**How one Wisconsin family controlled Johne’s**

by R. W. Fish, D.V.M.

HAROLD and Dolores Levendoski, with son Tom and family, moved to Clear Lake, Wis. (Polk County) from Minnesota in 1993. They brought with them 200 cows and a lifetime of dairy experience. They knew Johne’s disease existed in the herd, with an occasional cow becoming clinical and thus being culled.

Five years later, the herd had been expanded to 450 cows primarily through whole herd purchases. With the expanded size, they began computerized record keeping. It gave them better information pertaining to culling. Reason for removal and percent of total cows removed were no longer guesswork.

**Culling was costly . . .**

By 1995, a Johne’s testing and culling program was initiated. ELISA (blood test) positive cows were red tagged, not rebred, milked off, and shipped. Many positive cows were in the high-producing group. As the number of positives continued to rise, it became more evident that they just could not afford to continue this approach.

But the nightmare had just begun. Records from June 1997 to June 1998 revealed a full-blown crisis. Thirty-seven cows had been culled due to Johne’s. This represented 26 percent of all cows culled and almost 10 percent of the herd. These numbers represented ELISA positives and clinical Johne’s cases combined.

By late 1998, with Johne’s completely out of control, the family needed changes, and fast, if the herd was to survive. Herd veterinarian Dr. Jeff Bohn was brought in to help solve the problem. As a Wisconsin state ag department veterinarian, I also was consulted.

We initiated these changes:

- Discarded milk no longer would be fed to heifer calves.
- All cows would be ELISA tested at dry-off.
- ELISA positive (red tagged) cows would calve in a separate facility from the test-negative cows.
- Colostrum from red-tagged tagged cows would be discarded. Heifers from these cows would be fed bankedcolostrum from negative cows.
- Calves would be moved from calving area to hutches as soon as possible.
- Test-positive cows were bull bred and not removed from the herd until they became clinical.

To utilize all the “tools” available to them, the Levendoskis also entered into an agreement with the state ag department and Dr. Bohn to vaccinate all their calves under 35 days of age with an inactivated Johne’s vaccine.

My thoughts at that time were, “It could become very dark before the dawn which will not come for two years or when the vaccinated heifers raised on the management changes enter the milking herd.” Dawn was indeed a long time in coming for this family.

The following statistics taken from the herd records tell a grim story.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Johne’s cows culled</th>
<th>Percent of all culls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-1999</td>
<td>49</td>
<td>26.2</td>
</tr>
<tr>
<td>1999-2000</td>
<td>38</td>
<td>20.4</td>
</tr>
<tr>
<td>2000-2001</td>
<td>42</td>
<td>15.5</td>
</tr>
<tr>
<td>2001-2002</td>
<td>58</td>
<td>19.9</td>
</tr>
<tr>
<td>*2002-2003</td>
<td>19</td>
<td>7.5</td>
</tr>
</tbody>
</table>

*First year that contained a significant number of vaccinated/management change heifers in the herd.

The 2002-2003 period was the first year in a decade that Johne’s was not the number one reason for culling in this herd.

Due to the small number of ELISA positive cows remaining in the herd, regular testing and segregated calving no longer appear to be cost effective. Both have been dropped.

Analysis reveals that more than 300 vaccinated heifers have entered the herd to date. Only four have been culled with clinical Johne’s.

Realistically, milk production records reflect many variables. However, it is worth noting that the June 2002-2003 year did show a 1,400-pound-per-cow improvement over the previous five-year average.

The corner appears to have been turned regarding Johne’s in this herd. The Levendoski family and all concerned are eagerly awaiting next year’s results, as Johne’s no longer appears to be the number one enemy in this herd. Tom said, “We have so many other important issues that we seldom think about Johne’s any more.”

Tom added, “We would have been long gone without the changes made in 1998. Vaccine was the key, with calf milk management a strong second.”

Vaccination accompanied by calf feeding and handling changes appear to be effective in controlling Johne’s disease in moderate to heavily infected herds.

The author is a veterinarian at Rice Lake, Wis.