

Orsini M W. The external vaginal phenomena characterizing the stages of the estrous cycle, pregnancy, pseudopregnancy, lactation, and the anestrus hamster, *Mesocricetus auratus* Waterhouse. *Proc. Anim. Care Panel* 11:193-206, 1961.

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This paper contains descriptions and photographs of the stages of the estrous cycle and external phenomena indicative of pregnancy and pseudopregnancy, which enable the investigator to determine these stages easily. It also contains information concerning breeding, basic animal care, and colony maintenance. [The *SCI*® indicates that this paper has been cited in over 240 publications, making it the most-cited published in this journal.]

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My first hamster colony was initiated by purchase from a pet shop and maintained in the basement animal quarters of the Zoology Department at Cornell University in Ithaca in 1943. When I finished my PhD at Ithaca, I took the colony with me to Duke for three years, then to Wisconsin in 1949. In these early days the hamster was a novelty, but folklore about them arose overnight. First, they were thought to be extremely vicious; I have seen grown men shudder at approaching them. (Hindle, who was one of the first to work with them in London, England,¹ drove me up to the London Zoo to show me a new color mutant and almost fell over when I picked it up.)

Second, a hamster could get out of any narrow space and creep under closed doors; they could force open any free-lying cage top and escape. (I used bricks on top of plastic carrying cages.)

Despite the paper by Ruth Deanesly, which describes the reproductive cycle of the golden hamster,² people could not recognize or believe the ease of following the cycle in these animals.

I taught the animal caretakers in our early courses on animal care at Wisconsin. I was also my own animal caretaker and checked my colony daily at that time. The cited paper just evolved from this experience.

I consider the hamster a neglected animal for medical research. Rats and mice have postpartum heat and delayed implantation; hamsters have no reovulation after parturition until after weaning or removal of the young and do not delay. The human and hamster are similar in this respect. Hamsters also mate readily, and matings can be observed with no difficulty. I remember one colleague who wandered in when I had two hamsters mating in a bucket while I checked serial sections—"Good Lord," he said, "I always wanted to be a jackrabbit, but I guess I picked the wrong animal."

My object in writing this paper was to clarify. I guess I did. The Cancer Society reprinted it for international distribution outside this country! I made many friends through our common interest in hamster husbandry, but I'm still trying to clarify all the aspects of my original research interest—implantation.³

1. Bruce H M & Hindle E. The golden hamster, *Cricetus (Mesocricetus) auratus* Waterhouse; notes on its breeding and growth. *Proc. Zool. Soc. London* 104:361-6, 1934. (Cited 20 times since 1955.)

2. Deanesly R. The reproductive cycle of the golden hamster *Cricetus auratus*.

Proc. Zool. Soc. London Ser. A 108:31-7, 1938. (Cited 30 times since 1955.)

3. Huck U W, Lisk R D & Thierjung C. Stimulus requirements for pregnancy initiation in the golden hamster (*Mesocricetus auratus*) change with time of mating during the receptive period. *J. Reprod. Fertil.* 76:449-58, 1986.