



2014 PROFICIENCY AWARD AREAS CALIFORNIA (8.14.13)

(Note: National FFA has confirmed the same areas will be offered as in 2013). Descriptions for 2014 may be modified by National FFA. Those changes may not be posted until December 2013)

DEFINITION OF KEY TERMS

- **Agriscience Research and Experimentation**-Involve planning and conducting a scientific experiment based on hypothesis and the use of the scientific method of investigation on the hypothesis. This may include qualitative, quantitative, experimental, descriptive and quasi experimental research.
- **Entrepreneurship** - A student-owned enterprise where the student assumes responsibility for all financial and management decisions for the successful completion of the project or activity.
- **Placement** – A student works for an agriculture-related business or individual, either for pay or for the experience

2014 PROFICIENCY AWARD AREA DESCRIPTIONS

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 and 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 – Relates to education and extension, including, but not limited to youth mentoring, agricultural education departmental assistants, PALS mentors and student coordinators, 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 structures, and/or selection of the structural materials, and/or implementation of plans for utilizing concrete, electricity, plumbing, heating, ventilation, and/or air conditioning into agricultural settings.

Agricultural Mechanics Energy Systems– 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 involved in the repair and maintenance of agricultural equipment (including lawn equipment) and/or structures.

Agricultural Processing – Entrepreneurship/Placement – A student owns an enterprise or works for a business of assembling, transporting, processing, fabricating, mixing, packaging and storing food and nonfood agricultural products. Programs could 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, hides; processing of wool & cotton, making compost, 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, could include enterprises such as the sales of feed, seed, fertilizer, agricultural chemicals, agricultural equipment, machinery or structures. Enterprises could also include the merchandising (which is buying an item with the sole purpose to resell it in a short time frame) of crops, livestock, processed agricultural commodities, horticulture (including quarry rock for decorative or landscape purposes), floriculture, or forestry items at either the retail or wholesale level. **NOTE:** SAE's that include the production or processing of the previous items does not belong in this award area.

Agricultural Sales-Placement – Student works for an agriculture related business that is not covered in a more appropriate proficiency award category. This could include sales of feed, seed, fertilizer or agricultural chemicals. Students could also work for businesses that involve the sales of agricultural equipment, machinery or structures. Activities could include the merchandising (buying an item with the sole purpose to resell it in a short time frame) of crops, livestock, processed agricultural commodities, horticulture (including quarry rock for decorative or landscape purposes), floriculture, floriculture and/or forestry items at either the retail or wholesale level. **NOTE:** SAE's that include the production or processing of the previous items, it does not belong in this award area.

Agricultural Services – Entrepreneurship/Placement – Student owns enterprises or works in an agricultural business that is not covered in any of the existing award categories. This includes enterprises such as custom equipment operation and maintenance, agricultural management and financial services, animal breeding services, custom baling, crop scouting, implementing integrated pest management programs, horseshoeing, taxidermy services, auction services (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 a company or individual whose primary activity 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 in the life processes, health, nutrition, genetics, management and processing of animal systems related to small animals, aquaculture, livestock, dairy, horses and/or poultry.

Agriscience Plant Systems Research - Research in the life cycles, classifications, functions, practices of plant systems related to crops, turf grass, trees and shrubs and/or ornamental plants.

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

- **Diversified Research** – Research in two or more of the Agriscience research areas.
- **Environmental Service Systems/Natural Resource Systems Research** - Research in the systems, instruments and technology used in waste management and their influence on the environment.
- **Food Products and Processing Systems Research** - Research in the product development, quality assurance, food safety, production, sales and service, regulation and compliance, and food service practices within the food industry.
- **Power, Structural and Technical Systems Research** - Research in the 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 that effectively contributes to society.

The Agriscience Research Proficiency is designed for those students actively engaged in agriscience research and experimentation. This includes students who are actively engaged in doing their own research individually, as well as those students who may be cooperating on research projects with others including but not limited to teams in school, experiment stations or colleges/universities. The student must be actively involved in the development of the experimental design, formulation of the hypothesis, collection of data, interpretation of the data and publicizing the results to be considered for an Agriscience research proficiency.

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 livestock and crops in **two or more** proficiency areas. These areas include at least one species included in Diversified Livestock and at least one species included in Diversified Crop proficiency area.

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. These areas include 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. These areas include grain production, fiber/oil production, forage production, specialty crop production, vegetable production or fruit production.

Diversified Horticulture – Entrepreneurship – Student who owns the enterprise or business that applies the best management practices available to efficiently manage an SAE program that includes **two or more** of the following proficiency areas: landscape management, nursery operations, turf grass management, or the specific floricultural production or floral design and floral sales activities accepted in specialty crop production.

Diversified Horticulture –Placement – Student works for someone that applies the best management practices available to efficiently manage an SAE program that includes **two or more** of the following proficiency areas: landscape management, nursery operations, turf grass management, or the specific floricultural production or floral design and floral sales activities accepted in specialty crop production.

Diversified Livestock Production – Entrepreneurship– Student who owns the enterprise or business that applies the use of the best management practices available to efficiently produce and market a combination of **two or more** livestock related proficiency award areas. These areas include beef, dairy, sheep, swine, equine, goat, specialty animal, small animal production and care, or poultry.

Diversified Livestock Production – Placement – Student works for someone in the livestock industry applying the use of the best management practices available to efficiently produce and market a combination of **two or more** livestock related proficiency award areas. These areas include beef, dairy, sheep, swine, equine, goat, specialty animal, small animal production and care, or poultry.

Emerging Agricultural Technology - Entrepreneurship/Placement – Involves gaining career experiences in the development of 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. The implementation of new and emerging agricultural technologies is more appropriate in other existing 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 the areas of management of agriculture waste (excluding common compliance with EPA regulations) recycling of agriculture products, environmental cleanup, serving in the conservation corps; managing agricultural energy usage (not for building or maintaining), multiple uses of resources, land use regulations pertaining to soil, water and air quality, preservation of wetlands, shorelines, and grasslands, wildlife surveys, erosion prevention practices; public relations and education concerning pollution.

Equine Science - Entrepreneurship – Student owns an enterprise or business that provides experiences 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 (prior to 2012, formerly in Specialty Animal Production).

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 (prior to 2012, formerly in Specialty Animal Production).

Fiber and Oil Crop Production – Entrepreneurship/Placement – Student owns the enterprise, or 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, or works for a business that applies 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 – Student owns the enterprise, or works for a business that 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 – Student owns the enterprise, or works for a business that 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, , making and selling cedar shakes and firewood, and wood chips/mulch, or working for the Forest Service.

Goat Production - Entrepreneurship/Placement -- Student owns the enterprise, or works for a business that involves the use of the best management practices available to efficiently produce and market goats and 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 – Student owns the enterprise, or works for a business that involves 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 – Student owns the enterprise, or works for a business that 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 – Student owns the enterprise, or works for a business that provides students with job-entry experience in areas such as turf, ornamental plants, vegetable starter 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 – Student owns the enterprise, or works for a business that develops outdoor recreational activities best suited to family use or as income-producing enterprises. These enterprises could include vacation cabins and cottages, camping and/or picnic areas, fishing, hunting, water sports (not including indoor lifeguard activities), winter sports, 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.

Pomology Production – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that includes the best management practices available to efficiently produce and market crops for fruits such as stone fruits, pome fruits, citrus fruits, pineapples, coconuts, berries, watermelon, nuts and all common fruits. (Pome fruits include apples, mayhaws, and pears. Stone fruits include peaches, nectarines, plums, apricots and cherries). **Note:** Grape Production is under Viticulture only.

Poultry Production – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that 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 – Student owns the enterprise, or works for a business that includes the best management practices available to efficiently produce and market sheep, sheep products and wool.

Small Animal Production and Care – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that includes the best management practices available to efficiently produce and market small pet animals such as rabbits, cats, dogs, mice, hedgehogs, guinea pigs, lizards, small birds (such as canaries, cockatiels, cockatoos, parakeets, parrots, 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, working at a kennel, or preparing guide and assistance animals.

Specialty Animal Production – Entrepreneurship/Placement – Applies the best management practices available to efficiently produce and market specialty animals within the 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, mules, donkeys, bison, oxen, mink, worms, ostriches, pigeons, 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 horses have been reclassified and moved to Equine Science. All rabbits should be entered in small animal production.

Specialty Crop Production – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that applies the best management practices available to efficiently produce and market crops not covered in any of the existing award categories such as: native prairie plants, sugar beets, dry edible beans, green peanuts, 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 – Student owns the enterprise, or works for a business that involves the planting and maintaining of turf for outdoor beautification, providing a lawn mowing service; improving recreational areas, sod produced for sale, and sport field or golf course management.

Vegetable Production – Entrepreneurship – Student owns the enterprise that applies the best management practices available to efficiently produce and market crops such as beans, potatoes, sweet potatoes, yams, pumpkins, sweet corn, tomatoes, onions, zucchini, hot peppers, all canning vegetables and all common garden vegetables.

Vegetable Production – Placement – Student works for a business that applies the best management practices available to efficiently produce and market crops such as beans, potatoes, sweet potatoes, yams, pumpkins, sweet corn, tomatoes, onions, zucchini, hot peppers, all canning vegetables and all common garden vegetables.

Veterinary Science – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that 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.

Viticulture – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that includes the best management practices available to efficiently produce and market grapes.

Wildlife Production and Management – Entrepreneurship/Placement – Student owns the enterprise, or works for a business that includes the improvement and the availability of fish and wildlife through practices such as land and water habitat improvement, development of new land and water habitat, trapping, or the stocking of fish and wild game. This proficiency includes activities conducted with the Fish & Wildlife departments, or Department of Natural Resources. The production of wild species for the stocking of ducks, geese, quail and pheasants are eligible if used as an income enterprise.