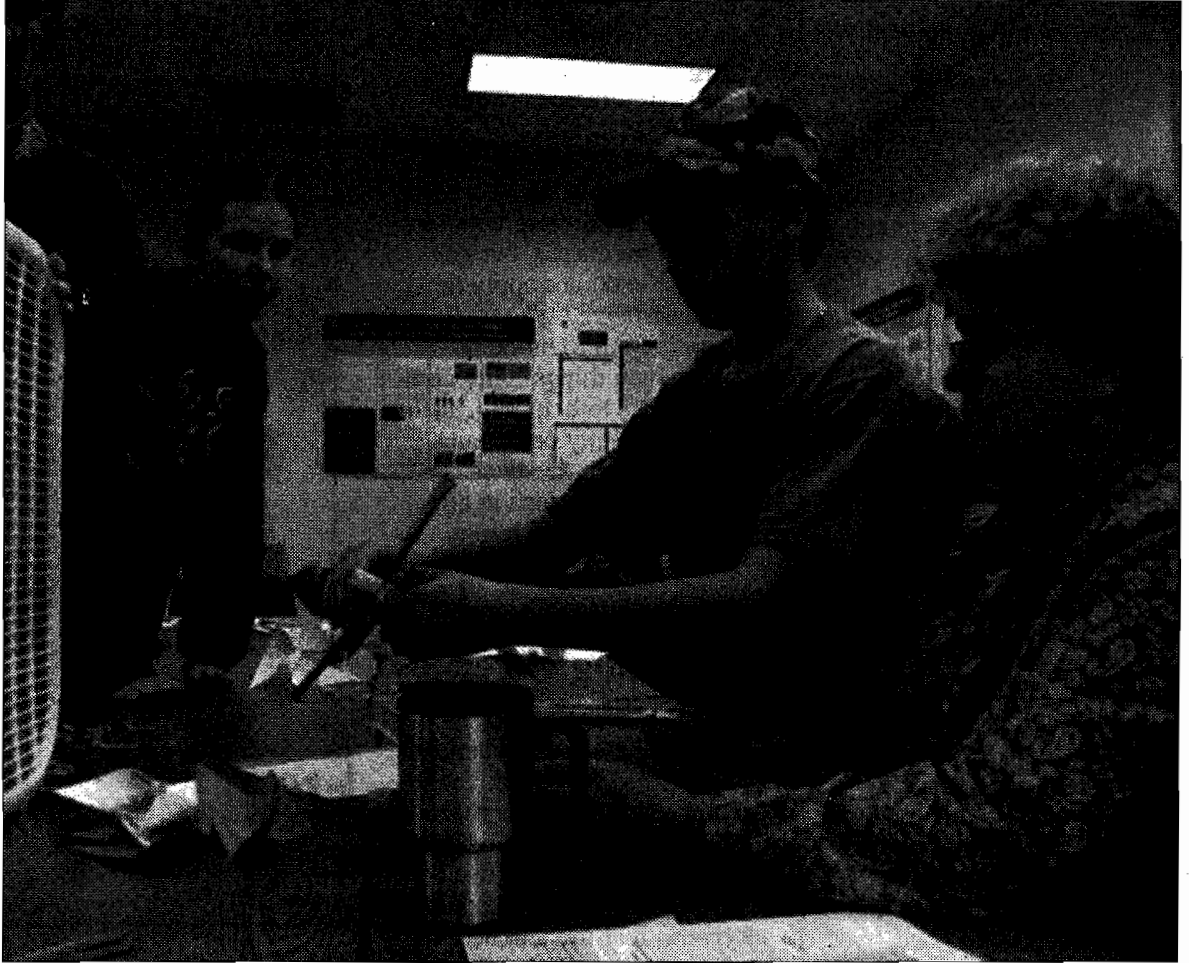


# More than just animals:

*Local 4-H a hub of National Science, Engineering, and Technology (SET) Initiative*



"I have a 4-H sticker on my car, and when I was at Chico State, everyone assumed I was an Ag Science major," Hedges says. "But I was actually always involved in GPS, vegetable gardening -- that kind of thing."

Hedges, 21, has seen a significant increase in members' interest in science projects since first joining the Redwood Valley/Calpella club as a young child.

## By WILL PARRISH For the Journal

In a fall kick-off to its new Science, Engineering, and Technology (SET) program, Mendocino County 4-H hosted a two-day pilot workshop and training on the "Power of Wind" on Friday, Dec. 4 and Saturday, Dec. 5 at the Mendocino County Agriculture Center on N. Bush St.

The 20 people on hand included not only members and volunteers of various Mendocino County 4-H clubs, but of 4-H clubs in three other north coast counties – Humboldt, Lake, and Marin.

The workshop consisted of practical training on the uses of wind for electrical power generation and other practical purposes, drawing on curriculum specifically tailored to 4-H youth. Its purpose was to train facilitators to lead related projects in their county 4-H clubs. The trainers – Drs. Cynthia Barnett and Keith Nathaniel, 4-H youth development advisors for San Bernardino County and Los Angeles County, respectively – took an intensive workshop on The Power of Wind curriculum from the national 4-H office in Virginia prior to conducting the training.

"What people really like is that so many of the activities are hands-on," Barnett says. "In the process of doing the training, everyone gains practical knowledge and acquires resources they can turn around and use to teach other people about pin-wheels and turbines, in the same type of format."

During the training, participants discussed hard facts about wind energy resources in California and its various local regions. From there, Barnett and Nathaniel led them through an "inquiry-based learning process" to discover which pinwheel model is best suited for different practical uses, ranging from pumping water to generating electricity.

Science, engineering, and technology projects have become increasingly popular in Mendocino County 4-H since the introduction of the SET program. Of the nearly 40 projects the Ukiah Shamrocks 4-H club is offering this year, its new Rocketry project is already the fifth most popular. Participation in the Shamrocks' Entomology, Science Exploration, and GIS/GPS projects is also strong. The Long Valley 4-H, Fort Bragg 4-H, Mendocino Spartans 4-H, and other clubs also have a variety of science-related projects, ranging from veterinary science to astronomy.

At the August Redwood Empire Fair, Mendocino County 4-H unveiled its first-ever SET-themed booth, which won third place in the "Best Hands-On Booth" competition.

"In spite of the impressive breadth and diversity of 4-H's youth development curriculum, most people continue to associate us with the livestock animals they see on display at the Redwood Empire Fair and Mendocino County Fair in Boonville," says Mendocino County 4-H Program Representative Linda Edgington, lead organizer of the training. "The biggest indication yet that Mendocino County 4-H is about 'more than just animals,' as we like to say, is that our new Science, Engineering, and Technology initiative is already extremely popular with our members, despite this being its first full year."

Redwood Valley resident Alex Hedges, who leads the Ukiah Shamrocks' Science Exploration and Rocketry projects, was one of the Power of Wind attendees. Despite the popularity and notoriety of 4-H's animal projects, Hedges notes that he's never been enrolled in an animal project during his 17 years in 4-H, four of which have been as a project leader.

science projects he leads are so enthusiastic, he says, that he scarcely has to give them any instruction.

"Most of the kids seem to respond well to learning scientific principles by just doing the activities hands-on," Hedges says. "Instead of me teaching them out of a book, I give them things they can do and they just go for it. I'm really just here for them as a facilitator."

Hedges says that many of the 4-H participants, most of whom are in middle school, intend to become scientists and engineers, and that the 4-H club activities provide them a more focused sampling of possible career paths than they are likely to get in school.

SET was initiated by the national 4-H program in 2008, with funding from a combination of private donors and government agencies, including the US Department of Agriculture and National Science Foundation. It features its own full-time staff person at California 4-H headquarters at UC Davis, with a variety of county-level 4-H program representatives serving as primary "program delivery people." The program's goal is to address what California 4-H SET Coordinator Steven Worker describes as "America's critical need for more scientists and engineers," with a goal of engaging 150,000 youth by 2013.

"The most rewarding thing for me is to see everyone so engaged," Barnett of San Bernardino County 4-H says. "I'm excited to see everyone here take this curriculum forward."

The California 4-H SET web page is <http://www.ca4h.org/SET/>. The web page of Mendocino County 4-H is located at <http://cemendocino.ucdavis.edu>. For more information on Mendocino County 4-H SET activities, contact Linda Edgington at the Mendocino County 4-H office: 463-4495 or [lgedgington@ucdavis.edu](mailto:lgedgington@ucdavis.edu).