



# 2012 Wisconsin 4-H Project Guide

*This is your guide . . .* A 4-H 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.

So how do you know what projects are available to you? Your club organizational leader or enrollment coordinator can tell you what projects and resources are offered in your county.

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at [www.uwex.edu/ces/4h/onlinpro/index.cfm](http://www.uwex.edu/ces/4h/onlinpro/index.cfm). On these pages, you'll find descriptions for statewide projects, Internet resources and links of interest, county fair exhibit suggestions, state specialist contacts, and other suggested 4-H resources.

And remember, 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. Good luck in your project selections. Have a great 4-H year!

## How to Select 4-H Projects

**4-H members . . .** 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 and any other project list you may receive from your county. Ask yourself if you have the equipment, money and time to do the projects that sound interesting.

Your club organizational leader or enrollment coordinator will give you a form when you're ready to sign up for projects. You'll notice that each project has a computer code number assigned to it. Mark that code number on the form. (Don't use the "youth leader" project codes unless you're signing up as a youth leader for that project.)

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. Many projects also have grade recommendations. These are only recommendations.

If this is your first year in 4-H, concentrate on doing only two or three projects well. Usually you can spend more than one year in a project unit because there are enough ideas there to span two or three years.

**4-H leaders . . .** If you're a 4-H adult leader, some project code numbers are just for you. For example, if you're a leader for all of the Shooting Sports project units, use code 60300. If there are several units within a project and you're a leader for only one, then use the project code number for that unit. For example, if you're a Shooting Sports leader for just archery, use code 60310. You'll need to make more than one entry if you're a leader for more than one project unit. For example, if you're a Shooting Sports leader for archery *and* air pistol, use codes 60310 *and* 60320. Youth leader codes all end in a "9."



## TABLE OF CONTENTS

### **Youth Leadership, pg. 2**

Ambassadors  
Youth Leadership

### **Younger Members, pg. 3**

Cloverbuds  
Exploring

### **Service Learning & Citizenship, pg. 3**

Citizenship  
Service Learning

### **Self-Determined, pg. 3**

### **Animal Sciences, pg. 3-9**

Beef  
Cats  
Clothes Horse  
Dairy  
Dogs  
Goats (Dairy, Meat & Pygmy)  
Horseless Horse  
Horses  
Pets  
Poultry (includes Domestic Waterfowl)  
Rabbits  
Sheep  
Swine  
Veterinary Science

### **Arts & Communication, pg. 9-12**

Arts & Crafts  
Block Printing  
Clowning  
Communications  
Computers  
Creative Writing  
Drawing & Painting  
Folk Arts  
Latino Cultural Arts  
Leathercraft

**Arts & Communication, pg. 9-12**

Metal Enameling  
 Music  
 Photography  
 Posters  
 Speaking  
 Theatre Arts  
 Videography

**Family, Home & Health, pg. 12-15**

Child Development  
 Clothing  
 Consumer Savvy  
 Crocheting  
 Entrepreneurship  
 Food Preservation  
 Foods & Nutrition  
 Health  
 Home Environment  
 Intergenerational Programs  
 Knitting  
 Personal Finance  
 Workforce Readiness

**Mechanical Sciences, pg. 15-16**

Bicycling  
 Electricity  
 Scale Models  
 Small Engines  
 Tractors  
 Woodworking

**Natural Resources & Environmental Education, pg. 16-20**

Adventures  
 Backpacking & Hiking  
 Bicycling  
 Birds  
 Canoeing  
 Entomology (Insects/Butterfly)  
 Exploring Your Environment  
 Fishing  
 Forestry  
 Geology  
 Recycling  
 Shooting Sports (Air Pistol, Air Rifle, Archery, Hunting, Muzzleloading, Rifle & Shotgun)  
 Water  
 Wildflowers  
 Winter Travel

**Plant & Soil Sciences, pg. 20-22**

Corn  
 Crops  
 Flowers  
 Forage  
 Fruits  
 Home Grounds  
 House Plants  
 Plant Crafts  
 Small Grains  
 Vegetables

**STEM (Science, Technology, Engineering & Math), pg. 22-23**

Exploring  
 Wind Energy  
 Aerospace  
 Geospatial  
 Robotics  
 Science

**International Programs, pg. 23****YOUTH LEADERSHIP****10200 YOUTH LEADERSHIP LDR**

Resources: 07903, *Leadership Mentor Guide for Grades K-5*  
 07904, *Leadership Mentor Guide for Grades 6-12*  
 Webpage: [4h.uwex.edu/onlinpro/leadership.cfm](http://4h.uwex.edu/onlinpro/leadership.cfm)

**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

Resource: 07905, *My Leadership Workbook for 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

Resource: 07906, *My Leadership Journal for 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

Resource: 07907, *My Leadership Portfolio for Grades 9-12*

**10209 YOUTH LEADERSHIP YTH LDR**

## 10210 AMBASSADORS LDR

## 10211 AMBASSADORS



### YOUNGER MEMBERS

## 10300 EXPLORING LDR

Resources: 08172, *Exploring Treasures of 4-H Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/exploring.cfm](http://4h.uwex.edu/onlinpro/exploring.cfm)

## 10301 EXPLORING

What you can do in this project:

- Learn about the 4-H program
- Sample a variety of projects offered in 4-H
- Learn about yourself and others

Grades: 2-3

Resource: 08171, *Exploring the Treasures of 4-H*

## 10309 EXPLORING YTH LDR

## 10350 CLOVERBUDS LDR

Resources: 05560, *4-H Discovery Program for 6-8 Yr. Olds*

Webpage: [4h.uwex.edu/onlinpro/cloverbuds.cfm](http://4h.uwex.edu/onlinpro/cloverbuds.cfm)

## 10351 CLOVERBUDS

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-Grade 2



### SERVICE LEARNING & CITIZENSHIP

## 10750 SERVICE LEARNING LDR

Resource: 08184, *Service Learning Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/ServiceLearning.cfm](http://4h.uwex.edu/onlinpro/ServiceLearning.cfm)

## 10751 SERVICE LEARNING 1

What you can do in this project:

- Learn to give back to your community
- Reflect on your experiences
- Identify community needs
- Plan a service project and execute the idea

Grades: 5-8

Resource: 08182, *Agents of Change + CD*

## 10752 SERVICE LEARNING 2

What you can do in this project:

- Plan and implement your own service project
- Share your project plan and outcome with others
- Conduct an evaluation of your project

Grades: 9-12

Resource: 08183, *Raise Your Voice + CD*

## 10759 SERVICE LEARNING YTH LDR

## 10800 CITIZENSHIP LDR

Resource: 08154, *Citizenship Guide's Handbook*

Webpage: [4h.uwex.edu/onlinpro/citizenship.cfm](http://4h.uwex.edu/onlinpro/citizenship.cfm)

## 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

Resource: 08153, *Citizenship Adventure Kit*

## 10809 CITIZENSHIP YTH LDR



### SELF-DETERMINED

## 10900 SELF-DETERMINED LDR

Webpage: [4h.uwex.edu/onlinpro/selfdetermined.cfm](http://4h.uwex.edu/onlinpro/selfdetermined.cfm)

## 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

Resource: 4H272, *Designing Your Own Project*

## 10909 SELF-DETERMINED YTH LDR



### ANIMAL SCIENCES

## 20100 BEEF LDR

Resources: 08146, *Beef Helper's Guide*

117R, *Beef Resource Handbook*

Webpage: [4h.uwex.edu/onlinpro/beef.cfm](http://4h.uwex.edu/onlinpro/beef.cfm)

## 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

Resources: 08143, *Bite Into Beef*

4H450, *Judging Breeding & Market Cattle*

MA, *Meat Animal Project Record*

## 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

Resources: 08144, *Here's the Beef*  
MA, *Meat Animal Project Record*

## 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

Resources: 08145, *Leading the Charge*  
MA, *Meat Animal Project Record*

## 20109 BEEF YTH LDR

## 20150 DAIRY GOAT LDR

Resource: 08355, *Dairy Goat Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/goats.cfm](http://4h.uwex.edu/onlinpro/goats.cfm)

## 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

Resource: 08352, *Getting Your Goat*

## 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

Resource: 08353, *Stepping Out*

## 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

Resource: 08354, *Showing the Way*

## 20159 DAIRY GOAT YTH LDR

## 20190 MEAT GOAT LDR

Resource: 07912, *Meat Goat Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/goats.cfm](http://4h.uwex.edu/onlinpro/goats.cfm)

## 20191 MEAT GOAT 1

What you can do in this project:

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

Grades: 3-4

Resource: 07909, *Just Browsing*

## 20192 MEAT GOAT 2

What you can do in this project:

- Recognize meat goat diseases
- Select a veterinarian and purchase breeding stock
- Understand reproduction cycle and keep records
- Fit and show meat goats

Grades: 5-8

Resource: 07910, *Get Growing with Meat Goats*

## 20193 MEAT GOAT 3

What you can do in this project:

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

Grades: 9-12

Resource: 07911, *Meating the Future*

## 20199 MEAT GOAT YTH LDR

## 20200 DAIRY LDR

Resource: 08164, *Dairy Cow Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/dairy.cfm](http://4h.uwex.edu/onlinpro/dairy.cfm)

## 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

Resources: 08161, *Cowabunga*  
CANADA1, *Showmanship...Leading to Win*  
4H501, *Dairy Cattle Judging Made Easy – CD*  
LDR, *Lifetime Dairy Record*

## 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

Resources: 08162, *Mooving Ahead*  
4H502, *The Rules are Black and White*  
CANADA2, *Preparing to Lead*

### **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

Resources: 08163, *Rising to the Top*  
HMR, *WI 4-H Dairy Heifer Mgmt. Record*

### **20209 DAIRY YTH LDR**

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

Resources: 08058, *Horse Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/horses.cfm](http://4h.uwex.edu/onlinpro/horses.cfm)

### **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

Resources: 08053, *Giddy Up & Go*  
CO200, *Horses & Horsemanship*  
CO201, *Horse Science*  
4H180, *Pleasure Riding*

### **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

Resource: 08054, *Head, Heart & Hooves*

### **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

Resource: 08055, *Stable Relationships*

### **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

Resource: 08056, *Riding the Range*

### **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

Resource: 08057, *Jumping to New Heights*

### **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

Resource: 08053, *Giddy Up & Go*  
4H266, *Horses are Fun- Horseless Horse*

### **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

Resource: 08054, *Head, Heart & Hooves*

### **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

Resource: 08055, *Stable Relationships*

### **20309 HORSE/HORSELESS HORSE YTH LDR**

### **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

Resource: 4H181, *Draft Horse*

### **20380 CLOTHES HORSE LDR**

Resource: 4H360, *4-H Clothes Horse Activity Guide*

Webpage: [4h.uwex.edu/onlinpro/horses.cfm](http://4h.uwex.edu/onlinpro/horses.cfm)

### **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

Resources: 4H374, *Additional Patterns for Clothes Horse*  
4H389, *Horse & Riding Attire*

### **20389 CLOTHES HORSE YTH LDR**

### **20400 SWINE LDR**

Resources: 08068, *Swine Helper's Guide*  
134R, *Swine Resource Handbook*

Webpage: [4h.uwex.edu/onlinpro/swine.cfm](http://4h.uwex.edu/onlinpro/swine.cfm)

### **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

Resources: 08065, *The Incredible Pig*  
4H412, *Judging Breeding & Market Swine*  
MA, *Meat Animal Project Record*

### **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

Resources: 08066, *Putting the Oink in the Pig*  
MA, *Meat Animal Project Record*

### **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

Resources: 08067, *Going Whole Hog*  
MA, *Meat Animal Project Record*

### **20409 SWINE YTH LDR**

### **20500 POULTRY LDR**

Resource: 06366, *Poultry Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/poultry.cfm](http://4h.uwex.edu/onlinpro/poultry.cfm)

### **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

Resources: 06363, *Scratching the Surface*  
CIR878, *From Egg to Chick*  
MA, *Meat Animal Project Record*

### **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

Resources: 06364, *Testing Your Wings*  
4H281, *Poultry for Fun & Food*  
A2880, *Chicken Breeds & Varieties*  
MA, *Meat Animal Project Record*

### **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

Resources: 06365, *Flocking Together*  
MA, *Meat Animal Project Record*

### **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

Resources: A3311, *Raising Waterfowl*  
MA, *Meat Animal Project Record*

### **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

Resources: NCR060, *Small Turkey Flock Management*  
MA, *Meat Animal Project Record*

## 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

Resources: NCR209, *Bantams*  
MA, *Meat Animal Project Record*

## 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

Resource: 4H135, *Pigeons*

## 20509 POULTRY YTH LDR

### 20600 SHEEP LDR

Resources: 06370, *Sheep Helper's Guide*  
194R, *Sheep Resource Handbook*

Webpage: [4h.uwex.edu/onlinepro/sheep.cfm](http://4h.uwex.edu/onlinepro/sheep.cfm)

### 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

Resources: 06367, *Lambs, Rams and You*  
4H421, *Judging Breeding & Market Sheep*  
MA, *Meat Animal Project Record*

### 20602 SHEEP 2

What you can do in this project:

- Learn to identify sheep parasites
- Promote meat safety
- Judge wool
- Diagnose sheep diseases
- Use medications safely
- Explore careers

Grades: 6-8

Resources: 06368, *Shear Delight*  
MA, *Meat Animal Project Record*

## 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

Resources: 06369, *Leading the Flock*  
MA, *Meat Animal Project Record*

## 20609 SHEEP YTH LDR

### 20650 CATS LDR

Resource: 08151, *Cat Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/cats.cfm](http://4h.uwex.edu/onlinepro/cats.cfm)

### 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

Resource: 08148, *Purr-fect Pals*

### 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

Resource: 08149, *Climbing Up!*

### 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

Resource: 08150, *Leaping Forward*

## 20659 CATS YTH LDR

### 20700 DOGS LDR

Resources: 08169, *Dog Helper's Guide*  
4H458, *4-H Dog Judging Guidelines*

Webpage: [4h.uwex.edu/onlinepro/dogs.cfm](http://4h.uwex.edu/onlinepro/dogs.cfm)

### **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

Resources: 08166, *Wiggles and Wags*  
4H436, *The Basics of Training Your Dog*

### **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

Resources: 08167, *Canine Connection*  
4H439, *Dog Obedience – Novice & Beyond*

### **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

Resources: 08168, *Leading the Pack*  
4H437, *A Guide to Showmanship*

### **20709 DOGS YTH LDR**

### **20750 RABBITS LDR**

Resource: 08083, *Rabbit Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/rabbits.cfm](http://4h.uwex.edu/onlinpro/rabbits.cfm)

### **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

Resource: 08080, *What's Happening?*

### **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

Resource: 08081, *Making Tracks*

### **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

Resource: 08082, *All Ears*

### **20759 RABBITS YTH LDR**

### **20800 VETERINARY SCIENCE LDR**

Resources: 08051, *Veterinary Science Helper's Guide*  
4H192, *Veterinary Science*

4H323, *The Normal Animal - Leader's Guide*

Webpage: [4h.uwex.edu/onlinpro/vetscience.cfm](http://4h.uwex.edu/onlinpro/vetscience.cfm)

### **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

Resources: 08048, *From Airedales to Zebras*  
4H334, *Adventure Notebook*  
4H131, *The Normal Animal*

### **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

Resources: 08049, *All Systems Go*  
4H048, *Animal Disease*

### **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

Resources: 08050, *On the Cutting Edge*  
4H133, *Animal Health*

### **20809 VETERINARY SCIENCE YTH LDR**

### **20900 PETS LDR**

Resource: 06362, *Pet Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/pets.cfm](http://4h.uwex.edu/onlinpro/pets.cfm)

### **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

Resource: 06359, *Pet Pals*

### **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

Resource: 06360, *Scurrying Ahead*

### **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

Resource: 06361, *Scaling the Heights*

### **20909 PETS YTH LDR**



## **ARTS & COMMUNICATION**

### **30000 PHOTOGRAPHY LDR**

Webpage: [4h.uwex.edu/onlinpro/photography.cfm](http://4h.uwex.edu/onlinpro/photography.cfm)

### **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

Resource: PC1, *Focus on Photography*

### **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

Resource: PC2, *Controlling the Image*

### **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

Resource: PC3, *Mastering Photography*

### **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

Resource: IS401, *Action! Making Videos & Movies*

### **30009 PHOTOGRAPHY YTH LDR**

### **30100 COMMUNICATIONS LDR**

Resources: 08159, *Communications Helper's Guide*

COMM04, *Voices From the Past*

COMM05, *It's All in the Family*

COMM07, *Communication Activities for 4-H Clubs*

Webpage: [4h.uwex.edu/onlinpro/communications.cfm](http://4h.uwex.edu/onlinpro/communications.cfm)

### **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

Resource: 08156, *Picking Up the Pieces*

### **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

Resource: 08157, *Putting It Together*

### **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

Resource: 08158, *The Perfect Fit*

### **30109 COMMUNICATIONS YTH LDR**

### **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

Resources: COMM02, *4-H Public Speakers Handbook*  
COMM06, *4-H Public Speaking Opportunities*

### **30129 SPEAKING YTH LDR**

### **30131 POSTERS**

Grades: 3-12

Resource: 4H23, *Say It With Posters*

### **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

Resources: COMM01, *Creative Wordworking*  
COMM03, *Crazy About Books Reading Circle*

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

Resource: 07597, *Arts & Crafts – A Palette of Fun*

Webpage: [4h.uwex.edu/onlinpro/artsandcrafts.cfm](http://4h.uwex.edu/onlinpro/artsandcrafts.cfm)

### **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

Resources: 23112, *Elements & Principles of Design Card*  
4H472, *Palette of Fun Member Sheet & Introduction*

### **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

Resources: 08140, *Advanced Visual Arts: Sketchbook Crossroads*  
08141, *Advanced Visual Arts: Portfolio Pathways*

### **30310 LEATHERCRAFT LDR**

Resource: CIR006, *Adventures in Leathercraft Leaders Guide*

Webpage: [4h.uwex.edu/onlinpro/leathercraft.cfm](http://4h.uwex.edu/onlinpro/leathercraft.cfm)

### **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

Resource: 4H149, *Adventures in Leathercraft Members Guide*

### **30319 LEATHERCRAFT YTH LDR**

### **30330 BLOCK PRINTING LDR**

Resource: CIR008, *Block Printing Leader Guide*

Webpage: [4h.uwex.edu/onlinpro/blockprinting.cfm](http://4h.uwex.edu/onlinpro/blockprinting.cfm)

### **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

Resource: 4H156, *Block Printing Member Guide*

### **30339 BLOCK PRINTING YTH LDR**

### **30340 METAL ENAMELING LDR**

Resource: CIR009, *Metal Enameling Leader Guide*

Webpage: [4h.uwex.edu/onlinpro/metalenameling.cfm](http://4h.uwex.edu/onlinpro/metalenameling.cfm)

### **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

Resource: 4H158, *Metal Enameling Members Guide*

### **30349 METAL ENAMELING YTH LDR**

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

Webpage: [4h.uwex.edu/onlinpro/drawing.cfm](http://4h.uwex.edu/onlinpro/drawing.cfm)

### **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

Resource: 4H169, *Drawing & Painting*

### **30359 DRAWING & PAINTING YTH LDR**

### **30400 FOLK ARTS LDR**

Resource: NCR534, *Folk Arts Leader Guide*

Webpage: [4h.uwex.edu/onlinpro/folkarts.cfm](http://4h.uwex.edu/onlinpro/folkarts.cfm)

### **30401 FOLK ARTS**

What you can do in this project:

- Explore traditional folk arts
- Learn more from your family and community
- Learn storytelling
- Decorate eggs and make baskets

Grades: 5-12

### **30409 FOLK ARTS YTH LDR**

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

Resource: 08180, *QueRico! La Cultura Bilingual Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/LatinoCulturalArts.cfm](http://4h.uwex.edu/onlinpro/LatinoCulturalArts.cfm)

### **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

### **30609 LATINO CULTURAL ARTS YTH LDR**

### **30700 THEATRE ARTS LDR**

Resource: 08073, *Theatre Arts Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/theatre.cfm](http://4h.uwex.edu/onlinpro/theatre.cfm)

### **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

Resource: 08070, *Play the Role*

### **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

Resource: 08071, *Become a Puppeteer!*

### **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

Resource: 08072, *Set the Stage*

### **30709 THEATRE ARTS YTH LDR**

### **30710 CLOWNING LDR**

### **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*

### **30719 CLOWNING YTH LDR**

### **30760 MUSIC LDR**

Resource: 4H351, *Sing Along Songbook*

Webpage: [4h.uwex.edu/onlinpro/Music.cfm](http://4h.uwex.edu/onlinpro/Music.cfm)

### **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

Resource: 4H620MP, *Youth and 4-H Music Project Guide*

### **30769 MUSIC YTH LDR**

### **30800 COMPUTERS LDR**

Resource: 08349, *Teens Teaching Tech*

Webpage: [4h.uwex.edu/onlinpro/computer.cfm](http://4h.uwex.edu/onlinpro/computer.cfm)

### **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

Resource: 08346, *Newbie Know How*

### **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

Resource: 08347, *Inside the Box*

### 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

Resource: 08348, *Peer to Peer*

### 30809 COMPUTERS YTH LDR



## FAMILY, HOME & HEALTH

### 40000 INTERGENERATIONAL PROGRAMS LDR

Resource: NCR548, *Walk in My Shoes Leader Guide*

Webpage: [4h.uwex.edu/onlinepro/intergenerational.cfm](http://4h.uwex.edu/onlinepro/intergenerational.cfm)

### 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

Resource: NCR591, *Walk in My Shoes Member Guide*

### 40009 INTERGENERATIONAL YTH LDR

### 40100 CHILD DEVELOPMENT LDR

Resource: 08078, *Child Development Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/childdev.cfm](http://4h.uwex.edu/onlinepro/childdev.cfm)

### 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

Resource: 08075, *On My Own*

### 40102 CHILD DEVELOPMENT 2

What you can do in this project:

- Learn how to take care of yourself and others
- 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

Resource: 08076, *Growing With Others*

### 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

Resource: 08077, *Growing in Communities*

### 40109 CHILD DEVELOPMENT YTH LDR

### 40200 CLOTHING LDR

Resource: 08063, *Sewing Expressions Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/clothing.cfm](http://4h.uwex.edu/onlinepro/clothing.cfm)

### 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

Resources: 08060, *Under Construction*  
07198, *Let's Sew! Beginner's Sewing Guide*

### 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

Resource: 08061, *Fashion Forward*

### 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

Resource: 08062, *Refine Design*

### 40209 CLOTHING YTH LDR

### 40300 CROCHETING LDR

Webpage: [4h.uwex.edu/onlinepro/crocheting.cfm](http://4h.uwex.edu/onlinepro/crocheting.cfm)

### 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

Resource: CC1403, *Crochet Made Easy*

### 40309 CROCHETING YTH LDR

### 40400 FOODS & NUTRITION LDR

Resource: 07730, *Foods Curriculum Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/foodsnutrition.cfm](http://4h.uwex.edu/onlinepro/foodsnutrition.cfm)

#### **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

Resource: 07144, *Six Easy Bites*

#### **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

Resource: 07146, *Tasty Tidbits*

#### **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

Resource: 07148, *You're the Chef*

#### **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

Grades: 10-12

Resource: 07150, *Foodworks*

#### **40409 FOODS & NUTRITION YTH LDR**

#### **40500 FOOD PRESERVATION LDR**

Webpage: [4h.uwex.edu/onlinpro/foodsnutrition.cfm](http://4h.uwex.edu/onlinpro/foodsnutrition.cfm)

#### **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

Resources: B0430, *Canning Fruits Safely*  
B1159, *Canning Vegetables Safely*  
B2909, *Making Jams, Jellies & Fruit Preserves*  
B3278, *Freezing Fruits & Vegetables*

#### **40502 FOOD PRESERVATION 2**

What can I do in this project:

- Continue learning food preservation techniques
- Use UW-Extension Safe Food Preservation Series

Grades: 6-12

Resources: B2267, *Homemade Pickles & Relishes*  
B2605, *Tomatoes Tart & Tasty*  
B3345, *Canning Meat, Wild Game, Poultry & Fish*  
B3570, *Canning Salsa Safely*

#### **40509 FOOD PRESERVATION YTH LDR**

#### **40650 PERSONAL FINANCE LDR**

Resource: 07712, *Financial Champions Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/finance.cfm](http://4h.uwex.edu/onlinpro/finance.cfm)

#### **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

Resource: 07710, *Money FUNdamentals*

#### **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

Resource: 07711, *Money Moves*

#### **40659 PERSONAL FINANCE YTH LDR**

#### **40660 ENTREPRENEURSHIP LDR**

Resource: 08036, *Entrepreneurship Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/entrepreneur.cfm](http://4h.uwex.edu/onlinpro/entrepreneur.cfm)

#### **40661 ENTREPRENEURSHIP**

What you can do in this project:

- Practice the skills needed to be an entrepreneur
- Explore businesses, products, marketing and pricing
- Create a business plan and start your own business

Grades: 7-12

Resource: 08035, *Entrepreneurship: Be the E*

#### **40669 ENTREPRENEURSHIP YTH LDR**

#### **40670 WORKFORCE READINESS LDR**

Resource: 08192, *Get in the Act! Take 1 Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/workforce.cfm](http://4h.uwex.edu/onlinpro/workforce.cfm)

#### **40671 WORKFORCE READINESS**

What you can do in this project:

- Explore what it takes to get your first job
- Discover how to assess job possibilities in the community
- Create job scenarios
- Recognize your learning styles and personal qualities

Grades: 6-9

Resource: 08191, *Get in the Act! Take 1 (with CD)*

#### **40679 WORKFORCE READINESS YTH LDR**

#### **40700 HOME ENVIRONMENT LDR**

Webpage: [4h.uwex.edu/onlinpro/homeenv.cfm](http://4h.uwex.edu/onlinpro/homeenv.cfm)

#### **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

Resource: 4H425, *Exploring Your Home*

#### **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

Resource: 4H426, *Living With Others*

#### **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

Resource: 4H427, *Where I Live*

#### **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

Resource: 4H465, *In My Home*

#### **40709 HOME ENVIRONMENT YTH LDR**

#### **40800 KNITTING LDR**

Webpage: [4h.uwex.edu/onlinpro/knitting.cfm](http://4h.uwex.edu/onlinpro/knitting.cfm)

#### **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

Resource: CC1402, *Knitting Made Easy*

#### **40809 KNITTING YTH LDR**

#### **40850 CONSUMER SAVVY LDR**

Resource: 08033, *Consumer Savvy Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/consumersavvy.cfm](http://4h.uwex.edu/onlinpro/consumersavvy.cfm)

#### **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

Resource: 08030, *The Consumer in Me*

#### **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

Resource: 08031, *Consumer Wise*

#### **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

Resource: 08032, *Consumer Roadmap*

#### **40859 CONSUMER SAVVY YTH LDR**

#### **40900 HEALTH LDR**

Webpage: [4h.uwex.edu/onlinpro/health.cfm](http://4h.uwex.edu/onlinpro/health.cfm)

#### **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
- Assemble a first-aid kit

Grades: 3-5

Resource: 08174, *First Aid in Action*

## 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

Resource: 08175, *Staying Healthy*

## 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

Resource: 08176, *Keeping Fit*

## 40909 HEALTH YTH LDR



## MECHANICAL SCIENCES

### 50200 BICYCLING LDR

Resources: 08336, *Bicycle Helper's Guide*  
08399, *Bicycle Fix It! (DVD)*

Webpage: [4h.uwex.edu/onlinpro/bicycling.cfm](http://4h.uwex.edu/onlinpro/bicycling.cfm)

### 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

Resource: 08334, *Bicycling for Fun*

### 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

Resource: 08335, *Wheels in Motion*

### 50209 BICYCLING YTH LDR

### 50300 ELECTRICITY LDR

Resource: 06852, *Electric Excitement Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/electricity.cfm](http://4h.uwex.edu/onlinpro/electricity.cfm)

### 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

Resource: 06848, *Magic of Electricity*

### 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

Resource: 06849, *Investigating Electricity*

### 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

Grades: 8-9

Resource: 06850, *Wired for Power*

### 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

Resource: 06851, *Entering Electronics*

### 50309 ELECTRICITY YTH LDR

### 50500 SMALL ENGINES LDR

Resource: 08189, *Small Engines Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/engine.cfm](http://4h.uwex.edu/onlinpro/engine.cfm)

### 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

Resource: 08186, *Crank It Up!*

### 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

Resource: 08187, *Warm It Up!*

### 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

Resource: 08188, *Tune It Up!*

### 50509 SMALL ENGINES YTH LDR

### 50600 SCALE MODELS LDR

Webpage: [4h.uwex.edu/onlinpro/scalemodels.cfm](http://4h.uwex.edu/onlinpro/scalemodels.cfm)

### 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

Resource: 4H424, *Guidelines for Building Scale Models*

### 50609 SCALE MODELS YTH LDR

### 50700 TRACTORS LDR

Webpage: [4h.uwex.edu/onlinpro/tractors.cfm](http://4h.uwex.edu/onlinpro/tractors.cfm)

### 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)

Resource: 4H961, *Starting Up: Getting to Know Your Tractor*

### 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)

Resource: 4H962, *Tractor Operations: Gearing Up for Safety*

### 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)

Resource: 4H963, *Moving Out: Learning About Your Tractor & Farm Machinery*

### 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)

Resource: 4H964, *Learning More: Learning About Agricultural Tractors & Equipment*

### 50709 TRACTORS YTH LDR

### 50800 WOODWORKING LDR

Resource: 06879, *Woodworking Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/wood.cfm](http://4h.uwex.edu/onlinpro/wood.cfm)

### 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

Resource: 06875, *Measuring Up*

### 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

Resource: 06876, *Making the Cut*

### 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

Resource: 06877, *Nailing It Together*

### 50804 WOODWORKING 4

What you can do in this project:

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

Grades: 9-12

Resource: 06878, *Finishing Up*

### 50809 WOODWORKING YTH LDR



## **NATURAL RESOURCES & ENVIRONMENTAL EDUCATION**

### 60000 EXPLORING YOUR ENVIRONMENT LDR

Resources: 07707, *Exploring Your Environment Helper's Guide*  
PUB-CE-456, *Education Connection*

PUBL-ER-001, *WI Endangered & Threatened Species*

Webpage: [4h.uwex.edu/onlinpro/environment.cfm](http://4h.uwex.edu/onlinpro/environment.cfm)

### 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

Resource: 07704, *Eco-Wonders*

### **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

Resource: 07706, *Eco-Actions*

### **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

Resource: 4H392, *Wildflowers*

Webpage: [4h.uwex.edu/onlinpro/wildflowers.cfm](http://4h.uwex.edu/onlinpro/wildflowers.cfm)

### **60006 BIRDS**

### **60009 EXPLORING YOUR ENVIRONMENT YTH LDR**

### **60050 FORESTRY LDR**

Resource: 08041, *Forestry Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/forestry.cfm](http://4h.uwex.edu/onlinpro/forestry.cfm)

### **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

Resource: 08038, *Follow the Path*

### **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

Resource: 08039, *Reach for the Canopy*

### **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

Resource: 08040, *Explore the Deep Woods*

### **60059 FORESTRY YTH LDR**

### **60100 ADVENTURES LDR**

Resource: 4H443, *4-H Adventure Project*

Webpage: [4h.uwex.edu/onlinpro/adventures.cfm](http://4h.uwex.edu/onlinpro/adventures.cfm)

### **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

Resource: 4H444, *Introduction to Adventures*

### **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

Resource: 4H448, *Winter Travel*

Webpage: [4h.uwex.edu/onlinpro/wintertravel.cfm](http://4h.uwex.edu/onlinpro/wintertravel.cfm)

### **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

Resource: 4H447, *Canoeing*

Webpage: [4h.uwex.edu/onlinpro/canoeing.cfm](http://4h.uwex.edu/onlinpro/canoeing.cfm)

### **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

Resource: 4H446, *Bicycling*

Webpage: [4h.uwex.edu/onlinpro/bicyclingnr.cfm](http://4h.uwex.edu/onlinpro/bicyclingnr.cfm)

### **60120 BACKPACKING & HIKING LDR**

Resource: 08046, *Outdoor Adventures Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/backpacking.cfm](http://4h.uwex.edu/onlinpro/backpacking.cfm)

### **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

Resource: 08043, *Hiking Trails*

### **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

Resource: 08044, *Camping Adventures*

### **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

Resource: 08045, *Backpacking Expeditions*

### **60129 BACKPACKING & HIKING YTH LDR**

### **60200 ENTOMOLOGY (INSECTS) LDR**

Resource: 06856, *Entomology Group Helper's Guide*

08393, *Project Butterfly Wings Facilitator Guide*

Webpage: [4h.uwex.edu/onlinpro/entomology.cfm](http://4h.uwex.edu/onlinpro/entomology.cfm)

### **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

Resource: 06853, *Creepy Crawlies*

08392, *Project Butterfly Wings Youth Guide*

### **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

Resource: 06854, *What's Bugging You?*

08392, *Project Butterfly Wings Youth Guide*

### **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

Resource: 06855, *Dragons, Houses, & Other Flies*

### **60209 ENTOMOLOGY YTH LDR**

### **60300 SHOOTING SPORTS LDR**

Resource: Each Shooting Sports Leader should attend a Certification Training to receive the *WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### **60309 SHOOTING SPORTS YTH LDR**

### **60310 ARCHERY LDR**

Resource: Each Archery Leader should attend a Certification Training to receive the *Archery Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### **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

### **60319 ARCHERY YTH LDR**

### **60320 AIR PISTOL LDR**

Resource: Each Pistol Leader should attend a Certification Training to receive the *Pistol Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### 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

### 60329 AIR PISTOL YTH LDR

### 60330 RIFLE LDR

Resource: Each Rifle Leader should attend a Certification Training to receive the *Rifle Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### 60331 RIFLE

What you can do in this project:

- Explore rifle history and the different models
- Learn to sight-in your rifle and score targets
- Learn various shooting positions used in competition
- Learn safe handling procedures and range rules

Ages: Only 12 years old and above can shoot powder burning guns

### 60339 RIFLE YTH LDR

### 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

### 60349 HUNTING YTH LDR

### 60350 SHOTGUN LDR

Resource: Each Shotgun Leader should attend a Certification Training to receive the *Shotgun Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### 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: Only 12 years old and above can shoot powder burning guns

### 60359 SHOTGUN YTH LDR

### 60360 MUZZLELOADING LDR

Resource: Each Muzzleloading Leader should attend a Certification Training to receive the *Muzzleloading Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### 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: Only 12 years old and above can shoot powder burning guns

### 60369 MUZZLELOADING YTH LDR

### 60370 AIR RIFLE LDR

Resource: Each Air Rifle Leader should attend a Certification Training to receive the *Air Rifle Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see webpage.

Webpage: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

### 60371 AIR RIFLE

What you can do in this project:

- Explore different types of air rifles
- Learn basic safety rules and range commands
- Develop marksmanship
- Learn various shooting positions used in competition

Grades: 3-12

### 60379 AIR RIFLE YTH LDR

### 60450 RECYCLING LDR

Webpage: [4h.uwex.edu/onlinpro/recycling.cfm](http://4h.uwex.edu/onlinpro/recycling.cfm)

### 60451 RECYCLING

What you can do in this project:

- Learn about the impact of solid waste on the environment
- Learn to reduce, reuse and recycle

Grades: 3-12

Resource: 4H362, *Recycling for Reuse*

### 60459 RECYCLING YTH LDR

### 60470 WATER LDR

Resource: 4H850, *Give Water A Hand Leader Guide*

Webpage: [4h.uwex.edu/onlinpro/water.cfm](http://4h.uwex.edu/onlinpro/water.cfm)

## 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

Resource: 4H855, *Give Water A Hand – Action Guide*

## 60479 WATER YTH LDR

### 60800 FISHING LDR

Resource: 07601, *Fishing Adventures- Helper's Guide*

Webpage: [www.uwex.edu/ces/4h/onlinpro/fishing.cfm](http://www.uwex.edu/ces/4h/onlinpro/fishing.cfm)

### 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

Resource: 07598, *Take the Bait*

### 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

Resource: 07599, *Reel in the Fun*

### 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

Resource: 07600, *Cast into the Future*

## 60809 FISHING YTH LDR



## 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

Resources: 4H355, *4-H Corn Project Manual*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*  
RS1, *Record Sheet – Crops Management*

Webpage: [4h.uwex.edu/onlinpro/corn.cfm](http://4h.uwex.edu/onlinpro/corn.cfm)

## 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

Resources: 4H349, *Pest Scouting Alfalfa*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*  
RS1, *Record Sheet – Crops Management*

Webpage: [4h.uwex.edu/onlinpro/forage.cfm](http://4h.uwex.edu/onlinpro/forage.cfm)

## 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

Grades: 3-12

Resources: 4H356, *4-H Small Grains Manual*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*  
RS1, *Record Sheet – Crops Management*

Webpage: [4h.uwex.edu/onlinpro/smallgrains.cfm](http://4h.uwex.edu/onlinpro/smallgrains.cfm)

## 70009 CROPS YTH LDR

### 70100 FRUITS LDR

Webpage: [4h.uwex.edu/onlinpro/fruits.cfm](http://4h.uwex.edu/onlinpro/fruits.cfm)

### 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

Resources: A1597, *Growing Strawberries in Wisconsin*  
A1610, *Growing Raspberries in Wisconsin*  
A1960, *Growing Currants, Gooseberries, & Elderberries in Wisconsin*

## 70102 FRUITS 2

What can I do in this project:

- Produce fruits such as pears and grapes
- Learn about different varieties of cultivars

Resources: A1656, *Growing Grapes in Wisconsin*  
A2072, *Growing Pears in Wisconsin*

## 70109 FRUITS YTH LDR

## 70200 VEGETABLES LDR

Resource: 07166, *Gardening Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/vegetables.cfm](http://4h.uwex.edu/onlinpro/vegetables.cfm)

## 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

Resources: 07162, *Gardening: See Them Sprout*  
4H395, *Organically Grown – Handbook*  
4H409, *Nature's Herbs*  
A3306, *Exhibiting & Judging Vegetables*

## 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

Resource: 07163, *Gardening: Let's Get Growing*

## 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

Resource: 07164, *Gardening: Take Your Pick*

## 70204 VEGETABLE 4

What you can do in this project:

- Growing vegetables for profits

Resource: 07165, *Gardening: Growing Profits*

## 70209 VEGETABLES YTH LDR

## 70300 HOUSE PLANTS LDR

Resource: 07166, *Gardening Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/houseplants.cfm](http://4h.uwex.edu/onlinpro/houseplants.cfm)

## 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

Resources: 07162, *Gardening: See Them Sprout*  
4H328, *Propagating & Growing House Plants*

## 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

Resource: 07163, *Gardening: Let's Get Growing*

## 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

Resource: 07164, *Gardening: Take Your Pick*

## 70304 HOUSE PLANTS 4

What you can do in this project:

- Growing house plants for profits

Resource: 07165, *Gardening: Growing Profits*

## 70309 HOUSE PLANTS YTH LDR

## 70350 PLANT CRAFTS LDR

Webpage: [4h.uwex.edu/onlinpro/plantcrafts.cfm](http://4h.uwex.edu/onlinpro/plantcrafts.cfm)

## 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

Resources: 4H330, *Plant Crafts*  
4H453, *Plant Crafts Supplement*

## 70359 PLANT CRAFTS YTH LDR

## 70400 FLOWERS LDR

Resource: 07166, *Gardening Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/flowers.cfm](http://4h.uwex.edu/onlinpro/flowers.cfm)

### 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

Resources: 07162, *Gardening: See Them Sprout*  
4H1301A, *Forcing Spring Flowering Bulbs*  
A2935, *Evaluating & Judging Flowers & Indoor Plants*

### 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

Resource: 07163, *Gardening: Let's Get Growing*

### 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

Resource: 07164, *Gardening: Take Your Pick*

### 70404 FLOWERS 4

What you can do in this project:

- Growing flowers for profits

Resource: 07165, *Gardening: Growing Profits*

### 70409 FLOWERS YTH LDR

### 70500 HOME GROUNDS LDR

Webpage: [4h.uwex.edu/onlinpro/homegrounds.cfm](http://4h.uwex.edu/onlinpro/homegrounds.cfm)

### 70501 HOME GROUNDS 1

What you can do in this project:

- Learn about seeding a lawn
- Study proper lawn care and maintenance
- Explore fertilization and pest management techniques

Grades: 3-5

Resource: 4H321, *4-H Lawn Care*

### 70502 HOME GROUNDS 2

What you can do in this project:

- Learn the importance of planting new trees and shrubs
- Explore variety selection and appropriate placement
- Learn basic maintenance: pruning and fertilization

Grades: 6-8

Resources: A3067, *Selecting, Planting & Caring for Shade Trees*  
A1730, *Evergreens – Planting & Care*

### 70503 HOME GROUNDS 3

What you can do in this project:

- Explore landscape planning
- Make a plan and put it on paper
- Select, place and plant trees and shrubs
- Maintain your home grounds

Grades: 9-12

Resource: G1923, *Planning & Designing Your Home Landscape*

### 70509 HOME GROUNDS YTH LDR



### STEM (Science, Technology, Engineering & Math)

#### 80100 STEM LDR

Resource: 08384, *The Power of the Wind Facilitator Guide*

Webpage: <http://4h.uwex.edu/set/index.cfm>

#### 80101 STEM – Exploring

Webpage: <http://4h.uwex.edu/set/index.cfm>

#### 80102 STEM WIND ENERGY

Resource: 08383, *The Power of the Wind Youth Guide*

#### 80109 STEM YTH LDR

Resource: 08383, *The Power of the Wind Facilitator Guide*

#### 80110 AEROSPACE LDR

Resource: 06846, *Aerospace Adventures Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/aerospace.cfm](http://4h.uwex.edu/onlinpro/aerospace.cfm)

#### 80111 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

Resource: 06842, *Pre-Flight*

#### 80112 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

Resource: 06843, *Lift Off*

### 80113 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

Resource: 06844, *Reaching New Heights*

### 80114 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

Resource: 06845, *Pilot in Command*

### 80119 AEROSPACE YTH LDR

### 80120 GEOSPATIAL LDR

Webpage: [4h.uwex.edu/onlinpro/geospatial.cfm](http://4h.uwex.edu/onlinpro/geospatial.cfm)

### 80121 GEOSPATIAL 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

Resource: CD8358, *Exploring Spaces, Going Places CD* ("Getting Out" section)

### 80122 GEOSPATIAL 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

Resource: CD8358, *Exploring Spaces, Going Places CD* ("On the Trail" section)

### 80123 GEOSPATIAL 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

Resource: CD8358, *Exploring Spaces, Going Places CD* ("Reaching Your Destination" section)

### 80130 ROBOTICS LDR

Resources: 08434, *Robotics Platforms Track DVD*

Webpage: [4h.uwex.edu/onlinpro/robotics.cfm](http://4h.uwex.edu/onlinpro/robotics.cfm)

### 80131 ROBOTICS 1

What you can do in this project:

- Explore and learn about robots arms
- Learn about robot form, function and design
- Build robots from everyday items

Grades:

Resource: 08431, *Junk Drawer Robotics Track Level 1: Give Robots a Hand*  
08435, *4-H Robotics Youth Notebook*  
08430, *Virtual Robotics Track DVD*

### 80132 ROBOTICS 2

What you can do in this project:

- Explore and learn about robots that move with legs, wheels and underwater.
- Learn about basic electrical power and motors, and gear system
- Build robots from everyday items

Grades:

Resource: 08432, *Junk Drawer Robotics Track Level 2: Robots on the Move*  
08435, *4-H Robotics Youth Notebook*  
08430, *Virtual Robotics Track DVD*

### 80133 ROBOTICS 3

What you can do in this project:

- Explore and learn about robots sensors and analog and digital systems
- Build basic circuits
- Study basic elements of programming and instruction

Grades:

Resource: 08433, *Junk Drawer Robotics Track Level 3: Mechatronics*  
08435, *4-H Robotics Youth Notebook*  
08430, *Virtual Robotics Track DVD*

### 80139 ROBOTICS YTH LDR



## INTERNATIONAL PROGRAMS

### 90150 INTERNATIONAL LDR

Resource: 4H812, *And My World*

Webpage: [4h.uwex.edu/onlinpro/international.cfm](http://4h.uwex.edu/onlinpro/international.cfm)

### 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

Resource: 4H812, *And My World*

### 90159 INTERNATIONAL YTH LDR