

**Seeking alone time: do cows seek isolation at and after calving?***Gosia Zobel<sup>1</sup>, Frances Huddart<sup>1</sup>, Jim Webster<sup>1</sup> and Kathryn Proudfoot<sup>2</sup>**<sup>1</sup>AgResearch Ltd., Animal Welfare Team, New Zealand, <sup>2</sup>The Ohio State University, USA;  
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Cows are social animals, but may naturally distance themselves from the herd at calving. The strength of this behaviour is unknown in modern New Zealand dairy cow genetics and in pasture-based systems using 'standoff' pads overnight. Our study aimed to determine if Kiwi cross dairy cows seek isolation around calving. Two standoff pads (17×70 m; typically utilized for pasture management during wet periods) were each equipped with 19 I-shaped 'hides' (2 heavy-duty gates covered with plywood and rubber matting). To randomize the chance cows had access to hides, and to minimize side bias, hides were accessible on each pad on alternating days with cows manually allocated to a pad in alternating order. Cows were kept on the pads overnight (16:00-08:00) at a stocking density of 50 cows/pad, and spent the daytime as a group of 100 on pasture. New cows were introduced into the group to replace those that calved. Weight and previous pad exposure were covariates in binomial tests of difference of observed proportions from 50%. Of 186 calvings, 42% (78 cows) occurred on pasture and 58% (108 cows) occurred on the pads. About half of the latter calved while hides were accessible, and 18% of these cows moved into a hide at calving (9/49 cows, 3 unknown, CI:7-29%). Of the cows that did not calve in the hides, 73% moved into a hide with their calf 2.5±1.7 h after calving (29/40 cows, CI:59-87%); previous pad experience tended to shorten this latency (P=0.1). Weight had no effect. Only a small proportion of cows sought isolation during calving, however, the majority eventually went in a hide with their calves. It is possible that cows familiar with large, pasture-based grouping either do not have a strong drive for isolation, or that it is actually the calf that seeks out a hiding place.