# Euprox furcatus (HENSEL, 1859) (Cervidae, Mammalia) from Przeworno (Middle Miocene, Lower Silesia, Poland)

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Abstract. Remains of *Euprox furcatus* (HENSEL, 1859) from the Middle Miocene (zone MN 7) of Przeworno (Lower Silesia, Poland) have been described. The material consists of numerous jaws with dentition and bones of limbs. Remarks on the formation of antlers are presented in this paper. *Euprox furcatus* resembles the muntjac; the type of its dentition indicates a diet of soft food. This deer was capable of fast running and jumping. *Euprox furcatus* has been recognized to have been an agile species, inhabiting various environments.

Key words: fossil mammals, Artiodactyla, Cervidae, Middle Miocene, Poland.

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## I. INTRODUCTION

This paper presents a description of the remains of *Euprox furcatus* (HENSEL, 1859) collected at the Middle Miocene locality of Przeworno (zone MN 7) (KOWALSKI 1990; HEIZMANN & KUBIAK 1992).

The location of this locality and the progress of its exploration and investigation have been broadly described in earlier publications (OBERC 1966; GŁAZEK et al. 1971, 1972, 1977; KUBIAK 1981 a,b, 1987, 1989; KOWALSKI 1990; HEIZMANN & KUBIAK 1992 and in papers by other authors). As a result, a large number of remains of Middle Miocene vertebrates were excavated and delivered to appropriate specialists for study. A preliminary study of part of the material obtained was published by GŁAZEK et al. (1972), including the first description of the remains of *Cervidae* identified by Dr A. SULIMSKI as *Euprox furcatus* (HENSEL, 1859). The results of the studies carried out so far on the fauna of this site, its stratigraphy, palaeogeography and palaeoecology have been comprised in publications by GŁAZEK et al. 1971, 1972, 1977; KOWALSKI & ZAPFE 1974; KUBIAK 1975, 1981a,b, 1982, 1987, 1989; MŁYNARSKI 1978, 1984; SZYNDLAR 1984;

KUBIAK & WOLSAN 1986; BOCHEŃSKI 1987; GŁAZEK & SZYNKIEWICZ 1987; CZYŻEWSKA 1989; KOWALSKI 1990; HEIZMANN & KUBIAK 1992.

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### II. MATERIAL AND METHODS

The material described in the present paper comes from two sites, originally defined as varying in age Przeworno 1 (also called "lower") and Przeworno 2 (called "upper"). It is in the possession of the Institute of Systematics and Evolution of Animals, P. A. Scs, in Cracow and is designated with the symbol MF/. Moreover, remains of *Euprox furcatus* described by GŁAZEK et al. (1972) and belonging to the Institute of Geology, Warsaw University (IGPUW-GŁ.P.2-8), were also utilized.

All the bones and teeth of *Euprox furcatus* white in colour come from Przeworno 1 (lower) and remains in yellow and yellow-brown colours from Przeworno 2 (upper). Complete mandibles, maxillae and other bones are scarce.

The remains were measured by mean of a vernier caliper. The following designations were applied: L – length, W – width, H – height, DAP – antero-posterior dimension, DT – transverse dimension, N – number of specimens, OR – range, M – arythmetic mean, SD – standard deviation.

The nomenclature of particular parts of the skeleton has been adopted after POPLEWSKI (1938) and that of teeth after HEINTZ (1970). The dentition of the *Cervidae* shows small but significant differences between individual members of this family (HEINTZ 1970) and for this reason a rather detailed description of the teeth of *Euprox furcatus* is given.

#### III. SYSTEMATIC PART

Order: Artiodactyla OWEN, 1848 Family: Cervidae GRAY, 1821 Genus: Euprox STEHLIN, 1928 Euprox furcatus (HENSEL, 1859) (Plates I-V; Tables I-VII; Figs. 1-8)

M a t e r i a l: Lower Przeworno: 12 complete and fragmentary mandibles (MF/2163/65 A, B, C, E, 69, 70, 71, 86, 88 A, B, 93 A, B), 9 complete and fragmentary maxillae (MF/2163/65 F, G, H, I, 76 A, B, C, 77 B, 84), left humerus (MF/2163/48), 2 right and 1 left fragments of distal ends of humeri (MF/2163/68 A, I, 41), proximal fragment of radius (MF/2163/73), 3 fragmentary right pelves (MF/2163/73, 78, 79), 2 distal

fragments of right femora (MF/2163/72, 75), left tarsus (MF/2163/80 A), left cubonavicular (MF/2163/80 B) and proximal end of right metatarsus (MF/2163/68 B).

Upper Przeworno: 20 fragments of mandibles (MF/2164/9, 33A, 44, 85, 89 A, B, 90, 91, 92, 94 A, B, 95 A, B, 96, 97 A, B, 99, 106, 107, 108), 3 fragments of antlers (MF/2164/110 A, B, 113), 4 right and 4 left damaged fragments of scapulae (MF/2164/2, 4, 6, 8, 19, 38, 40, 42), 2 heavily damaged fragments of the distal ends of humeri (MF/2164/15 A, B), fragmentary shaft of left radius of a juvenile (MF/2164/18 B), fragment of left metacarpus (MF/2164/13 A), right metacarpus (MF/2164/18 A), 2 damaged right pelves (MF/2164/38, 74), 2 fragments of left pelves (MF/2164/111, 112), right tibia (MF/2164/10), right and left distal ends of tibiae (MF/2164/14 A, B) fragmentary distal end of right tibia of a young individual (MF/2164/41 B), proximal end of right tibia (MF/2164/100), 2 left and 2 right calcanei (MF/2164/25, 32, 35 A, B), left metatarsus (MF/2164/101 A), fragmentary shaft of left metatarsus (MF/2164/101 B), 2 proximal ends of right metatarsi (MF/2164/89, 13 B), heavily damaged phalanx I (MF/2164/14 C), 2 phalanges II (MF/2164/31 A, B), phalanx III (MF/2164/15).

Measurements. Measurements and dental indices are given in Tables I-III and Figs 1-5, measurements of skeletal bones and antlers in Tables IV-VII.

# Description

Mandible and its dentition (Plates Id-e, IIIc; Tables I-III; Figs 1-5).

All the mandibles preserved are damaged. Specimens 65 A, C and 97 A, B belonged to young individuals; the preserved deciduous teeth are DP<sub>3</sub> and DP<sub>4</sub> or falling-out DP<sub>4</sub>. The remaining specimens belong to adult individuals with quite fresh teeth, slightly worn teeth and heavily worn ones. The tooth enamel is strongly channelled.

Table I

Measurements of teeth of Euprox furcatus from Przeworno

Tooth	N	Length			Width			
	N	OR	M	SD	OR	M	SD	
P <sub>2</sub>	7	8.2-9	8.56	0.3408	4.4-5.6	4.91	0.4099	
P <sub>3</sub>	13	9.2-11.4	10.15	0.6145	4.9-6.7	5.78	0.5145	
P <sub>4</sub>	17	10-12	11.02	0.4841	6-8.6	6.79	0.7039	
$M_1$	27	11.2-12.7	12.01	0.3752	7.3-8.9	8.02	0.3459	
M <sub>2</sub>	26	12-14	12.92	0.6508	8.1-9.8	8.8	0.3841	
M <sub>3</sub>	25	16-19.9	17.27	0.9923	7.8-10.2	8.9	0.5907	
P <sup>2</sup>	4	8.8-9.7	9.42	0.4272	8.6-10.2	9.32	0.7644	
$P^3$	9	9-10.8	10	0.5744	10.2-12	10.98	0.6180	
P <sup>4</sup>	13	8.3-9.9	8.91	0.4469	9-13	11.9	0.9978	
$M^1$	7	10.6-12.1	12.57	0.5282	13.2-13.9	13.38	0.2714	
$M^2$	8	12.2-15.3	13.22	0.9315	14.2-15.8	14.92	0.5230	
$M^3$	6	11.9-14.2	13.05	0.7943	13-15.4	14.67	0.9688	

Table II Values of the width:length index of the teeth of *Euprox furcatus* from Przeworno

Tooth	N	Width: length index of tooth						
100th	Note to encour	OR	M	SD				
P <sub>2</sub>	5	53-65	59.49	5.97281				
P <sub>3</sub>	13	50.47-63.63	57.71	3.52680				
P <sub>4</sub>	14	53.91-68.33	61.07	4.46623				
$M_1$	22	59.37-74.78	66.34	3.85876				
$M_2$	23	65.11-76.85	68.88	2.88873				
M <sub>3</sub>	10	47.67-58.28	52	2.7695				
$P^2$	1	92.52	1 SPANS-SPANS	sessions <del>-</del> udul				
$P^3$	4	105-140.25	117.62	15.85566				
$P^4$	4	127.36-152.63	143.35	11.16015				
$M^1$	5	107.63-138.65	121.49	10.26542				
$M^2$	6	114.51-156.45	129.99	13.98902				
$M^3$	4	106.44-146.66	125.2	17.14909				

The values of the length index of premolars to molars lie within the range of 70.49-72.72.

Table III Values of the hypsodont index (height:length) of the teeth of *Euprox furcatus* from Przeworno

Tooth	N	Height: length index of tooth			
100th	19	OR	M		
P <sub>2</sub>	1	71.11	260		
P <sub>3</sub>	1	62.06	9.5.3		
P <sub>4</sub>	2	68.87-76-31	71.09		
$M_1$	1	73.67	33 (32) 3 (3)		
M <sub>2</sub>	7	66.1-74.33	72.46		
M <sub>3</sub>	7	44.94-67.21	50.15		
$P^2$					
$P^3$					
P <sup>4</sup>					
$M^1$	1	78.3			
$M^2$	1.41.45	87.61			
$M^3$	. 1	79.04	s and the - has to the		

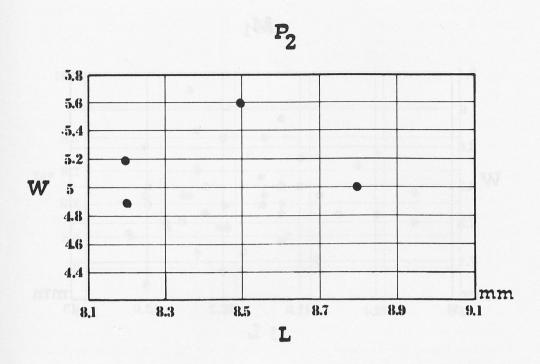


Fig. 1. Diagram showing the length/width index of P2.

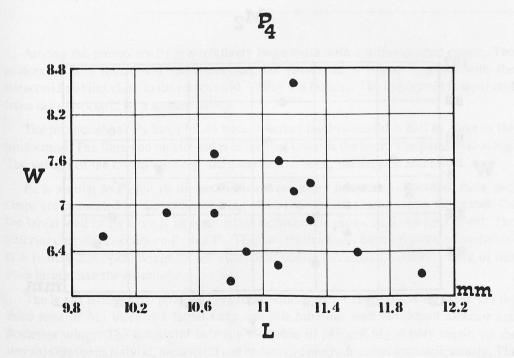


Fig. 2. Diagram showing the length/width index of P4.



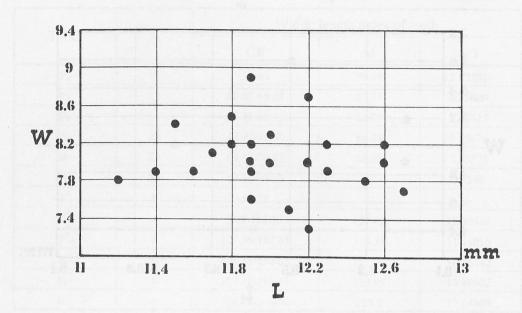


Fig. 3. Diagram showing the length/width index of  $M_1$ .



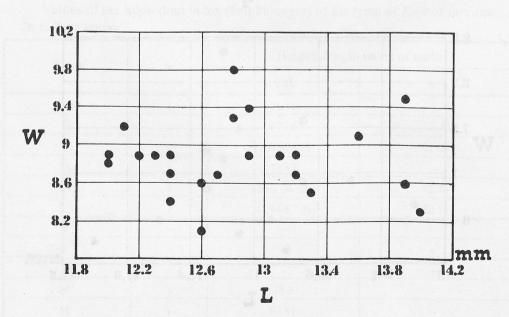


Fig. 4. Diagram showing the length/width index of M2.



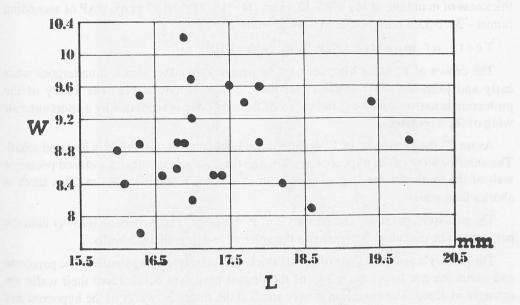


Fig. 5. Diagram showing the length/width index of M<sub>3</sub>.

Among the premolars P<sub>2</sub> is a relatively large tooth with a differentiated crown. The protoconid and metaconid are connected, the parastylid is joined together with the paraconid and lies close to the protoconid. Valley 1 is lacking. The hypoconid is separated from the protoconid by a narrow valley.

The protoconid of P<sub>3</sub> has a broad base, whereas the hypoconid is half as short as the protoconid. The flattened metaconid is elongated towards the back. The parastylid is big. The valleys of the crown are deep, the anterior one being the deepest and broad.

P<sub>4</sub> is similar to P<sub>3</sub> but its metaconid is moved away from the protoconid; these two cusps are connected by the posterior wing of the protoconid, placed across the crown. On the labial wall of P<sub>4</sub> there is an indentation between the protoconid and hypoconid. The anterior cingulum occurs on P<sub>3</sub> and P<sub>4</sub>. This last tooth attains the third grade of molarization (valley 2 is open, wings on the metaconid poorly developed, posterior wing of this cusp larger than the anterior).

The lower molars bear palaeomeryx folds which are not visible on worn teeth. On the third lobe of  $M_3$  there is a labial cusp and this lobe has well-developed anterior and posterior wings. The ectostylid between the lobes of  $M_1$  and  $M_2$  is very small; on the lingual side the parastylid, metastylid and endostylid protrude rather inconspicuously. The anterior cingulum is present but very small.

Measurements of mandible: L-163.5 mm; height of ascending ramus of mandible – 62.5 mm; diastema length – 40 mm; height of mandible under  $M_1-18.3-24.8$  mm (N = 7, M – 21.34 mm); height of mandible under  $M_2-18.7-28.7$  mm (N = 16, M – 23.08 mm); thickness of mandible at  $M_2-9.2-12.9$  mm (N = 15, M – 10.87 mm); DAP of ascending ramus – 33.1-35.6 mm (N = 2, M – 34.55 mm).

Teeth of maxilla (Plate IId-e, Tables I-III)

The crown of P<sup>2</sup> has a big paracone, its parastyle is rather small; it undergoes wear early and joins the short anterior cingulum. The metastyle is big. The valley of the protocone is narrow and long, the valley of the hypocone is separated by a short anterior wing of the hypocone.

As on P<sup>2</sup> the protocone of P<sup>3</sup> is pronounced, whereas the parastyle is low and small. The anterior wing of the hypocone is short and the posterior one forms a closed posterior wall of the tooth. On the lingual surface of P<sup>3</sup> there is a small cingulum. This tooth is shorter than wide.

The parastyle, paracone and metastyle of P<sup>4</sup> are large. The protocone is lower than the paracone. The cingulum is present on the anterior and lingual tooth walls.

The parastyle and mesostyle of M<sup>1</sup> are thick, the metastyle being smaller. The paracone and metacone are large, the wings of the lingual cusps are pointed and their walls are strongly inclined. The cingulum is very small at the front, the wings of the hypocone are surrounded by a small cingulum, which is joined together with the cingulum on the posterior wall of the tooth. There is a short fold of the protocone and, on the posterior lobe, a short crest.

 $M^2$  is bigger than  $M^1$ , the crest of the posterior lobe is missing and the cingulum is more pronounced than on  $M^1$ .

The fold of the protocone subsists on  $M^3$  even when the crown is considerably worn. The cingulum occurs on the anterior lobe, the entostyle is bigger than those on  $M^1$  and  $M^2$ 

Antlers (Table IV; Figs 6-8)

MF/2164/110 A – This is a fragment of an unshed right antler with a small fragment of the pedicle and a part of the brow tine. The burr is distinct, in the form of an irregular thickening, the tubercles are indistinct. The surface of the antler is worn out and, in consequence, there are few traces of vascular furrows preserved. Both branches are bent inwards, the axis of the beam is slightly declined outwards at the base.

MF/2164/110 B – a left unshed antler, resembling MF/2164/110 A in shape. Presumably, it belonged to a younger individual with a relatively short beam in comparison with the length of the brow tine.

Both the tines and a fragment of the pedicle are preserved. On the surface of both tines deep furrows are visible and they are deeper close to the antler pedicle. The burr is destroyed.

MF/2164/113 – A small shed left antler belonging to a young individual. This was an individual with at least second antlers. Furrows and thickenings pearls occur on the surface of the antler. The burr is not formed.

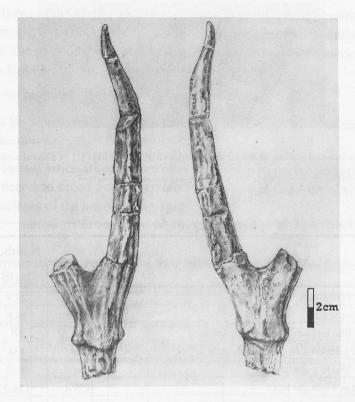


Fig. 6. The latero-internal surface of the unshed right antler (MF/2164/110~A) (1/2~of~natural~size).

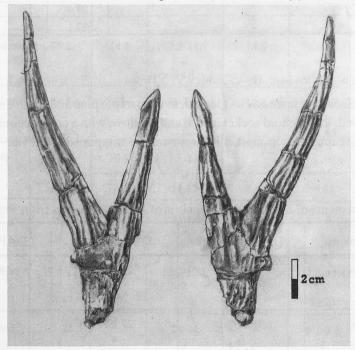


Fig. 7. The latero-internal surface of the unshed left antler (MF/2164/110 B) (1/2 of natural size).

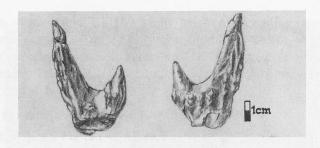


Fig. 8. The latero-internal surface of the shed left antler (MF/2164/113) (1/2 of natural size).

Table IV

Measurements of the antlers of Euprox furcatus from Przeworno

logica (home)	Number				
Measurement	110A	110B	113		
DAP of pedicle below burr	19.5	23.9			
DT of pedicle below burr	18.5	18.8	99 - N - Table 100		
Length of brow tine measured on anterior surface		89	33		
Length of beam measured on posterior surface	168	134	ca. 66		
Length of brow tine in a straight line		81.9	29.5		
Length of beam in a straight line	155.4	126.7	ca. 62		
Distance between burr and tine	36.3	19.9	18.3		
DAP of burr	29.4	-	s green Feet Square		
DT of burr	27.1	_	_		

# Forelimb (Plates Ia-c, IIa-c; Tables V, VI)

Scapula – Each specimen has its glenoid, neck, part of spine and fragments of scapular fossae preserved. The glenoid socket is oval and shallow, with a conspicuous infraglenoid tubercle. The scapular neck markedly narrowed in comparison with the length of the

Table V Measurements of the scapula and pelvis of *Euprox furcatus* from Przeworno

Measurement	DAP of socket	DT of socket	DAP of neck
Scapula	32-33.7	21-25.9	18.5-22.6
N	2	8	8
M	32.85	23.39	20.19
Pelvis	31.5-37.1	27.2-31	oge Tus vasai.
N	6	4	
M	33.33	28.55	

glenoid. The index of the antero-posterior neck length to the antero-posterior articulation facet length ranges from 58.12 to 67.06. The scapular spine is particularly prominent in the distal part. The posterior border of the scapula is massive and the anterior one is sharp. The posterior fossa is almost flat and the anterior quite narrow.

The humerus resembles that of the roe deer in size and shape.

The radius has a pronounced external tuberosity on the proximal surface. The shaft of this bone is slender.

On the proximal articulation surface of the metacarpus, on the posterior side of the shaft, a very deep and broad trough extends for three-quarters of the shaft length. Both articulation surfaces of the bone are damaged.

Table VI
Measurements of the bones of the forelimb and the phalanges of Euprox furcatus from Przeworno

Measurements	Bone							
Wiedly die in entry	Humerus	Radius	Metacarpus	Phalanx I	Phalanx II	Phalanx III		
L N M	148	- v )	152.1	32.6	23.9-25.1 2 24.5	24.2		
Н	cate 7 (lik	·-	# se <del>-</del>		<del>-</del>	24.1		
DAP of proximal end N M	25.5	14.6	13.5-14.7 2 14.1	14.6	14.6-15.1 2 14.85	12.2		
DT of proximal end N M	24.5	25	21-21.6 2 21.3	12.8	11.1-12.2 2 11.65	8.7		
DAP of shaft N M	17.8	10.8	11.1-11.2 2 11.15	01.1 - M 418 Ug es sect 2.21 - Se	9.8-10.1 2 9.95	Is to 4 - 1 to 100 to 1		
DT of shaft N M	13.4	20.5	14.7-18.3 2 16.5	44381 <u>-</u> 1301 17681-4 27,8841-1418	8.8	346 <u>±</u> 10 ° 146 246 ±10 °		
DAP of distal end N M	19.4-22 4 20.47	i lan enc en tou en economia	12.1-13.1 2 12.6		11.1-11.4 2 11.25	(2 - 10 <u>-1</u> 78.) Fig		
DT of distal end N M	21.5-26.5 4 25.12		22-24 2 23	deye ber	8.1-8.2 2 8.15	2002 <u>-</u> 13. 		

Hindlimb (Plates IIIa-b, IVa-d, Va-c; Tables V, VII)

The pelvic fragments preserved belonged for the most part to adult individuals. The acetabular socket is rather deep, with irregular outlines. The incisure of acetabulum is narrow. The oval, crescent-shaped surface is lightly concave and antero-posteriorly elongated. In the ischiatic region of the pelvis it is largest, it broadens in the coxa region and is smallest in the pubic part.

Femur – the preserved fragments of this bone lack their proximal articulation surfaces. The shaft is somewhat curved. The distal articulation surface resembles that in the *Muntiacinae*.

The tibia bears a high, curved crest. The tibia shaft is straight. The structure of the articulation surfaces is similar to that of muntjacs.

Table VII

Measurements of the bones of the hindlimb of Euprox furcatus from Przeworno

Massuromonto	Bone							
Measurements	Femur	Tibia	Calcaneus	Talus	Cubonaviculare	Metatarsus		
L N M		25.85	64.9-69.3 3 66.03	31.4	931 93 821 93	191.4		
H N M	S ( <u> </u>	-	25.3-25.5 2 25.4	17.8		M u s		
DAP of proximal end N M	8.43 <u> </u>	44.6-48.7 2 46.65	2 2 2 2 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	0.1 <u>2</u>	21.1	20.9-23.9 4 22.9		
DT of proximal end N M		ca. 48-51 2	845 <u>1</u> 0	20.2	17.8	20-24.3 4 22.9		
DAP of shaft N M	22	11.1-19.9 2 15.5	S (1-11 )	8.02	851- 1	15.9-18.6 3 17.66		
DT of shaft N M	19	18.4-19.1 2 18.75	17.6-18.2 4 17.82			14.3-16.5 3 15.53		
DAP of distal end N M	48.3-49.2 2 48.75	19.3-22.7 4 20.62	121-133 2 8.81	- 1	SS-AP- Lone L THOS	16		
DT of distal end N M	42.7-42.8 2 42.75	23.1-29.4 3 25.96	\$5.4 <del>5</del> 5 4.2	19.9	nd	25 mg		

The anterior and posterior margins of the calcaneal tuberosity of the calcaneum are straight on the interno-lateral side. The calcaneal tuberosity is relatively elongate and its surfaces are very well developed (strong facet for the insertion of the triceps muscle).

The structure of the tarsus is analogous to that in other Cervidae.

The inner and outer surfaces of the cubonavicular for the astragalus on the proximal side differ in size and are parallel to each other. The surface for the calcaneum is narrow and bent, there is a conspicuous tubercle for the internal ligament. On the distal side the surfaces for the metatarsus and cuneiform differ in shape and size.

The proximal part of the posterior surface of the metatarsus is strongly concave; the medial groove on the anterior surface does not reach to the distal articulation surface; there is an anterior medial channel. The sagittal crests of the distal joint are not prominent.

The phalanx of digit II is characterized by its proximal surfaces, which vary in size, conspicuous external tuberosity and less conspicuous internal one. The hollow between the posterior tubercles is shallow.

The phalanx of digit III has foramina for vessels on the internal side and at the back of the plantar side is poorly marked.

# IV. DISCUSSION

The material of teeth, antlers and skeletal fragments described has been referred to the species *Euprox furcatus* (HENSEL, 1859) on the following basis:

The structure of the dentition is the same as described by SULIMSKI (GŁAZEK et al. 1971) from Przeworno. Euprox furcatus was also described from Opole by WEGNER (1913). The dimensions of the dentition lie within the range of tooth dimensions of Euprox furcatus from Steinheim, Leoben, Statzling and Opole. The dentition evidences the primitiveness of this species: big P<sup>2</sup> with a differentiated crown, P<sup>4</sup> showing a low grade of molarization, the palaeomeryx fold of the lower molars is present, it readily undergoes wear. The protoconal fold is short and also soon becomes worn. M<sub>3</sub> has a fully developed third lobe. The teeth are low; the labial walls of the lower teeth and the lingual walls of the upper ones are strongly inclined.

The antler with two tines, furnished with a burr, is typical of Euprox furcatus (HENSEL, 1859, WEGNER 1913, STEHLIN 1928). The young antler with two short tines is a shed antler. THENIUS (1950) mentions an antler of Euprox minimus (TOULA, 1884) belonging to a pricket and he thinks that this species produced antlers only in the form of prickets just as do modern Mazama. On the other hand, the specimen of a young shed antler from Przeworno with two tines indicates several stages of the formation of antlers differing in size. Was it really so that there were two different ways of antler formation in the genus Euprox? This seems hardly probable. In our opinion, the antler described by THENIUS (1950), with a conspicuous burr on the pricket, may have been a pathologically formed antler, belonging to an older individual.

The skeletal fragments preserved show some resemblance to the muntjac and do not differ from those described from Opole by WEGNER (1913). The dimensions of the skeleton exceed those of the muntjac and correspond to those of the roe deer.

The dentition with low crowns and inclined walls suggest relatively soft food (leaves, young twigs). The limb proportions resemble those of muntjacs. Some of their features may indicate their capability of fast running (the probable position of the of the scapula on the humerus, elongate metacarpus and metatarsus). The hindlimb is furnished with a calcaneum with a pronounced calcaneal tuberosity showing the firm insertion of the triceps muscle, which made it possible for the animal to make efficient leaps.

Przeworno lies in an area situated close to coal-bearing regions (brown coal). According to HEIZMANN and KUBIAK (1992), the faunal assemblage from Przeworno belonged to a "mixed fauna" associated with the arid biotope, represented by *Euprox*, and the swampy forest biotope, in which *Dorcatherium crassum* has been included (CZYŻEWSKA & STEFANIAK 1994) and forests. We think that *Euprox furcatus*, in view of the structure of its dentition and skeleton, cannot be considered to be associated with the arid biotope only, but also with wooded areas. *Euprox* like other *Cervidae* was a mobile animal and was able easily to move from place to place within those environments.

In the course of its history the genus *Euprox* had occupied an extensive area from West Europe to East Asia (HENSEL 1859; HOFFMANN 1893; WEGNER 1913; STEHLIN 1928; THENIUS 1950; ALVERDI et al. 1981; VISLOBOKOVA 1983, 1990). The age of Przeworno was determined to be Zone MN7, it approaches the age of STEINHEIM (KOWALSKI 1990; VISLOBOKOVA 1990; HEIZMANN & KUBIAK 1992). In the Upper Miocene (Zone MN 10) this genus declines (MEIN 1990; VISLOBOKOVA 1990). The occurrence of *Euprox* at Przeworno and Opole in western Poland falls to the period of thriving of this genus.

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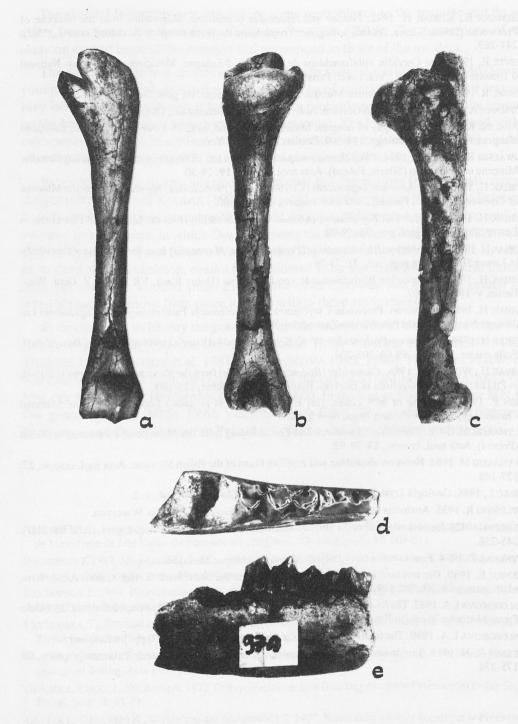


Plate I. Euprox furcatus (HENSEL, 1859) from Przeworno. a – left humerus (MF/2163/48), seen from in front.  $\times$  0.6; b – left humerus (MF/2163/48), seen from behind.  $\times$  0.6; c – left humerus (MF/2163/48), seen from a side.  $\times$  0.6; d – fragment of right mandible with DP3 - DP4 (MF/2164/97 A), occlusal view.  $\times$  1.4; e – fragment of right mandible with DP3 - DP4 (MF/2164/97 A), seen from a side.  $\times$  1.4.

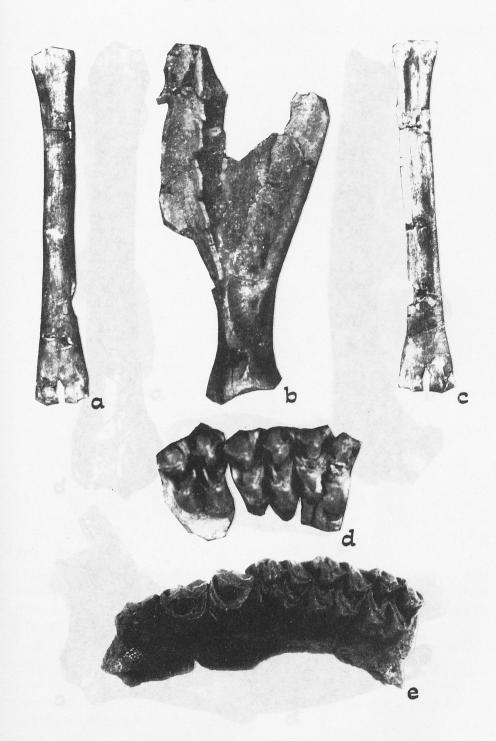


Plate II. Euprox furcatus (HENSEL, 1859) from Przewomo. a – right metacarpus (MF/2164/18 A), seen from in front.  $\times$  0.6; b – right scapula (MF/2164/2), seen from a side.  $\times$  0.6; c – right metacarpus (MF/2164/18 A), seen from behind.  $\times$  0.6; d – right M $^1$  - M $^3$  (MF/2163/65 H), occlusal view.  $\times$  1.3; e – fragment of left upper jaw with P $^2$  - M $^3$  (MF/2163/76 B), occlusal view.  $\times$  1.3.



Plate III. Euprox furcatus (HENSEL, 1859) from Przeworno. a – right femur (MF/2163/75, seen from a side.  $\times$  0.6; b – right femur (MF/2163/75, seen from in front.  $\times$  0.6; c – left mandible (MF/2163/88 A), seen from a side.  $\times$  0.7.

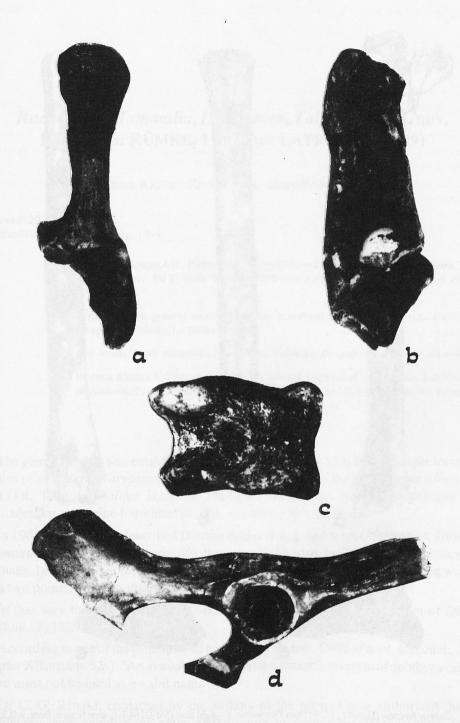


Plate IV. Euprox furcatus (HENSEL, 1859) from Przeworno. a – left calcaneum (MF/2164/35 A), seen from in front.  $\times$  1.2; b – left calcaneum (MF/2164/35 A), seen from a side.  $\times$  1.2; c – left astragalus (MF/2163/80 A), seen from behind.  $\times$  1.5; d – fragment of left pelvis (MF/2164/74), seen from a side.  $\times$  0.7.

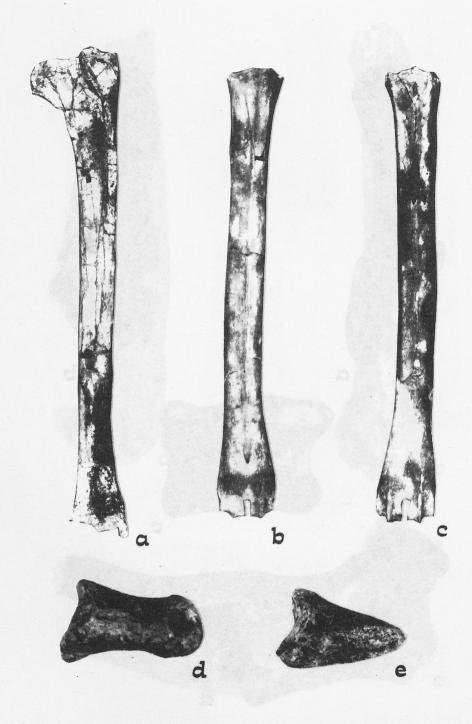


Plate V. Euprox furcatus (HENSEL, 1859) from Przewomo. a – right tibia (MF/2164/10), seen from in front.  $\times$  0.5; b – left metatarsus (MF/2164/101 A), seen from in front.  $\times$  0.6; c – left metatarsus (MF/2164/101 A), seen from behind.  $\times$  0.6; d – phalanx I (MF/2164/31 A), seen from a side.  $\times$  1.5; e – phalanx III (MF/2164/15 A), seen from a side.  $\times$  1.4