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

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 inversity 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.