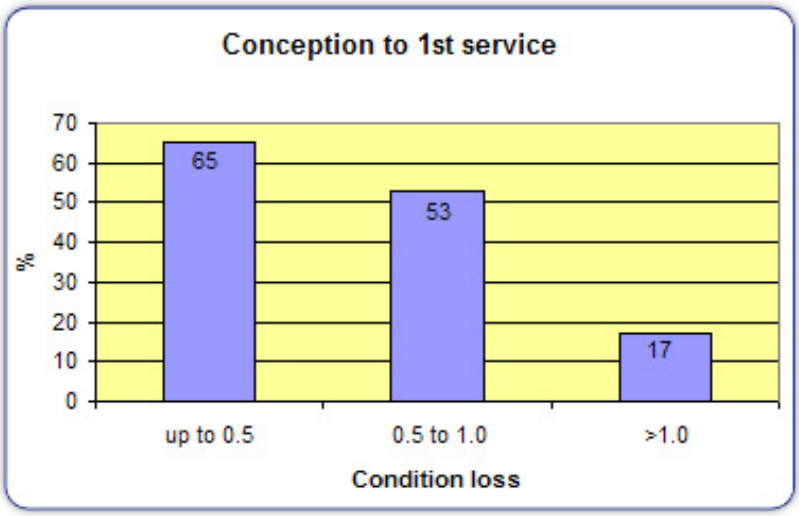
REPLY TO CRITICS FOLLOWING THE SPRING GRASS ARTICLE

(British Dairying, April 2005)

Well, I certainly stirred up a hornet's nest. The telephone calls came thick and fast - some in agreement and some challenging my views. Thanks to all of you who bothered to contact me and for the interesting discussions.

Let me re-cap what I said. High yielding cows should just about use grass to lie on, as the high protein in it is too degradable. This high degradable protein drives up milk yield and can cause excessive body condition loss. This loss affects fertility (see figure1). To remedy this we must restrict intakes of spring grass and offer conserved forages with concentrates mixed in. Also, the choice of concentrate to balance should be high in un-degradable protein. A 16% cake is about the best you will get considering high quality protein sources are difficult to include and they are expensive.

Figure 1



Here is a selection of discussions prompted by the comments.
Farmer "A" in Cardigan: "We calve all year round. When at spring grass our cows have a maximum of 8kgs of cake per day. The cake is 19% protein; wheat based with rape and sunflower the protein source. The cows are peaking at 40-45 litres and our conception rate is 65%. What is wrong with that?

RC: At first this looks like a good fertility performance - a good conception rate. But all is not what it seems. On probing, the average days from calving to conception were 160. If you add the gestation length of 283 days to 160, this gives a true calving index of 443 days. This is 33 days longer than the UK average and 78 days longer than target. When asked why calving to conception days were so high, the reply was "There is no point serving them before this time as they do not hold in calf."

I rest my case.

My advice would be to feed conserved forages mixed with high Digestible Un- degradable Protein (DUP), 16% protein concentrates and similar concentrates through the parlour.

As an aside, delaying service only improves conception rate, not fertility efficiency. Reducing the calving index is where the money is. (I suppose the extended lactation fans will have a go at me on that one.)

Farmer "B" in Lancashire: "I have lots of cows giving 45 litres at grass with 12kgs of a high fibre 18% protein cake in and outside the parlour. My calving index is 390 days."

RC: Average calving to conception was 107 days, so this added up to the 390 calving index. When I started digging a little deeper into the figures, it transpired the replacement rate was a massive 42%! What was happening here was that the cows were being culled if not in calf and these were not included in the figures.

To achieve a realistic calving index a cow must calve twice. These days between calvings are used with all the others in the herd to calculate an average for the herd. A lot of this herd were calving once and then being culled. This leaves animals with better fertility figures in the records.

The cake was supposedly high digestible fibre with good DUP. Where was the digestible fibre coming from? There was no beet pulp or soya hulls. Where was the DUP coming from? No soya, prairie meal, protected soya, or Promega. There was a small amount of maize distillers below molasses on the ingredient list. As molasses usually sits at about 5-6%, then anything below is probably less than 5-6% inclusion. This cake was low cost but poor value.

I calculate that excessive replacement rates for failure to conceive are costing this herd over £15,000 per year. Because you do not have to write a cheque for these amounts, they are not as noticeable. They are costing you all the same.

Farmer "C" in Staffordshire: "My spring calving portion of the herd are on grazing plus 6kgs of cake per day and get back in calf OK. Calving to conception is 117 days and replacement rate is 25%. The cake is a high digestible fibre 16% protein."

RC: The cows were peaking at 35 litres. Even with 6kgs of cake we are looking for about 21-22 litres from grazing. Given good conditions, that is still asking the cow to eat 90kgs of grazed grass in early lactation. Supposing she could eat this enormous amount, the protein is still too high in the total diet - over 21%. However, short of holding the cows on conserved forage for 2-3 hours a day to limit the amount of grazed grass eaten, there is little one can do.

What about the cake being used? Oh dear! It is based on high levels of citrus pulp, wheat feed and sunflower. Soya was tucked away at the bottom, way below molasses, possibly for cosmetic rather than nutritional benefits. Where is the quality protein? I would use this feed for mid to late lactation cows where it would do a good job soaking up the excess protein in the grass.

An interesting point was made. When feeding conserved forages in the winter, this farmer fed a high quality (high energy, high DUP) cake. So why not in the spring and summer? He is not on his own when over valuing grazed grass.

Even though the calving index is good, reducing it to target would save around £70 per cow. How much extra milk per cow would you need to make another £70 per cow? At a heady 5p/litre profit that is an extra 1400 litres a cow. Is it worth splitting the cows to give the high group conserved forage and concentrates? Do you want to bother? Do you want the extra £70/cow? The choice is yours.

And now a challenge to all you dairy farmers out there who still doubt me: If you have high yielding cows at spring grass and are not following my guidelines, take at least 7 cows that have calved 10-21 days and send blood samples to David Whitaker at the DHHPS at Edinburgh. The blood profiles will show energy and protein parameters. My challenge is this - if you have more than 50% of the tested cows energy stable, I will buy you dinner. The only proviso is if more than 50% of those tested are in negative energy, you must buy me dinner. I hope you have a good Italian restaurant near by!

Many thanks for those farmers allowing me to use their conversations.