A REVIEW OF PARTURITION PARAMETERS OF TWO SPECIES OF CAPTIVE RHINOCEROS: WHITE RHINOCEROS (*Ceratotherium simum*) AND GREATER ONE-HORNED RHINOCEROS (*Rhinoceros unicornis*)

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Abstract

Wild rhinoceros populations are currently threatened due to poaching and habitat loss and captive populations are not self-sustaining.[5,11,12] Therefore, efforts towards maximizing captive breeding efforts are critically important. While there have been great increases in knowledge of rhinoceros reproductive physiology and breeding management, there is still a lack of understanding regarding what are considered normal parameters during parturition.[7,9,10] We reviewed data regarding parturition of two rhinoceros species (southern white rhinoceros [SWR], and greater one-horned rhinoceros [GOH]) from videos, medical records, and literature of documented birthing events.[1,4,8] Using equine parturition parameters as a model for comparison, we compiled the following data on two species of rhinoceros: signs of impending parturition, duration of the three phases of parturition, and normal calving presentation.[2,3,6] Preliminary data from 11 animals (7 SWR, 4 GOH) and 16 births comparing calf presentation and viability documented 5 still births (4 posterior and 1 unknown presentation) and 11 live births (6 anterior, 1 posterior, and 4 unknown presentations). Ongoing data collection will lead to a more robust data set and will strive to include black rhinoceros (*Diceros bicornis*). The authors would like to stress the importance of investing in the monitoring of parturition, as detailed documentation is a necessary tool in determining normal parameters. The data presented in this review are intended to aid facilities with rhinoceros breeding programs and to provide prospective standardization of parturition observation parameters.

Key words: Calf presentation, parturition phases, pregnancy, rhinoceros, signs of impending parturition, stillborn calf

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