

# Development and Evolution of Agriculturally Related Merit Badges Offered by the Boy Scouts of America

Robert Terry, Jr.

Oklahoma State University

*Badges of Merit have been a primary component of Scouting programs since the inception of the movement more than 100 years ago. The diverse range of subjects for merit badges has included 32 programs relating directly to agriculture. The focus of this historical research was to identify when agriculturally related merit badges were introduced, describe changes made to these programs since their introduction, and to determine their popularity with Scouts. Records reveal that merit badges on a variety of agricultural subjects such as beef cattle production, rabbit raising, gardening, landscaping, agribusiness, and agricultural mechanics have been offered by Boy Scouts of America (BSA) since before the founding of the National FFA Organization or passage of the Smith-Hughes Act. Forestry and Soil and Water Management have been the two most popular agriculturally related merit badges, while Animal Science and Plant Science are among the least popular of all merit badges offered currently. It is recommended that agricultural educators support these merit badge programs and help facilitate their offering to BSA members. This study provides the foundation for further investigation into the promotion of agricultural literacy through BSA and other organizations not normally associated with agricultural education.*

Keywords: agricultural education; agricultural literacy; agricultural youth organizations

“Besides the campfire and the uniform, nothing is more emblematic of the Boy Scout experience in the public mind than merit badges” (Wills, 2009, p. 162). Less well known, however, is the fact that the merit badge program offered by the Boy Scouts of America (BSA) has delivered agricultural knowledge, skills and career awareness to millions of youth for the last 100 years.

The issuing of award badges to Scouts who gain proficiency in particular areas of interest has been a part of the Scouting experience since the very beginning of the movement more than 100 years ago (Baden-Powell, 2004). The preface of *Scouting for Boys*, written in 1908 by Lord Robert Baden-Powell, an Englishman who is recognized as the founder of the worldwide Scouting movement, included a description of the four components of the Scouting program. The second of those components was, “Handicrafts or hobbies which may help a boy to make his way in life, for which we give ‘Proficiency’ badges” (Baden-Powell, 2004, p. 5). Two years later, the American version of the Scouting movement was incorporated. The original edition of *The Official Handbook for*

*Boys* (BSA, 2007) was published in 1911 to standardize the program. In addressing merit badges, known at that time as Badges of Merit, the manual stated, “These badges are intended to stimulate the boy’s interest in the life about him and are given for general knowledge” (p. 23). That purpose has changed little since those early days. The 12<sup>th</sup> edition of the *Boy Scout Handbook* (BSA, 2009a) stated, “A merit badge is an invitation to explore an exciting subject” (p. 185).

It continued, “some merit badges encourage you to increase your skill in subjects you already like, while others challenge you to learn about new areas of knowledge ... a merit badge can even lead you toward a lifelong hobby or set you on the way to a rewarding career” (p. 185).

Thomas Seton, an author, nature artist, and naturalist from New York, was commissioned to adapt *Scouting for Boys* into a manual for the new BSA organization (Wills, 2009). His original work, published in 1910, included 14 Badges of Merit (Murray, 1937). The following year, a more comprehensive manual was

released by the organization (BSA, 2007). Considered the original handbook for BSA, *The Official Handbook for Boys* listed 57 different merit badges available to Scouts. From that point on, national leaders of the organization have considered and approved merit badges on subjects that interest boys and help achieve the purposes of BSA (Wills, 2009). Currently, there are 126 merit badges offered (BSA, 2009a). The most badges ever offered at one time was 127, which was the case in 1975 and in 1987 (Duersch, 2008). As of 2010, more than 121 million merit badges had been earned by Scouts (“Merit badges earned,” n.d.).

Merit badges are an important component of the rank advancement program in Scouting (BSA, 2009a). The BSA advancement program is based on the following principles:

- Every young person achieves personal growth.
- Each individual learns by doing.
- Youth members progress at their own pace.
- All young people receive recognition for the individual accomplishments.
- Youth participants are encouraged to embrace Scouting ideals. (“Rank advancement,” n.d. para 2)

Each rank advancement requires the Scout to complete a list of specific requirements or tasks (BSA, 2009a). No merit badges are required for a Scout to earn the first four ranks of membership, known as Scout, Tenderfoot, Second Class, and First Class (BSA, 2009a). To progress to the next rank, Star Scout, a boy must earn six merit badges, four of which must be from among the 12 badge categories required for the Eagle Scout rank (BSA, 2009a). The next rank, known as Life Scout, requires that the boy earn five more badges, three of which must be from among the *Eagle Required* group (BSA, 2009a). To earn the highest rank in BSA, Eagle Scout, a boy must earn a minimum of 21 merit badges, including one from each of 12 specified categories required for this prestigious rank (BSA, 2009a).

Boy Scouts earn merit badges by completing requirements associated with the particular badge. The webpage, Introduction to Merit

Badges, found on the official BSA website, instructs Scouts, “You are expected to meet the requirements as they are stated – no more and no less” (“Introduction to merit badges,” n.d. para 8). Completion of these requirements must be documented on the Merit Badge Application form and signed by a merit badge counselor (“Guide for merit badge counselors,” n.d.). Merit badge counselors are adult BSA leaders who are registered and approved by the local BSA council (“Guide for merit badge counselors,” n.d.). The Guide for Merit Badge Counselors advises that counselors are to be “both a teacher and a mentor to the Scout as he works on a merit badge and learns by doing” (“Guide for merit badge counselors,” n.d. para 8). Once the counselor has signed the application, it is submitted to the local council office and documented with troop, local council, National Council records (“Rank advancement,” n.d.). After this process is complete, the Scout is awarded the actual badge.

From 1910 until 1932, the awards given to Scouts for completing merit badges were round emblems embroidered on to a piece of square, green cloth (Duersch, 2008). Modern merit badges are round, completely embroidered patches of 38 millimeters to 42 millimeters in diameter (Duersch, 2008). As illustrated in the figures below, each merit badge has a unique design emblematic of the program it represents (Duersch, 2008). For instance, the Animal Science merit badge shows the head of a Polled Hereford and the badge for Farm Mechanics features a tractor in a field. Scouts display their earned merit badges on an olive-green sash that is part of the official uniform. Typically, the sash is worn only for formal events such as reviews for rank advancements and award ceremonies (“Excerpts from the rules,” n.d.).

Through the years, BSA has offered numerous merit badges related directly to production agriculture. From 1943-1954, as many as 21 agriculturally related merit badges were available (BSA, 1944; BSA, 1955). Although only ten of these badge offerings remain (BSA, 2009a), records show that the merit badge programs have delivered agriculturally related content and experiences to millions of boys and young men (“Merit badges earned,” n.d.). Nevertheless, a review of

literature yielded no historical examination of agriculturally related merit badges offered by BSA.

### Significance

This research relates to Priority 1 of the American Association for Agricultural Education's National Research Agenda. That priority, "Public and policy maker understanding of agriculture and natural resources" (Doerfert, 2011, p. 8), focuses on research about agricultural literacy, including programs designed to influence knowledge and perceptions about agriculture. The key outcome of the priority is:

Consumers and policy makers will have an accurate understanding of and informed opinions about agriculture and natural resources. Further, policy decisions at all levels will reflect win-win solutions that ensure the long-term sustainability of agriculture, natural resources, and quality of life in communities across the nation. (Doerfert, 2011, p. 11)

In its report, *Understanding Agriculture: New Directions for Education*, the Committee on Agricultural Education in Secondary Schools of the Board on Agriculture for the National Research Council stated that agriculture is too important a topic to be taught only through formal agricultural education programs (National Research Council, 1988). The committee suggested that alternative means be used to deliver content about agriculture and natural resources to young people. By virtue of their subject matter and targeted audience, BSA merit badges on topics related to agriculture qualify as an alternative program for agricultural literacy education.

According to McDowell (2002), study of the past has educational value. He pointed out that studying the past "can help us appreciate the similarities and differences between the circumstances and conditions that govern past and present events" (p. 4). This study provides historical information regarding how agricultural education content has been and continues to be delivered through a means other than school-

based agricultural education and extension programs.

### Purpose and Objectives

The purpose of this study was to examine merit badges that focus on agricultural subjects offered by BSA from its founding until the current time. The following objectives were formulated to guide this research:

1. Identify merit badges on subjects related to agriculture offered by BSA since its inception.
2. Describe the evolution of merit badges related to agriculture from their initial introduction to the current offerings.
3. Describe the popularity, as measured by number of badges earned, of merit badges related to agriculture.

### Methods and Procedures

Historical research methods were employed in this study. Ary, Jacobs, and Sorensen (2010) defined historical research as "the attempt to establish facts and arrive at conclusions concerning the past" (p. 467). Gall, Borg, and Gall (1996) stated that historical research allows for better understanding of the present by answering questions about the past.

Many of the documents and other artifacts used in this study were gathered on site at the Archives of the BSA located at the National Scouting Museum in Irving, Texas. In addition, the researcher gathered data at the Edmon Low Library at Oklahoma State University and online. A number of primary sources were used for this study, including: Annual reports of the BSA; merit badge pamphlets for the badges of interest, ranging from original to current editions; minutes and notes from National Council meetings, including committee and subcommittee meetings; articles in *Boys Life* magazine; original and subsequent editions of *The Boy Scout Handbook*; the original edition of *Scouting for Rural Boys: A Manual for Leaders*; the original edition of *Scoutmaster's Handbook: A Manual for Troop Leadership*; and,

Scouting.org, the official website of BSA. Secondary sources included books on the history of the Scouting movement, the history of BSA, and the *Merit Badge Field Guide (3<sup>rd</sup> Ed)*. Additional secondary sources included websites related to Scouting and merit badges, particularly the official BSA website, Scouting.org. Authentication and accuracy of materials are concerns when conducting historical research. External criticism is the process of determining the genuineness of historical materials (Ary et al., 2010) and internal criticism is the process of evaluating the accuracy and worth of historical documents (Gall et al., 1996). Steven Price, the BSA archivist, provided the necessary assurances regarding these issues. Comparison of multiple sources of information allowed for triangulation of information to assure credibility of the results.

The 12<sup>th</sup> printing of the 5<sup>th</sup> edition of the *Handbook for Boys* (BSA, 1958) listed each of the merit badges offered at that time into one of 15 “Merit Badge Groups” (p. 424). Twenty-four of the 101 badges listed in that edition of the handbook were marked with a notation stating,

“These badges may be earned by a 4-H’er completing a club project in this subject. Or an FFA member may meet these or equivalent requirements through the FFA supervised farming program” (p. 425). Only the badges with that notation, encompassing their predecessors and successors, were included in this study.

### Findings

Table 1 displays information regarding the introduction and other data related to the merit badges included in this research. The origin of eight agriculturally related merit badges can be traced to the introduction of the BSA program in 1911 (BSA, 2007; Duersch, 2008; BSA, 2009a). Merit badges for Agriculture, Bee Farming, Dairying, First Aid to Animals, Forestry, Gardener, Horsemanship, and Poultry Farming and were among the 57 merit badges described in the original handbook for the BSA (BSA, 2007). Images of these badges are displayed in Figure 1.

Table 1

*Evolution BSA Merit Badges Related to Agriculture*

Merit Badge	Year First Offered	Year Last Offered	Notes
Agriculture	1911	1975	Requirements merged into Animal Science and Plant Science.
Beekeeping	1911	1955	Originally Bee Farming (1911-1914).
Dairying	1911	1975	Merged into Animal Science.
Forestry	1911	Present	
Gardening	1911	Present	
Horsemanship	1911	Present	
Poultry Keeping	1911	1975	Originally Poultry Farming (1911-1913). Merged into Animal Science.
Veterinary Medicine	1911	Present	Originally First Aid to Animals (1911-1972), then Veterinary Science (1973-1994).
Animal Industry	1928	1975	Replaced by Animal Science.
Beef Production	1928	1975	Merged into Animal Science.
Farming	1928	1975	Merged into Plant Science
Farm Arrangements	1928	1979	Originally Farm Layout & Building Arrangement (1928-1959), then Farm Arrangement (1960-1973).
Farm Home & Its Planning	1928	1959	Merged into Farm Arrangement in 1960.
Farm Mechanics	1928	Present	
Farm Records	1928	1980	Originally Farm Records & Bookkeeping (1928-1958).
Fruit Culture	1928	1954	Merged into Fruit & Nut Growing.
Hog Production	1928	1975	Originally Hog & Pork Production (1928- 1958). Merged into Animal Science.
Nut Culture	1928	1954	Merged into Fruit & Nut Growing.
Sheep Farming	1928	1975	Merged into Animal Science.
Soil & Water Conservation	1928	Present	Originally Soil Management (1928-1952).
Landscape Architecture	1930	Present	Originally Landscape Gardening (1930-1958), then Landscape (1959-1966).
Citrus Fruit Culture	1931	1952	Merged into Fruit & Nut Growing.
Cotton Farming	1931	1975	Merged into Plant Science
Pigeon Raising	1933	1980	
Forage Crops	1938	1975	Originally Grasses, Legumes & Forage Crops (1938-1958).
Rabbit Raising	1943	1993	
Small Grains	1943	1975	Originally Small Grains & Cereal Foods (1943-1958). Merged into Plant Science.
Fish & Wildlife Management	1952	Present	Originally Wildlife Management (1952-1972)
Fruit and Nut Growing	1953	1975	Replaced Citrus Fruit Culture, Fruit Culture, and Nut Culture. Merged into Plant Science.

*Table 1 Continues*

Table 1 Continued

Merit Badge	Year First Offered	Year Last Offered	Notes
Farm Arrangements	1960	1979	Originally Farm Arrangement (1960-1973). Merged into Farm & Ranch Management.
Animal Science	1975	Present	Replaced Animal Industry, Beef Production, Dairying, Hog Production, Poultry Keeping and Sheep Production.
Plant Science	1975	Present	Replaced Corn Farming, Cotton Farming, Fruit & Nut Growing, and Small Grains. Later replaced Food Systems.
Food Systems	1978	1987	Merged into Plant Sciences.
Farm & Ranch Management	1979	1987	Replaced Farm Arrangement.
Agribusiness	1987	1995	Replaced Farm & Ranch Management. Merged into American Business.

Note. All data pertain to information up to and including 2007.



Figure 1. Agriculturally related merit badges included among the original 57 merit badges.

In his column, *The Scout World*, from the July 1928 issue of *Boys Life* magazine, Chief Executive Scout James E. West announced that 12 new merit badges had been added (West, 1928). West said the new badges were “of particular interest to rural and farm boys” (p. 61), though any Scout was eligible to pursue them. The newly introduced badges were: Animal Industry, Beef Production, Corn

Farming, Farm Layout and Building Arrangement, Farm Home and Its Planning, Farm Layout and Building Arrangement, Farm Mechanics, Farm Records and Bookkeeping, Fruit Culture, Hog and Pork Production, Nut Culture, Sheep Farming, and Soil Management (BSA, 1928). Images of these badges are displayed in Figure 2.



Figure 2. Agriculturally related merit badges added in 1928.

Interestingly, approval of the new badges followed closely the formation of a new division of the BSA National Council called the Department of Rural Scouting (BSA, 1928). The charge of this department was to develop plans to adapt BSA programs to the “needs and conditions of ‘farm’ and rural boys” (p. 16). In addition, this division was to cooperate with other agencies working in rural America to serve boys effectively in these areas (BSA, 1928). This group even published a handbook for BSA leaders working in rural areas (BSA, 1938).

In the 1930s, five new badges related to agriculture were added to the list of offerings.

Landscape Gardening—renamed Landscaping in 1959 and then Landscape Architecture in 1967—was first offered in 1930 (BSA, 1930). Citrus Fruit Culture and Cotton Farming were approved in 1930 (BSA, 1931). Pigeon Raising was approved in 1931 (BSA, 1932) and Grasses, Legumes & Forage Crops—later renamed Forage Crops—was first offered in 1938 (Duersch, 2008). The latter four badges have each been merged into other offerings or discontinued (Duersch). Images of these badges are displayed in Figure 3.



Figure 3. Agriculturally related merit badges added in the 1930s.

Merit badges for Rabbit Raising, and Small Grains and Cereal Foods were first offered in the

early 1940s (BSA, 1946). Rabbit Raising was discontinued in 1993, while Small Grains and

Cereal Foods morphed into Small Grains in 1958 (Duersch, 2008). Wildlife Management, first offered in 1953 (BSA, 1956), was

broadened to Fish and Wildlife Management in 1972 (Duersch, 2008). Images of these badges are displayed in Figure 4.



Figure 4. Agriculturally related merit badges added in the 1940s and 1950s.

Though the Farm Arrangement merit badge was approved in 1960 (BSA, 1961), the next substantive change with agriculturally related merit badges came in the mid-1970s. In 1975, six badges related to animal agriculture – Animal Industry, Beef Production, Dairying, Hog Production, Poultry Keeping, and Sheep Farming – were discontinued in favor of a single badge called Animal Science (BSA, 1974). Similarly, three badges related to agronomic crops, Corn Farming, Cotton Farming, and Small Grains, plus the Fruit and Nut Growing

badge were eliminated in favor of a new badge named Plant Science (BSA, 1974).

In the late 1970s and 1980s, three more merit badges on agricultural subjects were introduced, though these offerings were short lived (Duersch, 2008). Food Systems existed from 1978-1987, Farm and Ranch Management, which replaced Farm Arrangement, was offered from 1980-1987 and Agribusiness was offered from just 1987-1995 (Duersch, 2008). Images of these and other badges approved at this time are displayed in Figure 5.

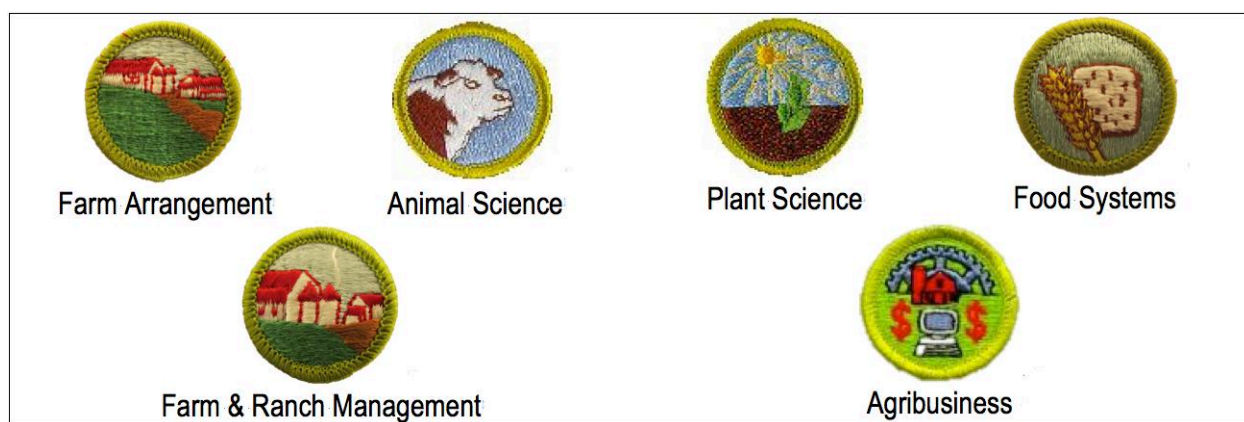


Figure 5. Agriculturally related merit badges added in the 1960s, 1970s and 1980s.

Currently, 10 merit badges related to agriculture are available to Scouts (BSA, 2009a). Those badges are: Animal Science, Farm Mechanics, Fish and Wildlife Management, Forestry, Gardening, Horsemanship,

Landscape Architecture, Plant Science, Soil and Water Conservation, and Veterinary Medicine (BSA, 2009a). Forestry, Gardening, and Horsemanship are three of but a few badges that have been offered since the inception of BSA

without undergoing a name change. Veterinary Medicine has also been offered for more than 100 years, though it has had two name changes. It was known as First Aid to Animals from 1911-1972 and then Veterinary Science from 1973-1994 (Duersch, 2008).

The measures used in this study to describe the popularity of merit badges were: (a) the total number of badges awarded historically, (b) the average number of badges awarded per year, and (c) the number of badges awarded during the most recent year on record, 2010. According to data from a BSA report posted on a website for the Merit Badge Research Center, the most popular merit badge of all time is First Aid, with more than 6.6 million awarded since it was introduced in 1911. It was also the most popular badge awarded in 2010, with 89,694 Scouts earning the award that year. The next most popular merit badges are Swimming (6,008,004 total; 60,686.91/year) and Camping (4,426,201 total; 44,709.10/year). According to the report ("Merit badges earned," n.d.) the only agriculturally related merit badges awarded to more than one million Scouts were Forestry (1,088,841 total; 10,415.26/year) and Soil and Water Conservation (1,069,145 total; 12,947.82/year).

The next most popular agriculturally related badge was Fish and Wildlife Management, with

an average of almost 9,434 badges awarded per year (594,358 total). Though it was discontinued in 1947, Animal Industry was the fourth most popular badge within this group with 7,876.64 awarded per year (370,202 total). Rounding out the five most popular agriculturally related merit badges, based on the number awarded per year, was Horsemanship with an average of 5,983.36 (592,353 total).

Fourteen (43.75%) of the 32 agriculturally related merit badges were awarded to fewer than 1000 Scouts per year. The least popular badge from this group was Nut Culture (138.96), immediately preceded by Citrus Fruit Culture (191.29), Farm and Ranch Management (274.43), Cotton Farming (314.84), and Food Systems (344.44). These and other related data are displayed in Table 2. As a point of reference, the overall most popular merit badge, historically and currently, is First Aid

None of the 10 agriculturally related merit badges currently offered rank among the most popular 30% of all badges offered ("Merit badges earned," n.d.). To the contrary, several of the badges on agricultural subjects rank among the lowest of the 125 badges offered in 2010 (see Table 3). Interestingly, Plant Science and Animal Science, two badges created to consolidate

Table 2

*Number of BSA Merit Badges Related to Agriculture Awarded*

Merit Badge	Number Awarded	Years Offered	Average/Year
Soil & Water Conservation	1,069,145	82	13,038.35
Forestry	1,088,841	99	10,998.40
Fish & Wildlife Management	594,358	63	9,434.25
Animal Industry	370,202	47	7,876.64
Horsemanship	592,353	99	5,983.36
Farm Home & Its Planning	135,174	31	4360.45
Veterinary Medicine	423,140	99	4,274.14
Gardening	379,220	99	3,830.51
Farm Mechanics	210,881	82	2,571.72
Poultry Keeping	162,794	64	2543.66
Farm Arrangements	127,667	51	2503.27
Rabbit Raising	118,925	50	2378.50
Beekeeping	72,666	44	1651.50
Hog Production	74,085	47	1576.28
Dairying	96,598	64	1509.34
Corn Farming	69,932	47	1487.91
Agriculture	85,831	64	1341.11
Beef Production	60,261	47	1282.15
Animal Science	44,599	35	1,274.26
Pigeon Raising	48,522	47	1032.38
Farm Records	51,527	52	990.90
Plant Science	34,202	35	977.20
Landscape Architecture	75,250	80	940.63
Agribusiness	6,716	8	839.50
Fruit and Nut Growing	14,412	22	655.09
Sheep Farming	30,195	47	642.45
Forage Crops	19,109	37	516.46
Fruit Culture	11,877	26	456.81
Small Grains	14,333	32	447.91
Food Systems	3,100	9	344.44
Cotton Farming	13,853	44	314.84
Farm & Ranch Management	1,921	7	274.43
Citrus Fruit Culture	4,017	21	191.29
Nut Culture	3,613	26	138.96

*Note.* All data pertain to information up to and including 2010. Several merit badges for which interest had decreased (BSA, 1974) were among the eight least popular badges offered.

### Conclusions

Agriculturally related merit badges have been a part of the BSA program since its inception

(BSA, 2007). Eight of the original 57 merit badges were on subjects associated with agriculture.

Table 3

*Ranking of Popularity of Merit Badges Related to Agriculture Compared to All BSA Merit Badges Offered in 2010*

Merit Badge	Overall Ranking
Forestry	37
Soil & Water Conservation	40
Fish & Wildlife Management	49
Horsemanship	50
Gardening	68
Farm Mechanics	78
Landscape Architecture	107
Veterinary Science	111
Animal Science	115
Plant Science	117

*Note.* Rankings are out of 125 merit badges offered in 2010 (“Merit badges earned,” n.d.).

In the late 1920s, the number of agriculturally related merit badges increased four-fold as Scouting programs began to emphasize expansion of the organization into rural areas (BSA, 1938). Though the number of badges in this area has decreased from its peak, agricultural education continues to be a fixture in this fundamental component of the BSA program with 10 current merit badges on agricultural subjects among the total of 126 offered presently.

Based on the number of badges awarded per year, Forestry, Soil and Water Management, Fish and Wildlife Management, and Horsemanship are the most popular agriculturally related merit badges. None of these programs, however, rank in the top quartile of all merit badges. It should be noted that the most popular badges are those that are required for the Eagle Scout rank, and none of the agriculturally related merit badges meet this criteria (BSA, 2011).

So, why are the three merit badges listed above the most popular of the 10 agriculturally related merit badges? Upon examination of the topics and their requirements, it is clear that these four particular merit badges have a contextual foundation and application that reaches beyond agriculture (BSA, 2004; BSA, 2005a; BSA, 2010d). In fact, Forestry, Soil and Water Management, and Fish and Wildlife

Management each relate closely to the natural resources and conservation emphases that have long been components of Scouting. In contrast, the Animal Science and Plant Science merit badges, which are much more narrowly focused (BSA, 2008a; BSA, 2008b), are among the least popular 10% of all merit badges offered by BSA.

### Recommendations and Implications

The findings and conclusions of this study lead to several recommendations and implications for professional agricultural educators. Pointing out the need to expand agricultural education beyond current offerings of the school based program, the Committee on Agricultural Education in Secondary Schools of the Board on Agriculture aptly stated that most students have limited access to formal agricultural education programs (National Research Council, 1988). Agriculturally related merit badge programs provide a delivery system through which an audience of more than one million youth can learn about agriculture (“At a glance.” n.d.). For many Scouts, these badges may serve their first exposure to agriculture and how food and fiber production impacts them on a daily basis. Interestingly, the idea of fusing BSA programs with agricultural education is not new. As early as 1929, a vocational agriculture

teacher noted that Scouting programs reinforce “splendidly our class and home project work in agriculture” (as cited in BSA, 1930, p. 198).

It is recommended that school-based agriculture teachers, extension professionals, and other agricultural educators serve as registered counselors for agriculturally related merit badges. There are numerous reasons for doing so. First, working with Scouts is an excellent opportunity for professional outreach as well as community service. Second, in addition to their value related to agricultural literacy, these merit badges are also a form of career education. Each of the agriculturally related merit badges currently offered includes a requirement for Scouts to explore career opportunities (BSA, 2004; BSA, 2005a; BSA, 2005b; BSA, 2008a; BSA, 2008b; BSA, 2009b; BSA, 2010a; BSA, 2010b; BSA, 2010c; BSA, 2010d). Another reason for professional agricultural educators to serve as counselors is that these merit badges could help recruit future 4-H clubs and FFA members. Enrollment in these merit badge programs indicates that the Scout has at least some interest in the subject matter that is the focus of agricultural youth organizations. By counseling Scouts, agricultural educators can share with them the opportunities available to them through 4-H and FFA.

Young people concurrently involved in BSA and an agricultural youth organization can also be well served through these merit badges if agricultural education professionals encourage them to remain active in both groups. Work on agriculturally related merit badges allows Scouts to advance in BSA while focusing on the agriculture and natural resources subject matter in which they are interested. In turn, agriculturally related merit badge programs can serve as excellent exploratory SAEs, benefiting the student in their agriculture classes and contributing to opportunities for awards and recognition through FFA.

Students and faculty associated with agriculture teacher education programs at universities should explore ways to become involved in these and other BSA merit badge programs. An example of this recommendation

in action is the annual College of Agriculture, Food and Natural Resources Merit Badge Center offered by the Department of Agricultural Education at the University of Missouri. Students in the curriculum design and construction course offered by the department teach agriculturally related merit badges to Scouts as their capstone project. This service learning activity allows college students to apply concepts they have learned in the class with a group of learners comparable to the students they will work with while student teaching. In turn, Scouts benefit because they are able to earn badges that are infrequently offered at summer camps or through other merit badge centers. It should be noted that opportunities also exist for agricultural education faculty and students to teach these merit badges through other events such as local troop meetings, merit badge universities and BSA summer camp programs.

It should be noted that many other merit badges that did not meet the criteria for inclusion in this study are, in fact, related to agriculture, natural resources and the curriculum of school-based agricultural education. Requirements for Electricity, Home Repairs, Metalwork, Plumbing, Surveying, Woodwork and the newly introduced Welding merit badge align with agricultural mechanics courses. Merit badges such as Environmental Science, Nature, Shotgun Shooting, Insect Study, Fly Fishing and Orienteering align with curriculum in natural resources, while Public Speaking, Entrepreneurship, Salesmanship and Personal Management match the content for classes such as agribusiness or agricultural leadership.

This study generates several ideas for further research. First, research should be conducted to examine the requirements of these agriculturally related merit badges and compare them to other educational programs on similar topics. Historical research should be conducted to investigate other ways BSA has engaged in agricultural education and rural development. Further research should also be conducted to consider the relationships between BSA and other agriculturally based youth organizations such as the National FFA Organization and 4-H.

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ROBERT TERRY, JR. is the Roger Howell Memorial Professor of Agricultural Education and Head of the Department of Agricultural Education, Communications and Leadership at Oklahoma State University, 149 Agricultural Hall, Stillwater, OK 74078, [rob.terry@okstate.edu](mailto:rob.terry@okstate.edu)

Notice of Correction: This article originally listed the author as Robert Terry. The correct name of the author is Robert Terry, Jr.