

Agriculture, Food & Natural Resources Career Cluster
Wildlife Management
Course Number 03.45300

Course Description

This course introduces students to the principles of wildlife management and conservation and to opportunities for further education and careers in the field of wildlife biology. The course includes instruction in the history of wildlife management, ecological concepts, habitat assessment, habitat management techniques for wildlife, population dynamics, predator-prey relationships, wildlife species biology and identification, human-wildlife conflict resolution, the role of hunting in conservation, game and fish laws and regulations, hunters safety, and the application of scientific principles to managing wildlife habitat and populations. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Course Standard 1

AFNR-WM-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

| Person-to-Person Etiquette | Telephone and Email Etiquette | Cell Phone and Internet Etiquette | Communicating At Work | Listening |
|-------------------------------|---------------------------------|-----------------------------------|---------------------------------|---------------------------------|
| Interacting with Your Boss | Telephone Conversations | Using Blogs | Improving Communication Skills | Reasons, Benefits, and Barriers |
| Interacting with Subordinates | Barriers to Phone conversations | Using Social Media | Effective Oral Communication | Listening Strategies |
| Interacting with Co-workers | Making and Returning Calls | | Effective Written Communication | Ways We Filter What We Hear |
| Interacting with Suppliers | Making Cold Calls | | Effective Nonverbal Skills | Developing a Listening Attitude |
| | Handling Conference Calls | | Effective Word Use | Show You Are Listening |
| | Handling Unsolicited Calls | | Giving and Receiving Feedback | Asking Questions |
| | | | | Obtaining Feedback |
| | | | | Getting Others to Listen |

| Nonverbal Communication | Written Communication | Speaking | Applications and Effective Résumés |
|--|-----------------------------------|--------------------------|------------------------------------|
| Communicating Nonverbally | Writing Documents | Using Language Carefully | Completing a Job Application |
| Reading Body Language and mixed Messages | Constructive Criticism in Writing | One-on-One Conversations | Writing a Cover Letter |

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|---|--|---------------------------|-------------------------------|
| Matching Verbal and Nonverbal communication | | Small Group Communication | Things to Include in a Résumé |
| Improving Nonverbal Indicators | | Large Group Communication | Selling Yourself in a Résumé |
| Nonverbal Feedback | | Making Speeches | Terms to Use in a Résumé |
| Showing Confidence Nonverbally | | Involving the Audience | Describing Your Job Strengths |
| Showing Assertiveness | | Answering Questions | Organizing Your Résumé |
| | | Visual and Media Aids | Writing an Electronic Résumé |
| | | Errors in Presentation | Dressing Up Your Résumé |

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

| Teamwork and Problem Solving | Meeting Etiquette |
|------------------------------|---|
| Thinking Creatively | Preparation and Participation in Meetings |
| Taking Risks | Conducting Two-Person or Large Group Meetings |
| Building Team Communication | Inviting and Introducing Speakers |
| | Facilitating Discussions and Closing |
| | Preparing Visual Aids |
| | Virtual Meetings |

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

| Problem Solving | Customer Service | The Application Process | Interviewing Skills | Finding the Right Job |
|-----------------------------|--|---|---|------------------------------|
| Transferable Job Skills | Gaining Trust and Interacting with Customers | Providing Information, Accuracy and Double Checking | Preparing for an Interview | Locating Jobs and Networking |
| Becoming a Problem Solver | Learning and Giving Customers What They Want | Online Application Process | Questions to Ask in an Interview | Job Shopping Online |
| Identifying a Problem | Keeping Customers Coming Back | Following Up After Submitting an Application | Things to Include in a Career Portfolio | Job Search Websites |
| Becoming a Critical Thinker | Seeing the Customer's Point | Effective Résumés: | Traits Employers are Seeking | Participation in Job Fairs |
| Managing | Selling Yourself and the Company | Matching Your Talents to a Job | Considerations Before Taking a Job | Searching the Classified Ads |
| | Handling Customer Complaints | When a Résumé Should be Used | | Using Employment Agencies |
| | Strategies for Customer Service | | | Landing an Internship |
| | | | | Staying Motivated to Search |

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

| Workplace Ethics | Personal Characteristics | Employer Expectations | Business Etiquette | Communicating at Work |
|-------------------------------|-------------------------------|----------------------------|----------------------------------|----------------------------------|
| Demonstrating Good Work Ethic | Demonstrating a Good Attitude | Behaviors Employers Expect | Language and Behavior | Handling Anger |
| Behaving Appropriately | Gaining and Showing Respect | Objectionable Behaviors | Keeping Information Confidential | Dealing with Difficult Coworkers |
| Maintaining Honesty | Demonstrating Responsibility | Establishing Credibility | Avoiding Gossip | Dealing with a Difficult Boss |

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| Playing Fair | Showing Dependability | Demonstrating Your Skills | Appropriate Work Email | Dealing with Difficult Customers |
| Using Ethical Language | Being Courteous | Building Work Relationships | Cell Phone Etiquette | Dealing with Conflict |
| Showing Responsibility | Gaining Coworkers' Trust | | Appropriate Work Texting | |
| Reducing Harassment | Persevering | | Understanding Copyright | |
| Respecting Diversity | Handling Criticism | | Social Networking | |
| Making Truthfulness a Habit | Showing Professionalism | | | |
| Leaving a Job Ethically | | | | |

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

| Expected Work Traits | Teamwork | Time Management |
|-----------------------------------|---|-------------------------------------|
| Demonstrating Responsibility | Teamwork Skills | Managing Time |
| Dealing with Information Overload | Reasons Companies Use Teams | Putting First Things First |
| Transferable Job Skills | Decisions Teams Make | Juggling Many Priorities |
| Managing Change | Team Responsibilities | Overcoming Procrastination |
| Adopting a New Technology | Problems That Affect Teams | Organizing Workspace and Tasks |
| | Expressing Yourself on a Team | Staying Organized |
| | Giving and Receiving Constructive Criticism | Finding More Time |
| | | Managing Projects |
| | | Prioritizing Personal and Work Life |

1.6 Present a professional image through appearance, behavior and language.

| On-the-Job Etiquette | Person-to-Person Etiquette | Communication Etiquette | Presenting Yourself |
|----------------------------|-----------------------------------|----------------------------------|-----------------------------------|
| Using Professional Manners | Meeting Business Acquaintances | Creating a Good Impression | Looking Professional |
| Introducing People | Meeting People for the First Time | Keeping Phone Calls Professional | Dressing for Success |
| Appropriate Dress | Showing Politeness | Proper Use of Work Email | Showing a Professional Attitude |
| Business Meal Functions | | Proper Use of Cell Phone | Using Good Posture |
| Behavior at Work Parties | | Proper Use in Texting | Presenting Yourself to Associates |
| Behavior at Conventions | | | Accepting Criticism |
| International Etiquette | | | Demonstrating Leadership |
| Cross-Cultural Etiquette | | | |
| Working in a Cubicle | | | |

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

AFNR-WM-2

Explore, develop, and implement the comprehensive program of agricultural education, learn and demonstrate safe working habits in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develops plans for a Supervised Agricultural Experience Program (SAEP).

- 2.1 Illustrate the relationship of the FFA within the Agricultural Education model and describe the role and function of the organizational structure from the chapter to national level.
- 2.2 Design, implement, and document SAEP by recording steps, skills acquired, and financial information.
- 2.3 Demonstrate leadership and personal development skills through participation in the FFA.
- 2.4 Analyze skills, education requirements, income, and advantages and disadvantages of careers in wildlife biology.
- 2.5 Explore the professional agricultural organizations associated with the course content.
- 2.6 Demonstrate safety practices when working in an outdoor environment.

Course Standard 3

AFNR-WM-3

Define wildlife, explain the importance of wildlife and wildlife management, and identify the role of government and private wildlife organizations in managing wildlife resources.

- 3.1 Define wildlife and differentiate between game and non-game species.
- 3.2 Describe wildlife management and compare and contrast wildlife management to other agricultural sciences.
- 3.3 Explain the importance of wildlife and the values society places on wildlife populations.
- 3.4 Report and debate the historical American attitudes concerning wildlife as a resource.
- 3.5 Describe major trends in wildlife management philosophies and practices.
- 3.6 Outline and explain the meaning, purpose and importance of major pieces of U.S. legislation pertaining to the conservation of wildlife resources.
- 3.7 Identify groups and organizations with concern for wildlife and explain their official position regarding hunting and other wildlife management techniques.
- 3.8 Compare and contrast hunting to other conservation practices.
- 3.9 Demonstrate appropriate responses to hunting and firearm accidents.
- 3.10 Identify means by which hunting and firearms accidents may be prevented.
- 3.11 Demonstrate an understanding of written laws regulating hunting activity.
- 3.12 Demonstrate an understanding of hunter ethics and why they are important to the well-being of wildlife.

Course Standard 4

AFNR-WM-4

Describe basic components of ecosystems and analyze the relationship between living organisms and their environment.

- 4.1 Define terms associated with wildlife ecology.
- 4.2 Describe the various components and functions of ecosystems.
- 4.3 Identify components of wildlife habitat and construct a wildlife habitat.
- 4.4 Determine the relationship between habitat availability and wildlife populations.
- 4.5 Define and research carrying capacity (biological and cultural).
- 4.6 Explain plant succession and its relationship to wildlife habitat.
- 4.7 Evaluate different stages of plant succession and how they benefit wildlife populations.
- 4.8 Explain the "Edge Effect" and its importance.
- 4.9 Evaluate and identify habitat from aerial photographs.

- 4.10 Identify habitat requirements and develop habitat for specific species.
- 4.11 Identify plant materials that serve as food and/or cover for wildlife.

Course Standard 5

AFNR-WM-5

Compare and contrast the habitat needs of selected wildlife species native to Georgia, identify wildlife species of Georgia from physical characteristics and/or evidence, identify the role of selected species in their environment, and explain biological processes related to reproduction and survival of selected species.

- 5.1 Describe major habitat requirements for selected wildlife species. Conduct a survey of a habitat and devise a comprehensive improvement plan.
- 5.2 Describe morphological characteristics used to identify wildlife species. Conduct a field inventory of wildlife species, and record and document findings.
- 5.3 Determine the age and sex of selected wildlife species.
- 5.4 Explain biological processes, of selected wildlife species, related to reproduction and survival.
- 5.5 Identify physical characteristics/attributes of species that make them well suited to their ecological niche. Conduct a field inventory of wildlife species, and record and document findings.
- 5.6 Explain predator/prey relationships.
- 5.7 Interpret animal behaviors relative to life processes of selected species.
- 5.8 Determine home range, space requirements, and travel patterns of selected species.

Course Standard 6

AFNR-WM-6

Identify and explain practices for managing wildlife populations and their habitats for the benefit of the entire biota.

- 6.1 Identify management practices to improve habitat for selected species.
- 6.2 Analyze the cause and effect of human wildlife conflicts.
- 6.3 Analyze methods of human wildlife conflict resolution.
- 6.4 Explain the importance of managing wildlife populations.
- 6.5 Identify methods of manipulating wildlife populations for management purposes.
- 6.6 Explain the purpose and goals of quality deer management.
- 6.7 Determine harvest strategies, based on harvest data collection, to achieve a specific management objective.

Course Standard 7

AFNR-WM-7

Identify, research, and discuss factors related to birth rate and mortality rate of wildlife and recognize the relationship between the biotic potential of wildlife species and their management. Calculate population size, carrying capacity, annual change in population size, and maximum rate of population increase.

- 7.1 Define appropriate and manageable wildlife populations for an entire biota.
- 7.2 Explain and apply the concept of limiting factors for wildlife.
- 7.3 Explain the relationship between carrying capacity, limiting factors and wildlife populations.
- 7.4 Describe factors affecting birth rate and death rate of wildlife.
- 7.5 Explain the concept of surplus as it relates to wildlife populations.
- 7.6 Define biotic potential and calculate the biotic potential of selected species.
- 7.7 Explain the principles of inversivity and compensation.
- 7.8 Analyze population curves that depict population changes among various species.
- 7.9 Explain cause and effect relationships represented by population curves and how they are utilized in managing wildlife populations.

- 7.10 Calculate population size, carrying capacity, annual change in population size, and maximum rate of population increase.

Course Standard 8

AFNR-WM-8

Using mastered concepts, conduct a field evaluation of wildlife habitats to investigate wildlife management practices to improve the habitat for selected species, and develop a habitat management plan.

- 8.1 Conduct a field evaluation of habitat, for selected species, on a given area.
- 8.2 Identify habitat deficiencies for the survey area.
- 8.3 Define habitat characteristics of wildlife and their impact on a given area.
- 8.4 Calculate a habitat quality index.
- 8.5 Identify practices to improve habitat characteristics.
- 8.6 Recommend approved practices for managing habitat and populations.
- 8.7 Schedule wildlife management practices to optimize effectiveness and sustainability on a given area.
- 8.8 Develop a wildlife management plan for a given land area.