

## OUTSTANDING ACHIEVEMENT IN RESOURCE STEWARDSHIP

# T-Bar Dairy and White Gold Dairy

Porterville, California



### Dairy proves conservation tillage is possible in dry climates

Tom Barcellos is not one to shy away from a challenge. In fact, if you tell him it can't be done, he's likely to show you otherwise. So it's no surprise that the dairy farmer was the first in drought-ridden Central Valley, California, to successfully develop conservation tillage. The method of growing crops is a challenge to maintain where water is scarce, but Barcellos was up for the challenge.

"It started out of necessity," Barcellos says of his quest to use conservation tillage. "Water – that's the lifeblood of everything. You don't have water, you don't have anything."

Barcellos, who heads the 1,400-cow T-Bar Dairy, also had doubters. Practicing conservation tillage in the Central Valley was unheard of because of the dry climate, but he got to work by altering machinery and collaborating with University of California, Davis, and the Natural Resources Conservation Service. After trial and error, he found a combination of no-till and strip-till methods worked. Not only was he able to manage for water scarcity, the new method also allowed him to dramatically reduce the operation's use of chemicals and fuel while experiencing fewer dust particles in the air.

Protecting the land, air and water is a challenge matched only by Barcellos' future-minded approach to farming. "I have to look forward and work towards improvements," he says. Barcellos is constantly tinkering with machinery and farm operations to make things more efficient.

Now that he's cracked the code on conservation tillage in the Central Valley, he's helping other farmers do it, too. "I've never told anybody, 'No.' I know that people helped me when I started, and I want to pass that on."

#### Tom Barcellos' approach to conservation tillage:

- Improved soil quality and water use
- Reduced greenhouse gas emissions by the equivalent of taking 184 cars off the road
- Increased his profit margin by 20 percent as the result of reduced labor, equipment maintenance, chemical, fuel and water costs