# **4H ENROLLMENT & LITERATURE GUIDE FOR MEMBERS**

General Enrollment Information: (Grade level as of Sept. 2018)



If you have questions, ask <u>YOUR</u> 4-H club leader or call the 4-H office, 7 15-627-6236.



### **Enrollment Deadlines:**

December 1, 2018 : Last day to re-enroll for current 2018 members. March 1, 2019: Last day to make changes to project lists. Last day for new enrollments that would like to participate at fair. Remember: You may only exhibit in those project areas where

you are currently enrolled.



Traditional 4-Hers in 6<sup>th</sup> grade and beyond may enroll in as many 13 projects. Each unit is one separate project!

<u>Cloverbuds</u>: For all youth enrolled in 5K-2<sup>nd</sup> grades. May ONLY enroll in Cloverbuds.



Explorers: For all youth enrolled in 3-5th grades. Explorers must enroll in "Explorers." They may enter up to 3 more projects.

## **Requirements for Youth and Adults:**

## <u>Project Literature:</u> <u>You must select your literature in 4-H Online to receive any.</u>

- 4-H members are required to pay a \$3.00 literature fee. Some clubs may choose to pay this for you.
- If you repeat a project, please do not order the literature again unless you lost it. If your brother or sister has the literature, please use theirs. <u>Please return any unused</u>
- <u>literature to your enrollment leader so that it can be recycled</u>. This helps reduce the cost of literature.
- New 4-H adult project leaders should order literature guides for both leaders and members (if available). This will help you know what is in the project so that you can plan your project or activity training and practice meetings.

## Project Sign Up Clarifications

- Double check the <u>fair book</u> to be sure you are really signed up for the projects you want to enter at the next fair.
- <u>Cake Decorating</u>: You must be enrolled in this to exhibit a cake at fair. You may not enter a cake if you only sign up for foods, to sell at auction you must be in your second year of cake decorating.
- <u>Shooting Sports</u>: You must sign up for each discipline you plan to compete in. For example: Archery, Air Rifle, & Air Pistol are all separate disciplines. If you want to do all 3 you must sign up for all 3.
- <u>Youth Leadership</u>: 4-Hers in grades 6-13 must sign up for youth leadership in order to be able to receive awards and trips.

## 4-H Projects Available

The projects below are sub categories, their maybe more available under the heading! Example: Arts & Crafts has ceramics, macramé, plant crafts etc.

- ADVENTURE PROJECT
- AEROSPACE-ASTRONOMY
- ARTS & CRAFTS
- AUTOMOTIVE
- BACKPACKING/HIKING
- BEEF
- BICYCLE
- CAKE DECORATING
- CAMPING
- CANDY MAKING
- CATS
- CHILD DEVELOPMENT
- CITIZENSHIP
- CLOTHING & SEWING
- CLOVERBUDS
- COMMUNICATIONS
- COMPUTERS
- CONSUMER SAVVY
- CONSERVATION
- CROCHETING
- CROPS
- DAIRY COW
- DAIRY GOATS
- DOGS
- ELECTRICITY
- ENTREPRENEUERSHIP
- ENTOMOLOGY (INSECTS)
- EXPLORING
- EXPLORING YOUR ENVIROMENT
- FLOWERS
- FOODS
- FOOD PRESERVATION
- FORESTRY
- FRUITS
- GARDENING
- GEOLOGY
- GUINEA PIGS
- HEALTH & FITNESS
- HOME ENVIRONMENT
- HORSES OR HORSELESS HORSE
- HORSE CLOTHES
- INTERNATIONAL
- JEWLERY MAKING
- KNITTING
- LEATHER CRAFT

- LEGOS
- LLAMAS
- MAPLE SYRUP
- MODELS
- MUSIC
- PERSONAL FINANCE
- PETS
- PHOTOGRAPHY
- PLANT & SOIL SCIENCE
- POTTERY
- POULTRY
- PUPPETRY
- PYGMY GOATS
- RABBITS
- REPTILES
- RECYCLE
- ROBOTICS
- SAFETY
- SCIENCE DISCOVERY
- SELF-DETERMINED
- SHEEP
- SHOOTING SPORTS
  - -Archery
  - -Air Pistol
  - -Air Rifle
- SMALL ENGINES
- SNOWMOBILING
- SPORTFISHING
- STEM
- SWINE
- THEATRE ARTS
- TRASH TO TREASURE
- VEGTABLES
- VETERINARY SCIENCE
- VIDEOGRAPHY
- WATER
- WEATHER AND CLIMATE
- WILD FLOWERS
- WILDLIFE MANAGEMENT
- WILDLIFE SCIENCE
- WIND ENERGY
- WORKFORCE READINESS
- WOODWORKING
- YOUTH LEADERSHIP

## 4-H PROJECTS EACH UNIT COUNTS AS ONE SEPARATE PROJECT

#### **ADVENTURE PROJECT**

**Introduction to Adventures** (Beginner through advanced) – Learn how to camp safely in all weather conditions, investigate camping equipment and clothing, build a campfire and cook a meal outside, tie knots practice first-aid, use a map and compass, and more.

**Bicycling** – Learn how and where to bicycle safely, select and care for equipment, explore the environment with all your senses, plan a bicycle camping trip, design and build a bicycle obstacle course, conduct a bike maintenance check, enter a bicycle rodeo, practice bicycling ethics, and more.

**Winter Travel** – Discover the joys of silent winter travel on cross-country skis or snowshoes. Select and take care of your equipment and clothing, experience a winter overnight campout, see how plants and animals prepare for winter, track animals in the snow, design a cross country ski conditioning program, make a winter shelter, and more.

**Canoeing** – Learn how and where to canoe safely, select and care for equipment, explore aquatic environments with all your senses, plan a canoe camping trip, design and build your own paddle, canoe a river, practice canoeing ethics, and more.

**Backpacking & Hiking –** Discover backpacking opportunities, learn how to backpack safely in all weather conditions, investigate backpacking equipment and clothing, develop wilderness manners, improve your observation skills, cook a meal on a backpacking stove, help develop And maintain a hiking trail, and more.

#### **Cross-Country Skiing Self-Taught**

#### AEROSPACE

Pre-Flight - 3rd grade - compare birds and airplanes, space helmets
Lift Off - 3rd-5th grade - paper airplanes, read maps, weather, kites
Reaching New Heights - 6th-8th grade - model rockets, remote controls
Pilot In Command - 9th-13th grade - altitude, flight routes, gravity, careers

#### ARTS & CRAFTS

**Celebrate Art** - This project is for beginners to introduce them to different arts and crafts. The project includes information on paper collage and Mache', weaving, clay, printed shirts, appliquéd banners, wood sculpture, wire sculpture, metal tooling, and sand casting.

Art In Your Future - This is a continuation of unit 1, with more in-depth activities plus embroidery, screen-printing, stained glass, and basketry.
Leather Craft - learn how to make leather articles
Block Printing - learn how to make designs to use on different materials, paper, cloth, etc.
Metal Enameling - learn how to make jewelry and other items

**Drawing & Painting** - learn how to make drawings and paintings using different media such as chalk, pencil, water color, acrylic, oil, etc.

Ceramics- learn the basics of preparing and painting mold (bisque)

**Trash & Treasure**- make useful articles out of throw-away such as plastic bottles, wire, tin cans, etc.

Folk Art - study of folk arts (music, dance, crafts, celebrations, etc.) of different people.

**Elements and Principles of Design** - Designed for youth in grades K-6, this new national 4-H Palette of Fun project will help you learn art through cutting and pasting, drawing, painting, printing sculpting, and construction w/fibers and other materials

**Plant Crafts**-Learn to harvest plants, use different drying techniques; learn how to use pant materials to make dried arrangements, corsages etc.

#### <u>BEEF</u>

**Bite Into Beef** - 3rd-5th grade **Here's the Beef** - 6th-8th grade **Leading the Charge** - 9th-13th grade

#### <u>CATS</u>

Purrr-fect Pals - 3rd-5th grade Climbing Up - 6th-8th grade Leaping Forward - 9th-13th grade

#### **CHILD DEVELOPMENT**

Growing On My Own - 3rd-5th grade - how you grow, safe toys Growing With Others - 6th-8th grade - family rules, healthy meals, safety hazards Growing In Communities - 9th-13th grade - community service, safe play grounds, careers

#### **CITIZENSHIP**

(Grades 6-8) Youth explore, stretch, challenge and connect to learn that they are participants in a global society.

#### **CLOTHING & SEWING**

**STEAM Clothing level 1- (Grade 3-4)**Youth understand textiles through fun science experiments, use beginning math and engineering techniques in clothing construction and investigating businesses, service learning projects and modeling.

**STEAM Clothing level 2– Simply Sewing (Grade 5-7)**– Youth learn advanced techniques, conduct projects and textile science experiments, focus on engineering adding finishing touches to garments, and market and calculate prices of products.

**STEAM Clothing Level 3– A Stitch Further (Grade 8-12)–** Youth learn designer couture techniques and how to sew with challenging patterns and fabrics, as well as how to sell their garments and accessories.

#### **CLOVERBUDS**

**Cloverbuds 1<sup>st</sup> Year Record Book** -for youth in Kindergarten – Learn about your 4-H group or club, begin developing different skills such as working with others, exploring your community and discover areas of project interest.

**Cloverbuds 2<sup>nd</sup> Year Record Book-** Learn about 4-H activities and events, how to work together as a club or team and share with others what you have learned

#### Cloverbuds 3<sup>rd</sup> Year Record Book- Continuation of 1 & 2

#### **COMMUNICATIONS**

**Communications 1** – <u>Picking Up the Pieces</u> - In this beginning project for grades 3 – 5, engage in nonverbal, verbal and written activities that stretch and strengthen your personal communication skills. Encrypt codes, write songs, give directions, deal with bullies, make a statement through art, and more.

**Communications 2** – <u>Putting it Together</u> - In this intermediate project for grades 6 – 8, become a confident communicator as you present oral reasons, plan and present speeches, communicate assertively, practice making a good first impression, mentor others, and more.

**Communications 3** - <u>The Perfect Fit</u> – In this advanced project for grades 9 – 12, polish your communication skills and develop a public presence by speaking in public, exploring communication careers, writing resumes, interviewing for a job, developing presentations, dealing with anxiety, and more.

**Creative Writing** – <u>Creative Word working</u> or <u>Crazy about Books Reading Circles</u> – explore the importance of language and creative expression. Enjoy fun ideas, tips, and special projects to stimulate your creativity and self-expression in this new 4-H project. Join a discussion group as you enrich your life-long joy of book reading.

#### **COMPUTERS**

**Computers 1, Inside the Box (3<sup>rd</sup> – 5<sup>th</sup> grade)** Learn about hardware, software and components, explore how computers work, learn the various programs and their features, and visit the project's interactive website.

**Computers 2, Peer to Peer (6<sup>th</sup> – 8<sup>th</sup> grade)** – Build and repair a computer, identify the components and how they work together, learn to upgrade and create connections, and install operating systems.

**Computers 3, Teens Teaching Tech (9<sup>th</sup> – 13<sup>th</sup> grade)** – Discover how to create and manage networks, make decisions about network management, and explore security issues and troubleshooting.

#### **ADVANCED COMPUTERS**

**Computer Science and Programming level 1**– This curriculum introduces young people to five fundamental principles of computer programming, providing a foundation for exploring and creating. Scratch is a project of the Lifelong Kindergarten Group at MIT media lab. Grades 6-8.

**Computer Science and Programming level 2–** This book delves deeper into important principles of computer science such as generalization and modularity, and introduces some additional features of Scratch such as clones and lists. Going through this book should strengthen youth's programming skills, help them write better programs, and provide interesting ideas for further exploration. Grades 6-8.

**Computer Science and Programming level 3–** The 3rd volume in a collection of 3 books on Scratch programming focuses on an interesting powerful and important technique from computer science called recursion. A recursive program is one which "calls itself". In Scratch, this means using a block for the script within the very script that defines the block. recursion makes solving many problems easier, and also allows one to do some things that would be very difficult to do without it, such as drawing intricate fractals. Grades 6-8.

#### **CONSUMER SAVVY**

**The Consumer In Me**-Youth will experience what it means to be a consumer through saving, spending and sharing.

**Consumer Wise**-Introduces youth to the influence of peer pressure, the power of advertising and the expanding Web market as they learn to make independent shopping decisions.

**Consumer Roadmap-**Supplemental materials that help volunteers facilitate learning situations for various ages of youth. Numerous group activities are included to help youth develop essential life skills as they pursue interest in consumer education.

#### CROCHETING

**Crochet Made Easy** - Discover what to consider when buying yarn, thread, and equipment. Learn crocheting and finishing techniques and how to care for crocheted items.

#### <u>CROPS</u>

**Corn Project**– learn about variety selection, germination, planting nutrients, harvesting and storage.

Forage Crops - corn silage and alfalfa Small Grains - oats and barley

#### DAIRY COW

**Cowabunga** - 3rd-5th grade **Moooving Ahead** - 6th-8th grade **Rising to the Top** - 9th-13th grade

#### **DAIRY GOATS**

Getting Your Goat - 3rd-5th grade Stepping Out - 6th-8th grade Showing the Way - 9th-13th grade

#### <u>DOGS</u>

Wiggles 'n' Wags - 3rd-5th grade Canine Connection - 6th-8th grade Leading the Pack - 9th-13th grade

#### **ELECTRICITY**

Magic of Electricity - 3rd-5th grade - simple circuits and switches, magnetism
 Investigating Electricity - 6th-7th grade - conductors, insulators, voltage
 Wired For Power - 8th-9th grade - tools, meters, symbols
 Entering Electronics - 10th-13th grade - semiconductors, resistors, TV, radio, computers

#### **ENTREPRENEUERSHIP**

Youth learn business types, products & pricing, marketing, partnerships, agreements & contracts. Youth go through the process of creating a business plan and starting a business. They do market surveys, budget forecasts, exit strategies, ethics & more.

**Discover the E-scene**-Grades 6+-Discovery is what Unit 1 is all about! Youth will learn about entrepreneurship by investigating businesses in their communities. Youth will discover the traits of an entrepreneur and take a skills test to see if they have these entrepreneurial traits. Other activities include: investigating entrepreneurs in youths' families, exploring potential business ideas, and reading stories of other entrepreneurs.

**The Case of ME**-Grades 6+- Youth will explore the core values of their business and learn how to give back to the community. Time management skills, ethics and legal considerations, professionalism, and relationship building are all themes within Unit 2.

**Your Business Inspection-**Grades 6+- Youth create a Business Plan and plan a marketing strategy. Youth also utilize the internet to promote their product or service to reach a broader audience.

#### Build Your Future Youth Notebook- Grades(9-12)

**ENTOMOLOGY** - The study of insects.

Teaming with Insects 1 - 3rd-5th grade – introduces the world of insects.

**Teaming with Insects 2** - 6th-8th grade –shows you how to make insect collection tools and expands on the basic concepts of biodiversity, invasive species, integrated pest management, and forensic entomology.

**Teaming with Insects 3** - 9th-13th grade – Goes even deeper into the basic concepts and encourages youth to take control of their learning by doing your own research using the scientific method and reference materials.

**Butterfly WINGS**-(grades 3-12) youth explore the outdoors through guided inquiry, learn to identify the butterfly families and common butterflies, and contribute to science.

#### **EXPLORING**

**Exploring the Treasures of 4-H** - for 3rd-5th grade members only - Learn about different 4-H projects such as arts and crafts, birds, insects, flowers, woodworking, electricity, foods, safety, plants, and small animals. You select which areas you want to work in. You may show many different exhibits at the county fair in the above-mentioned areas under exploring. This project is meant to introduce members to a variety of projects they may take in future years in 4-H. Work done in the Exploring project only counts as Exploring. For example, working on a woodworking project in Exploring does not mean that you have been entered in the woodworking project or that you may exhibit in the woodworking department at the Fair. It is meant as a means for exploration of the woodworking project before actually enrolling in it.

#### **EXPLORING YOUR ENVIROMENT**

Explore Your Environment - Earth's Capacity focuses on environmental stewardship and issues such as transportation choices, waste management, composting, recycling, and natural resources.

Earth's Capacity Ecosystem Services

FLOWERS - See Plant & Soil Science or House Plants

#### FOODS

**4-H Cooking 101**(3rd-4th grade) - learn about MyPlate, food safety, measuring and mixing, ingredients and preparing the table.

**4-H Cooking 201** (5th-7th grade) - Youth understand food borne illnesses, proper knife techniques, how to make soups, rice, pasta, and other foods.

4-H Cooking 301 (8th-9th grade) - Youth make bread, grill various foods and make butter.

4-H Cooking 401(10th-12th grade) - Youth learn how to make ethnic foods, cakes, candy, pastries.

### YOU MUST SIGN UP FOR CAKE DECORATING TO SELL AT THE AUCTION

You must take cake decorating one year prior before selling at the cake auction.

Cake Decorating 1– 1st year Cake Decorators Cake Decorating 2– 2nd Year Cake Decorators Cake Decorating 3– 3rd Year Cake Decorators Candy Making– Learn the basics of candy making

#### FOOD PRESERVATION

Food Preservation (6th-13th grade) - canning, drying and freezing fruits and vegetables.

#### **FORESTRY**

**Forestry 1** - <u>Follow the Path</u> – In this beginning project, identify forest types, forest products, tree and leaf parts; distinguish between deciduous and conifer trees; age trees by counting rings; identify organisms that depend on trees for survival; describe root systems; understand the processes of transpiration and photosynthesis; understand forest competition; recognize communities of trees; describe how leaves affect rainfall; find a state forest; research tree-related careers; and more.

**Forestry 2** – <u>Reach for the Canopy</u> – In this intermediate project, learn how trees move water from soil to canopy; diagram a leaf; describe a tree's life and decode its rings; understand major forest changes and the impact of invasive species; identify infectious and noninfectious tree diseases; identify and record insect damage to trees; analyze fire risk; understand forest densities and how to estimate the volume of a standing tree; understand why trees are necessary for human life; select urban tree planting sites, understand types or organism habitats; and more.

**Forestry 3** – Explore the Deep Woods – In this advanced project, identify an unknown tree using a tree key, make bark rubbings, recognize different tree fruits, determine the history of a neighborhood tree, create a community forest map, identify major forest biomes by continent, identify how different cultures use forests, identify benefits and requirements of urban trees, determine ownership of forests, decide how different values and needs influence forest uses, make harvest decisions, identify forestry jobs, and more.

Making Maple Syrup - tapping trees, making sugar and syrup.

#### **FRUITS**

**Fruits** – 3<sup>rd</sup>-13<sup>th</sup> grade - Produce fruits from apples to grapes & select the best fruit cultivar for your home garden.

#### **HEALTH & FITNESS**

- Health 1 <u>First Aid in Action</u> 3<sup>rd</sup> 5<sup>th</sup> grades Practice first aid skills to treat cuts, scrapes, nosebleeds, and bee stings. Learn how to respond to someone who is choking or has broken a bone, assemble a first aid kit, interview members of the medical profession.
- **Health 2** <u>Staying Healthy</u> 6<sup>th</sup> 8<sup>th</sup> grades Use a self-assessment tool to identify your personal talent areas; explore hygiene, nutrition, and physical activities; share what you discover, and more!
- Health 3 Keeping Fit 9<sup>th</sup> grade and up Design your own personal fitness plan and track it using your own fitness file. Through interviews and personal experiences, discover the benefits of being fit.

#### **HOME ENVIRONMENT**

- **Exploring Your Home** 3rd-5th grade Learn how to make a home more attractive; introduction to color, texture, and wood finishing.
- Living with Others 5th-9th grade Learn about elements of design (line, shape, and space). Make up simple accessories and study furniture finishes.
- Where I Live 9th-13th grade Learn how rhythm, balance, scale, and proportion make a room more attractive. Explore ways to hang accessories on walls in creative ways. Learn when to clean and when to restore furniture and how it is done.

#### HORSES OR HORSELESS HORSE

**Giddy up and Go-** Activities include horse body shop, human cues & group relay knot. Learn-by-doing activities that explore breed identification, horse body parts, selection, grooming, saddling & bridling, design the perfect horse, safety & equipment.

**Head Heart and Hooves** - Youth explore horse reproduction, diseases and health care, pasture management, providing appropriate shelter and building a financial plan.

**Stable Relationships-** Youth explore horse reproduction, diseases and health care, pasture management, providing appropriate shelter and building a financial plan.

**Riding the Range** -Youth learn nine basic riding skills and 10 horsemanship skills, training techniques, trail riding and selection and use of tack.

Jumping to New Heights- Youth learn more advanced riding skills, the Quarter System, horse showmanship, ethics and leadership.

#### Please note you should sign up for the Horseless Horse project if you fall in one of these categories:

- A: A horseless horse project member is defined as a 4-h member who has no one-on-one access to a horse. They do not own their own horse. Their family does not own or lease a horse. (Cloverbuds may not be horseless project members.)
- B: The horseless horse person must be working with a current 4-H horse project member (buddy) or leader. The same horse may be shown by both members. This is the only horse the horseless horse member may show. (Two Horseless Horse members may NOT show the same horse.)
- C: The "buddy" may not be a sibling that resides in the same household. (If two siblings are showing the same horse, that is family owned or managed, both siblings are classified as horse project members.)
- D: Horseless horse members are expected to work with the horse owning 4-H horse member or leader to learn about the horse, (including grooming, clean up, tack, riding, etc.).

#### HORSELESS HORSE

Horseless Horse 1 - 3rd-5th grade - draw horses, identify breeds, communicate with horses.

Horseless Horse 2 - 6th-8th grade - behavior traits, travel, caring for hooves, careers

Horseless Horse 3 - 9th-13th grade - promote horses, horse health program, train young horses

#### **HORSE CLOTHES**

**Horse Clothes**– In this project learn how to make your own riding apparel and horse equipment. Learn about textile selection and care.

#### **HOUSE PLANTS**

**Propagating and Growing House Plants**-Project guide to show how to identify plant parts and their functions, grow house plants, start a plant from a cutting, make a dish garden, prepare a house plants exhibit for show, and more.

**INSECTS** - See Entomology

#### <u>KNITTING</u>

**Knitting Made Easy** – Discover what to consider when buying yarn and knitting equipment. Learn knitting and finishing techniques, and how to correct errors and care for knitted items.

#### MODELS

**Building Scale Models** - build scale models of boats, trucks, trains, submarines, and motorcycles from kits.

#### **MUSIC**

4-H Music Project - You may get books at the library on different types of Musical instruments, composers, etc., and careers in music. Also, there is New Literature: "Youth & 4-H Music Project Guide."

#### PERSONAL FINANCE

**My Financial Future Beginner Youth Notebook-(Grades 5-8)** Helps youth develop skills and knowledge in money management; topics include defining wants vs. needs, creating spending plans and using debit/credit cards.

**My Financial Future Advanced Youth Notebook- (Grades 9-12)** Topics include identifying sources of income, using different methods of payment, evaluating investment alternatives, and managing debt.

#### **PETS**

Combines cage birds, guinea pigs, tropical fish, and more. Call to see if your animal is acceptable.

**Pet Pals** - 3rd-5th grade - select a pet, explore costs, and provide a safe environment **Scurrying Ahead** - 6th-8th grade - feeding pets, shopping for supplies, animal health **Scaling The Heights** - 9th-13th grade - classifying animals, pet related careers

#### **PHOTOGRAPHY**

**Focus on Photography** - (3rd-5th grade) - parts of cameras, basics of lighting & good photo composition, how to take good pictures, care of cameras, using different types of light, take trick and black and white photos.

**Controlling the Image** - (6<sup>th</sup>-8<sup>th</sup> grade) – camera adjustments, lighting and photo composition, film speed, shutter speed, aperture, take candid's, panning shots, panoramas, and montages.

**Mastering Photography** - (9th-13th grade) – Wide-angle and telephoto lenses, filters, infrared film, light meters, & studio lighting. Experiment with special effects, as well as underwater and astrophotography

#### PLANT & SOIL SCIENCE

The series contains hands-on activities that focus on growing and using flowers and plants. The curriculum is designed around five major categories: Planning, growing and caring for plants, exploring science, floral design and career exploration.

Level 1– Grades 3-4 Level 2– Grades 5-6 Level 3– Grades 7-8 Level 4– Grades 9-12

#### **POULTRY**

Scratching the Surface - 3rd-5th grade – chickens Testing Your Wings - 6th-8th grade – chickens Flocking Together - 9th-13th grade – chickens

#### **PUBLIC SPEAKING**

Finding your voice: public speaking made easy, this project prepares members for delivering speeches in front of large or small crowds with confidence.

#### **PUPPETRY** - See Theatre Arts

#### **PYGMY GOATS**

Note: These are considered Exotic Animals and will be entered in the Fair in that department, although the literature refers to "Meat Goats" the majority of the information is also applicable to Pygmy Goats.

Just Browsing – 3-5 grade Growing With Meat Goats – 6-8 grade Meating the Future – 9-12 grade

#### **RABBITS**

Whats Hoppening - 3rd-5th grade Making Tracks - 6th-8th grade All Ears - 9th-13th grade

#### **RECYCLE**

**Recycle for Reuse** - learn about recycling, solid waste, and what we can do to help recycle to reduce waste.

#### ROBOTICS

**Give Robots a Hand-**Youth explore and learn about robot arms. Concepts covered include pneumatics, arm designs, and three-dimensional space. Big ideas include form and function, scientific habits of mind, and engineering design.

**Robots on the Move**-Youth learn about robots that move with legs, wheels and underwater. Concepts covered include friction, basic electrical power and motors, engineering constraints, gear system and buoyancy.

**Mechatronics**-Youth will explore sensors and analog and digital systems. The track introduces simple electronic components; youth will build basic circuits to see how the components work. They will investigate basic elements of programming and instructions for robotic computer control.

#### **SERVICE LEARNING**

**Agents of Change–** grades 6-8– Youth become "Special OPPtoruniities Agents", as they follow a series of exciting activities that engage them in their community. Youth identify community needs, plan a service project, and execute their ideas

**Raise Your Voice-**Grades 9-12– This no-nonsense guide engages youth as young leaders. Voices of real young people engaged in service inspire youth and connect them with others who make an impact. Youth plan and implement their own service project.

#### **SELF-DETERMINED**

**Design Your Own Project** - <u>For members 9th-13th grade</u> who want to design a project that is not currently offered or expand a current project, going beyond what is offered. Example: a new project such as writing short stories or developing a game using a computer; expanding a project such as foods to learn about spices, their origin, and use in foods, or careers in the food industry.

#### **SHEEP**

Lambs, Rams and You - 3rd-5th grade Shear Delight - 6th-8th grade Leading the Flock - 9th-13th grade

#### **SHOOTING SPORTS**

Hunting - Introduction to Firearms and Hunting (7th-13th grade) - parts of a gun, safety, care of guns, hunting rabbits, squirrels, deer.

**Archery** - learn about shooting and parts of equipment and safety; hands-on training and safety is stressed.

**Air Rifle** – this project is an introduction to the air rifle: dry firing, sighting, shooting for scores, scoring targets, and standing, kneeling, sitting and prone positions. Hands-on training, marksmanship and safety will be stressed.

**Air Pistol** - 3<sup>rd</sup> -13<sup>th</sup> grade – 4-H Shooting Sports – Basic Air Pistol Explore different air pistols, learn basic safety rules and guidelines, and learn marksmanship and shooting procedures.

#### **SMALL ENGINES**

Youth explore internal parts of engines, learn about engine sizes, compression ratios, seasoning their engines & safety issues. Youth also learn about occupational possibilities & about starting their own business.

Crank it Up – 3rd –5th grade

Warm it Up – 6th – 8th grade

**Tune it Up** – 9th – 13th grade-Youth tear down and rebuild an engine, use diagnostic tools, research rules and regulations about using small engine machines and select replacement engines.

#### **SPORTFISHING**

**Take the Bait** – 3<sup>rd</sup> – 5<sup>th</sup> grade – Tie fishing knots, cast a fishing lure accurately, rig your tackle to fish on the bottom, identify types of tackle, organize a tackle box, take proper care of your tackle, use shelter and temperature information to locate fish, identify different types of baits, identify fish in your area, take proper care of your catch, identify parts of a fish, and more.

**Reel in the Fun** –  $6^{th} - 8^{th}$  grade – Find fishing information on the Internet, cast a spinning rod and reel, cast a plug for accuracy, cast a fly, tie fishing knots, select a recipe and cook a fish, clean a shoreline, research state fishing regulations, decorate a lure, make a fly wallet, tie an artificial fly, collect and analyze aquatic life, test water for oxygen and microscopic animals, research fish body shapes and more.

**Cast into the Future** – 9<sup>th</sup> grade and up – Take a friend fishing, reassemble a fishing reel, make artificial flies and lures, modify fishing equipment, refurbish old fishing equipment, conduct water temperature experiments, collect aquatic insects using a kick net, identify insects that fish eat, learn about ethical angling, investigate sportfishing careers, keep a field journal about fishing, teach others how to identify fish, and more.

#### **SWINE**

The Incredible Pig - 3rd-5th grade Putting the Oink in Pig - 6th-8th grade Going Whole Hog - 9th-13th grade

#### **THEATRE ARTS**

**Playing the Role** – Study acting, sound, movement, voce and speech. Learn different ways to play a scene.

**Becoming a Puppeteer** – Investigate the history of puppets, explore types of puppets and puppet characters, use puppets in community service work. Plan and present a puppet show.

**Setting the Stage** – Study costumes, makeup, stage sets, props and sound. Learn stage management, create sounds and disguises, make up your own character and bring it to life!

**Enter the Clowns** – Discover the history of clowning, develop your own character, design your own makeup, costume and props.

#### **VEGTABLES & GARDENING**

Help kids learn about garden planning, planting, care, harvesting, storage and careers!

#### **VETERINARY SCIENCE**

**From Airedales to Zebras-** Introduces youth to the normal animal, basic anatomy and systems, elementary principles of disease and careers with animals.

**All Systems Go-** Involves youth in in-depth investigation of normal and abnormal systems, preparation for college and exploration of the diversity of the veterinary profession.

**On the Cutting Edge-** Involves youth in in-depth investigation of normal and abnormal systems, preparation for college and exploration of the diversity of the veterinary profession.

#### **ADVANCED VETERINARY SCIENCE**

Module 1: Animal Behavior-Grades 9-12-. Module 1 provides tips for facilitators and Resource to guide youth through observing, measuring, and interpreting animal behavior.

**Module 2: Animal Vital Signs-**Grades 9-12. Module 2 provides data sheets and guides on How to measure and record basic health information and statistics.

**Module 3: Disease Transmission-**Grades 9-12. Module 3 teaches youth about disease and disease transmission. Several risk assessment practice scenarios are offered.

**Module 4: Principles of Bio Security–** Grades 9-12. Module 4 teaches youth about the important topic of bio-security. Disease risk, risk assessment, and strategies for risk Mitigation are addressed.

**Module 5: Advanced Concepts in Animal Care**-Grades 9-12. Module 5 teaches youth about advanced concepts in animal care practices

#### **VIDEOGRAPHY**

Action! Making Videos & Movies – Guide on Storytelling, editing, planning, lighting, camera handling, making titles, recording sound, as well as showing and reviewing your production.

#### WATER

**Give Water a Hand**– Become a water quality detective. Identify water conservation and pollution issues in your home, school, community.

#### WEATHER AND CLIMATE

**Level 1**– For youth who enjoy learning about science, especially weather and climate. Level 1 introduces basic weather words and ideas. Activities focus on understanding the signs of weather and youth will also begin to learn the difference between weather and climate and how these ideas are related. Grades 3rd-5th.

**Level 2**– Activities introduce youth to more complex weather topics, understanding climate and making and using weather instruments. Grades 6th-8th.

**Level 3**– Delves deeper into weather and climate science concepts, such as air masses, wind chill, and heat index, drought monitoring, and the sun-earth relationship to prepare youth to be well informed and perhaps to study these topics in college or university. Grades 9th-12th.

#### WILD FLOWERS

**Wildflowers**-Learn about wildflowers in your neighborhood; learn to identify wildflowers and how to collect them; discover how humans affect wildflowers.

#### WILDLIFE MANAGEMENT

**Providing Needs of Wildlife** - improving or developing a wildlife game refuge, wildlife ecology, and careers.

**Wisconsin Wildlife**– helps examine the wildlife management options, lists useful management practices and techniques, steps involving in developing a wildlife management plan.

#### WILDLIFE SCIENCE

The Wildlife Science curriculum is for youth who enjoy learning about wildlife and exploring Their habitats. Learn about mammals, birds, fish, and herptiles and the role humans play in Conservation and wildlife management.

**Level 1–** grades 3-5– Introduces the wildlife groups: mammals, birds, fish and herptiles. Youth will learn about the similarities and differences among these groups and then study each one.

**Level 2**-grades 6-8– Youth explore more complex wildlife topics, such as: habitats, conservation, and sign of wildlife.

**Level 3**-grades 9-12– Activities in level 3 are divided into chapters based on how youth might Use the information they've learned. As a homeowner, resident of a watershed, food and fiber (farmer), mayor, teacher, or legislator.

**WIND ENERGY**-Learn about the wind and it's uses, explore wind as a potential energy source in their community.

#### WORKFORCE READINESS

**Get in the Act!-** Explore what it takes to get your first job; discover how to asses job possibilities in the community; create job scenarios, recognize your learning styles.

#### WOODWORKING

Measuring Up - 3rd-4th grade - types of wood, handsaws, drills, finishes Making The Cut - 4th-6th grade - sanders, bevel and curved cuts, cost of lumber Nailing It Together - 6th-8th grade - planes, clamps, circular saws, table saws Finishing Up - 9th-13th grade - routers, plywood, safety, career

#### **YOUTH LEADERSHIP**

Youth Leadership is for 6th-13th grade members who want to develop skills in leadership. Younger members (6th-7th grade) help with setting up the meeting room, help with club recreation, serve on club committees, and help get new members and leaders. Members (8th-9th grade) help with project and activity training, serve on committees, become club officers, help younger members select projects, and help fill out fair entry forms and 4-H record books. They also help at the county fair. Members (10th-13th grade) become chairpersons of committees, teach projects, are volleyball managers, teach at county training sessions, help at county 4-H events, promote 4-H at schools, etc. (Certain 4-H awards require the youth leadership project.) This is a NEW curriculum designed to help you better organize and understand your project. It will help give you ideas and direction.

**My Leadership Journal** – 6-8<sup>th</sup> grade **My Leadership Portfolio** – 9<sup>th</sup>-13<sup>th</sup> grade

