# **ZOOLOGISCHE MEDEDELINGEN**

#### **UITGEGEVEN DOOR HET**

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN (MINISTERIE VAN CULTUUR, RECREATIE EN MAATSCHAPPELIJK WERK) Deel 49 no. 6 20 mei 1975

# THE HISTORY OF SOME KOMODO DRAGONS (VARANUS KOMODOENSIS) CAPTURED ON RINTJA IN 1927

by

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Dokter Guerinlaan 23, Ommeren With 2 plates

#### Introduction

The first scientific description of the Komodo Dragon (Varanus komodoensis), given by P. A. Ouwens, appeared only as late as 1912. During some time following this event, but little information on the species became available and no specimens were captured. Only in 1926, an American expedition to the island of Komodo, led by W. D. Burden, for the first time succeeded in capturing alive two Komodo Dragons and in transporting these to the U.S.A. Both animals were received at the New York zoological garden on 11 September 1926. One of the specimens, a male, died on 24 November 1926; the other, of unknown sex, died on 19 October 1926 (Jones, 1965: 92).

On 14 October 1926, a male Komodo Dragon was received at the Amsterdam zoological garden. It was donated by W. Groeneveldt, at the time assistant-resident of Bima, Sumbawa. After its capture on western Flores, it was transported to Amsterdam on the SS. "Karimata", "lodged in a specially built steam-heated cabin" (Anonymous, 1926: 979). The animal died on 4 December 1926 (Jones, 1965: 92, and Fr. de Graaf, in litt., 28 November 1973); the skin was stuffed and is preserved in the Zoölogisch Museum at Amsterdam (D. Hillenius, in litt., 31 October 1973).

In June 1927 five Komodo Dragons were received in European zoological gardens, viz., one in the Amsterdam Zoo, one in the Rotterdam Zoo, one in the Berlin Aquarium, and two in the London Zoo. These, with two specimens sent to the Surabaja zoological garden and five which died before reaching their destination, were captured by my late grandfather, H. R.

Rookmaaker, in 1927. The history of these specimens is the main subject of this paper. The information provided here is based 1) on letters I received from several zoological gardens and musea, 2) on scattered information in literature, and 3) on a large number of letters written by or directed to my grandfather and which I found in his legacy.

My grandfather, H. R. Rookmaaker (to be indicated as HRR here-under), visited the islands of Komodo and Rintja from 24 to 28 March 1927, being at that time assistant-resident of Flores. During this trip he captured, on Rintja, a total of 12 Komodo Dragons; an account of their capture given in letters to the Amsterdam and Rotterdam Zoo's, both dated 2 April 1927, reads as follows: "About 200 men from Flores searched the valley and when someone saw a 'dragon' it was surrounded and snared by means of a noose attached to a stick. A few animals tried to attack but, cornered by such a great number of people, they normally hid under branches or a tree, and subsequently they were snared".

In this way twelve Komodo Dragons were captured and afterwards taken to Ende on Flores. Two specimens died in Ende; the remains of these were at a later date sent to the Rijksmuseum van Natuurlijke Historie at Leiden (details are given below).

The remaining ten left the quay of Ende on 4 April 1927, on board of the K.P.M. ('Koninklijke Pakketvaart Maatschappij') steamer "De Klerk". On 11 April 1927, they arrived safely in the harbour of Surabaja (Java), where eight animals were taken ashore by the personnel of the Surabaja zoological garden. The other two went on the "De Klerk" to the British Consulate at Batavia, arriving at Priok on 14 April 1927.

The history of these twelve specimens is presented below, followed by remarks on specimens captured during a second expedition of HRR.

#### HISTORY OF THE SPECIMENS

1-2. Surabaja zoological garden (at that time known as "Vereeniging Soerabaiasche Planten- en Dierentuin").

Only two of the eight animals which arrived in the Surabaja Zoo on II April 1927, actually stayed there. About these two, a male and a female, no further information could be found.

# 3-4. Amsterdam zoological garden.

The two animals given to the Amsterdam Zoo were shipped from Surabaja on the SS. "Radja", under command of captain Terwiel. The date of

departure is unknown, but probably it was not before 21 April 1927 and not after 9 June 1927 (as on this date the shipment of the animals was confirmed by the Surabaja Zoo in a letter to HRR). One specimen died somewhere during the journey. Although the director of the Amsterdam Zoo in these years, Dr. C. Kerbert, in a letter to HRR dated 1 July 1927, writes that "skin and skull are preserved and therefore are valuable for the zoological museum here", these remains cannot be traced in the Zoölogisch Museum at Amsterdam (D. Hillenius, in litt., 31 October 1973).

The second specimen, however, arrived safely at Amsterdam harbour, although its health was badly affected by the long journey. The date of arrival of 27 July 1927, given to me by Fr. de Graaf (in litt., 28 November 1973) and recorded by Marvin L. Jones (1965: 92) is doubtful. Dr. D. Hillenius (in litt., 31 October 1973) mentions 27 June 1927 as date of arrival, which is probably correct as Kerbert reported the arrival of this Komodo Dragon in a letter to HRR dated 1 July 1927. This specimen, a female, fell seriously ill on 15 September 1927 and died the following day (Fr. de Graaf, in litt., 28 November 1973). At its death it measured 1.90 m (Jones, 1965). The skin is preserved in the Zoölogisch Museum at Amsterdam (D. Hillenius, in litt., 31 October 1973).

#### 5-6. Rotterdam zoological garden.

Concerning the date of departure from Surabaja about the same may be said as is stated above with regard to the Amsterdam specimens on the SS. "Radja". The two animals given to the zoological garden in Rotterdam were shipped on the SS. "Blitar". One of them was hardly alive on departure and died after one day on the ship (K. Kuiper, Rotterdam, in litt. to HRR, 11 July 1927). Its sex is unknown and no remains seem to have been preserved.

The other animal, also of unknown sex, arrived at Rotterdam on 4 July 1927 (D. van Dam, in litt., 25 October 1973). On its arrival it was in a good condition, "only somewhat injured on its snout" (K. Kuiper, in litt. to HRR, 11 July 1927), and it was about 2 m long. The exact date of its death is unknown, but in November 1927 the Rijksmuseum van Natuurlijke Historie at Leiden bought from the Rotterdam Zoo "I Varanus komodoensis from the island of Rintja" (Van Oort, 1928: 30).

In the Leiden Museum there is preserved a complete, half grown specimen in alcohol (reg. no. RMNH 9392). Although the label only states that this animal was donated by HRR (which is not quite correct), it is almost certain that it was received from the Rotterdam Zoo (M. S. Hoogmoed, in litt., 22 November 1973 and 3 January 1974). The length of this specimen is about 190 cm, 90 cm of which constitute head plus body.

# 7-8. Berlin aquarium.

On 21 April 1927, the two Komodo Dragons with destination Berlin were shipped from Surabaja on the SS. "Altona", arriving at Amsterdam harbour on 9 June 1927. There, the two animals were received by some persons of the Berlin aquarium, but the biggest specimen died somewhere between Amsterdam and Berlin, being very weak as a result of the long sea voyage (O. Heinroth, Berlin, in litt. to HRR, 11 June 1927). It measured 2.65 m (Lederer, 1942: 228).

The second specimen (a male) reached Berlin on 11 June 1927; it became very tame during the subsequent years in the aquarium and it was even allowed to roam about freely in the visitors area (Klös, 1969: fig. on p. 278). It lived in Berlin until, after an air-raid during the night of 22-23 November 1943, it was transferred to the Leipzig Zoo. On 17 January 1944 it died, after 16 years, 7 months and 6 days in Europe (Mertens, 1948: 153; 1970: 205). Its death has probably been the consequence of "einer Lähmungserscheinung am rechten Hinterbein, die sich in den letzten Jahren in immer steigenden Masse bemerkbar machte und die Fortbewegung stark behinderte" (Mertens, 1948: 153). When the animal arrived in Berlin in 1927, it was adult but certainly not yet fully grown. At that time its total length (including the tail) was 190 cm (Lederer, 1942: 228). At its death it measured 249.0 cm (head plus body 134.0 cm, tail 115.0 cm) (Mertens, 1948: 154). The remains arrived at the Senckenberg-Museum in Frankfurt am Main on 21 January 1944. They are preserved in the herpetological collection, under no. 37209 (Mertens, 1948: 153).

### 9-10. London zoological garden.

After arriving at the British Consulate at Batavia on 14 April 1927, these two animals were brought aboard te SS. "Phrontis" of the Blue Funnel Line, which left Priok on 23 April 1927 with destination London (British Consulate General, Batavia, in litt. to HRR, 20 April 1927). The two animals reached London on 6 June 1927 and were taken to the zoological garden by Dr. Malcolm A. Smith (Flower, 1937: 30, cf. also Jones, 1965: 92). Mitchell (1928: 1004) mentions 15 June 1927 as the date of arrival but that seems to be incorrect.

One of the specimens, named Sumbawa, "on arrival was badly affected with cancer in the mouth, and it was kept separate for some weeks while it was being treated with disinfectants. It became quite tame during this process and can be handled by persons it knows" (P. Chalmers Mitchell, London, in litt. to HRR, 17 October 1927). At first is was thought that

Sumbawa was a female, but at its death it proved to be a male (Mitchell, 1936: 36). Malcolm Smith (1938: 290) records its length on arrival as "seven and a half feet" (= 228.6 cm), and at its death in 1934 as "eight and a half feet" (= 259 cm). Mitchell, however, states that in 1936 the length was only 6 feet 8 inches (= 202.2 cm). Some additional information on this specimen has been provided by J. B. Procter (1928). Sumbawa died on 29 January 1934 (Flower, 1937: 30) of endocarditis (Mitchell, 1936: 36). The remains arrived in the British Museum (National History), at London, on 2 September 1934. From the skin a cast was made by Rowland Ward (Smith, 1938: 292), which is still on public display in the Reptile Gallery. Skeleton, tongue and penis were preserved separately (reg. nos. BM 1934. 9.2.1-4) (C. J. McCarthy, in litt., 25 October 1973).

The other Komodo Dragon, named Sumba, probably was a male too, as Flower (1937: 30) speaks about "two males". Jones (1965: 92) mentions 23 October 1939 as the date of its death, but the remains were received in the British Museum (Natural History) already on 1 October 1939. The animal is "preserved whole in a large tank with formalin" (reg. no. BM 1939. 10.1.1) (C. J. McCarthy, in litt., 25 October 1973). The total length now is 230 cm (snout to vent 125 cm, incomplete tail 105 cm, head 21 cm).

#### 11-12. Rijksmuseum van Natuurlijke Historie, Leiden.

Two specimens died soon after their capture in March 1927. Some of their remains were sent at a later date to the Rijksmuseum van Natuurlijke Historie at Leiden. HRR states to have sent the following material: 1) a skin and a skeleton of the first specimen (no. 11) and the head of the other, bigger animal (no. 12), on 28 May 1927; 2) the skeleton of specimen 12, on 9 August 1927. On 26 July 1927 the Leiden Museum received "a skin and some loose parts of a skeleton" (Van Oort, 1927: 19), or possibly "a skin and skeleton" (Van Oort, Leiden, in litt. to HRR, 6 August 1927), the second record being the more likely. Next, on 15 September 1927, "an almost complete skeleton of *Varanus komodoensis* from Rintja" was received (Van Oort, 1928: 7).

Dr. M. S. Hoogmoed, curator of Reptilia and Amphibia at the Leiden Museum, kindly provided me the following information about the material at present available in the Leiden Museum. This includes: reg. no. RMNH 17497: a stuffed animal and a nearly complete skeleton, including the head. The stuffed animal has a length of 240 cm, of which 113 cm constitute head and body length. The skeleton and the stuffed animal are preserved separately but, although this is not indicated, they probably belong to the same specimen (M. S. Hoogmoed, in litt., 23 October 1973). This is presumed

to have been specimen no. 11; if this assumption is correct, both skin and skeleton were received in Leiden on 26 July 1927. Recently, in July-August 1971, the stuffed animal has been on display during a terrarium exhibition in the Hortus Botanicus at Leiden (M. S. Hoogmoed, in litt., 15 January 1974).

Unfortunately, it has been impossible to locate in the Leiden Museum either the skeleton or the skull of specimen 12. Considering the information provided by Van Oort (1928: 7), it is almost certain that these parts did arrive in the Leiden Museum. Possibly this skeleton has been exchanged, but it has been impossible to trace any evidence supporting such a speculation (M. S. Hoogmoed, in litt., 17 January 1974).

# SECOND EXPEDITION TO RINTJA, IN JUNE 1927

On request of Prof. R. Mertens, who during his expedition to the Sunda islands in 1927 was unable to visit either Rintja or Komodo (Mertens, 1940: 68), HRR again went to Rintja in the middle of June 1927. There he captured, with the help of native assistants from Flores, at least two Komodo Dragons. These were sent to Mertens, who received them on 26 June 1927, when he stayed in Rana Mese (Mertens, 1930: 141-142; 1940: 67-71).

One of these animals, a male, had been badly wounded on its jaw during the capture and transportation and was very weak. After a few days, Mertens decided to kill it as it would not live very much longer (Mertens, 1930: 142; 1940: 71). The (stuffed) skin and the skeleton are still preserved in the Senckenberg-Museum, Frankfurt am Main, under no. 23184 (Mertens, 1930: 279). Immediately after its death it was measured: the total length was 300.4 cm (head plus body 150.3 cm, tail 150.1 cm) (Mertens, 1942: 280), but some 25 cm of the tail were missing, which does not seem to be uncommon (Heberer, 1930: 394). The skin in dry state measures 2950 mm (Mertens, 1930: 256).

The other specimen, a female, was taken to Germany by Mertens and was deposited in the zoological garden of Frankfurt am Main, where it arrived on 2 October 1927. This animal, which was called Bübchen, measured some 2.2 m in 1940 (Mertens, 1940: 71), and many details on its life and behaviour in captivity have been recorded by Lederer (1942). Unfortunately it was killed on 18 March 1944 during the destruction of the aquarium in the Frankfurt Zoo, after having been in captivity for 16 years, 8 months and 21 days. No remains have been recovered (Mertens, 1948: 156).

#### ACKNOWLEDGEMENTS

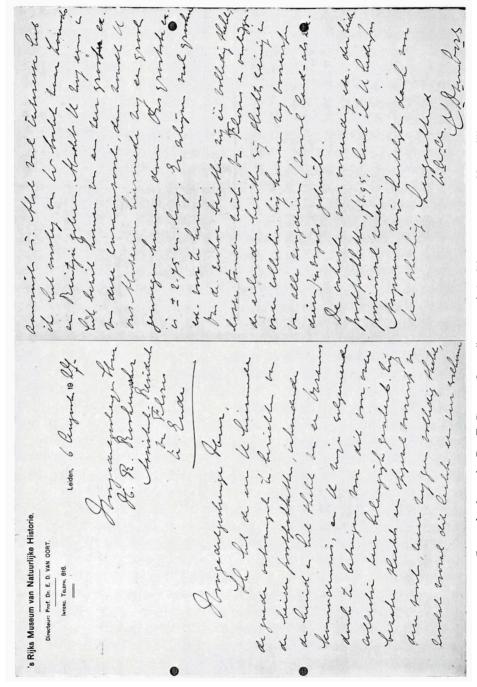
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#### REFERENCES

- Anonymous, 1926. Living "dinosaurs": Europe's first specimen; and two in New York.

  Ill. Lond. News, Nov. 20, 1926: 979, figs. 1-3.
- FLOWER, S. S., 1937. Further notes on the duration of life in animals. III. Reptiles. Proc. zool. Soc. London, 107(1): 1-30.
- Heberer, G., 1930. Das Hodeninterstitium von Varanus komodoensis Ouwens. (Aus den Ergebnissen der Sundaexpedition Rensch). Zeitschr. mikrosk.-anat. Forsch., 20 (3/4): 388-416, figs. 1-11, pls. 1-3.
- JONES, M. L., 1965. The Komodo Dragon. Chronological list of the Komodo dragon lizard (Varanus komodoensis) exhibited outside Indonesia 1926-1964. — Int. Zoo News, 12 (3): 92-93.
- Klös, H. G., 1969. Von der Menagerie zum Tierparadies. 125 Jahre Zoo Berlin. Berlin. Lederer, G., 1942. Der Drachenwaran (Varanus komodoensis Ouwens). Zool. Gart. Lpz., (N.F.) 14 (5/6): 227-244, figs. 1-11.
- MERTENS, R., 1930. Die Amphibien und Reptilien der Inseln Bali, Lombok, Sumbawa und Flores. (Beiträge zur Fauna der kleinen Sunda-Inseln, I). Abh. Senckenb. naturf. Ges., 42 (3): 115-344, pls. 1-9.
- -, 1940. Aus dem Tierleben der Tropen. Frankfurt am Main.
- —, 1942. Die Familie der Warane (Varanidae). Dritter Teil: Taxonomie. Abh. Senckenb. naturf. Ges., 466: 235-391.
- —, 1948. Ueber den Komodo-Waran des Berliner "Aquariums", besonders seinen Schädel. Senckenbergiana, 28 (4/6): 153-157, figs. 1-2.
- —, 1970. Ueber die Lebensdauer einiger Amphibien und Reptilien in Gefangenschaft. Zool. Gart. Lpz., (N.F.) 39 (1/6): 193-209, figs. 1-2.
- MITCHELL, P. CHALMERS, 1928. Report on the additions to the Society's Menagerie during the months of June, July, August and September, 1927. Proc. 2001. Soc. London, 1927 (4): 1003-1005.
- —, 1936. The Zoological Society of London. Guide to the gardens and aquarium. 32nd ed. London.
- Oort, E. D. van, 1927. Verslag omtrent 's Rijks Museum van Natuurlijke Historie te Leiden, loopende over het tijdvak van 1 September 1926 tot 1 September 1927. Leiden.
- ---, 1928. Verslag omtrent 's Rijks Museum van Natuurlijke Historie te Leiden, loopende over het tijdvak van 1 September 1927 tot 1 September 1928. Leiden.
- PROCTER, J. B., 1928. On a living Komodo Dragon, Varanus komodoensis Ouwens, exhibited at the Scientific Meeting, October 23, 1928. Proc. zool. Soc. London, 1928 (4): 1017-1019, fig. 1.
- SMITH, MALCOLM, 1938. The Komodo Dragon. Aquarist, Nov. 1938: 289-290, 292, 2 figs.



Copy of a letter by Dr. E. D. van Oort, director of the Rijksmuseum van Natuurlijke Historie, to mr. H. R. Rookmaaker, acknowledging the receipt of a skin and a skull of  $Varanus\ komodoensis$  Ouwens from Rintja.



One of the Komodo Dragons from Rintja, photographed on March 31, 1927. This specimen was subsequently sent to the Amsterdam Zoo.