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An evaluation of heatmount detectors in beef cattle under range conditions

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An Evaluation of Heatmount Detectors in Beef Cattle Under Range Conditions

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Kamar[a] heatmount detectors were used last spring on 45 Polled Hereford cows 3 to 12 years old. Bulls ran with the cows. Most cows became pregnant, which lessened observations as the breeding season progressed. Detectors were placed on rumps with adhesive according to directions. Generally, the front edge of the detector was farther to the rear on heavier cattle than on lighter cattle.

First observation was May 28, 1968. Observations then were made weekly for 9 weeks, by checking for presence or absence of detectors. All cows that lost detectors or had the detector activated were palpated rectally to determine if ovulation had occurred. If the detector was present and unactivated, it was noted if dye had leaked in the detector.

Results and Discussion

The heatmount detectors were 82.2 percent accurate. Seventy-three observations had activated detectors in which 46 (63.0 percent) had ovulated. Fourteen pregnant cows (19.2 percent) with detectors activated, did not ovulate. Only 29 observations (7.8 percent) had ovulated without showing detector activation, which is normal for beef cattle under range conditions. Twenty-one percent (78 observations) of the detectors leaked some. Sixty observations (19 percent) lost detectors during the observation period, primarily by loss of hair but also affected by amount of rainfall.

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[a] Kamar Inc., Steamboat Springs, Colo.

The results suggest that Kamar heatmount detectors can be used to help detect heat in beef cattle under range conditions.

Table 1

Summary of Data Collected on Heat mount Detectors

Week	No. of observations	No. of detectors lost[c]	No. of cows with activated detectors	No. of cows ovulating	No. of cows that ovulated with activated detectors	No. of cows ovulating with detectors not activated	No. of cows not ovulating with activated detectors	No. of detectors with some dye leakage
1	42[a]	4	11	11	9	2	2	6
2	45	5	15	15	12	3	3	7
3	45	5	10	13	9	4	1	14
4	45	1	6	4	3	1	3	19
5	45	6	15	10	6	4	9	12
6	45	2	9	3	2	1	7	8
7	41[b]	16	4	17	3	14	1	8
8	35[b]	7	2	2	2	0	0	4
9	30[b]	14	1	0	0	0	1	0
Total	373	60	73	75	46	29	27	78

[a] Three cows had not yet calved.

[b] Remaining cows were pregnant.

[c] If detectors were activated before being lost observations were included in ovulation data.