

# Science Education

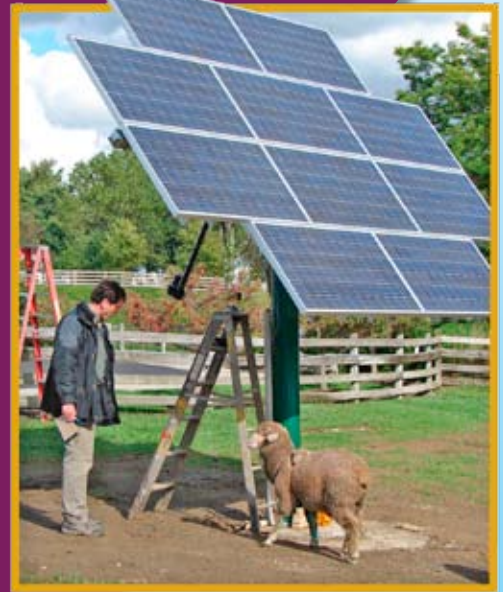
## The Sun Keeps Shining

BY ANDY BAKER, FARMPARK ADMINISTRATOR

Renewable energy is a hot topic these days since the release of the report from the Intergovernmental Panel on Climate Change. The report concludes that the burning of fossil fuels is an important factor in creating global warming. As *Almanac* readers know, Lake Metroparks produces renewable energy from the wind and sun at Farmpark and has provided renewable energy education programs for many years. Education is important for the continued implementation of renewable energy and sustainable energy policies. This summer, Lake Metroparks will help promote renewable energy education nationally by hosting a workshop for the American Solar Energy Society's national conference, which will be held in Cleveland the first week of July.

Workshop participants will see the latest addition to Lake Metroparks Renewable Energy project, a solar tracker located in front of the Visitor Center. The tracker is designed to follow the sun from east to west, changing its angle of declination as it moves, so that the photovoltaic panels can absorb the maximum amount of solar energy available. Designed by the Renaissance Group and made available through grants from the Bonneville, Cleveland, Hershey and Lake Parks Foundations, the solar tracker provides power for one of the aeration fountains in the front pond. While tracking systems are not cost effective in most situations, this application also allows visitors to temporarily override the tracker and manipulate the 1.4 kW array, changing its angle, to observe the impact on the array's power output by affecting how much water the fountain can pump.

The workshop participants will primarily focus on aspects of public education. In addition to examining our renewable energy installations, participants will visit the interactive exhibits at the Plant Science Center and learn how they were developed. There they will investigate the use of data collected from the array and wind turbine to create distance interactive learning opportunities. They will also engage in activities from Farmpark's renewable energy education programs. Farmpark's case study, along with others in the Northeast Ohio region, will help renewable energy professionals from across the country take their own education initiatives to a higher level of public engagement, helping the next generation learn about the role of renewable energy in making a better future.



## Camps for the 21st Century

BY RAY PATACCA,  
INTERPRETATION & EDUCATION MANAGER

Ice cream making and meeting farm animals have been cherished activities at Farmpark's summer camp program for nearly 19 years, offering city kids a taste of the country. But, the farm has changed. Today agriculture not only grows food to provide energy for people, but it also provides energy for people to do work.

You've heard of wind farms and farmers growing corn and soybeans for ethanol and biodiesel and you've seen Farmpark's wind turbine and solar array. Kids can explore and investigate the latest in energy technology and agriculture at Farmpark's newest camp, *Renewable Energy*.

Kid-powered ingenuity is the real energy of this camp. Campers investigate the science of solar cells and create solar powered toys and wind turbines. The adventure is energized with role-playing as solar cells and visits to green buildings and homes.

Renewable energy is not the only earth-healthy technology used by farmers and Farmpark. This four-day camp investigates the micro ecosystem that turns garden and stall waste into wonderful organic fertilizer at our composting facility. Campers will examine how corn fuels cars and how used cooking oil can power a diesel engine. This camp gives ten to twelve-year-olds a taste of tomorrow's important new crop for the future...energy.

To register or to learn more about Farmpark camps visit [www.lakemetroparks.com](http://www.lakemetroparks.com), check *Parks Plus!* or call 440-358-7275.