

### *Bert Langerwerf*

‘The Lizard King’



the letters because they may give readers some idea of how keen Bert was to pass on his knowledge.

6/5/1981

*Dear Mr Thatcher,*

*Thank you much for your letter, showing your interest in my work. On 2<sup>nd</sup> June I will not be home, but I will be on 1<sup>st</sup> June. It would be better to come and visit me on the 9<sup>th</sup> of June. I would like it better if you and Mr. Millwood would come already on Monday or Sunday and stay here 1 or 2 nights. Just 1 ½ week ago Mr. Hazlewood was here and stayed with his wife for 2 nights. I know he knows Mr. Millwood. In the next 2 weeks John Pickett will visit me and take several *Lacerta strigata* to England. Phone me! I hope to meet you soon,*

*Best wishes,*

*Bert Langerwerf.*

*Benedenkerksti.36A*

*NL5165CC Waspik*

This was one of the most inspiring trips of my life. Bert was at this time working as a Physics teacher in a local school and still managing to look after a large number of Lacertids and Agamids in his outdoor enclosures. The garden was on very sandy soil and comprised of several acres of cold frame like structures (Fig. 1), designed in such a way as to maximise the spring, summer and autumn sunshine. This was achieved by rows of south facing units set 12 to 18 inches into the ground, providing access to basking areas most of the day whilst allowing the lizards to thermoregulate in shade when needed. The lower section of the units also provided a dry and frost free hibernaculum. This is still a preferred design used to allow these lizards to survive cold northern European winter temperatures and often erratic spring weather of the UK. The vivaria often had garden compost piled against the rear walls to provide extra insulation in winter and to retain heat during summer. Old carpets were also used during extra cold snaps to cover the entire top area. While using these units Bert discovered that the glass cut out UVB rays and in doing so the lizards were unable to synthesise D3 naturally and were often

**B**ERT died on 11 August 2008 aged 64 after a long fight against cancer. The British Herpetological Society lost a good friend, prolific author and innovative breeder of Reptiles. I first wrote to Bert in 1981 as I had agreed to try and organise a trip to see the great man and observe his work ‘in the flesh’. The late Dr. Anthony Millwood, another BHS member, well known for his work on breeding European amphibians, had also wanted to see Bert’s breeding techniques and thus we organised a visit. Unfortunately email did not exist in those days. Pen and ink or telephone were the only means of communication. We had read Bert’s articles regularly in the BHS Bulletin, and like many other captive breeding enthusiasts, had been inspired by the ground breaking new techniques he was using. I have provided some of the letters I received from Bert until we changed to email around 1995. I deliberately chose not to alter



**Figure 1.** View from upstairs room of Bert's garden Terraria in Waspik. Nearly all structured vivaria in and around Bert's garden were hand made by himself.



**Figure 2.** The glass units Bert used for the smaller Lacertids and hatchlings. Note circular openings on fronts with sliding glass covers for feeding and ventilation.

not strong enough to leave the eggs (Fig. 2). This problem was subsequently solved by spraying oily vitamin D3 on the crickets, then dusting Calcium Carbonate on to the insects in a bucket, providing additional nutrients to balance the natural Calcium cycle of the lizards. This style of nutrient addition is now a standard technique in a captive breeder's arsenal and have been fine tuned to species specificity over generations, but the principal was discovered by Bert.

Bert and Hester were excellent hosts to Anthony and myself, despite having to manage his cricket cultures before going off to teach Physics at a local school in the morning, and again during the lunch period and in the evening. Bert was enthusiastic and inspiring. The food cultures were kept warm by diverting the central heating pipes into the cellar under the house. In the evening after eating and doing a final round of the lizard collection we were treated to local folk songs around the piano, viewing the universe from Bert's telescope and browsing his impressive library. Amazingly, Bert spoke more than 14 foreign languages at this time and informed us that he was adding another language each year.

11/9/81

*I thank you very much for the tape (Pink Floyd) and often play it in the car, which is a stereo installation. At this moment we are expecting born 1057 lizards (and some Natrix). Born for instance Ophisaurus apodus. Never bred before! I cannot mention the whole list. Many Lacerta*

*strigata. I still have some 200. So it will be 1200-1300 births. A new record. 14 days ago I was in Budapest and gave a lecture at the "1st Herp Conference of the Socialistic countries." They were amazed that I bred so many species. There is a possibility that I can speak in Leningrad, soon as I spoke in Russian in Budapest to show that I was able to speak in the Soviet Union. There were also three American professors there and they were also amazed at my work and it may be possible that in August 1982 I'll give a lecture in the U.S. (SU and US!). I have got permission from New Zealand to get a pair of Sphenodon punctatus. I must make a very good, less warm set up for them.*

4/5/82

*Most of my lizards hibernated well. In my terraria I put a layer of about 4 inches of leaves and/or Hay. The sand in the terraria is not so deep in many places: often only about a foot deep. I reckon 5 to 10% deaths in winter. I hope to breed 1500 lizards this year, so what does it matter if yearly to 70 lizards die. You get stronger races. Vitamins and things are expressed in IU = International Units. On good package must be written how many I.U. it contains per ml (=cc). For instance I have bottles with 1000,000 I.U. per cc and also 1000 I.U. per cc. One drop of the first bottle is the same as 100 drops of the other! So you must note it for not overdosing! Often I see articles where they tell you to give so and so many*

*drops per litre. But don't tell the units. This is worthless!*

21/3/84

*I had much trouble with my lizards this winter. Temperatures around 12°C are very bad. If lizards come out of hibernation they must be put warm immediately and given water to drink. Further they should be kept warm until spring. Normally lizards don't lose weight in winter, also Lacerta pater don't. Most of my L. pater hibernate well and come out of hibernation as fat as they were in September. The bad climate is the main reason I want to leave. I might breed 1,500 lizards but because of the winter each year my heating costs are already 6300 guilders a year (over 1000 pounds!).*

Bert finally decided to move to warmer climes, due to the heating bills (mainly incubation and crickets) in the mid eighties. He moved to Gran Canaria where I visited him in the early days of development and met his business partner, Jim Pether, who now owns this company (Fig. 3 and 4). The units are now collectively called, Centro de Investigaciones Herpetologicas, Galdar. From Galdar, Bert moved on to Alabama and formed, Agama International and the International Herpetocultural Institute.

25/7/94

*I look forward to seeing you in Orlando. Sunday afternoon we leave and drive through the night to Montevallo. There I can bring*

*you to Atlanta a few days later. My first 150 Physignathus lesueri were born again this year. I expect another 100-150 for this year. For 1995 I am keeping now all these subadults, mainly female, but I counted several male and about 150 female. So in 1995 there will be at least 1,000 young P. lesueri.*

I teamed up with my friend Steve Vanderhoeven and visited Bert in his final home in 1994. We met Bert at the Orlando Herpetological Show and were then driven through the night as promised and serenaded with manic Cajun folk music at quite a fair volume due to our host's hearing difficulties.

The stay with Bert and Hester was truly amazing. We were told how Bert had hand dug out all the partial underground rooms and cages to give protection from the sometimes violent weather conditions that crossed Alabama at certain times of the year and to protect the animals from extreme winter snows that were often followed by relatively mild sunny clear days. The cricket breeding room was a long building at least 5 feet underground and well insulated by its position. Bert must have singlehandedly moved hundreds of tons of soil while constructing this breeding area. Not to mention all the concrete and timber constructions. Bert announced enthusiastically that he would show us how he could catch rats that had found their way into his insect room with his bare hands! After disappearing under the cages and benches we heard a lot of scrambling and scratching and finally Bert reappeared with a rat



**Figure 3.** Construction of terraria in Gran Canaria.



**Figure 4.** Almost finished units, Gran Canaria.



Bert with a freshly caught, and well secured, rat.

held up in his hand (above). If that was not enough he then went on to demonstrate his speed of hand by plucking a wasp from the air outside his room. He told us that he was an excellent tree climber and that he was going to New Caledonia with some reptile friends to collect the giant *Rhacodactylus leachiana* geckos. He joked that only he would be good enough to climb these huge trees where they occurred. Bert was always good humoured and totally fearless. The seven acres of land was a haven for Black Widow Spiders and they could be found between many of the outdoor lizard units. Bert demonstrated how to kill them by rubbing his bare arm up the corner of the wall to squash them. His enthusiasm never faltered and many species of lizards were added to his list of successes. He bred Argentinean Tegu *Tupinambis merianae* in large numbers and due to their cooler requirements

they were better suited to outdoor propagation. He also bred South African Dwarf Chameleons *Bradipodium thamnobates* (over 106 progeny) in 1992 and *Bradipodium pumilium*. Plumed Basilisks (*Basiliscus plumifrons*) (509) were also successful as were *Basiliscus galeriticus* and *Basiliscus basiliscus*. Lacertids did not fair quite so well in the Alabama climate as in Europe but some species such as Eyed Lizards *Timon lepida* flourished (337). *Lacerta strigata* was continually successful (318). In 1992 Bert bred 3,209 lizards crossing an impressive nine Genera and 46 species.

I have included a picture of Bert standing by a large tree trunk (Fig. 5). He requested I take this picture to illustrate the start of his lizard breeding cycle. He collected free sawdust from a local sawmill which was used to breed Giant Mealworms. It was Bert who established this food item on the



**Figure 5.** The start of the food chain. Here Bert exhibits the food source for his Giant Mealworm colonies.



**Figure 6.** Some of Bert's many outdoor vivaria created for a number of lizard species.

herpetological menu. It formed a major item in the diets of the various lizard species that he bred.

Bert was my Guru and friend in those early days of breeding lizards. His knowledge and humour were willingly shared with all who were interested. He will leave a gaping hole in the herpetological hobby and zoological world.

I thank Bert's son Timo who kindly sent this list of species and articles for use in the Bulletin.

Some of the species Bert left when he died;

- 100 *Shinisaurus crocodilurus*,
- 80 *Corucia zebrata*,
- 350 *Physignathus lesueurii*,
- 23 *Uromastyx acanthinura*,
- 75 *Timon lepidus* (+ 25 melanistic),
- 40 *Lacerta strigata*,
- 60 *Tupinambis rufescens*,
- 200 *Tupinambis merianae*,
- 30 *Tupinambis merianae* x *T. rufescens*,
- 40 *Pseudocordylus melanotus*,
- 8 *Petrosaurus thalassinus*,
- 12 *Phrynops hilarii*,
- 20 *European turtles*
- Various *Laudakia*, *Platysaurus*,
- Ophisaurus* and *Elgaria*.

### PUBLICATIONS

- Göçmen, B., Arıkan, H., Mermer, A., Langerwerf, B. & Bahar, H. (2006). Morphological, hemipenial and venom electrophoresis comparisons of Levantine Viper, *Macrovipera lebetina* (Linnaeus, 1758) from Cyprus and southern Anatolia. *Turk. J. Zool.* **30**, 225-234.
- Goffinet, A.M., Daumerie, C., Langerwerf, B. & Pieau, C. (1986). Neurogenesis in reptilian cortical structures: 3H-thymidine autoradiographic analysis. *J. Comp. Neurol.* **243** (1), 106-116.
- Kohler, G. & Langerwerf, B. (2000). *Tejus: Lebensweise, Pflege, Zucht*. Herpeton, Offenbach, 80 pp.
- Langerwerf, B. (1971). Een openluchtterrarium. *Lacerta* **29** (8), 89-90.
- Langerwerf, B. (1972). Het kweken van inlandse hagedissen met behulp van een serre en een buitenterrarium. *Lacerta* **30** (8), 110-112.
- Langerwerf, B. (1973). De aanleg en instandhouding van reptielentuin. *Lacerta* **31** (12), 187-192.
- Langerwerf, B. (1974). De herpetofauna van de Oekraïne. *Lacerta* **32** (11), 171-180.
- Langerwerf, B. (1975). Reptielen en amfibieën in Finland. *Lacerta* **34** (1), 4-7.
- Langerwerf, B. (1976). De Weidhagedis *Lacerta praticola ponctica* Lantz & Cyrén in het terrarium. *Lacerta* **35** (2), 21-22.
- Langerwerf, B. (1977). De Marokkaanse parelhagedis, *Lacerta lepida pater*, in het terrarium. *Lacerta* **35** (5), 63-65.
- Langerwerf, B. (1977). De kweek van de tweede generatie *Lacerta lepida pater*. *Lacerta* **35** (5), 75-76.
- Langerwerf, B. (1978). Het kweken van hagedissen II. *Lacerta* **36** (6), 101-103.
- Langerwerf, B. (1978). Kaukasusrotshagedissen als ideale terrariumdieren. *Lacerta* **36** (12), 196-204.
- Langerwerf, B. (1979). Die erfolgreiche Zucht nichttropischer Echsen. *Elaphe* **1**, 2-5.
- Langerwerf, B. (1979). Die aufzucht von echsen. *Elaphe* **2**, 15-17.
- Langerwerf, B. (1979). Materialen over de vermenigvuldiging van Centraal Aziatische schildpadden in het gebied ten zuiden van het Balchasjeer. *De Schilpad* **4**.
- Langerwerf, B. (1980). De herpetofauna van Oezbekistan (5). *Lacerta* **38** (12), 123-124.
- Langerwerf, B. (1980). The Armenian Wall Lizard, *Lacerta armeniaca* Méhely 1909, with notes on its care and reproduction in captivity. *Brit. Herpetol. Soc. Bull.* **2**, 26-28.
- Langerwerf, B. (1980). The successful breeding of lizards from temperate regions. In: *Breeding Reptiles & Amphibians*, S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. (1981). Verzorging en kweek van Danfords berghagedis (*Lacerta danfordi anatolica*), in het buiten- en binnenterrarium. *Lacerta* **39** (9), 136-141.
- Langerwerf, B. (1981). Nigrinos bei der Nachzucht von *Lacerta lepida pater*. *Herpetofauna* **3** (12), 21-22.
- Langerwerf, B. (1981). The Southern Alligator lizard, *Gerrhonotus multicarinatus* Blainville 1935: its care and breeding in captivity. *Brit.*

- Herp. Soc. Bull.* **4**, 21-25.
- Langerwerf, B. (1982). *Lacerta strigata* fra Kaukasus. *Nord. Herp. For.* **25** (3), 58-63.
- Langerwerf, B. (1983). Notes on the Mosor Rock Lizard, *Lacerta mosorensis* Kolombatovic 1886, and its reproduction in captivity. *Brit. Herpetol. Soc. Bull.* **6**, 20-22.
- Langerwerf, B. (1983). Notes on management and breeding of *Agama caucasica* (Eichwald 1831) with notes on effective breeding, of other palaearctic lizards. Haltung und Zucht von *Agama caucasica* (Eichwald 1831) (Sauria: Agamidae), nebst Bemerkungen zur erfolgreichen Zucht weiterer palaearktischer Echsen. *Salamandra* **11**, 11-20.
- Langerwerf, B. (1984). Captive maintenance and breeding of the Oman Lizard *Lacerta jayakari*, Boulenger. *Bull. Chicago Herpetol. Soc.* **19** (1-2), 35-39.
- Langerwerf, B. (1984). Verzorging en kweek van de Oman hagedis, *Lacerta jayakari*. *Lacerta* **43** (1), 4-6.
- Langerwerf, B. (1984). Techniques for large-scale breeding of lizards from temperate climates in greenhouse enclosures (breeding many species of lizards in captivity, aiming the maintenance of populations of each species outside their natural habitat). *Acta Zool. Path. Antver.* **78**, 163-176.
- Langerwerf, B. (1991). A large scale breeding facility in Alabama. *Brit. Herpetol. Soc. Bull.* **36**, 43-46.
- Langerwerf, B. (1993). The reproduction in captivity of the Natal Midland Dwarf Chameleon, *Bradypodion thamnobates*. *Desert Monitor* **23** (4), 13-15.
- Langerwerf, B. (1994). The Caucasian Green Lizard, *Lacerta strigata* Eichwald 1831, with notes on its reproduction in captivity. In: *Breeding Reptiles and Amphibians*. pp. 1-6. S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. (1994). The Armenian Wall Lizard, *Lacerta armeniaca*, Mehely 1909, with notes on its care and reproduction in captivity. In: *Breeding Reptiles and Amphibians*. pp. 6-9. S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. (1994). *Agama stellio*, with observations on its care and breeding in captivity. In: *Breeding Reptiles and Amphibians*. pp. 36-41. S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. (1994). The Southern Alligator Lizard, *Gerrhonotus multicarinatus*: its care and breeding in captivity. In: *Breeding Reptiles and Amphibians*. pp. 58-64. S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. (1994). The reproduction in captivity of the Natal Midland Dwarf Chameleon, *Bradypodion thamnobates*. In: *Breeding Reptiles and Amphibians*. pp. 75-79. S. Townson (Ed.) British Herpetological Society, London.
- Langerwerf, B. & Paris, M. (1994). Super mealworms (*Zoophobas morio*). *Reptiles Magazine* **2** (1), 42-46.
- Langerwerf, B. (1995). Keeping and breeding the Argentine Black and White Tegu, *Tupinambis teguixin*. *Vivarium* **7** (3), 24-29.
- Langerwerf, B., Marion, K. & Paris, M. (1995). Captive husbandry of the Chinese Gliding Treefrog (*Polypedates dennysi*). *Reptiles Magazine* **3** (5), 68-77.
- Langerwerf, Bert. (1996). Notes on the natural history, husbandry, and breeding of Drakensberg Crag Lizards (*Pseudocordylus melanotus viridis*). In: *Advances in Herpetoculture*. P. D. Strimple (Ed.).
- Langerwerf, B. (1996). My Grozny Lizards. *Reptiles Magazine* **4** (9), 76-83.
- Langerwerf, B. & Paris, M. (1997). Outdoor vivaria. *Vivarium* **8** (4), 57-60.
- Langerwerf, B. (1997). Het houden en kweken van de Argentijnse Zwart-witte Teju, *Tupinambis teguixin* [Keeping and breeding the Argentine Black and White Tegu, *Tupinambis teguixin*]. *Terra*. **33** (2), 46-52.
- Langerwerf, B. (1998). Einfluss schwankender Temperaturen auf den Schlupf bei zwei Echsenarten. *Elaphe* **6** (3), 22-24.
- Langerwerf, B. & Mantel, P. (1998). Breeding of *Physignathus lesueurii* in outdoor terraria. *Lacerta* **56** (3), 83-89.
- Langerwerf, B. (2000). Die Zucht von Riesengürtelschweifern in Alabama. Bibliotheca Cordyliformium.

- Langerwerf, B. (2001). Keeping and breeding the Sungazer (*Cordylus giganteus*). *Reptiles Magazine* **9**, 6.
- Langerwerf, B. (2001). Jeweled Lacertas: A Mediterranean treasure. *Reptiles Magazine* **9**, 12.
- Langerwerf, B. (2002). A Tegu for you? *Keeping Rept. and Amphib.* **10** (11),72-85.
- Langerwerf, B. (2005). Haltung und Nachzucht des Drakensberg-Gürtelschweifs (*Cordylus melanotus subviridis*).
- Langerwerf, B. (2005). Montevallo man makes his living with lizards. *The Montgomery Advertiser*, July, 2005.
- Langerwerf, B. (2005). Physical sciences arranges speaker's visit to B'ham Elementary School. UAM Update. September, 2005.
- Langerwerf, B. (2006). Leapin' Lizards: Reptiles on the loose. *USA Today*. March edition, 2006.
- Langerwerf, B. (2006). Species Profile: Drakensberg Crag Lizard. *Reptiles Magazine* **14**, 3.
- Langerwerf, B. (2006). *Water Dragons*. TFH Publications. Neptune, New Jersey, USA.
- Langerwerf, B. (2008). *Shinisaurus* secrets. *Reptiles Magazine* **16**, 4.
- Langerwerf, B. (2008). Totally Tegus: How to distinguish and breed these south American lizards. *Reptiles Magazine* **16**, 6.
- Meni, B.G., Arikani, H.S., Mermer, A., Langerwerf, B. & Bahar, H. (2006). Morphological, hemipenial and venom electrophoresis comparisons of the Levantine Viper, *Macrovipera lebetina*, from Cyprus and southern Anatolia. *Turk J. Zool.* **30**, 225-234.
- Werning, H. (2007). Ferien auf dem bauernhof - die agamenfarm "Agama International Inc." von Bert Langerwerf. *Reptilia* **12** (6), 75-84.
- Zwart, P., Claessen, H., Goten, P.V.D. Langerwerf, B. Leunisse, J., Mennes, J. & Riel, C.V. (1982). Fortpflanzungsprobleme und Aufzucht-krankheiten bei Reptilien. *Verh. Ber. Erkrög. Zootiere* **24**, 97-105.
- Zwart, P., Langerwerf, B., Claessen, H., Leunisse, J.J.C., Mennes, J., Riel, C.V., Lambrechts, L. & Kik, M.J.L. (1992). Health aspects in breeding and rearing insectivorous lizards from moderate climatic zones. *Zool. Garten.* **62** (1), 46-52.

#### TRIBUTES

- Anon (2008). 'Lizard-man' nurtured reptiles and made discoveries along the way. *The Wall Street Journal*. Rememberances, September 20, 2008.
- Legg, C. (2008). Friends say goodbye to Lizard-man. *Shelby County Reporter*, 26 August 2008.

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