

in the Adriatic Sea was investigated. This study included 29 females of body mass in range from 23.65 to 261 kg, body length in range from 122 to 288 cm and 23 males of body mass in range from 75 to 350 kg and body length from 163 to 312 cm. The average pelvic bone length was 7.95 cm (in range from 1.8 to 12.7 cm). The average difference in length of the left and right pelvic bone of the same animal was 0.37 cm, and the highest difference was 1.5 cm. A high correlation ( $R=0.971$ ) between pelvic bone length and body length was observed in females although the correlation was not found in males. Females also show a correlation ( $R=0.941$ ) between pelvic bone length and body mass while males do not. Using this correlations in females based on the average pelvic bone length the body length (body length in cm =  $100.37 \ln(\text{pelvic bone length in cm}) + 49.787$ ) and body mass (body mass in kg =  $26.147 \text{ pelvic bone length in cm} - 29.419$ ) can be calculated.

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### PROCJENA STAROSTI DOBROG DUPINA (*Tursiops truncatus*) IZ JADRANSKOG MORA PREMA BROJU ZONA PRIRASTA U ZUBNOM DENTINU I USPOREDBA S DULJINOM TIJELA I TJELESNOM MASOM ŽIVOTINJE

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U 51 dobrog dupina iz Jadranskog mora procijenjena je starost na temelju zona prirasta u zubnom dentinu. Na podužnim i poprečnim presjecima zubiju obojenim hemalaunom brojane su zone prirasta u dentinu. Najveća procijenjena starost dobrog dupina bila je 26 godina, a najmlađe životinje mlade su od godinu dana. Prosječna starost istraženih dobrih dupina je 10,6 godina, a najčešća 12 godina. Histogram starosti istraživanih dobrih dupina ukazuje na mladu populaciju s povećanom smrtnošću muških jedinki u dobi od 9 do 12 godina. Starost dobrih dupina u boljoj je korelaciji s duljinom tijela ( $R=0,900$ ) nego s tjelesnom masom ( $R=0,792$ ). Poznavanjem duljine tijela dobrog dupina koristeći jednadžbu: starost u godinama =  $0,091e^{0,0179 \text{duljina tijela u cm}}$  može se procijeniti starost životinje, a za procjenu starosti životinje na temelju tjelesne mase može se koristiti jednadžba: starost u godinama =  $1,4383e^{0,0097 \text{tjelesna masa u kg}}$ . Poznavanjem spola životinje preciznije se procjenjuje starost životinje na temelju duljine tijela pomoću jednadžbe za mužjake (starost u godinama =  $0,0786e^{0,0189 \text{duljina tijela u cm}}$  uz faktor korelacije  $R=0,918$ ) i za ženke (starost u godinama =  $0,0909e^{0,0174 \text{duljina tijela u cm}}$  uz faktor korelacije  $R=0,907$ ).

AGE ESTIMATION IN THE BOTTLENOSE DOLPHIN (*Tursiops truncatus*) FROM THE ADRIATIC SEA BASED ON GROWTH LAYER GROUPS IN DENTINE AND CORRELATION OF AGE WITH BODY LENGTH AND BODY MASS

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The age of 51 bottlenose dolphins found in the Adriatic Sea based on growth layer groups in dentine has been estimated. Growth layer groups were counted on longitudinal and transversal tooth sections stained with hematoxylin. The highest estimated age of a bottlenose dolphin was 26 years, and the youngest animals were less than one year old. The average age of studied bottlenose dolphins was 10.6 years and the most frequent 12. Age histogram of investigated bottlenose dolphins shows a young population with an increased mortality of males in the age of 12 years. The age of bottlenose dolphins is in higher correlation with body length ( $R=0.900$ ) than with body mass ( $R=0.792$ ). The following formula can be used for age determination if the body length of an animal is known: age in years =  $0.091e^{0.0179 \text{body length in cm}}$  and the second one if the body mass is known: age in years =  $1.4383e^{0.0097 \text{body mass in kg}}$ . More precise age determination can be calculated if the sex of the animal is known by following formula for males: age in years =  $0.0786e^{0.0189 \text{body length in u kg}}$ , correlation factor  $R=0.918$ , and for females: age in years =  $0.0909e^{0.0174 \text{body length in kg}}$ , correlation factor  $R=0.907$ .

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RADIO-TELEMETRY STUDY OF THE WILDCAT (*Felis silvestris*) IN SOUTHERN SLOVENIA

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A marked decrease in the historical range of the wildcat has taken place over the last centuries in most of Europe. Many recent European populations



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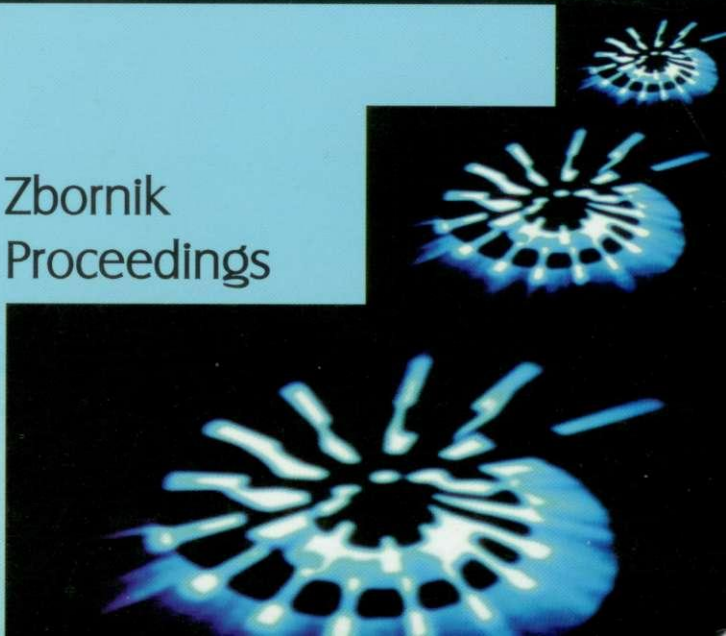
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