

and furthermore, from the desk of the dean



Dean Jerry G. Schickedanz

Public investment in Agricultural Experiment Station research yields a 35 percent annual return.

## Looking for the station

Anyone who has worked in land-grant university research has had to explain what constitutes an agricultural experiment station. It doesn't look like a train station or a gas station, though parts of it may resemble an Australian cattle station. An agricultural experiment station isn't a place but an organization.

The name comes from what has been called the first organized agricultural experiment station, established on the estate of John Bennett Lawes in Rothamsted, England. After Congress passed the Hatch Act authorizing U.S. agricultural experiment stations in 1887, land-grant colleges appointed agricultural experiment station directors. This may be when experiment stations stopped being places, because each state established many substations and developed and organized its research faculty.

We confuse matters more by having several places that could easily be called stations. Our organization has seven science centers and five research centers. Nine of these 12 centers are nowhere near Las Cruces—located from Farmington to Clayton to Artesia.

One of those nine, near Clovis, has two separate sites in Curry County. We have three units in or around Las Cruces. All centers, near and far, have resident staff or faculty who conduct research, often in conjunction with campus faculty. Beyond that, we have research and demonstration sites at farms, ranches and other locations.

All of these entities, including 314 faculty and staff, comprise NMSU's Agricultural Experiment Station. But it isn't even that simple, because most of our faculty split their research time with teaching or Cooperative Extension Service duties. The equivalent of 39 teaching faculty positions is split up among 100 faculty members.

Because of this, we can offer far

more variety in the curriculum with 18 undergraduate majors, nine master's degree programs and three doctoral programs. Most of these are offered nowhere else in New Mexico. We have the help of adjunct faculty, some of whom come from programs such as the Agricultural Research Service and the U.S. Geological Survey.

Students taught by any of these faculty have the advantage of learning from people with real applied science experience. Beyond that, we are fulfilling our purpose of creating knowledge to better the lot of New Mexico. Longitudinal studies show that public investment in Agricultural Experiment Station research yields a 35 percent annual return—far greater than the rate of most private research and development.

How do we do this? There are plenty of examples. Our research has resulted in a quadrupling of income, in inflation-adjusted dollars, of the state's onion industry. In fact, New Mexico produces half the nation's fresh, sweet onions in the summer. It is easy to calculate an \$8 million premium paid to New Mexico cotton growers annually due to our research on high quality varieties. This sort of production benefit can be replicated across the agricultural spectrum, but we are not just trying to improve economic returns.

Increasingly, we are concentrating on environmental issues—whether it be the co-existence of irrigation and silvery minnows or the control of exotic salt cedar with beneficial insects. From forest health to human health, our focus is on quality of life, the foundation of which is our inexpensive, safe food supply.

It's a big job. No wonder we need a system, not a place, called the Agricultural Experiment Station. 