Mechanical Harvesting in U.S. Tart Cherries
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**Equipment**

**Currently in Use**
- Double incline shaker
- Cooling pad
- One man shaker

**Under Evaluation**
- Over-the-row
- Continuous harvest

**Percentage of the Crop Harvested**
- All of the U.S. tart cherry crop is mechanically harvested – and has been since the 1970s using variations of trunk-shaking technology. Ethephon used as an abscission agent.

**Motivation for a New Type of Mechanical Harvesting**
- Long lag between initial investment and first returns (6-7 years)
- Global competition
- Adaptability of orchard design for environmental benefits

**Significant Obstacles**

**Economic**
- Sunk costs in existing orchards.
- Capital cost in equipment and trees.

**Institutional**
- Orchard redesign and architecture of the tree (i.e. change production practices or change varieties).

**Anticipated Impacts**
- Begin harvesting trees 3-4 years earlier.
- Earlier return on investment.
- Increased productivity per unit of land (i.e. improved productivity)
- Potential to use enclosed or contained spray technology in redesigned orchards.

*The views in this poster do not necessarily reflect official USDA policy.