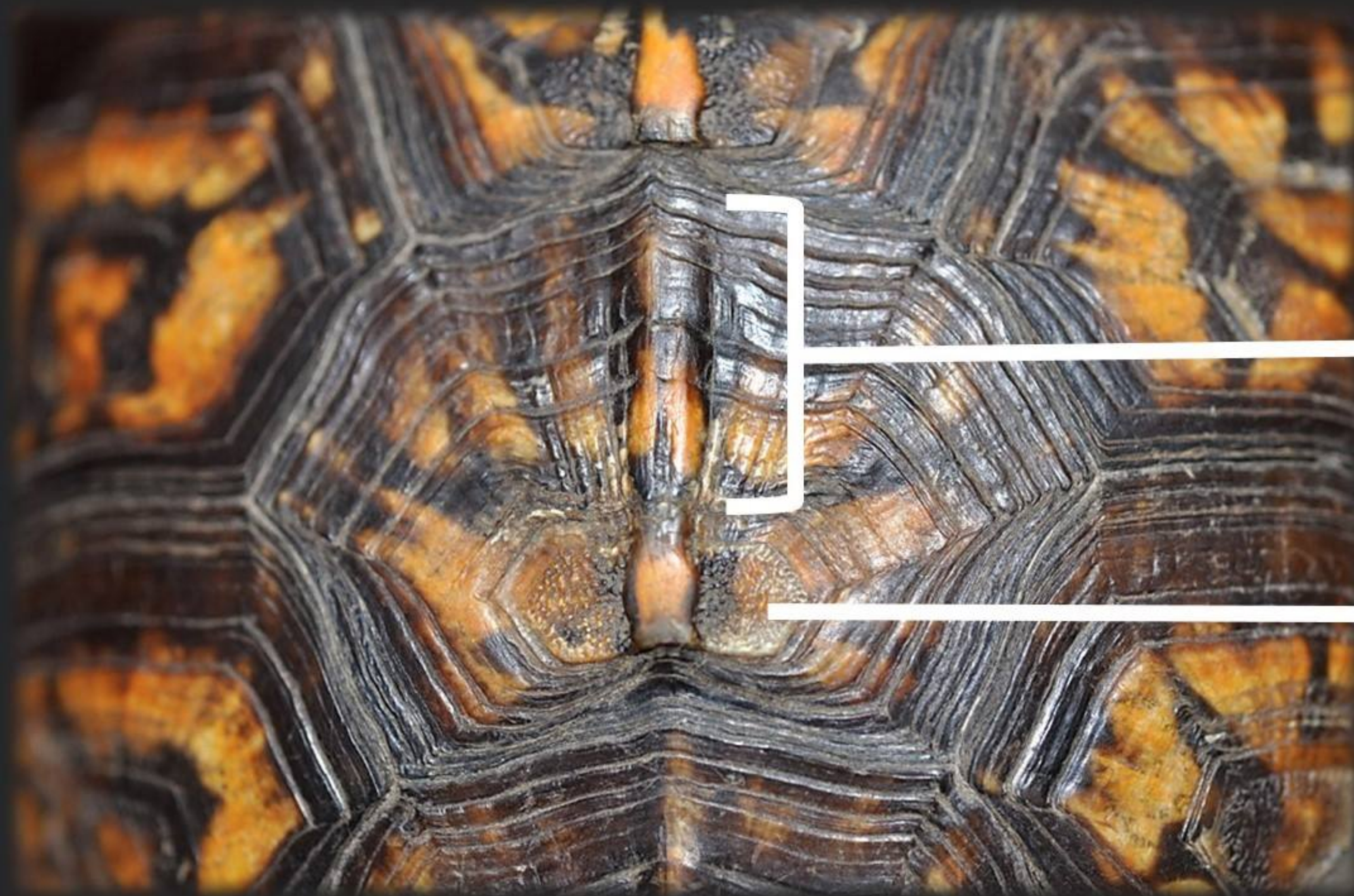


ANNU “LIE”: Truth Behind Growth Rings

Annuli are growth rings found on the scutes of a box turtle's carapace and plastron. These are rings of keratin laid down in correspondence to the growth of a box turtle's carapace or plastron. These are not necessarily formed annually and therefore are a poor estimate of age. Annuli simply show the history of growth of a box turtle, not the specific number of years lived.



Annuli may or may not be good indicators of the age of a box turtle. Annuli rings are a result of the necessity for the expansion of the carapace and plastron as the turtle increases in size.

Thick annuli rings reflects a time of heightened growth, where as thin annuli rings symbolize a time of little growth. Rings closer to the natal scute tend to be larger.

Box turtles lay down rings of keratin, called annuli rings. The word “annuli” means “ring” not “year”.

Annuli are more correlated to the resources available to an individual and the resulting rate of growth due to the availability of those resources than to the age of that individual. This will vary from region to region.

Natal Scute: This is the scute a box turtle is born with. Over the years, the turtle will lay down rings around the natal ring.

Created by Ashley LaVere & Ann Somers
Wilson, D.S., Tracy, C.R., Tracy, C.R., 2003, *Estimating Age of Turtles from Growth Rings: A Critical Evaluation of the Technique*, Herpetologica 59(2), The Herpetologists' League Inc.