## **West Otago**

Of specific interest to the West Otago group was the concept of having flocks lambing much earlier than current practice. The system of early lambing (mid-August) was compared to the current practice of late lambing (early October). The result was significantly greater numbers of lambs lost both due to exposure of the ewe and the lamb, and fewer live lambs. This decrease was greater at the High Hill site (6.7%) compared to the Low Hill site (4.2%).

Critical factors which need to be considered before deciding the economic significance of the result are the feed supply and the market price of the lamb. The reason for exploring the option to lamb early is to sell those lambs prime or store into an early market which provides a greater return relative to later in the summer.

 Table 1.
 West Otago High Hill

| Site                              |             |        |        |        |     |
|-----------------------------------|-------------|--------|--------|--------|-----|
| West Otago High Hill              | Time        |        |        |        |     |
|                                   |             | Future | Future | Future |     |
| Scanning percentage = 177%        | Present     | 1      | 2      | 3      | Isd |
| Lambs lost (exposure of the ewe)  | 299         | 292    | 288    | 284    | 5.2 |
| Lambs lost (exposure of the lamb) | 129         | 127    | 125    | 124    | 1.9 |
| Live lambs per 1000 ewes lambing  | 1340        | 1350   | 1355   | 1361   | 7.0 |
|                                   |             | System |        |        |     |
|                                   | Early       | Late   |        |        | Isd |
| Lambs lost (exposure of the ewe)  | 316         | 281    |        |        | 5.9 |
| Lambs lost (exposure of the lamb) | 134         | 123    |        |        | 2.1 |
| Live lambs per 1000 ewes lambing  | 1305        | 1372   |        |        | 7.8 |
|                                   | Mating Date |        |        |        |     |
|                                   |             |        |        | 10-    |     |
|                                   | 25-Apr      | 1-May  | 5-May  | May    | Isd |
| Lambs lost (exposure of the ewe)  | 289         | 284    | 283    | 281    | 5.9 |
| Lambs lost (exposure of the lamb) | 125         | 124    | 124    | 123    | 2.1 |
| Live lambs per 1000 ewes lambing  | 1354        | 1359   | 1362   | 1364   | 7.8 |

**Table 2.** West Otago Low Hill

| Site                              |         |        |        |        |     |
|-----------------------------------|---------|--------|--------|--------|-----|
| West Otago Low Hill               | Time    |        |        |        |     |
|                                   |         | Future | Future | Future |     |
| Scanning percentage = 177%        | Present | 1      | 2      | 3      | Isd |
| Lambs lost (exposure of the ewe)  | 285     | 278    | 275    | 270    | 5.1 |
| Lambs lost (exposure of the lamb) | 124     | 122    | 120    | 119    | 1.8 |
| Live lambs per 1000 ewes lambing  | 1359    | 1368   | 1373   | 1379   | 6.8 |
|                                   |         | System |        |        |     |
|                                   | Early   | Late   |        |        | Isd |

| Lambs lost (exposure of the ewe)  | 303         | 271   |       |      | 5.7 |  |  |  |
|-----------------------------------|-------------|-------|-------|------|-----|--|--|--|
| Lambs lost (exposure of the lamb) | 130         | 119   |       |      | 2.1 |  |  |  |
| Live lambs per 1000 ewes lambing  | 1336        | 1378  |       |      | 7.6 |  |  |  |
|                                   | Mating Date |       |       |      |     |  |  |  |
|                                   |             |       |       | 10-  |     |  |  |  |
|                                   | 25-Apr      | 1-May | 5-May | May  | Isd |  |  |  |
| Lambs lost (exposure of the ewe)  | 276         | 271   | 269   | 267  | 5.7 |  |  |  |
| Lambs lost (exposure of the lamb) | 120         | 119   | 119   | 118  | 2.1 |  |  |  |
| Live lambs per 1000 ewes lambing  | 1372        | 1378  | 1381  | 1382 | 7.6 |  |  |  |

The loss of a small number of lambs needs to be weighed against the value of the live lambs and to their cost on the system. Providing adequate feed for those ewes and lambs at a time of the year when pasture production is less than feed demand has a relatively high cost and so market premiums must be significant. It will be this relationship of cost to value that will be more important than the relatively small drop in lamb survival.

Variations in mating date around the current practice of 10 May showed relatively small reductions in lamb survival. These values have been calculated using all climate scenarios, both present and future. The variation is very small with only 1% difference, or 10 lambs per 1000 ewes lambing, in final live lamb number, even though lambing is up to 15 days earlier.