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Farm and Home Bureau Cooperatives:
Cultural and Social Formation at the Local Level
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First let me thank Debra Reid for graciously agreeing to read my paper, as well as Richard Hoyle, Catherine Glover, and András Vári for allowing me to present, although I could not be here. Debra is only the messenger, so don't throw the rotten tomatoes at her.

The Farm Bureau was a voluntary organization that supporters first formed at the county level in the 1910s to demonstrate new scientific techniques. County bureaus rapidly banded together to form state federations and a national organization, the American Farm Bureau Federation. By the 1920s it had membership in most states, but was strongest in the Midwest. The Farm Bureau was emblematic of the new organizational society that was coming to define modern America. As described by the “organizational synthesis” school of history, broad trends in the organization of science and technology, the professions, and business were sweeping through society in the early 20th century, all trends that the Farm Bureau promoted.¹ The multi-tiered Farm Bureau collaborated with a network of experts from various institutions: local, state and federal government agencies, publicly-funded universities and agricultural experiment stations, as well as other organizations. This collaboration exemplified a unique style of political economy that emerged in the United States during the first decades of the twentieth century that some scholars term “associationalism.” Via associationalism, government, private and quasi-public institutions developed cooperating networks that performed de facto regulatory, welfare, and public planning functions. The associationalist vision was essentially a non-statist one—it represented a sort of middle-ground between left and right. The state assumed a more active role

without fully intervening in the market or society while at the same time shifting away from the laissez-faire capitalism that had previously dominated mainstream America.²

This paper is part of a larger work that examines the Farm Bureau at the local level and considers how trends in functional organization, science, and professionalization impacted the quotidian. Elsewhere I look at how men, women and children mediated change by participating in the Farm Bureau's broad range of cultural, social, political, and economic activities.³ Today, I focus on local aspects of the cooperative movement, which grew out of the Bureau's scientific activities. I also describe the counterorganization discourse surrounding collective action as well as some of the gendered aspects of cooperation. Many of the illustrative samples I provide are based on developments in Illinois, where membership consisted of white landowners and tenants.

In the 1910s and 1920s, the Farm Bureau revived the cooperative movement in America, which had first surged in the late 19th century as a radical alternative to business organization, but then rapidly declined. Now, supporters turned to cooperative marketing as a means of accommodating to a modernizing economy. Economic cooperation, backed by science, promised stability in an urbanizing society; it seemed a way to gain some measure of control over market processes and preserve what was called "the rural way of life," which some felt was slipping away. Relying on managerial strategies, members formed cooperatives both grand and small. Taking their lessons from modern business, members hoped to develop effective mechanisms of controlling costs and raising their profits. Cooperative formation occurred at a time when there was a shift toward managerial planning in society and government. The U.S. Department of Agriculture supported cooperative marketing by fostering subject matter expertise. And government showed more tolerance of economic collaboration when in 1922 Congress passed the Capper-Volstead Act, which exempted agricultural cooperatives from antitrust prosecution.⁴

Ralph Allen, an Illinois farmer and long-time county President of the Tazewell County Farm Bureau, typified a local actor who would have mediated these broad trends. Allen articulated the merits of functional organization and cooperation, in part, through drawings and writings that explained the counterorganization discourse so prevalent in the Farm Bureau.

[Slide 1] One illustration depicted farmers climbing up a ladder of success to attain “great heights” through organization. [Slide 2] In another sketch, titled “Tazewell-Ike Goes to Town,” Allen urged farmers to sell livestock through farmer-owned marketing cooperatives, which were aimed at gaining fair price levels, quality service, and collective rather than individual profits.⁵

Counterorganization rhetoric was a mobilizing discourse, rallying farmers to support the Farm Bureau and its cooperatives. By forming their own sophisticated economic organizations and drawing on modern methods of scientific management and public relations, farmers could meet organized business and labor on an equal footing. Cooperation would serve as a countervailing force against other interests.⁶ [Slide 3] Joining “the Parade” of organized industries would lead to “Prosperity Park,” one Farm Bureau cartoon promised.

Even as they promoted farm life as unique and worth protecting, Farm Bureau members sought to accommodate modernization.⁷ Rather than dismantling industrial power, as earlier agrarian groups had advocated, Farm Bureau members admired and sought to emulate the organized style of power that labor and business had acquired by organizing the American Federation of Labor and the National Association of Manufacturers. Iowa leader Ruth Buxton Sayre told a meeting of farm women that “Labor is organized, industry is organized, and farmers must organize.”⁸ A Farm Bureau county newspaper warned, “Can farmers and homemakers afford to be less well-organized than labor and capital?”⁹ Another member said: “Modern

business is done through organization and farmers must organize to protect their interest and be in a position to work with other organized groups....The American standard of living justifies agriculture being on an equal basis with labor and other industries and our organization is working toward that end.”¹⁰ Of course agricultural groups had organized before, but now functional organization was premised in part on managerial and administrative impulses and drew on the guiding hand of science for legitimacy; this fit well with the political economy of associationalism.

While counterorganization sought to boost agriculture, it also conveyed powerful sentiments of injustice and insecurity, and was deeply self-referential. Members exhibited a distinctive self-consciousness—even a sense of insecurity and inferiority—with their slogans calling for “Equality for Agriculture.” At this time, romanticism about rural life and the self-sufficient farmer was eroding. In popular culture, farmers were commonly deprecated as “hicks” and “rubes.” Reformers pathologized rural life as morally, economically, physically, and socially bankrupt. Popular novels and poetry of the period by Edgar Lee Masters, Sherwood Anderson, and Hamlin Garland exposed the underbelly of small town and rural life.¹¹ Farm Bureau members on some level accepted this indictment of rural life, pointing to the lag in the farmer’s “standard of living” as compared to others’. To legitimize collective action, members drew upon this notion of “standard of living,” a rural social science concept that referenced vague cultural and economic measurements.

Yet, as critical as Farm Bureau members were of urbanites, laborers, and businessmen, the solution was to become more like them—a beat them at their own game mentality. They sought to emulate corporate men and their style of organization down to the details, with men dressing in business suits and ties and women in their Sunday best when attending local meetings

where they meticulously followed Robert's Rules of Order.¹² As Ralph Allen said, they were prepared to "Go to Town,"—literally, to leave the insular countryside to meet up with likeminded progressives in town and city centers, and metaphorically, to do whatever they had to do to succeed.

Farm Bureaus first developed around scientific educational activities, and it was out of these activities that the affiliated cooperatives developed. [Slide 4] As part of their systematized annual "program of work," county Farm Bureaus sponsored educational projects for members who worked with university-trained specialists, called county agents, or advisors. The agents demonstrated new agricultural and home economics techniques developed at the publicly-funded agricultural colleges and experiment stations. In 1914, Congress had passed the Federal Smith-Lever Act, which set up a national educational network that came to be known as the Cooperative Extension Services, to support county agent work. The Extension Services network was jointly administered through state and federal governments, state agricultural colleges, and at first, private organizations. The Farm Bureaus became a structural base through which the Extension Services worked, making the two organizations seem as one. Later, the USDA stipulated formal separation between the Extension Agents and the Farm Bureau to stem criticism that the close relationship had given Bureau members an unfair advantage. Extension professionals described their work as a way of "Bringing the University to the People" and of adhering to the values of "self-help" and "local leadership" that rural social scientists said were so important to democracy.¹³ One contemporary put a different spin on the work when he compared the county agent to the "efficiency expert in business."¹⁴

Soil science and crop improvement dominated the early work of the Farm Bureaus.¹⁵ This became the basis for some of the first cooperative activities that the county Bureaus

engaged in, including cooperative purchasing of “pure” seeds and fertilizer. Working with the county agents, farmers planted experimental plots of recommended crops, tested soils for nutritional content, and applied newly recommended fertilizers. For example, farmers began to grow Alfalfa instead of Timothy Hay to improve soils, following the advice of “Mr. Alfalfa,” a Professor of Agronomy at the University of Wisconsin.¹⁶ Alfalfa, however, grew poorly in acidic soils, and crushed limestone was recommended to neutralize acidic soil. Crushed limestone could be difficult to acquire in large quantities. Thus members worked, as one put it, to “spread the truth of limestone.”¹⁷ They cooperatively purchased railroad carloads, sometimes several hundred a year, of limestone as well as phosphate and potash, other recommended fertilizers. Railroad facilities could not always accommodate such large shipments and it was difficult to transport the fertilizer from rail stations to the fields, so members cooperatively purchased crushers and sold the pulverized limestone to members.¹⁸ Bureaus also negotiated to have companies supply and deliver limestone to members.

Farmers might be convinced to participate in cooperative activities by seeing for themselves the efficacy of a recommended scientific technique: Henry H. Parke, an Illinois county Farm Bureau leader “caught” what he called the “Alfalfa bug” and planted several experimental acres and applied the recommended fertilizer. Parke claimed that the experiment succeeded as “an object lesson” for other farmers because his “was the only green hay field for miles around” during a drought year.¹⁹

[Slide 5] As the county Farm Bureaus grew, they began to organize supply and purchasing cooperatives on a sophisticated and broad scale. At first products might be sold through the Bureau, but soon county bureaus sponsored member-owned and member-financed cooperatives. While technically separate for legal reasons, the cooperatives were closely

associated with the Bureau. Members sold subscriptions to the cooperatives at local Farm Bureau meetings and canvassed rural neighborhoods using sophisticated public relations techniques. As a selling point, proponents argued that “Cooperation Pays” because members would accrue more than enough savings through patronage refunds to pay for their Farm Bureau membership dues.²⁰

In Illinois, county co-ops specializing in particular commodities developed a template for combining under the umbrella of the state farm bureau federation, known as the Illinois Agricultural Association, or the IAA. This allowed them to pool resources and purchase in bulk, while drawing legal and technical help from the experts that the IAA employed.

For example, the Knox County Farm Bureau, in Illinois, was among the first to form an oil cooperative. Seeking power in numbers, multiple oil co-ops joined with the Knox county Farm Bureau and formed a statewide cooperative called the Illinois Farm Supply Company, or FS. Under a unique legal arrangement, member cooperatives owned FS, but the state federation held stock. FS diversified to supply a range of petroleum products and was phenomenally successful, expanding regionally and nationally in later years.²¹ This became the organizing model for other county cooperatives, which supplied products ranging from automobile insurance to worm oil. The IAA assumed many administrative functions, using its vast resources to advise counties on how to structure, promote, and advertise cooperatives.

County Farm Bureaus formed other cooperatives pivoting on developments in medical, public health, and veterinary science. They established cooperatives for purchasing serum to inoculate against hog cholera. A diagnosis of hog cholera was economically devastating, as it usually meant a farmer’s entire herd had to be destroyed. Even though animal scientists were still working out the etiology of hog cholera and how to prevent it from spreading, inoculation with virus serum was viewed as an effective preventative.²²

By 1924, county cooperatives had banded together to form the Illinois Farm Bureau Serum Association. The Serum Association bought hog cholera virus serum and inoculation equipment in volume and distributed these pharmaceutical supplies to members at below market prices. The Serum Association first acted as a broker and also paid patronage dividends. The local serum cooperative provided farmers with ready supplies of quality serum, difficult to obtain elsewhere, and provided the required refrigeration, which many farmers still lacked. The Association also monitored the quality of serum and live virus, which could be dangerous if mishandled or contaminated. By doing the inoculating themselves, farmers saved the cost of hiring veterinarians. Farmer vaccination became a contentious issue in the 1920s as veterinarians battled farmers for the right to obtain full control over preventative, diagnostic, and treatment procedures. The political arm of the Illinois state farm bureau federation successfully fended off legislation that would have prevented farmers from administering hog vaccinations.²³

In the 1910s, some county Farm Bureaus began to work with specialists in the new field of agricultural economics to develop a system for the collection of empirical data on farmers' inventories, income, and expenses—those of landlords as well as tenants. Specialists and farmers, working one-on-one, pioneered and standardized methods of recordkeeping—that is, “farm accounting.” In 1924, the members of several county Farm Bureaus who had been involved in recordkeeping projects initiated the Farm Bureau Farm Management Services, a cooperative service organization funded through farmer subscription. The cooperative worked with agricultural economists from the University of Illinois to promote the system on a broader scale. It subsidized the farm management drive, handing out farm account books, and hired a Professor of Farm Management Extension from the University of Illinois to help members prepare their record books.²⁴

Consistent with the shift towards empirical scientific study in other professional fields, recordkeeping members provided a variety of data to agricultural economists, although it took years to develop anything that approximated a standard methodology for measuring relationships between farm practices and profits.²⁵ Members of the cooperative offered their enterprises as a laboratory, providing a record of experience and contributing to the body of knowledge underpinning the field of agricultural economics. Thus, members were deeply involved in the process of research; their cooperation was important for data analysis as well as for demonstrating the practical utility of recordkeeping.²⁶

While most of the activities just described were directed toward men, women, too, participated in cooperative action. Women associated with Farm Bureaus, or in Illinois with affiliated Home Bureaus, confronted a hardening gender ideology, one that positioned farm men as producers, farm women as consumers, and differentiated agricultural from domestic skills.²⁷ This challenged some family farms where women had more of an economic partnership. Poultry cooperatives were one site where women blurred the notions of separate spheres. Some Bureau women affirmed that specialized poultry production was still appropriate for females, as it had been traditionally. They sought to develop the expertise that might transform the traditional household flock into a more profitable business.²⁸ At the same time that women sought to retain a place in agricultural production through poultry, female home economists battled with male professors to control the field of poultry science.²⁹

Poultry cooperatives were grounded in the educational projects that Farm and Home Bureaus typically sponsored, all emphasizing science, management and efficiency. At first, Bureaus promoted techniques such as “culling,” which involved separating out the better egg layers from the unproductive ones. While simple, culling was touted as “scientific.”³⁰ Projects

became more complex as poultry science expanded, incorporating breeding techniques influenced by Mendelian genetics, as well as nutrition and sanitation science.³¹ [Slide 6]

Women's participation was promoted through the new media of film: The American Farm Bureau Federation film "Leave it to Ma," portrayed "Ma" showing "Pa" how she had made "her flock pay" by using new methods. The 1920 USDA film "Layer and Liars" depicted a home extension agent demonstrating the culling technique. While probably not as entertaining as Charlie Chaplain, the showings no doubt served, at least, as an excuse to socialize.³²

In the 1920s, poultry production became increasingly commercialized and industrialized and states passed new grading, packing, and inspection laws for marketed eggs.³³ Some Farm Bureau women struggled to keep pace with these rapid economic changes through collective action to improve marketing conditions.

The Illinois Home Bureau (the women's auxiliary to the Farm Bureau) and university specialists attended to the specific problems that female producers faced. The University of Illinois directed farm and home extension agents to survey farmers and find out how farm women might be helped to get better prices for their eggs, chickens, and butter. The state federation in Illinois, concerned with the poor prices that women seemed to be getting for their poultry production, promoted women's local marketing associations and trained women, as well as men, in operating poultry cooperatives. Female producers sold eggs through local cooperatives that Bureaus formed. Women gathered together with men to study the poultry and the egg marketing plan sponsored by the state Farm Bureau federation. Women also worked as graders and packers at the local marketing associations and as government egg inspectors.³⁴

In 1923, the American Farm Bureau Federation held a national conference to develop plans for cooperative egg marketing and asked that at least one female delegate be sent from

each state, stating that the “co-operative marketing of eggs will be of primary interest to the farm women of America.” [Slide 7] An article printed in the national Farm Bureau *Newsletter* told women that they had “Something to Cackle About,” for they were “to have their own great national co-operative enterprise.” Mrs. W.C. Martin of Texas was named head of the planning committee that was to organize affiliated state committees, initiate local promotional campaigns, and develop ways to merchandise “eggs in an intelligent and orderly fashion.” The conference resulted in a standard plan for cooperative marketing, which included intentions to federate local cooperatives and coordinate laws across states that regulated the marketing, standardizing, and the grading of eggs.³⁵

The conference is particularly interesting because of the forceful way that women tried to claim a central role in industry developments. Their arguments certainly did not draw on a consistent gender ideology. One county Bureau newspaper reported that conference participants had resolved that: “Women of each state [should] be given a dominant part because of our recognition of the fact that the marketing of eggs has heretofore been left, in a majority of cases, to the control of the women members of the farm families, and because the proceeds from the sale of eggs have been used in direct home expenditures by such women members [who] are directly concerned with the comfort and standard of living in such homes.” Other discussion privileged domesticity less, and business more: a Bureau county newspaper reported that “Farm women at the conference expressed confidence that through the standard type of collective selling they can treble their profits in the poultry business and at the same time sell carefully graded, standardized, guaranteed eggs at a saving of from a nickel to a dime per dozen to the consumer.”³⁶

However, women apparently found it difficult to press their claims much further at the

national level. While Mrs. Martin, the Texan, presided as chairwoman of the National Egg Marketing Committee that resulted from the conference, only one other Farm Bureau woman—one from Ohio—served on the committee. The other members were male representatives of the Farm Bureaus and of regional poultry associations.³⁷

For a while, it seemed women were partially successful in affirming their role as producing members of the agricultural occupation. However, as poultry and egg producing became more industrialized and concentrated in certain regions of the United States, they began to lose out. Over the years, the gendered economy of family farm poultry production and cooperatives was transformed by the rise of agribusiness.

The Farm Bureau was involved in other cooperatives, but my time here is brief. Perhaps I have given short shrift to institutional detail, but I wanted to give a sense of the local here, to bring to life those overarching trends of science, organization, and professionalization that were changing the countryside in the '10s and '20s. My goal is to mesh top-down *and* bottom-up perspectives.³⁸ Certainly, cooperatives were an expression of the scientific and managerial outlook that was gaining momentum across society. Still, agricultural counterorganization had a distinctive cast to it: while farm people used new methods to ease the transition to a modernizing economy, they still meant to hold onto farming as a particular way of life. While Farm Bureau men and women might assume the trappings of the modern businessman, they were still farm people at heart—in their minds, this made them uniquely different from other Americans.

¹ “The Emerging Organizational Synthesis in Modern American History,” *The Business History Review* XLIV, 3 (Autumn 1970), 279-90. “Technology, Political Economy, and Professionalization: Central Themes of the Organizational Synthesis,” *The Business History Review*, 57 (Winter 1983), 471-93; Louis Galambos, “Recasting the Organizational Synthesis: Structure and Process in the Twentieth and Twenty-First Centuries,” *Business History Review* 79 (2005), 1-38; Samuel Hays, “The New Organizational Society,” in Jerry Israel, *Building the Organizational Society* (New York: The Free Press, 1972), 1-15.

² Margaret Rossiter, “The Organization of the Agricultural Sciences” in Alexandra Oleson and John Voss, eds., *The Organization of Knowledge in Modern America, 1860-1920* (Baltimore: Johns Hopkins, 1979), 216-217, 213, 239-40; Ellis W. Hawley, “Herbert Hoover, the Commerce Secretariat, and the Vision of an Associative State,” *Journal of American History* 61 (June 1974): 116-40, and *The Great War and the Search for a Modern Order: A History of the American People and their Institutions, 1917-33* (New York: St. Martin's Press, 1979), 94-98; David E. Hamilton, *From New Day to New Deal: American Farm Policy From Hoover to Roosevelt* (Univ. of North Carolina, 1991), 1-7; Louis Galambos, ed., *The New American State* (Baltimore: Johns Hopkins Univ. Press, 1987), 6-20.

³ Nancy Berlage, “Organizing the Farm Bureau: Family, Community and Professionals, 1914-1928,” *Agricultural History* 75 (4) (2001): 438-69.

⁴ Hamilton, *From New Day to New Deal*, pp. 38-4. Other legislation included the Grain Futures Act (designed to protect cooperatives from discrimination by boards of trade and chambers of commerce); the Agricultural Credits Act of 1923, and the Packers and Stockyards Act of 1921 (geared toward restraining major packers from monopolistic practices). Theodore Saloutos and John D. Hicks, *Agricultural Discontent in the Middle West* (Madison: Univ. of Wisconsin Press, 1951), 59-66, 288, remains an informative account of the politics behind the movement.

⁵ Allen Family Papers, University of Illinois Manuscript Division [hereafter UIL].

⁶ David Hamilton, *From New Day to New Deal American Farm Policy from Hoover to Roosevelt* (Chapel Hill: Univ. of North Carolina Press, 1991), 4-5; Hamilton defines “counterorganization” slightly differently, as a approach that focused on the new administrative capacities of the federal government represented by direct subsidies, credits, or direct government involvement, market controls or other beneficial legislation. He juxtaposes this to the “associationalist,” approach with its values of science and organization. He describes associationalism as a “corporatist alternative” to formal and regulatory systems, which used the “nation’s think tanks, trade associations, professionals societies, foundations and social-welfare federations.” “The nation’s managerial, technocratic, and scientific elites sought to create the associative sector and through it supply the machinery necessary for social peace and economic progress. In this way, they hoped to obviate the need for a powerful central state and to preserve the traditions of participatory government....In place of classical liberalism’s distinct public and private sphere, the proponents of corporatist designs called for fusing private and public power so that governing institutions might act as coordinators and partners rather than as regulators and administrators.” I contend that in the Farm Bureau’s counterorganization discourse, these various strands come together.

⁷ My qualitative analysis is consistent with the findings presented in Louis Galambos, “The Agrarian Image of the Large Corporation, 1879-1920,” *Journal of Economic History* 28 (Sept. 1968): 341-362.

⁸ “Mrs. Raymond Sayre Gives Talk to Farm Bureau Women,” clipping from *The Times-Republican*, Corydon, IA, Apr. 10, 1931, Box 25, in untitled scrapbook, c. 1925-c. 1960, Ruth Buxton Sayre Papers, MS 19, Iowa State Historical Society, Iowa City, Iowa [hereafter Sayre Papers].

⁹ “Reasons for Joining County Home Bureaus,” *Onondaga County [New York] Farm Bureau News*, Jan. 1920.

¹⁰ Anonymous quote from “Reasons Why I Belong to the Farm Bureau,” *McLean County Farm Bureau News*, Nov. 1928, p. 1; for instances of this rhetoric see “The Impending Agricultural Crisis,” June 1924, p. 5 and

“Farmers Must Organize,” Apr. 1, 1926, p. 2, both in *Livingston County Farm Bureau News*; James P. Howard Notes, James R. Howard Papers, Box 1, Folder 1, Iowa State University, Ames, Iowa [hereafter Howard Papers]; “Frank Bill Recalls Reporting Key Meeting of I.A.A. in 1919,” *The Daily Pantagraph*, Sept. 1961, p. 7; Edna Scott Sewell, “When Dreams Come True,” draft of speech, n.d., Box 16, Folder “Associated Women,” Sayre Papers.

¹¹ Edgar Lee Masters, published *Spoon River Anthology* in 1914, Sherwood Anderson published *Winesburg, Ohio* in 1919, and Hamlin Garland published *Son of the Middle Border* in 1917.

¹² See “Cartoon,” *Macon County Farmers’ Outlook*, Feb. 1928, p. 1. With the captions, “A Good Motto,” and “The Farm Bureau in 1928 will be as good as we make it,” the cartoon depicts members in suits and ties sitting around a table. Photos also show men and women dressed up to attend demonstrations and meetings.

¹³ Wayne D. Rasmussen, *Taking the University to the People: Seventy-five Years of Cooperative Extension* (Ames: Iowa State University Press, 1989).

¹⁴ Quote is in a series of reader letters and replies published in the *Rural New Yorker*: “The Strength and Weakness of the Farm Bureau,” June 17, 1916, p. 879; “Cortland County Farm Bureau,” June 1916, p. 1919; “Reply,” July 20, 1916, p. 1026; and Aug. 19, 1916, p. 1125; Sept. 2, p. 1160; Sept. 23, p. 1230; Nov. 11, pp. 1416 and 1424, all 1916.

¹⁵ For background on soil science, see Peter MacDonald, ed., *The Literature of Soil Science* (Ithaca: Cornell Univ. Press 1994), and Margaret Rossiter, *The Emergence of Agricultural Science: Justus Liebig and the Americans, 1840-1880* (New Haven: Yale Univ. Press, 1975). The cooperative purchase of quality seed and seed marketing were among Utah’s first major projects, see Allen V. Olsen, *As Farmers Go Forward: History of the Utah Farm Bureau Federation* (n.p.: Utah Farm Bureau Federation, 1975), 13-18; fertilizer and seed purchase were first among the cooperative projects of the Indiana State Farm Bureau, beginning in 1920, Harvey I. Hull, *Built of Men: The Story of Indiana Cooperatives* (New York: Harper & Brothers, 1952), 42-45. Lloyd R. Simons reported that “selection of seed corn and testing of seeds has been standard county agent projects ever since the work started,” in “Status and Results of County-Agent Work, Northern and Western States, 1918,” *USDA Circular* no. 37 (Washington, D.C.: GPO, May 15, 1919), 9, for general work in agronomy and soils and fertilizer. On fertilizer and seed purchase activities of Farm Bureaus in Washington, Fred R. Yoder, “Some Better Things in Farm Life in Washington,” *Bulletin* no. 195 (State College of Washington, Agricultural Experiment Station, Pullman, Washington, Sept. 1925).

¹⁶ For similar work in Wisconsin where “Mr. Alfalfa,” (R.A. Moore) led a popular movement to increase alfalfa plantings, see W.H. Glover, *Farm and College*, pp. 207-208.

¹⁷ “Interview With Charles B. Shuman, AFBF,” Reel 3, in Charles B. Shuman Papers, Tape Recorded Interview, Reel 3, 1974, UIL.

¹⁸ “Rock Phosphate Committee Report,” *Report of the Fifth Annual Meeting of the Illinois Agricultural Association* (Chicago: Office of the Secretary, I.A.A., 1920), Illinois Agricultural Association Collection, IAA Offices, Bloomington, IL; Minutes of Board of Directors of DeKalb County Soil Improvement Assoc. June 9, 1925; DeKalb County Farm Bureau Records, DeKalb, Illinois; J. R. Bent, “Report of Limestone-Phosphate Dept.,” *Annual Report of the Illinois Agricultural Association: 1928*, (n.p.: I.A.A., 1929), I.A.A. Collection; Minutes, Cherokee County Farm Bureau, Iowa State University Manuscript Division [hereafter ISU]; Francis Bybee, “Lee County Farm Bureau Organized in 1915,” in Lee County Farm Bureau Records, Northern Illinois University Manuscript Division [hereafter NIU]; L. A. Abbott, Leo Knox, Art James, Joe Slaymaker, “Throughout These Years...1916-67,” *Whiteside County Farm Bureau Fiftieth Anniversary*, Whiteside County Farm Bureau Records, NIU; “Golden Anniversary Banquet Johnson County Extension Service,” program, Johnson County Farm Bureau Records, UIA.

¹⁹ “Autobiography of Henry Hall Parke,” C. A. Atwood, “DeKalb County Agriculture Ten Years Ago--Before and Since,” DeKalb County Farm Bureau Records. Annual Narrative Reports, Whiteside County Farm Bureau, 1928, under “Soil Testing,” Whiteside County Farm Bureau Records, Private Collection. On the development of the idea that fertilizer had to be tested, and not just applied, as part of the scientific method, see Rossiter, *Justus Liebig*, p. 45.

²⁰ “Cooperation Pays,” *McLean County [Illinois] Farm Bureau News*, Feb. 1929, p. 9.

²¹ “Bureau Members Started Service Company To Cut Costs of Needed Farm Supplies,” *Champaign-Urbana Courier*, Jan. 23, 1962; Lacey, *Farm Bureau in Illinois*, pp. 125-28, and on inferior oil, pp. 291-301; “Bureau Members Started Service Companies to Cut Costs,” 50 Years in Review edition of *Champaign-Urbana Courier*, Jan. 23, 1962. On meetings to get stock subscriptions see “L. R. Merchant Sends Words of Encouragement to Member,” and “Knox County Oil Company Reports 11 Years of Progress,” 1938 Anniversary Edition of *Knox County [Illinois] Farm Bureau News*, in Knox County Farm Bureau Records, NIU; on LP and preferred stock dividends see “The Lee County Service Company,” *Lee County Farm Bureau History, 1915-1965*, in Lee County Farm Bureau Records, NIU.

²² For background, Ole H. V. Stalheim, *The Winning of Animal Health: 100 Years of Veterinary Medicine* (Ames: Iowa State Univ. Press, 1994).

²³ On the serum association, see “All Co-ops in Jersey County Linked to Bureaus,” *I.A.A. Record*, 1923; “Audit Reports, Grundy County Serum Association,” Grundy County Farm Bureau Records, NIU; “Farm Bureau Will Handle Clear Concentrated Serum,” *McLean County [Illinois] Farm Bureau News*, Apr. 1928, p. 1; “Farm Bureau Will Handle Serum,” *Livingston County [Illinois] Farm Bureau News*, Mar. 1924, p. 4; “Hog Cholera Vaccinating Schools,” *Livingston County Farm [Illinois] Bureau News*, May 1924, p. 1; “Minutes of Meetings of Executive Committee,” Champaign County Farm Bureau Records, Private Collection; “Report of Livestock Marketing Dept.,” *Annual Report of the Illinois Agricultural Association: 1924*, I.A.A., Collection; “Serum Purchasing Committee Makes Recommendations,” *I.A.A. Record*, Apr. 1915, p. 4; “Vaccinating Hogs,” *Livingston County Farm Bureau News*, Apr. 1928, p. 1; “Serum Dividend Exceeds \$900,” *Whiteside County Farm Bureau News*, Feb. 1938, Whiteside County Farm Bureau Records, Private Collection.

²⁴ Illinois Farm Bureau Farm Management Association, *Farm Bureau Farm Management: The First 50 Years* (Bloomington, IL: FBFMA, 1974); Dan Leifel and Norma Maney, *The Diamond Harvest: A History of the Illinois Farm Bureau* (Bloomington, IL: Illinois Agricultural Association, 1990), 32.

²⁵ Julius Wayne Reitz, “Measures of Total Farm Efficiency for the Farm Management Investigator (MS Thesis, University of Illinois, 1935).

²⁶ Participants tried to measure factors such as income, ownership status, inventory, crop and capital investments, labor input, and improvement practices, see Martin L. Mosher, “Complete History through 1912 - 1948 of Record Work and Beginning of Farm Bureau Farm Management,” p. 16, in Henry C. M. Case Papers, 1918 - 1965, Box 2, Folder “Farm Management History of Illinois Work,” UIL.

²⁷ Deborah Fink, *Agrarian Women, 1880-1940* (Chapel Hill: Univ. of North Carolina, 1992); Deborah Fink, *Open Country, Iowa: Rural Women, Tradition and Change, 1880-1940* (Albany, NY: State Univ. of New York Press, 1986).

²⁸ Bureau publications constantly refer to demonstrations for women: “Poultry Demonstrations in Suffolk County a Success,” *Suffolk County [New York] Farm Bureau News*, Nov. 1917, p. 1; “Farm Poultry Demonstration for Suffolk County,” *Suffolk County [New York] Farm Bureau News*, July 1918, p. 3; for examples of meetings and demonstrations at homes see “Camp Point,” *Adams County [Illinois] Home Bureau Bulletin*, Feb. 1929, p. 3. “Photo, Unit Meeting on Chickens, 1918”; local records claim that as many as 500 women participated in the Farm Bureau’s 1921 poultry projects, in “Clay County Farm Bureau Women,” *Iowa Farm Bureau Women*, 1965, Ms 18, Iowa State Historical Society; “Committee Lists by Area, Agricultural Adjustment Conference,” 1928, Herbert W. Mumford Papers, 1919-1938, RS 8/1/22, Box 1, Folder “Agricultural Adjustment Conferences 1928,” UIL; “The Farm Woman Tells of Her Own Conditions,” Sept. 1919, p. 77; E. E. Golden, “Our Agricultural Heritage: A History of DeKalb County Farm Bureau,” ch. 19, DeKalb County Farm Bureau; “County Poultry Committee Schedules Four Poultry Schools for November,” *Suffolk County [New York] Farm and Home Bureau News*, Oct. 1922, p. 9; Ruth Buxton Sayre, “Report of the Woman of the Farm Bureau of Virginia Township for the Year 1922,” Sayre Papers.

²⁹ Nancy Berlage, “The Establishment of an Applied Social Science: Home Economists, Science and Reform at Cornell University, 1870-1930,” in Helene Silverberg, ed., *Gender and American Social Science: The*

Formative Years (Princeton University Press, 1988).

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