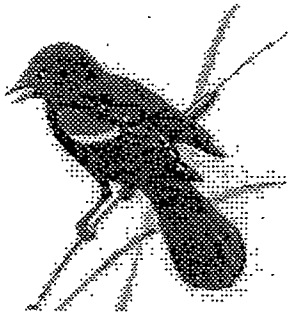


FARMERS VERSUS REDWINGS



The red-winged blackbird is a controversial bird. Many people appreciate redwings and know that they help control insects. Farmers in the southern part of the United States, however, saw redwings from a different point of view.

When redwings migrate from the northern states in the fall, great numbers of them end up in Louisiana and Arkansas, where farmers make a living by growing grain such as wheat and corn. Redwings see a field of grain as an easy place to get food. Redwings also usually gather in big groups in their winter habitats. A big flock of redwings can eat a lot of grain—especially if they repeat their visits to a farm. Farmers, understandably, considered the redwings pests and began asking their local agricultural departments to allow the use of some kind of control. (Control means reducing the size of the redwing population with a treatment that would kill them.)

People who study birds knew that the farmers needed help to see the whole picture of what redwings do in the environment. Environmental management officers put together information for the farmers that resulted in the following analysis.

Red-winged Blackbird's Diet

1. Animal Food—7/10 of total diet
 - a. In large quantities
 1. weevils
 2. beetles
 3. caterpillars
 4. grubs
 5. cankerworms
 6. grasshoppers
 7. ants
 - b. In smaller quantities
 1. snails
 2. crustaceans
 3. spiders
2. Plant Food—3/10 of total diet
 - a. weed seeds—2/10 of total diet
 - b. grain seeds (wheat and corn)—1/10 of total diet

1) What does this analysis show you about the redwing's diet?

More information about the issue:

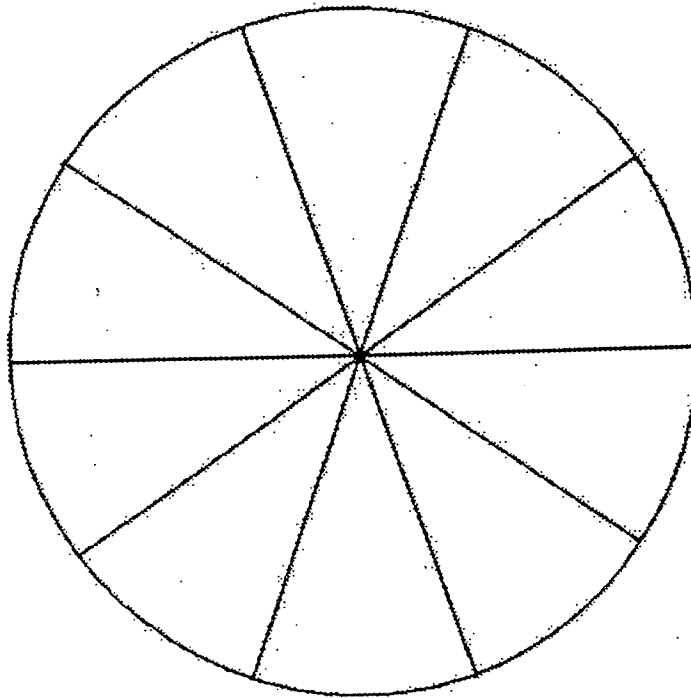
Farmers also have a major problem protecting their grain fields from a variety of insects that are very destructive to their crops. The most serious pests are those that bore into the ears or stalks of corn or stalks of other grain plants. Other insect pests suck the juice of a plant or eat its tender new growth. Borers such as weevils, grubs, and cankerworms, along with chomping beetles, caterpillars, grasshoppers, and ants can cause farmers big losses in their crops.

To help the farmers see the complete picture quickly at their meetings, the environmental officials prepared a pie graph.




Directions:

- o **Prepare** the pie graph given, including the key, as you think the environmental officials would have prepared it for their meetings with the farmers. Use the information from the chart on page 1. Choose colors that you think will help the farmers see quickly what the pie graph shows.
- o After preparing the pie graph, **answer** question #2.

The Red-Winged Blackbird's Diet



color key

-  animals (insects)
-  grain seeds
-  weed seeds

2) What do you think would have been the farmers' reaction to the pie graph you prepared?
