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Expanding and Intensifying Cherry Production in Washington

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Expanding global markets, dwarfing rootstocks and new varieties are changing how the Washington cherry industry does business. Over the past decade there has been increased enthusiasm in the industry as domestic and global markets have expanded. More recently, that enthusiasm is being tempered by the concern of overproduction, the phase of the cropping cycle which leads to a highly competitive market and lower prices for the fruit. Growers are hoping that size-controlling rootstocks will help them reduce costs and that new varieties will increase cherry consumption to maintain the profitable market for cherries.

Recent acreage census numbers indicate that, while the acreage and production is increasing, it is a gradual increase. Acreage has risen from approximately 16,000 acres (6,475 ha) in 1987 to about 19,000 acres (7,689 ha) in 1997. Nursery sales indicate that in the last 2 years enough cherry trees to plant over 1,500 acres have been sold. But this figure is misleading in that a large portion of those trees were purchased to replace trees killed in the 1996 freeze. These sales also include some out-of-state customers. These 19,000 acres (7,689 ha) produced 90,081 tons (81,721 metric tons) in 1997, up from the freeze reduced crop of 62,155 in 1996.

The density at which cherry trees are planted in Washington is also increasing. In the early 1970s we were generally planting on a 20 ft x 20 ft (6 x 6 m) spacing at about 109 trees per acre (269 trees/ha). Growers are planting trees today at about 203 trees per acre (500 trees/ha). To do this there has been a change in the training system to a more upright conical-shaped tree. Dwarfing rootstocks have also begun to make an impact on density which will increase as smaller trees become more available. Of the estimated 350,000 cherry trees sold from Washington nurseries, 60% will be on Mazzard; 15% on Mahaleb; 10% on Colt; 7% on Gisela 5; 4% on Gisia 6 and 4% on a range of other rootstocks. Most dwarfing rootstocks are sold out for 1998 and 1999.

Bing still is the number one cherry variety being planted. Bing makes up 31% of the nursery stock sold for 1998. Lapins is a close number two, with 29%. Chelan and Sweetheart each comprise about 9% of the tree sales and Rainier has dropped to about 4% of tree sales.

Dr. Greg Lang, Washington State University Horticulturist who succeeded Dr. Ed Proebsting at the Irrigated Agriculture Research and Extension Center, Prosser, has numerous projects under way to improve production and quality:

- NC-140 Project—examination of new rootstocks under Washington's growing conditions. These rootstocks include: Giessen 148/1, 148/2, 148/8, 195/20, 209/1, 318/17, 473/10; Wieroot 10, 13, 53, 72, 154, 158; Edabriz, P50, Mazzard, Mahaleb.
- Pruning and training—trials study new precocious rootstock and how to best control fruit size.
- Bing strain selections—evaluation for productivity, winter hardiness, and virus resistance.
- Reduction of rain cracking—application of calcium during rain events.
- Other studies include variety evaluation and virus detection.

Future trends for the industry will focus on three main areas: new rootstocks and varieties, labor efficiencies and marketing. New dwarfing rootstocks are seen as very desirable, not only because of their precocity but also for management efficiency. This will continue to be a major trend in the industry. New varieties are expanding the marketing window and opening niche markets as with field-packed Rainier cherries. More effort will be given to reduce labor costs, i.e., smaller trees, picking directly into bins and mechanizing harvest. Modified atmosphere packing is now being employed by several warehouses and, as that technology is perfected, will aid in spreading out our market window and getting cherries to market in better conditions. Consumer friendly packaging such as bagged fruit and clam shells are changing our marketing efforts.

As the cherry acreage increases both in the United States and other countries, grower efforts will be focused on reducing growing, packing and shipping costs. At the same time, there will be a concerted effort on improved quality to increase consumption.

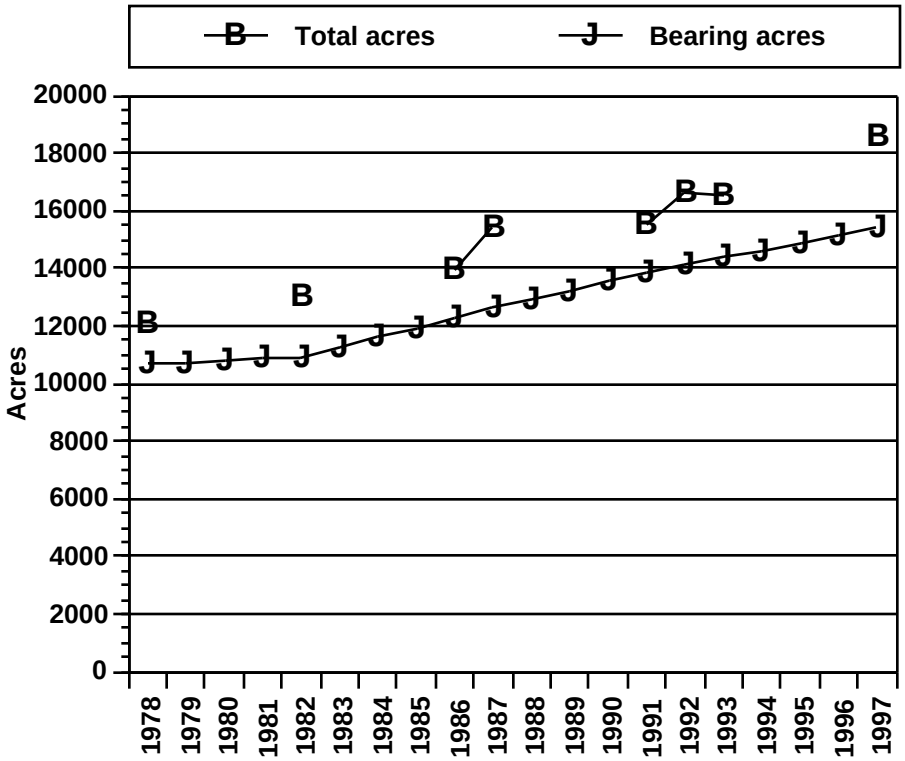

Figure 1. Washington cherry acreage total acres vs. bearing acres (prepared by Fitch & Marshall, Inc., for Washington State Fruit Commission).

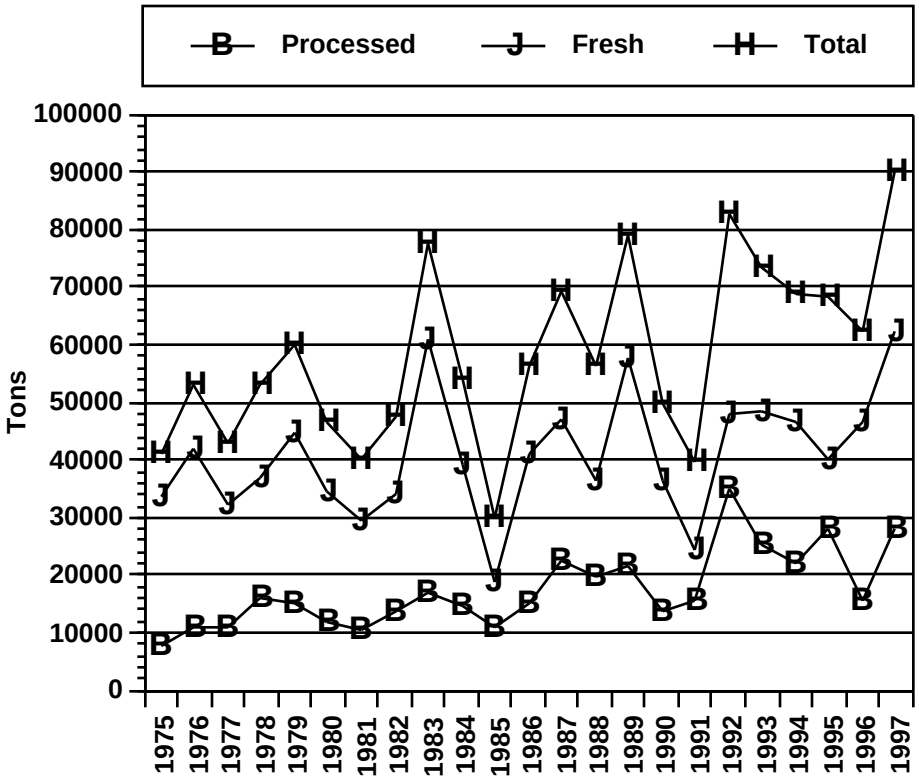

Figure 2. Washington sweet cherry production, fresh and processed (prepared by Fitch & Marshall, Inc., for Washington State Fruit Commission).

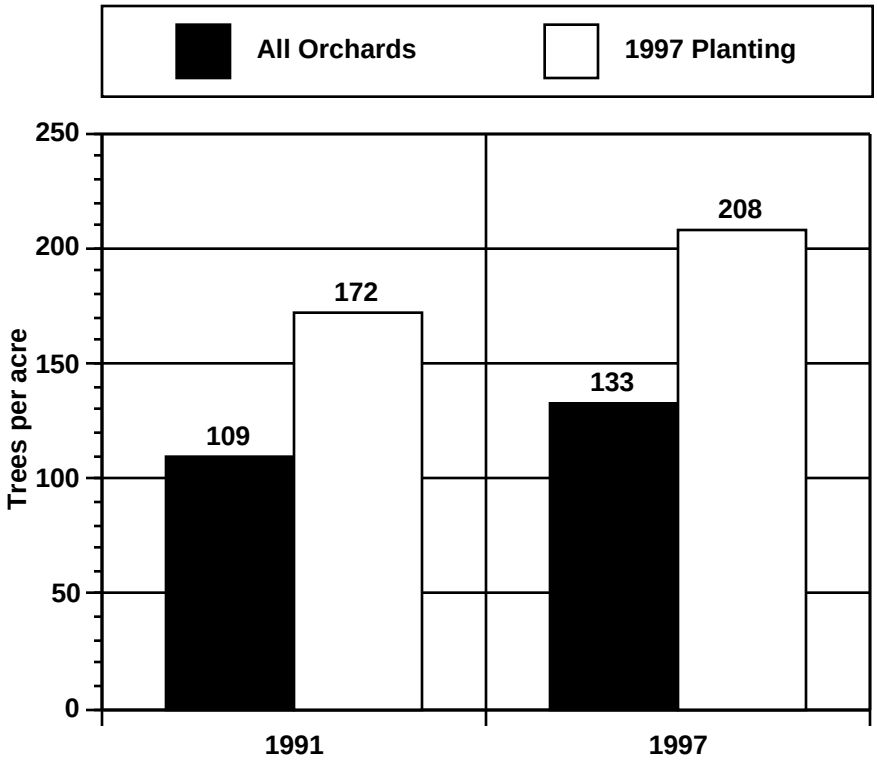

Figure 3. Sweet cherry tree density (prepared by Fitch & Marshall, Inc., for Washington State Fruit Commission).

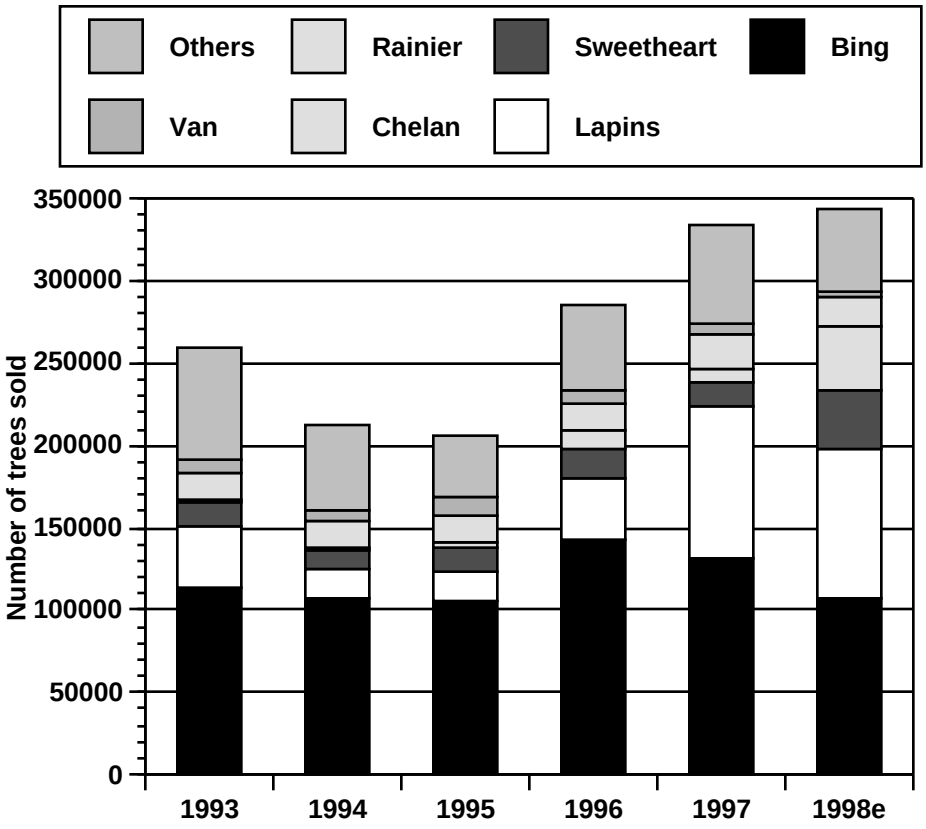

Figure 4. Tree sales by variety, 1993-98 (prepared by Fitch & Marshall, Inc., for Washington State Fruit Commission).

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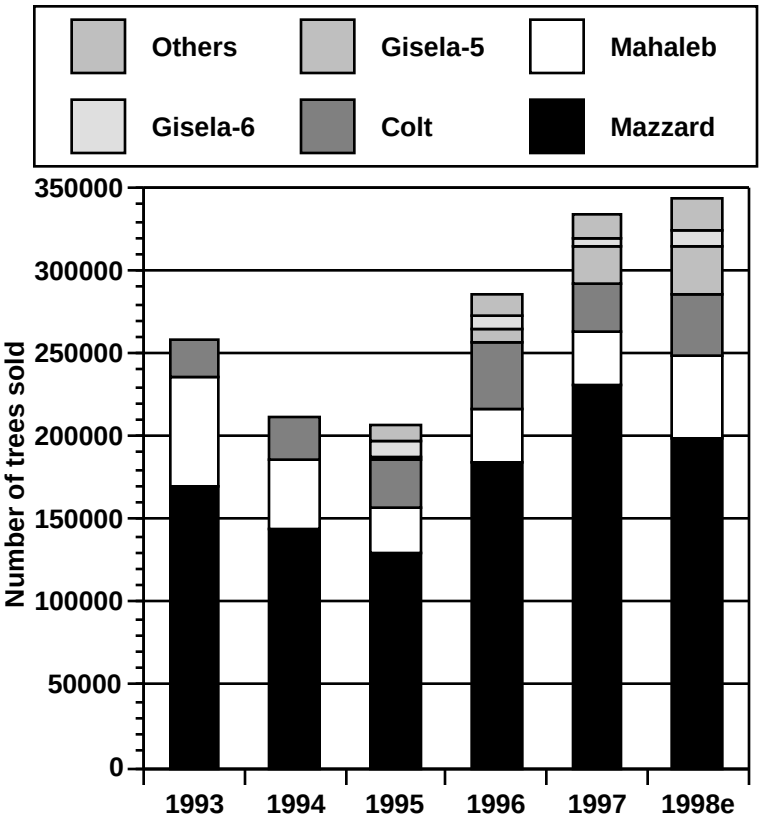

Figure 5. Sales by type of rootstock (prepared by Fitch & Marshall, Inc., for Washington State Fruit Commission).