

Does Housing Conditions Affect the Flight Distance of Dairy Cows? (Advanced Studies on Sustainable Animal Production: Interrelationships among Human, Animal and Environment, 8th International Symposium of Integrated Field Science)

著者	TAKEDA Ken-ichi, KAWASE Nori
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## **6. Does Housing Conditions Affect the Flight Distance of Dairy Cows?**

**Ken-ichi TAKEDA and Nori KAWASE**

**Shinshu University, Japan**

The human-animal relationship is an important factor when considering animal welfare. The flight distance, that is how close a human can come to a stationary animal before it moves away, is an indicator of the relationship. However, the distance may varied under restrict housing conditions. We investigated that the flight distance of dairy cows in different housing condition. Eighteen lactating Jersey cows were used and usually tethered with 55cm chain in stalls at night and a pasture in the daytime. Flight distances of these cows were measured three times under the tie-stall housing condition and grazing condition. Under the tie-stall housing condition, standing cows were approached slowly (one step per sec) from the front by the experimenter (1.64m tall), who held the arm overhand in an angle of the 45° in front of the body. The distance between the experimenter's hand and the focal cow's head was estimated at the moment of the cow's withdrawal according to Waiblinger et al (2003). Under the grazing condition, the same experimenter approached slowly (one step per sec) standing cow's front. The experimenter stopped walking when the cow stated moving away. The distance from experimenter and where the cow moved was estimated with eye according to Rousing et al (2004). The flight distance score under the tie-stall housing condition was significantly and positive correlated with under the grazing condition ( $r_s = 0.70$ ,  $P < 0.05$ ). The result suggests that the flight distance score of a cow is the same even if cow had been tethered.