

Background:

Per the *Guide for the Care and Use of Laboratory Animals*¹ (pg 112), “all animals should be observed for signs of illness, injury or abnormal behavior by a person trained to recognize such signs. As a rule, such observation should occur at least daily, but more frequent observations may be required, such as during postoperative recovery, when animals are ill or have a physical deficit, or when animals are approaching a study endpoint. Professional judgement should be used to ensure that the frequency and character of observations minimize risks to individual animals and do no compromise the research for which the animals are used.”

Rationale:

Per the United States Department of Agriculture (USDA) *Animal Welfare Regulations*², “each research facility shall establish and maintain programs of adequate veterinary care that include daily observation of all animals to assess their health and well-being.”

Applies to:

This policy applies to all prairie voles housed within the University of Kansas (KU) - Lawrence Animal Care Unit (ACU).

Policy Statement:

- A. Prairie voles are a burrowing species. In the wild, burrow systems are associated with patches of lush vegetation and consist of numerous surface entrances, extensively branched and interconnected tunnels and dead-end passages, nest chambers, and feeding chambers.
 - a. To mimic their natural habitat and encourage species-specific behaviors, prairie vole colonies maintained at the University of Kansas (KU) are provided with Crink-I’Nest, a 100% virgin paper product consisting of thin paper strands which allow for weaving and manipulation of the nest.
 - i. As seen in the photograph below, the amount of nesting material required for burrowing activity and complex nest building may obfuscate daily observation of animals.
 - ii. In the professional judgement of KU ACU veterinarians, daily disruption of nests to allow for direct visualization of animals may increase stress of animals and create more opportunities for injury of ACU personnel due to animal bites.
- B. To ensure animal welfare, daily cage-side observations will be performed of each cage to ensure that adequate food and water is available in the cage.
 - a. Any animals that are visualized outside of the nest will be observed cage-side to assess their health and well-being.
 - b. However, nests will not be disturbed during daily cage-side animal observations.
 - c. Voles will be handled and directly observed to assess their health and well-being at least once weekly at cage change.



References:

¹ *Guide for the Care and Use of Laboratory Animals, Eighth Edition (NRC 2011).*

² *USDA Animal Welfare Act and Animal Welfare Regulations (APHIS 41-35-076).*

Change History

Version	Effective date	Summary of changes or review
01	November 2016	Initial Approval
02	April 2018	Minor Revisions
03	February 2021	Periodic Review