

HISTORY OF CPIA

Dale Heermann
USDA-ARS
Fort Collins, Colorado
Voice: 970-491-8229 Fax: 970-491-8247
Email: heermann@wmu.colostate.edu

Freddie Lamm
KSU Northwest Research-Extension Center
Colby, Kansas
Voice: 785-462-6281 Fax: 785-462-2315
Email: flamm@ksu.edu

INTRODUCTION

The first Central Plains Irrigation Short Course was held on February 13 and 14 in Colby, Kansas. The idea for the short course was the result of ASAE committee meetings held at the 1988 summer meeting in Rapid City, South Dakota. The Irrigation Group recognized the need to increase our efforts in increasing the knowledge and skills of those involved in irrigation throughout the United States. Following the ASAE summer meeting, an organizing committee from Colorado, Kansas and Nebraska explored the need and possibility of cooperatively sponsoring a technology transfer event focused on irrigation. It would include a time for the researchers to discuss research priorities and that we were all telling the same story. Those involved in the very first planning meeting were Danny Rogers, Israel Broner, Norm Klocke and Dale Heermann. We agreed that a workshop format providing current irrigation technology to producers, consultants, government agency personnel and industry was needed. We also agreed that it would be beneficial to have an equipment exposition in conjunction with the work shop. The organizing committee enlisted the help of many others and we were off and running with the first short course and equipment exposition. We are now participating in the 15th annual event.

INITIAL CHALLENGES

The planning committee from each of the states had cooperative extension responsibilities and were quite accustomed to organizing short courses and work shops. The technical program was easily decided on and the technical expertise was readily available in the three state area. We did make a conscious effort to invite participants from neighboring state Wyoming and included speakers from the High Plains of Texas where similar irrigation problems existed. The effort was made to invite the irrigation industry to exhibit current products at the short course. It is always beneficial to have the latest technology being presented by the industry representatives and explain the application to those in attendance.

The challenge of how to deal with the financial details of the joint short course was beyond that which any one state had experienced. It was agreed early on that it would be advantageous to rotate the short course in a different state each year. Each state was responsible for the collection of registration and exhibitor booth contributions to cover the cost of the short course and proceedings. The proceedings have been a valuable part of the annual meeting for the attendees. It provides a good set of notes for their reference when returning to their home.

The concept of organizing an industry/trade association was soon a topic of discussion by many in attendance at the short course and equipment exposition. Marion Miller, who devoted his life to the improvement and adoption of irrigation technology, volunteered to assist in starting an industry trade association. He had been involved in helping establish other state irrigation association chapters and was one of the first presidents of the national Irrigation Association. He wrote many letters and sent them to as many of the irrigation industry people that he could identify in the three central plains states. His efforts were successful and Articles of Incorporation of Central Plains Irrigation Association, Inc. were signed on September 16, 1992. The Articles of Incorporation were signed by Theodore Tietjen, Jr., Keith V. Jardine, Ronley R. Schultz, Jr., Larry W. Rumburg, David B. Lott, Dale F. Heermann, Theodore G. Johnson, M. Earl Hess, Dan H. Rogers and Roger W. Schulz. Marion was made an honorary charter member. The first president was Ted Tietjen for the 92-93 year. The following presidents followed: 93-94 Keith Jardine, 94-95 Ron Schulz, 95-96 David Lott, 96-97 Gary Newton, 97-99 Bill Orendorff, 99-01 Ray Glaser, 01-03 Dwight Scholl.

The business of the CPIA is conducted at two annual meetings of the Board of Directors. Voting rights are reserved for Regular members. Regular membership shall be available to irrigation equipment manufacturers, distributors, dealers and installers, registered engineers and/or engineering firms, companies that design irrigation equipment, and manufacturer representatives. Technical membership is available to individuals employed by local, state or federal governmental agencies. The due structure is set on the basis of membership class. The Board of directors has three representatives from each of the states of Colorado, Kansas and Nebraska. The officers of the board shall be president, vice-president and secretary-treasurer. One technical member from each state serves as an educational advisor.

CENTRAL PLAINS IRRIGATION ASSOCIATION.

The objectives and purposes of the non-profit organization whose principal objective is to enhance agricultural irrigation which shall include:

1. Promoting standards for proper design, installation and management of irrigation systems.
2. Promoting water and soil conservation through the economic use of irrigation practices.
3. Communicating information to farmers and the general public about agricultural irrigation.
4. Encourage cooperation among all segments of the industry
5. Promoting a closer liaison with financing agencies.
6. Promote ethical business practices within the industry
7. Cooperation with agencies or organizations in the efficient use of water.

They have been a strong supporter for the continuation of the Central Plains Irrigation short course and have also cosponsored other meetings. The Association accepted the financial responsibility for underwriting the annual short course and equipment exposition. The Board of directors began discussing establishing scholarships with one going to each of the three states. They have been awarded at the \$500 level since 1994. Education has been a primary focus for the CPIA. In 1996, the Board of Directors made the decision to provide more continuity for the association by hiring an executive assistant. Donna Lamm was selected and began serving in that position, April 1996. This has brought more continuity to the Association and monthly Events Calendars are sent by email to the membership. She has been responsible for taking minutes at meetings; doing the bookkeeping; sending out three newsletters a year; making a directory; handling correspondence; answering questions; and helping organize the Short Course and Equipment Exposition.

The CPIA has typically held two meetings per year. One at the time of the annual Short Course and Equipment Exposition and the other during the late spring or summer time frame often in conjunction with the 3I show in Kansas. They are continually evaluating the success of the CPIA activities and questioning if changes should be made. The success and attendance has varied from one meeting site to another and it is always a challenge to do an adequate job of publicity for assuring a good attendance. The most recent discussion has reaffirmed that the technical credits for consultants and government agency personnel are of benefit to the irrigation industry. Discussion of whether to join with some other group in hosting the annual event was explored. The general conclusion was that there is a real benefit to reach a different audience by rotating the meeting sites and the networking with the attendees, many of whom

do not attend the larger expositions such as the 3I show in Kansas and the Husker Harvest Days. The short course directly targeted toward irrigation is a needed and valuable program that would potentially suffer if the annual event were cosponsored with another interest group.

SUMMARY OF CPIA CONFERENCES

The first Central Plains Irrigation Conference was held February 13-14, 1989 in Colby, Kansas. This meeting in Colby is the 15th Conference. The typical format has been a series of concurrent technical sessions that are presented multiple times in two days. At a number of the earlier meetings the researchers and interested industry had research discussion to gain an more in depth understanding of the research being conducted in the three states. This was particularly valuable to the many researchers that made presentations and then had the opportunity for more interactive discussion with each other on the latest technology and the research needs. The discussions and interaction with the producers, consultants, industry and government agency personnel provided an immediate agenda for a better understanding of the researchable problems or areas that should be presented in following conferences. The technical sessions are target for the area adjacent to the meeting site.

We have had many opportunities to participate as presenters at the conferences. The interaction with the attendees has provided us with a sense of direction in our own research programs and future presentations. My most memorable experience came at the 1991 conference in North Platte, Nebraska. I was on the program prior to lunch and was certain that I did not want to be long and interrupt the time set for the lunch break. In the middle of my slide presentation with the lights out, suddenly the moderator came up to me at the podium with a question. Are you about finished? I was taken back by his question, but he immediately explained that Governor Kerry had entered the room and asked for the opportunity to make a few comments. He was coming into North Platte for a business meeting and noticed all of the cars at the Holiday Inn. He, like any good politician, decided that he should stop and address a ready made audience. As he had come into the session, he requested just a moment or two to address the group. I suggested to the moderator that I could, given a couple of minutes, quickly complete my presentation. I have always told the organizers that I have never been stopped during a presentation before and in fact not since at any other conference. They had gone to extra effort to have the Governor stop by and shorten my presentation. My question; Is the Governor of Kansas going to come in while I am presenting this interesting story?

The following is the locations and years in which the conference was held in the 15 years of the existence of the Annual conference.

| | |
|------------------------|------------------|
| Colby, Kansas | 1989, 1997, 2003 |
| Garden City, Kansas | 1995, 2000 |
| Goodland, Kansas | 1992 |
| Burlington, Colorado | 1996 |
| Lamar, Colorado | 2002 |
| Sterling, Colorado | 1993, 1999 |
| Wray, Colorado | 1990 |
| North Platte, Nebraska | 1991, 1998 |
| Kearney, Nebraska | 1994, 2001 |

Summary of Proceedings

A number of factors ultimately influence the number of papers and topic areas that are published in the conference proceedings. It should be noted that not all presentations are accompanied by a proceedings paper and so no numerical summary of the proceedings papers can exactly summarize all the topics presented over the years. The proceedings papers are a mixture of invited and voluntary papers, and thus reflect a mixture of perceived interests of the conference organizers in that given year and of the topics various speakers may be prepared to present. In general, the conference organizers do consider the needs of the specific location of the meeting. For instance, center pivot sprinkler irrigation topics often predominate in locations where furrow irrigation has rapidly declined. There is also a core block of irrigation scientists, extension specialists and agency staff that are engaged in long term activities related to a particular topic area and it is common for these activities to be reported on.

There have been 236 papers with 1812 pages given at the Central Plains Irrigation Conference during the years 1989-2002 (Table 1). Allowing for overlap between topic areas, there were 265 papers and 1996 pages in 18 distinct topic areas.

As might be expected, the topic areas related to center pivot sprinklers, furrow and surge irrigation and subsurface drip irrigation (SDI) were popular topic areas with 99 papers consuming 781 pages. There was a tendency for furrow irrigation papers to decline somewhat over the years as those acres declined and for SDI papers to increase as the technology for its use in the Great Plains developed (Table 1). Center pivot sprinkler papers were consistently strong over the years and at all locations, reflecting the growth and current predominance of this irrigation system type.

Table 1. Summary of Proceedings from the Central Plains Irrigation Conference, 1989-2002.

| Topic area | Proceedings Papers | Total Pages | Proceeding Papers by Period | | | Proceeding Papers by Location | | |
|-----------------------------------|--------------------|-------------|-----------------------------|------------|-----------|-------------------------------|-----------|-----------|
| | | | 1989-1993 | 1994-1998 | 1999-2002 | Kansas | Colorado | Nebraska |
| Center Pivot Management | 23 | 169 | 15 | 6 | 2 | 10 | 6 | 7 |
| Center Pivot Sprinkler Design | 23 | 174 | 10 | 9 | 4 | 10 | 4 | 9 |
| Furrow and Surge Irrigation | 26 | 242 | 10 | 12 | 4 | 9 | 3 | 14 |
| Subsurface Drip Irrigation Mgmt. | 17 | 111 | 2 | 8 | 7 | 6 | 8 | 3 |
| Subsurface Drip Irrigation Design | 10 | 85 | 0 | 6 | 4 | 3 | 2 | 5 |
| Irrigation Scheduling | 28 | 196 | 12 | 10 | 6 | 9 | 12 | 7 |
| Crop Water Use and Soils | 12 | 60 | 4 | 8 | 0 | 10 | 2 | 0 |
| Limited Irrigation | 17 | 151 | 9 | 3 | 5 | 9 | 5 | 3 |
| Water Quality and Nutrient Mgmt. | 27 | 128 | 10 | 8 | 9 | 10 | 8 | 9 |
| Chemigation | 7 | 54 | 3 | 4 | 0 | 2 | 3 | 2 |
| Precision Agriculture and GIS | 8 | 59 | 0 | 3 | 5 | 1 | 2 | 5 |
| Wastewater Applications | 7 | 57 | 0 | 0 | 7 | 1 | 3 | 3 |
| Salinity | 4 | 57 | 0 | 0 | 4 | 0 | 4 | 0 |
| Irrigation Economics | 17 | 166 | 3 | 10 | 4 | 7 | 4 | 6 |
| Irrigation System Conversions | 10 | 88 | 4 | 5 | 1 | 3 | 5 | 2 |
| Pumping Plants and Energy | 11 | 88 | 4 | 3 | 4 | 3 | 4 | 4 |
| Water Policy and Resource Mgmt. | 15 | 85 | 6 | 3 | 6 | 10 | 2 | 3 |
| Safety | 3 | 26 | 0 | 2 | 1 | 1 | 2 | 0 |
| Total | 265 | 1996 | 92 | 100 | 73 | 104 | 79 | 82 |

Note: Papers listed in multiple categories when distinct topic overlap occurred.

The actual number of papers was 236 and the number of pages was 1812 for the years 1989-2002.

Meeting locations

Colby, Kansas -- 1989, 1997

Garden City, Kansas -- 1995, 2000

Goodland, Kansas -- 1992

Sterling, Colorado -- 1993, 1999

Wray, Colorado -- 1990

Burlington, Colorado -- 1996

Lamar, Colorado -- 2002

North Platte, Nebraska-1991, 1998

Kearney, Nebraska-1994, 2001

Papers dealing with irrigation scheduling, crop water use and limited irrigation have also been very important topic areas throughout the years in all three states with 57 papers and 407 pages. Additionally, this area would clearly overlap with other papers listed in other topic areas such as water quality and nutrient management, economics and the various irrigation system topics.

Water quality and nutrient management, chemigation, precision agriculture and GIS, wastewater applications and the salinity topic areas are often interrelated and this group had 53 papers and 355 pages. This group also had emerging areas of interest (Table 1). Most of the papers related to precision agriculture, wastewater applications and salinity have been presented during the last four years. These topic areas are likely to remain in future conferences as producer interest grows and technologies become more fully developed. The topic of salinity generally was of greater emphasis in locations experiencing current problems (e.g. Arkansas River) but as water resources continue to decline, salinity can become an issue at additional locations. It is good to note that the mutual aspects of good irrigation and water quality management have been consistently recognized and addressed since the earliest conferences.

Irrigation economics, irrigation system conversions, and pumping plants and energy are recurring topics with 38 papers and 342 pages. The amount of emphasis on these topic areas is often tied to the relative economic prosperity in the rural areas. Crop and irrigation management issues often have increased emphasis when the economy is poor and system conversion and pumping plant upgrades are often associated with a better farm economy.

Water laws and policies vary across the three states, but water policy and resource management papers still continue to be of interest to producers. Over the years there were 15 proceeding papers in this topic area with 85 pages published. This topic area is also one which is frequently given in general sessions or at meal functions. Often these speakers are legislators or state agency staff whose schedules often change at the last minute. As a result, many of the water policy presentations are not available in the proceedings.

At the conclusion of this 2003 conference, there is likely to have been about 250 distinct papers and nearly 2000 pages of text in the proceedings from the 15 years of the conference. Some things have changed over the years and some things have remained relatively unchanged. The proceedings continue to be a good source for irrigation system and management information in the Central Great Plains.

CONCLUSION

I want to conclude by saying that the Central Plains Irrigation Conferences have been a great success. It is the dedicated effort of the program committee that includes both industry representation and technical leadership from the three states to arrange for the excellent technical programs. The CPIA deserves a special thanks and recognition for there extra efforts in promoting the educational aspects of the Annual Conference. They also have contributed of their time and resources in participating in the Equipment Exposition. This is a very beneficial part of the annual event. We also are very pleased that they have continued their support of a scholarship program for those studying irrigation science and technology. The Board of Directors has continually evaluated the format, content and location of the annual Conference. I would encourage the Board and CPIA to continually review the goals they set for themselves in their Bylaws. It is the professional dedication of the industry and technical membership that contributes to the excellence of our annual conference. Together we can all make a difference and assure that irrigation is sustainable and limited water supplies are used effectively for production and the enhancement of our natural resource environment.

This paper was first printed in the Proceedings of the Central Plains Irrigation Conference, Colby, Kansas, February 4-5, 2003. Proceedings are available from CPIA, 760 N. Thompson, Colby Kansas.