

populacija sredozemne medvjedice.

### CRANIOMETRIC CHARACTERISTICS OF THE MEDITERRANEAN MONK SEAL (MONACHUS MONACHUS HERMAN 1779) FROM THE ADRIATIC SEA

In the collection of bones of the Croatian Natural Museum in Zagreb, among other seal bones, there is the skull belonging to the species Mediterranean monk seal (*Monachus monachus Herman 1779*). It is labelled as the skull of a male. On the basis of the appearance of its suturae crani and teeth and also according to literature data, it is considered to be the skull of a young animal, only about 2 months old, its length possibly about 130 - 150 cm and the weight about 80 kg.

As there are no craniometric data on Mediterranean monk seals from the Adriatic Sea, the authors thought it worth measuring the skull of this thinned species in the Adriatic Sea. The values obtained are: facial length 59 mm, condylobasal length 164 mm, zygomatic breadth 111 mm, interorbital breadth 40 mm, supraorbital breadth 41 mm, mastoid breadth 112 mm, the least cranial breadth 22 mm, palatal breadth 59 mm, molar-premaxilla length 62 mm, breadth at canines 39 mm, palatal length 71 mm, condylopalatal length 92 mm, condylar breadth 54 mm, maxilla-supraorbital height 52 mm, coronoid height 44 mm, length of the palatine bone 43 mm, and the width of the external nasal openings 23 mm. The sagittal crest of this young animal was not yet developed at all.

It would be of interest to compare these values with the values of the same measurements in the other populations of the Mediterranean monk seal.

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### KRANIOMETRIJSKE OSOBITOSTI KALIFORNIJSKOG MORSKOG LAVA (ZALOPHUS CALIFORNIANUS LESSON, 1828) IZ ZAGREBAČKOG ZOOLOŠKOG VRTA

Iz literature je poznato da kalifornijski morski lavovi žive 12 - 14 godina, iako se navodi i podatak da je jedna ženka živjela u zatočeništvu 30 godina. Kako su kraniometrijske vrijednosti pojedinih vrsta, pa tako i kalifornijskih morskih lavova, jedna od osnovnih značajki vrste, na lubanji jedne izuzetne jedinke (stare 24 godine) željeli smo istražiti i zabilježiti kraniometrijske vrijednosti.

Istraživanja smo obavili na lubanji mužjaka kalifornijskog morskog lava (*Zalophus californianus Lesson, 1828*) starog 24 godine, koji je pune 23 godine živio u Zoološkom vrtu grada Zagreba. Na lubanji te jedinke, koja je živjela gotovo dvostruko duže od ostalih priпадnika svoje vrste, dužina ličnog dijela lubanje je 131 mm, dužina lubanje 294 mm, širina lubanje 158 mm, međuočni razmak 44 mm, širina čela 61 mm, međuušni razmak 138 mm, širina tjemena 28 mm, širina zubišta 62 mm, dužina zubišta 104 mm, međuočnjačni razmak 63 mm, dužina tvrdog nepca 126 mm, dužina baze lubanje 156 mm, zatiljna širina 82 mm, visina mozgovnog dijela lubanje 93 mm, visina donje čeljusti 63 mm, dužina nepčane kosti 77 mm, širina prednjega nosnog otvora 31 mm i visina vanjskoga sagitalnog grebena 34 mm.

Iz navedenih je podataka uočljivo da i ta lubanja izrazito stare jedinke uglavnom odgovara uobičajenim kraniometrijskim vrijednostima kalifornijskih morskih lavova, jer dužina nepčane kosti iznosi 26,2% dužine lubanje (uobičajeno je 37-45%), dužina tvrdog nepca je 42,9% dužine lubanje (uobičajeno je > 45%) i širina nosnog otvora je 10,5% dužine lubanje (uobičajeno je > 10%).

CRANIOMETRIC CHARACTERISTICS OF THE CALIFORNIA SEA LION (*ZALOPHUS CALIFORNIANUS* LESSON, 1828) FROM THE ZAGREB ZOO

From the literature the California sea lion is known to live 12 - 14 years, although there is a report on a female having lived in captivity for 30 years. As the craniometric values of a species are one of its basic characteristics, the authors were intrigued to analyse the skull of a special specimen, aged 24 years, and measure its craniometric dimensions.

The skull examined belonged to a male California sea lion (*Zalophus californianus* Lesson, 1828), aged 24 years, which for a full 23 years had lived in the Zagreb Zoo. The values obtained in that specimen which had lived twice as long as the other individuals of its species were as follows: facial length 131 mm, condylobasal length 294 mm, zygomatic breadth 158 mm, interorbital breadth 44 mm, supraorbital breadth 61 mm, mastoid breadth 138 mm, the least cranial breadth 28 mm, palatal breadth 62 mm, molar-premaxilla length 104 mm, breadth at canines 63 mm, palatal length 126 mm, condylopalatal length 156 mm, condylar breadth 82 mm, maxilla-supraorbital height 93 mm, coronoid height 63 mm, the length of the palatine bone 77 mm, the width of the external nasal openings 31 mm, and the height of the sagittal crest 34 mm.

From these measures it may well be seen that also the skull of this extremely old specimen for the most part corresponds to the usual craniometric values of California sea lions, because its palatine bone is 26.2 % of the skull length (usually 37-45 %), the length of the hard palate 42.9 % of the skull length (usually less than 45 %), and the width of the external nasal openings 10.5 % of the skull length (usually less than 10 %).

(253) Although the Gomori-Bargman method was considered as a method of choice in histopathology, the results of the basic research work conducted by Ljubica Nešić significantly differ from those obtained by other authors. The author's findings are summarized below:

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PRILOG POZNAVANJU HISTOFIZIOLOŠKIH OSOBITOSTI TIMUSA OVACA  
SUBPOPULACIJE U DOBI TIJEKOM GRAVIDNOSTI

Rađena su histofiziološka istraživanja timusa gravidnih ovaca u vremenu od 10. do 50. dana. Žlijezdu smo fiksirali i uklopili u parafin, a preparate smo bojili Gomori-Bargmanovom metodom (CAH) kao i azan-metodom. Ustanovljeno je različito ponašanje kore i srži timusa u prvim danima gravidnosti. U kori timusa zapaženo je timolitičko djelovanje izazvano vjerojatno visokom razinom progesterona. Također je uočeno pojavljivanje većeg broja cista.

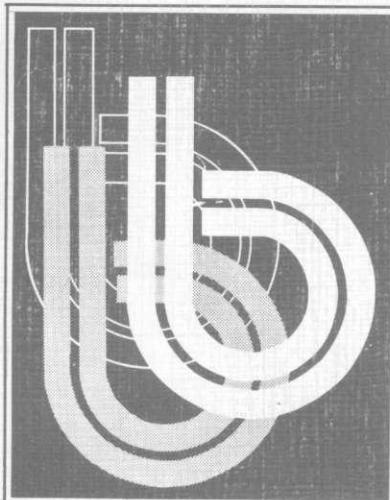
Epiteloidne se stanice pojavljuju u više oblika u subkortikalnom i subseptalnom području s nakupljanjem CAH pozitivnih tvari. Uočeno je i pojavljivanje hipertrorfiranih epitheloidnih stanica sa svjetlo ili tamno obojenom tvari u području između kore i srži.

Ponašanje timusa tijekom gravidnosti potvrđuje postojanje dvije glavne subpopulacije timocita, jedne osjetljive na hidrokortizon i rendgenske zrake u kori, a druge neosjetljive u srži. Nastanak cista je vjerojatno posljedica djelovanja hormona nadbubrežne žlijezde.

CONTRIBUTION TO THE KNOWLEDGE OF HISTOPHYSIOLOGICAL CHARACTERISTICS  
OF THE THYMUS IN EWES DURING PREGNANCY

Histophysiological investigations were carried out in the thymus of pregnant ewes during the period from the 10th to the 50th day. The gland was fixed and embedded in paraffin and preparations were stained using the Gomori-Bargman method (CAH), as well as the azan method. Different reactions of the cortex and medulla during the first days of pregnancy were observed. The thymolytic effect was established in the cortex of the thymus, probably

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