

there; its membership is for all colleges and universities that offer a curriculum in agriculture.

NACTA is the unifying force and organization for teaching improvement. Where there is unity there is progress. We are going to see a lot of progress in the next decade. I believe there will be progress in the teaching improvement programs on a regional and state basis. I believe there will be more state associations organized in the next decade, and perhaps some conferences will be held on a regional basis.

### Membership

Our membership continues to increase every quarter, but we haven't scratched the surface. There is a new dimension available in membership — a double dimension. We can double our membership in one year if we

are willing to meet the challenge. The challenge is to every member of NACTA, to the regional directors and state coordinators of our four regions. We need 300 new members in the Central and Southern regions and 200 new members in the Eastern and Western regions.

In the Central and Southern regions we would only need 25 new members for each state and in the Eastern and Western region we would need only 20 new members in each state.

We are not just after members; we are interested in teachers who have a desire to improve their teaching, and they need some help in doing so. NACTA, through the exchange of ideas, methods, materials, and motivation, can justify its reason-for-being when teaching improvement is implemented on a "grass roots" level.

## Agriculture and Education in Louisiana

William H. Brown  
Introduction

Louisiana is a diverse state. Socially, culturally, agriculturally, and in numerous other ways Louisiana encompasses the extremes of the spectrum. For example, Louisiana citizens vary from those with a predominantly Catholic French heritage in south Louisiana to the protestant Anglo-Saxon inhabitants of north Louisiana; their cities vary from the world famous metropolis of New Orleans to the smallest of rural villages; their economic means vary from trappers and fishermen who literally "live off the land" to people who have become suddenly and vastly wealthy by owning land underlain with oil or natural gas deposits.

Louisiana's agriculture is also diverse. Food and fiber production encompasses not only the traditional southern cotton, cattle, and forest crops, but includes the historical sugarcane production and processing industry, the relatively modern soybean enterprise, subtropical citrus production, a variety of sometimes unusual horticultural and aquacultural crops, and many others that will be discussed later. An accomplished Louisiana cook, using strictly Louisiana products, can keep your taste buds dancing for days, and keep you guessing what you are eating as well.

Serving in and supporting Louisiana's agri-business complex are agriculturally trained people representing all parts of the state and all academic disciplines. Agricultural education in Louisiana varies from two-year associate degree programs to highly specialized doctoral training available at one or more of thirteen state universities offering degree programs in some phase of agriculture.

Brown is professor and head of the Agricultural Engineering Department Louisiana State University. This paper was presented to the 27th annual NACTA conference held on the LSU Baton Rouge campus. June 7-10, 1981.

### Agricultural Commodities and Production

Prior to discussing Louisiana's agricultural education system in more detail a review of the agricultural commodities and their relative importance to the state is in order. Animal products will be discussed first followed by plant products. The statistics represent the most recent data available which was for the 1980 crop year in most cases.

**BEEF CATTLE:** Approximately 1.4 million head of cattle; gross income from cattle and calves was \$221 million in 1980.

**DAIRYING:** 1,100 dairy farms with 110,000 dairy cows; average herd size is slightly over 100; nearly \$143 million worth of milk was produced.

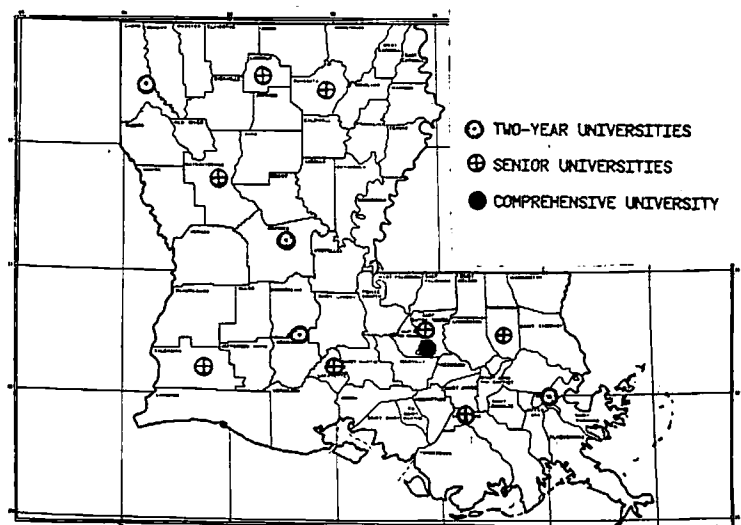
**HORSES:** Over 220,000 horses were valued at \$30 million but contributed \$440 million to state's economy primarily due to parimutuel racing and related activities.

**POULTRY:** Farm value of poultry including broilers, layers and eggs was \$140 million in 1980; approximately 1.6 million broilers were produced per week.

**SHEEP:** Farm income was approximately \$900,000 in sheep and wool products.

**SWINE:** Over 150,000 market hogs were produced in 1980; gross farm income from all pork sources was nearly \$18 million.

FIGURE 1. LOUISIANA UNIVERSITIES WITH AGRICULTURE PROGRAMS



**COMMERICAL FISHERIES:** Primary products were shrimp, oysters, crab and menhaden; total value was \$198 million with a nation-leading volume of 15 million pounds.

**CRAWFISH:** Approximately 25 million pounds with a value of \$18 million was produced during the past season.

**ALLIGATOR:** Total value of meat and hides was approximately \$1.8 million during the 1980 season.

**FURBEARERS:** Approximately \$17 million of pelts and meat were harvested in the 1979-80 season; nutria provided half that value with muskrat and raccoon accounting for most of the remainder.

**COTTON:** Approximately 500,000 acres were produced with a farm value of \$203 million in 1980.

**FEED GRAINS:** Corn, wheat, and grain sorghum were grown on 86,000 acres and accounted for \$11 million farm value in 1980.

**HAY:** Total crop was valued at approximately \$42.7 million in 1980.

**FORESTRY:** Forest products, primarily saw timber and pulp wood, were valued at \$342 million; overall contribution to state's economy was nearly \$3.4 billion.

**FRUIT CROPS:** Strawberries, citrus, peaches, and other fruit crops were valued at \$8.8 million.

**HOME GARDENS:** Home grown foods were estimated to value over \$65 million.

**PECANS:** Louisiana usually ranks 3rd or 4th among producing states; 13 million pounds were produced in 1980 worth over \$9 million.

**ORNAMENTALS:** Commerical ornamental production is growing rapidly with a 1980 value of over \$34 million.

**RICE:** Approximately 600,000 acres were produced; farm value was \$231 million.

**SUGARCANE:** About 240,000 acres were harvested valued at over \$186 million.

**SOYBEANS:** Louisiana's highest acreage crop with over 3.35 million acres produced; 67 million bushel crop was valued at \$536 million.

**SWEET POTATOES:** Approximately \$17 million worth of sweet potatoes were produced on 27,000 acres.

**COMMERCIAL VEGETABLES:** Over \$12.6 million in farm value; a wide variety of crops grown.

Louisiana's lands and waters produce a truly diverse assortment of food and fiber to help feed, clothe, and house people all over the world. From this vast array of agricultural products Louisianans realized a gross farm value totaling nearly \$2.6 billion in 1980. The value added by processing or other operations was estimated to be \$4.6 billion for a total contribution to the state's economy of \$7.2. Although Louisiana may be more famous for its oil, gas, and petro-chemical activities, a vitally important concept is that, with proper management, manpower, capital, and research inputs, the agricultural contribution to the state's economy is basically a renewable resource that can be counted on year after year.

### Agricultural Education

Louisiana's agricultural education system is vital to the future productivity of the state's agriculture; and it is just as diverse, in a number of ways, as the agricultural production system.

The "Master Plan for Higher Education in Louisiana" was developed by Louisiana's Board of Regents for Higher Education in 1978. This "Master Plan" provides for three types of higher education institutions in the state. These three types and their characteristics are:

- (1) **Two-year institutions** granting a wide variety of technical associate degree or certificate programs; the first four shown in Table 1 are this

type.

- (2) **Senior universities** offering a wide range of undergraduate programs and selected graduate programs in areas of specific strengths; the eight institutions shown in the center of Table 1 fall into this category.

- (3) **Comprehensive universities** offering a wide range of undergraduate, graduate, and profession level programs; the last university shown on Table 1 is designated as Louisiana's only comprehensive university.

Table 1 Agricultural Programs and Enrollment in Louisiana, 1980-81

University	Number of Degree Programs Offered/Enrollment		
	Associate Programs* <sup>1</sup>	Bachelors Programs	Graduate Programs
Louisiana State University - Alexandria	1/65	—	—
Louisiana State University - Eunice	1/32	—	—
Louisiana State University - Shreveport	1/50	—	—
Delgado Community College	1/15	—	—
Northeast Louisiana University	2/26	—	—
Northwestern State University	6/23	5/65	—
Southwestern Louisiana University Louisiana	3/74	3/135	—
Louisiana Tech University	1/7	16/500	—
Nicholls State University	1/0	8/536	—
McNeese State University	2/49	3/64	—
Southern University - Baton Rouge	2/24	7/439	—
Louisiana State University - Baton Rouge	—	4/225	—
Enrollment Totals	475	3,410	460

\*<sup>1</sup>Includes all associate degree, certificate, or pre-agriculture programs.

Figure 1 shows the locations of the state-supported institutions that offer agricultural programs or curricula. The schools are geographically well dispersed enabling students to enroll in agricultural programs near their home or, in many cases, continue to live at home, at least during their first two years of study.

Table 1 summarizes the thirteen institutions in the state offering agricultural programs, the number of degree programs each of them offers, and the number of students enrolled at each level. Twelve schools offer two-year pre-agricultural programs or associate degree programs enrolling 475 students (includes all associate degree, certificate, or pre-agricultural programs.); nine schools offer bachelors degree programs enrolling 3,410 students; one school offers graduate degree programs enrolling 360 masters students and 100 doctoral students in 16 graduate degree programs. A total of 4,345 students were enrolled in some type of post-secondary agriculturally-related education program in Louisiana in the 1980-81 school year.

Using the system employed by the National Association of State Universities and Land Grant Colleges to classify programs into seven categories, the agricultural enrollments and percent of total enrollments in Louisiana are as follows:

ANIMAL SCIENCES (including beef, sheep, poultry, dairy and pre-vet): 832; 19%

PLANT AND SOIL SCIENCES (includes agronomy and horticulture): 576; 13%

SOCIAL SCIENCES (includes ag. economics, ag. business, ag. education and rural sociology): 1,016, 23%

NATURAL SCIENCES (includes wildlife, fisheries and forestry): 440; 10%

RELATED SCIENCES (includes plant pathology, entomology, ag. engineering and mechanization and food science): 284; 7%

GENERAL AGRICULTURE (includes all general programs, statistics and international agriculture): 463; 11%

OTHER (includes home economics, restaurant management and dietetics): 734; 17%

The diverse educational programs available in Louisiana enable a student who is interested in an agricultural career to be relatively flexible in choosing a school and a course of study. His or her choice may be to select a particular university, a particular discipline, a 2-year or a 4-year program, a large, small or medium-sized school, a curriculum or university that offers graduate-level training, a university near his home, or a selection based on some other factor. The important point of this flexibility is that a student is free to attend any university that he chooses, to major in the program he chooses, to transfer to another university (with appropriate prior planning) if he wishes, and to continue his educational achievement, even to the doctoral level, if he chooses to do so.

A recent survey of 19 undergraduate and graduate programs at Louisiana State University-Baton Rouge showed that employment prospects for degree holders ranged from good to excellent and that starting salaries for bachelors degree holders could be expected to range from \$9,000 to \$20,000 per year (and higher in selected disciplines). Also, a recently released USDA study revealed that a nation-wide annual shortage of 8,500 food and agricultural profession graduates could be expected in coming years.

As the world's population increases from a 1980 level of 4.4 billion to a projected 6.6 billion in the year 2000, a fifty percent increase, the demand for food and fiber will continue to accelerate. This increased need for agricultural products, the many options for study in agricultural programs, and the apparent strong and continuing demand indicate that students choosing careers in agriculture will be making wise and rewarding decisions.

## Summary

Both the agricultural production and the agricultural education systems in Louisiana find strength through diversity. The products of the agricultural education system will be students with the imagination and abilities to bring innovation and optimization to the agricultural production system, to keep it healthy, and to keep a bountiful supply of wholesome food on every citizen's table. All this must be done in an increasingly resource limited environment. Our charge as agricultural educators is obvious.

## Letters To The Editor

Dr. Jack C. Everly, Editor  
NACTA Journal  
College of Agriculture, University of Illinois  
608 West Vermont  
Urbana, IL 61801

Dear Jack:

Possibly some of the readers can help me with a problem related to obtaining crop seeds. In a field crops class at Southern Illinois University, we need 40 or more different crop seeds (from a few ounces up to 5 pounds of each). This list includes seeds such as flax, sunflowers, peanuts, tobacco, and sugarbeets, which are not available in most mid-western seed houses. Is there a single seed house where we can purchase small quantities of a diversity of crop seeds?

I would appreciate hearing from other crop instructors as to how they deal with this problem.

Sincerely yours,  
Donald M. Elkins  
Dept. of Plant and Soil Science  
Southern Illinois University  
Carbondale, Illinois 62901

Dear Dr. Everly:

With your kind permission may I use the columns of your "Journal" for announcing the following:

"At the last annual meeting of the American Society of Agronomy, held in Detroit, MI, the Asian Agricultural Scientists got together and decided to form a new organization called the American Association of Asian Agricultural Scientists with the following objectives:

1. Professional growth and development of Asian agricultural scientists in USA.
2. Promote and encourage the acquisition and dissemination of knowledge pertaining to agricultural sciences and related areas of interest.
3. Encourage and recognize the outstanding achievements of Asian agricultural scientists.
4. Assist with the training and career placement of Asian agricultural scientists and students in USA.
5. Collaborate with developing countries to promote the applications of agricultural sciences.

Scientists interested in joining the organization are urged to contact Dr. Gian Gupta, Secretary, American Association of Asian Agricultural Scientists at Woodview Square, 411F, Salisbury, MD 21801.

My thanks for your help.

Sincerely,  
Gian Gupta, Ph.D.  
Secretary