Grade: 3

Program Title: Bird Beak Buffet

Related Iowa Core Performance Expectations:

3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. [Clarification Statement: Examples of cause and effect relationships could be plants that have larger thorns than other plants may be less likely to be eaten by predators; and, animals that have better camouflage coloration than other animals may be more likely to survive and therefore more likely to leave offspring.]

3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. [Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.]

Future Considerations: Blend this program with the unit storyline developed by the classroom teacher.

Program alignment with the Iowa Core Science Standards:

Disciplinary Core Ideas (DCIs)	**Investigative Question**	**Investigative Phenomena**	**Practices (SEPs) Students will:**	**Cross Cutting Concepts (CCCs) Students will identify:**
LS4.C Adaptation For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.	How does the shape of a bird's beak help it survive?	Photos or mounts of Iowa birds with diverse beaks. Suggestions: • Hummingbird • Eagle • Woodpecker • Robin	**Use models** of bird beaks. **Analyze and interpret data** of food gathered with each beak. **Engage in reasoning and argument based on evidence** about the structure of the beak and how birds can gather food efficiently.	**Structure and function** of bird beaks. **Cause and effect** of access to different food sources.

Program components: Program components: The presenter will have students use the CCCs, the SEPs and the phenomena to figure out how to answer the investigative question and to grasp the disciplinary core ideas.

1. View the beaks of a diverse set of native birds. Or, in nature center, point out various mounted specimens. Have students discuss how they think the birds get their food.
2. Complete a traditional bird beak activity.
3. Relate the tools back to the beaks of the birds in step one.
4. Match original bird photos or specimens with food sources (photos or real!). Example; Flower, fish, duckweed, worm.
5. Point out areas around the nature center or school. Which of these birds could survive in each? Which could not survive in each?
6. How does the shape of a bird's beak help it survive?