1969

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An evaluation of heatmount detectors in beef cattle under range conditions

Abstract
Kamar 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.

Keywords
Cattlemen's Day, 1969; Report of progress (Kansas State University. Agricultural Experiment Station); 529; Beef; Kamar heatmount detection

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An Evaluation of Heatmount Detectors in Beef Cattle Under Range Conditions

A.R. Singh, Guy H. Kiracofe and R.R. Schalles

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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.

\textsuperscript{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

<table>
<thead>
<tr>
<th>Week</th>
<th>No. of observations</th>
<th>No. of detectors lost</th>
<th>No. of cows with activated detectors</th>
<th>No. of cows ovulating</th>
<th>No. of cows not ovulating with activated detectors</th>
<th>No. of cows not ovulating with some dye leakage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42a</td>
<td>4</td>
<td>11</td>
<td>11</td>
<td>9</td>
<td>2</td>
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<tr>
<td>2</td>
<td>45</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>9</td>
<td>4</td>
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<td>6</td>
<td>45</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>41b</td>
<td>16</td>
<td>4</td>
<td>17</td>
<td>3</td>
<td>14</td>
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<tr>
<td>8</td>
<td>35b</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>30b</td>
<td>14</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total 373</td>
<td>60</td>
<td>73</td>
<td>75</td>
<td>46</td>
<td>29</td>
</tr>
</tbody>
</table>

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.