



Mechanization rises with tighter farm labor

Quality and value figure in growers' choice of labor vs. use of machine

Article by Gil Smith; Photos by Edith Leith

As workers at orchards become scarce, the need for mechanical harvesting is rising.

“Much of the produce that used to be hand-harvested is now almost completely harvested by machines,” said Ken Nye, a commodity specialist for the Farm Bureau. The increasing use of mechanized harvesting, Nye explains, is brought about by available labor to work the farms dwindle.

“The shortage of workers has been noticeable for years, but it wasn’t until recently that it became a real problem,” Nye adds. “We had a small year for crops in 2015 due to frost,” he said. “This caused people to find other jobs, and to not find a reason to come back.”



There have been many strides in mechanized harvesting technology, and some crops lend themselves to mechanical harvesting more easily than others, Nye said. “Certain commodities like apples and asparagus and some of the vegetable crops, particularly fresh market crops, are extremely difficult to harvest mechanically.

Another factor to consider is what the crop will be used for. “Some commodities like blueberries are machine-harvested but also hand-harvested depending on how the product is going to be used,” Nye said. “If it’s going to be for fresh market, it is likely to be hand-harvested. If it’s for processing, more than likely, it’s going to be machine harvested.”

Although harvesting equipment is expensive, growers can make enough money during a season to make up for the price. “Where a typical farm had 40 acres and 20 to 30 workers, they now can harvest 100 to 300 acres with a dozen people,” Nye explained.

Nye said most mechanical harvesting is for produce that is going to be processed, but farmers are considering it for other purposes. “The cost of any new technology is going to be closely considered by the producer,” Nye said. “They are going to stack up the cost of hand harvest or hand labor on one side and the cost of the machine and the number of acres and so on. They are going to try and figure out what’s to be gained in quality and higher value if it’s hand-harvested compared to mechanical.”



Left page

Top: High-tech grape harvesting takes place at a farm in California.

Bottom: Field workers pick strawberries.

Right page

Top: A field worker hauls a carton of strawberries.

Middle: A mechanical canopy shaker harvests oranges. Bottom: Dozens of field workers pick strawberries with the help of machines at a farm in California.