

## ECONOMIC REVITALIZATION

*Heat stress in dairy cattle can cause a 25% drop in milk production.*

# A Cool Cow Is A Happy Cow

**W**hen does a cow produce milk? If you said, “when she has a calf,” treat yourself to some milk and cookies. But milk cows are mostly temperate-climate creatures, and in Hawai‘i’s subtropical environment, they may not get pregnant or carry calves to term during the hottest eight months of the year. No calves, no milk.

What’s a Hawai‘i dairy farmer to do? Heat stress in dairy cattle can cause a 25% drop in milk production, meaning short supplies for Hawai‘i and slimmer profits for the farmer. The animals can be kept cool with water, but they and the ground they lie on also must be kept dry to prevent udder infections. How to solve this riddle?

Relief is at hand from CTAHR dairy specialist C.N. Lee. After more than 10 years of experimentation, working with Hawai‘i’s dairy farmers, he hit upon the right combination of two of nature’s basic elements, wind and water. Using Lee’s combination of sprinklers, foggers, misters, drenchers, and lots and lots of fans, Waianae dairy farmer David Wong, Jr., has seen dramatic progress in the past year, with calving and milk production nearing expected levels. Wong believes that “without a solution to this problem, there can be no dairy industry in Hawai‘i.” Lee’s work, he says, has changed the dynamics of the dairy marketplace and can make Hawai‘i competitive with Mainland bulk shippers.



*Oscillating fans with misters.*



*Cows being sprayed with water (drenchers) at the feed mangers.*