	Almeida-Gomes et al. 2008	Almeida-Gomes, M., Vrcibradic, D., Siqueira, C. C., Kiefer, M. C., Klaion, T., Almeida-Santos, P., Nascimento, D., Ariani, C. V., Borges-Junior, V. N., Freitas-Filho, R. F., van Sluys, M. and Rocha, C. F. 2008. Herpetofauna of an Atlantic rainforest area (Morro Sao Joao) in Rio de Janeiro State, Brazil. <i>Anais da Academia Brasileira de Ciéncias</i> , 80: 291-300.
Phyllodactylidae	<i>Gymnodactylus geckoides</i>	male	73	41.3	1.9	Vitt 1995	Vitt, L. J. 1995. The ecology of tropical lizards in the caatinga of northeast Brazil. <i>Occasional Papers of the Oklahoma Museum of Natural History</i> 1: 1-29.
Phyllodactylidae	<i>Haemodracon riebeckii</i>	male	2	131.5	59.8	Rosler and Wrانik 2007	Rosler, H. and Wrانik, W. 2007. Remarks on biology, keeping and breeding the Socotra Giant Gecko, <i>Haemodracon riebeckii</i> (Peters, 1882). <i>Zoologische Garten</i> 77: 59-83.
Phyllodactylidae	<i>Homonota darwini</i>	unsexed	36	48.6	3.0	Weeks and Espinoza 2013	Weeks, D. M. and Espinoza, R. E. 2013. Lizards on ice: Comparative thermal tolerances of the world's southernmost gecko. <i>Journal of Thermal Biology</i> 38: 225-232.
Phyllodactylidae	<i>Homonota gaudichaudii</i>	male	8 (mass)/10	31.1	0.8	Marquet et al. 1990	Marquet, P. A., Bozinovic, F., Medel, R. G., Werner, Y. L. and Jaksic, F. M. 1990. Ecology of <i>Garthia gaudichaudii</i> , a gecko endemic to the semiarid region of Chile. <i>Journal of Herpetology</i> , 24: 431-434.
Phyllodactylidae	<i>Phyllodactylus lanei</i>	male	5	60.6	6.6	Franco and de la Torre 1990	Franco, R. C. and de la Torre, G. G. 1990. Reptiles de la Isla La Pena, Nayarit, Mexico. <i>Anales del Instituto de Biología, Universidad Nacional Autónoma de México, serie Zoología</i> 61: 175-187.
Phyllodactylidae	<i>Phyllipezus pollicaris</i>	male	30	75.2	10.5	Vitt 1995	Vitt, L. J. 1995. The ecology of tropical lizards in the caatinga of northeast Brazil. <i>Occasional Papers of the Oklahoma Museum of Natural History</i> 1: 1-29.
Phyllodactylidae	<i>Pyodactylus guttatus</i>	male	8	72.7	12.1	Meiri, own measurements	Shai Meiri, own measurements
Phyllodactylidae	<i>Pyodactylus hasselquistii</i>	male	3	87.7	10.7	TAUM	based on specimens in the Natural History Museum. Tel Aviv University
Phyllodactylidae	<i>Pyodactylus oudrii</i>	unsexed	not reported	53.5	5.3	Mateo and Cuadrado 2012	Mateo, J. A. and Cuadrado, M. 2012. Communal nesting and parental care in Oudri's fan-footed gecko ( <i>Pyodactylus oudrii</i> ): field and experimental evidence of an adaptive behavior. <i>Journal of Herpetology</i> , 46: 209-212.
Phyllodactylidae	<i>Pyodactylus puiusexi</i>	male	3	68.1	11.2	Meiri, own measurements	Shai Meiri, own measurements
Phyllodactylidae	<i>Tarentola annularis</i>	unsexed	4	72.5	8.1	TAUM	based on specimens in the Natural History Museum. Tel Aviv University
Phyllodactylidae	<i>Tarentola boettgeri</i>	unsexed	not reported	56.5	4.8	Brown 1996 (mass), Salvador and Brown	Salvador, A. and Brown, R. P. 2007. <i>Perenquén de Boettger – Tarentola boettgeri Steindachner, 1891</i> . Version: 29-05-2007. Enciclopedia virtual de los vertebrados Españoles.
Phyllodactylidae	<i>Tarentola delalandii</i>	male	1	84.0	18.5	Salvador 2009	Salvador, A. 2009. Lagartija de las Pitiusas – <i>Podacris pitiusensis</i> (Boscá, 1883). Version 3-09-2009. Enciclopedia virtual de los vertebrados Españoles.
Phyllodactylidae	<i>Tarentola mauritanica</i>	unsexed	4	65.8	7.5	TAUM	based on specimens in the Natural History Museum. Tel Aviv University
Phyllodactylidae	<i>Thecadactylus rapicauda</i>	unsexed	28	98.2	21.9	Vitt 2000	Vitt, L. J. 2000. Ecological consequences of body size in neonatal and small-bodied lizards in the neotropics. <i>Herpetological Monographs</i> 14: 388-400.



Tropiduridae	<i>Eurolophosaurus nanuzae</i>	female	58	47.8	4.4	Galdino and Van Sluys 2011	Galdino, C. A. B. and Van Sluys, M. 2011. Clutch size in the small-sized lizard <i>Eurolophosaurus nanuzae</i> : does it vary along the geographic distribution of the species? <i>Iheringia, Serie Zoologica</i> , 101: 61-64.
Tropiduridae	<i>Microlophus albemarlensis</i>	unsexed	1	88	20.2	Blob 2000	Blob, R. W. 2000. Interspecific scaling of the hindlimb skeleton in lizards, crocodylians, felids and canids: does limb bone shape correlate with limb posture? <i>Journal of Zoology</i> 250: 507-531.
Tropiduridae	<i>Microlophus occipitalis</i>	male	512	63	9.4	Watkins 1996	Watkins, G. G. 1996. Proximate causes of sexual size dimorphism in the iguanian lizard <i>Microlophus occipitalis</i> . <i>Ecology</i> , 77: 1473-1482.
Tropiduridae	<i>Microlophus quadrivittatus</i>	male	103	102.3	42	Goldberg and Rodriguez 1986	Goldberg, S. R. and Rodriguez, E. 1986. Reproductive cycles of two iguanid lizards from northern Chile, <i>Tropidurus quadrivittatus</i> and <i>Tropidurus theresioides</i> . <i>Journal of Arid Environments</i> 10: 147-151.
Tropiduridae	<i>Microlophus theresioides</i>	male	49	78.3	24.9	Goldberg and Rodriguez 1986	Goldberg, S. R. and Rodriguez, E. 1986. Reproductive cycles of two iguanid lizards from northern Chile, <i>Tropidurus quadrivittatus</i> and <i>Tropidurus theresioides</i> . <i>Journal of Arid Environments</i> 10: 147-151.
Tropiduridae	<i>Plica plica</i>	male	16	139.8	79.39	Vitt 1991	Vitt, L. J. 1991. Ecology and life history of the scansorial arboreal lizard <i>Plica plica</i> (Iguanidae) in Amazonian Brazil. <i>Canadian Journal of Zoology</i> 69: 504-511.
Tropiduridae	<i>Plica umbra</i>	male	22	86.8	17.2	Vitt et al. 1997	Vitt, L. J., Zani, P. A. and Avila-Pires, T. C. S. 1997. Ecology of the arboreal tropidurid lizard <i>Tropidurus</i> (=Plica) umbra in the Amazon region. <i>Canadian Journal of Zoology</i> 75: 1876-1882.
Tropiduridae	<i>Stenocercus caducus</i>	male	25	67.92	10.68	Avila et al. 2008	Avila, L. J., Morando, M. and Sites, J. W. 2008. New species of the iguanian lizard genus <i>Liolaemus</i> (Squamata, Iguania, Liolaemini) from central Patagonia, Argentina. <i>Journal of Herpetology</i> , 42: 186-196.
Tropiduridae	<i>Stenocercus roseiventris</i>	male	1	95	43	Duellman 2005	Duellman, W. E. 2005. <i>Cusco Amazónico: The lives of amphibians and reptiles in an Amazonian rainforest</i> . Cornell University Press, Ithaca.
Tropiduridae	<i>Strobilurus torquatus</i>	male	7	92.7	28.2	Rodrigues et al. 1989	Rodrigues, M. T., Yionenaga-Yassuda, Y. and Kasahara, S. 1989. Notes on the ecology and karyotypic description of <i>Strobilurus torquatus</i> (Sauria, Iguanidae). <i>Brazilian Journal of Genetics</i> 12: 747-759.
Tropiduridae	<i>Tropidurus etheridgei</i>	female	10	66.67	21.3	Cruz 1997	Cruz, F. B. 1997. Reproductive activity in <i>Tropidurus etheridgei</i> in the semiarid Chaco of Salta, Argentina. <i>Journal of Herpetology</i> 31: 444-450.
Tropiduridae	<i>Tropidurus hispidus</i>	unsexed	82	82.5	22.09	Vitt and Zani 1998	Vitt, L. J. and Zani, P. A. 1998. Ecological relationships among sympatric lizards in a transitional forest in the northern Amazon of Brazil. <i>Journal of Tropical Ecology</i> 14: 63-86.
Tropiduridae	<i>Tropidurus itambere</i>	male	110	61.94	9.25	Faria and Araujo 2004	Faria, R. G. and Araujo, A. F. B. 2004. Sintopy of two <i>Tropidurus</i> lizard species (Squamata: Tropiduridae) in a rocky cerrado habitat in central Brazil. <i>Brazilian Journal of Biology</i> 4: 775-786.
Tropiduridae	<i>Tropidurus montanus</i>	unsexed	65	44.9	4.32	Vitt 1991	Vitt, L. J. 1991. An introduction to the ecology of cerrado lizards. <i>Journal of Herpetology</i> , 25: 79-90.
Tropiduridae	<i>Tropidurus oreadicus</i>	male	83	76.07	15.82	Faria and Araujo 2004	Faria, R. G. and Araujo, A. F. B. 2004. Sintopy of two <i>Tropidurus</i> lizard species (Squamata: Tropiduridae) in a rocky cerrado habitat in central Brazil. <i>Brazilian Journal of Biology</i> 4: 775-786.
Tropiduridae	<i>Tropidurus psammonastes</i>	unsexed	not reported	75.65	15	Lima and da Rocha 2006	Lima, A. F. B. and da Rocha, P. L. B. 2006. Ontogenetic change in plant consumption by <i>Tropidurus psammonastes</i> , Rodrigues, Kasahara & Yonenaga-Yassuda, 1988 (Tropiduridae), a lizard endemic to the dunes of the São Francisco River, Bahia, Brazil. <i>Revista Brasileira de Zoológicas</i> 8: 67-75.
Tropiduridae	<i>Tropidurus semitaeniatus</i>	male	185	82.5	16.5	Vitt 1995	Vitt, L. J. 1995. The ecology of tropical lizards in the caatinga of northeast Brazil. <i>Occasional Papers of the Oklahoma Museum of Natural History</i> 1: 1-29.
Tropiduridae	<i>Tropidurus spinulosus</i>	unsexed	not reported	83.15	15.4	Costa et al. 2008	Costa, G. C., Vitt, L. G., Pianka, E. R., Mesquita, D. O. and Colli, G. R. 2008. Optimal foraging constrains macroecological patterns: body size and dietary niche breadth in lizards. <i>Global Ecology and Biogeography</i> 17: 670-677.
Tropiduridae	<i>Tropidurus torquatus</i>	male	283	100	47.9	Vitt and Goldberg 1983	Vitt, L. J. and Goldberg, S. R. 1983. Reproductive ecology of two tropical iguanid lizards: <i>Tropidurus torquatus</i> and <i>Platynotus semitaeniatus</i> . <i>Copeia</i> , 1983: 131-141.
Tropiduridae	<i>Uracentron flaviceps</i>	male	11	107.27	38.84	Vitt and Zani 1996	Vitt, L. J. and Zani, P. A. 1996. Ecology of the elusive tropical lizard <i>tropidurus</i> [=Uracentron] flaviceps (Tropiduridae) in lowland rain forest of Ecuador. <i>Herpetologica</i> , 52: 121-132.
Tropiduridae	<i>Uranoscodon superciliosus</i>	unsexed	18	100.7	47.4	Vitt and Zani 1998	Vitt, L. J. and Zani, P. A. 1998. Ecological relationships among sympatric lizards in a transitional forest in the northern Amazon of Brazil. <i>Journal of Tropical Ecology</i> 14: 63-86.
Family	<i>Species</i>						2nd reference & remarks
Carphodactylidae	<i>Carphodactylus laevis</i>						
Carphodactylidae	<i>Nephrurus asper</i>						
Carphodactylidae	<i>Nephrurus laevisimus</i>						
Carphodactylidae	<i>Nephrurus levis</i>						
Carphodactylidae	<i>Nephrurus stellatus</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Carphodactylidae	<i>Nephrurus vertebralis</i>						
Carphodactylidae	<i>Phyllurus amnicola</i>						
Carphodactylidae	<i>Phyllurus championae</i>						
Carphodactylidae	<i>Phyllurus nephtys</i>						
Carphodactylidae	<i>Phyllurus ossa</i>						
Carphodactylidae	<i>Phyllurus platurus</i>						
Carphodactylidae	<i>Saluarius cornutus</i>						
Carphodactylidae	<i>Underwoodisaurus milii</i>						
Diplodactylidae	<i>Amalasia lesueurii</i>						
Diplodactylidae	<i>Amalasia rhombifer</i>						
Diplodactylidae	<i>Crenadactylus ocellatus</i>						
Diplodactylidae	<i>Dactylocnemis pacificus</i>						
Diplodactylidae	<i>Diplodactylus conspicillatus</i>						
Diplodactylidae	<i>Diplodactylus granariensis</i>						
Diplodactylidae	<i>Diplodactylus ornatus</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Diplodactylus polyophthalmus</i>						
Diplodactylidae	<i>Diplodactylus pulcher</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Diplodactylus tessellatus</i>						
Diplodactylidae	<i>Hesperoedura reticulata</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Hoplodactylus duvaucelii</i>						
Diplodactylidae	<i>Lucasium albuguttatum</i>						
Diplodactylidae	<i>Lucasium damaeum</i>						
Diplodactylidae	<i>Lucasium immaculatum</i>						
Diplodactylidae	<i>Lucasium squarrosam</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Lucasium steindachneri</i>						
Diplodactylidae	<i>Lucasium stenodactylum</i>						
Diplodactylidae	<i>Mokopirirakau cryptozoicus</i>						
Diplodactylidae	<i>Nautilinus manukanus</i>						
Diplodactylidae	<i>Oedura castelnaui</i>						weights and lengths estimated from Figure 3.2 in Holmes 2004
Diplodactylidae	<i>Oedura coggeri</i>						
Diplodactylidae	<i>Oedura marmorata</i>						
Diplodactylidae	<i>Oedura montis</i>						
Diplodactylidae	<i>Oedura tryoni</i>						
Diplodactylidae	<i>Pseudothecadactylus australis</i>						Bustard, H. R. 1967. Reproduction in the Australian gekkonid genus <i>Oedura</i> Gray 1842. <i>Herpetologica</i> , 23: 276-284.
Diplodactylidae	<i>Rhynchoedura ornata</i>						
Diplodactylidae	<i>Strophurus assimilis</i>						
Diplodactylidae	<i>Strophurus ciliaris</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Strophurus elderi</i>						
Diplodactylidae	<i>Strophurus intermedius</i>						
Diplodactylidae	<i>Strophurus krisalys</i>						How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of <i>Diplodactylus</i> gecko in western Australia. <i>Herpetologica</i> 42: 471-482.
Diplodactylidae	<i>Strophurus michaelsoni</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Strophurus spinigerus</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Strophurus strophurus</i>						Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). <i>Australian Journal of Zoology</i> 48: 111-126.
Diplodactylidae	<i>Strophurus taeniatus</i>						
Diplodactylidae	<i>Strophurus williamsi</i>						
Diplodactylidae	<i>Toropuku stephensi</i>						
Diplodactylidae	<i>Woodworthia maculatus</i>						
Diplodactylidae	<i>Asacelus nomatus</i>						
Phyllodactylidae	<i>Gymnodactylus darwini</i>						
Phyllodactylidae	<i>Gymnodactylus gekkoides</i>						
Phyllodactylidae	<i>Haemodracon riebeckii</i>						
Phyllodactylidae	<i>Homonota darwini</i>						
Phyllodactylidae	<i>Homonota gaudichaudii</i>						
Phyllodactylidae	<i>Phyllodactylus tanei</i>						
Phyllodactylidae	<i>Phyllopezus pollicaris</i>						
Phyllodactylidae	<i>Pyodactylus guttatus</i>						
Phyllodactylidae	<i>Pyodactylus hasselquistii</i>						
Phyllodactylidae	<i>Pyodactylus oudrii</i>						
Phyllodactylidae	<i>Pyodactylus puiseuxi</i>						
Phyllodactylidae	<i>Tarentola annularis</i>						Brown, R. P. 1996. Thermal biology of the gecko <i>Tarentola boettgeri</i> : comparisons among populations from different elevations within Gran Canaria. <i>Herpetologica</i> , 52: 396-405.
Phyllodactylidae	<i>Tarentola boettgeri</i>						
Phyllodactylidae	<i>Tarentola delalandii</i>						
Phyllodactylidae	<i>Tarentola mauritanica</i>						
Phyllodactylidae	<i>Thecadactylus rapicauda</i>						

Tropiduridae	<i>Eurolophosaurus nanucae</i>
Tropiduridae	<i>Microlophus albemarlensis</i>
Tropiduridae	<i>Microlophus occipitalis</i>
Tropiduridae	<i>Microlophus quadrivittatus</i>
Tropiduridae	<i>Microlophus theresioides</i>
Tropiduridae	<i>Plica plica</i>
Tropiduridae	<i>Plica umbra</i>
Tropiduridae	<i>Stenocercus caducus</i>
Tropiduridae	<i>Stenocercus roseiventris</i>
Tropiduridae	<i>Strobilurus torquatus</i>
Tropiduridae	<i>Tropidurus etheridgei</i>
Tropiduridae	<i>Tropidurus hispidus</i>
Tropiduridae	<i>Tropidurus itambere</i>
Tropiduridae	<i>Tropidurus montanus</i>
Tropiduridae	<i>Tropidurus oreadicus</i>
Tropiduridae	<i>Tropidurus psammonastes</i>
Tropiduridae	<i>Tropidurus semitaeniatus</i>
Tropiduridae	<i>Tropidurus spinulosus</i>
Tropiduridae	<i>Tropidurus torquatus</i>
Tropiduridae	<i>Uracentron flaviceps</i>
Tropiduridae	<i>Uranoscodon superciliosus</i>

Family	Species	TL (mm)	mass (g)	source
Colubridae	<i>Boiga ceylonensis</i>	460.00	5.90	TAUM
Colubridae	<i>Coluber sinai</i>	543.75	19.13	TAUM
Colubridae	<i>Crotaphopeltis hotamboeia</i>	448.00	13.80	TAUM
Colubridae	<i>Dispholidus typus</i>	1156.00	153.00	TAUM
Colubridae	<i>Eirenis coronella</i>	261.50	6.10	TAUM
Colubridae	<i>Eirenis coronelloides</i>	254.00	4.30	TAUM
Colubridae	<i>Eirenis decemlineatus</i>	666.67	29.37	TAUM
Colubridae	<i>Eirenis modestus</i>	454.25	15.48	TAUM
Colubridae	<i>Eirenis rothii</i>	219.00	1.60	TAUM
Colubridae	<i>Elaphe quatuorlineata</i>	1600.00	400.00	TAUM
Colubridae	<i>Lytorhynchus diadema</i>	412.00	12.80	TAUM
Colubridae	<i>Macroprotodon cucullatus</i>	433.67	16.57	TAUM
Colubridae	<i>Pantherophis alleghaniensis</i>	1467.00	246.00	TAUM
Colubridae	<i>Phyllorhynchus decurtatus</i>	510.00	22.60	TAUM
Colubridae	<i>Platyceps florulentus</i>	377.67	11.50	TAUM
Colubridae	<i>Platyceps rhodorachis</i>	1099.33	56.57	TAUM
Colubridae	<i>Rhynchocalamus melanocephalus</i>	420.00	10.00	TAUM
Colubridae	<i>Telescopus dhara</i>	853.00	81.96	TAUM
Colubridae	<i>Telescopus fallax</i>	567.88	33.23	TAUM
Colubridae	<i>Telescopus hoogstraali</i>	779.83	74.60	TAUM
Colubridae	<i>Telescopus semiannulatus</i>	490.00	9.50	TAUM
Colubridae	<i>Thelotornis kirtlandii</i>	1369.00	69.00	TAUM
Colubridae	<i>Zamenis longissimus</i>	795.00	199.33	TAUM
Colubridae	<i>Dolichophis jugularis</i>	1698.30	691.91	TAUM, Feldman, own measurement
Colubridae	<i>Elaphe sauromates</i>	1612.29	993.21	TAUM, Feldman, own measurement
Colubridae	<i>Hemorrhois nummifer</i>	1073.00	230.28	TAUM, Feldman, own measurement
Colubridae	<i>Platyceps collaris</i>	985.31	63.60	TAUM, Feldman, own measurement
Colubridae	<i>Spalerosophis diadema</i>	1042.77	211.17	TAUM, Feldman, own measurement
Colubridae	<i>Hierophis viridiflavus</i>	1153.33	172.33	Capula et al. 1995, Zuffi et al. 2010
Colubridae	<i>Lampropeltis nigra</i>	745.33	152.50	Faust & Blomquist 2011
Colubridae	<i>Chironius exoletus</i>	1276.00	147.00	Franca et al. 2008
Colubridae	<i>Chironius flavolineatus</i>	1116.00	89.00	Franca et al. 2008
Colubridae	<i>Chironius quadricarinatus</i>	959.00	58.00	Franca et al. 2008
Colubridae	<i>Drymarchon corais</i>	1553.00	829.00	Franca et al. 2008
Colubridae	<i>Drymoluber brazili</i>	622.00	86.00	Franca et al. 2008
Colubridae	<i>Mastigodryas bifossatus</i>	1410.00	523.00	Franca et al. 2008
Colubridae	<i>Simophis rhinostoma</i>	565.00	32.00	Franca et al. 2008
Colubridae	<i>Tantilla melanocephala</i>	301.00	7.00	Franca et al. 2008
Colubridae	<i>Coronella austriaca</i>	495.00	50.00	Luisselli et al. 1996, Zuffi et al. 2010
Colubridae	<i>Boiga cynodon</i>	2350.00	417.35	Quinn & Neitman 1978
Colubridae	<i>Pantherophis spiloides</i>	1348.00	322.80	Schumacher et al. 1997
Colubridae	<i>Tantilla coronata</i>	231.83	2.53	Semlitsch et al. 1981, Todd et al. 2008
Colubridae	<i>Ahaetulla prasina</i>	1380.00	78.20	Seymor 1987
Colubridae	<i>Arizona elegans</i>	1070.00	161.00	Seymor 1987
Colubridae	<i>Boiga dendrophila</i>	1260.00	182.00	Seymor 1987
Colubridae	<i>Boiga irregularis</i>	1320.00	402.00	Seymor 1987
Colubridae	<i>Chrysopelea ornata</i>	1050.00	145.00	Seymor 1987
Colubridae	<i>Coelognathus radiatus</i>	740.00	50.50	Seymor 1987
Colubridae	<i>Coluber constrictor</i>	1160.00	182.00	Seymor 1987
Colubridae	<i>Coluber flagellum</i>	1810.00	475.00	Seymor 1987
Colubridae	<i>Dendrelaphis calligastra</i>	1030.00	83.70	Seymor 1987
Colubridae	<i>Dendrelaphis caudolineatus</i>	937.50	54.00	Seymor 1987
Colubridae	<i>Dendrelaphis punctulatus</i>	1185.00	130.25	Seymor 1987
Colubridae	<i>Lampropeltis getula</i>	1120.00	258.00	Seymor 1987
Colubridae	<i>Pantherophis obsoletus</i>	1380.00	510.00	Seymor 1987
Colubridae	<i>Pituophis melanoleucus</i>	1620.00	747.00	Seymor 1987
Colubridae	<i>Ptyas korros</i>	930.00	201.00	Seymor 1987
Colubridae	<i>Thelotornis capensis</i>	1109.50	78.80	Shine et al. 1996a
Colubridae	<i>Drymarchon couperi</i>	1725.50	1759.00	Stevenson et al. 2003
Colubridae	<i>Chironius fuscus</i>	1080.00	70.00	Tiffany Doan (pc)

Colubridae	<i>Chironius multiventris</i>	2496.00	650.00	Tiffany Doan (pc)
Colubridae	<i>Chironius scurrulus</i>	1720.00	750.00	Tiffany Doan (pc)
Colubridae	<i>Dendrophidion dendrophis</i>	742.00	20.25	Tiffany Doan (pc)
Colubridae	<i>Drymobius rhombifer</i>	701.50	55.25	Tiffany Doan (pc)
Colubridae	<i>Drymoluber dichrous</i>	979.67	119.33	Tiffany Doan (pc)
Colubridae	<i>Rhinobothryum lentiginosum</i>	1155.00	89.50	Tiffany Doan (pc)
Colubridae	<i>Oxybelis aeneus</i>	1332.00	57.50	Vitt & Valdinger 1983
Colubridae	<i>Spilotes pullatus</i>	1803.50	552.50	Vitt & Valdinger 1983
Colubridae	<i>Leptophis ahaetulla</i>	1144.67	68.33	Vitt & Valdinger 1983, Tiffany Doan (pc)
Colubridae	<i>Pantherophis guttatus</i>	1453.33	695.33	Feldman, own measurement
Colubridae	<i>Coronella girondica</i>	650.00	55.00	Zuffi et al. 2010
Colubridae	<i>Hemorrhois hippocrepis</i>	1100.00	220.00	Zuffi et al. 2010
Colubridae	<i>Rhinechis scalaris</i>	1500.00	500.00	Zuffi et al. 2010
Colubridae	<i>Zamenis lineatus</i>	930.00	190.00	Zuffi et al. 2010
Colubridae	<i>Hierophis andreas</i>	500.00	17.20	Behzad Fathinia (pc)
Colubridae	<i>Platyceps elegantissimus</i>	604.42	21.72	TAUM
Colubridae	<i>Lycodon rufozonatus</i>	780.00	160.90	Dieckmann et al. 2010
Colubridae	<i>Platyceps karelini</i>	726.47	35.87	TAUM
Dipsadidae	<i>Philodryas nattereri</i>	1066.50	170.50	TAUM
Dipsadidae	<i>Clelia clelia</i>	2040.67	2050.00	Barun et al. 2007
Dipsadidae	<i>Phalotris nasutus</i>	576.00	58.00	Braz et al. 2009
Dipsadidae	<i>Apostolepis ammodites</i>	259.00	2.00	Franca et al. 2008
Dipsadidae	<i>Apostolepis assimilis</i>	251.00	4.00	Franca et al. 2008
Dipsadidae	<i>Apostolepis flavotorquata</i>	502.00	20.00	Franca et al. 2008
Dipsadidae	<i>Atractus badius</i>	306.86	8.32	Franca et al. 2008
Dipsadidae	<i>Atractus snethlageae</i>	321.00	7.75	Franca et al. 2008
Dipsadidae	<i>Diadophis punctatus</i>	535.13	17.19	Franca et al. 2008
Dipsadidae	<i>Gomesophis brasiliensis</i>	359.00	23.00	Franca et al. 2008
Dipsadidae	<i>Helicops angulatus</i>	426.25	39.38	Franca et al. 2008
Dipsadidae	<i>Helicops modestus</i>	378.00	35.00	Franca et al. 2008
Dipsadidae	<i>Imantodes nochtha</i>	954.21	16.41	Franca et al. 2008
Dipsadidae	<i>Lygophis paucidens</i>	496.00	20.00	Franca et al. 2008
Dipsadidae	<i>Mussurana quimi</i>	622.00	89.00	Franca et al. 2008
Dipsadidae	<i>Ninia hudsoni</i>	389.50	14.63	Franca et al. 2008
Dipsadidae	<i>Oxyrhopus petolarius</i>	809.83	34.05	Franca et al. 2008
Dipsadidae	<i>Oxyrhopus trigeminus</i>	563.33	41.33	Franca et al. 2008
Dipsadidae	<i>Philodryas chamissonis</i>	955.00	145.30	Franca et al. 2008
Dipsadidae	<i>Philodryas psammophidea</i>	610.00	50.00	Franca et al. 2008
Dipsadidae	<i>Phimophis guerini</i>	607.00	87.00	Franca et al. 2008
Dipsadidae	<i>Pseudoboa coronata</i>	743.80	62.80	Franca et al. 2008
Dipsadidae	<i>Sibynomorphus mikanii</i>	332.00	12.00	Franca et al. 2008
Dipsadidae	<i>Tachymenis peruviana</i>	427.50	29.25	Franca et al. 2008
Dipsadidae	<i>Xenodon merremi</i>	718.33	201.77	Franca et al. 2008
Dipsadidae	<i>Xenopholis scalaris</i>	302.61	8.78	Franca et al. 2008
Dipsadidae	<i>Alsophis antiquae</i>	990.00	760.00	Franca et al. 2008
Dipsadidae	<i>Dipsas catesbyi</i>	532.21	11.29	Parker & Brown 1974, Seymour 1987
Dipsadidae	<i>Atractus major</i>	456.00	23.28	Tiffany Doan (pc)
Dipsadidae	<i>Atractus pantostictus</i>	300.00	15.00	Tiffany Doan (pc)
Dipsadidae	<i>Boiruna maculata</i>	1517.00	823.50	Tiffany Doan (pc)
Dipsadidae	<i>Clelia plumbea</i>	1716.00	600.00	Tiffany Doan (pc)
Dipsadidae	<i>Dipsas indica</i>	412.00	4.50	Tiffany Doan (pc)
Dipsadidae	<i>Dipsas variegata</i>	921.50	46.75	Tiffany Doan (pc)
Dipsadidae	<i>Drepanoides anomalus</i>	569.17	28.58	Tiffany Doan (pc)
Dipsadidae	<i>Erythrolamprus aesculapii</i>	485.00	40.00	Tiffany Doan (pc)
Dipsadidae	<i>Helicops leopardinus</i>	360.00	24.00	Tiffany Doan (pc)
Dipsadidae	<i>Imantodes lentiferus</i>	913.57	14.54	Tiffany Doan (pc)
Dipsadidae	<i>Leptodeira annulata</i>	654.33	29.92	Tiffany Doan (pc)
Dipsadidae	<i>Lygophis meridionalis</i>	611.00	26.00	Tiffany Doan (pc)
Dipsadidae	<i>Oxyrhopus formosus</i>	741.00	51.20	Tiffany Doan (pc)
Dipsadidae	<i>Oxyrhopus guibei</i>	556.00	43.00	Tiffany Doan (pc)
Dipsadidae	<i>Oxyrhopus rhombifer</i>	389.00	21.00	Tiffany Doan (pc)

Dipsadidae	<i>Pseudoboa nigra</i>	809.50	134.00	Tiffany Doan (pc)
Dipsadidae	<i>Thamnodynastes hypoconia</i>	407.00	20.40	Tiffany Doan (pc)
Dipsadidae	<i>Xenopholis undulatus</i>	316.00	10.00	Tiffany Doan (pc)
Dipsadidae	<i>Borikenophis portoricensis</i>	816.90	64.00	Vitt & Valdinger 1983
Dipsadidae	<i>Philodryas olfersii</i>	947.50	91.50	Vitt & Valdinger 1983
Dipsadidae	<i>Philodryas patagoniensis</i>	929.00	168.00	Vitt & Valdinger 1983
Dipsadidae	<i>Rhachidelus brazili</i>	999.00	561.00	Vitt & Valdinger 1983
Dipsadidae	<i>Thamnodynastes rutilus</i>	384.00	21.00	Vitt & Valdinger 1983
Dipsadidae	<i>Phalotris lativittatus</i>	764.00	62.00	Vitt & Valdinger 1983, Franca et al. 2008
Dipsadidae	<i>Thamnodynastes pallidus</i>	800.00	53.00	Vitt & Valdinger 1983, Franca et al. 2008
Dipsadidae	<i>Xenodon nattereri</i>	289.00	14.00	Vitt 1983, Franca et al. 2008
Dipsadidae	<i>Apostolepis albicollaris</i>	297.00	4.00	Franca et al. 2008
Dipsadidae	<i>Erythrolamprus ornatus</i>	740.00	67.00	<a href="http://www.arkive.org/saint-lucia-racer/liophis-ornatus/">http://www.arkive.org/saint-lucia-racer/liophis-ornatus/</a>
Dipsadidae	<i>Tachymenis chilensis</i>	373.02	22.40	Greene & Jaksic 1992
Dipsadidae	<i>Thamnodynastes longicaudus</i>	574.00	15.00	Framco et al 2003
Dipsadidae	<i>Erythrolamprus almadensis</i>	375.00	14.00	Franca et al. 2008
Dipsadidae	<i>Lygophis lineatus</i>	550.50	26.50	Vitt 1983
Dipsadidae	<i>Erythrolamprus maryellenae</i>	399.00	23.00	Franca et al. 2008
Dipsadidae	<i>Erythrolamprus mossoroensis</i>	537.35	50.75	Vitt 1983
Dipsadidae	<i>Erythrolamprus poecilogyrus</i>	453.00	40.10	Vitt 1983
Dipsadidae	<i>Erythrolamprus reginae</i>	570.83	35.96	Tiffany Doan (pc)
Dipsadidae	<i>Erythrolamprus typhlus</i>	720.00	47.00	Moon & Candy 1997, Tiffany Doan
Dipsadidae	<i>Erythrolamprus viridis</i>	456.00	20.75	Vitt 1983
Dipsadidae	<i>Philodryas aestiva</i>	718.00	47.00	Franca et al. 2008
Dipsadidae	<i>Philodryas agassizii</i>	346.00	16.00	Franca et al. 2008
Dipsadidae	<i>Philodryas argenteus</i>	1105.00	25.00	Tiffany Doan (pc)
Natricidae	<i>Natrix maura</i>	615.00	44.40	TAUM
Natricidae	<i>Natrix natrix</i>	400.00	13.00	TAUM
Natricidae	<i>Natrix tessellata</i>	677.45	79.53	TAUM, Feldman, own measurement
Natricidae	<i>Amphiesma metusia</i>	885.00	134.00	Inger et al. 1990
Natricidae	<i>Amphiesma sauteri</i>	414.25	14.00	Inger et al. 1990
Natricidae	<i>Rhabdophis nuchalis</i>	517.80	32.50	Inger et al. 1990
Natricidae	<i>Xenochrophis flavipunctatus</i>	898.56	250.70	Karns et al. 2010
Natricidae	<i>Thamnophis radix</i>	552.75	50.96	King et al. 1999
Natricidae	<i>Thamnophis sirtalis</i>	630.85	73.04	King et al. 1999
Natricidae	<i>Nerodia sipedon</i>	786.23	174.00	King et al. 1999, Weathrhead et al. 1995
Natricidae	<i>Nerodia taxispilota</i>	798.00	228.00	Seymor 1987
Natricidae	<i>Amphiesma conelarum</i>	823.00	71.40	Ota & Iwanaga 1997
Natricidae	<i>Trachischium guentheri</i>	325.50	10.41	Chetri et al. 2009
Pythonidae	<i>Malayopython reticulatus</i>	3522.53	11769.35	Shine et al. 1998
Pythonidae	<i>Morelia viridis</i>	1210.00	563.20	TAUM
Pythonidae	<i>Python sebae</i>	3735.00	13250.00	TAUM
Pythonidae	<i>Python regius</i>	1216.00	1378.05	Gorzula et al. 1997, Aubert et al. 2005, Feldman, own measurement
Pythonidae	<i>Morelia spilota</i>	1683.77	1924.38	Pearson et al. 2002, Seymor 1987
Pythonidae	<i>Antaresia perthensis</i>	769.00	339.00	Seymor 1987
Pythonidae	<i>Aspidites melanocephalus</i>	1310.00	1362.00	Seymor 1987
Pythonidae	<i>Aspidites ramsayi</i>	1950.00	3900.00	Seymor 1987
Pythonidae	<i>Liasis fuscus</i>	1490.00	953.00	Seymor 1987
Pythonidae	<i>Liasis olivaceus</i>	2400.00	3305.00	Seymor 1987
Pythonidae	<i>Antaresia maculosa</i>	1259.00	530.00	Trembath 2008
Pythonidae	<i>Python bivittatus</i>	3220.00	21750.00	Van Mierop & Barnard 1976
Pythonidae	<i>Python kyaiktiyo</i>	1518.00	3600.00	Zug et al. 2011
Pythonidae	<i>Python natalensis</i>	2804.17	13800.00	Alexander 2007
Typhlopidae	<i>Anilios bituberculatus</i>	245.00	3.40	Dale Nimmo (pc)
Typhlopidae	<i>Anilios australis</i>	328.00	48.00	Seymor 1987
Typhlopidae	<i>Xerotyphlops vermicularis</i>	191.53	2.23	TAUM
Typhlopidae	<i>Anilios torresianus</i>	510.00	43.30	Seymor 1987
Typhlopidae	<i>Anilios bicolor</i>	222.61	8.97	Dale Nimmo (pc)
Typhlopidae	<i>Amerotyphlops reticulatus</i>	266.81	17.26	Alessandro Costa Menks (pc)
Typhlopidae	<i>Amerotyphlops minuisquamus</i>	272.60	16.50	Marinus Hoogmoed (pc)
Typhlopidae	<i>Letheobia simonii</i>	201.11	0.95	TAUM

## source

## lizards

Almeida-Gomes et al. 2008

Avila et al. 2008  
 Blob 2000  
 Brown 1996  
 Salvador and Brown 2007  
 Brown 2012  
 Bush 1992  
 Bustard 1967

Costa et al. 2008

Couper et al. 2000  
 Cree and Hare 2010  
 Cruz 1997  
 Doughty and Shine 1995  
 Duellman 2005  
 Faria and Araujo 2004  
 Franco and de la Torre 1990

Galdino and Van Sluys 2011  
 Gardner 1994

Goldberg and Rodriguez 1986  
 Hare 2005  
 Holmes 2004  
 How et al. 1986

How et al. 1990  
 Jewell and Leschen 2004

Lima and da Rocha 2006

Marquet et al. 1990

Dunham et al. 1988  
 mass: Warburg 1966, SVL: How et al. 1986  
 Boulenger 1885  
 Chapman and Dell 1985  
 How et al. 1986  
 Storr 1979  
 Storr 1988  
 Werner and Seifan 2006

Mateo and Cuadrado 2012  
 Parrish and Gill 2003

Rodrigues et al. 1989  
 Rosler and Wraniak 2007  
 Salvador 2009  
 Schlesinger and Shine 1994  
 Shah 2002  
 TAUM

Vitt 1991  
 Vitt 1995  
 Vitt 2000  
 Vitt and Goldberg 1983  
 Vitt and Zani 1996  
 Vitt and Zani 1998  
 Vitt et al. 1997

Vucko 2008  
 Watkins 1996  
 Weeks and Espinoza 2013  
 Whitaker 1968

Withers et al. 2000

## Snakes

Alexander 2007  
 Aubert et al. 2005  
 Barun et al. 2007  
 Braz et al. 2009  
 Capula et al. 1995, Zuffi et al. 2010

Chetri et al. 2009

Dieckmann et al. 2010  
 Faust & Blomquist 2011  
 Franco et al. 2003  
 Franca et al. 2008  
 Gorzula et al. 1997  
 Greene & Jaksic 1992  
 Inger et al. 1990  
 Karns et al. 2010  
 King et al. 1999  
 Luiselli et al. 1996,  
 Moon & Candy 1997

Ota & Iwanaga 1997  
 Parker & Brown 1974  
 Pearson et al. 2002  
 Quinn & Neitman 1978  
 Schumacher et al. 1997  
 Semlitsch et al. 1981  
 Seymour 1987

Shine et al. 1996  
 Shine et al. 1998  
 Stevenson et al. 2003  
 Todd et al. 2008

Trembath pt yl 2008

## reference

- Almeida-Gomes, M., Vrcibradic, D., Siqueira, C. C., Kiefer, M. C., Klaion, T., Almeida-Santos, P., Nascimento, D., Ariani, C. V., Borges-Junior, V. N., Freitas-Filho, R. F., van Sluys, M. and Rocha, C. F. 2008. Herpetofauna of an Atlantic rainforest area (Morro Sao Joao) in Rio de Janeiro State, Brazil. *Anais da Academia Brasileira de Ciencias*, 80: 291-300.
- Avila, L. J., Morando, M. and Sites, J. W. 2008. New species of the iguanian lizard genus *Liolaemus* (Squamata, Iguania, Liolaemini) from central Patagonia, Argentina. *Journal of Herpetology*, 42: 186-196.
- Blob, R. W. 2000. Interspecific scaling of the hindlimb skeleton in lizards, crocodylians, felids and canids: does limb bone shape correlate with limb posture? *Journal of Zoology* 250: 507-509.
- Brown, R. P. 1996. Thermal biology of the gecko *Tarentola boettgeri*: comparisons among populations from different elevations within Gran Canaria. *Herpetologica*, 52: 396-405.
- Salvador, A. and Brown, R. P. 2007. *Perenquén de Boettger – Tarentola boettgeri Steindachner, 1891*. Version: 29-05-2007. *Enciclopedia virtual de los vertebrados Espanoles*.
- Brown, D. 2012. *A guide to Australian dragons in captivity*. Reptile Publications, Burleigh.
- Bush, B. 1992. Some records of reproduction in captive lizards and snakes. *Herpetofauna* 22: 26-30.
- Bustard, H. R. 1967. Reproduction in the Australian gekkonid genus *Oedura* Gray 1842. *Herpetologica*, 23: 276-284.
- Costa, G. C., Mesquita, D. O., Colli, G. R. and Vitt, L. J. 2008. Niche expansion and the niche variation hypothesis: does the degree of individual variation increase in depauperate assemblages? *American Naturalist* 172: 868-877.
- Couper, P. J., Schneider, C. J., Hoskin, C. J. and Covacevich, J. A. 2000. Australian leaf-tailed geckos: phylogeny, a new genus, two new species and other new data. *Memoirs of the Queensland Museum* 45: 253-265.
- Cree, A. and Hare, K. M. 2010. Equal thermal opportunity does not result in equal gestation length in a cool-climate skink and gecko. *Herpetological Conservation and Biology* 5: 271-282.
- Cruz, F. B. 1997. Reproductive activity in *Tropidurus etheridgei* in the semiarid Chaco of Salta, Argentina. *Journal of Herpetology* 31: 444-450.
- Doughty, P. and Shine, R. 1995. Life in two dimensions: Natural history of the southern leaf-tailed gecko, *Phyllurus platurus*. *Herpetologica* 51: 193-201.
- Duellman, W. E. 2005. *Cusco Amazónico: The lives of amphibians and reptiles in an Amazonian rainforest*. Cornell University Press, Ithaca.
- Faria, R. G. and Araujo, A. F. B. 2004. Sintopy of two *Tropidurus* lizard species (Squamata: Tropiduridae) in a rocky cerrado habitat in central Brazil. *Brazilian Journal of Biology* 4: 775-780.
- Francó, R. C. and de la Torre, G. G. 1990. Reptiles de la Isla La Pena, Nayarit, Mexico. *Anales del Instituto de Biología, Universidad Nacional Autónoma de México, serie Zoología* 61: 175-176.
- Galdino, C. A. B. and Van Sluys, M. 2011. Clutch size in the small-sized lizard *Eurolophosaurus nanuzae*: does it vary along the geographic distribution of the species? *Iheringia, Serie Zoologia*, 101: 61-64.
- Gardner, A. S. 1994. A new species of *Asaccus* (Gekkonidae) from the mountains of northern Oman. *Journal of Herpetology*, 28: 141-145.
- Goldberg, S. R. and Rodriguez, E. 1986. Reproductive cycles of two iguanid lizards from northern Chile, *Tropidurus quadrivittatus* and *Tropidurus theresioides*. *Journal of Arid Environments* 10: 147-151.
- Hare, K. M. 2005. *The paradox of nocturnality in lizards*. PhD Dissertation, Victoria University of Wellington.
- Holmes, K. 2004. The female reproductive cycle of a viviparous skink, *Oligosoma maccanni*, in a subalpine environment
- How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of *Diplodactylus* gecko in western Australia. *Herpetologica* 42: 471-482.
- How, R. A., Dell, J. and Wellington, B. D. 1990. Reproductive and dietary biology of *Nephurus* and *Underwoodisaurus* (Gekkonidae) in Western Australia. *Records of the Western Australian Museum* 14: 449-459.
- Jewell, T. R. and Leschen, R. A. B. 2004. A new species of *Hoplodactylus* (Reptilia: Pygopodidae) from the Takitimu Mountains, South Island, New Zealand. *Zootaxa* 792: 1-11.
- Lima, A. F. B. and da Rocha, P. L. B. 2006. Ontogenetic change in plant consumption by *Tropidurus psammoneustes*, Rodrigues, Kasahara & Yonenaga-Yassuda, 1988 (Tropiduridae), a lizard endemic to the dunes of the São Francisco River, Bahia, Brazil. *Revista Brasileira de Zoociencias* 8: 67-75.
- Marquet, P. A., Bozinovic, F., Medel, R. G., Werner, Y. L. and Jaksic, F. M. 1990. Ecology of *Garthia gaudichaudi*, a gecko endemic to the semiarid region of Chile. *Journal of Herpetology*, 24: 431-434.
- Dunham, A. E., Miles, D. B. and Reznick, D. N. 1988. Life history patterns in squamate reptiles. Pages 441-522 in C. Gans and R. B. Huey, eds. *Biology of the Reptilia*. Vol. 16. Ecology B. Defense and life history. Liss, New York.
- Warburg, M. R. 1966. On the water economy of several Australian geckos, agamids, and skinks. *Copeia*, 1966: 230-235.
- Boulenger, G. A. 1885. *Catalogue of the Lizards in the British Museum* (Nat. Hist.) I. Gekkonidae, Eublepharidae, Uroplatae, Pygopodidae, Agamidae. Trustees of the British Museum, London.
- Chapman, A. and Dell, J. 1985. Biology and zoogeography of the amphibians and reptiles of the Western Australian wheatbelt. *Records of the Western Australian Museum* 12: 1-46.
- How, R. A., Dell, J. and Wellington, B. D. 1986. Comparative biology of eight species of *Diplodactylus* gecko in western Australia. *Herpetologica* 42: 471-482.
- Storr, G. M. 1979. The *Diplodactylus vittatus* complex. *Records of the Western Australian Museum* 7: 391-402.
- Storr, G. M. 1988. The *Diplodactylus ciliaris* complex (Lacertilia: Gekkonidae) in Western Australia. *Records of the Western Australian Museum*, 14: 121-133.
- Werner, Y. L. and Seifan, T. 2006. Eye size in geckos: asymmetry, allometry, sexual dimorphism, and behavioral correlates. *Journal of Morphology* 267: 1486-1500.
- Mateo, J. A. and Cuadrado, M. 2012. Communal nesting and parental care in Oudri's fan-footed gecko (*Ptyodactylus oudrii*): field and experimental evidence of an adaptive behavior. *Journal of Herpetology*, 46: 209-212.
- Parrish, G. R. and Gill, B. J. 2003. Natural history of the lizards of the Three Kings Islands, New Zealand. *New Zealand Journal of Zoology* 30: 205-220.
- Rodrigues, M. T., Yonenaga-Yassuda, Y. and Kasahara, S. 1989. Notes on the ecology and karyotypic description of *Strobilurus torquatus* (Sauria, Iguanidae). *Brazilian Journal of Genetics* 12: 747-759.
- Rosler, H. and Wraniak, W. 2007. Remarks on biology, keeping and breeding the Socotra Giant Gecko, *Haemodracon riebeckii* (Peters, 1882). *Zoologische Garten* 77: 59-83.
- Salvador, A. 2009. *Lagartija de las Pitiusas – Podarcis pityusensis* (Bosca, 1883). Version 3-09-2009. *Enciclopedia virtual de los vertebrados Espanoles*.
- Schlesinger, C. A. and Shine, R. 1994. Selection of diurnal retreat sites by the nocturnal gekkonid lizard *Oedura lesueurii*. *Herpetologica* 50: 156-163.
- Shah, B. 2002. Why do thick-tailed geckos (*Underwoodisaurus milii*) aggregate? Honors thesis, University of Sydney.
- Vitt, L. J. 1991. Ecology and life history of the scansorial arboreal lizard *Plica plica* (Iguanidae) in Amazonian Brazil. *Canadian Journal of Zoology* 69: 504-511.
- Vitt, L. J. 1995. The ecology of tropical lizards in the caatinga of northeast Brazil. *Occasional Papers of the Oklahoma Museum of Natural History* 1: 1-29.
- Vitt, L. J. 2000. Ecological consequences of body size in neonatal and small-bodied lizards in the neotropics. *Herpetological Monographs* 14: 388-400.
- Vitt, L. J. and Goldberg, S. R. 1983. Reproductive ecology of two tropical iguanid lizards: *Tropidurus torquatus* and *Platynotus semitaeniatus*. *Copeia*, 1983: 131-141.
- Vitt, L. J. and Zani, P. A. 1996. Ecology of the elusive tropical lizard *Tropidurus* [= *Urocastron*] *flaviceps* (Tropiduridae) in lowland rain forest of Ecuador. *Herpetologica*, 52: 121-132.
- Vitt, L. J. and Zani, P. A. 1998. Ecological relationships among sympatric lizards in a transitional forest in the northern Amazon of Brazil. *Journal of Tropical Ecology* 14: 63-86.
- Vitt, L. J., Zani, P. A. and Avila-Pires, T. C. S. 1997. Ecology of the arboreal tropidurid lizard *Tropidurus* (= *Plica*) *umbra* in the Amazon region. *Canadian Journal of Zoology* 75: 1876-1886.
- Vucko, M. J. 2008. The dynamics of water on the skin of Australian carphodactylid and diplodactylid geckos. MSc thesis, James Cook University.
- Watkins, G. G. 1996. Proximate causes of sexual size dimorphism in the iguanian lizard *Microlophus occipitalis*. *Ecology*, 77: 1473-1482.
- Weeks, D. M. and Espinoza, R. E. 2013. Lizards on ice: Comparative thermal tolerances of the world's southernmost gecko. *Journal of Thermal Biology* 38: 225-232.
- Whitaker, A. H. 1968. The lizards of the Poor Knights Islands, New Zealand. *New Zealand Journal of Science* 11: 623-651.
- Withers, P. C., Aplin, K. P. and Werner, Y. L. 2000. Metabolism and evaporative water loss of Western Australian geckos (Reptilia: Sauria: Gekkonomorpha). *Australian Journal of Zoology* 48: 111-126.
- Alexander G. 2007. Thermal biology of the Southern African Python (*Python natalensis*): does temperature limit its distribution? *Biology of the boas and pythons* (ed. By R.W. Henderson and R. Powell), pp 51-70. Eagle Mountain Publishing, Eagle Mountain, UT.
- Aubret, F., Bonnet X., Harris M., Maumelat S. 2005. Sex differences in body size and ectoparasite load in the ball python, *Python regius*. *Journal of Herpetology* 39: 315-320.
- Barun A, Perry G, Henderson RW, Powell R. 2007. *Alsophis portoricensis anegadensis* (Squamata: Colubridae): morphometric characteristics, activity patterns, and habitat use. *Copeia* 2007: 163-169.
- Braz HBP, Araujo CO, Almeida-Santos MS. 2009. Life history traits of the snake *Phalotris lativittatus* (Xenodontinae: Elapomorpha) from the Brazilian Cerrado. *Herpetology Notes* 2: 163-169.
- Capula M, Filippi E, Luiselli L. 1995. Annual mating in female Colubrid snakes with irregular reproductive frequency. *Herpetozoa* 8: 11-15.
- Chettri B, Bhupathy S, Acharya BK. 2009. Morphometry and aspects of breeding biology of *Trachischium guentheri* Boulenger, 1890 (serpentes: colubridae) in north Sikkim, eastern Himalaya, India. *Russian Journal of Herpetology*, 16(3), 177-182.
- Dieckmann S, Norval G, Mao JJ. 2010. A description of an Asian king snake (*Dinodon rufozonatum rufozonatum* [Cantor, 1842]) clutch size from central western Taiwan. *Herpetology Notes* 3: 313-314.
- Faust TM, Blomquist SM. 2011. Size and growth in two populations of black kingsnakes, *Lampropeltis nigra*, in east Tennessee. *Southern Eastern Naturalist* 10: 40-422.
- Franco FL, Ferreira TG, Marques OAV, Sazima I. 2003. A new species of hood-displaying *Thamnodynastes* (Serpentes: Colubridae) from the Atlantic forest in southeast Brazil. *Magnolia*
- França FGR, Mesquita DO, Nogueira CC, Araújo AFB. 2008. Phylogeny and ecology determine morphological structure in a snake assemblage in the central Brazilian Cerrado. *Copeia*
- Gorzula S, Nsiang WO, Oduro W. 1997. Survey of the status and management of the royal python (*Python regius*) in Ghana.
- Greene HW, Jaksic FM. 1992. The feeding behavior and natural history of two Chilean snakes, *Philodryas chamissonis* and *Philodryas chamissonis*. *Revista Chilena de Historia Natural*, 65, 485-493.
- Inger RF, Zhao E, Bradley SH, Guanfu W. 1990. Report on a collection of amphibians and reptiles from Sichuan, China. *Fieldiana: Zoology* 58: i-iii, 1-24
- Karns DR, Murphy JC, Voris HK. 2010. Semi-aquatic snake communities of the central plain region of Thailand. *Tropical Natural History* 10: 1-25.
- King RB, Bittner TD, Queral-Regil A, Cline JH. 1999. Sexual dimorphism in neonate and adult snakes. *Journal of Zoology* 247: 19-28.
- Luiselli L, Capula M, Shine R. 1996. Reproductive output, costs of reproduction, and ecology of the smooth snake, *Coronella austriaca*, in the eastern Italian Alps. *Oecologia* 106: 100-110.
- Moon BR, Candy T. 1997. Coelomic and muscular cross-sectional areas in three families of snakes. *Journal of Herpetology* 31: 37-44.
- Ota H, Iwanaga S. 1997. A systematic review of the snakes allied to *Amphiesma pryeri* (Boulenger) (Squamata: Colubridae) in the Ryukyu Archipelago, Japan. *Zoological Journal of the Linnean Society* 121, 339-360.
- Parker WS, Brown WS. 1974. Notes on the ecology of regal ringneck snakes (*Diadophis punctatus regalis*) in Northern Utah. *Journal of Herpetology* 8: 262-263.
- Pearson D, Shine R, Williams A. 2002. Geographic variation in sexual size dimorphism (*Morelia spilota*, Pythonidae). *Oecologia* 131: 418-426.
- Quinn HR, Neitman K. 1978. Reproduction in the Snake Boiga cynodon (Reptilia, Serpentes, Colubridae). *Journal of Herpetology* 12: 255-256.
- Schumacher J, Lillywhite HB, Norman WM, Jacobson ER. Effects of ketamine HCl on cardiopulmonary function in snakes. *Copeia* 1997: 395-400.
- Semlitsch RD, Brown KL, Caldwell JP. 1981. Habitat Utilization, seasonal activity, and population size structure of the southeastern crowned snake *Tantilla coronata*. *Herpetologica* 37: 40-49.
- Seymour RS. 1987. Scaling of cardiovascular physiology in snakes. *American Zoologist* 27: 97-109.
- Shine R, Harlow PS, Branch WR, Webb JK. 1996. Life on the lowest branch: sexual dimorphism, diet, and reproductive biology of an African twig snake, *Thelotornis capensis* (Serpentes, Colubridae). *Copeia* 1996: 290-299.
- Shine R, Harlow PS, Keogh JS, Boeadi. 1998. The allometry of life-history traits: insights from a study of giant snakes (*Python reticulatus*). *Journal of Zoology* 244: 405-414.
- Stevenson DJ, Dyer KJ, Willis-Stevenson BA. 2003. Survey and monitoring of the eastern indigo snake in Georgia. *Southern Naturalist* 2: 393-408.
- Todd BD, Willson JD, Winne CT, Semlitsch RD. 2008. Ecology of the South eastern Crowned Snake, *Tantilla coronata*. *Copeia* 2008: 388-394.
- Trembath DF. 2008. A record of ophiophagy by the spotted python *Antaresia maculosa* (serpentes: Pythonidae) from Murray Falls National Park, north Queensland, Australia. *Herpetofauna* 38: 81-83.



Van Mierop & Barnard 1976

Vitt & Valding 1983

Vitt 1983

Weatherhead Gt el 1995

Zug et al. 2011

Zuffi tt nl 2010

Van Mierop LHS, Barnard SM. Observations on the reproduction of *Python molurus bivittatus* (Reptilia, Serpentes, Boidae). *Journal of Herpetology* 10: 333-340.

Vitt LJ, Valding LD. 1983. Ecology of a snake community in northern Brazil. *Amphibia-Reptilia* 4: 273-296.

Vitt LJ. 1983. Ecology of an anuran-eating guild of terrestrial tropical snakes. *Herpetologica* 39: 52-66.

Weatherhead PJ, Barry FE, Brown GR, Forbes MRL. 1995. Sex ratios, mating behavior and sexual size dimorphism of the northern water snake, *Nerodia sipedon*. *Behavioral Ecology and Sociobiology* 36: 301-311.

Zug GR, Steve WG, Jeremy FJ. 2011. Pythons in Burma: Short-tailed python (Reptilia: Squamata). *Proceedings of the Biological Society of Washington* 124 (2): 112-136.

Zuffi MAL, Fornasiero S, Picchiotti R, Rapoli P, Lomele M. 2010. Adaptive significance of food income in European snakes: body size is related to prey energetics. *Biological Journal of the Linnean Society* 100: 307-317.

<http://www.arkive.org/saint-lucia-racer/liophis-ornatus/>

ain, UT.