Individual identity of ultrasonic calls along ontogeny in the yellow steppe lemming (Eolagurus luteus) Ilya A. Volodin^{1,2}, Daria D. Yurlova¹, Julia D. Kozhevnikova¹, Olga G. Ilchenko² and Elena Bepartine Restance View Provide State University, Russia ² Scientific Research Department, Moscow Zoo, Russia volodinsvoc@gmail.com http://www.bioacoustica.org HYPOTHESIS **METHODS** Individual identity of ultrasonic calls 12 post-natal-day (PND) age-classes: (USV) will increase with age. PND (1-4) PND (25-28) 10 individuals per age-class For mobile adolescents and adults is PND (5-8) PND (29-32) 110 pups and 10 adults more important to be individualistic than PND (9-12) PND (33-36) 120 individuals in total. for neonate pups falling out of the nest PND (13-PND (37-40) (17- P\$)D (17-PND (41-60/adolescents) **Isolation test** PND (60+/adults) 29)D (21-24) Each individual was recorded for 2 min at 22° C using a recorder Pettersson D1000X (384 kHz, 16 bit). After this — measurement and weighing. Up to **10** USV calls per individual were analyzed using Avisoft SASLab Pro software Russia Sentant. 1176 USV calls in total). Kazakhstar Mongolia RESULTS DFA 6 variables: duration Erequency (kHz) Ultrasonic call acoustics Bodv size fpeak f0max f0end Body weight, g Types of frequency contours: 120 100 fobeo fÒmin 80 0.05 0.10 0 60 Amplitude (V) flat up-FM down-FM complex Time (s) chevron es openino 40 Discriminant Function Analy F_{11,105}=0.74, *p*=0.70 70 17-20 25-28 33-36 41-60 ad 13-16 21-24 29-32 37-40 60+ 60 62 CONCLUSION 57 57 correct classifying 55 56 50 53 53 52 52 47 Against expectations, vocal 40 43 40 individuality of USV calls in 30 yellow steppe lemmings did 20 ~ not increase with age, remaining at the same level 10 in pups and adults \cap 5-8 9-12 13-16 17-20 21-24 25-28 29-32 33-36 37-40 41-60 1-4 ad Age (days) ID23 Age 1-4 d ID94 ID106 ID107 ID151 ID15 ID153

Age 25-28 d

Adult

S

ID04

redu

N. C. STRIC

Support: RSF grant 19-14-00037

Time (s)

ID121

ID122

ID165

ID185