

MidWest Plan Service: A History of Cooperation

A.S. Leaflet R1922

Jay D. Harmon, Associate Professor, Agricultural and Biosystems Engineering Department,
Bill Koenig, Engineer, MidWest Plan Service,
Jack Moore, Manager, MidWest Plan Service

Introduction

MidWest Plan Service (MWPS) will soon turn 75, and while the educational products delivered have changed from copies of pencil drawings and materials lists, to CDs and handbooks, the ideals have remained the same. MWPS is a regional organization with the goal of cooperating to develop detailed educational resources to keep agriculture productive and sustainable, protect the environment, and improve quality of life. It is composed of extension and research agricultural engineers from twelve universities located in the north-central region of the United States plus representatives of the USDA. MWPS was the first cooperative plan service organized by academic institutions in the United States. This article will provide some background to the cooperation that started almost 75 years ago.

History

During the early part of the 1900's, agriculture and farms were changing as new technologies and practices were being developed. Farmers realized that new buildings designed using the latest technology were needed for them to be most efficient. Farmers turned to their state college or university to help plan new buildings. Individual states prepared plans for farm buildings and distributed them through the extension services. Because the preparation of good, accurate, and complete plans was difficult and time consuming, a complete plan service in any one state made great demands upon an Agricultural Engineering Department's staff, yet there was reluctance to use building designs from another state.

At the sectional ASAE meeting in Fargo, North Dakota in May of 1929, Agricultural engineers attending from North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri listened to a presentation titled "How the Engineer Can Help the Farmer Build Good Farm Buildings." This presentation introduced the concept of developing a "cooperative effort" for a plan service that was national in scope and unquestioned in quality. The concept of a cooperative plan service made sense because the country has relatively few climatic belts; therefore, regional or national plans could and should be developed to simplify practices and reduce the confusion when comparing differences in recommendations from other states.



Figure 1. Farm building plans were used for education as well as to provide a service in the early days.

To make this plan service function properly, states must forget personal differences, pool resources, and eliminate useless duplication of effort. Because the states at this meeting represented a region with few differences in farming practices and little climatic changes, these states were in a good position to begin this cooperative effort. No formal action was taken at the meeting in Fargo but attendees went home with the idea that a cooperative plan service was needed. In the meantime, each state continued to distribute other plans as necessary to meet current needs.

Professor Henry Giese of Iowa State College was one of the people who saw the great value of having a cooperative plan service but organizing this cooperative effort proved to be difficult. The era of the Great Depression was just beginning. Progress was slow due to lack of time on the part of the structures specialists but lack of available funds caused no tangible progress.

In 1932, a report on the Survey of Research in Farm Structures in the United States was published that outlined existing conditions and problems in farm structures. Due to limitations in personnel and funds, cooperation was necessary to attain the most from resources available. Cooperation would permit more intensive efforts and result in a closer agreement and greater prestige to all. The survey encouraged interstate cooperation with leadership to be provided by the U.S. Department of Agriculture. This report was the ammunition that Professor Giese needed to further the cause of a cooperative plan service.

Shortly after the survey was published, a small group of representatives from several states met in Ames to discuss how to organize such an operation. The group had a basic idea of how this cooperative plan service should be organized and operated, but it still needed one thing that was

difficult to obtain during this era of the Great Depression...strong financial backing.

In 1932 Raymond M. Hughes, the President of Iowa State College, at the urging of several others, became thoroughly convinced that having a cooperative plan service would benefit the farmers of Iowa. He made available a \$6,000 loan with little or no assurance of recovery. Soon after the financial backing was obtained, the cooperative plan service was organized. This new organization was known as Mid-West Farm Building Plan Service, and Professor Giese was selected to be the first Plan Service Chairman.

More states became involved as they became aware of the cooperative plan service. In total 15 states indicated a desire to be included in the cooperative effort, which included the original seven states that met in North Dakota. The states of Arkansas, Illinois, Indiana, Kentucky, Michigan, Ohio, Oklahoma, and Wisconsin also participated in the submission and selection of plans. Over the years, New Mexico and Alaska have also participated in MWPS activities.

The group originally thought it would be possible only to agree on a few plans, which would be prepared and made available to each of the cooperating states. Instead they discovered that more than 1,400 different plans from 12 of the 15 states and the USDA would be considered for review. Many of the over 1,400 plans were inadequate and were quickly dismissed, but in the end, 113 plans were selected, revised, redrawn and prepared for distribution. These plans were illustrated in a 96-page catalog. Income to the central organization was obtained from the sale of an illustrated catalog at \$2 per copy and a bound volume of material lists at \$3 per copy.

Kirk Fox, editor of *Successful Farming* magazine, became so intrigued with the idea of a cooperative plan service that he immediately took steps to encourage and supplement the efforts by printing the first catalog without any guarantee of a single order. In order to give the Mid-West Farm Building Plan Service publicity, he carried a number of articles in *Successful Farming* and paid approximately \$1,500 into the Plan Service treasury. Mr. Fox also paid the travel expense of Professor Giese to enable him to make personal contacts with the cooperating states.

The financial success of Mid-West Farm Building Plan Service was due largely to the support of persons and organizations outside of the cooperating group. The organization maintained operations through the sales of catalogs, plans and, material lists. The catalog was revised and published again in 1937 and 1941 at which time the organization became known simply as MidWest Plan Service.

During the post World War II period of 1947 and 1948, the Directors of the Experiment Stations and Extension Services of the North Central Region recognized the importance of the Plan Service and understood the need to

provide financial support of the organization so that during financially difficult time the services provided would still exist. The Directors developed and approved a "Memorandum of Understanding" (MOU). For the first time, the MidWest Plan Service became an "official" agency with formally defined duties, responsibilities, and privileges. The membership states provided input through the state's representative to the Plan Service. Also, the Directors provided financial support of the Plan Service in the amount of \$25,000, which was split among the states based on farm population. During this time a full time manager and office staff were hired to work on building and equipment plans.

The foresight of these Directors soon paid off. Because of the lack of farm building construction during the war years and the return of soldiers to the farms, a national grain storage emergency occurred in 1949. The Plan Service developed a series of grain storage structure plans. This activity helped to revitalize the Plan Service.

Since 1948 MidWest Plan Service, now more commonly known as MWPS, has seen many changes. MWPS is still one of the best organizations at addressing current issues that affect farmers and homeowners. The focus has changed from building plans to more broad-based publications that educate and empower clients. Many old plans are still available for free download from the MWPS website (www.mwpsdq.org).

Current Situation

MWPS develops materials not only for agricultural buildings, but also develops detailed publications for livestock-specific applications (swine, beef, dairy, sheep and horse), manure management systems, outdoor air quality, concrete manure storages, ventilation, sprinkler irrigation systems, and conservation tillage management. Modern delivery is by CD, web-based and well-designed printed materials. MWPS publications have won many ASAE Blue Ribbon awards for quality.

Many of the MWPS recommended practices for design, construction, ventilation, and manure storage and management have been used in ASAE Standards and Engineering Practices. The most recent example of new Engineering Practices based on a MWPS publication is EP514, *Design of Concrete Structures for Secondary Containment of Liquid Pesticides and Fertilizers*, which is based on the book *Designing Facilities for Pesticide and Fertilizer Containment*. Some MWPS materials have also been cited by legislation in various states regarding manure management.

Over the years the Extension Directors from the North Central Region continued their financial support for the cooperative efforts of MWPS. The Directors have continually cited MWPS as a model for cooperative effort among universities and colleges. Unfortunately, with tough financial circumstances at all these universities, the Extension Directors have had to make tough financial

decisions including the discontinuation of funding to MWPS, which was effective July 1, 2003. Financial support from the universities constituted approximately 40% of the MWPS budget. A 40% reduction in budget is a severe blow to MWPS and will change the way publications are marketed and prioritized for development.

Future Direction

MWPS hopes to aggressively pursue other funding opportunities by partnering to publish outreach materials from grants, more aggressively marketing materials and other entrepreneurial opportunities. Present examples of such partnering include work with the North Central Farm Management Extension Committee, the Four-State Dairy group and an EPA grant to develop the Livestock and Poultry Environmental Stewardship Curriculum.

The current priorities for publication include a House Planning handbook, that incorporates the ideas of universal design, a revised Horse Housing Equipment Handbook, and the Structures and Environment Handbook, a book that is used by many universities, colleges, and technical schools for their teaching programs.

MWPS will continue to cling to those ideals originally set forth by Professor Giese in 1929 but will aggressively meet the challenges of the 21st century. If you want to learn more about MWPS or want to pursue opportunities with MWPS, please contact us at MWPS, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080, 1-800-562-3618, mwps@iastate.edu. View our many publications at: www.mwpsHQ.org.

Recent Publications

- *Acquiring and Managing Resources for the Farm Business*, 2001, 90 pages (NCR-610D)
- *Purchasing and Leasing Farm Equipment*, 2001, 10 pages (NCR-615)
- *Feeding and Management Practices for Replacement Heifers*, 2001, 56 pages (MWPS-4SD10)
- *Four-State Applied Nutrition and Management Conference*, 2001, 154 pages (MWPS-4SD11)
- *Manure Storages*, 1st Edition, 2001, 117 pages (MWPS-18-S2)
- *Swine Breeding and Gestation Facilities Handbook*, 1st edition, 2001, 103 pages (MWPS-43)
- *Dairy Modernization Planning Guide*, 1st edition, 2001, 70 pages (MWPS-DMPG)
- *Guía para la Planificación de la Modernización Lechera*, 1st edition, 2001, 70 pages (MWPS-DMPG-Spanish)
- *National Curriculum for Livestock and Poultry Environmental Stewardship*, CD-ROM, Web site and print, 2001, 838 pages (LPES-P, LPES-CD-1, LPES-CD-2)
- *National Center for Manure and Animal Waste Management White papers on Animal Agriculture and the Environment*, 2001 (WP-CD-1)
- *Outdoor Air Quality*, 2002, 96 pages (MWPS-18-S3)
- *Feeding and Management Practices to Maximize Profitability*, 2002, 54 pages (MWPS-4SD12)
- *Getting Established in Farming*, 2002, 82 pages (NCR-610E)
- *Income Tax Management for Farmers*, 2002, 32 pages (NCR-2)
- *The Farm Corporation*, 2002, 32 pages (NCR-11)
- *Four-State Professional Dairy Management Seminar*, 2002, 168 pages (MWPS-4SD13)
- *Conservation Tillage on CD*, 2003, CD-ROM that includes MWPS-45 plus other educational materials, (MWPS-45CD)
- *Four-State Professional Dairy Management Seminar*, 2003, 52 pages (MWPS-4SD14)
- *Four-State Forage Conference*, 2003, 64 pages (MWPS-4SD15)
- *Four State Applied Nutrition and Management Conference*, 2003, 182 pages (MWPS-4SD16)
- *Planning the Late Career, Retirement-Mode Years*, 2003, 78 pages (NCR-610F)
- *Planning and Managing your Farm Business Center*, 2003, 16 pages (NCFMEC-233)
- *Raising Dairy Replacements*, 2003. (MWPS-RDR)

MWPS
Objective, University-Based
Publications for Agriculture

