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AN ABNORMAL SKULL OF THE EUROPEAN HARE,
LEPUS EUROPAEUS PALLAS, 1778

ANORMALNA CZASZKA ZAJĄCA SZARAKA, *LEPUS EUROPAEUS*, PALLAS, 1778

Brachycephalous and shortened (brain-case) skull of the European hare is described. The base of this skull is inflected more than normally. Comparison of skull measurements of normaly and anomaly specimens are given.

In my own collections of mammals from the Kujawy region of Poland I found a hare skull which differed greatly in appearance from other specimens of this species (Fig. 1). This particular specimen (coll. no. 366) had been shot on December 17th 1961 near Ciechocinek (Aleksandrów Kujawski district, Bydgoszcz province). The following external measurements were made: L — 576 mm, C — 50 mm, P — 145 mm, A — 100 mm. It was a male in age class *III*, aged about 9—12 months (Caboń-Raczyńska, 1964 c). With the exception of the very short tail, the measurements given are of medium size (Caboń-Raczyńska, 1964 a, b). It must be added that the tail was undamaged and ended in a tuft of black hairs.

Table 1.
Comparison of measurements of an abnormal and normal specimens.

Measurements	n	Control series		Abnormal specimen
		Min. — Max	Avg.	
Condylbasal length	143	77.5— 91.0	85.7*	80.6
Length of profile	124	92.0—102.0	97.4*	93.7
Length of brain-case	121	44.0— 50.0	46.6*	44.9
Zygomatic breadth	101	43.5— 49.1	46.1*	49.0
Breadth of brain-case	62	30.0— 34.5	32.2*	35.6
Spread of <i>rami mandibulae</i>	22	29.0— 38.1	33.2	39.0
Angle α	27	145°—169°	155.4°	119°
Angle β	29	149°—174°	162.4°	142°
Angle γ	29	142°—162°	148.5°	125°
Breadth-length index of skull in %	62	38.0— 45.0	41.3*	50.6

* — for hares in age class *III* (after Caboń-Raczyńska, 1964c).

The skull of this specimen exhibits shortening of the cranial part due to inflection of the base at a certain angle. Measurements of length (*Cb.*, length of profile and brain-case), although within limits of variation encountered in these measurements for adult specimens in the same age class (*III*), are very close to minimum values. The breadth of the brain-case and space between the branches of the mandible are distinctly enlarged and exceed the limits of variation of these characters in normal

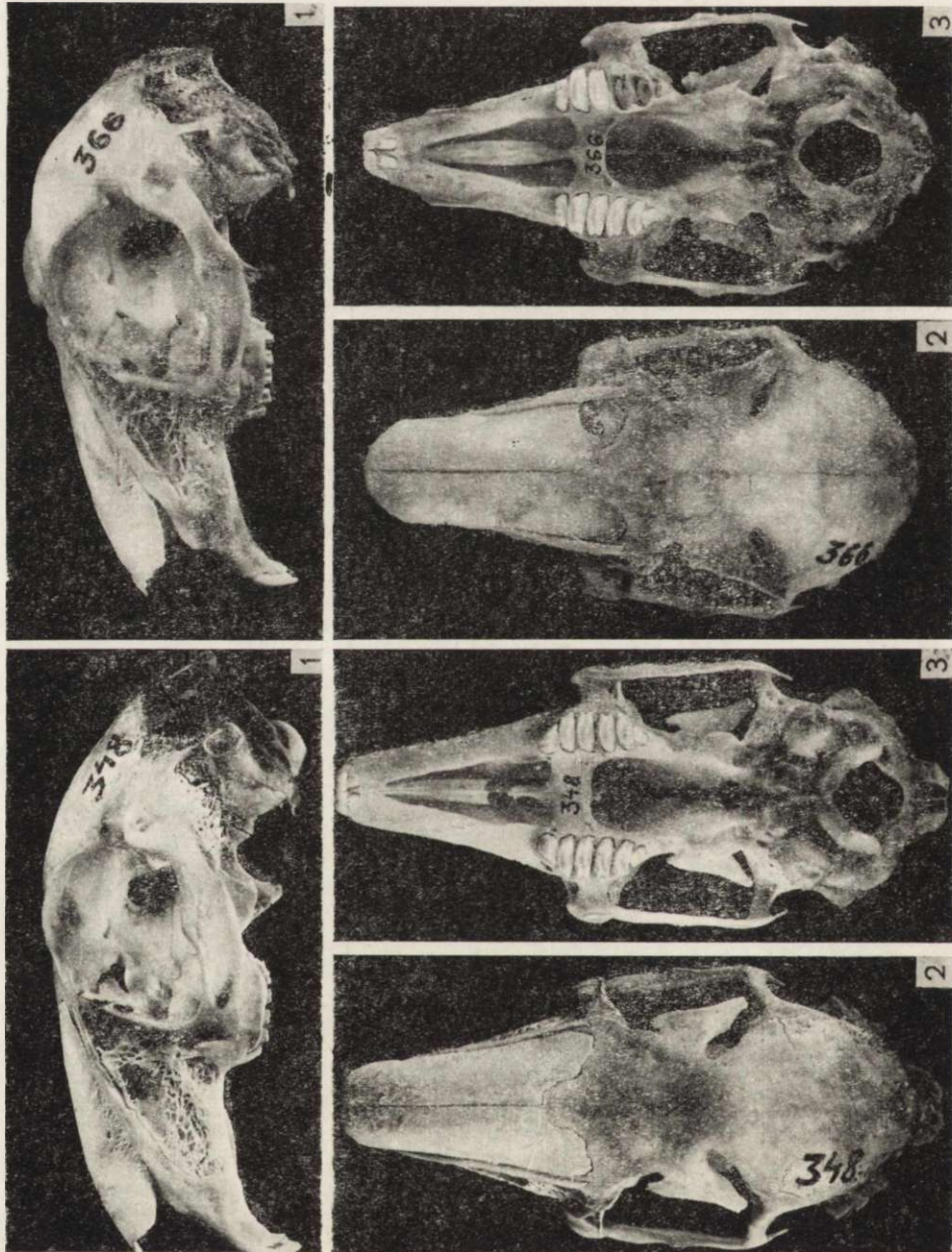


Fig. 1. Comparison of normal (left) and deformed (right) skulls of the hare.
1. *norma lateralis*, 2. *norma verticalis*, 3. *norma basillaris*.

specimens. The zygomatic breadth is close to the upper limit of variation in normal skulls (Table 1), hence the breadth — length index of the skull, expressed in the relation of breadth of brain-case to length of base, differs considerably in this species from values for control specimens.

Measurement of three angles was made in order to express numerically the inflection of the base of the skull: α — between the *praesphenoidale* and *basisphenoidale*, β — between *basisphenoidale* and *basioccipitale*, and γ — between the planes of *ossa parietalia* and *os frontale* — the values of which are given in table 1. All the above angles in the specimen discussed are far greater than in the control series of hares' skulls.

Incisura angularis mandibulae does not normally cover *bulla tympanica*, but in this particular specimen it half-covers it. The fact is also remarkable that *synchondrosis intersphenoidalis* and *s. sphenoccipitalis* form bony growths, although normally they do not ossify throughout the whole life of hares (Caboń-Raczyńska, 1964 c).

The case described here is undoubtedly a rare one and can only occur as a pathological fact. In the literature to which he had access the author did not find any description of a similar case, and the present one would appear to be completely isolated. The uneven ossification of cartilaginous growth might be due to the bones forming the base of the skull converging and fracturing, and as a result shortening of the brain-case, and also enlargement of the angle of inflection of *ossa parietalia* in relation to the plane of *os frontale*. The author assumes that such distinct changes in the structure of the skull might be caused by mechanical injury during birth, or in the early stage of postnatal development.

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A RUFOUS SPECIMEN OF *EPTESICUS SEROTINUS* (SCHREBER, 1774)

RUDY OKAZ *EPTESICUS SEROTINUS* (SCHREBER, 1774)

A specimen (coll. no. 30850, ♂, ad.) differing considerably as to its external appearance from the other bats of this species (specimens kept in a lightproof cabinet) was found among the series of *E. serotinus* in the collection of the Mammals Research Institute at Białowieża. It was captured in the European bison reserve on October 26th 1962. The author has often found this species when ringing bats, but encountered a specimen of this coloration for the first time.

The measurements of the body and skull in the specimen referred to were as follows: L — 70 mm, C — 52 mm, P — 12 mm, A — 16 mm, forearm — 52 mm, weight — 27.1 g, Cb. — 20.5 mm. Use was made of the