The World Of Animals

LEADER’S GUIDE

Florida 4-H Animal Science Program

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.
The World Of Animals

An Animal Science Project

Produced by the Florida 4-H Youth Development Program, University of Florida Cooperative Extension, Institute of Food and Agricultural Sciences, June, 1996; reviewed June 2002.

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.
CREDITS AND ACKNOWLEDGEMENTS

4-H THE WORLD OF ANIMALS was developed through a team effort of the Florida 4-H Youth Development Program, Institute of Food and Agricultural Sciences, and The Departments of Animal Science, Dairy and Poultry Science and College of Veterinary Medicine, University of Florida.

This curriculum package was created by Joanna Harrelson, project assistant, and Deborah J. Glauer, Educational Resource Coordinator and Animal Science Design Team Leader, Department of 4-H and Other Youth Programs. Special assistance was provided by Julie Sexton, Karen Strickland, Erin Freel, and Debra Summerall, project assistants.

Technical review and assistance was provided by the following members of the Cooperative Extension Service Animal Science curriculum design team (FL711): Dr. Saundra TenBroeck, Associate Professor, Department of Animal Science, Dr. Tim Marshall, Associate Professor, Department of Animal Science, Dr. Ed Johnson, Professor, Department of Animal Science, Dr. Ben Mather, Associate Professor, Department of Dairy and Poultry Sciences, and James Umphrey, Dairy Youth Extension Specialist, Department of Dairy and Poultry Sciences, Dr. Tom Lane, Associate Professor, College of Veterinary Medicine, Dr. Tracy Hoover, Assistant Professor, Department of Agricultural Education & Communication, Dr. M. Joy Cantrell, Associate Professor and 4-H Youth Development Curriculum Specialist, and Craig Miller, Energy Education Coordinator, Department of 4-H and Other Youth Programs, University of Florida Institute of Food and Agriculture Sciences, Elva Farrell, Sarasota County Extension 4-H Agent, Carmen Parrilla, Pasco County Extension 4-H Agent, John Brenneman, Polk County Extension 4-H Agent, Bob Renner, Marion County Extension 4-H Agent, Sheila Andreasen, Jackson County Extension 4-H Agent and Sandy Lyon, Baker County Extension 4-H Agent.

Artist: Special thanks to Judy Cabral for the cover design of The World of Animals and for other artwork found throughout the Leader’s guide and workbook. Also a special thanks to Angela Frampton for coordinating the artwork design development.

Special acknowledgement of contributions and thanks are also extended to Angela Frampton, Nikki Harvey, Trey Killingsworth, and Eric Hernandez, Department of 4-H and Other Youth Programs, for the word processing and computer graphics.

Special acknowledgement and thanks for technical assistance is extended to Dr. R. David Glauer, State Veterinarian and Chief, Division of Animal Industry, Ohio Department of Agriculture.
PREFACE

4-H THE WORLD OF ANIMALS

An Animal Science Curriculum
for 9-11 year olds

The new Florida 4-H Animal Science curriculum, OUR LIVING WORLD, includes the basic premise that animals play a big part in children's lives and proper care and humane treatment are essential. The 4-H Animal Science program provides an opportunity for young people to practice a variety of life skills while learning subject matter.

THE WORLD OF ANIMALS

The WORLD OF ANIMALS is the second level of the 4-H Animal Science Core Curricula that is designed to help 9-11 year old children understand the basics of the role animals play in our lives and how to be responsible caretakers. Additional curriculum packages are being designed for youth in other age ranges and for sequential advancement in the Animal Science program.

To the informed Florida citizen, it is not surprising that animal science commands a priority within the total Florida 4-H education curriculum. An investment in young people's knowledge, understanding and attitudes about animals affects their lives and cannot be ignored now or in the future. Below, you see the framework for the 4-H animal science curricula. It charts the direction for development, review and revision.
TABLE OF CONTENTS

I. INTRODUCTION

Credits .......................................................................................... 1
Preface .......................................................................................... 2
Table of Contents ............................................................................... 3-5
About the World of Animals ................................................................. 6
Lesson Profiles ............................................................................. 7
Instructional Materials Needed ............................................................ 8-10
About Experiential Education ............................................................. 11-13

II. THE WORLD OF ANIMALS

LESSON 1: What is an Animal? .............................................................. L1-1
Teaching Outline ............................................................................... L1-1
Background Basics ........................................................................ L1-5
Activities
1. Can You Find It? ........................................................................... L1-11
2. What's the Difference? ................................................................. L1-14
3. What Am I? ................................................................................ L1-16
4. Costumes With Class ................................................................. L1-19
5. Wild Collage ............................................................................... L1-21
6. Where Do I Belong? .................................................................... L1-23
7. Are We A Set? ........................................................................... L1-25
8. Where Do They Go? ................................................................. L1-27
9. Everything Changes .................................................................. L1-34

Take-Home Activities

LESSON 2: How Animals Serve Humans ...................................................... L2-1
Teaching Outline ............................................................................... L2-1
Background Basics ........................................................................ L2-4
Activities
1. Wear It! .................................................................................... L2-12
2. Steak, Ham, and More ................................................................. L2-14
3. More Than Meat ....................................................................... L2-19
5. Special Critters ...................................................................... L2-26
6. Around the Animal World ...................................................... L2-28

Take-Home Activities

LESSON 3: Animal Care ................................................................... L3-1
Teaching Outline ............................................................................... L3-1
Background Basics ........................................................................ L3-4
Activities
1. Where Do I Live? ................................................................. L3-8
2. Handle With Care ................................................................. L3-11
3. What's In The Box? ............................................................ L3-16
4. Play Dress Up ................................................................. L3-20
5. Way To Go! ........................................................................... L3-22
6. All for the Best ................................................................. L3-24
7. What Do You Mean? ........................................................ L3-26

Take-Home Activities

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.
## TABLE OF CONTENTS (continued)

### LESSON 4: Animal Health

- **Teaching Outline**: L4-1
- **Background Basics**: L4-4

#### Activities
1. What's Normal? L4-8
2. System 2050! L4-10
3. The Answer Is? L4-12
4. I've Got It! L4-14
5. Sickbed L4-19
6. Time For Shots! L4-21
7. When Did That Happen? L4-23
8. Story Time L4-25

#### Take-Home Activities

### LESSON 5: Animal Nutrition

- **Teaching Outline**: L5-1
- **Background Basics**: L5-4

#### Activities
1. Meat and Vegetables L5-7
2. Digestion Journey L5-9
3. Label Detectives L5-17
4. Nutrient Mix-Up L5-20
5. What's For Dinner? L5-23
6. How Much? L5-26

#### Take-Home Activities

### LESSON 6: Animal Welfare

- **Teaching Outline**: L6-1
- **Background Basics**: L6-4

#### Activities
1. Extra! Extra! L6-7
2. Fair News L6-9
3. Through Animal Eyes L6-13
4. Management Medley L6-15
5. Animal Talk Show L6-17
7. Be Responsible! L6-22

#### Take-Home Activities

### LESSON 7: "Harvesting" Animals

- **Teaching Outline**: L7-1
- **Background Basics**: L7-3

#### Activities
1. Taste Test L7-5
2. Farm To Table L7-7
3. Meats, P.I. L7-11
4. "Cow"Mercials L7-13
5. Cow To Cereal L7-15
6. Inspection L7-17

Archival copy: for current recommendations see [http://edis.ifas.ufl.edu](http://edis.ifas.ufl.edu) or your local extension office.
<table>
<thead>
<tr>
<th>LESSON 8: Marketing Economics</th>
<th>L8-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Outline</td>
<td>L8-1</td>
</tr>
<tr>
<td>Background Basics</td>
<td>L8-4</td>
</tr>
<tr>
<td>Activities</td>
<td></td>
</tr>
<tr>
<td>1. Market Tag</td>
<td>L8-7</td>
</tr>
<tr>
<td>2. Animals Everywhere</td>
<td>L8-10</td>
</tr>
<tr>
<td>3. Track It!</td>
<td>L8-17</td>
</tr>
<tr>
<td>4. Marketing Feud</td>
<td>L8-19</td>
</tr>
<tr>
<td>5. To The Highest Bidder!</td>
<td>L8-23</td>
</tr>
<tr>
<td>7. Investigate Your Market</td>
<td>L8-28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LESSON 9: How Animals Affect The Environment</th>
<th>L9-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Outline</td>
<td>L9-1</td>
</tr>
<tr>
<td>Background Basics</td>
<td>L9-4</td>
</tr>
<tr>
<td>Activities</td>
<td></td>
</tr>
<tr>
<td>1. Let's Investigate</td>
<td>L9-6</td>
</tr>
<tr>
<td>2. Enviro-Laws</td>
<td>L9-8</td>
</tr>
<tr>
<td>3. Find Me If You Can</td>
<td>L9-10</td>
</tr>
<tr>
<td>4. What If...?</td>
<td>L9-13</td>
</tr>
<tr>
<td>5. Food Chain Bingo</td>
<td>L9-15</td>
</tr>
<tr>
<td>6. Who Eats Whom</td>
<td>L9-19</td>
</tr>
</tbody>
</table>

Take-Home Activities
About The World of Animals...

The development of this 4-H Animal Science Project Kit was driven by two basic principles:

1. Learning about animals can be fun! The project guide provides simple and inexpensive, yet fun activities that teach youth about major animal science concepts including What is an Animal?, How animals serve humans, Care, Health, Nutrition, Harvesting, Welfare, Marketing, and Effects with the environment.

2. 4-H volunteer teaching activities must be ready-to-use. This project includes materials needed to conduct animal science activities in an easy-to-use format. It was designed to be teacher friendly and takes much of the guesswork out of teaching this subject.

AGE OR GRADE LEVELS

This project was developed for youth ages 9-11. Both group and individual activities encourage participation and action in all aspects of animal science education. Teachers and volunteers are encouraged to select learning activities that are most suitable to their youth. The overall intent is to facilitate learning and to spark creativity in both teachers and youth.

CONTENTS

The following resources are components of the 4-H Animal Science Program:

- LEADER'S GUIDE - This three-ring notebook contains a complete, easy-to-read outline for lessons. Each lesson provides a variety of activities that can be conducted depending upon the time frame devoted to this project. The following activities are a mix of games, experiments, role plays or demonstrations that help to teach the basic principles and concepts in each lesson. The lesson concludes with a review using activity sheets in the youth's Workbook and discussion questions for youth to REFLECT and APPLY.

- THE WORLD OF ANIMALS WORKBOOK - contains activity sheets for youth that correspond to each lesson. A variety of activities including puzzles, word searches, mobile, and other instructional activities make up this fun booklet.
LESSON PROFILES

A brief description of the nine WORLD OF ANIMALS Lessons:

LESSON 1: WHAT IS AN ANIMAL?
Understanding where an animal fits into the classes of animals and further classifying an animal are key concepts in Lesson 1. A foundation in recognizing the difference between wild and domestic, and what the terms extinct, endangered and threatened is given. Also introduced will be the characteristics of a living animal.

LESSON 2: HOW ANIMALS SERVE HUMANS
The many ways animals provide for humans is extensively covered in Lesson 2. Explained is not just that we get food from animals but also what kind and from what source. Beyond that, Lesson 2 describes the fiber and clothing that is made available thanks to animals. Not overlooked are the many other advancements and amenities animals have contributed to the United States and the world.

LESSON 3: ANIMAL CARE
Animal care is a major concern and in Lesson 3 a detailed look at production and companion animals is taken. What are their differences and how should they be cared for? In this Lesson animal care encompasses protection from the environment, disease and illness, handling, grooming and transportation. Also covered is a recommended health care program.

LESSON 4: ANIMAL HEALTH
Healthy animals are those that are free from disease and illness. An exploration into the many different illnesses and diseases is taken. Recognizing good health as well as recognizing symptoms of illness are both stressed. The difference between a disease and injury are made known, plus introduction of a veterinarian and his/her responsibilities are given.

LESSON 5: ANIMAL NUTRITION
Like humans, animals need proper nutrition. What do animals eat? How much do they eat? How is the food digested and do all animals digest the same way? All of these questions and more are revealed in Lesson 5. Plus, a distinction is made between herbivores, carnivores and omnivores.

LESSON 6: ANIMAL WELFARE
Animal Welfare - an important topic thoroughly addressed. Lesson 6 defines animal welfare and humane treatment of animals. It is designed to allow youth to form their own opinion about this sensitive subject. This lesson describes what the majority of farmers promote.

LESSON 7: "HARVESTING" ANIMALS
Lesson 7 ties it all together with the harvesting and processing procedures. Explained is the way the product is processed and packaged. It also looks at the regulation and inspection that must be done as well as the slaughtering process.

LESSON 8: MARKETING AND ECONOMICS OF PRODUCTION OF ANIMALS
The wages behind the work are uncovered as Lesson 8 dives into the money side of animal agriculture. Explained is the different meanings of the word market and what you should do when you are ready to sell.

LESSON 9: HOW ANIMALS AFFECT THE ENVIRONMENT?
Everything done on the farm affects the environment in some way through human and/or animal interaction. This statement is honestly discovered in Lesson 9. Ways and reasons farmers should be environmentally careful and correct are explored.