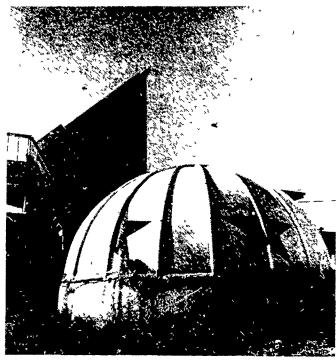


Lancaster Farming, Saturday, July 8, 1978-13



At the USDA Animal Genetics and Management Laboratory, Beltsville, Md, scientists are heating the wash water and the milking parlor with energy from the sun Four different types of solar collectors, operated simultaneously, are being compared for efficiency and durability

Solar energy harnessed

Farmers, more than most people, have always had to rely on the sun, as well as the other forces of nature

Not too many years ago, crops stood in the field, were stacked or windrowed, or put in a crib to be dried by the sun and wind But with today's more efficient machinery, more acres can be harvested in less time, with less losses to pests and adverse weather By doing this, grains are often harvested with a high moisture content, so they must be artificially dried before storage

More fossil fuel is now required to dry corn than is used to produce the crop in 1956, only 14 percent of the corn crop in Illinois, Indiana, and Iowa was artificially dried Today, that figure is around 70 percent

As the supply of fossil fuel continues to diminish, the cost for many agricultural uses may become prohibitive. We must turn again to such alternate energy sources as the sun for at least part of our agricultural energy Research programs, financed by the Energy Research and Development Administration and coordinated by USDA's Agricultural Research Service and Cooperative State Research Service, are doing this

Scientists in ARS and State Agricultural Experiment Station laboratories are experimentally collecting and using solar energy to dry corn, rice, grain sorghum, wheat, soybeans, peanuts and tobacco They are also exploring more efficient ways to dry hay in the field and in barns. Animals, too, will benefit from the solar energy research Solar energy is being tested to heat and cool milking parlors and to heat poultry and swine houses, along with drying poultry manure to facilitate handling Other scientists are studying how to heat and cool greenhouses and rural homes with energy from the sun Soon, because of this research, solar collectors in many forms will trap the sun's energy to benefit not only farmers, but all the earth's inhabitants

