

- Welcome/** Naturalist/Volunteer Names
- Introduction:** **Today's Topic- Birds** **Question: How are birds different from other animals?**
- Ice Breaker/** **Noah's Aviary** -Students make the sounds of their birds and find their partner with a matching call, until all the student pairs match up.
- Background/** **What makes a bird a bird?**
Exploration: Introduce the characteristics of birds.
(feathers, wings, hollow bones, flight, beaks, crop/gizzard, feet, eggs, migration)
- **Kinds of Feathers**
 - down (warm, pillow, fluffy)
 - contour (shape, smooth)
 - flight (long, strong)
- Flight**-For birds to fly well, their set of feathers must be streamlined, not too fluffy or puffy.
- Migration**- Ask students why some birds fly south for the winter. Discuss.
- Sight**-Birds move their head to look around because they can't move their eyes. Discuss the difference between eye placement on prey birds (sides of head) and predators (front).
- Bird Guessing Game**-Students take turns reading clue cards and guessing.
Look at mounts and discover how each bird's adaptations help it in its life/habitat.
- Help students think of the major bird groups. Have them find examples from mounts and pictures in the room: ducks/geese, perching, wading, raptors, game birds
- Beaks**- Ask student what birds use their beaks for.
Look at mounts or pictures showing some different kinds of beaks (Sisson).
- Activity:** **How Do They Do It?** Bird beak adaptation stations.
Stations where beak forms and functions are illustrated with household tools.
- Birdsong**-Birds have different calls/songs, and sing for different reasons.
Ask the students why a bird might call or sing. (territory, mating, danger)
Explain that learning bird calls is helpful for identifying certain birds, especially those difficult to see. Play a tape or CD to give examples of some bird calls.
- Nests and homes**- Look at nest examples or pictures. Ask students what type of bird would build each kind of nest, and what habitat it would be built in.
Discuss bird nest adaptations for different habitats.
- Activity:** **Edible Nests**- Students use craft sticks to mimic beaks in constructing nest like treats out of chocolate, chow mein noodles, coconut, and candies.
- OUTDOOR**
EXPLORATION: Quietly explore different habitats, looking for birds and signs of birds.
Check out tree cavities, nests, woodpecker holes, and bird feeding stations.
Encourage students to use binoculars.
- Game:** **Migration Headache**-Discuss the different problems migratory birds face.
- Closing:** Help the students think of ways they can help over-wintering birds.
Introduce them to Cornell University Ornithology Lab's *Project FeederWatch*.

Send Off: Bye!

Take Home: Project FeederWatch information

Vocabulary

Aviary, crop, gizzard, contour, keratin, migration, fledging, conservation

www.birds.cornell.edu
www.birds.cornell.edu/pfw

Cornell University Lab of Ornithology website
Cornell University Lab of Ornithology Project FeederWatch website

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P. 1 Goldfinch Information; pp. 5-6 State Bird Search-good take home information/activity
P. 67 How to Use Binoculars; p. 45 Migration route illustration