Production Update:

**Hay Preservatives (Part 3):** Microbial hay preservatives or inoculants are available in addition to chemical preservatives. Microbial preservatives are not corrosive to equipment, as is the case with most chemical preservatives, and may be naturally occurring and derived from hay. The beneficial bacteria in hay inoculants stabilize high moisture hay and prevent heating, mold growth, and dry weight loss caused by harmful microbes.

**Insect Management:** *Empoasca spp.* leafhopper occasionally infest low desert alfalfa in large enough numbers to cause economic damage. These tiny yellowish-green insects cause a characteristic wedge-shaped yellow area on the outer end of leaflets. The leafhoppers inject salivary toxins that cause the yellowing and stunting. When unabated, the yellowing spreads over the entire leaf giving the field a yellowish appearance. Leafhopper populations build in vegetable fields and weeds. Adult leafhoppers then migrate to alfalfa. If damaging infestations are not controlled, the toxin levels in the crown may persist to stunt and yellow subsequent cuttings. The treatment threshold is 5 to 10 leafhoppers per sweep.

**Weed Control:** Roundup Ready alfalfa is being developed by Monsanto. Tests being conducted in this area indicate that alfalfa with this genetic characteristic has excellent tolerance to Roundup. The varieties have not yet been chosen and the rates and seed cost have not been finalized. Registration is currently projected at 2004.

**Market Summary:**

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
<th>Average</th>
<th>Off grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past 2 Weeks</td>
<td>120</td>
<td>105</td>
<td>115</td>
<td>90-100</td>
</tr>
<tr>
<td>Last Year</td>
<td>110</td>
<td>95</td>
<td>105</td>
<td>70-90</td>
</tr>
</tbody>
</table>

**10 Year Summary**

(February 12, to February 24, 1993 - 2002)

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