

PA Governor's School For Agriculture Attracts The Best And Brightest Students

BY BONNIE BRECHBILL
Franklin Co. Correspondent
CHAMBERSBURG (Franklin)

—The courses have such names as "Cocoa Molecular Biology," "Gamete Physiology," "Radioisotopes in Agricultural Research," and "Remote Sensing and Geographic Information Systems." The students participate in Leadership Development Classes, debate current agricultural issues, hold weekly Senate meetings, and attend eight hours of classes per day.

No, this isn't a Master's Degree program. It's not even an intensive college-level seminar. The students who took these rigorous courses are the high school sophomores and juniors who attended the Pennsylvania Governor's School for Agriculture at Penn State University July 3 through August 6.

The Governor's School for Agriculture, which was first held in 1986, attracts the best and brightest of Pennsylvania's students. The five week school focuses on the policy, science and technology of food, agriculture and natural resources. It is funded by the Pennsylvania Department of Education and the state's intermediate units.

According to the school's promotional literature, students "who have demonstrated exceptional ability in the sciences and who have a high interest in some phase of agriculture" may apply. Applicants are judged on their grade point average; class rank; letters of recommendation from a science teacher, guidance counselor, and one other teacher or person; a personal essay describing the student's interest and experience in food, agriculture or natural resources; SAT and PSAT scores; and the official high school transcript of courses and grades.

In 1988, 63 students were chosen out of 350 applicants. Five of those 63 were from Franklin and Fulton Counties. Attending the school were Kevin Vandervort and Brian Brady from Fulton County and Rick Hissong, Christiana Keener, and Regina Christman from Franklin County.

Only about one-third of this year's Governor's School for Agriculture participants were from farms; many of the non-farm stu-

dents came from Philadelphia and Pittsburgh suburbs. According to Rick, 17, many suburban kids came for the emphasis on the sciences.

"We used equipment like electron microscopes that four-year graduates of Penn State may not have used," he said.

One of the purposes of the Governor's School is to interest young people in career in the agricultural sciences, whether those young people have a farm background or not. According to the school brochure, there is a critical need for agricultural scientists in today's global economy.

"Some kids might not have given an agricultural career a thought before they came to the school, but they did afterwards," Brian, 18, said.

Kevin, 17, cited grain brokers, who buy and sell futures on agricultural commodities, and people who are involved with the hybridization of seed as people in agricultural careers. "Agriculture is twenty percent of the gross national product," he added.

Of the five participants from Franklin and Fulton Counties, only two, Rick and Regina, have parents who farm full-time. All have some agricultural background, however. Rick, the son of Ronald and Judith Hissong of Mercersburg, is responsible for the family's farm computer and helps out with the shop work, milking and feeding. Regina, 16, daughter of Lakee and Linda Christman, milks and helps with field work on her family's farm near Greencastle. Kevin, while not from a farm, milks and does field and shop work on a farm near his Harrisonville home. Brian does field work on his uncle's dairy farm and helps on his own family's hobby farm in Big Cove Tannery. Christi's family has about ten acres near Chambersburg. She helps with the family's flock of thirty sheep.

Through "core" (required) and elective courses, farm and non-farm students alike got a sampling of such ag-related fields as Forestry, Pest Control and Food Engineering Processes. In one of the elective courses, Wildlife Management, the students learned about Penn State's most recent deer research project. Blue duikers, tiny members of the antelope



These Franklin and Fulton County students participated in the 1988 Governor's School for Agriculture held at Penn State this summer. From rear, Brian Brady, Rick Hissong and Christi Keener; and Kevin Vandervort, front.

family and the world's smallest ruminants, are being used in ruminant research. The university maintains a herd of over ninety of the ten to twelve pound animals, which were imported from South Africa. Blue duikers are nearly extinct, according to the students, and are valued at \$16,000 apiece.

Besides utilizing the many resources of the Penn State campus, students were also taken on field trips to experience several ag-related industries. They visited a dairy farm with a computerized parlor, a draft horse farm, Woolrich Woolen Mills, Longwood gardens and Hershey Technical Center. At Hershey, the students were admitted to a part of the complex that is usually not open to the public. They learned about the firm's ne wandy bars and met the creator of the Bar None bar. They also sampled candy at various stages of manufacture.

Another part of the course of study was the Independent Research Project (IRP). Students chose their own topic and were

then assigned a professional in that field as their mentor.

Brian's IRP was on "Microbial Activity on Soils." He conducted experiments with greenhouse soil and wrote a ten page paper on how microbes break down fertilizer.

"Influences of Moisture Content on Mechanical Properties of Wood" was Kevin's project. He used a special testing machine to determine how many pounds of force were needed to break wood at three different moisture levels -- saturation, twelve percent moisture, and oven-dry. His paper included ten written pages, eighteen graphs and two charts.

The title of Rick's IRP was "Computer Assisted Land Analysis to Prioritize Land for Farmland Preservation in Lehigh County." In November 1987, \$100 million had been approved to purchase land under suburban pressure in Lehigh County. Rick entered information into a computer to create a data base which could determine which tracts of land were under the most suburban pressure. Included in the data base were the value of the land, what crops were grown there, and 210 different soil types. He wrote a ten page paper on his findings.

Christi's IRP, Soil Control, concerned erosion. The information for her ten page paper was gleaned mainly by researching scientific journals.

"The Use of Mulch in Retention of Heat in the Soil" was the title of Regina's IRP. She wrote a ten page paper comparing the efficiency of such mulches as aluminum foil, black plastic, clear plastic, and

stones.

Besides turning in a paper, students also had to give a ten minute presentation as part of their IRP. Attending the presentation were the professors, the mentors, and some of the other students. Because Kevin worked with another student on the wood project, he did not have to give his presentation alone, but he was still nervous. "I was shaky," he said.

Despite the scariness of the presentation, Kevin enjoyed working on the IRP. Brian, however, felt differently.

"The worst thing (of the whole five weeks) had to be the IRP," he said. "It took up almost all my free time."

And free time was at a premium. Besides the core courses, the elective classes, and laboratory sessions, there were the required Governor's School Senate meetings on Thursday evenings and various speakers on Monday evenings. Wednesday evenings were set aside for "options night," when students could go to a movie, play sports, or choose other activities.

Busy as the students were, there apparently was ample time for friendships to develop. "The best part was the people," Brian said.

"We met friends that we'll have for a lifetime," Rick added. "By the end we didn't want to leave. We made so many friendships in a short time."

"I go to a big school," Christi, 18, said. "I see the same kids for three years, but I might not know them. At Governor's School, it was a confined group, and the sixty

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Christi, Rick, Brian and Kevin discuss the experiences they had at the Governor's School for Agriculture.

Homestead Notes