The Centennial of the Smith-Lever Act and Aquaculture Extension

By Michael A. Rice*

This event was to commemorate the centennial of the landmark Smith-Lever Act of 1914 signed into law by U.S. President Woodrow Wilson creating the Cooperative Extension Service as a partnership between the USDA and the Land Grant Universities nationwide. Extension Directors from Land Grant Universities across America along with other dignitaries were in attendance at these ceremonies in celebration of the successes of the last century and hopes for the next century for this program of practical education, outreach, and cooperative research primarily with extramural farm and conservation communities.

The creation of the Cooperative Extension Service set into place the “third pillar” of the Land Grant mission of extramural engagement in addition to the previously recognized mission activities of intramural teaching, scientific research and other scholarship. Thus the Land Grant Universities were expected to seek out cooperators and engage beyond the “ivory towered walls” of the academy in this new model for higher education in America. The development of aquaculture is an example of a vibrant sector within America’s farm economy that has been aided greatly through extension services enabled through the Smith-Lever legislation.

Seaman A. Knapp

Extension programming as part of the Land Grant University system began shortly after the 1862 Morrill Act that created the Land Grant Colleges with a primary focus on agricultural education. That provided federal government aid for the establishment of the Agricultural Experiment Stations at all of the Land Grant Colleges nationwide. The late extension movement at America’s Land Grant Colleges was given a boost because implicit within the Hatch Act of 1887 was an expectation that practical research at these newly created Agricultural Experiment Stations would be disseminated and that provided federal government aid for the establishment of the Agricultural Experiment Stations at all of the Land Grant Colleges nationwide.

The latent extension movement at America’s Land Grant Colleges was given a boost because implicit within the Hatch Act of 1887 was an expectation that practical research at these newly created Agricultural Experiment Stations would be disseminated and extension stations would be disseminated to the public. Thus the land grant universities were expected to disseminate the results of their research to the farmers and farm communities. That was the beginning of extension programming as an outreach to disseminate research to the public. The first extension stations were established in Kansas and Colorado in the 1880s and 1890s.

Seaman A. Knapp (Fig. 1), a graduate of Union College in New York, was appointed as superintendent of the Iowa School for the Blind, in Vinton and engaged in his passion for agricultural research on his own farm nearby. Within four years he had organized the Iowa Agricultural College (IAC, now Iowa State University) begun in 1859 was a primary focus on agricultural education. The Iowa Agricultural College (IAC, now Iowa State University) begun in 1859 was an early contributor to the Cooperative Extension movement in 1869 by dispatching faculty from the college to conduct courses for farmers at the invitation of government officials in Iowa’s Black Hawk County. That same year, an early proponent of extension programming, Seaman A. Knapp (Fig. 1), a graduate of Union College in New York, was appointed as superintendent of the Iowa School for the Blind, in Vinton and engaged in his passion for agricultural research on his own farm nearby. Within four years he had organized the Iowa Im-
Kenyon L. Butterfield

By the time of Knapp's death in 1911, the seeds of Cooperative Extension programming were sown, but the formal institutionalization of the program into the Land Grant colleges was largely taken up by Kenyon L. Butterfield (Fig. 2) who became the President of the Rhode Island College of Agriculture and Mechanical Arts (RIC&M, now the University of Rhode Island) in 1903. In an atmosphere of considerable political action by Rhode Island's farmers at that time, Butterfield in April, 1904 was able to secure a USD$4,000 appropriation from the Rhode Island General Assembly to institute an extension department at the college and hire dedicated extension faculty to cooperate with the experiment station researchers and work with Rhode Island's farmers.

The administrative organization of RIC&M worked so well that only two years later in 1906, Butterfield was hired as president of the Massachusetts Agricultural College in Amherst (MAC, now University of Massachusetts) to replicate the work that he had done in Rhode Island to set up the college's Extension Department. It was while serving as president of MAC that Butterfield drafted the Agricultural Extension Act introduced by Senators M. Holte Smith of Georgia and Ashbury F. Lever of South Carolina and signed into law by President Wilson on May 8, 1914.

Athalsthan F. Spilhaus

For America's aquaculture community, particularly those engaged in mariculture, a major part of the extension programming is carried out by extension professionals associated with the nation's Sea Grant Colleges. The National Sea Grant Program and College Act of 1966 was initially conceived by Athelstan F. Spilhaus (Fig. 3), an oceanographer and geophysicist at Woods Hole Oceanographic Institution and the University of Minnesota who introduced the idea at the 1963 annual meeting of the American Fisheries Society. In his September 4th, 1964 essay “Man in the Sea” in Siwom, Spilhaus explicitly patterned the Sea Grant Program after the successful Land Grant Colleges and the Smith-Lever Act that he described as “one of the best investments this nation ever made. The same kind of imagination and foresight should be applied to the exploration of the sea.”

The Sea Grant Act

The first hearings in support of the passage of the Sea Grant Act were held on May 2nd, 1966 by its primary sponsor, Senator Claiborne de B. Pell, the then junior senator from Rhode Island and Sea Grant Act extension professionals set the pattern for subsequent RAC extension networking and programming efforts, which is expected to continue well into the future.

The relationship between the government and the Academia

For America's aquaculture community, much as Knapp and all the others is the assurance that the best science and scholarship is brought to bear on the problems of mollusks, shellfishery management and aquaculture in international development, among many other topics. Michael Rice is a Professor of Fisheries, Animal and Veterinary Science at the University of Rhode Island. He has published in the areas of physiological ecology of mollusks, shellfishery management and aquaculture in international development, among many other topics.

In 1964 Athelstan Spilhaus patterned the Sea Grant Program after the successful Land Grant Colleges and the Smith-Lever Act. A good opportunity to remember the accomplishments of Extension over the last century and to reflect upon the elements that make extension programming effective. The foresight of Knapp, Butterfield and Spilhaus in creating the extension services has greatly benefited America's aquaculture industry largely due to its tight relationship with the research and instructional capabilities of the Land Grant and Sea Grant colleges.

University-based extension programming is also advantageous in building trust and cooperation between and among aquaculture industry members, researchers and extension professionals, much as Knapp initially conceived. Although there is governmental funding of Extension programming at American universities, there is frequently an arms-length relationship between the universities and governmental regulatory authorities responsible for industry oversight.

Elsewhere in the world, extension programs have often developed differently. For instance, in some other countries, extension services may be based upon programming by non-governmental organizations that may have the arms-length between them and governmental regulators, but they may not have such a tight relationship with the research community and most up to date and relevant scientific information. Conversely in some other places, extension professionals may be based directly in national, provincial governmental offices and have ties to excellent research from national agricultural or marine science laboratories, but their efforts may be hampered by the too-close relationship with important regulatory authorities often in their same agency.

The ingenuity of the Extension system built by Knapp, Butterfield, Spilhaus and all the others is the assurance that the best science and scholarship is brought to bear on the most difficult problems facing industry, while simultaneously building cooperation and trust among all the stakeholders.