

## Central Valley Crops Imperiled by Cold

By MIRIAM JORDAN AND MATT STEVENS

It's the prettiest time of year in California's Central Valley. Along country roads, fragrant trees burst with white, pink and red flowers that normally bear a bounty of fruit in the summer.

But a cold snap that gripped the state last week may have harmed the blossoms and undermined this year's almond, peach, plum and nectarine crops. Now growers are busy assessing the fallout.

"There will be damage; it's just a matter of how bad it will be," said John Chandler, a grower in the Fresno area. "Frost at the time that it came is really catastrophic."

Thermometers dipped into the 30s in Los Angeles County and into the 20s across California's agricultural heartland early last week. Then, after a midweek respite, temperatures plunged again.

"Anything below freezing is when you start biting your nails, particularly this time of year," said Mr. Chandler, whose family has been farming in Selma, Calif., for four generations.

In late February, California's stone-fruit and nut trees wake up from their winter dormancy, begin to bloom and enter a growth spurt that stretches until the summer harvest.

"Trees in bloom are very, very fragile," said Ryan Jacobsen, executive director of the Fresno County Farm Bureau. "Freezing temperatures can burn the flowers or harm fruit that is just being set."

Growers worked around the clock to implement frost-protection measures, such as irrigating their orchards to create a warmer environment around the trees.

Extremely low temperatures have also kept bees in their hives, instead of on the job pollinating. "Not only are we losing crops, but bees aren't flying," Mr. Jacobsen said, adding, "The bees make your crop."

Subfreezing temperatures are more likely to impact California agriculture in December and January, when the citrus harvest is underway. Temperatures plunged to the 20s only briefly around Christmas last year, sparing this season's production.

Half of the navel orange and mandarin crop is still on trees, but citrus industry officials said they were not worried.

Smaller almond and stone-fruit crops could push up prices for consumers.

"We're casting a wary eye on the forecast," Mr. Chandler, the grower, said. "If Mother Nature keeps going cold, there's not much that worrying is going to do to save the crop."