A National Study of the Supply and Demand for Teachers of Agricultural Education From 2004-2006

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The "Supply and Demand Study" is an ongoing project sanctioned and sponsored by the American Association for Agricultural Education (formerly the American Association for Teacher Educators in Agriculture) since 1965

May 2007

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Personal Statement

In May of 2006 a "Draft Report" of 2002-2004 data was presented to the AAAE but not released publicly due to the poor response rate. An additional year of work resulted in an acceptable response rate and the current report is the result of that effort.

This report provides trend data in a number of tables that are drawn from all of the previous authors and reports. The layouts for many of the tables, data, instrumentation, and parts of the verbiage were taken directly from earlier studies and I make no claim to the originality of any parts of the study.

I accept full responsibility for any data inconsistencies. I have worked in consultation with others to minimize the occurrence of errors but recognize fully that mistakes may have slipped by our review and I apologize in advance for those errors that may relate to your state or your teacher education program.

I also need to thank Ernie Gill and his entire staff at the National FFA Organization for their assistance in collecting state demand data and Dr. Bill Camp of Cornell University for his assistance in reviewing the report. Thank you.

Respectfully,

Adam J. Kantrovich

A National Study of the Supply and Demand for Teachers of Agricultural Education from 2004-2006

Introduction and History

This is the 35th volume of the national survey of the supply and demand for teachers of Agricultural Education in the United States. This study is sanctioned by the American Association for Agricultural Education and is conducted as a service to the profession.

1965 - 1973	Dr. Ralph Woodlin, initially of the Ohio State University and later of the University of Tennessee, Knoxville, conducted the annual studies.
1974 – 1984	Dr. David Craig of the University of Tennessee continued the study.
1985 – 1989	Dr. William G. Camp initially at Virginia Tech now of Cornell University was responsible for the annual study.
1990-1991	Dr. J. Oliver of Virginia Tech.
1992 - 2001	Dr. William G. Camp initially at Virginia Tech now of Cornell University was responsible for the annual study.
1994	At the annual convention of the American Vocational Association, the Agricultural Education Division elected to change the study to a 3-year cycle and this current volume (2004-2007) is the third triennial study.
1995	Last annual study.
2004-05	The American Association for Agricultural Education broke from holding their meetings in conjunction with Association of Career and Technical Education (ACTE, formerly AVA) to holding it on its own. The first meeting away from ACTE was held in May of 2004. It was at this time that the membership selected Dr. Adam J. Kantrovich of Morehead State University to take over the study with the assistance of Dr. Tom Broyles of Virginia Tech. (Report Presented May 2006)
2006	Study performed and reported by Dr. Adam J. Kantrovich of Morehead State University with demand data collection assistance provided by Doug Loudensager, Ernie Gill, and the staff of National FFA. Report Presented May 2007)

Importance of the Study

Agricultural Education in the United States is in a constant state of flux. Not only is the profession changing rapidly, but the patterns by which new teachers are educated and brought into the profession are undergoing dramatic revisions in most states (Lynch, 1996). According to the National Center for Education Statistics, the number of elementary and secondary school teachers is projected to rise, primarily due to the increase in school enrollment" during the early part of the 21st century (Gerald, 1999). Thus, it is as important as ever that data are available to illuminate the numbers and sources of new teachers in Agricultural Education. Moreover, it is important that data are available to track the changes as they are implemented in Agricultural Education programs throughout America. Secondary Agricultural Science Education Programs offer students the opportunity to apply the "general" education curriculum of science and mathematics and leadership skills through FFA. These opportunities for up and coming generations should not be forgone due to a lack of prepared educators. As a national organization it is our duty to track the occurring changes in educational trends, policy, student needs, and agricultural educator's needs. Our stakeholders are the community at large; with proper marketing and preparation we can meet the needs of tomorrow.

Background

The profession's concern for the supply and demand for teachers of Agricultural Education is not a new phenomenon. In a bulletin published by the Department of the Interior only four years after the Smith Hughes Act, C. D. Jarvis (1921) reported a total of 283 graduates from specialized teacher preparation programs in Agricultural Education, for 38 colleges of agriculture in the United States. He went on to quote C. H. Lane of the Federal Board for Vocational Education:

> In the North Atlantic region 352 students were enrolled in resident teacher-training classes during the school year 1919-20, as against 247 for the previous year. In the southern territory 849 students were enrolled in 1919-20 compared with 389 for the previous year. The east-central region had an enrollment of 343 for 1919-20 as against 282 for the previous year. In the west-central region, for 1919-20, 491 students were enrolled as against 164 for the previous year. In the Pacific-coast region, 275 students were enrolled in 1919-20 compared with 252 for the previous year.
>
> In summarizing the enrollment in resident teacher-training classes it is found that there were 2,310 students enrolled during 1919-20, compared with 1,334 for 1918-19. Experience has shown that many students who work in these classes do not become teachers. Furthermore, these enrollments represent the number of students of all years, and many of them will not be immediately available for service. In 1920, 444 students who had carried the work in agricultural education were graduated. (p. 9)

Estimating the supply and demand of teachers is often a difficult and frustrating task. Many people have tried over the years, and the results have been mixed at best. As recently as 1992, an Office of Educational Research and Improvement study (National Center for Educational Statistics, 1992) estimated the number of Agricultural Education teachers in the United States in

1987-88 at 10,598. This supply and demand study reported the total number of teachers at 11,072 for the same year, a difference of 474 teachers.

Moreover, agricultural educators have debated the reality of an agriculture teacher shortage. Parmley, Bowen, & Warmbrod (1979) examined data from previous national supply and demand studies by Woodin and Craig, attempting to make sense of a confusing situation. They concluded that the shortage reported by the ongoing studies resulted not from a shortfall in the number of graduates but from the low percentage of graduates choosing teaching as their initial profession. By extending their reasoning, the classic laws of supply and demand from the field of economics implied that the shortage was a function of salaries for beginning teachers rather than an inadequate numbers of graduates. More recently, Brown (1995) concluded:

> Approximately half of those graduating with a bachelor's degree in agricultural education were electing not to enter the teaching profession. The problem was not created by insufficient numbers completing bachelor's degrees in agricultural education. The problem was created by insufficient recruitment of qualified individuals into the profession of teaching. (p. 11)

Regardless of the theoretical basis for the teacher shortage, a very real problem faced the profession of Agricultural Education in those years: how to recruit enough qualified people into teaching to fill the need of the profession for replacement teachers. A de-facto "teacher shortage" has been a constant problem for Agricultural Education for at least the 40 years covered by this study. Then, between 1976 and 1988, student enrollment in public school Agricultural Education declined from 697,000 to 522,000 (Scanlon, Yoder, Hoover, & Johnson, 1989). That student decline occurred during a concurrent but much less dramatic decline in the number of teachers in the profession, from 12,844 in 1978 to 11,204 in 1987, as reported later in this study. During the same general timeframe, the number of newly qualified potential teachers of agriculture fell from 1,749 in 1977 to 643 in 1994, again as reported later in this study. Many of the positions becoming vacant during that timeframe were not filled because of the decreasing number of teaching positions. Thus, even with fewer new potential teachers available, not only did the placement rate for new teacher education graduates decline, but the shortage of the 1960s and 1970s appeared to become a very brief national teacher surplus in the mid-1980s, even though we have not experienced a single year since 1965 in which all teaching positions have been filled. Notably, the decline in the number of newly qualified teachers of agriculture continued throughout the 1980s, in spite of the general increase in teacher education enrollments during that period, as reported by Rodman (1987).

Today another potential major problem may loom on the horizon. Dykman (1993), drawing heavily from earlier work by Lynch (1991) asked the question, "who will teach the teachers" for career and technical education. The Lynch study pointed out that the numbers of vocational teacher education programs had been steadily declining in recent years. At the same time, federal policies have begun to place greater emphasis on career and technical education as a critical component of the public educational system. If the future holds more career and technical education (Dykman, 1993), including a revitalized Agricultural Education (National Research Council, 1988), more teachers will be needed, not fewer. Yet teacher education programs seem to be on the decline in vocational education in general (Lynch, 1996).

Problem and Purpose

The problem addressed by this ongoing study is twofold. Leaders of the profession need current, accurate estimates of the numbers of and demand for teachers of Agricultural Education to provide for meaningful policy decisions at all levels. Teacher organizations and teacher educators need current, accurate supply and demand information to use in recruitment activities and in counseling potential teachers of Agricultural Education. Yet, detailed data of that nature, specific to Agricultural Education, are not available outside this study.

The purpose of the study was to conduct a census of the field of public school Agricultural Education and determine the situation regarding the supply and demand of teachers in the United States, Specific questions to be addressed were:

1. What are the current numbers and trends in terms of total numbers of teachers of Agricultural Education nationally, by region, and by state?
2. What kinds of public school programs exist for Agricultural Education nationally, by region, and by state?
3. What are the numbers and trends in newly qualified potential teachers of Agricultural Education nationally, by region, and by agricultural teacher education institution?
4. What are the numbers and trends in teacher education programs nationally and by region?

Data Collection

This study is a population census and is descriptive in nature. The data came from two main sources.

> **Supply Data** – e.g. teacher education programs, graduates, and placements. The head teacher educator of a program that prepares teachers of agriculture at institutions of higher education in the United States was surveyed. In several institutions, the head teacher educator passes responsibility for the study to another faculty member or a higher administrator chose to respond.
>
> **Demand Data** – e.g. numbers of teachers, numbers of replacements hired, sources of replacements hired, types of schools, and kinds of programs. The person in charge of Agricultural Education at each state department of education was surveyed. In several states, the state department official does not have access to the data needed or for some other reason does not respond to the survey. In several other states no state department of education official with access to the data could be found, responded, able to locate data, or no one knew who kept the data because of turn over. In those cases, the most suitable sources of information that was located were surveyed. For instance the state FFA executive secretary or the state president of the agricultural teacher association might be used.

The initial call for responses was emailed in October 4, 2006. Repeated follow-ups by mail, e-mail, telephone, and in person over a six month period resulted in an initial responses from 88

institutions (95.6%) to provide the teacher supply data. Through this response it was found that six programs have been consolidated or are no longer in existence and one new program at the University of Rio Grande in Ohio can certify individuals to teach agriculture. This leaves a new population of 92 institutions. For the teacherdemand data, 48 of 53 States and Territories responded (90.5%). The five non-respondents included the states of Hawaii, Massachusetts, South Dakota, Puerto Rico, and the Virgin Islands.

In the past data for those states that did not respond to the repeated attempts at data collection, previous-study data were used. Realizing that using data dating back to 1998 is not a clean substitute for current information and that the data can significantly skew the results the researchers decided to leave missing data. For those teacher education institutions and State Staff that failed to respond, repeated attempts were made via email, phone, fax, and at various professional conferences to retrieve some response even if the response was that no Agricultural Education Program existed.

The method of response was recorded for the supply and demand portions of the study. There were three response types; email, using the traditional mail system or "Snail-mail", or by fax. The overwhelming majority of responses came from email with the least coming through snail-mail. From the supply portion of the study 55 institutions responded through email, 18 by fax, and 14 through the U.S. Postal Service. The demand portion of the study yielded the same results, 37 responses came through email, 6 through fax, and 5 through snail-mail.

Non-Respondents

Although every attempt was made to contact initial respondents and the timeliness of this report was put at risk to allow for additional responses, Dr. Kantrovich made an attempt to call every institution and state to locate an individual that would be able and willing to complete the survey. Those institutions and states that did not respond include:

The Institutions that did not respond include:	**States/Territories that did not respond to the Demand Study:**
Alabama A & M	Hawaii
California Polytechnic State University – Pomona	Massachusetts
Delaware State University	South Dakota
Southern University – Baton Rouge, LA	Puerto Rico
Alcorn State University*	Virgin Islands
College of the Ozarks	
The University of Hawaii	
The University of Maryland – Eastern Shore	
The University of Puerto Rico	

*although the institution still maintains an Agricultural Education preparation curriculum they no longer have a agricultural teacher educator/coordinator and have not produced a graduate within the last 5 years (information gathered from other state faculty/staff).

When reviewing the institutions that did not respond these are institutions that most likely no longer certify agricultural educators or are the numbers are so small that it will have little bearing nationally. Reviewing the states and territories that did not respond one should not fret about the loss of their data. Their demand has never been such to change the implication of the collected national demand data. The most profound negative of not receiving their data is for the purposes of tracking census and demographic information.

Regional and National Summary Data

This study will provide two perspectives (National & Regional) on the data collected. National and regional data will be presented in this section, followed by state and local data in the next section. Throughout the report, the American Association for Agricultural Education (AAAE) regions were used to organize the data by region. This has changed recently from four regions (Central, Eastern, Southern, and Western) to three regions (North Central, Southern, and Western).

North-Central:	Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, West Virginia, Wisconsin;
Southern:	Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, Oklahoma, South Carolina, Texas, Tennessee, Virginia, Puerto Rico;
Western:	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

The reader should note that detailed data regarding variables such as program focus, grade level of teaching assignment, gender, ethnicity, and many other are almost always incomplete due to underreporting. As a result, most tables reflect subtotals that do not add up to the total number of positions reported regionally and/or nationally. We have tried to point out such discrepancies where they are most glaring, but please hold this limitation in mind as you use this study.

Numbers of Teachers

As seen in Table 1 and Figure 1, the 2002 and 2003 data implies that the total number of positions has dropped from previous years. This is a false perception due to a decreased response rate and how datum is being utilized prior to this study. In the past data from previous Supply and Demand studies would be used to replace missing data. The previously used data has become too old to be considered reliable and therefore missing data was not replaced. This drop should not be considered a positive or a negative. It was for this reason that it was decided to renew our efforts with performing this study again to

be able to offer a more complete and up-to-date report in May of 2007. With the increased response rate the data now looks to be more in-line with the previous trend(s). The reader must look for trends within these historical numbers. Here we continue to see that there is a trend of growth in total positions and teachers needed. While we also continue to see a growth in the number of newly qualified teachers including a 12% higher rate of qualified teachers entering the field it is not enough to meet the continued demand.

As we see an initial decline of programs in 2001 to 2004 (partly due to a response rate issue for the 2002 & 2003 data) there is a steady increase between 2004 and 2006. A disturbing note is that it is estimated that 40 programs did/will not operate because of the lack of a qualified teacher. In 2006 there were 78 more positions nationally than there were teachers. It is estimated that there will only be 758 qualified agricultural teachers prepared to enter the field for fall of 2007. Over the past study's only approx. 53% of qualified teachers will enter the field, leaving only 401 to enter the profession. The state data shows that they expect to have 652 positions to fill leaving a 251 (38.5%) teacher deficit. This has the potential to reach epidemic proportions if we are unable to recruit additional students into the field of agriculture education and the continued growth in secondary agricultural education programs continues.

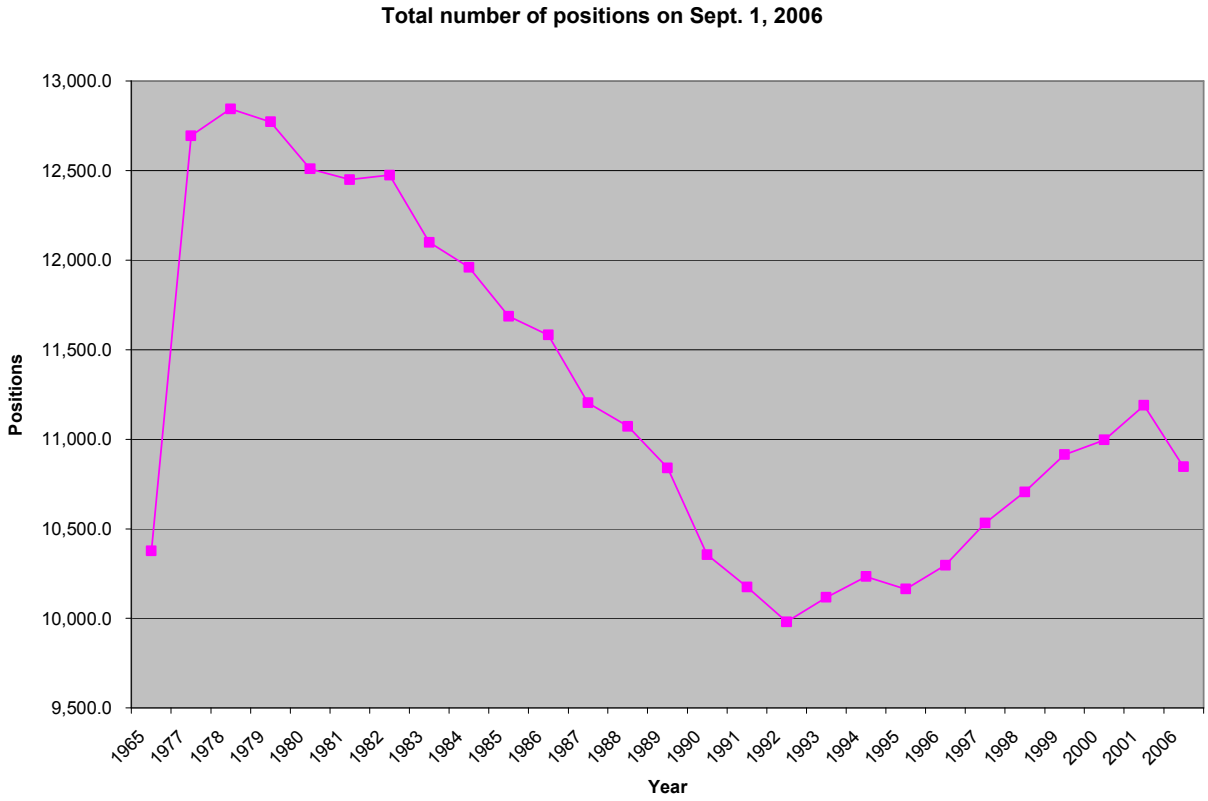
Table 1

Trends in Selected Information on the Supply of Secondary Teachers of Agricultural Education in 1964-65 and Since 1977

Year	Total number of positions on Sept. 1	Teachers needed but unavailable Sept. 1	Number newly qualified to teach during previous SY	Percent newly qualified entering teaching
1965	10,378	120	1,038	64.6
1977	12,694	221	1,749	60.8
1978	12,844	189	1,791	56.7
1979	12,772	144	1,656	54.9
1980	12,510	117	1,584	52.0
1981	12,450	98	1,468	52.2
1982	12,474	35	1,368	51.3
1983	12,099	42	1,277	45.6
1984	11,960	19	1,249	45.2
1985	11,687	8	1,207	40.8
1986	11,582	20	964	41.2
1987	11,204	14	952	41.6
1988	11,072	39	838	42.5
1989	10,840	25	588	52.9
1990	10,356	23	625	53.0
1991	10,176	9	638	50.9
1992	9,981	11	686	53.4
1993	10,118	20	636	54.2
1994	10,234	40	643	56.3
1995	10,164	51	625	60.2
1996	10,297	-	716	-
1997	10,532	-	657	-
1998	10,706	69.5	748	63.8
1999	10,915	-	789	-
2000	10,996	-	798	-
2001	11,189	67	857	59.4
2002	*5,959*	-	*690*	-
2003	*6,170*	-	*749*	-
2004	9,107	168	781	*73*
2005	9,282.5	-	744	-
2006	10,846.5	78	785	69.8

***Lower Response than in past and older datum is not being used for missing data as in the past studies.*

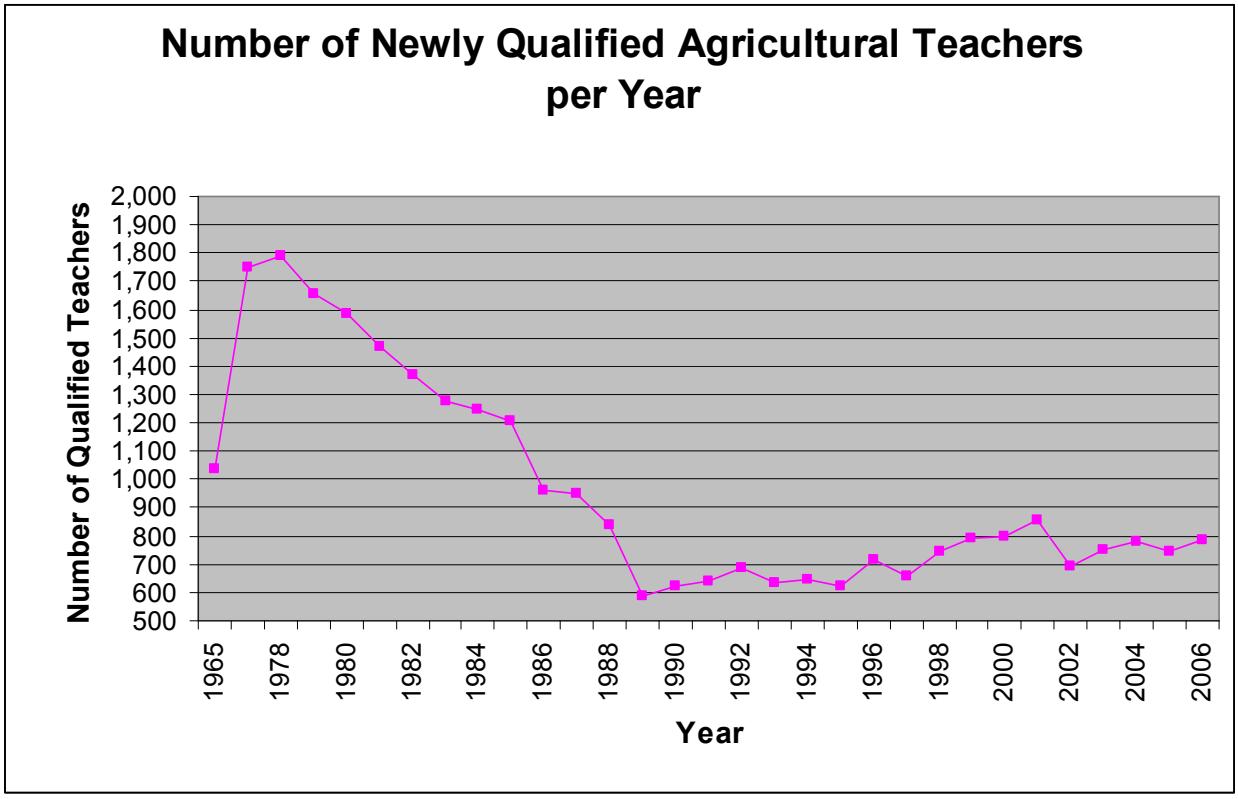
Figure 1. Trend in Total Agricultural Education Teaching Positions, 1965-2006



*** Due to low response rate which show inaccuracies 2002 - 2005 data is not shown on the figure.**

The total number of newly qualified potential teachers of Agricultural Education prepared in the US annually remained over 1,000 from the inception of the study until 1985, when it dropped to 964. The number reached a low of 588 in 1989, but has shown a rather substantial increase since then. Since 1989, the profession seems to have begun a recovery that has resulted in a fairly steady increase in the number of newly qualified potential teachers to a 14-year high of 857 in 2001, representing a 45.7 % increase from the 1989 low (See Table 1 and Figure 2). Although we see in a fall from the high the newly qualified teachers that are prepared between 2002 and 2006 has stayed relatively constant averaging about 750 a year.

Figure 2. Trend in Total Newly Qualified Potential Teachers of Agricultural Education



Personnel Turbulence

Table 2 repeats some of the data in Table 1 but adds several dimensions for comparison. An interesting set of statistics involves the net number of replacement teachers needed in Agricultural Education classrooms. The total of "replacement teachers needed" ranged from a high of 1,273 in 1975 to a low of 824 in 1980, with 888.5 (FTE) replacements needed in 2004. That figure can be misleading, however, since many of those are simply moving from one school to another. The net number of replacement teachers needed could not be computed from earlier studies because data on school-to-school transfers were not collected until the previous studies cycle. Since 1985, school-to-school transfer data have been available and the net number of replacements needed fell fairly steadily from 805 in 1985 to 574.9 in 1998. The number of replacements needed is presently at 1,218 nearing the high in 1975 of 1,273. To estimate the overall rate of teacher turbulence in Agricultural Education for 2006, we can divide the number of teacher replacements required (1,218, see Table 2) by the number of teaching positions at the end of the previous year (9,282.5, see Table 1) for a gross replacement rate of 13.1%. Correcting that figure for teachers who moved from one school to another, we find that the net replacement rate was approx. 8.9% (824 / 9,282.5).

The number of teachers needed but still unavailable at the start of the school year was 78 for 2006. This is down from the high of 211 in 1975 but still far from the lows from the mid 1980's The number of teachers working with various forms of temporary or emergency certification has risen steadily from a low of 110 in 1990 to the 2001 level of 242 but still remains high with 185

in 2006. The number of departments expected not to operate for the year has again risen with 40 departments, See Table 2.

Table 2. Overview of Agricultural Education Teaching Positions and Personnel Turbulence in the United States for Selected Years**

	1975	1980	1985	1990	1995	1998	2001	2006
Total positions on Sept. 1	12,107	12,510	11,687	10,355.5	10,164	10,706	11,189	10846.5
Replacements Needed	1,273	824	1,043	979	977	888.9	1,170.5	1218
Moving between schools	*	*	238	351	280	314	372	394
Net demand for replacements	*	*	805	628	697	574.9	798.5	824
Needed, but not available Sept. 1	211	117	8	23	40	69.5	67.0	78
Teachers with Emergency Certification	607	454	140	110	119	175.5	242.0	185
Departments that will not operate due to lack of qualified teacher	78	55	3	9	41	55	35	40

* Data not collected for year indicated

** This figure is not the same as "teachers hired" that will be reported in Table 7. "Replacements Needed" is computed as follows: Teachers Leaving Positions + New Positions + Vacancies Remaining – Positions Lost.

*** Due to low response rate which show inaccuracies 2004 data is not shown on Table 2.

Graduates and Placements

From the standpoint of agricultural teacher education, an important consideration in interpreting Table 3 is the change in perspective between 1975 and the present. As late as the 1985 supply and demand study, the survey sought simply the number of Agricultural Education BS/BA graduates. Until that time, being an Agricultural Education graduate was generally considered equivalent to being qualified to teach. That is no longer the case. Since 1985 the survey has sought the number of newly qualified potential teachers, which includes only part of the undergraduate program completers but also includes many masters degree or non-degree program completers. So the numbers found in the previous and following tables and figures all reflect those that have been produced and are qualified to teach.

As we saw in Table 1 and Figure 2, the total number of new potential teachers of Agricultural Education qualified annually, declined steadily from 1980 to 1989 then stabilized with an average annual production of 653 qualified agricultural educators between 1990 and 1998. Between 1999 and 2006 we saw an increase in the average number of qualified agricultural educators produced to 771. An examination of Table 3 shows that, of the 785 persons newly qualified to teach during 2005-06 school year, their professors estimated that 705 (89.8%)

"probably wanted to teach." As was discussed previously, the overall placement rate (in teaching agriculture) for the total was only 69.8%, when those teaching subjects other than agriculture are included in to the equation the percentage of those teaching increases to 75.6%. Assuming the estimate of those who "probably wanted to teach" is reasonably accurate (705/594) approx. 16% of those newly qualified teachers who would like to teach were unable to secure satisfactory teaching positions in any subject.

Table 3
Newly Qualified Potential Agricultural Education Teachers and Placement.

	1974-75	1989-90	1994-95	1997-98	2000-01	2003-04	2005-06
Total Newly Qualified	1,660	625	625	748	857	781	785
Probably Wanted To Teach	*	386	351	619	693	628	705
Of Newly Qualified, Number Entering Teaching Agriculture	999	331	56.2	482	509	573	548
Percentage of Newly Qualified Entering Teaching Agriculture	60.2	53	48.4	63.8	59.4	73.4	69.8
Percentage who "Probably Wanted To Teach" Teaching	*	85.8	72.5	77.9	73.4	91.2	89.8

* Data not collected for year indicated

Table 4 provides information concerning the placement of those persons newly qualified to teach Agricultural Education. The primary initial occupation for 58% those that were qualified to teach in the 2005-06 year was teaching agriculture (n = 548). Those choosing to work in Agricultural Business coming in with a far 2nd place with 11% of those qualified to teach agriculture (n = 104), and those attending graduate school is third on the list with 8% of those qualified (n = 75). Full time farming has declined markedly over the past 20 years, from 136 in 1975 to only 14 (approx. 1%) in 2006. Figure 3 provides a graphic illustration of the placement of this group in 2006.

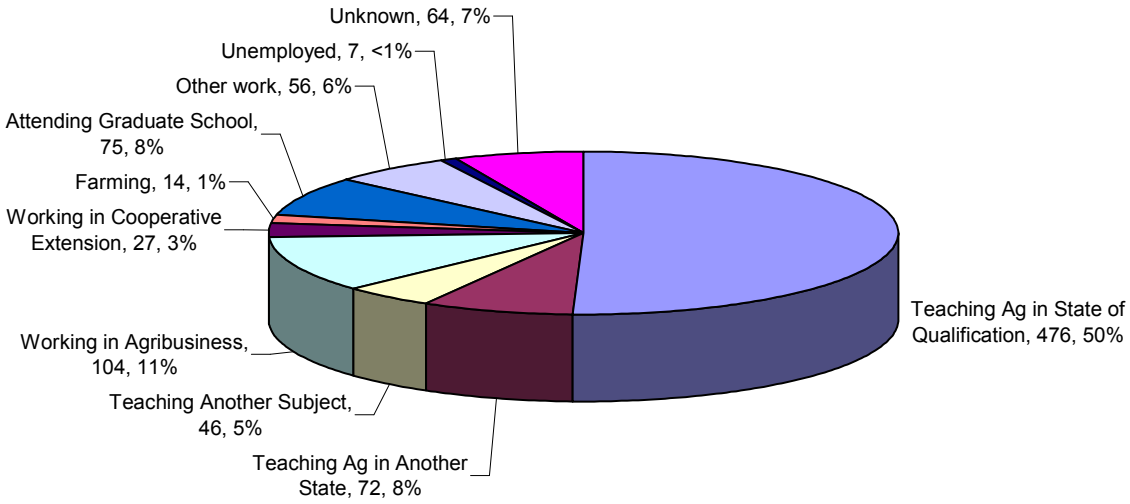
Of the 548 teachers reported in 2006 by teacher education institutions, 476 newly qualified teachers were teaching in the state they received their education while 72 had taken agricultural teaching positions in other states. This is a positive sign for many states that are in need of "replacements."

Table 4
Number of Newly Qualified to Teach Agricultural Education Teachers Entering Various Occupations for Selected Years

	1974-75	1989-90	1997-98	2000-01	2003-04	2005-06
Newly Qualified	1,660	625	756	857	781	785
Teaching Ag Ed	999	295	482	509	515	548
Teaching Another Subject	55	19	30	49	58	46
Extension Service	*	29	18	26	26	27
Agricultural Business	125	157	96	80	96	104
Graduate Work	163	109	65	87	67	75
Farming	136	46	15	27	16	14
Armed Forces	18	3	**	**	**	**
Other Work	164	61	25	41	22	56
Unemployed and Unknown	*	*	22	107	84	71

* Data not collected for year indicated
** Placement in the armed forces is now included in Other Work

Figure 3. Placement Patterns of Newly Qualified Potential Teachers of Ag. Ed. in 2006



Types of Teaching Positions

Table 5-A changes focus from teacher education program completers to teaching positions. The data shows that the Southern Region maintains 48% of the teaching positions with the North Central Region containing 36% and the Western Region holding on to approx. 16%. As expected the High School (Only) positions out weigh all other positions with a total of 8,451 or 78%. Middle school/junior high school only positions only make-up 427 (4%) positions. Full-time adult and/or Young Farmer teachers made up just 135 (1.2%) positions with the Western Region having none. 860 (8%) positions had some adult and/or Young Farmer responsibilities. The data shows that there are 5745 (53%) single teacher positions, 4600.5 (42%) multi-teacher department

positions, and 645 (6%) positions that are unknown (all in the North Central Region) nation wide.

Table 5A
Types of Secondary Teaching Positions in Agricultural Education on September 1, 2006

	North Central	Southern	Western	US Total
TOTAL POSITIONS:	3942.5	5211	1693	*10846.5*
Teaching high school only	2800	3987	1664	*8451*
Teaching junior high or middle school only	38	375	14	*427*
Teach in high school and jr. high/middle school	470.5	623	131	*1224.5*
Adult and/or Young Farmer Only	64	71	0	*135*
Unknown	243	0	0	*243*
Other	16	0	0	*16*
Teach at Vocational H.S. or Vocational Centers	844.5	101	18	*963.5*
Some adult and/or Young Farmer responsibilities	213	540	107	*860*
Teachers teaching in more than one school	50	32	31	*113*
Single teacher dept.	2290	2607	848	*5745*
Multi teacher dept.	1344.5	2413	843	*4600.5*
Unknown	645	0	0	*645*

Table 5B shows the teaching position numbers by the curriculum program of the teachers' primary program focus. The total number of teaching positions reported was 10,846.5. In marked contrast to earlier years, production agriculture programs made-up only about 6% or 715 programs of those reporting, this is down from the 2001 data with 1231 Production Ag programs which made up 14.9% of the Agricultural Education Programs. There are 3729 reported "combination" programs which represents about 34% of the total which is down slightly from the 2001 reported 3,878 programs reported. Agricultural Science Programs make-up 10% or 1046 of the total programs reported. 995 of the programs are unknown which makes-up 9% of the total programs. There are 839 Ornamental horticulture programs reported which is 8% of the total programs. Ag production makes up 6% of the total and agricultural mechanics makes-up 5% or 605 of the total programs.

Table 5B
Types of Secondary Teaching Positions in Agricultural Education on September 1, 2006

	North Central	Southern	Western	U.S. Total	U.S. Total in %
TOTAL POSITIONS	3942.5	5211	1693	10846.5	100%
	PROGRAM FOCUS				
Agricultural Production	352	221	142	*715*	*6%*
Agricultural Science	323	410	313	*1046*	*10%*
Ornamental Horticulture	288	493	58	*839*	*8%*
Natural Resources/Environment	170.5	69	28	*267.5*	*2%*
Agricultural Products	6	0	0	*6*	*.05%*
Agricultural Mechanics	178	242	185	*605*	*5%*
Agricultural Sales & Service	173	29	5	*207*	*2%*
Combination of Agricultural Courses	1619	1092	1018	*3729*	*34%*
Exploratory and Introductory Courses	39	296	13	*348*	*3%*
Disadvantaged/Handicapped	3	1	0	*4*	*.004%*
Part-Time and Other Courses/Program	6	0	37	*43*	*.04%*
Unknown	560	435	0	*995*	*9%*
Other	0	38	0	*38*	*.04%*

* Subtotals do not equal U.S. Total because of under-reporting by category

State and Regional Data

Programs of Agricultural Education

Tables 6A, 6B, and 6C provides region and state-specific data on Agricultural Education programs, organized by AAAE region. As Shown in Table 5 The Southern Region had the largest number of teaching positions with 5,211 positions followed by the North Central Region with 3,942.5 leaving the Western Region with the least amount at 1300 positions. Texas, continued its domination of the field with 1,596 teaching positions or 14.7% of all Agricultural Education teaching positions in the United States of those states reporting. California was second largest with 693 positions which is an increase from the previous study's number of 649 positions. Ohio has the third highest number of positions with 535 which is a decrease of 6 positions from the previous study. Of those reporting Alaska had the least number of agricultural education positions with four state-wide. Rhode Island has the least number of positions in the continental United States (second least overall) with only nine positions of those reporting. Although U.S. Territory of Guam responded to the study and reported zero positions the remainder of Guam's data was not available, leaving Guam with the least positions from all U.S. States and Territories of those that responded.

Of interest, and not shown in the tables, Texas reporting 1,490 positions in 1995, 1,590 in 1998 and presently with 1,596 positions has shown rapid and steady growth in teacher numbers over the last decade.

Tables 6A-C also provides data sorted by program/option for each state. When those positions marked as "Unknown" are removed from the list/population of positions by program the largest curriculum offering by positions is a combination of Agricultural Education courses with 3,725 positions, rather than a dedicated program to any other single agricultural and/ natural and environmental sciences option. As follows in rank order are the number of positions dedicated to program(s);

1. Combination of Agricultural Programs/courses (3,725)
2. Agriscience (1,046)
3. Ornamental Horticulture (839)
4. Production Agriculture (715)
5. Agricultural Mechanics (605)
6. Exploratory and Introduction to Agriculture (348)
7. Natural Resources and/or Environmental Sciences (268)
8. Agricultural Sales and Service (207)
9. Part-Time Agriculture and Other Program (43)
10. Other (38)
11. Agricultural Products (6)
12. Disadvantaged/Handicapped Programs (4)

- There are 995 positions that were marked as being to an "Unknown" program

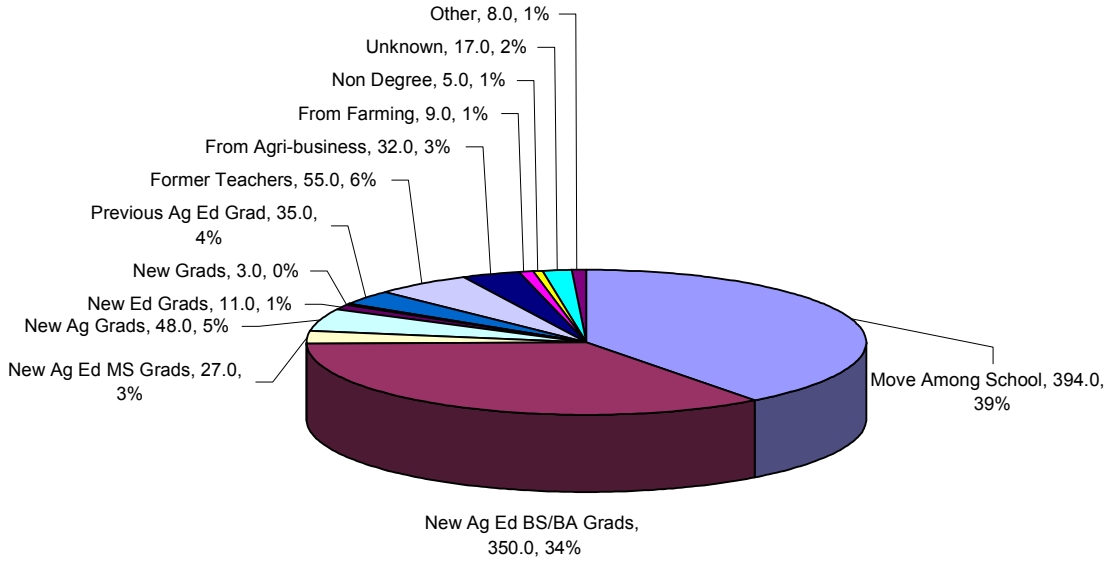
Sources of New Teachers

Tables 7A-C provides detailed data regarding the sources of the new teachers actually hired in 2006. An estimated total of 1011 (FTE) teachers had been hired by September 1, 2006 for the 2006-2007 school year. Of those, 394 had simply moved from one school to another. The largest number of new hires was in the North Central Region with 379 new hires, the Southern Region is a close second with 345 new hires and the Western Region has a total of 287 (an increase from 181.5 new hires from the previous study).

Of those reporting only Alaska had no new hires. California had the highest number of new hires with 127. Through Personal communication with Mr. Terry Phillips via email on March 29, 2007 he stated that the State of Texas will "typically see around 100 + or – attend the new teacher training during the summer conference." And that some are recent university completers and others were those that "pursued careers in other areas but starting as new teachers." Terry also states that those numbers does not reflect those teachers that are moving "from district to district." This would leave Texas as second in the nation with the number of new hires. Eight states nation-wide required 50 or more new hires for the 2006-2007 year. California (127), Texas (100), Missouri (62), Florida (59), Georgia (51), North Carolina (51), Illinois (50), and Kansas (50).

The contribution to new hires of those that were new master's degree graduates in Agricultural Education was only 27, an increase of one from the 2001 number of 26. As in previous years, the number of "new hires" was again bolstered by previous Agricultural Education graduates with 35 entering teaching and 32 former Agricultural Education teachers re-entering the field which is down significantly from the 75 in 2001. Figure 4 illustrates the relative importance of the various sources of new hires for Agricultural Education in 2004. The largest group of new hires actually came from those moving among schools (394 or 39%). New agricultural B.S./B.A. graduates made-up 34% or 350 of the new hires.

Figure 4.
Sources of New Hires for Agricultural Education Positions in the United States, 2006



Teacher Education Completers and Placements

An examination of Tables 8A-C shows the numbers and job placements of newly qualified graduates and other potential teachers, by region and by institution. As reported in Table 3, a total of 785 newly qualified potential Agricultural Education teachers were educated from all sources in 2005-06. From those institutions that reported, the Southern Region produced the highest amount of newly qualified teachers with 404, down 11 from 2004. The state of Texas again produced the highest number of completers with 183 which is over 45% of those graduates within the Southern Region and just over 23% of the national total completers. Texas A & M produced 70 of those newly qualified completers with Tarleton State University producing 30. All of these numbers are higher than the in 2001.

The North Central Region produced 257 newly qualified Teachers (down three from 2004) with The Ohio State University producing 34 newly qualified graduates and the University of Minnesota – St. Paul producing 31 (down three from 2004). The Western Region produced the least amount of graduates with only 124 newly qualified teachers which is up 25 graduates from the 2004 numbers. California State University – San Luis Obispo produced the most with 22 up three graduates from the previous study with California State University – Fresno producing 12.

Program Structure

Tables 9A-B provides data by state and region of the program structure of Agricultural Education in the United States in 2006. Clearly the dominant pattern for program level remains that of the high school maintaining 8451 positions of those states and territories reporting. In ten of the states of those reporting there are no junior high or middle school programs. Of those states reporting there are only 135 Adult/Young Farmer programs while 860 teachers are reported to have at least some Adult/Young Farmer responsibilities. Nationwide there are 5,745 positions in single teacher departments and 4,600.5 positions in multiple teacher departments. There are 113 teachers assigned to multiple schools and 1224.5 teachers with responsibilities for both high school and junior high/middle school programs.

Race/Ethnicity and Gender of Newly Qualified Potential Teachers

Tables 10A-C show the race/ethnicity and gender of newly qualified potential teachers of Agricultural Education by region and by institution. Data on race/ethnicity and gender of newly qualified teachers have only been collected since 1994. Females represented the majority of newly qualified agricultural teachers with 472 and males making up 436. White, non-Hispanic males totaled 412 and females 446. There were one male and three female potential teachers of Asian or Pacific Island descent, Six individuals of Native American / Alaskan descent that were newly qualified (four males and two females). A total of 18 African-Americans, eight male and ten females (down 15) that are considered newly qualified. Only 15 Hispanic (seven male and eight female) potential teachers were prepared nationally in 2006 down six from 2004.

Race/Ethnicity and Gender of Teachers of Agricultural Education

Tables 11A-C show the race/ethnicity and gender of active teachers of Agricultural Education by region and by state. The 1998 study was the first time data had been reported on gender and race/ethnicity for practicing teachers. For the teachers reported by gender, males continue to substantially outnumbered females by just under 3:1 with 6,005.5 males (73%) and 2,251 females (27%). White, non-Hispanic teachers represented 88% of all teachers reported with unknown ethnicity second with 8% or 665 teachers. African American teacher's make-up 2.5% or 209 teachers while there are 83 Hispanic teachers. Native American/Native Alaskan and Asian/Pacific Islanders only number 22 or .26% of the Agricultural teachers nationwide.

Faculty Numbers and Affiliation

We continue to see a steady increase in Assistant, Associate and Full Professor faculty at the post-secondary level that have at least a portion of their duties associated with teacher education. In 1998 only 155 positions were reported while in 2006 167.45 FTE were reported. College of agriculture affiliations for faculty and degrees granted through remained the dominant location. Just fewer than 80% of the degrees granted for newly qualified agricultural teachers are housed in colleges of agriculture with just over 17% in colleges of education and 3% in other colleges. Colleges of agriculture continue to house the majority of faculty that have at least a portion of

their time designated to agricultural education teacher prep. A total of 66% or 61.5 FTE's of agricultural education teacher prep program faculty are housed in colleges of agriculture with 19% (17.5) being housed in colleges of education and 15% (14) being housed in other colleges. A number of responses were received to what those "other" colleges were. Some are very similar to colleges of agriculture while others are considered departments of agriculture within other colleges.

Other Colleges that grant undergraduate degree or house faculty include:

- College of Business and Technology (2)
- College of Applied Science and Technology (CAST)
- Department of Agriculture
- Department of Career and Technical Education
- Human Development in Education
- Cook College, Rutgers University
- Department of Agriculture College of Science and Technology (2)
- College of Science and Engineering
- College of Science
- Arthur Temple College of Forestry and Agriculture
- College of Arts and Science (2)
- L & S

Table 6A – North Central Region

Programs of Agricultural Education and Their Primary Focus by State and Region on September 1, 2006

	Total Positions	Prod Ag	Agri-science	Hort	NR & Env.	Ag. Products	Ag. Mech	Ag. Sales & Service	Combination of Ag courses	Exploratory/ Intro Ag.	Disadvantaged / Handicapped	Part time Ag & other Program	Unknown	Other
CT	104	0	0	0	0	0	0	0	104	0	0	0	0	0
DE	56	0	13	12	6	0	8	0	10	5	2	0	0	0
IL	379	0	150	23	12	0	25	169	0	0	0	0	0	0
IN	243	0	0	0	0	0	0	0	0	0	0	0	243	0
IA	240	0	1	1	0	0	1	0	236	1	0	0	0	0
KS	189	187	1	1	0	0	0	0	0	0	0	0	0	0
ME	46	0	0	5	21	0	0	0	10	6	0	3	1	0
MD	67	1	0	18	0	0	3	0	43	2	0	0	0	0
MA	No Response													
MI	127	0	95	12	3	0	0	0	17	0	0	0	0	0
MN	232	NA	NA	NA	N	NA	NA	NA	NA	NA	NA	NA	NA	NA
MO	445	0	0	40	1	0	10	0	389	5	0	0	0	0
NE	136	0	0	0	0	0	0	0	136	0	0	0	0	0
NH	22	0	0	3	5	0	4	0	10	0	0	0	0	0
NJ	61	0	0	34	3	0	1	0	23	0	0	0	0	0
NY	238	35	2	13	57	0	4	0	115	2	0	1	8	0
ND	115	4	0	2	0	0	4	4	100	1	0	0	0	0
OH	535	24	0	76	24	5	42	0	364	0	0	0	0	0
PA	274	80	40	40	31	0	60	0	20	10	0	0	0	0
RI	9	0	1	0	0	0	0	0	8	0	0	0	0	0
SD	No Response													
VT	30	1	0	4	5	0	6	0	14	0	0	0	0	0
WV	88	20	20	4	3	1	10	0	20	7	1	2	0	0
WI	307	0	0	0	0	0	0	0	0	0	0	0	308	0
Sub-Total	**3,943**	**352**	**323**	**288**	**171**	**6**	**178**	**173**	**1,619**	**39**	**3**	**6**	**560**	**0**
US Total	**10,846.5**	**715**	**1,046**	**839**	**268**	**6**	**605**	**207**	**3,729**	**348**	**4**	**43**	**995**	**38**

Table 6B – Southern Region
Programs of Agricultural Education and Their Primary Focus by State and Region on September 1, 2006 – Southern Region

	Total Positions	Prod Ag	Agri-science	Hort	NR & Env.	Ag. Products	Ag. Mech	Ag. Sales & Service	Combination of Ag courses	Exploratory/ Intro Ag.	Disadvantaged / Handicapped	Part time Ag & other Program	Unknown	Other
AL	335	0	0	32	8	0	38	0	242	15	0	0	0	0
AR	282	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FL	433	63	130	70	8	0	10	7	0	145	0	0	0	0
GA	368	5	12	87	7	0	27	3	188	42	0	0	0	0
KY	250	50	20	40	0	0	20	0	100	20	0	0	0	0
LA	233	0	0	0	0	0	0	0	233	0	0	0	0	0
MS	163	35	93	7	0	0	20	7	0	0	1	0	0	0
NC	377	0	75	100	5	0	50	0	109	0	0	0	0	38
OK	435	0	0	0	0	0	0	0	0	0	0	0	435	0
PR*	No Response													
SC	114	5	0	70	13	0	20	0	3	3	0	0	0	0
TN	315	0	48	42	0	0	21	0	204	0	0	0	0	0
TX	1,596	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VI*	No Response													
VA	310	63	32	45	28	0	36	12	13	71	0	0	0	0
Sub-total	**5,211**	**221**	**410**	**493**	**69**	**0**	**242**	**29**	**1,092**	**296**	**1**	**0**	**435**	**38**
US Total	**10,846.5**	**715**	**1,046**	**839**	**268**	**6**	**605**	**207**	**3,729**	**348**	**4**	**43**	**995**	**38**

*** PR – Puerto Rico; VI – U.S. Virgin Islands**

Table 6C – Western Region
Programs of Agricultural Education and Their Primary Focus by State and Region on September 1, 2006 – Western Region

	Total Positions	Prod Ag	Agri-Sci	Hort	NR & Env.	Ag. Products	Ag. Mech	Ag. Sales & Service	Combination of Ag courses	Exploratory/ Intro Ag.	Disadvantaged / Handicapped	Part time Ag & other Program	Unknown	Other
AK	4	0	1	1	2	0	0	0	0	0	0	0	0	0
AZ	103	0	74	4	4	0	3	0	15	0	0	3	0	0
CA	693	0	142	8	0	0	103	0	428	8	0	4	0	0
CO	0	85	36	5	0	0	0	0	0	0	0	0	0	0
Guam	0*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HI	No Response													
ID	109	0	7	3	3	0	12	0	77	5	0	2	0	0
MT	85	0	0	0	0	0	0	0	85	0	0	0	0	0
NV	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NM	104	0	10	9	0	0	9	0	76	0	0	0	0	0
OR	126	0	0	4	2	0	6	0	112	0	0	2	0	0
UT	91	2	8	4	0	0	6	0	47	0	0	24	0	0
WA	304	15	35	20	15	0	45	5	174	0	0	0	0	0
WY	49	40	0	0	2	0	1	0	4	0	0	2	0	0
Sub-total	**1,693**	**142**	**313**	**58**	**28**	**0**	**185**	**5**	**1,018**	**13**	**0**	**37**	**0**	**0**
US Total	**10,846.5**	**715**	**1,046**	**839**	**268**	**6**	**605**	**207**	**3,729**	**348**	**4**	**43**	**995**	**38**

***** Not enough available data or information given to make appropriate conclusions or implications.

Table 7A – North Central Region
Sources of Agricultural Education Teachers Hired for Beginning of School Year 2006-07, by State and Region

REGION STATE	North Central Region													
	Total Hired	Move Among School	New Ag Ed BS/BA Grads	New Ag Ed MS Grads	New Ag Grads	New Ed Grads	New Grads	Previous Ag Ed Grad	Former Teachers	From Agri-business	From Farming	Non Degree	Unknown	Other
Connecticut	10	1	0	2	1	0	0	0	0	0	0	0	6	0
Delaware	4	2	1	1	0	0	0	0	0	0	0	0	0	0
Illinois	50	12	24	0	0	0	0	0	0	0	0	0	0	0
Indiana	31	9	17	0	0	0	0	3	1	0	1	0	0	0
Iowa	22	5	14	0	0	0	0	0	3	0	0	0	0	0
Kansas	50	24	14	1	7	0	0	1	3	0	0	0	0	0
Maine	2	1	1	0	0	0	0	0	0	0	0	0	0	0
Maryland	7	2	0	0	0	1	0	0	1	3	0	0	0	0
Massachusetts	No Response													
Michigan	8	5	0	0	0	0	0	1	0	2	0	0	0	0
Minnesota	28	6	17	1	0	0	0	0	4	0	0	0	0	0
Missouri	62	22	25	0	6	0	0	1	8	0	0	0	0	0
Nebraska	17	5	7	1	0	0	0	1	1	0	2	0	0	0
N. Hampshire	3	2	1	0	0	0	0	0	0	0	0	0	0	0
New Jersey	3	0	2	0	0	0	0	1	0	0	0	0	0	0
New York	7	0	1	2	0	0	0	0	2	0	0	0	1	1
North Dakota	12	6	3	0	0	0	0	1	1	1	0	0	0	0
Ohio	37	9	18	0	0	1	0	0	3	6	0	0	0	0
Pennsylvania	18	0	14	4	0	0	0	0	0	0	0	0	0	0
Rhode Island	2	1	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	No Response													
Vermont	1	0	0	0	0	0	0	0	0	1	0	0	0	0
West Virginia	5	4	1	0	0	0	0	0	0	0	0	0	0	0
Wisconsin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subtotals	379	116	160	12	14	2	0	9	27	13	3	0	7	1
US TOTALS	1011	394	350	27	48	11	3	35	55	32	9	5	17	8

Table 7B – Southern Region
Sources of Agricultural Education Teachers Hired for Beginning of School Year 2006-07, by State and Region

REGION STATE	Southern Region													
	Total Hired	Move Among School	New Ag Ed BS/BA Grads	New Ag Ed MS Grads	New Ag Grads	New Ed Grads	New Grads	Previous Ag Ed Grad	Former Teachers	From Agri-business	From Farming	Non Degree	Unknown	Other
Alabama	9	2	4	1	2	0	0	0	0	0	0	0	0	0
Arkansas	26	14	8	0	0	0	0	0	2	0	2	0	0	0
Florida	59	35	12	0	2	0	0	0	4	4	0	0	0	0
Georgia	51	24	15	1	0	1	1	0	2	2	2	1	2	0
Kentucky	15	5	10	0	0	0	0	0	0	0	0	0	0	0
Louisiana	33	11	6	0	1	3	1	8	1	1	0	0	0	1
Mississippi	6	3	0	1	1	0	0	0	0	0	1	0	0	0
North Carolina	51	17	10	1	21	2	0	0	0	0	0	0	0	0
Oklahoma	35	20	15	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	No Response													
South Carolina	11	4	4	1	0	0	0	0	1	1	0	0	0	0
Tennessee	27	12	10	0	2	0	0	0	2	2	0	0	0	0
Texas	100*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Virgin Islands	No Response													
Virginia	22	4	5	1	3	0	0	3	2	2	0	2	0	0
Subtotals	445	151	99	6	32	6	2	11	14	12	5	3	2	1
US TOTALS	1111	394	350	27	48	11	3	35	55	32	9	5	17	8

***number received through personal communication with Mr. Terry Phillips from Texas on March 29, 2007 via email.**

Table 7C – Western Region
Sources of Agricultural Education Teachers Hired for Beginning of School Year 2006-07, by State and Region

REGION STATE	Western Region													
	Total Hired	Move Among School	New Ag Ed BS/BA Grads	New Ag Ed MS Grads	New Ag Grads	New Ed Grads	New Grads	Previous Ag Ed Grad	Former Teachers	From Agri-business	From Farming	Non Degree	Unknown	Other
Alaska	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	26	11	5	0	1	0	0	1	1	0	1	0	0	6
California	127	64	46	2	1	0	0	2	5	5	0	2	1	0
Colorado	11	8	0	0	0	0	0	1	0	0	0	0	0	0
Guam	6	0	0	0	0	0	1	0	0	0	0	0	5	0
Hawaii	No Response													
Idaho	21	5	8	0	0	0	0	4	4	0	0	0	0	0
Montana	17	5	9	0	0	0	0	3	0	0	0	0	0	0
Nevada	2	0	0	0	0	0	0	1	0	1	0	0	0	0
New Mexico	8	2	4	2	0	0	0	0	0	0	0	0	0	0
Oregon	25	10	3	5	0	1	0	2	2	0	0	0	2	0
Utah	13	4	5	0	0	2	0	0	1	1	0	0	0	0
Washington	20	14	6	0	0	0	0	0	0	0	0	0	0	0
Wyoming	11	4	5	0	0	0	0	1	1	0	0	0	0	0
Subtotals	287	127	91	9	2	3	1	15	14	7	1	2	8	6
US TOTALS	1011	394	350	27	48	11	3	35	55	32	9	5	17	8

Table 8A – North Central Region
Newly Qualified Teachers of Agricultural Education for the 2005-06 Year and Their Job Placement as of September 1, 2006

State	Institution	Newly Qualified	Teaching in State	Teaching in a Different State	Teaching Another Subject	Agribusiness	Coop-Ext	Farm	Graduate	Other work	Un-employed	Un-known
CT	University of Connecticut	3	2	1	0	0	0	0	0	0	0	0
DE	University of Delaware	NA	2	1	0	0	0	0	0	0	2	2
IA	Iowa State University	13	6	0	0	0	0	0	1	0	0	1
IL	Southern Illinois University	8	3	0	0	1	2	1	0	0	1	0
IL	Western Illinois University	4	3	0	0	0	0	0	0	0	0	1
IL	Illinois State University	11	13	0	0	0	0	0	2	1	0	0
IL	University of Illinois	9	4	0	1	1	0	1	1	1	0	0
IN	Purdue University	18	12	1	0	3	0	0	0	1	0	1
KS	Kansas State University	9	6	1	0	0	0	1	0	1	0	0
MA	The University of Mass.	0	0	0	0	0	0	0	0	0	0	0
MD	University of Maryland	0	0	0	0	0	0	0	0	0	0	0
MI	Michigan State University	1	0	0	0	0	0	0	1	0	0	0
MN	University of Minnesota	31	12	2	0	9	2	2	2	0	0	3
MO	Missouri State University	8	7	1	0	0	0	0	0	0	0	0
MO	NW Missouri State University	9	3	3	1	1	0	0	1	0	0	0
MO	University of Missouri	13	7	0	0	2	0	0	3	1	0	0
MO	University of Central Missouri	6	6	0	0	0	0	0	0	0	0	0
ND	North Dakota State University	0	0	0	0	0	0	0	0	0	0	0
NE	University of Nebraska	12	6	0	0	2	0	0	1	3	0	0
NH	University of New Hampshire	0	0	2	0	0	0	0	0	0	0	0
NJ	Rutgers	0	4	1	0	0	0	0	0	0	0	0
NY	Cornell University	7	1	3	0	0	0	0	0	0	0	3
NY	SUNY Oswego	4	2	0	0	0	0	0	1	0	0	1
Ohio	Ohio State University	34	13	1	0	1	1	0	2	11	1	4
OH	University of Rio Grande	1	1	0	0	0	0	0	0	0	0	0
PA	Pennsylvania State University	12	6	1	0	2	0	0	0	3	0	0
SD	South Dakota State University	7	7	8	0	5	1	0	1	6	0	3
WI	The Univ. of Wis. - Madison	3	0	0	0	1	0	0	1	0	0	1
WI	The Univ. of Wis. - Platteville	5	2	0	0	2	0	1	0	0	0	0
WI	University of Wis.-River Falls	21	5	7	0	4	1	0	0	4	0	0
WV	West Virginia University	8	8	1	0	3	4	0	6	0	1	3
	North Central Region Sub-Total	**257**	**141**	**34**	**2**	**37**	**11**	**6**	**23**	**32**	**5**	**23**

Table 8B - Southern Region

State	Institution	Newly Qualified	Teaching in State	Teaching in a Different State	Teaching Another Subject	Agribusiness	Coop-Ext	Farm	Graduate	Other work	Un-employed	Un-known
AL	Auburn University	2	2	0	0	0	0	0	0	0	0	0
AR	Arkansas State University	0	3	0	0	0	0	1	0	1	0	0
AR	Southern Arkansas University	9	5	0	2	0	0	0	1	0	0	1
AR	Univ. of Arkansas-Fayetteville	8	1	0	2	0	0	0	5	0	0	0
FL	Florida A & M University	0	0	0	0	0	0	0	0	0	0	0
FL	University of Florida	18	14	0	4	2	0	0	3	3	1	1
GA	Fort Valley State University	5	5	0	0	0	0	0	0	0	0	0
GA	University of Georgia	20	57	2	2	12	2	1	2	0	0	9
KY	Eastern Kentucky University	5	2	1	1	0	0	1	0	0	0	0
KY	Morehead State University	4	2	0	0	0	2	0	0	0	0	0
KY	Murray State University	9	1	3	0	3	1	0	1	0	0	0
KY	University of Kentucky	13	8	0	0	0	0	1	3	1	0	0
KY	Western Kentucky	8	5	2	0	0	0	0	0	1	0	0
LA	Louisiana Tech	6	3	0	0	1	0	0	0	0	0	2
LA	Univ. of Louisiana-Lafayette	1	1	0	0	0	0	0	0	0	0	0
LA	McNeese State University	2	2	0	0	0	0	0	0	0	0	0
LA	Louisiana State University	4	2	0	0	0	0	0	1	1	0	0
MS	Mississippi State University	1	1	0	0	0	0	0	0	0	0	0
NC	North Carolina A & T	5	5	0	0	0	0	0	0	0	0	0
NC	North Carolina State	23	11	7	2	1	0	0	2	0	0	0
OK	Oklahoma State	23	12	4	0	3	0	0	1	0	0	3
OK	Panhandle State University	3	5	3	0	0	2	0	0	0	0	0
SC	Clemson University	16	9	2	2	1	1	0	1	0	0	0
TN	Tennessee State University	0	0	0	0	0	0	0	0	0	0	0
TN	Tennessee Tech University	7	4	0	1	1	0	0	0	1	0	0
TN	Univ. of Tennessee-Martin	4	3	0	0	0	1	0	0	0	0	0
TN	Middle Tennessee State Univ.	7	5	0	0	0	1	0	0	1	0	0
TN	University of Tennessee	6	4	0	1	0	1	0	1	0	0	0
TX	Stephen F. Austin State Univ.	7	13	0	1	7	1	0	0	0	0	2
TX	Tarleton State University	30	17	1	1	6	0	0	2	0	0	3
TX	Prairie View A&M University	0	0	0	0	0	0	0	0	0	0	0
TX	Texas A&M - College Station	70	18	0	16	10	2	0	12	4	0	9

Table 8B - Southern Region Continued

TX	Texas State University	0	0	0	0	0	0	0	0	0	0	0
TX	Texas Tech University	27	8	1	1	5	1	1	5	5	0	0
TX	Texas A&M Univ. - Commerce	7	5	0	1	1	0	0	0	0	0	0
TX	Texas A&M Univ. - Kingsville	9	7	0	0	2	0	0	0	0	0	0
TX	Sam Houston State University	22	12	0	2	5	0	0	1	0	0	2
TX	West Texas A&M University	11	1	0	0	0	0	0	0	0	0	0
VA	Virginia Tech	12	5	2	1	1	0	0	3	0	0	0
VA	Virginia State University	0	0	0	0	0	0	0	0	0	0	0
	Southern Region Sub-Total	**404**	**258**	**28**	**40**	**61**	**15**	**5**	**44**	**18**	**1**	**32**

Table 8C - Western Region

State	Institution	Newly Qualified	Teaching in State	Teaching in a Different State	Teaching Another Subject	Agribusiness	Coop-Ext	Farm	Graduate	Other work	Un-employed	Un-known
AZ	University of Arizona	9	4	0	0	2	0	0	1	0	0	2
CA	California State-San Luis Obispo	22	17	0	2	1	0	0	0	0	0	2
CA	California State Univ.-Fresno	12	11	0	0	1	0	0	0	0	0	0
CA	California State University-Chico	10	8	1	0	0	1	0	0	0	0	0
CA	University of California-Davis	9	7	1	1	0	0	0	0	0	0	0
CO	Colorado State University	5	3	0	1	0	0	0	1	0	0	0
ID	University of Idaho	9	4	4	0	1	0	0	0	0	0	1
ID	University of Idaho-Boise Center	0	0	0	0	0	0	0	0	0	0	0
MT	Montana State University	4	2	0	0	1	0	0	0	1	0	0
NV	University of Nevada, Reno	1	0	1	0	0	0	0	0	0	0	0
NM	New Mexico State University	10	1	0	0	0	0	0	5	0	0	4
OR	Oregon State University	11	7	1	0	0	0	2	0	0	1	0
UT	Utah State University	7	4	0	0	0	0	1	0	2	0	0
WA	Washington State University	8	6	1	0	0	0	0	0	1	0	0
WY	University of Wyoming	7	3	1	0	0	0	0	1	2	0	0
	Western Region Sub-Total	**124**	**77**	**10**	**4**	**6**	**1**	**3**	**8**	**6**	**1**	**9**
	U.S. Total	**785**	**476**	**72**	**46**	**104**	**27**	**14**	**75**	**56**	**7**	**64**

Table 9A - North Central Region
Types of Secondary Teaching Positions (FTE) in Agricultural Education on September 1, 2006

North Central Region State	High School	Jr. High/Middle School Only	High/Jr. High/Middle Combined	Adult/ Young Farmer	Un-known	Other	Teach Voc. HS/Centers	Some Adult Responsibility	Teach 2 or more schools	Single Teacher dept.	Multiple Teacher dept.	Un-known
CT	99	0	0	1	0	0	33	NA	0	0	104	0
DE	50	5	1	0	0	0	3	0	0	9	47	0
IL	308	0	71	0	0	0	3	0	2	270	109	0
IN	NA	NA	NA	NA	243	0	8	29	3	143	0	100
IA	239	1	0	0	0	0	0	NA	10	218	22	0
KS	189	0	0	0	0	0	2	0	2	145	44	0
MA	No Response											
ME	44	2	0	0	0	0	25	0	3	40	0	6
MD	64	2	1	0	0	0	9	0	2	23	44	0
MI	123	1	3	0	0	0	38	0	3	434	84	0
MN	232	0	0	0	0	0	11	0	3	85	147	0
MO	230	5	190	20	0	0	85	150	4	202	243	0
NE	34	0	102	0	0	0	0	0	8	124	12	0
NH	22	0	0	0	0	0	16	0	0	6	16	0
NJ	59	1	1	0	0	0	27	0	0	27	34	0
NY	195	4	39	0	0	0	88	3	3	128	110	0
ND	21	1	62	15	0	16	11	15	2	71	44	0
OH	511	0	0	24	0	0	190	0	NA	0	0	535
PA	260	10	0	4	0	0	260	10	3	70	200	4
RI	8	1	0	0	0	0	0	0	0	1	8	0
SD	No Response											
VT	29	0	0.5	0	0	0	24.5	2	0	6	23.5	0
WV	83	5	0	0	0	0	11	4	2	75	13	0
WI	NA	NA	NA	NA	NA	NA	NA	NA	NA	213	40	NA
Sub-Total	**2800**	**38**	**470.5**	**64**	**243**	**16**	**844.5**	**213**	**50**	**2290**	**1344.5**	**645**

Table 9B - Southern & Western Region; Types of Secondary Teaching Positions (FTE) in Ag. Education on Sept 1, 2006

Southern Region State	High School	Jr. High/Middle School Only	High/Jr. High/Middle Combined	Adult/ Young Farmer	Un-known	Other	Teach Voc. HS/Centers	Some Adult Responsibility	Teach 2 or more schools	Single Teacher dept.	Multiple Teacher dept.	Un-known
AL	95	15	225	0	0	0	20	16	6	287	48	0
AR	0	0	282	0	0	0	3	282	0	180	102	0
FL	162	145	105	21	0	0	16	21	0	270	163	0
GA	269	53	0	49	0	0	9	52	5	148	224	0
KY	244	5	1	NA	0	0	4	10	NA	64	186	0
LA	215	11	7	0	0	0	1	0	1	143	90	0
MS	NA	NA	NA	NA	NA	NA	NA	0	1	109	54	0
NC	340	38	0	0	0	0	2	0	2	173	204	0
Puerto Rico	No Response											
OK	435	0	0	0	0	0	0	0	0	293	64	0
SC	111	3	0	0	0	0	23	114	4	94	20	0
TN	306	6	3	0	0	0	8	0	1	84	110	0
TX	1572	28	0	0	0	0	5	NA	6	660	940	0
VA	238	71	0	1	0	0	10	45	6	102	208	0
Virgin Islands	No Response											
Sub Total	**3987**	**375**	**623**	**71**	**0**	**0**	**101**	**540**	**32**	**2607**	**2413**	**0**

Western Region State	High School	Jr. High/Middle School Only	High/Jr. High/Middle Combined	Adult/ Young Farmer	Un-known	Other	Teach Voc. HS/Centers	Some Adult Responsibility	Teach 2 or more schools	Single Teacher dept.	Multiple Teacher dept.	Un-known
AK	4	0	0	0	0	0	2	0	3	3	0	0
AZ	103	0	0	0	0	0	1	0	4	44	61	0
CA	690	0	3	0	0	0	4	2	4	100	593	0
CO	116	0	0	0	0	0	0	5	0	95	11	0
Guam	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HI	No Response											
ID	90	1	18	0	0	0	2	0	2	70	39	0
MT	14	0	71	0	0	0	2	0	0	68	17	0
NV	23	0	2	0	0	0	2	0	0	18	7	0
NM	85	6	13	0	0	0	0	0	7	87	17	0
OR	125	1	0	0	0	0	0	0	0	88	38	0
UT	80	3	8	0	0	0	4	0	3	55	36	0
WA	295	3	6	0	0	0	0	95	5	175	20	0
WY	39	0	10	0	0	0	1	5	3	45	4	0
Sub-Total	**1664**	**14**	**131**	**0**	**0**	**0**	**18**	**107**	**31**	**848**	**843**	**0**
U.S. Total	**8451**	**427**	**1224.5**	**135**	**243**	**16**	**963.5**	**860**	**113**	**5745**	**4600.5**	**645**

Table 10A - North Central Region
Gender and Race/Ethnicity of Newly Qualified Potential Teachers of Ag. Ed on Sept. 1, 2006

Region State	Institution	Newly Qualified	African American		Caucasian		Hispanic / Non-Caucasian		Native American / Alaskan		Asian / Pacific Islander		Unknown or Other	
			M	F	M	F	M	F	M	F	M	F	M	F
CT	University of Connecticut	3	0	0	0	3	0	0	0	0	0	0	0	0
DE	University of Delaware	NA	0	0	2	5	0	0	0	0	0	0	0	0
IA	Iowa State University	13	0	0	7	6	0	0	0	0	0	0	0	0
IL	Southern Illinois University	8	0	0	4	4	0	0	0	0	0	0	0	0
IL	Western Illinois University	4	0	0	1	4	0	0	0	0	0	0	0	0
IL	Illinois State University	11	0	0	5	11	0	0	0	0	0	0	0	0
IL	University of Illinois	9	0	0	6	3	0	0	0	0	0	0	0	0
IN	Purdue University	18	0	0	4	13	0	0	0	0	0	0	1	0
KS	Kansas State University	9	0	0	3	5	0	1	0	0	0	0	0	0
MI	Michigan State University	1	0	0	0	0	0	0	0	0	0	0	1	0
MN	University of Minnesota-St. Paul	31	1	3	9	14	0	0	0	0	0	0	2	2
MO	Missouri State University	8	0	0	3	5	0	0	0	0	0	0	0	0
MO	Northwest Missouri State University	9	0	0	5	4	0	0	0	0	0	0	0	0
MO	University of Missouri	13	0	0	8	5	0	0	0	0	0	0	0	0
MO	University of Central Missouri	6	0	0	8	9	0	0	0	0	0	0	0	0
ND	North Dakota State University	0	0	0	0	0	0	0	0	0	0	0	0	0
NE	University of Nebraska	12	0	0	6	6	0	0	0	0	0	0	0	0
NH	University of New Hampshire	0	0	0	1	1	0	0	0	0	0	0	0	0
NJ	Rutgers	0	0	0	0	5	0	0	0	0	0	0	0	0
NY	Cornell University	7	0	0	2	5	0	0	0	0	0	0	0	0
NY	SUNY Oswego	4	0	0	3	1	0	0	0	0	0	0	0	0
OH	Ohio State University	34	0	0	13	21	0	0	0	0	0	0	0	0
OH	University of Rio Grande	1	0	0	0	1	0	0	0	0	0	0	0	0
PA	Pennsylvania State	12	0	0	6	6	0	0	0	0	0	0	0	0
SD	South Dakota State University	7	0	0	16	15	0	0	0	0	0	0	0	0
WI	The University of Wisconsin - Madison	3	0	0	0	3	0	0	0	0	0	0	0	0
	Sub-Total	**223**	**1**	**3**	**112**	**155**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**2**

Table 10B – Southern Region. Gender and Race/Ethnicity of Newly Qualified Potential Teachers of Ag. Ed on Sept. 1, 2006

Region State	Institution	Newly Qualified	African American		Caucasian		Hispanic / Non-Caucasian		Native American / Alaskan		Asian / Pacific Islander		Unknown or Other	
			M	F	M	F	M	F	M	F	M	F	M	F
AL	Auburn University	2	0	0	2	0	0	0	0	0	0	0	0	0
AR	Arkansas State University	0	0	0	4	1	0	0	0	0	0	0	0	0
AR	Southern Arkansas University	9	1	0	14	5	0	0	0	0	0	0	0	0
AR	University of Arkansas-Fayetteville	8	0	0	3	4	0	0	0	1	0	0	0	0
FL	Florida A & M University	0	0	0	0	0	0	0	0	0	0	0	0	0
FL	University of Florida	18	0	0	6	12	0	0	0	0	0	0	0	0
GA	Fort Valley State University	5	1	1	3	0	0	0	0	0	0	0	0	0
GA	University of Georgia	20	1	0	35	51	0	0	0	0	0	0	0	0
KY	Eastern Kentucky University	5	0	0	5	0	0	0	0	0	0	0	0	0
KY	Morehead State University	4	0	0	2	2	0	0	0	0	0	0	0	0
KY	Murray State University	9	1	0	8	0	0	0	0	0	0	0	0	0
KY	University of Kentucky	13	0	0	7	6	0	0	0	0	0	0	0	0
KY	Western Kentucky	8	0	0	5	3	0	0	0	0	0	0	0	0
LA	Louisiana Tech	6	0	0	5	1	0	0	0	0	0	0	0	0
LA	University of Louisiana-Lafayette	1	0	0	1	0	0	0	0	0	0	0	0	0
LA	McNeese State University	2	0	0	2	0	0	0	0	0	0	0	0	0
LA	Louisiana State University	4	0	0	2	2	0	0	0	0	0	0	0	0
MS	Mississippi State University	1	1	0	1	0	0	0	0	0	0	0	0	0
NC	North Carolina A & T	5	0	0	3	2	0	0	0	0	0	0	0	0
NC	North Carolina State	23	0	0	10	13	0	0	0	0	0	0	0	0
OK	Oklahoma State	23	0	6	14	0	0	0	3	0	0	0	0	0
OK	Panhandle State University	3	0	0	10	0	0	0	0	0	0	0	0	0
SC	Clemson University	16	1	0	5	10	0	0	0	0	0	0	0	0
TN	Tennessee State University	0	0	0	0	0	0	0	0	0	0	0	0	0
TN	Tennessee Tech University	7	0	0	3	4	0	0	0	0	0	0	0	0
TN	University of Tennessee-Martin	4	0	0	2	2	0	0	0	0	0	0	0	0
TN	Middle Tennessee State University	7	0	0	4	3	0	0	0	0	0	0	0	0
TN	University of Tennessee	6	0	0	4	3	0	0	0	0	0	0	0	0
TX	Stephen F. Austin State University	7	0	0	14	9	0	1	0	0	0	0	0	0

Table 10B - Southern Region Continued

TX	Tarleton State University	30	0	0	18	10	0	1	0	0	1	0	0	0
TX	Prairie View A&M University	0	0	0	0	0	0	0	0	0	0	0	0	0
TX	Texas A&M - College Station	70	0	0	23	43	1	1	0	0	0	1	0	1
TX	Texas State University	0	0	0	0	0	0	0	0	0	0	0	0	0
TX	Texas Tech University	27	0	0	19	1	0	0	0	0	0	0	0	0
TX	Texas A&M University - Commerce	7	1	0	1	5	0	0	0	0	0	0	0	0
TX	Texas A&M University - Kingsville	9	0	0	3	2	4	0	0	0	0	0	0	0
TX	Sam Houston State University	22	0	0	5	17	0	0	0	0	0	0	0	0
TX	West Texas A&M University	11	0	0	8	3	0	0	0	0	0	0	0	0
VA	Virginia Tech	12	0	0	1	10	0	0	0	0	0	1	0	0
VA	Virginia State University	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-Total	**404**	**7**	**7**	**252**	**224**	**5**	**3**	**3**	**1**	**1**	**2**	**0**	**1**

Table 10C - Western Region - Gender and Race/Ethnicity of Newly Qualified Potential Teachers of Ag. Ed on Sept. 1, 2006

			African American		Caucasian		Hispanic / Non-Caucasian		Native American / Alaskan		Asian / Pacific Islander		Unknown or Other	
Region State	**Institution**	**Newly Qualified**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
AZ	University of Arizona	9	0	0	0	7	0	1	0	1	0	0	0	0
CA	California State-San Luis Obispo	22	0	0	7	11	2	2	0	0	0	0	0	0
CA	California State University-Fresno	12	0	0	6	6	0	0	0	0	0	0	0	0
CA	California State University-Chico	10	0	0	2	8	0	0	0	0	0	0	0	0
CA	University of California-Davis	9	0	0	3	5	0	0	0	0	0	1	0	0
CO	Colorado State University	5	0	0	3	2	0	0	0	0	0	0	0	0
ID	University of Idaho	9	0	0	6	3	0	0	0	0	0	0	0	0
MT	Montana State University	4	0	0	2	1	0	0	1	0	0	0	0	0
NV	University of Nevada, Reno	1	0	0	0	1	0	0	0	0	0	0	0	0
NM	New Mexico State University	10	0	0	4	5	0	1	0	0	0	0	0	0
OR	Oregon State University	11	0	0	3	8	0	0	0	0	0	0	0	0
UT	Utah State University	7	0	0	4	3	0	0	0	0	0	0	0	0
WA	Washington State University	8	0	0	3	5	0	0	0	0	0	0	0	0
WY	University of Wyoming	7	0	0	5	2	0	0	0	0	0	0	0	0
	Sub-Total	**124**	**0**	**0**	**48**	**67**	**2**	**4**	**1**	**1**	**0**	**1**	**0**	**0**
	U.S. Total	**751***	**8**	**10**	**412**	**446**	**7**	**8**	**4**	**2**	**1**	**3**	**4**	**3**

*This number is underreported by the respondents when compared to other locations of information within the survey instrument.

Table 11A – North Central Region
Gender and Race/Ethnicity of Agricultural Education Teachers by Region and State as of September 1, 2006

REGION STATE	African American		Caucasian		Hispanic		Native American		Asian/Pacific Islander		Unknown		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
CT	0	0	0	0	0	0	0	0	0	0	58	46	58	46
DE	1	0	23	31	0	0	0	0	0	0	0	1	24	32
IL	4	5	268	102	0	0	0	0	0	0	0	0	272	107
IN	0	0	175	68	0	0	0	0	0	0	0	0	175	68
IA	0	0	196	44	0	0	0	0	0	0	0	0	196	44
KS	0	0	155	29	1	2	0	0	0	0	0	0	156	31
MA	No Response													
ME	0	0	34	12	0	0	0	0	0	0	0	0	34	12
MD	1	0	36	30	0	0	0	0	0	0	0	0	37	30
MI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MN	0	1	61	63	0	1	0	0	0	1	0	0	61	66
MO	0	0	173	59	0	0	0	0	0	0	0	0	173	59
NE	1	0	341	102	0	0	0	0	0	0	1	0	343	102
NH	0	0	111	24	0	1	0	0	0	0	0	0	111	25
NJ	0	0	6	16	0	0	0	0	0	0	0	0	6	16
NY	1	0	35	25	0	0	0	0	0	0	0	0	36	25
ND	1	0	138	88	0	0	0	0	0	0	5	6	144	94
OH	0	0	101	14	0	0	0	0	0	0	0	0	101	14
PA	0	0	0	0	0	0	0	0	0	0	408	127	408	127
RI	4	0	200	60	4	0	0	0	0	0	6	0	214	60
SD	No Response													
VT	0	0	4	5	0	0	0	0	0	0	0	0	4	5
WV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WI	0	0	25.5	4	0	0	0	0	0	0	0	0	25.5	4
Subtotals	13	6	2082.5	776	5	4	0	0	0	1	478	180	2578.5	967

Table 11B – Southern Region

REGION STATE	African American		Caucasian		Hispanic		Native American		Asian/Pacific Islander		Unknown		Total	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
AL	55	1	264	15	0	0	0	0	0	0	0	0	319	16
AR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0
FL	10	1	237	176	5	4	0	0	0	0	0	0	252	181
GA	24	8	254	84	0	0	0	0	1	0	0	0	279	92
KY	0	0	200	50	0	0	0	0	0	0	0	0	200	50
LA	11	4	182	36	1	0	0	0	0	0	0	0	194	40
MS	18	2	124	13	0	0	0	0	0	0	5	1	147	16
NC	17	5	239	114	0	0	2	0	0	0	0	0	258	119
OK	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	No Response													
SC	11	0	87	15	0	0	0	0	1	0	0	0	99	15
TN	9	0	240	66	0	0	0	0	0	0	0	0	249	66
TX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0
VA	9	2	185	114	0	0	0	0	0	0	0	0	194	116
Virgin Islands	No Response													
Sub-Totals	**164**	**23**	**2012**	**683**	**6**	**4**	**2**	**0**	**2**	**0**	**5**	**1**	**2191**	**711**

Table 11C – Western Region

	African American		Caucasian		Hispanic		Native American		Asian/Pacific Islander		Unknown		Total	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
AK	0	0	3	1	0	0	0	0	0	0	0	0	3	1
AZ	0	0	52	37	7	1	3	3	0	0	0	0	62	41
CA	1	1	371	276	20	14	3	1	4	2	0	0	399	294
CO	0	1	80	35	0	0	0	0	0	0	0	0	80	36
Guam	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0
HI	No Response													
ID	0	0	80	29	0	0	0	0	0	0	0	0	80	29
MT	0	0	64	20	1	0	0	0	0	0	0	0	65	20
NV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0
NM	0	0	75	18	12	7	0	1	0	0	1	0	88	26
OR	0	0	84	40	2	0	0	0	0	0	0	0	86	40
UT	0	0	72	19	0	0	0	0	0	0	0	0	72	19
WA	0	0	259	55	0	0	0	0	0	0	0	0	259	55
WY	0	0	37	12	0	0	0	0	0	0	0	0	37	12
Subtotals	**1**	**2**	**1177**	**542**	**42**	**22**	**6**	**5**	**4**	**2**	**1**	**0**	**1231**	**573**
US TOTALS	**178**	**31**	**5271.5**	**2001**	**53**	**30**	**8**	**5**	**6**	**3**	**484**	**181**	**6000.5**	**2251**

Table 12 - Agricultural Education Faculty and Colleges of Affiliation by Region in Fall 2006 & US Totals

	FTE Positions				Faculty Housed in College of			Undergraduate Degrees Granted in College of		
Sept. 1, 2006	Asst/Assoc/Full Prof	Instructor	Grad Asst	Other	Agriculture	Education	Other	Agriculture	Education	Other
North-Central	52.20	9.00	11.50	2.00	21.00	9.00	6.00	19.00	5.00	5.00
Southern	84.05	8.00	23.00	0.00	30.00	5.00	8.00	27.00	5.00	8.00
Western	31.20	4.50	4.50	2.00	10.50	3.50	0.00	16.00	2.00	1.00
US Totals	167.45	21.50	39.00	4.00	61.50	17.50	14.00	62.00	12.00	14.00
US Totals 2004	132	12.5	35	6	48	7	0	50	11	2
US Totals 2001	166.4	18	60.8	4.5	68.5	14.5	5	56	17.3	6
US Totals 1998	155	12.1	41.3	10.75	55.4	15.4	12	59	13	8

Discussion and Conclusions

Stability

The stability of the profession hinges on a number of variables that not only include secondary and post-secondary education but state and federal legislation on education, funding sources, the public's perception and knowledge of agriculture and education, and the immediate local administration of said school systems and programs. These notions go beyond the focus of this study but must always be given thought when looking at local and regional issues with supply and demand of agricultural teachers and the meaning of trends. Is the national patient of Agricultural Education stable? This is a difficult question to answer; the stability of agricultural education is more dependent on region than as a whole. Agricultural Education has begun to climb a long staircase the leads toward greater things. The agricultural education community has already come a long way to gaining acceptance at the grass-roots level and now stands ready to climb to the next level. The data collected through this study shows that in many forms we are growing but it also shows some short-comings that are caused by this growth. If these short-comings are not rectified it can cause some short-term stability issues that will be described in the coming discussions.

Potential Teachers, Placement, and the Teacher Shortage

This has the potential to reach epidemic proportions if we are unable to recruit additional students into the field of agriculture education and the continued growth in secondary agricultural education programs continues.

We continue to see strong numbers of newly qualified teachers being produced. With almost 90% of the institutions responding only an estimated 785 newly qualified teachers, a 12% increase, that are prepared to enter the classroom in the fall of 2007. Of these 785 potentially "new" teachers it is estimated from past trends that only 53% or only 401 teachers will actually teach in the fall of 2007. According to the collected state data there will be an expected 652 positions to fill leaving a gap of 251 or 38% left vacant. It was estimated that in fall of 2006, 40 programs could not operate due to lack of a qualified agricultural teacher and that there were 78 more positions nationally than there were qualified teachers.

If past trends continue we could easily see one of if not the highest need for teachers since this study began with teachers needed but unavailable. Looking at Table 1 with the teachers needed but unavailable dating back from 1965 to 1980 and making the assumption that those positions were actually filled in some manner, this high need trend could continue to exist for up to the next 3-6 years if one assumes 30 year to retirement.

There continues to be population growth in key areas including the Southeast region including Florida, areas of the west like California that has in the past shown great need

for agricultural teachers. When giving thought to population growth, potential retirements, a push nationally to expand non-traditional agricultural education programs in urban schools, promote junior high/middle school programs, and the Council's 10x15 growth plan to have 10,000 quality programs by 2015 we are falling significantly short on the production of agricultural teachers and of those newly qualified actually taking jobs within the profession.

The following facts can not be ignored or disguised:

- There were 78 teachers needed but unavailable with 69.8% of newly qualified teachers entering the field in 2006.
- According to their professors almost 90% of the graduates wanted to teach.
- There were 185 teachers given emergency certification in 2006
- 257 New Positions
- 71 positions lost
- There were 40 departments estimated that would not operate because a teacher was unavailable.
- There were 55 (6%) former agricultural teachers re-entering the field, 35 (4%) previous graduates entering the field, 5 (1%) non-degreed entering the field, and approx. 85 individuals that entered the agricultural teacher profession that did not come from agricultural education teacher preparation programs.

Diversity

As has been the case for many years the agricultural education community still lacks diversity to a proportion that would not be tolerated by many state and federal agencies. Approximately 88% of all agricultural education teachers are white with almost 64% being white male and about 24% being white female. Only 12% of the agricultural teaching community at the middle and high school levels is non-Caucasians, there is still a lot of garden to be planted. Caucasians also dominate those becoming newly qualified, we are seeing close to a 50/50 split between the 45% or 412 white males and 49% or 446 white females. The tide seems to be slowly turning when it comes to gender equity when producing newly qualified teachers while we are still far behind in the actual profession. With the continued changing face of the American population we need to do a much greater job at attracting minority faculty to assist in the recruitment of minority students and their placements as agricultural teachers in the field.

Program Structure

The total number of teaching positions reported by curriculum focus was 10,847. In marked contrast to yester-years, production agriculture programs continue to shrink only making-up less than 7% or 715 of the from those reporting. This is a sizable difference compared to the 2001 data with 1231 Production Ag programs which made up 14.9% of the Agricultural Education Programs, this program has dropped in half within a six year period. A "combination" program represents about 34% or 3,729 positions, down slightly from the 2001 number of 3,878 of all

programs reported. Agriscience programs have grown to account for 1,046 positions or almost 10% of the total positions as reported by all states and territories responding. Ornamental horticulture programs made-up almost 8% or 839. This is an increase in total numbers from 2001 with 766 positions. Agricultural mechanics makes-up about 6% or 605 of all reported programs which is a decrease from 2004 levels of 720 positions and up from the 2001 number of 566 programs.

The data shows that there are slightly more single teacher positions than multiple teacher department positions. Single teacher department positions account for about 68% (5,745 positions) with positions in multiple teacher programs only reaching 32% with 4.600.5 positions.

Teacher Education

When the study began the number of programs that were known to be able to produce newly qualified agricultural teacher numbered 99 institutions. Through this study there was one institution gained, six programs lost, and two programs that official confirmed that their programs are no longer active, thus leaving a total known number of programs at post-secondary institutions that can newly qualify agricultural teachers at 92. Not all of these institutions has had graduates within the last few years but can produce them.

The study received responses from 88 institutions (95.6%). 48 of the 53 States and Territories responded (90.5%). The six non-respondents included the states of Hawaii, Massachusetts, South Dakota, Puerto Rico, and the Virgin Islands.

In the past those states that did not respond to the repeated attempts at data collection, previous-study data were used. Realizing that using data dating back to 1998 is not a clean substitute for current information and that the data can significantly skew the results the researchers decided to leave missing data. For those teacher education institutions and State Staff that failed to respond, repeated attempts were made via email, phone, fax, and at various professional conferences to retrieve some response even if the response was that an Agricultural Education Program no-longer existed at that institution.

The data implies that teacher education programs are doing a better job of producing prepared teachers by having such a high number of newly qualified individuals that want to teach (90%). Vacancies were left and programs did not operate because of some newly qualified agricultural teachers that wanted to teach but remained unemployed or accepted positions outside of agricultural education for reasons only known to them would not go to those positions.

Discussion and Recommendations

As found on the National FFA website there are presently 7,242 FFA chapters which equates to 7,242 recognized agricultural education programs. It is also clear that not all Agricultural Education programs have chartered FFA chapters. Obviously, the total number of programs is greater than the number of FFA chapters, although no reliable statistics are available to provide the actual number of programs. According to the Council for Agricultural Education website those 7,242 chapters/programs provide formal agricultural leadership and educational experiences for more than 800,000 students from the seventh grade on in all 50 states and three

U.S. territories. The National Council for Agricultural Education's 10x15 goal of having 10,000 quality programs by 2015 will be a very difficult goal to meet. There are 10,847 (as reported by those states and territories that responded) agricultural teacher positions servicing 7,242 recognized agricultural programs. When there continues to be a shortage of newly qualified agricultural teachers going into the profession, programs not operating because they can not find a qualified candidate to teach (78 in 2006), individuals coming into the profession with no agricultural education experience of any kind (185 in 2006), a loss of positions (71 in 2006), even with the gain of 257 new positions the agricultural education community is running at a deficit of human capital. Although the race has begun we are turning the corner and it is time to sprint.

We continue to see slight growth in FTE's at university programs, 90% of newly qualified potential agricultural teachers wanting to take teaching jobs with an average of only 53% (average taken from all previous collected data since 1968) of them actually taking positions in the field. With the continued need for agricultural teachers, university faculty are already stretched to the limits to do more with less, to continue to meet more difficult goals set by universities for additional publications, more dollars brought from grantsmanship, on top of the teaching and service that should be our communities first priority, and all while now being pushed for the need of additional graduates. Many of the teachers that entered the profession in the 1970's and early 1980's during the last major drought of newly qualified agricultural teachers are able to or soon will be able to take retirement, thus leaving an additional burden on agricultural education and a further deepening of the deficit. There soon can be an even greater need for newly qualified agricultural education teachers and those in the agricultural education community need to take a proactive stance to do what is necessary to expand our programs, produce increased numbers of newly qualified potential agricultural teachers, and work with local school districts to expand agricultural education programs to meet 10x15.

As has been the case for a number of years through a number of previous supply and demand studies we continue to see that a national deficit of newly qualified agricultural teachers, the severity can vary greatly according to region and the individual state. There are many states that at the present time has a surplus of newly qualified teachers. Unfortunately those that make-up the surplus do not seem to be willing to leave their state of residence or a short proximity of their home to take a teaching position in another locale.

The simple fact is that nationally there are not enough newly qualified agricultural teachers being produced, not enough of the newly qualified are going into the profession, and that there are more positions opening than there are individuals willing or able to fill those open positions. At the present time there is not any data that shows that this national trend will falter. With this in mind unless there is a significant turn around in a very short period of time the 10x15 goal may need to be revisited.

Therefore it is recommended that:

1. There needs to be an increase in FTE's in Agricultural Education Faculty working with undergraduate programs
    a. A portion of FTE's should be dedicated to recruitment for potential agricultural education majors.
2. A stronger national effort to recruit minorities in to the profession at the post-secondary level and the secondary education level.

3. As with previous study recommendations, additional research into why students who are prepared as newly qualified teachers do not enter or leave the profession.
4. A national sponsored research project that can assist in determining if and/or how new educational reforms are turning newly qualified teachers away from the profession.
5. A call to all states to collect a minimum amount of annual demographic data on their secondary and adult agricultural teachers and programs.
6. A call for AAAE member institutions in each state to assist in the collection of demand study data.
7. A committee to serve at the pleasure of the National Council for Agricultural Education to re-examine the national supply and demand survey instruments for the purposes of updating and setting a new standard of basic demographic data that should be kept by all states and institutions.
8. To return the National Supply and Demand Study to collect data on an annual basis and it become a function of the National Council for Agricultural Education.
9. Locate resources to transform/recreate the National Supply and Demand Study survey instruments into a web-based electronically submitted format.

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