National Dairy Shrine Honors Five Industry Pioneers

Dr. William G. Bickert

"A dairy farm was his classroom," says colleagues of Dr. William G. Bickert, whose innovations and ideas fashioned the gold standards of today's modern dairy farms in the areas of labor efficiency, cow comfort and environmental management.

Bickert completed a 45-year career at Michigan State University in the Agriculture Engineering Department, where he served as a teacher, researcher and extension specialist. His early research in the 1970s developed the first automatic milking machine detachers and other innovations that improved the through-put of herringbone and parallel milking parlors. Bickert's driving force throughout his research was cow comfort, which prompted him to improve the design of free stalls, including optimizing physical stall dimensions and loop design. A particular and distinct loop design was dubbed by the industry as the MSU loop. He also implemented sand bedding as a stall base to improve cow comfort, which led him to explore methods for handling manure-laden sand, thus having a part in creating the first sand separation system. He also introduced the concept of transition heifer barns and naturally ventilated free stall barns, further promoting cow health and comfort and producer profitability. These ideas have become commonly accepted practices throughout the United States and worldwide.