

Missouri FFA Association

2011-12 Proficiency Award Handbook



Revised October 11, 2011

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Highlighted areas are changes for 2012.

Introduction

The Agricultural Proficiency Award program recognizes excellence in a supervised agricultural experience (SAE) program. The purpose of this handbook is to encourage and assist students to participate in the agricultural proficiency award program. It is intended only as a supplement to the individualized instruction, which will be provided by the agriculture instructor/FFA advisor.

2011-2012 Proficiency Award Areas

Proficiency awards can be selected from three categories. One is called "placement," for work or experience-only SAE programs. Another, called "entrepreneurship," is for programs that typically involve ownership of an agricultural production or agribusiness enterprise. The third area is "Agriscience Research" based SAE's. The agricultural proficiency award program consists of the following award areas:

- *Agricultural Communications
- *Agricultural Education
- *Agricultural Mechanics Fabrication & Design
- *Agricultural Mechanics Energy Systems
- Ag Mechanics Repair & Maintenance – Entrepreneurship
- Ag Mechanics Repair & Maintenance - Placement
- *Agricultural Processing
- Agricultural Sales - Entrepreneurship
- Agricultural Sales - Placement
- *Agricultural Services
- Agriscience Research – Animal Systems
- Agriscience Research – Integrated Systems
- Agriscience Research – Plant Systems
- Beef Production - Entrepreneurship
- Beef Production - Placement
- Dairy Production - Entrepreneurship
- Dairy Production - Placement
- *Diversified Agriculture Production
- Diversified Crop Production - Entrepreneurship
- Diversified Crop Production - Placement
- *Diversified Horticulture
- Diversified Livestock Production
- *Emerging Agricultural Technology
- *Environmental Science & Natural Resource Mgmt
- Equine Science - Entrepreneurship
- Equine Science Placement
- Fiber and/or Oil Crop Production
- *Food Science and Technology
- *Forage Production
- *Forest Management
- *Fruit Production
- Goat Production
- Grain Production - Entrepreneurship
- Grain Production - Placement
- *Home and/or Community Development
- *Landscape Management
- *Nursery Operations
- *Outdoor Recreation
- *Poultry Production
- *Sheep Production
- *Small Animal Production & Care
- *Specialty Animal Production
- *Specialty Crop Production
- Swine Production - Entrepreneurship
- Swine Production - Placement
- *Turf Grass Management
- *Vegetable Production
- *Veterinary Science
- *Wildlife Management

* Both Entrepreneurship and Placement are combined into one proficiency award area.

There will not be a Floriculture Proficiency Award area this year (11-12). Members with production based placement or entrepreneurship programs will apply in the specialty crop proficiency area. Members who own floral retail or work for floral retail will apply in the agricultural sales proficiency area.

Guidelines for Completing Application

Applications for proficiency awards may include reports of activities and records completed up to January 1 of the year the application is submitted. The following are guidelines for filling out the proficiency award application forms:

1. Read all instructions.
2. Complete the application as of January 1 of the year in which the award is sought. No achievements accomplished or inventory acquired after this date should be included.
3. Carefully complete the personal data page of the application.
4. Make sure applicant is making application in the correct award area. Indicate award area application on page 1 of application.
5. Records for the first year of supervised agricultural experience program must begin at or above the 9th grade level and may be more than 12 months but no more than 16 months in length.
6. Check application for spelling, grammatical and mathematical errors.
7. Relate project story to project by giving supportive information that will clarify the completed application.
8. Obtain required signatures on page 1 of award of proficiency award application.

A Step-By-Step Approach

The following instructions correspond with page 1 of the application.

MO FFA Area # - Automatically generated based upon the FFA chapter name.

Proficiency Award Area- Indicate one proficiency award area from list on page 2 of handbook using the drop down menu on the application.

Name- As you want it on plaque/certificate.

Home Address- Include post office box number and/or appropriate street name and number.

FFA Membership Number – Indicated your 9 digit FFA membership number found on the local FFA roster.

Home City – Enter your home city.

Home Zip Code – Enter your home Zip Code

Name of Parents/Guardians- This information is used for news media purposes.

Complete FFA Chapter Name- Select the chapter name from the drop down list.

FFA Chapter Number – Automatically generated by the computerized application. MO followed by four-digit number including zeros. (MO####)

Name of High School- The school name is automatically generated based upon your FFA Chapter Name.

Chapter Advisor(s)- Indicate the complete name of each current FFA advisor.

Year in School at Time of Applying for Award- Indicate either sophomore, junior, senior or graduate from the drop down menu.

Signatures- Obtain required signatures and make sure applications are signed in the proper place.

You have completed page 1 of the application.

Now go to application page 2.

The following instructions apply to page 2 of the proficiency award application.

A. Scope- information is obtained from **Form 12 and Form 111** of Missouri Agricultural Record Book for Secondary Students (MARBSS). See State Degree Handbook for helpful information and guidance.

List the specific type of enterprises conducted by the applicant, the job or title including responsibilities and/or placement hours. Be sure to indicate the total number of acres, head and/or hours in each enterprise or job description.

For Agriscience Research applications – you should list the research done, location of research, and hours associated with that research.

Applicant may include a placement job description, responsibilities, projects completed etc. as a part of the scope description.

Scope Question 1. – Applicants should respond to the question by indicating three goals and progress they have made in accomplishing their goals.

Now go to application page 3.

The following instructions apply to page 3 of the proficiency award application.

B. Income and Expense

The number of years of records will be indicated based upon the student's year in school indicated on the cover page.

For Agriscience Research applications – The following applies:

SAE programs that involve planning and conducting a scientific experiment based on a hypothesis and the use of the scientific method of investigation on the hypothesis. This may include qualitative research, quantitative research, experimental research, descriptive research or quasi experimental research. It can include hours from a research facility, but the student must be doing true research. An example of an SAE that is **not** agriscience research is a student working in a lab analyzing soil samples and providing feedback to farmers as to what nutrients to add. This is an Ag Service. Examples of income – hours from research facility and winnings from Agriscience Fairs. Examples of Expenses – wage deductions and cost of the research project.

Closing Inventory- All the items of property and equipment owned or owned in partnership as of December 31 that were of value and were used to carry out the SAEP in which the applicant is seeking recognition. Information is obtained from **Forms 8 & 9** or **Form 104** of MARBSS. **(Use Remaining Depreciated Book Value.)** The closing inventory value will automatically transfer to the beginning inventory value of the next year.

Cash Sales/Wages- This represents the cash received from the sale of all livestock, crops, products produced, wages received and miscellaneous income

through that portion of the SAEP in which the applicant is seeking recognition. Information is obtained from **Form 5, Forms 1 & 2** or **Form 104** of MARBSS.

Value of Products Used In Home- The fair market value and/or purchase price of all products purchased that were consumed in the home or business. Information is obtained from **Form 104** of MARBSS

Capital Assets Sold- When a capital asset is sold, not traded, the price received for the sale of the item should be recorded here. Only that portion of the item used in the production or operation of the enterprise for which a proficiency award application is being submitted should be included. Information is obtained from **Form 5, Forms 1 & 2** or **Form 104** of MARBSS.

Value of Crops Fed to Livestock- The fair market value of all crops that were produced which were used as feed or bedding for one of the livestock enterprises during the current year. The "Value of Crops Fed to Livestock" is only applicable to the following entrepreneurship application areas: Diversified Agricultural Production, Diversified Crop Production, Fiber and/or Oil Crop Production, Forage Production, Grain Production, Specialty Crop Production.

Total Income- Includes all the income generated by each specific enterprise for the year. To calculate "Total Income", all the individual income categories (Lines 1 through 5) for each year listed under the income section of the application.

Beginning Inventory- All items of property and equipment owned or owned in partnership as of January 1, that were of value and were used to carry out the SAEP in which the applicant is seeking recognition. **You can only enter a beginning inventory on Year 1. (Use Remaining Depreciated Book Value.)** The computer will automatically transfer from the closing inventory of the preceding year. The "Beginning Inventory" must be equal to the "Closing Inventory" for the prior year. Information obtained from **Forms 8 & 9** of MARBSS.

Merchandise Purchased for Resale- This category of expense is used in SAEP's that buy goods which are later resold at the wholesale or retail level. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Cash Feed Costs- This represents the amount paid to purchase grains, pastures, supplements and other feeds used with one of the animal/poultry enterprises. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Non-Cash Feed Costs- The fair market value for all feeds obtained through exchange for labor, gifts, or other means and used with one of the animal/poultry enterprises. The fair market for all home grown feeds fed, that were produced by the applicant in a crop enterprise, must all be included here. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Cash Operating/Placement Expense- This represents the cash costs associated with all enterprises other than feed for livestock enterprises. Also included are

business expenses and/or placement expenses in the SAEP in which the applicant is seeking recognition. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Non-Cash Operating Expense- These are similar expenses as described under "Cash Operating/Placement Expenses" but were obtained through barter, exchange of labor, gifts and other means. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Cash Expense for Use of Buildings, Equipment and Machinery- This represents the cash that was expended for rent, custom hire, repair and maintenance of buildings, equipment and machinery used in the enterprise/business. Information obtained **Form 5** or **Form 3 & 4** of MARBSS.

Non-Cash Expense for Use of Buildings, Equipment and Machinery- The fair market value of expense items similar to those included as "Cash Expense for Use of Buildings, Equipment and Machinery" but were obtained through barter, exchange for labor or gifts. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Livestock and Poultry Purchased- This represents the sum total purchase price paid for all animals and poultry purchased for breeding, marketing or for the production of specialty products and other livestock income producing activities. Information obtained from **Form 5** or **Forms 3 & 4** of MARBSS.

Capital Expense- This represents the sum total purchase price paid for all machinery, equipment, buildings, land, and land improvements. For items acquired by trade of another capital asset, only the cash difference paid should be included as a capital expense. Information obtained from **Form 5** of **Forms 3 & 4** of MARBSS.

Total Expense- This represents the sum total of all expenses, cash and non-cash, that were incurred in conducting the enterprise/business for the year. To calculate "Total Expense" add all the individual expense categories for each year (Lines 7 through 16).

Return to Capital/Management- This represents the difference between "Total Income" and "Total Expense". To calculate "Return to Capital/Management", subtract "Total Expense" from "Total Income" (Line 6-Line 17).

Applicant's Share (%)- The percentage share of the "Return to Capital/Management" that is claimed by the applicant.

Applicant's Share (\$)- The share in dollars of the "Return to Capital/Management" that is claimed by the applicant. To calculate "Applicant's

Share" multiply "Return to Capital Management" by "Applicant's Share (%)" (Line 18 x Line 19).

Grand Total Applicant's Share- This represents the total dollars that were earned over the years covered by the application from SAEP's that were related to the award area in which the applicant is seeking recognition. To calculate "Grand Total Applicants Share" add each column "Applicant's Share (\$)" (Line 20, Column A + B +C +D).

Unusual Circumstances - Since incomes and expenses from an enterprise are judged against industry standards, anything that significantly distorts the earnings should be explained. Such as death loss, droughts, floods, gifts, lease agreements, special circumstances, etc

You have completed page 3 of the application.

Now go to application page 4.

The following instructions apply to page 4 of the proficiency award application.

C. INVENTORY RELATED TO THIS PROFICIENCY AWARD AREA- The inventory should include all supplies, equipment, merchandise bought and held for resale, fair market value of all growing and harvested crops, home raised and purchased market and breeding animals, land, machinery and other capital items on hand which were part of the enterprise for which recognition is being sought. Information can be obtained from **Forms 8 & 9** of MARBSS. **Ending inventory values should be the remaining undepreciated book vales.**

List **ONLY** items owned &/or purchased by the applicant and shown on inventory Forms 8 & 9. The **ONLY** items shown as \$0 Value Your Share should be inventory items that are owned by the student and have been depreciated or expensed.

Applicants whose SAE is Placement Only or the Proficiency Award Area is Placement should NOT list any inventory. Inventory points will be allocated to: Skills, Competencies & Knowledge and the Project Story. See Score Sheet!

Inventory Items should only be items owned by the student and listed in the record book inventory pages as purchased or raised.

Purchased items should be shown on the record book expense pages.

Items that are used by the student but not owned by the student SHOULD NOT BE LISTED.

Items that show \$0 Values Your Share should not be listed unless they are:

- 1.) owned by the student and records shown
- 2.) shown in the record book inventory pages and
- 3.) are shown under inventory as depreciated to \$0 value.

Inventory

Indicate the beginning month and year and the ending year in the space provided.

Description of Inventory Item- Items of property, owned or owned in partnership by the applicant, which were on hand December 31 of the last year covered by the application and which were used with the enterprise in which they are seeking recognition.

Starting Date- The month and year that you started assembling items that were necessary to conduct the experience program for which you are seeking recognition.

Quantity on Hand- A simple accounting of the actual number of a specific inventory item owned by the applicant at the time that the applicant became involved with the specific enterprise for which recognition is being sought.

Total Value- The remaining undepreciated value of each item of inventory in which the applicant had ownership at the time of becoming involved with the enterprise for which recognition is being sought.

Value Your Share- The actual dollar value of the items of inventory owned by the applicant at the time of becoming involved with the enterprise for which recognition is being sought.

Ending Date- This is December 31 of the last year covered by the application.

Quantity on Hand- A simple accounting of the actual number of a specific inventory items in which the applicant had ownership as of December 31 of the year that the application is being submitted.

Total Value- The remaining undepreciated value of each item of inventory in which the applicant had ownership as of December 31 of the year that the application is submitted.

Value Your Share-The remaining depreciated value of each item of inventory that is actually owned by the applicant as of December 31 of the year that the application is submitted.

Grand Total-The total dollar value of all items of inventory owned by the applicant at the time that the enterprise was begun as part of their experience program and as of December 31 of the year that the application is submitted.

C. Skills Competencies & Knowledge

List the major skills, competencies & knowledge that best describes what you have gained technically and personally from the proficiency area. Indicate how you think these skills, competencies and knowledge have contributed to your success.

You have completed page 4 of the application.

The following instructions apply to page 5 of the proficiency award application.

INCOME AND NET WORTH

Complete Supplemental Table A. It will not print but will assist in the calculation and transfer of values.

E. Income (All years)

Net Income from Award Area- This represents the total dollars that were earned over the years covered by the application from SAEP's that were related to the award area in which the applicant is seeking recognition. This must be the same figure as in **B. Line 21, of page 3** of award application.

Other Net Income from SAE- This represents the total dollars that were earned over the years covered by the application from SAEP's that were not related to the award area in which the applicant is seeking recognition. This information can be obtained from **Form 5** and **Form 11** of MARBSS.

Income Other Sources- This represents the total of all year's other income earned by the applicant that was not part of any SAEP. This information can be obtained from **Form 5, Line D** and/or **Form 11, Line 16** (add together all years) of MARBSS.

Total Income- This is calculated by adding "Net income from Award Area", "Other Net Income from SAE" and "Income Other Sources". This information can be obtained from **Form 11, Line 17** (add together all years) of MARBSS.

F. Net Worth

Net Worth Entering Agricultural Education- This is the record of the applicant's net worth at the time the first SAEP was begun. This information can be obtained from **Form 10** of MARBSS.

Net Worth Present Time- This is the record of the applicant's net worth as of December 31 the last year of records. This information can be obtained from **Form 10** of MARBSS.

Gain in Net Worth- Represents the difference between the applicant's net worth at the time that the first SAEP was begun and the applicant's net worth as of December 31 of the year that the application is submitted. This is calculated by subtracting "Net Worth Present Time" from "Net Worth Entering Vocational Agriculture"

FFA LEADERSHIP ACTIVITIES- Activities made available to all applicants as a result of their membership in the FFA. Activities can be those sponsored by the local chapter, state association or national organization. Information can be obtained from **Forms 108 & 110** of MARBSS

G. FFA Activities, Awards, Committees, Contests and Offices

Activity- A brief description or the specific name of the leadership activity in which the applicant was involved.

Chapter, Area or District, State, National- An indication of the competitive nature of the specific leadership activity. To allow each applicant to list a number of different activities and still provide the opportunity to participate in a specific activity for more than one year each applicant should indicate the specific year or years that they participated at each competitive level.

OTHER ACTIVITIES- Either activities related to the proficiency application and school and community activities should be listed here. Related activities are activities that are not sponsored by the school or FFA chapter but do supplement the experiences and training received in the SAEP. School and community activities and accomplishments other than FFA should be included. Information can be obtained from **Form 109** of MARBSS.

H. Activities Related to Award Area and/or School & Community Activities

Year- The calendar year in which the activity or accomplishment was conducted such as 2003, 2004, 2005, etc.

Activity- A brief description or the specific name of the activity or accomplishment of the applicant.

You have completed page 5 of the application.

Now go to page 6.

The following instructions apply to page 6 of the proficiency award application.

PROJECT STORY-The section allows each applicant the opportunity to further explain any part of his/her program that was not adequately treated in other sections of the application. Summarize from the beginning, how your program started, unusual events or circumstances affect this enterprise, you current status, management decisions, marketing information, special skills and/or competencies developed and your future plans and goals. The applicant should indicate only those things that will strengthen the application. **The project story is limited to page 6 of the application.** (It is required that standard 12 point font with 1" margins be maintained throughout the project story.).

For Agriscience Research applications – Attach an abstract for each research project in the appropriate award area.

SUPPORTING PICTURES- Each applicant should provide pictorial evidence of their involvement within particular phases of their SAEP. You may submit a maximum of six photographs, no larger than 4 x 6, with a brief caption of 50 words or less for each.

Appendix A –

Proficiency Award Areas

Agricultural Communications – Entrepreneurship/Placement – Includes programs in which a student is placed at a newspaper or other agricultural print (such as magazines) facilities to obtain training and practical experience in writing and publicizing in preparation for a writing communications career. Programs may also be at radio, TV stations, fair media rooms, or other businesses requiring speaking skills and knowledge of agriculture. The student may also own and produce an agriculture related broadcast or show. This area also includes any use of technology (such as websites and blogs) aimed at communicating the story of agriculture.

Agricultural Education – Entrepreneurship/Placement – Related to education and extension, including, but not limited to: youth mentoring, agricultural education departmental assistants, PALS mentors and student coordinators, students developing and conducting informational materials and presentations for civic organizations and school aged youth, and students who are involved in SAEs surrounding educating the public about the broad topics of agriculture, agriculture education and the FFA.

Agricultural Mechanics Design and Fabrication – Entrepreneurship/Placement – Involves the design and construction of agricultural equipment, and/or structures or the structural materials selection, and/or implementation of plans for utilizing concrete, electricity, plumbing, heating, ventilation, and/or air conditioning into agricultural settings.

Agricultural Mechanics Energy Systems (Ag. Power) – Entrepreneurship/Placement – Involves the adjustment, repair, and maintenance of agricultural power systems including mechanical power, electrical power, chemical power, wind power, solar power and/or water power. **NOTE:** Electrical wiring for general construction, restoration of tractors, general engine repair is more appropriately covered in other agricultural mechanics proficiency award areas.

Agricultural Mechanics Repair and Maintenance – Entrepreneurship – Student owns an enterprise or business involving the repair and maintenance of agricultural equipment (including lawn equipment) and/or structures.

Agricultural Mechanics Repair and Maintenance – Placement – Student works for an employer or conducts research involving the repair and maintenance of agricultural equipment (including lawn equipment) and/or structures.

Agricultural Processing – Entrepreneurship/Placement – A student owns an enterprise or business of assembling, transporting, processing, fabricating, mixing, packaging, and storing food and nonfood agricultural products. Programs may include processing meat, milk, honey, cheese, raisins and other dried fruits, maple syrup and/or other food processing. Nonfood products could include by-products processing such as meat, bone, fish and blood meal, tallow, making compost, hides, processing of wool & cotton, cubing & pelleting of forages, producing bird seed and other pet foods. **NOTE:** Processing of forest products is no longer part of the Agricultural Processing area. See: Forest Management and Products.

Agricultural Sales-Entrepreneurship – Student owns the enterprise or business, not covered in a more appropriate proficiency award category; may include enterprises such as: the sales of feed, seed, fertilizer, agricultural chemicals, agricultural equipment, machinery or structures. Enterprises may also include the

merchandising of crops, livestock, processed agricultural commodities, horticultural, floriculture, or forestry items at either the retail or wholesale level.

Agricultural Sales-Placement – Student works for an agriculture related business that is not covered in a more appropriate proficiency award category that includes sales of feed, seed, fertilizer or agricultural chemicals. Students may also work for businesses that involve the sales of agricultural equipment, machinery or structures. Activities may also include the merchandising of crops, livestock, processed agricultural commodities, horticultural, floriculture, or forestry items at either the retail or wholesale level.

Agricultural Services – Entrepreneurship/Placement – Category involves a student owning enterprises, or working in an agricultural business that is not covered in any of the existing award categories. The category includes enterprises such as: custom equipment operation and maintenance, agricultural management and financial services, animal breeding services, custom baling, crop scouting, horseshoeing, taxidermy services, auction services (including working at or owning the auction house), custom and contract feeding services or other appropriate services offered through agricultural enterprises. Students applying for placement in agricultural services must work for company or individual whose key function is to provide agricultural services. **NOTE:** Activities related to lawn care, landscaping, mowing or other landscape and care activities are not included in this area. Students with these types of enterprises or activities need to apply in other more appropriate areas related to turf care, horticulture or nursery landscape.

Agriscience Animal Systems Research - Research into the study of animal systems, including life processes, health, nutrition, genetics, management and processing through the study of small animals, aquaculture, livestock, dairy, horses and/or poultry

Agriscience Plant Systems Research - Research into the study of plant life cycles, classifications, functions, practices, through the study of crops, turf grass, trees and shrubs and/or ornamental plants.

Agriscience Integrated Systems Research- (Must fit one of the following descriptions)

- Diversified Research** - Research studies in two or more of the Agriscience research areas.
- Environmental Service Systems/Natural Resource Systems Research** - Research into the study of systems, instruments and technology used in waste management and their influence on the environment.
- Food Products and Processing Systems Research** - Research into the study of product development, quality assurance, food safety, production, sales and service, regulation and compliance and food service within the food science industry.
- Power, Structural and Technical Systems Research** - Research into the study of agricultural equipment, power systems, alternative fuel sources and precision technology, as well as woodworking, metalworking, welding and project planning for agricultural structures.
- Social Sciences Research** - Research of leadership, personal growth and career success skills necessary for a chosen profession while effectively contributing to society.

Beef Production- Entrepreneurship – Student owns the enterprise or business that uses the best management practices available to efficiently produce and market beef. This award area is for any beef animals, including miniature Herefords, Zebu, etc.

Beef Production- Placement – Student works for a livestock producer applying the best management practices available to efficiently produce and market beef. This award area is for any beef animals, including miniature Herefords, Zebu, etc.

Dairy Production- Entrepreneurship – Student owns an enterprise or business and applies the best management practices available to efficiently produce and market dairy cattle and dairy cattle products.

Dairy Production- Placement – Student works in the dairy cattle industry applying the best management practices available to efficiently produce and market dairy cattle and dairy cattle products.

Diversified Agricultural Production - Entrepreneurship/Placement- Involves the use of the best management practices available to produce and market a combination of two or more livestock and crop related proficiencies. Must include at least one livestock and at least one crop related proficiency.

Diversified Crop Production – Entrepreneurship – Student owns an enterprise or business that applies the best management practices available to efficiently produce and market crops from two or more of the crop related proficiencies areas such as: grain production, fiber/oil production, forage production, specialty crop production, vegetable production, or fruit production.

Diversified Crop Production – Placement – Student works for a crop producer that applies the best management practices available to efficiently produce and market crops from two or more of the crop related proficiencies such as: grain production, fiber/oil production, forage production, specialty crop production, vegetable production, or fruit production.

Diversified Horticulture – Entrepreneurship/Placement – Applies the best management practices available to efficiently manage an SAE program that includes **two or more** of the following proficiency areas: floriculture, landscape management, nursery operations, or turf grass management.

Diversified Livestock Production – Entrepreneurship/Placement – Involves the use of the best management practices available to efficiently produce and market a combination of two or more livestock related proficiency award areas such as beef, dairy, swine, equine, specialty animal, small animal production and care or poultry.

Emerging Agricultural Technology- Entrepreneurship/Placement – Involves students gaining career experiences in new and emerging agricultural technologies, such as engineering, remote sensing, hand held device technology, precision agriculture, agrobotics and other new and emerging technologies that are not covered in any of the existing award categories.

Environmental Science and Natural Resources Management – Entrepreneurship /Placement – Students receive practical experience concerned with the principles and practices of managing and/or improving the environment and natural resources. Activities may include: management of agriculture waste, recycling of agriculture products, environmental cleanup, conservation corps, agricultural energy usage, multiple uses of resources, land use regulations (including soil, water and air quality), preservation of wetlands (includes shorelines and grasslands), wildlife surveys, erosion prevention practices, public relations and education concerning pollution.

Equine Science- Entrepreneurship – Student owns an enterprise or business providing experience in horse production, breeding, marketing, showing and other aspects of the equine industry. Programs may also include calf roping, barrel racing, rodeo, racing, training, riding lessons and therapeutic horseback riding if horses are owned and/or managed by the member. This also includes miniature horses (formerly in Specialty Animal Production prior to 2012).

Equine Science- Placement – Student works for an employer providing experience in horse production, breeding, marketing, showing and other aspects of the equine industry. Programs may also include calf roping, barrel racing, rodeo, racing, training, riding lessons and therapeutic horseback riding if horses are owned and/or managed by the member. This also includes miniature horses (formerly in Specialty Animal Production prior to 2012).

Fiber and Oil Crop Production – Entrepreneurship/Placement – Student owns the enterprise, works for a business that includes the best management practices available to efficiently produce and market crops for fiber and/or oil; such as, cotton, sisal, hemp, soybeans, sesame seed, flax, mustard, canola, castor beans, sunflower, peanuts, dill, spearmint, and safflower.

Food Science and Technology – Entrepreneurship/Placement – Student owns the enterprise, works for a business that provides experience in the applying microbiology and biochemistry or food product development to improve taste, nutrition, quality and/or value of food. Programs could include the development of new products, food testing, grading and inspecting. **NOTE:** Food Science is not processing of food products, marketing or sales of food products, or food preparation and/or service.

Forage Production – Entrepreneurship/Placement – Includes the best management practices available to efficiently produce and market crops for forage such as: sorghum not used for grain, alfalfa, clover, brome grass, orchard grass, grain forages, corn and grass silages, and all pastures.

Forest Management and Products – Entrepreneurship/Placement – Includes the best management practices available to conserve or increase the economic value of a forest and/or forest products through such practices as thinning, pruning, weeding, stand improvement, reforestation, insect and disease control, planting, harvesting, Christmas tree farming, Forest Service, making and selling cedar shakes and firewood, and wood chips/mulch.

Fruit Production – Entrepreneurship/Placement – Includes the best management practices available to efficiently produce and market crops for fruit such as stone fruits, pome fruits, citrus fruits, pineapples, coconuts, berries, watermelon, grapes, nuts and all common fruits. (Pome Fruits include apples, mayhaws, and pears. Stone fruits include peaches, nectarines, plums, apricots and cherries).

Goat Production - Entrepreneurship/Placement Involves the use of the best management practices available to efficiently produce and market all goat products.

Grain Production – Entrepreneurship – Student owns an enterprise or business that applies the best management practices available to efficiently produce and market crops for grain production such as corn, barley (including the malting types), millet, buckwheat, oats, grain sorghum, milo, wheat, rice and rye. Grain Production **does not** include any of the aforementioned crops with an intended use for forage.

Grain Production – Placement – Student works for a crop producer or grain production related business that applies the best management practices available to efficiently produce and market crops for grain production such as corn, barley (including the malting types), millet, buckwheat, oats, grain sorghum, milo, wheat, rice and rye. Grain Production **does not** include any of the aforementioned crops with an intended use for forage.

Home and/or Community Development – Entrepreneurship/Placement – Activities that involve improving and protecting the beauty of an area by using natural vegetation or commercial ornamental plants and/or modernizing the home for better health and comfort through installation or improvement of water and sanitary facilities, heating and air conditioning or labor saving devices. Also includes community development activities such as volunteerism, community development and community betterment activities.

Landscape Management – Entrepreneurship/Placement – Includes experiences of planting and maintaining plants and shrubs, landscaping and outdoor beautification, grounds keeping, sprinkler installations and improvement of recreational areas.

Nursery Operations – Entrepreneurship/Placement – Provides students with job-entry experience in areas such as turf, plants, shrubs and/or tree production for the purpose of transplanting or propagation. This could include water garden plants if produced for sale.

Outdoor Recreation – Entrepreneurship/Placement – For students who strive to develop outdoor recreational activities as the primary land use. Some activities best suited to family use or as income-producing enterprises are vacation cabins and cottages, camping areas, fishing, hunting, shooting preserves, guide services, riding stables, trail rides, vacation farms and guest ranches, natural scenic or historic areas, and rodeo events where the member does not own or manage animals.

Poultry Production – Entrepreneurship/Placement – Includes the best management practices available to efficiently produce and market chickens, turkeys, domestic fowl such as ducks, geese and guinea, and their products.

Sheep Production – Entrepreneurship/Placement – Includes the best management practices available to efficiently produce and market sheep, sheep products and wool.

Small Animal Production and Care – Entrepreneurship/Placement – Includes the best management practices available to efficiently produce and market small pet animals such as rabbits, cats, dogs, mice, hedgehogs, guinea pigs, lizards, etc. and programs that typically provide a service in caring for the well-being of pets. Programs could include working at a pet shop, as a groomer, as a dog trainer, providing pet sitting services or working at a kennel. Also a student could be volunteering their time for a companion animal, such as a guide dog. This category does not include individuals working with therapeutic horses.

Specialty Animal Production – Entrepreneurship/Placement – Applies the best management practices available to efficiently produce and market specialty animals within the U.S. Agriculture industry. Students in the specialty animal production proficiency area must demonstrate that they are producing and marketing specialty animals not covered in any of the existing award categories. Specialty animals can include the following: aquaculture, bees, goats, mules, donkeys, miniature horses, mink, meat rabbits or rabbits bred for fur or show, worms, ostriches, emus, alpacas or llamas. Placement experiences could include roles as a zoo worker or placement at any specialty animal facility. In their supervised work experience, students must participate in hands-on activities including feeding, inoculating, performing basic animal care, weighing, measuring, showing and possibly marketing animals in an entrepreneurial or work placement environment. **NOTE:** Goats are now in the Goat Production award area, and miniature horse have been reclassified and moved to Equine Science.

Specialty Crop Production – Entrepreneurship/Placement – Applies the best management practices available to efficiently produce and market crops not covered in any of the existing award categories, such as: sugar beets, dry edible beans, gourds, tobacco, specialty corns (popcorn, white corn, Indian corn), all grass seed production, herbs and spices, mushrooms, sugar cane, hops, sorghum cane, confectionary sunflowers, production of crop seed, or specific floriculture production.

Swine Production – Entrepreneurship – Student owns an enterprise that applies - the best management practices available to efficiently produce and market swine.

Swine Production – Placement – Student works for an employer that applies the best management practices available to efficiently produce and market swine.

Turf Grass Management – Entrepreneurship/Placement – Involves the planting and maintaining of turf for outdoor beautification, providing a lawn-mowing service, improvement of recreational areas, sod produced for sale, and sport field or golf course management.

Vegetable Production – Entrepreneurship/Placement – Applies the best management practices available to efficiently produce and market crops such as beans, potatoes, pumpkins, sweet corn, tomatoes, onions, zucchini, hot peppers, all canning vegetables and all common garden vegetables.

Veterinary Science – Entrepreneurship/Placement – Includes working with veterinarians in clinical practice, research facilities, colleges of veterinary medicine, animal health industry, or any other environment in which they assist veterinarians in performing duties related to the health of people and/or the health and welfare of large and small animals. This experience may include wage earning, entrepreneurial or exploratory activities not limited to: hands-on care of animals, management of business aspects of a veterinary practice, or working on legislation or regulations relating to animals.

Wildlife Production and Management – Entrepreneurship/Placement – Strives to improve the availability of fish and wildlife through practices such as land and water habitat improvement, development of new land and water habitat, trapping, Fish & Wildlife departments, Forest Service, Department of Natural Resources or the stocking of fish and wild game. Wildlife ducks, geese, quail and pheasants are eligible if used as an income enterprise.