

Coaching a New Mexico 4-H Wildlife Habitat Education Program (WHEP) Team

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Figure 1. New Mexico WHEP contest participants receiving instructions regarding development of team wildlife management plan.

INTRODUCTION

The Wildlife Habitat Education Program (WHEP) is a 4-H and National FFA Organization environmental education program designed to teach wildlife and fisheries ecology and habitat management to youth in the United States (Figure 1). WHEP participants apply their knowledge through activities that develop their abilities in leadership, written and oral communication, decision-making, and teamwork.

Using a science-based manual, youth participants will:

1. Learn wildlife terms and concepts
2. Learn about wildlife habitats
3. Learn how to evaluate wildlife habitats
4. Learn about wildlife habitat management practices

This guide is designed to help New Mexico coaches understand the different parts of the program and provide ideas for coaching WHEP teams. The New Mexico contest format differs slightly from the national contest. To prepare, it is crucial to use the national WHEP manual. A team that wins the New Mexico state contest is well equipped to be competitive at the National WHEP Invitational with dedicated preparation. The New Mexico contest consists of the following four activities: I. Wildlife Challenge, II. On-Site Recommendations of Wildlife Management Practices (WMPs), III-A. Written Wildlife Management Plan, and III-B. Oral Reasons for Wildlife Management Plan. Please see NMSU Extension Guide L-114, *New Mexico State 4-H Conference: Wildlife Habitat Education Program (WHEP) Contest* (https://aces.nmsu.edu/pubs/_/L114.pdf), to understand the New Mexico WHEP contest format and scoring, which is summarized in Table 1.

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STRATEGIES FOR SUCCESSFUL COACHING

Coaching WHEP is fun and rewarding. Using contest simulation and small rewards will keep contest preparation fun and engaging, while improving team performance. Coaches and team members should begin by familiarizing themselves with the national WHEP manual to understand the activities and scoring as well as the concepts and terms associated with WHEP. Read the glossary to improve understanding. The better the team knows and understands the information in the manual, the more knowledgeable they will become about wildlife management. Further, their enhanced knowledge will improve their confidence and performance during competition. Teams should study and know how points accrue to maximize their individual and team scores. Start with small steps by having team members compete with each other on each of the contest activities or specific elements of activities (e.g., species identification). Focus on ecoregions and species associated with your local events first and expand to regional and state levels as the team improves.

List of useful coaching materials:

1. National WHEP manual: <https://www.whep.org/national-whep-manual/>
2. Study materials: <https://www.whep.org/study-here/>
3. Digital slideshow presentations for wildlife identification; find photos online (e.g., www.birds.cornell.edu, bugwood.org, google.com).
4. Wildlife specimens; seek assistance from your local County Extension Agent (<https://aces.nmsu.edu/county/>) or New Mexico Department of Game and Fish Officer (<https://www.wildlife.state.nm.us/home/contact/>).
5. Flashcards created by participants as a study guide.
6. Aerial photographs or digital imagery (e.g., Google Earth).
7. Field guides, which can be found at your local library or bookstores.

Traditionally, at least two sets of flash cards were recommended for studying species' diets and wildlife management practices. Using flash cards or a flash card-maker phone application for a variety of study topics may improve individual and team performance. Flash cards are useful to prepare for each of the contest activities. Suggested flash cards may be organized as follows, and combined and adapted for personal or team preferences:

- Species name and diet information
- Species name and wildlife management practices
- Species name and identification characteristics
- Species name and habitat requirements
- Wildlife management concepts and terms
- Definitions of food groups
- Glossary terms

CONTEST ACTIVITIES

Activity I: Wildlife Challenge

Individual Activity; 50 points total

Objective: Demonstrate knowledge of wildlife identification, ecoregions, wildlife management concepts, terminology, wildlife management practices, and the biology and ecology of wildlife species.

The Wildlife Challenge is an individual activity where contestants answer 25 wildlife identification and general wildlife knowledge questions. Questions are worth 2 points each for a total of 50 points.

Wildlife Identification

All species within the national WHEP manual are eligible for wildlife identification questions in the Wildlife Challenge. Review the list of wildlife species and their correct spellings beginning on page 69 of the WHEP manual. Writing must be legible, and the full common name of the species must be spelled correctly (e.g., American kestrel, not kestrel; channel catfish, not catfish; Eastern gray squirrel, not gray squirrel or squirrel). Illegible answers will be marked incorrect. No partial credit is given.

A variety of approaches can be used to prepare participants for wildlife identification. Create slideshow presentations to help youth identify species through repetition. Photos of the species used in the WHEP manual are readily available from several sources, including field guides and websites. For the contest, a specimen, portion of a specimen, image, animal sign, or sound of a male or female will represent the species either as a juvenile or adult. This portion of the contest is multiple choice or fill-in-the-blank.

Tips:

- Use images, videos, and specimens to help improve participants' identification skills.
- Know how to identify adult and juvenile males and females. Create slideshows to practice the more difficult species and correct spelling of species names.
- Seek opportunities to review and identify fur, feather, skull, and full specimens of wildlife.
- Field guides are a good resource for learning species identification characteristics.
- Some identification information for fur, feathers, and skulls can be found online.
- Create flash cards with the species name on one side and identification characteristics on the other. Be sure to include identification information for males and females in juvenile and adult stages.

General Wildlife Knowledge

Information found in the **Wildlife Management Concepts and Terms, Ecoregions, Wildlife Species, Wildlife Management Practices (WMPs), Appendix A. Definitions of**

Food Groups, and **Appendix B. Glossary** sections of the WHEP manual are used for questions in Activity I. Questions range from general questions about wildlife–habitat relationships, glossary terms, and management practices to ecoregion-specific questions. Ecoregion-specific questions are limited to the **Hot Desert**, **Urban**, and **Wetlands** ecoregions for the New Mexico 4-H Conference contest. General knowledge questions that include species-specific information will be limited to those species found in Hot Desert, Urban, and Wetlands ecoregions. For example, a question related to a specimen may ask, “What types of foods does this species eat?” Answers in this section may be multiple choice or fill-in-the-blank.

General wildlife knowledge questions may include the following topics:

- Wildlife food groups
- Wildlife management concepts and terms
- Wildlife management practices (WMPs)
- Glossary terms
- Aerial photograph interpretation
- Species-specific information (habitat requirements, diets, WMPs)
- Ecoregion-specific questions (Hot Desert, Urban, and Wetlands)

The general knowledge portion will test participants’ knowledge in the categories listed previously. Wildlife foods definitions are provided in Appendix A of the WHEP manual. Participants should be prepared to indicate which foods are eaten by specific wildlife species and be familiar with the food group definitions. In the **Wildlife Species** section of the manual, habitat requirements are listed for each species, as well as management practices, habitat preferences, and other information. Focus on wildlife species in the Hot Desert, Urban, and Wetlands ecoregions to prepare for general wildlife knowledge questions.

Learning to interpret aerial photographs allows participants to view the landscape and gain knowledge of areas they may not have yet visited. From these images, they can gain information on the topography, landscape features (e.g., rivers), available cover, and the juxtaposition and level of interspersions of major vegetation communities and land uses (see the manual for definitions of juxtaposition and interspersions). These images may also show barriers to migration, agricultural fields, and residential development. Online programs such as Google Earth, TerraServer, and Google Maps are useful tools for producing images when learning how to interpret aerial images, preparing for general knowledge questions, and developing the written management plan.

Tips:

- Species’ diet information is located on species information pages.

- Know and understand information contained in the Wildlife Management Concepts and Terms section.
- Know food group definitions from Appendix A.
- Know food groups and WMPs for each species.
- Read and understand information about each species in the Hot Desert, Urban, and Wetlands ecoregions for the NM 4-H State Conference.
- Flash cards are especially useful when preparing for this portion of the contest.

Activity II: On-Site Recommendations of Wildlife Management Practices (WMPs)

Individual Activity; 50 points

Objective: Demonstrate knowledge of wildlife habitat and management on a given site. Participants should base their recommendations separately for each species, making each species the focal species considered at the given site.

A scenario describing field conditions will be provided to participants in verbal or written form. Participants will be provided with a WMP score sheet and asked to mark an “X” in the boxes for each recommended WMP. The field conditions scenario should inform the recommendations that participants select. This activity is graded based on the number of correctly and incorrectly marked WMPs on the score sheet provided by the contest superintendent. However, no negative scores will be assigned for this activity. WMP score sheets for each ecoregion can be found at www.whep.org. See NMSU Extension Guide L-114 (https://aces.nmsu.edu/pubs/_/L114.pdf) for details on scoring.

Tips:

- Study species in the Hot Desert, Urban, and Wetlands ecoregions.
- Know and understand recommended WMPs for each species listed in contest ecoregions.
- Charts/flash cards are helpful in learning habitat requirements and management practices, which will be useful in developing on-site recommendations.

Activity III-A: Written Wildlife Management Plan

Team Activity; 125 points

Objective: Demonstrate knowledge of habitat requirements for selected wildlife species in the Hot Desert, Urban, and Wetlands ecoregions. Be able to write recommendations based on the management objectives stated in the field condition sheet (scenario).

As a team, participants will interpret the management objectives and identify focal species from a written scenario, which will be provided before starting this activity. The team’s written plans should include management objectives, focal species, and recommends WMPs and their expected results, and should state how the plan’s outcomes will be evaluated. See the “Judges’ Scoring Sheet,” on page

14 of the WHEP manual, for details on how plans will be judged. All plans must be written on one side of a page of paper using paragraph format. Teams that address the scoring criteria on the judge's score sheet and follow the example in the WHEP manual will have the best opportunity to maximize their scores for this activity. On a separate piece of paper, participants may sketch the area and locate where recommended management practices will occur. An aerial photograph of the area may be provided on which management practices can be drawn. The contest superintendent will provide the written scenario, map (if applicable), and paper at the time of the contest. Teams will have one hour to write their management plan.

Field Condition Sheet

The field condition sheet describes the management scenario and provides information used to write the management plan. The field condition sheet may contain the following information:

1. Management objectives and focal species
2. Description of property boundaries (e.g., size of management tract)
3. Species population conditions
4. Special considerations (e.g., conflicts of interests, budgets)

If any of these are omitted, they are not considered important for the development of the written plan. For example, if population size is not provided, an initial wildlife or fish survey may be necessary, unless it is otherwise addressed in the scenario. Regardless of the scenario's treatment of population information, wildlife or fish surveys may be appropriate to evaluate the plan's implementation based on interpretation of management objectives.

Written Plan Strategies

To maximize points earned for the written wildlife management plans, the following details must be adequately addressed in the team's plan.

Plan Background (10 points)

Early in the plan, the team should write the management objective(s) and identify focal species to be managed. Focal species and management objectives will be provided in the scenario.

Plan Development (40 points)

Twenty points are possible for demonstrating an understanding of the habitat needs for each species. Provide habitat requirements for each species in the plan. Be concise, but make sure requirements for each species are covered.

Twenty points are possible for accurately evaluating the area as habitat for each species. Assess what is present and what is lacking for each species. Provide as many details as

possible, such as plant names, distribution of water, or specific information on what is lacking. Tie this information back to focal species' habitat requirements.

Plan Implementation (40 points)

Ten points are possible for **each** of these four areas: 1) identifying appropriate management practices, 2) demonstrating knowledge of the effect these practices will have on habitat and the species, 3) using appropriate native plant species or identifying invasive species, and 4) addressing management compromises necessary to meet the needs of all focal species. Appropriate management practices are those practices that address elements identified in the scenario or elements observed as lacking in the management area, and are specific to focal species or management objectives. Discuss how management practices will affect habitat and focal species. Address identified or observed native and invasive plants relevant to focal species or management objectives. Management practices often affect focal species differently, and these impacts should be identified and necessary compromises in management should be discussed. Explain when and where practices will be implemented.

Plan Evaluation (15 points)

Describe how you will determine the effectiveness of implemented management practices recommended in the plan. Be realistic about monitoring methods.

Format and Drawing (20 points)

Ten points are possible for writing the plan in paragraph format. Follow the judges' scoring sheet to structure your plan. For example, write management objectives and identify focal species first, followed by habitat needs of focal species and an assessment of habitat. Next, provide recommended management practices and implementation, followed by a realistic monitoring plan to evaluate management outcomes and inform future management decisions.

Ten points are possible for including a drawing or sketch of the area that shows the location of recommended management practices. If an aerial photograph is provided, the team may draw directly on the photograph to illustrate their management practices.

Tips:

- Develop practice scenarios for Hot Desert, Urban, and Wetlands ecoregions and simulate the written plan portion of the contest. Use the judges' scoring sheet as a guide and practice writing management plans for each scenario.
- Follow the example written management plan provided in the WHEP manual to understand appropriate content.
- Take field trips to different areas to practice developing written plans.
- Encourage the team to develop a system for evaluating the condition sheet, map (if provided), and site evalua-

tion. Site evaluation includes assessment of food, cover, and water, and identification of invasive species and other noteworthy site characteristics (e.g., train tracks splitting the site) in relation to management objectives and focal species habitat requirements.

- Take advantage of “easy” points when writing the management plan. For example, if the field condition sheet formatting allows, write verbatim the management objectives and focal species from the field condition sheet to earn maximum points for the plan background element.

Activity III-B: Oral Reasons for Written Plan

Team Activity; 75 points (top three individual scores)

Objective: Demonstrate knowledge and understanding of the written plan and be able to respond to judges’ questions about the team’s plan.

After completing the written wildlife management plan, team members will be required to demonstrate their knowledge about the team’s plan. One or more judges will question each team member individually to determine their level of knowledge and understanding about their plan. Questions related to the management objectives, focal species, and recommended management practices, as well as relevant information found in the **Wildlife Management Concepts and Terms, Ecoregions, Wildlife Species, Wildlife Management Practices (WMPs), Appendix A. Definitions of Food Groups, and Appendix B. Glossary** sections of the WHEP manual, are possible. Each team member will be scored independently. The top three scores will be combined for the team score. **Note:** Scores for Activity III-B only contribute to the team score and not individual high scores.

Use the judges’ scoring sheet for oral reasons to understand the scoring criteria when practicing. The more team members know about the focal species biology, habitat requirements, and management practices and their implementation, the higher the team will score. This is where studying and understanding information and using flash cards can further contribute to team performance. Reasoning and knowledge related to the plan are tested through the questions, and team members will perform better if they are well prepared.

Tips:

- Have your team practice answering questions in front of their teammates.
- There are four important and basic criteria in every good oral defense: knowledge of subject, use of appropriate terminology, presentation, and organization.

When giving an oral defense, participants should remember to do the following:

- Stand up straight in front of the judge(s).
- Establish eye contact with the judge(s).
- Do not chew gum or wear a cap or hat.
- Speak loud enough to be understood without shouting.
- Speak at a comfortable rate.
- Vary your tone to emphasize important points.
- Use correct enunciation and grammar.
- Use comparative terms when justifying the plan.
- Speak with confidence.

Table 1. Total Possible Points and Activity Scoring	
Individual Scoring Activities: Individual scores are used to determine the top individual in each activity. Totals of the top three individual scores are included in the team total score.	Points
Activity I: Wildlife Challenge	50
Activity II: On-Site Recommendations of Wildlife Management Practices	50
Individual Point Total	100
Team Scoring Activities: The top three individual scores contribute to the team score.	Points
Total of individual scores	300
Activity III-A: Written Wildlife Management Plan	125
Activity III-B: Oral Reasons for Written Plan. Oral defense is an individual activity worth 25 points and only counts toward the team score.	75
Team Point Total	500

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