WILDLIFE HABITAT EVALUATION CONTEST

I. Eligibility

A. Read general rules

B. Members may be enrolled in any 4-H project

C. Two teams, consisting of 3 or 4 members, may be entered from each county. If there are not enough members for a team, the county will be entered as individuals

The contest consists of five activities:

Activity I

Identifying Common Wildlife Foods

Pages 98-101 of the Wildlife Habitat Evaluation (WHE) Handbook have a list and tables of foods commonly used by certain wildlife species or groups. The list is not entirely complete as most species of wildlife occasionally eat unusual things if they happen upon them by chance. All species in a certain wildlife group do not eat all foods listed for that wildlife group. For example, all turtles do not eat fruit. Some species eat fruit and not mussels, and others eat mussels and not fruit. Likewise, wildlife does not eat all species in a certain food group. For example, deer do not eat tender twigs and leaves from all trees and shrubs - only certain species.

For purposes of judging, if any species in a wildlife group commonly eats any species in a food group, the food group should be marked for the appropriate wildlife group.

An example of the scorecard for Activity I can be found on page 102 of the WHE Handbook. This activity is worth 15 points.

In a judging event, each food item shown is assigned a number. The participant marks an "X" in the appropriate box for each wildlife group that may eat the numbered food item. During an event, food items may be shown to contestants with pictures, plant parts, growing plants, or mounted specimens and/or live animals.

Example:

The judge has brought a persimmon tagged with the number 7. This would be classified as a fruit, so the appropriate box for each wildlife group that eats fruit should be marked with an "X" in the column numbered 7. Boxes for bluebirds, deer, foxes, marten, quail, rabbits, sparrows, squirrels, thrashers, turkeys, turtles, and woodpeckers should be marked. To verify, check the tables on pages 100 and 101 of the WHE Handbook. All species of turtles do not eat fruit. But remember, if any species of turtle eats fruit, column 7 should be marked for turtles.

Activity II

Interpreting Wildlife Habitat From Aerial Photographs

This activity is divided into two parts and is used only for rural areas. The wildlife species and aerial photographs used in evaluating habitat vary for each region, but the procedures are the same. This section is an example of how this exercise is conducted.

Activity II-A, worth 25 points, involves using aerial photographs to judge the quality of an area of land for different wildlife species. An example of the scorecard that is used for this part of Activity II is shown on page 109 of the WHE Handbook. The contestant is given a list of wildlife species. He then must rank each photograph in relation to habitat needs of these species. The species can be written on the scorecard in the space provided. The photographs are ranked by number from left to right starting with the best for each species on the scorecard. Do not consider surrounding areas. Rank the photographs one species at a time. Then mark an "X" in the box that corresponds to the rankings you gave the photos. Only one box should be marked under each wildlife species. This part is scored using a Hormel system to take into account similarities in photographs.

Activity II-B is worth 10 points and involves an oral presentation before a judge, demonstrating a basic understanding of aerial photographs and how to read them. Each participant is required to give oral reasons to a judge for one or more species used in Activity photographs. Oral reasons are limited to two minutes for each species.

Activity III

On-site Habitat Management Recommendations

Activity III worth 40 points, addresses the prescription of *Wildlife Management Practices (WMP's)* necessary to improve an area for each of the wildlife species listed. A blank scorecard is shown on page 112 of the WHE Handbook. Space is provided to write in the species and practices (with corresponding numbers) recommended for judging in the *Regions* section. If more than one region is being used, copies of the score card can be made. Only practices that are appropriate for the specific contest being administered should be written in the spaces provided.

In urban contests, the following practices and numbers should also be used.

U1. Do not disturb nesting places;

U2. Plant flower;

U3. Rooftop balcony gardens;

U4. Use insecticides carefully.

The practices shown above are not in the *Management Practices* section, but are discussed in the *Wildlife Species* section under the appropriate species. Look at the table on page 41 to see which species these practices may be used for.

Leaders and participants will be informed of the region(s) and species that will be used for the contest well in advance of the event. The area(s) may be shown to the judging team by an on-site visit or with a series of pictures.

The scorecard for Activity III is completed using information found on the tables in the *Regions* section and from the *Wildlife Species* and *Wildlife Management Practice* sections in the WHE Handbook. The appropriate box for all WMP's that would improve the area for each species listed on the scorecard should be marked with an "X".

Consider each species separately. For example, WMP's for deer would not be the same as those for bluebirds. Prescribe only the appropriate practices that have been listed as applicable for the species. These practices are found in the *Wildlife Species* section or on the Practice table in the *Regions* section of the WHE Handbook.

This activity can be used in both urban and rural areas. Any of the practices can be used in both areas. Prescribed practices in urban areas should not be limited to the urban oriented practices listed above. This is just a list of practices that are more appropriate for urban areas which are not described in the *Wildlife Management Practice* section.

Cost or other land management objectives should not be considered.

Assume that all species listed on the scorecard are present in the area. Also, it must be assumed that the area is large enough to support all listed species.

Activity IV

Wildlife Management Plan

Activity IV is a team effort and is worth 10 points.

Referring to the same tract of land used in Activity III, participants make written recommendations based on the objectives of the landowner as stated on the Field Condition Sheet. As a team, they interpret the objectives, state which wildlife management practices are to be used and how the practices positively or negatively affect the designated species, and tell where these practices can be applied.

No more than one side of a sheet of paper may be used.

An example of a landowner's objectives might be: "I want to manage for both white-tailed deer and bluebirds." We would then identify those management practices that could be used to benefit both deer and bluebirds and discuss where compromises might be necessary.

Field Condition Sheet:

The Field Condition Sheet will contain the following information:

1. Landowner's objectives;

2. Aerial photograph or sketch map of the property;

3. Definition of property boundaries, size of tract;

4. Population conditions for some of the species;

5. Special considerations, which can include costs.

If any of the above are omitted, they are not considered by event organizers to be important to the development of the wildlife management plan.

Activity V

Urban Landscapes and Backyard Habitat Plans

Activity V, worth 20 points, is a team effort. It involves evaluating habitats in urban areas, and developing a management map and justification sheet for the recommendations. It should be done in the field, but if inclement weather or other circumstances warrant, the activity may be done indoors using slides or other visual aids.

Introduction:

Most people live in urban areas with intensively managed landscapes around home environments. Rural homes have backyards also that can be managed intensively for animal habitats and wildlife enjoyment. This phase of the handbook enables participants to work near the home to evaluate landscapes.

Species that adapt to human development are selected for this exercise. Habitat requirements provided by the environment are still basic to wildlife survival. Habitat requirements are supplied by vertical layers of short, intermediate, and tall plants as well as by buildings in the area. The horizontal arrangement of lands that are dominated by vegetation and/or buildings of different layers (height) determine which wildlife species might prefer the area. Corridors that enable movement of animals between the different areas are also important features of horizontal arrangement. Remember, buildings in urban areas also serve as places to roost, nest, and hide for some wildlife species.

The Activity:

This is a times team event. All phases of the exercise must be completed and handed to the judges within one hour after the instructions are given and the clock is started.

Equipment Needed Includes:

Compass, acetate sheets, marking pens (not permanent), grid paper, blank paper, and clipboard. Teams are to develop a wildlife management plan for an assigned urban or backyard area.

The Goals:

The goals for the national contest are to manage four or five of the eight wildlife species or groups on one of the seven categories of urban land. You must work under the environmental conditions of the contest area. At the time of the competition, contest organizers indicate the needs of the landowner for using the area. You should know from information provided at this time whether the wildlife in question is found seasonally or year-round in the area, and you must make management decisions accordingly. Local and state contests should use two or more of the seven categories if no rural lands are visited.

The Products:

The products from this phase of the contest will be a management map with plantings or other management practices drawn to scale, and written justifications about each team's management decisions. The map shall be constructed on one sheet of paper or acetate, oriented to the site, with features of the landscape drawn to scale including your management alterations. Each change you make to the existing landscape must be justified in writing using simple statements about the benefits of proposed management for the wildlife being considered, and how it relates to the landowner's objectives. Any major landscape features left unaltered must also be explained. The judges do not assume that you know whether a habitat is acceptable for wildlife in the present state unless you tell them in your written justifications.

Scoring the Contest

Each activity is scored as follows:

Activity I: The score for this part is based on the formula: [C - I/T] x 15, where C = the number of correct answers on the contestant's scorecard; I = the number of incorrect answers on the scorecard; and T = the total number of correct answers on the scorecard of the official or judge. For example, a contestant has 38 answers that are correct and 12 that are incorrect. The judges determine there are 44 correct answers, so the contestant's score on this part would be [38 - 12]/44] x 15 = 8.86. What we have done is create a proportion of the official correct answers that the contestant has listed, and then multiply that by 15, the total number of points allocated for this part. Do not consider the answers that the contestant does not include on the score sheet. This would be double counting.

Activity II-A: This part involves the correct placing of habitat from aerial photographs for each of the listed wildlife species. The Hormel computing slide is used to score this part of the scorecard. The judge determines the official order of photographs for each of the species, then establishes, by number, the margin of difference between each of the three pairs of photographs. These numbers represent the penalties for switching the top, middle, and bottom pairs. A contestant makes six decisions when he ranks four aerial photographs. The Hormel slide penalizes a contestant, by the amount of the margin between the two photographs involved, for each incorrect decision. Once a total score for this part is computed with the Hormel slide, the score is adjusted to a scale of 0 to 25 points, since the maximum total points for a perfect score for Activity II-A is 25.

Activity II-B: This activity is worth 10 points and is subjectively judged by officials. A contestant gives oral reasons to a group of judges on why he/she ranked the aerial photographs for the species indicated. The reasons should be short and concise. Contestants are given one or two species to

consider. Even when an incorrect order for the photographs is selected, it is possible to score well by giving logical and concise reasons.

Activity III: This score is calculated the same way as in Activity I, except the total number of points is 40.

Activity IV: The wildlife management plan is subjectively scored by the judges. Judges look for how well the contestants perceive the needs of the landowner, which WMP's to use, and how well the contestants make compromises for the species the landowner wants to manage. The highest possible score is 10 points.

Activity V: This activity is scored in the same manner as Activity IV. The urban wildlife management plan is subjectively scored by the judges. Judges look for how well the contestants perceive the needs of the landowner, which WMP's to use, if the features drawn on the sketch map are accurate and logical, and how well they can make compromises for the species the landowner wants to manage. The highest possible score on this activity is 20 points.

The team score is calculated by adding Activities I, II, and III for each contestant and dropping the low individual score (if there are four members on the team). The three remaining scores are added and the team scores for Activities IV and V are added to create the total team score. A maximum team score would be 300 points.

April 2000

Tie Breaker

1. Team

   Activity III

   Activity IV
   1
   2
   3

2. Individual

   Activity
   1
   2
   3

April 2000