

# Waukesha County 4-H Project Enrollment Guide



**Projects . . .** A 4- project is an area that you want to learn more about during the year. There are projects on just about any topic you would like to study and explore, from art to woodworking, from computers to rabbits, from clothing to small engines.

You'll learn more than "subject matter" as you complete your projects. You'll learn many "life" skills that you'll use every day of your life, such as, understanding yourself, communicating better, solving problems, making decisions and working with others.

**Selecting projects . . .** First, make a list of the things you like to do or want to learn more about. Talk over your list with your parents, leaders and friends. They may recognize some special things you are good at that you don't even realize you do well.

Then compare your list with the projects described in this guide. Ask yourself if you have the equipment, money and time to do the projects that sound interesting. Limit yourself to a maximum of 24 projects. If this is your first year in 4-H, choose only two or three projects and do them well.

Many projects have more than one level. If you've had a lot of experience in an area, you may want to skip the first or beginning level of a project. All projects also have grade recommendations. Most of these are recommendations, however, the Legos and Shooting Sports projects are age specific.

**Enrolling in projects . . .** When filling out the 4-H Enrollment form you received from your club leader, use the numbers and project titles found in this booklet ONLY. Remember to select no more than 24 projects.

**Showing your projects . . .** Completed projects are to be displayed at the Waukesha County Fair in July. Display at least one entry for every project you enroll in.

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## **GROWING IN 4-H**

### **10200 YOUTH LEADERSHIP LDR**

#### **10201 YOUTH LEADERSHIP 1**

What you can do in this project:

- Assess your leadership skills
- Practice effective communication skills
- Set goals and resolve conflict
- Plan a group event

Grades: 3-5

#### **10202 YOUTH LEADERSHIP 2**

What you can do in this project:

- Explore how leaders are different
- Develop a multi-media presentation
- Set and achieve team goals
- Practice teamwork

Grades: 6-8

#### **10203 YOUTH LEADERSHIP 3**

What you can do in this project:

- Build trust in a group
- Assess your own strengths and weaknesses
- Write vision and mission statements
- Contribute to a group project

Grades: 9-12

### **10350 CLOVERBUDS LDR**

#### **10351 CLOVERBUDS 1**

What you can do in this project:

- Learn about your 4-H club or group
- Begin developing different skills, e.g., working with others
- Explore your community
- Discover areas of project interest

Grade: Kindergarten (K5)

#### **10352 CLOVERBUDS 2**

What you can do in this project:

- Learn about 4-H activities and events
- Learn about working together as a club or team
- Share with others what you have learned

Grade: 1

#### **10353 CLOVERBUDS 3**

What you can do in this project:

- Begin learning about specific 4-H project areas
- Learn to complete projects as an individual
- Share with others what you have learned

Grade: 2

### **10800 CITIZENSHIP LDR**

#### **10801 CITIZENSHIP**

What you can do in this project:

- Discover and discuss public issues
- Plan a project to change or improve your community

Grades: 4-12

#### **10809 CITIZENSHIP YTH LDR**

### **10900 SELF-DETERMINED LDR**

### **10901 SELF-DETERMINED**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **ANIMAL SCIENCES**

### **20100 BEEF LDR**

#### **20101 BEEF 1**

What you can do in this project:

- Identify various beef breeds
- Identify parts of a beef animal
- Halter-break and show a calf
- Fit and judge beef cattle
- Recognize and raise a healthy animal

Grades: 3-5

#### **20102 BEEF 2**

What you can do in this project:

- Present oral reasons during judging
- Learn about feed ingredients, behavior and parasites
- Study how to do nose-print identification
- Learn beef carcass composition and retail meat cuts

Grades: 6-8

#### **20103 BEEF 3**

What you can do in this project:

- Explore selection and judging
- Learn about careers, health, reproduction, etc.
- Discover how to market your animal and by-products

Grades: 9-12

### **20150 DAIRY GOAT LDR**

#### **20151 DAIRY GOAT 1**

What you can do in this project:

- Gain hands-on experiences in the goat project
- Select, manage, fit and show goats
- Learn responsible goat ownership

Grades: 3-5

#### **20152 DAIRY GOAT 2**

What you can do in this project:

- Learn to keep your goat healthy
- Feed your goat for maximum production
- Prepare for kidding
- Develop judging skills
- Learn how to milk a goat properly

Grades: 6-8

#### **20153 DAIRY GOAT 3**

What you can do in this project:

- Learn about genetics, diseases and breeding
- Study body-condition scoring and linear appraisal
- Understand bio-security and prevention measures
- Gain leadership and explore career opportunities

Grades: 9-12

### **20200 DAIRY LDR**

## **ANIMAL SCIENCES *continued***

### **20201 DAIRY 1**

What you can do in this project:

- Identify dairy breeds
- Study and identify parts of the dairy cow
- Learn how to select quality dairy calves
- Fit and show a calf
- Identify stages of calving and care
- Assemble tools needed for packing a show box

Grades: 3-5

### **20202 DAIRY 2**

What you can do in this project:

- Learn about housing and hay quality
- Learn about milking and food safety
- Explore ways to keep an animal healthy
- Observe animal behavior

Grades: 6-8

### **20203 DAIRY 3**

What you can do in this project:

- Practice mastitis detections
- Learn to balance rations
- Practice pregnancy detection and delivery of a calf
- Learn body-conditioning scoring
- Promote dairy products
- Explore various dairy industry careers

Grades: 9-12

### **20300 HORSE/HORSELESS HORSE LDR**

#### **20301 HORSE 1**

What you can do in this project:

- Learn horse behavior and terms
- Study breeds and identify body parts
- Saddle, groom and bridle your horse
- Practice horse safety and horse selection

Grades: 3-5

#### **20302 HORSE 2**

What you can do in this project:

- Practice horsemanship and judging
- Understand horse selection and training
- Learn about tack, feeding and diseases
- Practice showing a horse and trail riding

Grades: 6-8

#### **20303 HORSE 3**

What you can do in this project:

- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers

Grades: 9-12

#### **20304 HORSE 4**

What you can do in this project:

- Train a horse
- Practice a round-pen workout
- Learn English and Western style bridles
- Understand equitation and riding styles

Grades: 3-7

### **20305 HORSE 5**

What you can do in this project:

- Learn to set goals
- Compare costs of show clothing
- Present your horse in showmanship classes
- Rate your showmanship skills
- Practice proper show ethics

Grades: 8-12

### **20306 HORSELESS HORSE 1**

What you can do in this project:

- You do *not* need a horse in this project
- Explore horse behavior, terms and breeds
- Identify body parts
- Learn grooming, saddling and bridling
- Learn about safety and equipment

Grades: 3-5

### **20307 HORSELESS HORSE 2**

What you can do in this project:

- Learn about horsemanship
- Explore judging and oral reasons
- Learn selection, training and showing
- Practice trail riding skills

Grades: 6-8

### **20308 HORSELESS HORSE 3**

What you can do in this project:

- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers

Grades: 9-12

### **20311 DRAFT HORSE**

What you can do in this project:

- Explore different breeds and characteristics
- Learn conformation, selection and nutrition
- Practice harnessing and hitching

Grades: 6-8

### **20380 CLOTHES HORSE LDR**

#### **20381 CLOTHES HORSE**

What you can do in this project:

- Learn how to make riding apparel and equipment
- Develop sewing and creative skills
- Understand textile selection and care

Grades: 3-12

### **20390 LLAMAS LDR**

#### **20391 LLAMA 1**

What you can do in this project:

- Identify llama breeds and parts
- Learn to select a good animal
- Feed and care for a llama
- Develop a budget for a llama project

Grades: 3-4

#### **20392 LLAMA 2**

What you can do in this project:

- Recognize llama diseases

## **ANIMAL SCIENCES *continued***

- Select a veterinarian and purchase breeding stock
- Understand reproduction cycle and keep records
- Fit and show llama

Grades: 5-7

### **20393 LLAMA 3**

What you can do in this project:

- Learn to control diseases
- Understand bio-security and quality assurance
- Formulate rations
- Evaluate llama pastures

Grades: 9-12

### **20400 SWINE LDR**

#### **20401 SWINE 1**

What you can do in this project:

- Identify swine breeds, feeds and animal parts
- Practice judging market hogs
- Identify pork meat cuts
- Practice fitting and showing a hog

Grades: 3-5

#### **20402 SWINE 2**

What you can do in this project:

- Make a swine health care plan
- Identify diseases
- Assemble tack and pack a show box
- Plan and organize a facility expansion
- Complete a plan for a new pork product

Grades: 6-8

#### **20403 SWINE 3**

What you can do in this project:

- Learn to make breeding and culling decisions
- Judge a class of breeding gilts
- Design a preventative herd health plan
- Manage a feeding program

Grades: 9-12

### **20500 POULTRY LDR**

#### **20501 POULTRY 1**

What you can do in this project:

- Identify poultry breeds
- Learn parts of the bird
- Learn parts and functions of the egg
- Learn how to select and handle poultry
- Fit and show poultry

Grades: 3-5

#### **20502 POULTRY 2**

What you can do in this project:

- Observe a healthy flock
- Select and judge broilers
- Discover how an egg is formed
- Prevent poultry diseases
- Discover how chicks imprint

Grades: 6-8

#### **20503 POULTRY 3**

What you can do in this project:

- Organize a judging clinic
- Manage a laying flock
- Discover qualities of eggs
- Handle poultry products safely
- Process a chicken

Grades: 9-12

### **20504 WATERFOWL**

What you can do in this project:

- Learn about waterfowl breeds and parts
- Handle waterfowl properly
- Select and prepare waterfowl for market
- Incubate and exhibit waterfowl

Grades: 3-12

### **20505 TURKEYS**

What you can do in this project:

- Learn about buying poultry
- Prepare a brooding area
- Raise range turkeys
- Feed and water turkeys
- Identify diseases

Grades: 3-12

### **20506 BANTAMS**

What you can do in this project:

- Discover bantam breeds and breed characteristics
- Learn how to get started raising bantams
- Select and mate bantams
- Incubate and rear their young
- Learn to feed and house birds
- Fit and show bantams

Grades: 3-12

### **20507 PIGEONS**

What you can do in this project:

- Learn about buying, banding and feeding
- Understand about proper housing and behavior
- Learn about grooming and exhibiting

Grades: 3-12

### **20511 EXOTIC BIRDS (Ostrich, Emu, Peafowl)**

What you can do in this project:

- Learn about buying, banding and feeding
- Understand about proper housing and behavior
- Learn about grooming and exhibiting

Grades: 3-12

### **20600 SHEEP LDR**

#### **20601 SHEEP 1**

What you can do in this project:

- Identify sheep breeds and body parts
- Observe sheep behavior
- Identify uses of wool and other by-products
- Fit and show sheep

Grades: 3-5

#### **20602 SHEEP 2**

What you can do in this project:

- Learn to identify sheep parasites
- Promote meat safety
- Judge wool

## **ANIMAL SCIENCES *continued***

- Diagnose sheep diseases
- Use medications safely
- Explore careers

Grades: 6-8

### **20603 SHEEP 3**

What you can do in this project:

- Set sheep production goals
- Plan sheep related activities
- Market sheep products and teach others
- Plan a judging contest
- Explore careers

Grades: 9-12

### **20650 CATS LDR**

#### **20651 CATS 1**

What you can do in this project:

- Select a cat
- Identify cat breeds
- Name the parts of a cat
- Handle and groom a cat
- Care for its health
- Create a budget

Grades: 3-5

#### **20652 CATS 2**

What you can do in this project:

- Learn about cat senses and sounds
- Explore tricks to teach a cat
- Traveling with a cat
- Learn about feeding and emergency care
- Detect signs of illness and health issues

Grades: 6-8

#### **20653 CATS 3**

What you can do in this project:

- Explore veterinary procedures
- Learn reproduction and cat body systems
- Learn showmanship and cat behavior
- Explore community laws and animal welfare

Grades: 9-12

### **20700 DOGS LDR**

#### **20701 DOGS 1**

What you can do in this project:

- Learn basic skills for dog care and training
- Discover different dog breeds
- Study and identify dog body parts
- Learn how to keep a dog healthy and groomed

Grades: 3-5

#### **20702 DOGS 2**

What you can do in this project:

- Explore dog health and nutrition
- Discover genetic problems and population control
- Learn showmanship and training techniques
- Learn about show-ring ethics

Grades: 6-8

### **20703 DOGS 3**

What you can do in this project:

- Investigate responsible breeding
- Care for geriatric dogs
- Train service dogs
- Explore careers related to dogs

Grades: 9-12

### **20730 DOG OBEDIENCE TRAINING LDR**

#### **20731 DOGS OBEDIENCE TRAINING**

What you can do in this project:

- Learn showmanship and training techniques
- Learn about show-ring ethics
- Train dogs

Grades: 3-12

### **20750 RABBITS LDR**

#### **20751 RABBITS 1**

What you can do in this project:

- Learn about selecting and handling rabbits
- Identify rabbit breeds and body parts
- Explore health issues and feeding

Grades: 3-5

#### **20752 RABBITS 2**

What you can do in this project:

- Learn to select show rabbits
- Give oral reasons and judge rabbits
- Learn to tattoo
- Detect diseases
- Keep records of animals

Grades: 6-8

#### **20753 RABBITS 3**

What you can do in this project:

- Learn about breeding and genetics
- Design a rabbitry
- Market rabbits
- Learn about disease prevention and rabbit registration

Grades: 9-12

### **20760 RABBIT HOPPING LDR**

#### **20761 RABBITS HOPPING**

What you can do in this project:

- Learn sportsmanship, care and management of a rabbit
- Train your rabbit to hop over barriers on a course that resembles that of a horse show event scaled down for bunnies

Grades: 3-12

### **20800 VETERINARY SCIENCE LDR**

#### **20801 VETERINARY SCIENCE 1**

What you can do in this project:

- Learn different breeds of animals
- Interpret animal behavior
- Identify feed nutrients
- Describe animal life stages and systems

Grades: 3-5

## **ANIMAL SCIENCES *continued***

### **20802 VETERINARY SCIENCE 2**

What you can do in this project:

- Create health records for your animal
- Conduct food safety experiments
- Discover importance of immunity and bio-security
- Consider ethics and animal welfare

Grades: 6-8

### **20803 VETERINARY SCIENCE 3**

What you can do in this project:

- Investigate the importance of genetics
- Understand diseases that spread from animals to humans
- Learn about diversity of veterinary careers

Grades: 9-12

### **20860 CAVIES LDR**

#### **20861 CAVIES (GUINEA PIGS)**

What you can do in this project:

- Identify cavie/guinea pig body parts
- Learn to provide a safe environment
- Design a space for your cavie/guinea pig

Grades: 3-12

### **20870 CAGE BIRDS LDR**

#### **20871 CAGE BIRDS**

What you can do in this project:

- Learn about buying, banding and feeding
- Understand about proper housing and behavior
- Learn about grooming and exhibiting

Grades: 3-12

### **20900 PETS LDR**

#### **20901 PETS 1**

What you can do in this project:

- Explore your favorite pet or select a pet
- Identify pet body parts
- Learn to provide a safe environment
- Design a space for your pet

Grades: 3-5

#### **20902 PETS 2**

What you can do in this project:

- Explore animal digestion and feeding
- Shop for pet supplies
- Determine the animal's sex and proper health
- Study pet behavior and communication

Grades: 6-8

#### **20903 PETS 3**

What you can do in this project:

- Explore pet products
- Teach others about pets
- Understand how genetics work
- Explore animal welfare issues

Grades: 9-12

### **20991 SELF-DETERMINED ANIMAL SCIENCES**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **ARTS & COMMUNICATION**

### **30000 PHOTOGRAPHY LDR**

#### **30001 PHOTOGRAPHY 1**

What you can do in this project:

- Explore the camera and learn to use it properly
- Learn the basics of lighting and composition
- Learn the use of different light sources
- Shoot photos that tell a story

Grades: 3-5

#### **30002 PHOTOGRAPHY 2**

What you can do in this project:

- Learn about camera adjustments
- Learn about film speed, shutter speed and aperture
- Take silhouettes, candid, action shots and others

Grades: 6-8

#### **30003 PHOTOGRAPHY 3**

What you can do in this project:

- Learn about wide-angle and telephoto lenses
- Explore the use of light meters and studio lighting
- Experiment with special effect photos
- Take still life photos and portraits

Grades: 9-12

### **30004 SCRAPBOOKING**

What you can do in this project:

- Explore techniques used in scrapbooking
- Develop graphic design techniques
- Create an original scrapbook

Grades: 3-12

### **30005 VIDEOGRAPHY**

What you can do in this project:

- Learn storytelling, editing and lighting
- Experiment with camera handling and editing
- Learn to plan a project with the use of sound and titles
- Show and review your production

Grades: 6-12

### **30100 COMMUNICATIONS LDR**

#### **30101 COMMUNICATIONS 1**

What you can do in this project:

- Engage in non-verbal, verbal and written activities
- Strengthen your personal communication skills
- Encrypt codes, write songs and give directions

Grades: 3-5

#### **30102 COMMUNICATIONS 2**

What you can do in this project:

- Learn to become a confident communicator
- Present oral reasons, plan and present speeches
- Practice making good first impressions

Grades: 6-8

## **ARTS & COMMUNICATION *continued***

### **30103 COMMUNICATIONS 3**

What you can do in this project:

- Polish your communication skills
- Explore communication careers
- Write résumés and interview for a job

Grades: 9-12

### **30110 DEMONSTRATIONS LDR**

#### **30111 DEMONSTRATIONS**

What you can do in this project:

- Learn how to plan and present an effective demonstration with the use of a poster
- Tell and show someone how to do something
- Strengthen your personal communication skills

Grades: 3-12

### **30120 SPEAKING LDR**

#### **30121 SPEAKING**

What you can do in this project:

- Plan, practice and present an effective speech
- Gain confidence in public speaking
- Plan, practice and present an effective demonstration

Grades: 3-12

### **30130 POSTERS LDR**

#### **30131 POSTERS**

What you can do in this project:

- Learn techniques and procedures for using posters to emphasize your demonstration and illustrated talks

Grades: 3-12

### **30140 CREATIVE WRITING LDR**

#### **30141 CREATIVE WRITING**

What you can do in this project:

- Explore language and creative expression
- Stimulate your creativity and self-expression
- Enrich your joy of book reading

Grades: 3-12

### **30150 BOOKS ON THE MOVE LDR**

#### **30151 BOOKS ON THE MOVE**

What you can do in this project:

- Promote reading around the world
- Register books on line
- Release books to travel

Grades: 3-12

### **30300 ARTS & CRAFTS LDR**

#### **30301 ART 1**

What you can do in this project:

- Learn art through cutting, pasting and drawing
- Explore sculpting and constructing with fibers
- Paint and print using different materials

Grades: 3-6

#### **30302 ART 2**

What you can do in this project:

- Explore art techniques, culture and history of art
- Learn artistic challenges in drawing, fiber arts and sculpting
- Develop graphic design techniques

Grades: 7-12

### **30310 LEATHERCRAFT LDR**

#### **30311 LEATHERCRAFT**

What you can do in this project:

- Learn about the characteristics and uses of leather
- Use tools and equipment
- Make patterns and original designs
- Explore various leathercraft techniques

Grades: 3-12

### **30320 STENCIL PAINTING LDR**

#### **30321 STENCIL PAINTING**

What you can do in this project:

- Learn to design and cut stencils, apply paints, overlap prints
- Learn different application techniques using brushes and sponges

Grades: 3-12

### **30330 BLOCK PRINTING LDR**

#### **30331 BLOCK PRINTING**

What you can do in this project:

- Design and cut blocks from different materials
- Print designs on cloth and paper
- Create your own original designs

Grades: 5-12

### **30340 METAL ENAMELING LDR**

#### **30341 METAL ENAMELING**

What you can do in this project:

- Try enameling earrings, pins and other jewelry
- Learn to attach fasteners
- Create original designs and patterns

Grades: 5-12

### **30350 DRAWING & PAINTING LDR**

#### **30351 DRAWING & PAINTING**

What you can do in this project:

- Learn to draw with pencil, chalk, crayon, etc.
- Learn to blend and shade
- Make surface rubbings
- Paint with watercolor, oil and acrylics
- Mix colors
- Mat and frame your artwork

Grades: 3-12

### **30470 BASKETRY LDR**

#### **30471 BASKETRY**

What you can do in this project:

- Study basketry history
- Learn characteristics and techniques of basket weaving
- Learn to use tools and equipment
- Create patterns and original designs

## **ARTS & COMMUNICATION *continued***

Grades: 3-12

### **30480 CREATIVE/CROSS STITCHERY LDR**

#### **30481 CREATIVE/CROSS STITCHERY**

What you can do in this project:

- Learn non-needlepoint forms of stitchery

Grades: 3-12

### **30490 GLASSWORK LDR**

#### **30491 GLASSWORK**

What you can do in this project:

- Learn characteristics and techniques of glasswork
- Learn to use tools and equipment
- Create patterns and original designs

Grades: 3-12

### **30500 WOOD BURNING LDR**

#### **30501 WOOD BURNING**

What you can do in this project:

- Learn characteristics and techniques of wood burning
- Learn to use tools and equipment
- Create patterns and original designs

Grades: 3-12

### **30510 RUBBER STAMPING LDR**

#### **30511 RUBBER STAMPING**

What you can do in this project:

- Learn techniques to make cards and more
- Learn to make and use your own stamps
- Learn to use pre-cut purchased stamps

Grades: 3-12

### **30520 POTTERY LDR**

#### **30521 POTTERY**

What you can do in this project:

- Learn about clay and how to handle it
- Learn how to use a pottery wheel
- Learn about the firing process

Grades: 3-12

### **30530 WEAVING LDR**

#### **30531 WEAVING**

What you can do in this project:

- Learn the difference between warp and weft
- Learn the use of different fibers and materials
- Create your own woven cloth

Grades: 3-12

### **30540 RUG HOOKING LDR**

#### **30541 RUG HOOKING**

What you can do in this project:

- Learn different yarn hooking techniques
- Learn the use of different yarns and equipment
- Create your own hooked rug

Grades: 3-12

### **30550 JEWELRY MAKING LDR**

### **30551 JEWELRY MAKING**

What you can do in this project:

- Learn tips and techniques of jewelry making
- Learn to use tools and equipment
- Learn to create your own signature jewelry
- Design and make your own jewelry

Grades: 3-12

### **30560 CERAMICS LDR**

#### **30561 CERAMICS**

What you can do in this project:

- Learn how to choose pre-formed green ware or sculpt an original design
- Learn to glaze, apply decals, paint, stain, and fire a ceramic project

Grades: 3-12

### **30570 NEEDLEPOINT LDR**

#### **30571 NEEDLEPOINT**

What you can do in this project:

- Learn needlepoint techniques
- Learn how to work from a pattern or create an original design

Grades: 3-12

### **30600 LATINO CULTURAL ARTS LDR**

#### **30601 LATINO CULTURAL ARTS**

What you can do in this project:

- Understand the Latino culture by exploring traditional art
- Make Latino instruments, jewelry, weavings, murals, etc.
- Celebrate Latino holidays, sample foods and tell stories

Grades: K-8

### **30700 THEATRE ARTS LDR**

#### **30701 THEATRE ARTS 1**

What you can do in this project:

- Study acting, sound, movement, voice and speech
- Learn different ways to play a scene
- Try pantomime, clowning and improvisation

Grades: 3-5

#### **30702 THEATRE ARTS 2**

What you can do in this project:

- Become 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

Grades: 6-8

#### **30703 THEATRE ARTS 3**

What you can do in this project:

- 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

Grades: 9-12

### **30710 CLOWNING LDR**

## **ARTS & COMMUNICATION *continued***

### **30711 CLOWNING**

What you can do in this project:

- Discover the history of clowning
- Develop your own character
- Design your own makeup, costume and props

Grades: 3-12

Resource: 4H265, *Enter the Clowns*

### **30720 PUPPETRY LDR**

#### **30721 PUPPETRY**

What you can do in this project:

- Discover the history of puppetry
- Design and construct your own puppets
- Create props and write your own scripts

Grades: 3-12

### **30730 JUGGLING LDR**

#### **30731 JUGGLING**

What you can do in this project:

- Learn the mechanics of juggling
- Attend and perform at parades
- Learn how to interact with crowds

Grades: 3-12

### **30740 MIME LDR**

#### **30741 MIME**

What you can do in this project:

- Discover the history of mime
- Study some of the most famous mime acts
- Develop your own character

Grades: 3-12

### **30760 MUSIC LDR**

#### **30761 MUSIC**

What you can do in this project:

- Gain a greater appreciation for music
- Explore different ways to participate
- Listen, perform and compose various types of music
- Teach others and make instruments

Grades: 3-12

### **30800 COMPUTERS LDR**

#### **30801 COMPUTERS 1**

What you can do in this project:

- Learn about hardware, software and components
- Explore how computers work
- Learn the various programs and their features
- Visit the project's interactive website

Grades: 3-5

#### **30802 COMPUTERS 2**

What you can do in this project:

- Build and repair a computer
- Identify the components and how they work together
- Learn to upgrade and create connections
- Install operating systems

Grades: 6-8

#### **30803 COMPUTERS 3**

What you can do in this project:

- Discover how to create and manage networks
- Make decisions about network management
- Explore security issues and troubleshooting

Grades: 9-12

### **30820 COLLECTIONS LDR**

#### **30821 COLLECTIONS**

What you can do in this project:

- Begin or learn how to improve your collection
- Identify significant pieces to add to your collection
- Learn methods of displaying or mounting your collection

Grades: 3-12

#### **30822 COIN COLLECTING**

What you can do in this project:

- Learn the history, events and origin of your coins
- Identify significant pieces to add to your coin collection
- Learn the value and techniques of mounting, displaying and promoting your collection

Grades: 3-12

#### **30823 STAMP COLLECTING**

What you can do in this project:

- Learn the history, events and origin of your stamps
- Identify significant pieces to add to your coin collection
- Learn the value and techniques of mounting, displaying and promoting your collection

Grades: 3-12

### **30991 SELF-DETERMINED ARTS & COMMUNICATION**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **FAMILY, HOME & HEALTH**

### **40000 INTERGENERATIONAL PROGRAMS LDR**

#### **40001 INTERGENERATIONAL PROGRAMS**

What you can do in this project:

- Learn to understand older people better
- Let them share their stories and experiences
- Explore what happens as you grow older

Grades: 5-12

### **40100 CHILD DEVELOPMENT LDR**

#### **40101 CHILD DEVELOPMENT 1**

What you can do in this project:

- Find out how you grow and develop
- Learn about the development of babies and toddlers
- Learn how to make toys safe for small children

Grades: 3-4

#### **40102 CHILD DEVELOPMENT 2**

What you can do in this project:

- Learn how to take care of yourself and others

## **FAMILY, HOME & HEALTH *continued***

- See what makes your family special
- Discover how to match toys to ages of children
- Develop family rules
- Check for safety hazards

Grades: 5-6

### **40103 CHILD DEVELOPMENT 3**

What you can do in this project:

- Explore how to be an effective parent
- Gain experience as a teacher or coach
- Make babysitting and first-aid kits
- Check out child development careers

Grades: 7-10

### **40200 CLOTHING LDR**

#### **40201 CLOTHING 1**

What you can do in this project:

- Identify sewing tools and machine parts
- Thread a sewing machine and identify fabrics
- Select and purchase a pattern
- Sort clothes for laundry and remove stains
- Donate a sewing project

Grades: 3-5

#### **40202 CLOTHING 2**

What you can do in this project:

- Identify types of fabric constructions
- Sew different buttonholes and seam finishes
- Use pressing tools and thread a serger
- Research different laundry products

Grades: 6-8

#### **40203 CLOTHING 3**

What you can do in this project:

- Use specialized sewing tools or equipment
- Combine patterns to create a design
- Create outdoor wear
- Design and embellish a garment
- Use a computer to print on fabric

Grades: 9-12

### **40210 QUILTING LDR**

#### **40211 QUILTING**

What you can do in this project:

- Explore quilting and finishing techniques
- Learn sewing techniques
- Learn to make patterns

Grades: 3-12

### **40300 CROCHETING LDR**

#### **40301 CROCHETING 1**

What you can do in this project:

- Learn to select and purchase yarn, thread and equipment
- Explore crocheting and finishing techniques
- Understand care instructions for crocheted items

Grades: 3-12

#### **40304 CROCHETING LEFT HAND**

#### **40305 CROCHETING RIGHT HAND**

### **40380 CANDY MAKING LDR**

#### **40381 CANDY MAKING**

What you can do in this project:

- Learn how to make different types of candy
- Learn the tools and equipment used to make candy

Grades: 6-12

### **40390 CAKE DECORATING LDR**

#### **40391 CAKE DECORATING 1**

What you can do in this project:

- Learn how to use decorator's frosting
- Learn how to use a decorating cone

Grades: 3-4

#### **40392 CAKE DECORATING 2**

What you can do in this project:

- Learn how to make decorator's frosting
- Learn how to make a decorating cone
- Learn the use of different decorating tips

Grades: 5-8

#### **40393 CAKE DECORATING 3**

What you can do in this project:

- Learn how to write on a cake
- Create a 3-dimensional design

Grades: 9-12

### **40400 FOODS & NUTRITION LDR**

#### **40401 FOODS & NUTRITION 1**

What you can do in this project:

- Learn what is good to eat and how to fix simple foods
- Fix pizza, pancakes, fruit kabobs and granola bars
- Explore why calcium is important to our bodies
- Understand TV commercial messages about food

Grades: 3-4

#### **40402 FOODS & NUTRITION 2**

What you can do in this project:

- Make main dishes, e.g., meatballs, pasta and salads
- Learn to make basic muffins and biscuits
- Learn to change recipes
- Reduce fat content in recipes
- Discover how to store fruit and vegetables

Grades: 5-6

#### **40403 FOODS & NUTRITION 3**

What you can do in this project:

- Learn to evaluate nutrition information and fad diets
- Develop your own exercise program
- Learn how to cook different cuts of meat
- Learn to divide large-quantity packages for family use
- Make baked chicken, breadsticks and stir-fried vegetables

Grades: 7-9

#### **40404 FOODS & NUTRITION 4**

What you can do in this project:

- Learn how to make jelly, bake fish and marinate meat
- Conduct a food activity with young children
- Learn to divide recipes and make substitutions
- Plan menus on a budget

## **FAMILY, HOME & HEALTH *continued***

Grades: 10-12

### **40410 MICROWAVE LDR**

#### **40411 MICROWAVE 1**

What you can do in this project:

- Learn how to make simple snacks

Grades: 3-5

#### **40412 MICROWAVE 2**

What you can do in this project:

- Learn how to make simple meals
- Learn tricks of microwave cooking

Grades: 6-7

#### **40413 MICROWAVE 3**

What you can do in this project:

- Learn how to make more complex meals

Grades: 8-9

#### **40414 MICROWAVE 4**

What you can do in this project:

- Learn how to bake in the microwave
- Learn how to make jellies and jams

Grades: 10-12

### **40500 FOOD PRESERVATION LDR**

#### **40501 FOOD PRESERVATION 1**

What you can do in this project:

- Learn the basics of preserving food safely
- Use UW-Extension Safe Food Preservation Series

Grades: 6-12

### **40650 PERSONAL FINANCE LDR**

#### **40651 PERSONAL FINANCE 1**

What you can do in this project:

- Learn money management skills
- Learn how to live on a budget

Grades: 6-8

#### **40652 PERSONAL FINANCE 2**

What you can do in this project:

- Learn about wants and needs, values and goal setting
- Explore ways to use and save money
- Learn the benefits and drawbacks of credit
- Survey and select financial services

Grades: 9-12

### **40700 HOME ENVIRONMENT LDR**

#### **40701 HOME ENVIRONMENT 1**

What you can do in this project:

- Learn about home care
- Learn to sand and finish a simple wood item
- Make small home decorative items for the home
- Explore the world of home interior design

Grades: 3-5

#### **40702 HOME ENVIRONMENT 2**

What you can do in this project:

- Become more involved with activities around the home
- Learn to handle home tasks and entertain guests

- Refinish wood furnishings and make other home items
- Grades: 6-7

### **40703 HOME ENVIRONMENT 3**

What you can do in this project:

- Learn the principles of home design
- Learn scale, balance and proportion in home design
- Use the principles of design to arrange your home
- Create storage centers and restore furniture

Grades: 8-9

### **40704 HOME ENVIRONMENT 4**

What you can do in this project:

- Focus on the application of design fundamentals
- Learn about purchasing furnishings for the home
- Restore or make a heritage item

Grades: 10-12

### **40800 KNITTING LDR**

#### **40801 KNITTING 1**

What you can do in this project:

- Discover what to consider when buying yarn or tools
- Learn knitting and finishing techniques
- Correct knitting errors
- Learn how to care for your knitted items

Grades: 3-12

#### **40804 KNITTING LEFT HAND**

#### **40805 KNITTING RIGHT HAND**

### **40850 CONSUMER SAVVY LDR**

#### **40851 CONSUMER SAVVY 1**

What you can do in this project:

- Learn your shopping style
- Use the yellow pages to find goods and services
- Know the difference between wants and needs
- Write a savings and spending plan
- Start a savings account

Grades: 3-5

#### **40852 CONSUMER SAVVY 2**

What you can do in this project:

- Identify your personal spending values
- Understand advertising appeal and its affects
- See how peer pressure can influence your purchases
- Understand the risks of shopping on the Internet

Grades: 6-9

#### **40853 CONSUMER SAVVY 3**

What you can do in this project:

- Define consumer responsibilities and ethics
- Understand your consumer rights
- Use comparison shopping techniques
- Understand the costs of owning a vehicle

Grades: 10-12

### **40900 HEALTH LDR**

#### **40901 HEALTH 1**

What you can do in this project:

- Practice first-aid skills to treat basic injuries
- Learn how to respond to someone who is choking

## **FAMILY, HOME & HEALTH *continued***

- Assemble a first-aid kit

Grades: 3-5

### **40902 HEALTH 2**

What you can do in this project:

- Identify your personal talent areas in health care
- Explore hygiene, nutrition and physical activities
- Share what you learn with others

Grades: 6-8

### **40903 HEALTH 3**

What you can do in this project:

- Design your own fitness plan
- Track your plan and review your progress
- Interview individuals in the health and fitness fields

Grades: 9-12

### **40908 RACEWALKING**

What you can do in this project:

- Learn racewalking techniques
- Research competitive race walk opportunities
- Track your plan and review your progress

Grades: 3-12

### **40991 SELF-DETERMINED FAMILY HOME HEALTH**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **MECHANICAL SCIENCES**

### **50000 AEROSPACE LDR**

#### **50001 AEROSPACE 1**

What you can do in this project:

- Build an introductory level rocket
- Compare birds and airplanes
- Make a space helmet

Grades: K-2

#### **50002 AEROSPACE 2**

What you can do in this project:

- Build straw and paper rockets
- Learn to read a map
- Identify types of aircraft
- Discover how weather affects flying
- Build and fly a kite
- Make a hot-air balloon model

Grades: 3-5

#### **50003 AEROSPACE 3**

What you can do in this project:

- Build, exhibit and launch model rockets
- Test a paper hang glider
- Make a flight simulator
- Demonstrate why rockets fly
- Organize a kite-flying contest

Grades: 6-8

### **50004 AEROSPACE 4**

What you can do in this project:

- Design and build rockets and box kites
- Build an altitude tracker
- Plan a flight route
- Discover the affects of gravity
- Explore life in space and aerospace careers

Grades: 9-12

### **50010 MODEL ROCKETRY LDR**

#### **50011 MODEL ROCKETRY**

What you can do in this project:

- Build a model rocket
- Compare birds and airplanes
- Participate in a model rocket launch

Grades: 3-12

### **50200 BICYCLING LDR**

#### **50201 BICYCLING 1**

What you can do in this project:

- Learn the essentials for getting started safely
- Explore the basics toward lifelong cycling
- Learn safety, road rules and planning for a pleasant ride

Grades: K-3

#### **50202 BICYCLING 2**

What you can do in this project:

- Choose a bike that's right for you
- Practice bike maintenance
- Learn road rules

Grades: 4-6

#### **50203 BICYCLING 3**

What you can do in this project:

- Choose a bike that's right for you
- Practice bike maintenance
- Learn road rules

Grades: 7-12

### **50300 ELECTRICITY LDR**

#### **50301 ELECTRICITY 1**

What you can do in this project:

- Understand how to use electricity
- Identify electrical materials
- Wire a simple circuit
- Build a compass, flashlight, switch and electric motor

Grades: 4-5

#### **50302 ELECTRICITY 2**

What you can do in this project:

- Work with electrical equipment
- Learn to read circuit diagrams
- Build a circuit and measure voltages
- Communicate in Morse code

Grades: 6-7

#### **50303 ELECTRICITY 3**

What you can do in this project:

- Develop a basic electrical tool and supply kit
- Understand the symbols on wires and cables
- Locate your home wiring system

## **MECHANICAL SCIENCES *continued***

Grades: 8-9

### **50304 ELECTRICITY 4**

What you can do in this project:

- Identify electrical and electronic parts and devices
- Learn how to solder and prepare parts for assembly
- Assemble a circuit using a transistor

Grades: 10-12

### **50370 GEOSPATIAL (LETTERBOXING) LDR**

#### **50371 GEOSPATIAL (LETTERBOXING) 1**

What you can do in this project:

- Discover ways of thinking about geographic positions
- Learn about navigational tools: GIS, GPS, compasses
- Learn to measure distances

Grades: 4-12

#### **50372 GEOSPATIAL (LETTERBOXING) 2**

What you can do in this project:

- Learn how to collect data
- Combine data with geographical positions
- Make maps of home, neighborhood and community

Grades: 4-12

#### **50373 GEOSPATIAL (LETTERBOXING) 3**

What you can do in this project:

- Use multi-layered maps to attempt to solve problems
- Find ways to reduce traffic congestion
- Pinpoint pollution sources

Grades: 4-12

### **50380 ROBOTICS LDR**

#### **50381 ROBOTICS 1**

What you can do in this project:

- Explore programming concepts using RoboLab language
- Learn what a robot is and how to build one
- Learn how to program the robot to use sensors

Grades: 4-8

#### **50382 ROBOTICS 2**

What you can do in this project:

- Learn more advanced topics in programming
- Advance your programming techniques
- Build your own custom functions

Grades: 9-12

### **50420 LEGOS LDR**

#### **50421 LEGOS (TEAM PROJECT)**

What you can do in this project:

- Learn to program using LEGO Mindstorms ®
- Learn to design and build a LEGO NXT Robot
- Learn to conduct a research project and present it before a panel of judges
- Participate in the fall FIRST LEGO League tournament

Grades: 4-8 (Ages 9-14)

### **50500 SMALL ENGINES LDR**

#### **50501 SMALL ENGINES 1**

What you can do in this project:

- Learn the basics of small engines
- Explore external engine parts and tools
- Identify the uses of small engines and safety issues

Grades: 3-5

#### **50502 SMALL ENGINES 2**

What you can do in this project:

- Explore the internal parts of engines
- Learn about engine sizes and safety issues
- Explore different jobs related to small engines

Grades: 6-8

#### **50503 SMALL ENGINES 3**

What you can do in this project:

- Tear down and rebuild an engine
- Learn to use diagnostic tools
- Research rules and regulations in using small engines

Grades: 9-12

### **50600 SCALE MODELS LDR**

#### **50601 SCALE MODELS**

What you can do in this project:

- Assemble and create scale models of trains, cars, etc.
- Learn how to obtain materials you need in construction
- Learn to display your model and judge it

Grades: 3-12

#### **50603 MODEL RAILROAD**

What you can do in this project:

- Create and assemble a model train diorama
- Learn how to obtain materials you need in construction
- Learn to display your model for judging

Grades: 3-12

#### **50604 REMOTE CONTROL CARS**

What you can do in this project:

- Learn remote control techniques
- Assemble and create scale models cars
- Learn how to obtain materials you need in construction
- Learn to display your model for judging

Grades: 3-12

### **50700 TRACTORS LDR**

#### **50701 TRACTORS 1**

What you can do in this project:

- Learn and identify parts of the tractor
- Understand the basics of tractor maintenance
- Learn about different fuels and engine cooling systems
- Research different safety features and learn safety rules

Grades: 3-4 (little or no experience)

#### **50702 TRACTORS 2**

What you can do in this project:

- Practice farm and tractor safety
- Understand the mechanics of engines
- Identify accessory equipment
- Learn the functions of different operational systems

Grades: 5-6 (little or no experience)

## **MECHANICAL SCIENCES *continued***

### **50703 TRACTORS 3**

What you can do in this project:

- Learn types of oil systems and fuel safety
- Learn how to hook on a PTO unit
- Learn tractor and machinery maintenance

Grades: 7-9 (some prior experience)

### **50704 TRACTORS 4**

What you can do in this project:

- Focus on safety and maintenance
- Identify and work with operational systems

Grades: 10-12 (some prior experience)

### **50800 WOODWORKING LDR**

#### **50801 WOODWORKING 1**

What you can do in this project:

- Learn safety practices when working with wood and tools
- Use various hand tools, e.g., hammer and saw
- Identify types of nails and wood
- Sand and paint a piece of wood

Grades: 2-4

#### **50802 WOODWORKING 2**

What you can do in this project:

- Identify functions of various tools
- Practice safety techniques
- Select a project to build, e.g., birdhouse or foot stool
- Use a screwdriver and combination square

Grades: 4-6

#### **50803 WOODWORKING 3**

What you can do in this project:

- Compare different types of hinges
- Enlarge scale-drawn woodworking plans
- Use a hand plane and build a laminated cutting board
- Compare different grades of plywood

Grades: 6-8

#### **50804 WOODWORKING 4**

What you can do in this project:

- Use a table saw, router, powered circular saw & sander
- Learn to make more difficult joints
- Evaluate exotic and veneer woods
- Create inlays and overlays
- Test various adhesives

Grades: 9-12

### **50991 SELF-DETERMINED MECHANICAL SCIENCES**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **NATURAL RESOURCES & ENVIRONMENTAL EDUCATION**

### **60000 EXPLORING YOUR ENVIRONMENT LDR**

#### **60001 EXPLORING YOUR ENVIRONMENT 1**

What you can do in this project:

- Explore the four elements of life: sun, air, water and soil
- Use your senses to explore the environment
- Connect to the environment through plants and animals
- Learn how the environment is affected by pollution

Grades: 5-7

#### **60002 EXPLORING YOUR ENVIRONMENT 2**

What you can do in this project:

- Explore wildlife habitats and tracking
- Learn about groundwater
- Research pollination and how it works

Grades: 8-10

#### **60003 EXPLORING YOUR ENVIRONMENT 3**

What you can do in this project:

- Explore the world of biotechnology
- Learn the features of insect creatures
- Begin to understand biodiversity
- Learn what climate has to do with the way we live

Grades: 11-12

#### **60005 WILDFLOWERS**

What you can do in this project:

- Learn about wildflowers in your neighborhood
- Learn to identify wildflowers and how to collect them
- Discover how humans affect wildflowers

Grades: 3-12

#### **60006 BIRDS**

What you can do in this project:

- Learn simple ways to attract birds to your backyard
- Learn tips on identifying bird
- Learn how to build bird feeders and blue bird houses

Grades: 3-12

#### **60050 FORESTRY LDR**

##### **60051 FORESTRY 1**

What you can do in this project:

- Identify forest types, forest products and trees
- Age trees by counting rings
- Understand forest competition
- Find a state forest
- Describe how leaves affect rainfall

Grades: 3-5

##### **60052 FORESTRY 2**

What you can do in this project:

- Learn how trees move water from soil to canopy
- Diagram a leaf
- Understand major forest changes and their impact
- Select urban tree planting sites

Grades: 6-8

##### **60053 FORESTRY 3**

What you can do in this project:

- Recognize different tree fruits
- Create a community forest map
- Identify forest biomes by continent
- Identify an unknown tree using a tree key

Grades: 9-12

**NATURAL RESOURCES &  
ENVIRONMENTAL EDUCATION *continued***

**60100 ADVENTURES LDR**

**60101 ADVENTURES**

What you can do in this project:

- Learn how to camp safely in all weather conditions
- Investigate camping equipment and clothing
- Build a campfire and cook a meal
- Practice tying knots and first aid
- Learn to use a map and compass

Grades: 3-12

**60102 WINTER TRAVEL**

What you can do in this project:

- Discover winter travel on cross-country skis and snowshoes
- Select and take care of equipment and clothing
- Experience a winter overnight campout
- Discover how trees and plants prepare for winter

Grades: 3-12

**60103 CANOEING**

What you can do in this project:

- Learn how and where to canoe safely
- Select and care for equipment
- Explore aquatic environments
- Plan a canoe camping trip
- Canoe a river

Grades: 3-12

**60104 BICYCLING**

What you can do in this project:

- Learn how and where to bicycle safely
- Plan a bicycle camping trip
- Design and build a bicycle obstacle course
- Conduct a bike maintenance check

Grades: 3-12

**60105 CAMPING**

What you can do in this project:

- Learn how to select camping equipment
- Learn how to select a proper campsite
- Learn food preparation techniques and supplies

Grades: 3-12

**60120 BACKPACKING & HIKING LDR**

**60121 BACKPACKING & HIKING 1**

What you can do in this project:

- Plan a day hike, select items and plan the food
- Learn to organize and pack a backpack
- Select appropriate clothing
- Prepare a first-aid kit
- Learn to use a compass
- Prepare for dangerous weather

Grades: 3-5

**60122 BACKPACKING & HIKING 2**

What you can do in this project:

- Plan a camping trip
- Select equipment, including shelter

- Plan a camping trip menu and prepare supplies
- Practice “Leave No Trace” principles while hiking
- Study various organism habitats

Grades: 6-8

**60123 BACKPACKING & HIKING 3**

What you can do in this project:

- Select group backpacking gear including a tent
- Design a non-tent backpacking shelter
- Develop a personal conditioning program
- Learn to orient a map and use triangulation

Grades: 9-12

**60200 ENTOMOLOGY (INSECTS) LDR**

**60201 ENTOMOLOGY (INSECTS) 1**

What you can do in this project:

- Learn about insects, their behavior and life history
- Discover the parts of an insect’s body
- Collect and compare insects
- Explore how insects communicate and move

Grades: 3-5

**60202 ENTOMOLOGY (INSECTS) 2**

What you can do in this project:

- Learn how an insect protects itself
- Explore insect habitats
- Create an insect display
- Build an insect extractor
- Investigate entomology careers

Grades: 6-8

**60203 ENTOMOLOGY (INSECTS) 3**

What you can do in this project:

- Raise and study mealworms and mosquitoes
- Observe a colony of ants
- Make an insect identification key
- Record and collect aquatic insects
- Explore various gardens and habitats

Grades: 9-12

**60300 SHOOTING SPORTS LDR**

**60310 ARCHERY LDR**

**60311 ARCHERY**

What you can do in this project:

- Learn the fundamentals of archery marksmanship
- Learn rules and safety guidelines
- Make archery equipment
- Shoot with sights and different bows

Grades: 3-12

**60320 AIR PISTOL LDR**

**60321 AIR PISTOL**

What you can do in this project:

- Explore different air pistols
- Learn basic safety rules and guidelines
- Learn marksmanship and shooting procedures

Grades: 3-12

**60330 RIFLE LDR**

## **NATURAL RESOURCES & ENVIRONMENTAL EDUCATION *continued***

### **60331 RIFLE**

What you can do in this project:

- Introduction to air rifle and .22 rifle through dry firing
- Learn to sight your rifle and score targets
- Learn various shooting positions
- Learn safety policies and procedures

Grades: 3-12 for air rifle

### **60340 HUNTING LDR**

#### **60341 HUNTING**

What you can do in this project:

- Learn the history, philosophy and laws of hunting
- Learn to plan and equip yourself for a hunt

Grades: 3-12

### **60350 SHOTGUN LDR**

#### **60351 SHOTGUN**

What you can do in this project:

- Learn the basic safety issues with shotgun handling
- Learn shooting fundamentals
- Learn the proper way to carry a shotgun

Ages: 12 years old and above

### **60360 MUZZLELOADING LDR**

#### **60361 MUZZLELOADING**

What you can do in this project:

- Explore muzzleloading history
- Study different muzzleloading guns and accessories
- Learn how to clean a muzzleloader
- Learn safety issues

Ages: 12 years old and above

### **60370 AIR RIFLE LDR**

#### **60371 AIR RIFLE**

What you can do in this project:

- Explore different air rifles
- Learn basic safety rules and guidelines
- Learn marksmanship and shooting procedures

Grades: 3-12

### **60410 WILDLIFE LDR**

#### **60411 WILDLIFE**

What you can do in this project:

- Learn about animals in your community and in remote areas
- Explore how they live and defend their territory
- Explore habitats and how you might help improve them

Grades: 3-12

### **60470 WATER LDR**

#### **60471 WATER**

What you can do in this project:

- Identify water conservation and pollution issues
- Explore issues in your home, community or school
- Select an issue to focus on

- Develop and implement a plan

Grades: 3-12

### **60800 FISHING LDR**

#### **60801 FISHING 1**

What you can do in this project:

- Identify types of tackle
- Organize a tackle box
- Identify different types of bait and fish in your area
- Learn to take proper care of your catch

Grades: 3-5

#### **60802 FISHING 2**

What you can do in this project:

- Find fishing information on the Internet
- Cast a spinning rod and reel
- Learn to tie fishing knots
- Select a recipe and cook a fish
- Collect and analyze aquatic life

Grades: 6-8

#### **60803 FISHING 3**

What you can do in this project:

- Learn to reassemble a fishing reel
- Make artificial flies and lures
- Modify fishing equipment
- Investigate fishing careers

Grades: 9-12

### **60991 SELF-DETERMINED ENVIRONMENTAL EDUCATION**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **PLANT & SOIL SCIENCES**

### **70000 CROPS LDR**

#### **70001 CORN (CROPS 1)**

What you can do in this project:

- Learn about variety selection, germination and planting
- Learn about nutrients, harvesting and storage
- Explore uses and marketing strategies for corn

Grades: 3-12

#### **70002 FORAGE (CROPS 2)**

What you can do in this project:

- Establish and manage a forage crop
- Scout fields for pests, diseases and nutrition shortages
- Take an accurate forage sample
- Study growing techniques

Grades: 3-12

#### **70003 SMALL GRAINS (CROPS 3)**

What you can do in this project:

- Explore types of grasses, including wheat, oats and barley
- Learn about growing conditions and nutrients
- Practice integrated pest management
- Compare production costs and marketing

## **PLANT & SOIL SCIENCES *continued***

Grades: 3-12

### **70004 SOYBEANS (CROPS 4)**

What you can do in this project:

- Learn about variety selections, germination and harvesting
- Explore insect pests, weeds and disease control
- Research marketing strategies for soybeans

Grades: 3-12

### **70100 FRUITS LDR**

#### **70101 FRUITS 1**

What you can do in this project:

- Produce fruits from apples to berries
- Select the best fruit cultivar for your home garden

Grades: 3-12

### **70200 VEGETABLES LDR**

#### **70201 VEGETABLES 1**

What you can do in this project:

- Identify plant parts and their functions
- Explore germination and start a plant from a cutting
- Grow vegetables in containers
- Plan an outdoor garden
- Prepare a vegetable exhibit for show

Grades: 3-5

#### **70202 VEGETABLES 2**

What you can do in this project:

- Learn about plant needs and soil testing
- Start new plants and grow transplants
- Build a compost pile and use mulches

Grades: 6-8

#### **70203 VEGETABLES 3**

What you can do in this project:

- Grow plants in a cold frame
- Make a site analysis and landscape plan
- Compare organic and chemical fertilizers
- Research various insect control methods

Grades: 9-12

### **70300 HOUSE PLANTS LDR**

#### **70301 HOUSE PLANTS 1**

What you can do in this project:

- Identify plant parts and their functions
- Grow house plants and start a plant from a cutting
- Make a dish garden
- Prepare house plants for exhibit

Grades: 3-5

#### **70302 HOUSE PLANTS 2**

What you can do in this project:

- Learn about plant seeds and soil
- Select and start new plants and grow transplants
- Plant a terrarium
- Examine plants for insects and diseases

Grades: 6-8

#### **70303 HOUSE PLANTS 3**

What you can do in this project:

- Take a tour of a horticulture business
- Design a plant experiment
- Teach others how to grow house plants
- Compare different fertilizers: organic and chemical

Grades: 9-12

### **70350 PLANT CRAFTS LDR**

#### **70351 PLANT CRAFTS**

What you can do in this project:

- Learn to harvest plants
- Use different drying techniques
- Learn how to use plant materials
- Learn how to make dried arrangements, corsages, etc.

Grades: 3-12

### **70400 FLOWERS LDR**

#### **70401 FLOWERS 1**

What you can do in this project:

- Identify flower parts and their functions
- Plant flowers and make flower arrangements
- Give a presentation on flowers
- Prepare a flower exhibit

Grades: 3-5

#### **70402 FLOWERS 2**

What you can do in this project:

- Learn about plant needs and soil testing
- Select and start new plants and grow transplants
- Examine plants for insects and diseases
- Judge a flower exhibit

Grades: 6-8

#### **70403 FLOWERS 3**

What you can do in this project:

- Design a plant experiment
- Make a landscape plan
- Write instructions on how to force bulbs
- Compare different fertilizers: organic and chemical

Grades: 9-12

### **70991 SELF-DETERMINED PLANT & SOIL SCIENCES**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

## **INTERNATIONAL PROGRAMS**

### **90150 INTERNATIONAL LDR**

#### **90151 INTERNATIONAL 1**

What you can do in this project:

- Explore the world around you through maps
- Track weather in various parts of the world
- Make your family tree by talking with relatives
- Explore where your ancestors came from

Grades: 3-12

## **Waukesha County 4-H General Information**

1. Mailing Address:  
Waukesha County UW Extension 4-H Program  
515 W. Moreland Blvd., AC 22  
Waukesha, WI 53188-3869
2. UW Extension Office Hours: Monday-Friday / 8:00 AM - 4:30 PM  
4-H Support staff hours are part time, call for specific hours
3. 4-H Support staff phone: 262-548-7774
4. 4-H Educator Phone: 262-548-7784
5. UW-Extension 4-H Office Fax: 262-548-7787
6. 4-H Support staff e-mail address: waukesha.4h@ces.uwex.edu
7. Clover Flyer and One Liner Newsletters are posted on the Waukesha County 4-H website:  
<http://www.uwex.edu/ces/cty/waukesha/4h/index.html>
8. Waukesha County 4-H is operated under the by-laws of the 4-H Leader Association – a volunteer organization
9. The Waukesha County 4-H Leaders Association Executive Board Meets Monthly
10. For volunteer opportunities, please call 262-548-7770

## **Waukesha County Fair General Information**

1. Mailing Address:  
Waukesha County Fair Association, Inc.  
2417 Silvernail Road  
Pewaukee, WI 53072.
2. Waukesha County Fair Office Hours: Vary (Call the Fair Office for current hours)
3. Phone: 262-544-5922
4. Fax: 262-544-1228
5. Website: <http://www.waukeshacountyfair.com>
6. The Waukesha County Fair is run by the Waukesha County Fair Association – a volunteer organization – and is not supported by County Government
7. Waukesha County 4-H and the Waukesha County Fair are independent entities cooperating for the benefit of youth development
8. Project entry deadline for the Waukesha County Fair is June 1

University of Wisconsin, U.S. Department of Agriculture and Wisconsin counties cooperating. UW-Extension provides equal opportunities in employment and programming including Title IX and ADA