

133. THE USE OF DENTAL ANNULI AS AN INDEX TO REPRODUCTIVE SUCCESS

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Black bears (Ursus americanus) from northeastern Minnesota usually produce narrower layers of cementum in their teeth during years of lactation than during other years. It is hypothesized that this phenomenon is caused by the loss of calcium in milk during years of lactation. Black bears usually produce cubs every second or third year after they reach maturity, but frequency of littering varies from area to area. If cementum annuli prove to be valid index of reproductive success over the range of the species, they will provide a relatively easy means of obtaining reproductive data for comparison with various environmental parameters. Studies are needed to determine whether this phenomenon occurs in other mammals that show dental annuli and breed less than once a year.

Rogers, L. L. 1975. The use of dental annuli as an index to reproductive success. P. 62. In: Abstracts of technical papers presented at 55th annual meeting of the American Society of Mammalogists. Univ. of Montana, Missoula. 121pp.