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Conference paper / Extended abstract

Craniometric characteristics of the California sea lion (*Zalophus californianus Lesson*, 1828) from the Zagreb Zoo

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From the litertature (3) 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 (1), we were intrigued to analyse the skull of a special specimen, aged 24 years, and to 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 from this specimen, which had lived twice as long as the other individuals of the same species were as follows: 1. facial length 131 mm; 2. condylobasal length 294 mm; 3. zygomatic breadth 158 mm; 4. interorbital breadth 44 mm; 5. supraorbital breadth 61 mm; 6. mastoid breadth 138 mm; 7. least cranial breadth 28 mm; 8. palatal breadth 62 mm; 9. molar-premaxilla length 104 mm; 10. breadth at canines 63 mm; 11. palatal length 126 mm; 12. condylopalatal length 156 mm; 13. condylar breadth 82 mm; 14. maxilla-supraorbital height 93 mm; 15. coronoid height 63 mm; 16. length of the palatine bone 77 mm; 17. the width of the external nasal openings 31 mm; and 18. the height of the sagittal crest 34 mm.

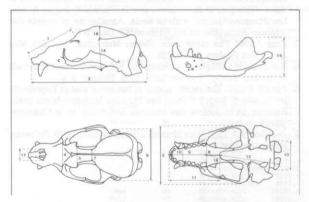


FIGURE 1. Schematic drawing of the California sea lion's skull with all measured lengths: 1. facial length, 2. condylobasal length, 3. zygomatic breadth, 4. interorbital breadth, 5. supraorbital breadth, 6. mastoid breadth, 7. least cranial breadth, 8. palatal breadth, 9. molar-premaxilla length, 10. breadth at canines, 11. palatal length, 12. condylopalatal length, 13. condylar breadth, 14. maxilla—supraorbital height, 15. coronoid height, 16. length of the palatine bone, 17. the width of the external nasal openings, and 18. the height of the sagittal crest.



FIGURE 2. Lateral view of the skull of a male 24 year old California sea lion (Zalophus californianus Lesson, 1828).

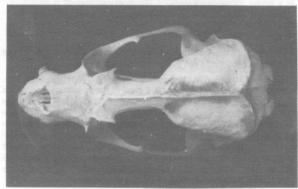


FIGURE 3. Dorsal view of the skull of a male 24 year old California sea lion (Zalophus californianus Lesson, 1828).

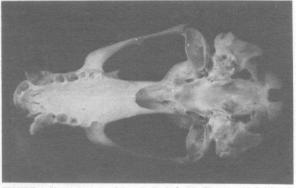


FIGURE 4. Ventral view of the skull of a male 24 year old California sea lion (Zalophus californianus Lesson, 1828).

From these measures it is seen that the skull of this specimen mostly corresponds to the usual craniometric values of California sea lions (2). Its palatine bone is 26.2% of the skull length (usually 37-45%), the length of the hard palate is 42.9% of the skull length (usually less than 45%), and the width of the external nasal openings is 10.5% of the skull length (usually less than 10%).

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