Overall Animal Welfare Assessment of Dairy Cattle at the Farm Level Using the Shinshu Comfort Livestock Farm Certification Standard (Advanced Studies on Sustainable Animal Production: Interrelationships among Human, Animal and Environment, 8th International Symposium of Integrated Field Science)

3. Overall Animal Welfare Assessment of Dairy Cattle at the Farm Level Using the Shinshu Comfort Livestock Farm Certification Standard

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The "Shinshu Comfort Livestock Farm Certification Standard," is an overall welfare assessment model for farm animals, which was proposed in 2007 in Nagano Prefecture, Japan. However, the usefulness of this model at the farm level has not been evaluated. We evaluated the overall animal welfare of dairy cattle at the farm level using the assessment methods and investigated the usefulness of these assessment methods. Fifteen dairy farms employing one of three different housing types (tie-stall system, free-stall system, and grazing system) were visited, and welfare levels of all cattle reared on these farms were assessed over summer. The assessors scored the welfare levels using the assessment methods of the Shinshu Comfort Livestock Farm Certification Standard. This model contains 65 measures based on the following "Five Freedoms": (1) freedom from injury, or disease; (2) freedom from hunger and thirst; (3) freedom from discomfort; (4) freedom to express normal behavior; and (5) freedom from fear and distress, in terms of three bases (animal, management, and environment). Total scores ranged from 301.2 to 397.7. Average values ($\pm$ SD) of tie-stall, free-stall, and grazing systems were 345.5 ± 13.3, 393.9 ± 4.3, and 351.4 ± 35.8, respectively. Furthermore, total scores varied markedly among the farms and the grazing system did not necessarily score the highest. The category score for Freedom 1 was higher in the free-stall system than in the grazing system ($P < 0.05$) and that for Freedom 4 was higher in the grazing system than in the tie-stall system ($P < 0.01$).