

4-H PROJECT GUIDEBOOK

7TH—12TH GRADE



"To Make the Best Better"

Visit our website at:

www.lsuagcenter.com/4H



LSU AgCenter

Louisiana 4-H Youth Development
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Selecting a 4-H project is an important step as a club member. Your project should reflect your interests and goals. There are many 4-H projects to choose from. If you have difficulty selecting your project interest, complete the Pick-A-Project activity at the back.

For more information on 4-H curricula and resources, visit the 4-H Mall website at: <http://www.4-hmall.org/curriculums.aspx>.

The 4-H Project categories are:

- Animal Science**
- Science, Engineering & Technology**
- Environmental Science**
- Healthy Living**
- Communication & Expressive Arts**
- Citizenship & Leadership**
- Personal Development**

The 4-H Portfolio

All members use this document to compile records of all 4-H experiences during the year, highlight outstanding achievements and tell YOUR 4-H Story!
(Formerly referred to as a Project Record.)



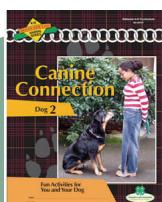
A State Partner in the Cooperative Extension System

The LSU Agricultural Center is a statewide campus of the LSU System and provides equal opportunities in programs and employment. Louisiana State University and A. & M. College, Louisiana parish governing bodies, Southern University, and United States Department of Agriculture cooperating.

Animal Science

Animals, animals, animals...on the farm or around the home, here are a few of the *amazing* animal projects.

Also included in this category are the livestock projects. Some of these guides require ownership of the farm animal and include: Beef, Dairy, Lamb, Swine, Goat, & Poultry. You can raise farm animals for show or profit. Contact the 4-H Office to sign up for these projects.

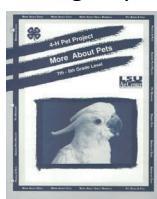
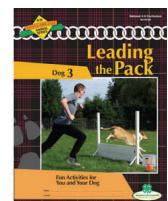


Canine Connection (8167)

Youth explore dog web resources, breed origins, safety, locating a missing dog, socializing a dog, showmanship, tricks, health, feeding and controlling parasites.

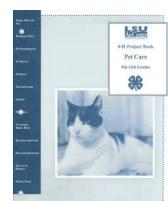
Leading the Pack (8168)

Experienced youth will learn how to plan and conduct a dog show, a showmanship clinic, a puppy training class and a skillathon as well as research zoonosis diseases, administer emergency first aid, explore dog laws and dog related careers.



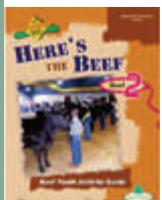
More About Pets (2511)

Youth will explore the responsibilities of owning a pet. Activities include record keeping, games, and have many demonstrations to present to your club.



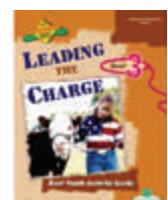
Pet Care (2598)

Pet care is designed for development of a self-study project in an area of pet care that you wish to explore. Included in this book are brief discussions of several areas for con-



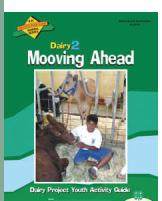
Here's the Beef (8144)

Challenges youth with activities related to leg structure, oral reasons, feed ingredients, behavior, nose printing, parasites, fitting, ethical issues, beef carcass composition and retail meat cuts.



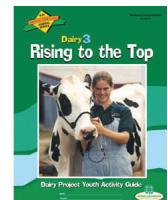
Leading the Charge – Beef (8145)

Selection and judging, feeds, careers, health, reproduction, and meats and marketing encourage more in depth learning.



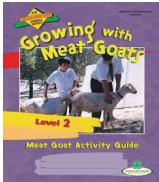
Mooving Ahead – Dairy (8162)

Judging, identifying, ethical decision making, keeping animals healthy, parasites, behavior, housing, hay quality, milking, food safety and careers are featured.



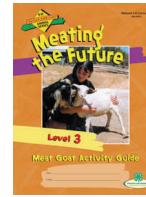
Rising to the Top – Dairy (8163)

Advanced youth practice body condition scoring, selecting through records, mastitis detection, balancing a ration, pregnancy detection, delivery of calf, promoting dairy products and exploring career opportunities.



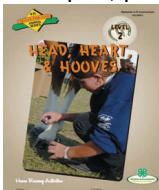
Get Growing With Meat – Goat (7910)

Youth will explore goat body parts, goat selection, breeds, record keeping, meat goat and dairy conformation, show preparations, sportsmanship, goat health, feed selection and several management skills.



Meating the Future (7911)

Youth discover how to control parasites, practice bio-security, conduct a judging clinic, judge goats, give oral reasons, select sires, balance a ration, compare forage samples, practice sound ethics, prevent diseases & more.



Head, Heart & Hooves – Horse (8054)

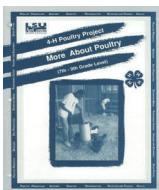
Youth learn horse behavior, anatomy and basic care practices. Activities include pony up to the salad bar, body condition scoring, bad hair day and long in the tooth

Animal Science: Livestock



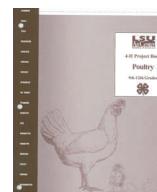
Riding the Range (8056)

Beginning riding skills and everything youth need to know before they get on a horse for the first time are covered in this book. Some of the activities are round pen workout, bridle in a bucket, saddle up, where do you ride and basic riding



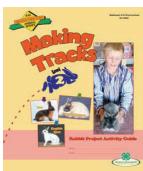
More About Poultry (2522)

The 4-H poultry project involves several activities; some require owning a bird, and some do not. No matter what your level of interest, this book will introduce you to many facts about poultry and help you learn more about these animals.



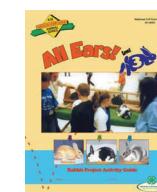
4-H Poultry Project (2673)

In this project booklet, youth will broaden their understanding and experiences concerning poultry and how it relates to our world.



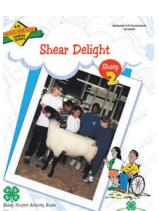
Making Tracks - Rabbit (8081)

Youth will recognize body types, judge and show rabbits, tattoo a rabbit, keep records, identify diseases, administer medication, record growth rates and market products.



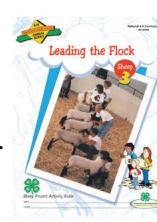
All Ears - Rabbit (8082)

Older youth will develop a breeding program, design a rabbitry, cull based on production, prevent diseases, develop sportsmanship and develop a marketing plan.



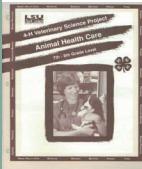
Shear Delight — Sheep (6368)

In Sheep 2 youth will practice presenting oral reasons, determine yield grades, compare digestive systems, explore a feed tag, practice management practices, deliver a lamb, treat parasites and discuss ethical decision making.



Leading the Flock— Sheep (6369)

Sheep 3 features activities related to judging, budgeting, web surfing, reproduction and genetics, surveying consumers, career exploration, marketing products and teaching other.

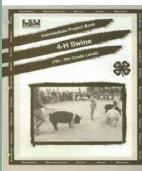
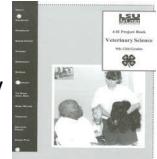


Animal Health Care (8071)

Youth will discuss the health and well-being of animals. You will need a pet or live near horses or farm animals that you can observe. Some of the activates planned in this book involve contact with animals. (Grade 7-8)

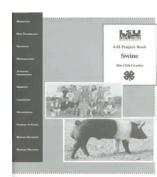
Vet Science (2595)

The veterinary science project is designed to broaden your knowledge of veterinary medicine, animal health and their relationship in our world. This is a self-study course from nearly any topic can be selected; However it should be related to veterinary medicine.



Swine (2571)

Youth will reinforce the learning of swine production, practices and terminology.



Swine (2671)

Youth will have several opportunities to develop their animal science and leadership skills as you strive to complete the senior level of the swine project. You will also finds activities to help you develop a business, explore careers and teach others.

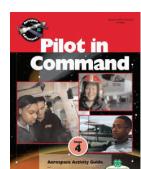
Science, Engineering, & Technology

4-H Science, Engineering and Technology projects and helping to bridge the educational for many young people who need to develop the critical workforce skills necessary to complete in the 21 Century. Explore and discover your passion for the sciences with one of these exciting projects. Additional resources available at www.4-hmall.org.



Reaching New Heights (6844)

Youth will make a shuttle on a string, a Japanese kite, a hang glider and a control panel of an aircraft. Grades 6-8



Pilot in Command (6845)

Youth create an altitude tracker, determine fuel efficiency, explore pilot certification, evaluate navigation systems, and learn about airport issues. Grades 10-12



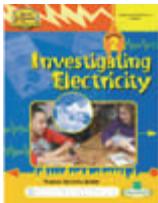
Peer to Peer (Computer 2)

CPU 2: Peer to Peer Ages 12 and up (36 pages) By the end of this activity guide, youth will be able to: demonstrate a basic understanding of networking; Working with adults and peers to build a functioning network.

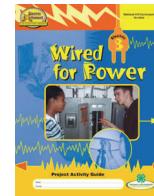


Teens Teaching Tech (Computer 3)

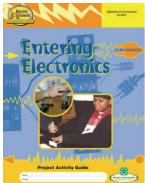
CPU 3: Teens Teaching Tech Ages 14 and up (36 pages) Work with peers, adults and community partners to develop service related computer goals; Develop lesson plans and teach diverse populations basic computer skills.

**Investigation Electricity (6849)**

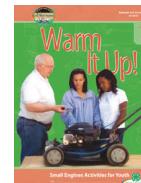
Youth build circuits and test voltages, build a rocket launcher and a burglar alarm as they practice decision making and communication. This unit is designed for youth who understand magnetism, electron flow and circuit design. Grades 6-8

**Wired for Power (6850)**

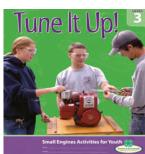
Youth build on skills learned in levels 1 & 2 plus learn some new ones, such as, measuring electrical usage, replacing electrical switches and determining electrical loads. Youth will also evaluate different light bulbs and test for electrical power.

**Entering Electronics (6851)**

This unit introduces the basics of solid-state electronics and provides hands-on activities that gives youth practical experience in understanding modern day electronic equipment. This unit is for the intermediate to advanced learner. Grade 9-12

**Warm It Up - Small Engines (8187)**

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

**Tune It Up! - Small Engines (8187)**

Youth tear down and rebuild an engine, use diagnostic tools, research rules and regulations about using small engine machines and select replacement engines.

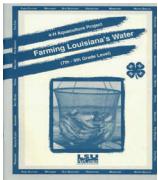
The Car and the Highway (0678)

In this book teens will learn about the safe care and operation of automobiles & light trucks. You will get the advantage of learning more about the automobile, how it should be handled on the road , the cost involved in operating it, and how to maintain the car properly.

4-H Tractor Project (0600)

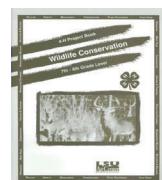
This is the fourth and last project book in the 4-H tractor project. In the first three projects you learned about tractor care and safety. Now, you can continue your enrollment in the project by learning about the care, operation and safe use of the machinery on your farm.

Take a closer look at nature through the study of plants and the outdoors. From the tiniest sprout to the tallest tree in the forest, plants provide food, shelter and beauty for us all. Explore the outdoors and learn to enjoy nature and outdoor adventures.

**Aquaculture - Farming Louisiana Waters (2549)**

Youth will learn how to keep record systems that a farmer involved in aquaculture might use. Youth will also gain "hands-on" experience by participating in suggested activities.

Environmental Science

**Wildlife Conservation (2604)**

Youth will learn about wildlife and the principles involved in its management. Youth will also learn its value to us and how you can help to ensure its future.

Louisiana 4-H Youth Development Program Project Book Guide

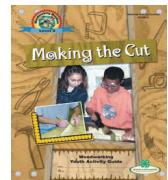


Explore the Deep Woods (8040)

Set includes Forestry 1-3 plus the Helper's Guide.

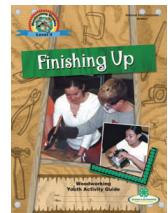
Making the Cut (6876)

Youth will measure, cut, sand, drill, use advanced hand and power tools, apply paint, and use bolts and staples.



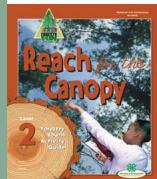
Nailing it Together (6877)

Youth will practice measuring angles, cutting dado and rabbet joints (page 12); use a circular saw, a table saw and a radial arm saw; smooth lumber with a hand planer (page 17); and learn to sand and stain wood (page 24).



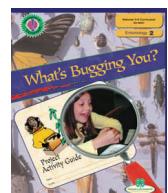
Finishing Up (6878)

Specific woodworking skills include using a router, portable planer and jointer; making a blind mortise and tenon joint; making dovetail joints; and experimenting with adhesives and various chemical wood strippers. Grades 9-12



Reach for the Canopy (8039)

Youth take a closer look at the inner-workings of trees, explore forest change, learn about forest health concerns and discover the health benefits trees have on people.



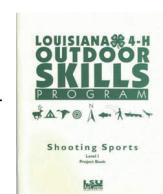
What's Bugging You? (6854)

Youth develop communication skills, identify insets to order, design insects, complete an insect collection table, plan an insect collection trip, rear meal worms, explore insect legs and collects insects with an extractor



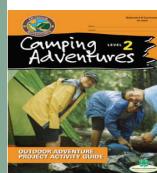
Dragons, Houses and Other Flies (6855)

Youth keep an insect journal, determine the effect of food on mealworm larvae production, test ant food preferences, conduct honey bee learning experiments, organize an insect club, use an insect key, plan a butterfly garden, and records insect observations.



Louisiana 4-H Outdoors Skills (2785)

Youth will become familiar with the different disciplines included in the shooting sports program. They are rifle, shotgun, muzzleloader, hunting and archery. You may enroll in one or more disciplines, depending on which ones are conducted by a Certified Shooting Sports Instructor in your parish.

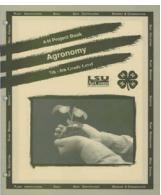


Camping Adventures (8044)

Focuses on hiking for a day. It will include clothing needs; packing daypack; reading topographic maps and orienteering skills

Backpacking Expeditions (8045)

Focuses on being on the trail for extended periods of time. It includes clothing needs; tent setup; using backcountry stoves; basic nutrition; menu planning for multi-day hikes; personal hygiene & basic first aid

**Agronomy (2528)**

In this book, youth will learn some basic principles of growing field crops and something about the most important ones in Louisiana. Youth will learn about our Louisiana soils and what is important in a soil for good plant growth.

Agronomy (2627)

Youth will have a new experience by creating your very own project to meet your interests and needs. You can extend an existing agronomy project from the earlier book or you may choose an entirely new area including the production, storage and marketing of some field or forage crop.

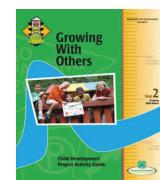


Take great care of yourself and others! Learn about how children grow and develop, prepare healthy foods, get moving with cycling for exercise and fitness or practice first aid skills. You can even learn more about yourself and have some fun with friends! Take a look at all the choices in the Healthy Living series.

Healthy Living

Growing with Others (8076)

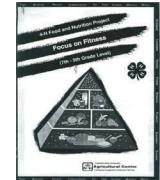
Youth learn about self care, rules, responsibility, and safety and are introduced to babysitting. They work with others and gain awareness of common dangers in their world.

**Growing in Communities (8077)**

Youth explore child development careers, gain experience as a teacher or coach, participate in a community service project and learn that children with different abilities have different needs.

Focus on Fitness (2504)

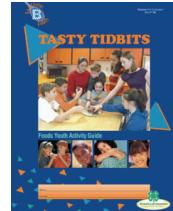
This book contains three levels of activities. Level 1 activities, will give you introductory learning experiences. Level 2 activities, build on those experiences. Level 3 activities, will draw on many things you have learned and integrate them into more complex projects.





Food & Nutrition (2628)

Youth can do what they want in this project! It's called a "self-designed" project. We provide youth with information about four subject areas in food, nutrition and fitness. Youth will learn how to make decisions, establish plans, carry them out and then evaluate the results! Those skills you'll use the rest of your life!



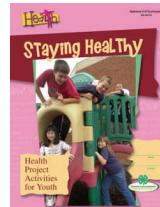
Tasty Tidbits (7146)

Youth solve problems, acquire information (learn to learn), make decisions, keep records, and learn how to use resources wisely. Fun packed recipes allow choices for food preparation, such as pretzels, biscuits and lasagna. Youth learn proper food storage.



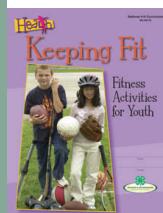
You're the Chef (7148)

This activity guide is designed to help select healthy food, food preservation and preparation, and careers. Youth learn to evaluate fad diets, connect emotions to eating habits and to can foods. Youth enjoy making crazy casseroles, stir-fry vegetables.



Staying Healthy (8175)

Youth design their own personal fitness plan and track it using their own fitness file. Through interviews and personal experiences youth discover the benefits to being fit as they practice making decisions, speaking with others and managing themselves.



Keeping Fit (8176)

Youth will enjoy using the self-assessment tool to identify personal talent areas smarts, explore hygiene, nutrition and physical activities, and share what they discover with a new appreciation of personal interests and talents.



Housing Design & Improvement (2495)

In this project book, youth will explore design and home improvement. You will use the design principles to plan appealing spaces in your home. You will practice making choices after looking at your options. You will do things to make your home look better, work better and feel more comfortable. You will learn ways to save energy in your home and why that's important.



From Home Design to Housing Issues (2600)

This project book is designed for three years. It contains many varied activities (learn-by-doing ideas) to provide you with learning experiences related to each topic and several venture projects (major, self-directed activities) that can help you develop a deeper level of expertise. You can also create your own activities and venture projects in related areas

**Horticulture (2514)**

Youth will have the opportunity to develop their own garden. Growing plants is a rewarding pastime that many enjoy. Once grown, the plants or plant products can be used at home or sold. This project will help you learn how to grow quality produce and start new plants for home and landscape.

**Horticulture (2599)**

This will be a new experience to youth—your very own project designed by you to meet your interests and needs.

Develop effective public speaking skills and learn to communicate with others with these fun and interactive guides. Put your imagination in action with theater arts, puppetry, photography and song writing. Have fun writing and performing plays, skits and demonstrations with hands-on activates to challenge your creativity.

Communication & Expressive Arts

**Clothing Clues (2505)**

This book is designed for three years. You will complete activities throughout the clothing project at your level.

**Fashion Forward (8061)**

Fashion Forward will help youth develop their fashion sense and the skills needed to create a unique style of their own.

**Refine Design (8062)**

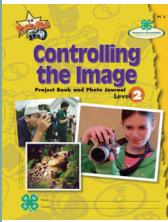
Youth will learn more about fashion and their unique style as well as technology in sewing in careers in the textile industry.

**Clothing Project (2635)**

What youth do in the clothing and textile project book will be up the youth and their parish Extension agents. You can choose several subjects and how much you complete. This project is designed to help you acquire decision-making and creative skills.

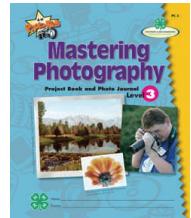
**Broadcast & Print Journalism (2650)**

In this communication project, youth will explore the media – broadcast journalism and print journalism. The media – radio, TV, newspapers, magazines and the like – are the major way citizens stay informed and communication skills are some of the most important skills you will ever learn for the media.



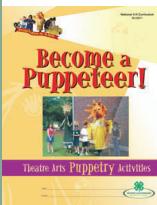
Controlling the Image (PC2)

Youth will explore depth of field, aperture and shutter speeds, hard and soft lighting, silos and flash techniques.



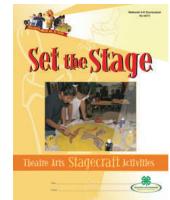
Mastering Photography (PC3)

Youth will gain insight on the use of wide-angle and telephoto lenses, filters and special film, light meters and shooting with different light sources.



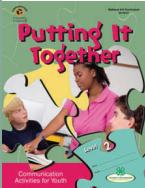
Becoming a Puppeteer (8071)

Fun for both youth & helpers. Youth create sound effects, make puppets & prepare a puppet skit. Although acting is the primary subject matter, young people will practice life skills like problem solving, managing feelings, decision making & communicating.



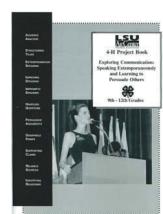
Setting the Stage (8072)

Youth do improvisations, create disguises & design costumes. They learn how to express themselves in the exaggerated manner that is seen on stage. Other life skills include problem solving, accepting differences, communicating, & decision making.



Putting it Together— Public Speaking (8157)

Stimulating activities provide opportunities for youth to practice and gain confidence in communicating in a variety of situations. Watch them unfold as strong communicators in front of your eyes while they present oral reasons, plan and present speeches.



Speaking Extemporaneously & Learning to Persuade Others (2632)

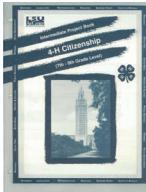
Youth will focus on being able to speak extemporaneously, persuasively, and use inductive and deductive reasoning. Youth will also use an appropriate delivery method, do impromptu speaking, and prepare for audience questions.

Citizenship



Leadership

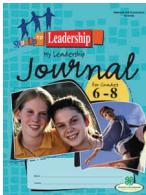
My Head, My Heart, My Hands, and My World...for my Club, my Community, my Country and my World! Being a good citizen and leader is essential to all 4-H Club members. These projects get you on your way to "Making the Best Better!" Learn and develop skills to improve your world for yourself, your family and your community. New members should begin with the Discovering 4-H project below.

**Citizenship (2572)**

This book is designed to be used for three years. Youth will learn more information and opportunities for the development in testing, evaluating and research skills. A list of suggested activities on ways you can participate in government are included in each section.

Citizenship (2669)

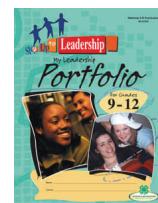
Designed to engage youth in changing a piece of the public world, discovering the possibilities of democratic citizenship and building a commitment to taking action in new and exciting ways.

**Step Up to Leadership—My Leadership Journal (7906)**

All activities offer a cross-cultural perspective. Young children and teens can lead in many ways - at home, in clubs, youth groups, school and the community. The fun continues with an interactive web site to enhance and support learning.

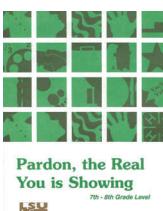
Step Up to Leadership—My Leadership Portfolio (7907)

All activities offer a cross-cultural perspective. Young children and teens can lead in many ways - at home, in clubs, youth groups, school and the community. The fun continues with an interactive web site to enhance and support learning.



Be a responsible consumer! Become better informed about how to save and spend money for the things you want most. Find out more about your money personality and how you set values and goals for the future. Plan how to use your money wisely. These projects will put you on the road to financial success!

Personal Development

**Pardon, the Real You Is Showing (2165)**

Welcome aboard for a trip of self-exploration. This book will help you know the "real" you better. It will discuss things you may have thought about and would like to know more about. Maybe it will bring up questions you hadn't considered before and it might even help you work on some areas that will make other people want to know more about the "real" you, too.

Jump Start for Job Seekers (2752)

In this project book, youth will have completed all the activities to become a more skillful employee. As with any skill, practice refines the skill and increases your knowledge base.

