

One Hundred Years of Agronomic Education

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FOUNDATIONS

Late 1800's

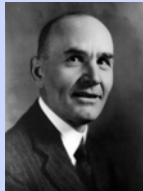
Land grant colleges offered basic soil science and crop management courses.

1908

Early ASA committee reports summarized educational activities but few papers published.

1917

ASA President W. M. Jardine set forth challenges for agronomic education.



In 1917, ASA president W.M. Jardine stressed the importance of agronomic education to address domestic and global food and fiber issues, emphasizing the need for young agronomists for the future.

Mid-1920's

Early stages of a teaching section. Crop judging contests started.

1940's

After WW II, academic programs were revised to meet contemporary needs. GI's returned, continued on to graduate school, retired, leaving global impacts on science and education.

1950

Agronomy Clubs now on most campuses; provided a foundation for future ASA members.

1960's

Division A-1 formed. Programs focused on teaching methods and course content as science expanded.

1972

Journal of Agronomic Education launched to enhance publication and communication.

1980's

Outreach – to involve females and minorities.

1990's

Student symposiums - report on research. More interest in graduate school.

2000's

A-1 launched programs for K-12 educators. Student section name is changed.



In 2005, the student organization changed its name to "Students in Agronomy, Soils, and Environmental Sciences" to reach past the farm gate and to non-agricultural students. Here, students studied the environmental aspects of a cotton gin in Texas.

EDUCATIONAL OUTREACH

Growth

Science and enrollment expand after WW II. By 1950, 1300 students were involved in agronomy clubs across the U.S.

Gender

With the social changes of the 60's, more women entered professional ranks. "Women in Agronomy" provide mentors for female students.

The 1998 national soils judging contest was won by an all-female team from Texas A&M, indicative of the increased role of women in agronomic programs. Cristine Morgan (lower right) earned a Ph.D. and now teaches and conducts research at Texas A&M.



Publications

1920 to 1950- 2 to 6 papers published per year. 1963 "Agronomic Education" headings appear. 1972 J. of Agronomic Education (JAE) launched. 1992 JAE broadened to Journal Natural Resources & Life Sciences Education; published electronically.

Career enhancement for students

Mock interview workshops, graduate school explorations, and mentoring programs. Females active in summer internship programs.

STUDENT CONTESTS

Background

Early contests patterned after livestock judging; instrumental in forming agronomy clubs.

Today, 400 students are involved in contests; contestants later assumed prominent positions.

Crops judging started in 1923. Teams from Texas Tech, coached by Prof. Ayers (center), won contests in Chicago and Kansas City for 14 consecutive years. Ed Clark (far left) on this 1959 team earned a Ph.D and developed cropping systems. (see Ayers, 1953)



Contest History

Year	Contest	Note
1923	Crops Judging	Seed ID, quality & classification
1933	Essay	Forerunner of manuscript contest
1952	Achievement	Recognizes outstanding clubs
1961	Soils Judging	Nearly 300 students work in teams
1961	Speech	Speak on an assigned title
1970	Photo/visual aid	Now a digital presentation
1984	Quiz bowl	Covers all aspects of agronomy
1997	Research	Technical - oral or poster
2002	Club Poster	Showcase local activities

IMPACTS OF ASA TODAY

Leadership

In 2007, ASA President Jerry Hatfield noted that the future of mankind depends on well trained agronomists with strong foundations in basic and applied sciences.



For "student learners"

Soils, crops, and environmental stewardship. Student contests and professional development. 70 clubs; 600 students with 250 attending ASA.

For professional educators

Confer with colleagues – on contemporary issues. Engage in papers, posters, and workshops. Sustain enthusiasm for teaching & research.



The Agronomic Education Award recognizes faculty for outstanding teaching and student assistance. The 1977 award was presented to Dr. D. A. Miller for his dedication to teaching at the University of Illinois and North Carolina State University.

SUMMARY

- In 1917, ASA President Jardine, perhaps the "father of agronomic education", highlighted the need for college-trained agronomists.
- By 1930, Committee on Agronomic Education was formed, evolved to Division status, and today is "A-1 Resident Education".
- Recent outreach includes J. Agronomic Education, gender and minority involvement, and K-12 teachers.
- ASA continues to offer career development through local agronomy clubs, leadership roles, workshops, contests, and travel.
- This centennial summary was developed from ASA records, committee documents, publications, and interviews, and will be published as a manuscript. (Milford and Smith. 2007. Development and evolution of resident education. p. 71-78. In L. Moser (ed.) The Am. Soc. Agron.:100 years of history. ASA, Madison.)

REFERENCES

- Ayers, C. 1953. Crops judging, grading, and identification contests. *Agronomy. J.* 45:565-566.
- Graveel, J. G. 1992. Journal changes title and scope. *J. Nat. Resour. Life Science Educ.* 21:1.
- Jardine, W. M. 1917. The agronomist of the future. *J. Am. Society Agronomy.* 9:385-392.
- Metcalfe, D. S. 1962. Student activities sponsored by the Society. In H. H. Laude (Historian) *History of ASA. 1907-1957. Agron.* 54:64-66