



# 2028 NATIONAL FFA SAE AWARD TYPE AND AREA DESCRIPTIONS

## Program Purpose

The National FFA SAE Award Program is based entirely on an FFA member's Supervised Agricultural Experience (SAE). These awards recognize individual skills and career-based competencies developed through multiple years of participation in agriculture and/or natural resource Immersion-type SAEs. Members apply individually for SAE Awards and report only their own share of ownership, profit/loss, skills, competencies, and knowledge.

The National FFA SAE Award Program is divided into SAE "types" and "areas" where members exploring or becoming established in specific agricultural career pathways can receive recognition. Each area has a specific description that the SAE must fit to apply in that type and area.

The National FFA SAE Award Program does not and is not meant to define SAEs. Not all SAEs will have a National FFA SAE Award Program area to be recognized in, though areas are added and updated each year, attempting to include as many SAEs as possible. All SAE Awards must be aligned with the 2024 Agriculture, Food and Natural Resources (AFNR) Content Standards.

## SAE Application Types

The correct SAE type must first be known to determine which National FFA SAE Award Program area an applicant should apply to. Five SAE types are recognized through the SAE Award Program. These types were created by the [National Council for Agricultural Education](#) and defined by the [SAE for All Guidelines](#). Learn more about these on the [SAE for All](#) website.

- **Entrepreneurship SAE:** An FFA member who **owns** an SAE that provides goods and/or services to the marketplace has an ENTREPRENEURSHIP SAE type. The operational and risk management decisions on how goods and/or services are provided are made by the member-owner. ([Award Area List](#))
- **Placement SAE:** An FFA member conducting a PLACEMENT SAE is employed (either paid or volunteer) by another. They perform tasks determined by the employer that are necessary for the operation of the business. ([Award Area List](#))
- **Research SAE:** An FFA member conducting a RESEARCH SAE is involved in systematic investigation to answer questions, solve problems, or develop new solutions in agriculture and natural resource fields. Members apply as individuals. There are three Research SAE categories:
  - **EXPERIMENTAL RESEARCH SAE:** Applies the scientific method by controlling certain variables while manipulating others to observe outcomes. The member must define the hypothesis, select the experimental design, conduct the research, collect the data, analyze

the results, and make recommendations for further study or explain an application for the information discovered.

- ANALYTICAL RESEARCH SAE: Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings.
- INVENTION RESEARCH SAE: Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose.

[\(Research Award Area List\)](#)

- **School-Based Enterprise SAE (SBE):** An SBE is an Entrepreneurship SAE based at the school and involves a group of FFA members working cooperatively. School-Based Enterprise SAEs are student-led business enterprises that provide goods or services. They are operated from the school campus utilizing facilities, equipment and other resources provided by the agricultural education program or the school in general. A member will work with one or more peers in the operation of the enterprise. The business itself may be “owned” by the school or FFA chapter, meaning that the organization holds the risk of the business that is led, directed and managed by FFA members. Alternatively, the business may be structured as a partnership or cooperative between FFA members. Partnership or cooperative agreements will define how the responsibilities and profits are distributed. Members apply as individuals. *Members who do not lead/manage the SBE but are employed by the SBE have Placement SAE projects, not SBE projects.* [\(Award Area List\)](#)
- **Service-Learning SAE:** A SERVICE-LEARNING SAE is conducted by one or a team of FFA member(s) who plan, conduct, and evaluate a project to provide a service to the school, public entities, or the community. It must provide a benefit to an organization, group or individuals other than the FFA chapter. The project must be preapproved by a review committee that includes local stakeholders in addition to the agriculture teacher. Members apply as individuals. [\(Award Area List\)](#)

### Award Area Determination Assistance

When choosing the National FFA SAE Award Program area to apply for, review all types and area descriptions. If you are in doubt or have questions regarding the correct type or award area, contact your state staff and/or the National FFA Organization SAE education specialist by emailing a detailed description of the SAE to [saeawards@ffa.org](mailto:saeawards@ffa.org), requesting a determination.

# 2028 SAE AWARDS BY TYPE AND AREA

CLICK THE LINK TO MOVE DIRECTLY TO THE AWARD AREA DESCRIPTION

| Five Types                                                             |                                                                        |                                                                |                                                          |                                              |
|------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------|
| <a href="#">Entrepreneurship</a>                                       | <a href="#">Placement</a>                                              | <a href="#">Research</a>                                       | <a href="#">School-Based Enterprise</a>                  | <a href="#">Service-Learning</a>             |
| 35 Areas                                                               | 35 Areas                                                               | 3 Categories of 7 Areas Each                                   | 8 Areas                                                  | 4 Areas                                      |
| <a href="#">Agricultural Communications</a>                            | <a href="#">Agricultural Communications</a>                            | <b>Analytical</b>                                              | <a href="#">Agribusiness Systems</a>                     | <a href="#">Community Engagement</a>         |
| <a href="#">Agricultural Education</a>                                 | <a href="#">Agricultural Education</a>                                 | <a href="#">Animal Systems</a>                                 | <a href="#">Animal Systems</a>                           | <a href="#">Community Safety</a>             |
| <a href="#">Agricultural Mechanics Design and Fabrication</a>          | <a href="#">Agricultural Mechanics Design and Fabrication</a>          | <a href="#">Environmental Service/Natural Resource Systems</a> | <a href="#">Biotechnology Systems</a>                    | <a href="#">Environmental Responsibility</a> |
| <a href="#">Agricultural Mechanics Repair and Maintenance</a>          | <a href="#">Agricultural Mechanics Repair and Maintenance</a>          | <a href="#">Food, Products, and Processing Systems</a>         | <a href="#">Environmental Service Systems</a>            | <a href="#">Hunger, Health and Nutrition</a> |
| <a href="#">Agricultural Processing</a>                                | <a href="#">Agricultural Processing</a>                                | <a href="#">Plant Systems</a>                                  | <a href="#">Food Products and Processing Systems</a>     |                                              |
| <a href="#">Agricultural Sales</a>                                     | <a href="#">Agricultural Sales</a>                                     | <a href="#">Power, Structure, and Technical Systems</a>        | <a href="#">Natural Resource Systems</a>                 |                                              |
| <a href="#">Agricultural Services</a>                                  | <a href="#">Agricultural Services</a>                                  | <a href="#">Social Science</a>                                 | <a href="#">Plant Systems</a>                            |                                              |
| <a href="#">Beef Production</a>                                        | <a href="#">Beef Production</a>                                        | <a href="#">Integrated Systems</a>                             | <a href="#">Power, Structural, and Technical Systems</a> |                                              |
| <a href="#">Dairy Production</a>                                       | <a href="#">Dairy Production</a>                                       | <b>Experimental</b>                                            |                                                          |                                              |
| <a href="#">Diversified Agricultural Production</a>                    | <a href="#">Diversified Agricultural Production</a>                    | <a href="#">Animal Systems</a>                                 |                                                          |                                              |
| <a href="#">Diversified Crop Production</a>                            | <a href="#">Diversified Crop Production</a>                            | <a href="#">Environmental Service/Natural Resource Systems</a> |                                                          |                                              |
| <a href="#">Diversified Horticulture</a>                               | <a href="#">Diversified Horticulture</a>                               | <a href="#">Food, Products, and Processing Systems</a>         |                                                          |                                              |
| <a href="#">Diversified Livestock Production</a>                       | <a href="#">Diversified Livestock Production</a>                       | <a href="#">Plant Systems</a>                                  |                                                          |                                              |
| <a href="#">Environmental Science and Natural Resources Management</a> | <a href="#">Environmental Science and Natural Resources Management</a> | <a href="#">Power, Structure, and Technical Systems</a>        |                                                          |                                              |
| <a href="#">Equine Science</a>                                         | <a href="#">Equine Science</a>                                         | <a href="#">Social Science</a>                                 |                                                          |                                              |
| <a href="#">Fiber and Oil Crop Production</a>                          | <a href="#">Fiber and Oil Crop Production</a>                          | <a href="#">Integrated Systems</a>                             |                                                          |                                              |
| <a href="#">Forage Production</a>                                      | <a href="#">Forage Production</a>                                      | <b>Invention</b>                                               |                                                          |                                              |

|                                                               |                                                               |                                                                |
|---------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|
| <a href="#">Forest Management and Products</a>                | <a href="#">Forest Management and Products</a>                | <a href="#">Animal Systems</a>                                 |
| <a href="#">Fruit and Nut Production</a>                      | <a href="#">Fruit and Nut Production</a>                      | <a href="#">Environmental Service/Natural Resource Systems</a> |
| <a href="#">Goat Production</a>                               | <a href="#">Goat Production</a>                               | <a href="#">Food, Products, and Processing Systems</a>         |
| <a href="#">Grain Production</a>                              | <a href="#">Grain Production</a>                              | <a href="#">Plant Systems</a>                                  |
| <a href="#">Landscape Installation</a>                        | <a href="#">Landscape Installation</a>                        | <a href="#">Power, Structure, and Technical Systems</a>        |
| <a href="#">Nursery Operations</a>                            | <a href="#">Nursery Operations</a>                            | <a href="#">Social Science</a>                                 |
| <a href="#">Outdoor Recreation</a>                            | <a href="#">Outdoor Recreation</a>                            | <a href="#">Integrated Systems</a>                             |
| <a href="#">Poultry Production</a>                            | <a href="#">Poultry Production</a>                            |                                                                |
| <a href="#">Sheep Production</a>                              | <a href="#">Sheep Production</a>                              |                                                                |
| <a href="#">Small Animal Production and Care</a>              | <a href="#">Small Animal Production and Care</a>              |                                                                |
| <a href="#">Specialty Animal Production</a>                   | <a href="#">Specialty Animal Production</a>                   |                                                                |
| <a href="#">Specialty Crop Production</a>                     | <a href="#">Specialty Crop Production</a>                     |                                                                |
| <a href="#">Swine Production</a>                              | <a href="#">Swine Production</a>                              |                                                                |
| <a href="#">Turf and Landscape Maintenance</a>                | <a href="#">Turf and Landscape Maintenance</a>                |                                                                |
| <a href="#">Vegetable Production</a>                          | <a href="#">Vegetable Production</a>                          |                                                                |
| <a href="#">Vertically Integrated Agricultural Production</a> | <a href="#">Vertically Integrated Agricultural Production</a> |                                                                |
| <a href="#">Veterinary Science</a>                            | <a href="#">Veterinary Science</a>                            |                                                                |
| <a href="#">Wildlife Production and Management</a>            | <a href="#">Wildlife Production and Management</a>            |                                                                |

## National FFA Entrepreneurship SAE Award Area Descriptions

([Entrepreneurship Type Definition pg.1](#))

**Agricultural Communications – Entrepreneurship:** Member owns an SAE project that publishes a newspaper or other agricultural magazine, newsletter, etc., which provides training and practical experience in writing and publicizing in preparation for a writing communications career. SAEs may also be producing agricultural-related radio, TV, or other media broadcasts. This area also includes any use or development of social media or new technology aimed at communicating the story of agriculture to the public. **NOTE:** SAEs working with media for the primary purpose of marketing or advertising for others belong in the appropriate Agricultural Services Award area of the appropriate Entrepreneurship or Placement application type.

**Agricultural Education – Entrepreneurship:** Member owns an SAE project related 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 FFA members who are involved in SAEs surrounding educating the public about the broad topics of agriculture, agricultural education and FFA. **NOTE:** *Creation or use of media for use other than educating the public about the stated topics belongs in either the Agricultural Communications or Agricultural Services Award areas of the appropriate Entrepreneurship or Placement application type, depending on its intended use. Serving as an FFA officer is not an SAE.*

**Agricultural Mechanics Design and Fabrication – Entrepreneurship:** Member owns an SAE project involving the design and construction of agricultural/natural resource equipment and/or structures for use in or related to any existing National FFA SAE Award area. Materials may include wood, metal, plastic, leather, concrete, electrical, plumbing, data communication components, etc. Excavation, heating, ventilation and/or air conditioning for agricultural/natural resource structures or equipment fits this area. It may also include the development of new and emerging agricultural technologies such as engineering, remote sensing, precision agriculture, ag-robotics, and other new technologies not covered by another National FFA SAE Award area. **NOTES:** *Items such as toys, jewelry, furniture, t-shirts, banners, plaques, art, and all facets of residential construction are considered non-agricultural and not eligible.*

**Agricultural Mechanics Repair and Maintenance – Entrepreneurship:** Member owns an enterprise or business involving the repair and maintenance of agriculture/natural resource equipment (*including lawn and landscape equipment*) and/or structures, including agricultural power systems such as mechanical, electrical, chemical, wind, solar and/or waterpower. This includes agricultural equipment restoration. **Note:** *Personal and non-agricultural vehicles/equipment are considered non-agricultural (i.e., racing or classic cars) and are not eligible.*

**Agricultural Processing – Entrepreneurship:** Member owns an enterprise in the business of assembling, transporting, processing, fabricating, mixing, packaging, and storing food and nonfood agricultural products. SAEs 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, and hides; processing of wool and cotton; making compost; cubing and pelleting of forages; producing bird seed and other pet foods. SAEs may include but not solely be the sale of the processed product. **NOTE:** *This area does not include any production of raw products (animals and plants), only processing them. Processing of nonfood forest products is not included in the agricultural processing area; see the Forest Management and Products Award areas for Entrepreneurship or Placement application types.*

**Agricultural Sales – Entrepreneurship:** A member owns an enterprise focused on acquiring, marketing, and re-selling FINISHED agricultural/natural resource products **not covered in a more appropriate National FFA SAE Award area.** This includes sales of feed, seed, fertilizer, agricultural chemicals, agricultural equipment, landscaping materials, horticulture products, agricultural machinery, agricultural structures, etc. This area does not include the production or processing of products.

- **FLORICULTURE NOTE:** A member who owns a retail floral design and/or sales business that does not raise its own flowers qualifies in this area. (*See the descriptions for floriculture SAEs that include raising flowers in the Diversified Horticulture and Specialty Crop Award areas for Entrepreneurship or Placement application types.*)
- **WILD GROWN/FORAGED NOTE:** Foraging, marketing, and selling raw plant products not grown or cultivated by human assistance qualify in this area. (*Examples include but are not limited to wild berries, fruit, nuts, mushrooms, truffles, ramps, dandelion greens, etc.*) The Application should focus on marketing and selling the products.

**Agricultural Services – Entrepreneurship:** Member owns an agricultural business whose primary activity is to provide agricultural services that are **not covered in a more appropriate National FFA SAE Award area**. This includes agricultural enterprises such as custom equipment operation, agricultural management and financial services, animal breeding services, custom baling, crop scouting, implementing integrated pest management programs, horseshoeing, taxidermy services, auction services (owning the auction business), commercial agricultural well drilling, residential tree removal service, custom and contract feeding services, marketing/advertising of agricultural products through social media, print, radio and TV, soil/crop testing, animal feed ration testing or development and other agricultural services. **NOTE** Activities related to lawn care, landscaping, mowing or other landscape and yard care activities are not included in this area. See Landscape Installation or Turf and Landscape Maintenance Award areas.

**Beef Production – Entrepreneurship:** Member owns an enterprise or business that uses the best management practices available to efficiently produce and market beef. This award area is for any animals raised mainly to produce beef and all beef breed animals, including miniature Herefords, Zebu, etc.

**Dairy Production – Entrepreneurship:** Member owns an enterprise or business and applies the best management practices available to efficiently produce and market dairy cattle, including the raising of breeding animals for dairy purposes (i.e., bulls and heifers) and raw dairy cattle products. This award area also includes enterprises where a member leases cattle for dairy production.

**Diversified Agricultural Production – Entrepreneurship:** Member owns an enterprise or business that uses the best management practices available to produce and market a combination of livestock and crops. Application must include one or more species included in the Diversified Livestock - Entrepreneurship award area and one or more species included in the Diversified Crop Award - Entrepreneurship area.

**Diversified Crop Production – Entrepreneurship:** Member owns an enterprise or business that applies the best management practices available to efficiently produce and market crops from **two or more** of the following award areas: Grain Production - Entrepreneurship, Fiber and Oil Crop Production - Entrepreneurship, Forage Production - Entrepreneurship, Specialty Crop Production - Entrepreneurship (excluding Floriculture Production), Vegetable Production - Entrepreneurship or Fruit and Nut Production - Entrepreneurship.

**Diversified Horticulture – Entrepreneurship:** Member owns an enterprise or business that applies the best management practices available to efficiently produce and market plants/arrangements from **two or more** of the following National FFA SAE Award areas: Landscape Installation - Entrepreneurship, Nursery Operations - Entrepreneurship, Turf and Landscape Maintenance - Entrepreneurship, floricultural production accepted in Specialty Crop Production - Entrepreneurship, and floral design/marketing accepted in Agricultural Sales - Entrepreneurship.

**Diversified Livestock Production – Entrepreneurship:** Member owns an enterprise or business that applies best management practices available to efficiently produce and market a combination of animals from **two or more** of the following award areas: Beef Production - Entrepreneurship, Dairy Production - Entrepreneurship, Sheep Production - Entrepreneurship, Swine Production - Entrepreneurship, Equine Science - Entrepreneurship, Goat Production - Entrepreneurship, Specialty Animal Production - Entrepreneurship, Poultry Production - Entrepreneurship or Small Animal Production and Care - Entrepreneurship.

**Environmental Science and Natural Resources Management – Entrepreneurship:** Member owns an enterprise or business providing 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 (*excluding common compliance with EPA regulations*), recycling of agriculture products, environmental cleanup, land/wetland reclamation, 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, erosion prevention practices; installing subsurface drainage, public relations and education concerning pollution. **NOTES:** 1. SAEs that solely install/maintain drainage tiling systems belong in the Agricultural Services - Entrepreneurship award area. 2. Activities primarily for the purpose of creating or improving wildlife habitat or producing and managing wildlife are not eligible in this award area; see the Wildlife Production and Management - Entrepreneurship award area.

**Equine Science – Entrepreneurship:** Member 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 the training and/or management of horses for activities such as but not only roping, racing, rodeo, show, riding lessons and therapeutic horseback riding if horses are owned and/or managed by the member. Miniature horses are included in this award area. **NOTE:** Participation in events in which equine are used but where activities do not involve the above do not qualify in this award area.

**Fiber and Oil Crop Production – Entrepreneurship:** Member owns the enterprise or 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. The harvesting, baling, marketing, and selling of straw and/or corn stalks for all purposes other than forage fits in this area. **NOTE:** SAEs, which include producing grain, include the straw as a portion of the grain production and should apply in the Grain Production - Entrepreneurship award area.

**Forage Production – Entrepreneurship:** Member owns the enterprise or business that uses the best management practices available to efficiently produce and market crops for forage such as alfalfa, clover, brome grass, orchard grass, grain forages, corn and grass silages, all pastures and sorghum (not used for grain). **NOTE:** Custom baling activities more appropriately fit in the appropriate Agricultural Services Award area of the appropriate Entrepreneurship or Placement application type.

**Forest Management and Products – Entrepreneurship:** Member owns the enterprise or 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, firewood, wood chips/mulch and working for local, state or federal forest management agencies. **NOTE:** This area does not include food items harvested from the forest, residential tree removal services or processing/use of lumber beyond processing at the lumber mill.

**Fruit and Nut Production – Entrepreneurship:** Member owns the enterprise or business that includes the best management practices available to efficiently produce and market fruit and nut crops such as stone fruits (*peaches, nectarines, plums, apricots, and cherries*), pome fruits (*apples, mayhaws, and pears*), citrus fruits, pineapples, coconuts, berries, cranberries, melons, grapes, olives, all nuts (*not peanuts*) and all common fruits. **NOTE:** SAEs involving processing fruits/nuts beyond the raw product are better suited to the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.

**Goat Production – Entrepreneurship:** Member owns the enterprise or business that uses best management practices available to efficiently produce and market goats and all raw goat products. **NOTE:** Processing products is better suited to the appropriate Agricultural Processing Award area of the appropriate Entrepreneurship or Placement application type.



**Grain Production – Entrepreneurship:** Member owns the enterprise or business that applies the best management practices available to efficiently produce and market grain crops such as corn, barley (*including the malting types*), millet, buckwheat, oats, grain sorghum, milo, wheat, rice, and rye. Production of certified grain seed is included in this award area. Straw/stalks, as a by-product of these crops, are included in this award area. **NOTES:** *Grain Production does not include any of the mentioned crops if intended for forage (See Forage Production). For projects ONLY harvesting straw/stalks and not grain, see the appropriate Fiber and/or Oil Crop Production area of the appropriate Entrepreneurship or Placement application type.*

**Landscape Installation – Entrepreneurship:** Member owns the enterprise or business that includes experiences designing and installing landscapes (*outdoor and indoor*), including plants, shrubs, turf, and trees. Includes sprinkler installation, hardscaping, and the installation of decorative rock, etc. **NOTE:** *SAEs, including only the building of landscape structures, belong in the appropriate Agricultural Mechanics Design and Fabrication area of the appropriate Entrepreneurship or Placement application type. **Note:** this area does not include landscape maintenance (see Turf and Landscape Maintenance).*

**Nursery Operations – Entrepreneurship:** Member owns an enterprise or business that grows, markets, and sells ornamental plants, vegetable starter plants, shrubs, and/or tree production for the purpose of transplanting or propagation. Includes water garden plants and sod/turf grass produced for sale.

**Outdoor Recreation – Entrepreneurship:** Member owns the enterprise or business that develops or provides agricultural/natural resource-related outdoor recreational activities for public or family use as experiential or income-producing enterprises. These enterprises could include agritourism, camping and/or picnic areas, recreational fishing and/or hunting areas, winter sports, shooting preserves, guide services, riding stables, trail rides (*ATV, horseback, etc.*), vacation farms and guest ranches, natural scenic or historic areas, and running petting zoos and rodeo events where the member does not own or manage animals. **NOTE:** *Personal participation in outdoor recreation activities is not an SAE. Working as a lifeguard of any type does not qualify as an SAE.*

**Poultry Production – Entrepreneurship:** Member owns the enterprise or business that includes the best management practices available to efficiently produce and market domestic fowl, including chickens and all domestic turkeys, ducks, geese and guinea, and their raw products (*eggs, meat, feathers, etc.*).

**Sheep Production – Entrepreneurship:** Member owns the enterprise or business that includes the best management practices available to efficiently produce and market sheep, raw sheep products and wool.

**Small Animal Production and Care – Entrepreneurship:** Member owns the enterprise or business that includes the best management practices available to efficiently produce and market small animals such as all rabbits, cats, dogs, mice, hedgehogs, guinea pigs, lizards, snakes, small birds (*such as canaries, cockatiels, cockatoos, parakeets, parrots, etc.*) and SAEs 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. **NOTE:** *Operating a veterinary clinic or similar veterinary care enterprise assisting veterinarians in performing duties related to the health and welfare of animals belongs in the appropriate Veterinary Science award area of the appropriate Entrepreneurship or Placement application type.*

**Specialty Animal Production – Entrepreneurship:** Member owns an enterprise or business that applies the best management practices available to efficiently produce and market specialty animals and their raw products. Members in this area must demonstrate that they are producing and marketing specialty animals not covered in any of the existing award areas. Specialty animals can include but are not limited to alligators, aquaculture, bees, mules, donkeys, bison, oxen, mink, worms, insects, ostriches, pigeons, emus, alpacas, or llamas. **NOTE:** *This award area does not include further processing of specialty animal products (i.e., honey, llama wool, etc.); processing of these products belongs in the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.*



**Specialty Crop Production – Entrepreneurship:** Member owns an enterprise or business that applies the best management practices available to efficiently produce and market raw crops not covered in any of the existing award areas, 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 and floriculture production. (such as chrysanthemums, daylilies, etc.) **NOTE:** *This award area does not include further processing of these products; processing belongs in the appropriate Agricultural Processing area of the appropriate Entrepreneurship or Placement application type.*

**Swine Production – Entrepreneurship:** Member owns an enterprise or business that applies the best management practices available to efficiently produce and market swine and their raw products.

**Turf and Landscape Maintenance – Entrepreneurship:** Member owns the enterprise or business maintaining plants and shrubs, landscaping, groundskeeping, sprinkler repair/maintenance, lawn mowing and care services and sports field or golf course grounds maintenance. **NOTE:** *Producing turf grass for sale/transplant belongs in the appropriate Nursery Operations award area. Installation of new landscaping belongs in the appropriate Landscape Installation area of the appropriate Entrepreneurship or Placement application type.*

**Vegetable Production – Entrepreneurship:** Member owns the enterprise or business that applies the best management practices available to efficiently produce and market unprocessed crops such as asparagus, beans, potatoes, sweet potatoes, yams, pumpkins, sweet corn, tomatoes, onions, zucchini, hot peppers, and all other common garden vegetables.

**Vertically Integrated Agricultural Production – Entrepreneurship:** Member owns an enterprise or business that produces an animal or plant specified in the Diversified Agricultural Production award area description and adds value to that animal/plant through further processing and marketing. To qualify for this award area, the member **must personally own and participate in ALL of the following:**

- Production of the live animal or plant
- Processing the animal or plant into a ready-to-use form
- Marketing and selling the finished product directly to the consumer

**NOTE:** *Acceptable examples include but are not limited to:*

- *Raising bees and harvesting raw honey and/or wax; processing the honey and/or wax into cleaned and bottled honey, lip balms, candy, candles, etc.; and finally, selling the finished products.*
- *Raising milking animals (cows, goats, sheep, etc.) and milking them. Processing the raw milk into ready-to-drink milk, cheese, ice cream, lotions, soaps, etc. Marketing and selling the finished products.*
- *Planting and growing fruits or vegetables. Processing the raw fruits/vegetables into finished food products such as canned or bottled items, baked or dried goods, etc. Marketing and selling the finished food products.*
- *Raising meat animals (cattle, sheep, swine, rabbits, poultry, etc.). Processing the animal into wholesale or retail cuts or other animal products (jerky, meat sticks, leather, tallow). Marketing and selling the finished products.*

**Veterinary Science – Entrepreneurship:** Member owns the enterprise or 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 and welfare of large and small animals. This experience must be under the **supervision of a veterinarian** and may include 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:** Member owns the enterprise or business that includes the improvement and the availability of fish and wildlife through practices such as land and water habitat improvement or development, wildlife surveys, trapping or the stocking of fish and wild game. This award area includes activities conducted with local, state, or federal fish and wildlife or natural resource agencies managing wildlife and habitat specifically for wildlife. The legal production of wild species for stocking, such as ducks, geese, quail, pheasants, deer, elk, etc., are eligible if used as an income enterprise. Legal harvest of wildlife or fish for resale as an income enterprise is included in this area. **NOTE:** *Personal participation in recreational or subsistence hunting or fishing is not eligible.*

## National FFA Placement SAE Award Area Descriptions

([Placement Type Definition pg. 1](#))

**Agricultural Communications – Placement:** Member is placed at a newspaper or other agricultural print (*such as magazines*), which provides training and practical experience in writing and publicizing in preparation for a writing communications career. SAEs may also be producing radio, TV or other media broadcast, fair media rooms, or other businesses requiring speaking skills and knowledge of agriculture. This award area also includes any use of or development of social media or new technology to communicate the story of agriculture. **NOTE:** SAEs working with media for the primary purpose of marketing or advertising for others belong in the appropriate Agricultural Services Award area of the appropriate Entrepreneurship or Placement application type.

**Agricultural Education – Placement:** Member is employed in 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 FFA members who are involved in SAEs surrounding educating the public about the broad topics of agriculture, agricultural education and FFA. **NOTE:** Creation or use of media for use other than educating the public about the stated topics belongs in either the Agricultural Communications or Agricultural Services Award areas of the appropriate Entrepreneurship or Placement application type, depending on its intended use. Serving as an FFA officer is not an SAE.

**Agricultural Mechanics Design and Fabrication – Placement:** Member works for an employer involved in the design and construction of agricultural/natural resource equipment and/or structures for use in or related to any existing National FFA SAE Award area for Entrepreneurship and Placement application types. Materials may include wood, metal, plastic, leather, concrete, electrical, plumbing, data communication components, etc. Excavation, heating, ventilation and/or air conditioning for agricultural/natural resource structures or equipment fits this Award area. It may also include the development of new and emerging agricultural technologies such as engineering, remote sensing, precision agriculture, ag-robotics, and other new technologies not covered by another National FFA SAE Award area for Placement application types. **NOTES:** Items such as toys, jewelry, furniture, T-shirts, banners, plaques, art, signs and all facets of residential construction are considered non-agricultural and not eligible.

**Agricultural Mechanics Repair and Maintenance – Placement:** Member works for an employer involved in the repair and maintenance of agricultural equipment (including lawn and landscape equipment) and/or structures, including agricultural power systems such as mechanical, electrical, chemical, wind, solar and/or waterpower. This award area includes agricultural equipment restoration where the member does not own the piece of equipment. **Note:** Personal and non-agricultural vehicles/equipment are considered non-agricultural (i.e., racing or classic cars) and are not eligible.

**Agricultural Processing – Placement:** Member works for a business assembling, transporting, processing, fabricating, mixing, packaging, and storing food and nonfood agricultural products. SAEs 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, and hides; processing of wool and cotton; making compost; cubing and pelleting of forages; producing bird seed and other pet foods. SAEs may include but not solely be the sale of the processed product. **NOTE:** This award area does not include any production of raw products (animals and plants), only processing them. Processing of nonfood forest products is not included in the Agricultural Processing Award area for Entrepreneurship or Placement application types; see the Forest Management and Products area for Entrepreneurship and Placement application types.

**Agricultural Sales – Placement:** A member works for an enterprise or business focused on acquiring, marketing, and selling agricultural/natural resource products **not covered in a more appropriate National FFA SAE Award**. This includes sales of feed, seed, fertilizer, agricultural chemicals, agricultural equipment, landscaping materials, horticulture products, agricultural machinery, agricultural structures, etc. This area does not include the production or processing of products.

- **Floriculture NOTE:** A member who works for a retail floral design and/or sales business that does not raise its own flowers qualifies in this area. *(See the Diversified Horticulture and Specialty Crop descriptions for members who work for a floral enterprise, which includes raising flowers.)*
- **WILD GROWN/FORAGED NOTE:** Working for an organization foraging, marketing and selling raw plant products that are not in any way grown or cultivated by human assistance qualifies in this area. *(Examples include but are not limited to wild berries, fruit, nuts, mushrooms, truffles, ramps, dandelion greens, etc.) The application should focus on marketing and selling the products.*

**Agricultural Services – Placement:** Member works for an agricultural business whose primary activity is to provide agricultural services that are **not covered in a more appropriate National FFA SAE Award area**. This includes agricultural enterprises such as custom equipment operation, 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 business), commercial agricultural well drilling, residential tree removal service, custom and contract feeding services, marketing/advertising of agricultural products through social media, print, radio and TV, soil/crop testing, animal feed ration testing or development and other agricultural services. **NOTE:** *Activities related to lawn care, landscaping, mowing or other landscape and yard care activities are not included in this area. See Landscape Management, Turf Grass Management, and Nursery Operations Award areas for Entrepreneurship and Placement application types.*

**Beef Production – Placement:** Member works for a livestock producer who applies the best management practices available to efficiently produce and market beef. This award area is for any animals raised mainly to produce beef and all beef breed animals, including miniature Herefords, Zebu, etc.

**Dairy Production – Placement:** Member works in an enterprise or business applying the best management practices available to efficiently produce and market dairy cattle, including the raising of breeding animals for dairy purposes (i.e., bulls and heifers) and raw dairy cattle products.

**Diversified Agricultural Production – Placement:** Involves the use of the best management practices available to produce and market a combination of livestock and crops in **two or more** National FFA SAE Award areas. These areas include at least one species included in the Diversified Livestock Award area for Placement application types and at least one species included in the Diversified Crop Award area for Placement application types.

**Diversified Crop Production – Placement:** Member works for a business that applies the best management practices available to efficiently produce and market crops from **two or more** of the following National FFA SAE Award areas for Placement application types: Grain Production, Fiber and Oil Crop Production, Forage Production, Specialty Crop Production *(excluding Floriculture Production Award area for Placement application types)*, Vegetable Production or Fruit Production award areas for Placement application types.

**Diversified Horticulture – Placement:** Member works for an enterprise or business that applies the best management practices available to efficiently produce and market plants/arrangements from **two or more** of the following National FFA SAE Award areas for Placement application types: Landscape Installation, Nursery Operations, Turf and Landscape Maintenance, floricultural production accepted in Specialty Crop Production, and floral design/marketing accepted in Agricultural Sales Award area for Placement application types

**Diversified Livestock Production – Placement:** Member works for an enterprise using best management practices available to efficiently produce and market a combination of animals for **two or more** of the livestock-related National FFA SAE Award areas for Placement application types. These areas include Beef, Dairy, Sheep, Swine, Equine, Goat, Specialty Animal, Poultry or Small Animal Production and Care Award areas for Placement application types.

**Environmental Science and Natural Resources Management – Placement:** Members receive practical experience in 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, land/wetland reclamation, 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, erosion prevention practices; installing subsurface drainage, public relations and education concerning pollution. **NOTES:** 1. SAEs that solely install/maintain drainage tiling systems belong in the Agricultural Services award area for Entrepreneurship or Placement application types. 2. Activities primarily for the purpose of creating or improving wildlife habitat or producing and managing wildlife are not eligible in this area; see the appropriate Wildlife Production award area of the appropriate Entrepreneurship or Placement application type.

**Equine Science – Placement:** Student works for an employer providing experiences in horse production, breeding, marketing, showing and other aspects of the equine industry. Programs may also include the training and/or management of horses for activities such as but not only roping, racing, rodeo, show, riding lessons and therapeutic horseback riding if horses are not owned but are managed by the member. Miniature horses are included in this National FFA SAE Award area. **Note:** Participation in events where equine are used but activities do not involve the above may belong in other areas.

**Fiber and Oil Crop Production – Placement:** Member 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. The harvesting, baling, marketing, and selling of straw and/or corn stalks for all purposes other than forage fits in this area. (SAEs, which include producing grain, include the straw as a portion of the grain production SAE and apply in the appropriate Grain Production award area of the appropriate Entrepreneurship or Placement application type.)

**Forage Production – Placement:** Member works for a business that includes the best management practices available to efficiently produce and market crops for forage such as alfalfa, clover, brome grass, orchard grass, grain forages, corn and grass silages, all pastures and sorghum (not used for grain). **NOTE:** Custom baling activities more appropriately fit in the Agricultural Services Award area for Entrepreneurship or Placement application types.

**Forest Management and Products – Placement:** Member 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, firewood, wood chips/mulch and working for local, state or federal forest management agencies. **NOTE:** This area does not include food items harvested from the forest, residential tree removal services or processing/use of lumber beyond processing at the lumber mill.

**Fruit and Nut Production – Placement:** Member works for a business that includes the best management practices available to efficiently produce and market crops for fruit and nuts such as stone fruits, pome fruits, citrus fruits, pineapples, coconuts, berries, cranberries, melons, grapes, olives, nuts (*not peanuts*) and all common fruits. (Pome fruits include apples, mayhaws, and pears. Stone fruits include peaches, nectarines, plums, apricots, and cherries). **NOTE:** SAEs involving processing fruits/nuts beyond the raw product are better suited to the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.

**Goat Production – Placement:** Member works for a business that uses the best management practices available to efficiently produce and market goats and all raw goat products. **NOTE:** *Processed products are better suited to the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.*

**Grain Production – Placement:** Member 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. Production of certified grain seed is included in this area. Straw/stalks, as a by-product of these crops, are included. **NOTES:** Grain Production does not include any of the mentioned crops if intended for forage (see *Forage Production*). For SAEs ONLY harvesting straw/stalks, see Fiber and/or Oil Crop Production.

**Landscape Installation – Placement:** Member works for a business that includes experiences with designing and installing landscapes (*outdoor and indoor*), including plants, shrubs, turf, and trees. Includes sprinkler installation, hardscaping, and the installation of decorative rock, etc. **NOTE:** *SAEs, including only the building of landscape structures, belong in the appropriate Agricultural Mechanics Design and Fabrication award area of the appropriate Entrepreneurship or Placement application type. (Note: Does not include mowing.)*

**Nursery Operations – Placement:** Member works for a business that provides experience in growing, marketing, and selling ornamental plants, vegetable starter plants, shrubs, and/or tree production for the purpose of transplanting or propagation. Includes water garden plants and sod/turf grass produced for sale.

**Outdoor Recreation – Placement:** Member works for a business that develops or provides outdoor recreational activities for public or family use as experiential or income-producing enterprises. These enterprises could include agritourism, vacation cabins and cottages, camping and/or picnic areas, recreational fishing and/or hunting areas, winter sports, shooting preserves, guide services, riding stables, trail rides (*ATV, horseback, etc.*), vacation farms and guest ranches, natural scenic or historic areas, and running petting zoos and rodeo events where the member does not own or manage animals. **NOTE:** *Personal participation in outdoor recreation activities is not an SAE. Working as a lifeguard of any type does not qualify as an SAE.*

**Poultry Production – Placement:** Member works for a business that uses the best management practices available to efficiently produce and market chickens, turkeys, domestic fowl such as ducks, geese and guinea, and their raw products.

**Sheep Production – Placement:** Member works for a business that uses the best management practices available to efficiently produce and market sheep, raw sheep products and wool.

**Small Animal Production and Care – Placement:** Member works for a business that includes the best management practices available to efficiently produce and market small animals such as all rabbits, cats, dogs, mice, hedgehogs, guinea pigs, lizards, snakes, small birds (*such as canaries, cockatiels, cockatoos, parakeets, parrots, etc.*) and programs that typically provide service in caring for the well-being of pets. SAEs 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. **NOTE:** *Employment at a veterinary clinic or similar veterinary care enterprise assisting veterinarians in performing duties related to the health and welfare of animals belongs in the appropriate Veterinary Science award area of the appropriate Entrepreneurship or Placement application type.*



**Specialty Animal Production – Placement:** Member works for a business that applies the best management practices available to efficiently produce and market specialty animals and their raw products. Members in this area must demonstrate that they are producing and marketing specialty animals not covered in any of the existing Award areas. Specialty animals can include but are not limited to the following: alligators, aquaculture, bees, mules, donkeys, bison, oxen, mink, worms, insects, 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, FFA members 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:** *This award area does not include further processing of specialty animal products (i.e., honey, llama wool, etc.); processing of these products belongs in the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.*

**Specialty Crop Production – Placement:** Member works for a business that applies the best management practices available to efficiently produce and market raw crops not covered in any of the existing award areas, 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 and floriculture production. (such as chrysanthemums, daylilies, etc.) **NOTE:** *This award area does not include further processing of these products; processing belongs in the appropriate Agricultural Processing award area of the appropriate Entrepreneurship or Placement application type.*

**Swine Production – Placement:** Member works for an employer that applies the best management practices available to efficiently produce and market swine and their raw products.

**Turf and Landscape Maintenance – Placement:** Member works for a business that includes experience with maintaining plants and shrubs, landscaping, groundskeeping, sprinkler repair/maintenance, lawn mowing and care services and sports field or golf course grounds maintenance. **NOTE:** *Producing turf grass for sale/transplanting belongs in the Nursery Operations award area for Entrepreneurship or Placement application types. Installing new landscaping belongs in the appropriate Landscape Installation award area of the appropriate Entrepreneurship or Placement application type.*

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

**Vertically Integrated Agricultural Production – Placement:** Member works at an enterprise or business that produces an animal or plant specified in the Diversified Agricultural Production award area description and adds value to that animal/plant through further processing and marketing. **To qualify in this award area the member's employment duties must include personal participation in ALL of the following:**

- Production of the live animal or plant
- Processing the animal or plant into a ready-to-use form
- Marketing and selling the finished product directly to the consumer

**NOTE:** *Acceptable examples include but are not limited to:*

- *Raising bees and harvesting raw honey and/or wax; processing the honey and/or wax into cleaned and bottled honey, lip balms, candy, candles, etc.; and finally, selling the finished products.*
- *Raising milking animals (cows, goats, sheep, etc.) and milking them. Processing the raw milk into ready-to-drink milk, cheese, ice cream, lotions, soaps, etc. Marketing and selling the finished products.*



- *Planting and growing fruits or vegetables. Processing the raw fruits/vegetables into finished food products such as canned or bottled items, baked or dried goods, etc. Marketing and selling the finished food products.*
- *Raising meat animals (cattle, sheep, swine, rabbits, poultry, etc.). Processing the animal into wholesale or retail cuts or other animal products (jerky, meat sticks, leather, tallow). Marketing and selling the finished products.*

**Veterinary Science – Placement:** Member works for a business that includes working with veterinarians in clinical practice, research facilities, colleges of veterinary medicine, the 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 must be under the **supervision of a veterinarian** and may include wage earning 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 – Placement:** Member works for a business that includes the improvement and the availability of fish and wildlife through practices such as land and water habitat improvement or development, wildlife surveys, trapping or the stocking of fish and wild game. This area includes activities conducted with local, state, or federal fish and wildlife or natural resource agencies managing wildlife and habitat specifically for wildlife. The legal production of wild species for stocking, such as ducks, geese, quail, pheasants, etc., are eligible if used as an income enterprise. Legal harvest of wildlife or fish for resale as an income enterprise is included in this area. **NOTE:** *Personal participation in recreational or subsistence hunting or fishing is not eligible.*

### National FFA Research SAE Award Area Descriptions

*(Research Type Definition pg. 1)*

**Note:** *Biotechnology Systems is the study of using data and scientific techniques to solve problems concerning living organisms with an emphasis on applications to agriculture, food, and natural resource systems. Because of this, biotechnology research is incorporated into all areas listed, depending on the study conducted. Biotechnology Systems is not its own area.*

**Analytical Research - Animal Systems:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of animal system life processes, health, nutrition, genetics, management, and processing of small animals, specialty animals (insects, worms, bacteria, coral, etc.), aquaculture, livestock, dairy, horses, and/or poultry.

**Analytical Research – Environmental Service/Natural Resource Systems:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of systems, instruments and technology used to monitor and minimize the impact of human activity on environmental systems and the management, protection, enhancement, and improvement of soil, water, wildlife, forests, and air. **NOTE:** *Includes only noninvasive and nonintrusive methods that do not negatively affect vertebrate animal health or well-being. Research designed or anticipated to cause vertebrate animal death is strictly prohibited.*

**Analytical Research - Food Products and Processing Systems:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of food product development, quality assurance, food safety, production, regulation and compliance within the food science industry.

**Analytical Research - Plant Systems:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of plant life cycles, classifications, functions, structures, reproduction, media, nutrients, growth and cultural practices. Includes research on all plants including but not limited to crops, turf grass, trees, shrubs and ornamental plants.

**Analytical Research - Power, Structural and Technical Systems:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of agricultural equipment, power systems, alternative fuel sources, precision technology, woodworking, metalworking, welding, and project planning for agricultural/natural resource equipment and structures.

**Analytical Research – Social Science:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Applies to the study of agricultural education, agribusiness, agricultural communications, agricultural leadership, and sales within agriculture, food, and natural resources.

**Analytical Research – Integrated:** Focuses on investigating why or how something occurs. The member must collect qualitative and/or quantitative data, analyze the information, and draw conclusions based on findings. Must include research from **two or more** of the Research SAE categories:

1. Animal Systems
2. Environmental Service/Natural Resource Systems
3. Food Products and Processing Systems
4. Plant Systems
5. Power, Structural and Technical Systems
6. Social Science

**Experimental Research - Animal Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of animal system life processes, health, nutrition, genetics, management, and processing of small animals, specialty animals (insects, worms, bacteria, coral, etc.), aquaculture, livestock, dairy, horses, and/or poultry.

**Experimental Research – Environmental Service/Natural Resource Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of systems, instruments and technology used to monitor and minimize the impact of human activity on environmental systems and the management, protection, enhancement and improvement of soil, water, wildlife, forests, and air. **NOTE:** *Includes only noninvasive and nonintrusive methods that do not negatively affect vertebrate animal health or well-being. Research designed or anticipated to cause vertebrate animal death is strictly prohibited.*

**Experimental Research – Food Products and Processing Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of food product development, quality assurance, food safety, production, regulation and compliance within the food science industry.

**Experimental Research – Plant Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of plant life cycles, classifications, functions, structures, reproduction, media, nutrients, growth, and cultural practices. Includes research on all plants including but not limited to crops, turf grass, trees, shrubs and ornamental plants.

**Experimental Research – Power, Structural and Technical Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome.

You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of agricultural equipment, power systems, alternative fuel sources, precision technology, woodworking, metalworking, welding, and project planning for agricultural/natural resource equipment and structures.

**Experimental Research – Social Science:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Applies to the study of agricultural education, agribusiness, agricultural communications, agricultural leadership, and sales within agriculture, food, and natural resources.

**Experimental Research – Integrated Systems:** SAE involves the application of the scientific method to control certain variables while manipulating others to observe the outcome. You will define a **hypothesis**, determine an appropriate **experimental design**, **conduct the research**, **collect the data**, **draw conclusions** from the data and **recommend** further research that can be done. Must include research from **two or more** of these Research SAE categories:

1. Animal Systems
2. Environmental Service/Natural Resource Systems
3. Food Products and Processing Systems
4. Plant Systems
5. Power, Structural and Technical Systems
6. Social Science

**Invention Research – Animal Systems:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of animal system life processes, health, nutrition, genetics, management, and processing of small animals, specialty animals (insects, worms, bacteria, coral, etc.), aquaculture, livestock, dairy, horses, and/or poultry.

**Invention Research – Environmental Service/Natural Resource Systems:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of systems, instruments and technology used to monitor and minimize the impact of human activity on environmental systems and the management, protection, enhancement and improvement of soil, water, wildlife, forests, and air.

**NOTE:** *Includes only noninvasive and nonintrusive methods that do not negatively affect vertebrate animal health or well-being. Research designed or anticipated to cause vertebrate animal death is strictly prohibited.*

**Invention Research – Food Products and Processing Systems:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of food product development, quality assurance, food safety, production, regulation and compliance within the food science industry.

**Invention Research – Plant Systems:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of plant life cycles, classifications, functions, structures, reproduction, media, nutrients, growth and cultural practices. Includes research on all plants including but not limited to crops, turf grass, trees, shrubs and ornamental plants.

**Invention Research – Power, Structural and Technical Systems:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of agricultural equipment, power systems, alternative fuel sources, precision technology, woodworking, metalworking, welding, and project planning for agricultural/natural resource equipment and structures.

**Invention Research – Social Science:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Applies to the study of agricultural education, agribusiness, agricultural communications, agricultural leadership, and sales within agriculture, food, and natural resources.

**Invention Research – Integrated:** Uses the engineering design process to develop a new product or service. The member must identify a need, create a prototype, test and refine the design to meet the intended purpose. Must include research from **two or more** of the Research SAE categories:

1. Animal Systems
2. Environmental Service/Natural Resource Systems
3. Food Products and Processing Systems
4. Plant Systems
5. Power, Structural and Technical Systems
6. Social Science

### National FFA School-Based Enterprise SAE Award Area Descriptions

[\*\(SBE Type definition pg.2\)\*](#)

**Agribusiness Systems:** Business provides products and/or services, keeping agricultural business records, managing budgets, performing business planning, and/or sales and marketing consulting.

**Animal Systems:** Business uses best management practices to produce, manage, train or care for animals of all types for all legal and ethical purposes, including but not limited to:

- Production of animal products such as meat, milk, wool, hides, eggs, embryos, semen, feathers, furs, hair, hormones, etc.
- Producing or training animals for show, work, human companionship or service such as emotional/medical support animals, racing, rodeo, sports, leisure, etc.
- Restocking wild populations such as but not limited to pheasants, quail, ducks, deer, elk, chukars, bees, endangered species, etc.
- Control of problem species.

**Biotechnology Systems:** Business uses data and scientific techniques to solve problems concerning living organisms with an application to agriculture, food, and natural resource systems.

**Environmental Service Systems:** Business provides products or services that manage, monitor, preserve or educate the public about environmental systems and issues. May also provide products or services that minimize negative impacts on, enhance or improve the environment.

**Food Products and Processing Systems:** Business provides products or services that:

- Monitor or improve food safety and sanitation.
- Monitor or improve nutrition, biology, microbiology, chemistry, and human behavior in local and global food systems.
- Monitor or improve food selection and processing for storage, distribution, and consumption.

**NOTE:** Food dish/item preparation, sales or serving does not meet AFNR standards and does not qualify. This includes cooking, baking, frying, barbequing, catering, serving, etc.

**Natural Resource Systems:** Business provides products or services to manage, protect, enhance and/or improve soil, water, wildlife, forests, and air as natural resources in AFNR settings.

**Plant Systems:** Business uses best management practices to produce, manage, or care for plants for all legal and ethical purposes.

**Power, Structural and Technical Systems:** Business provides products or services to design, manage, fabricate, build, repair and/or maintain agriculture and/or natural resource equipment and structures.

### **National FFA Service-Learning SAE Award Area Descriptions**

*([Service-Learning Type Definition pg.2](#))*

**Community Engagement:** SAEs that address matters related to heritage and traditions, connections between community members and civic responsibility throughout the community.

**Community Safety:** Member project addresses the safety of community members and/or the preparation, response and recovery efforts related to emergency preparedness and natural disasters.

**Environmental Responsibility:** SAEs that address the issues regarding air and water quality, energy and water efficiency, at-risk ecosystems, and conservation to protect and sustain the natural systems upon which all life depends.

**Hunger, Health and Nutrition:** Member project addresses unmet food insecurity needs, increasing physical activity and/or improving healthy habits to promote the physical and mental well-being of the community.