Lower Elementary – Level 3



#13 - Magnificent Flying Machines Genesis 1:20-23

PICTURES NEEDED

- 13-1 Variety of flying insects and birds
- 13-2 Insects performing important functions
- 13-3 Bat, penguin and ostrich
- 13-4 Bird nest and eggs

13-5 Types of beaks and bills

- 13-6 Types of feet and talons
- 13-7 Types of feathers
- 13-8 Kookaburra bird

REVIEW (Before Teaching Lesson)

- <u>Journal Review:</u> Ask students to share an important truth that they learned from their journal readings at home that week. Share some of your own insights.
- <u>Previous Lesson Review:</u> (Use the visual from the last lesson to aid in review)
 What are the differences between living plants and living animals? What did God mean when he said, "Let the water teem with living creatures"? What are the groups of animals that live in the ocean?
- <u>The Big Question Review:</u> What should sea creatures remind us of? Let the students give their answers to the question.
- <u>Bible Verse Review:</u> Psalm 104:24-25 In wisdom God made all things.

(24How many are your works, O LORD! In wisdom you made them all; the earth is full of your creatures.) ²⁵There is the sea, vast and spacious, teeming with creatures beyond number-- living things both large and small.

LESSON CONTENT

Note: The Bible verses included in the lesson are from the NIV 1984 edition. The wording of the questions is derived from that version. If another version of the Bible is used, questions may need to be adapted.

In the last lesson we examined the different types of life God created to live in the waters of the earth, in this lesson we will study the amazing design of the different types of winged birds.

On the fifth day of creation God said: ²⁰"Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky." ²¹So God created the great creatures of the sea and every living and moving thing with which the water teems, according to their kinds, and every winged bird according to its kind. And God saw that it was good. ²²God blessed them and said, "Be fruitful and increase in number and fill the water in the seas, and let the birds increase on the earth."

The Hebrew word for winged bird includes anything that flies. (picture 13-1) What else flies besides birds? Most insects at some point in their life cycle fly. Genesis says that God created the winged birds according to their own kinds. There are about 9,700 species (different types) of birds and about one million species of insects.

How do people generally view insects? Although most people generally find most insects annoying, they are a critical part of the balance of nature.

Why are insects important? (picture 13-2)

- Insects are an important source of food for a variety of animals including lots of birds and fish.
- Many insects, especially bees, pollinate different types of flowers so that plants can produce fruits and seeds.
- Insects also feed on animal wastes and dead plants and animals, breaking them down
 and helping to keep the environment in right balance.

What are words associated with birds in terms of their physical characteristics? (List the words the children give and add some of your own. Use the words as a basis for going over the information that follows.)

- All birds have <u>feathers</u> and <u>wings</u>. In fact, birds are the only animals with feathers but they are not the only animals that have wings and fly. <u>Besides insects and birds what other animal flies?</u> A bat is not a bird but a mammal and it also flies. (picture 13-3)
 - What are some birds that don't fly? Ostriches and penguins have wings and feathers but they don't fly. Ostriches can only walk or run and they use their wings for balance instead of flight. Besides walking, Penguins can swim under water and use their wings like flippers.
- 2. All birds hatch from eggs that the female lays. (picture 13-4) She generally lays the eggs in a nest that she, her mate, or both of them have built. The parents protect the baby birds and feed them until they can take care of themselves. Most birds can function on their own by the time they are a few months old. The parents push them out of the nest when they are ready to fly.

- 3. Instead of teeth, birds have a <u>beak</u> or a <u>bill.</u> (picture 13-5) The beaks and bills of birds were designed by God to serve different purposes depending on what food each bird was to eat. Many different types of birds can live in the same area because they don't feed on the same things. (Have the children describe the types of beaks and bills.)
- 4. <u>Feet</u>, <u>claws</u> and <u>talons</u> are also unique to each type of bird and again design is related to how God planned the bird to function. (picture 13-6) (Have the children describe the types of feet and talons.)

Besides having wings and feathers, how does the design of a bird enable it to fly? All the parts of a bird have been designed to enable it to fly.

- A bird's body is streamlined and aerodynamically designed for efficient flight.
- When the wings extend out, they create the lift that enables the bird to get off the ground and stay in the air.
- Beaks are exceptionally strong but lightweight.
- Bones are hollow and some are fused together to make them strong but light. If a bird's bones were like ours, they would be too heavy for the bird to fly.
- Even the internal organs of a bird and the way the heart works are designed to enable it to fly.
- Feathers are also lightweight.

What are the different functions of feathers? (picture 13-7) Some feathers are designed for flight, others for warmth and protection and some, it would seem, just for beauty and attracting a mate, like a peacock. (Have the children describe the types of feathers.)

<u>How are birds part of the balance of nature?</u> Birds, like insects, are an important part of the balance of nature.

- Through eating the fruit of plants birds spread the seeds around an area so more plants can sprout.
- Hummingbirds pollinate the flowers as they extract nectar out of them for their food.
- Some birds help farmers by eating weed seeds while others eat the insects that would destroy crops.
- Predator birds like hawks and eagles help keep rodents like rats and mice under control.

What do you think people have learned from studying the design of birds? Studying the amazing design of birds has enabled people to understand principles of flight and apply that knowledge to the development of the airplane.

We can learn something about God and gain his wisdom from every aspect of his creation. We need to study both God's creation and his word to understand principles of right living. Just as birds were designed to function in certain ways, so humans were designed to function in a right relationship with their creator.

Jeremiah 8:7 says, ⁷ Even the stork in the sky knows her appointed seasons, and the dove, the swift and the thrush observe the time of their migration. But my people do not know the requirements of the LORD.

<u>What does the verse mean?</u> We as God's people are to know what God requires of us and follow our design. As we live in the way God designed us to, in general life will go well for us. We need to choose carefully what we will believe and follow. Remember that birds fly according to a design and that as we live according to God's design and dwell with him we are blessed.

LESSON WRAP-UP

- <u>Overview Questions:</u> How are insects an important part of the balance of nature? What is unique about birds? What does the design of each type of bird reveal about it? What have people learned from studying birds?
- <u>Thought Questions:</u> What should the fact that people had to study birds to learn about principles of flight and how to design an airplane cause all people to consider? Why do you believe a bird was designed and didn't evolve? Why are people able to look at the complex design of a bird and think it is a result of a random evolutionary process rather than created by God?
- <u>Prayer:</u> Thank God for the magnificent design of birds and what can be learned from studying them. Pray that when you see a bird and think about its design and purpose you would consider your own design and purpose and commit yourself to following God's plan and dwelling with him.
- <u>The Big Question:</u> What can we learn from the birds? Let the students give their answers to the question. Share the memory verse. Ask how it answers the question.
- Memory Verse: Jeremiah 8:7 We are wise when we follow our design and respond rightly to God.

⁷ Even the stork in the sky knows her appointed seasons, and the dove, (the swift and the thrush observe the time of their migration. But my people do not know the requirements of the LORD.)

Questions: What does it mean to dwell with God? Why are those who dwell with God blessed?

ACTIVITIES (Completed after the lesson)

Any age appropriate activity can be included which fits into the class time. The activities with a star are included on the class notes.

- ★ Lesson Notes: Have the children answer the two questions individually or as a group. What did you learn from this lesson? How can you put into practice what you learned?
- ★ Memory Verse: Read the memory verse on the cover of the class notes and then have the students fill in the blanks in the verse.
- ★ Activity Page: Birds of a feather flock together

 Over two thousand years ago a man in Greece named Aesop wrote fables (stories) that had an important moral to them. These morals have become sayings that we still use today. One of these sayings is ,"Birds of a feather flock together" and comes from Aesop's story of the farmer and the stork:

A farmer put nets in his fields to catch the cranes that came to steal the seed he had planted. He caught several cranes and with them one stork. The stork begged the farmer to let him go because he was not a robber crane but a poor harmless stork that did not resemble a crane in any way. The farmer replied that while he did not resemble a crane he was caught with the cranes and must expect to suffer the same punishment because the farmer had every reason to think he was stealing too. After all, "Birds of a feather flock together."

<u>Discussion:</u> What does it mean that "Birds of a feather flock together"? Why wouldn't the farmer excuse the stork because he wasn't a crane? How does what Paul says in 1 Corinthians 15:33, "Do not be misled: 'Bad company corrupts good character," relate to the fable?

<u>Reminder:</u> People, like birds, hang around with those who are like them. You will be judged by the company you keep.

<u>Activity:</u> Unscramble the names of types of birds from the lesson and decode the hidden message with the clues: peacock, penguin, ostrich, eagle, hawk, hummingbird, stork, dove

Message: Birds of a feather flock together.

<u>This Week's Big Question:</u> Have the students fill in the blanks for the way the memory verse answers the big question.

We are wise when we follow our design and respond rightly to God.

Coloring Page: Color the lesson picture.

★ Craft: Balancing bird

As a reminder that God designed birds to according to a design, make a balancing bird.

<u>Materials:</u> cover stock paper, scissors, color pencils or crayons, small paper clips Preparation: Run off craft 13 on cover stock paper. Cut birds apart.

Instructions:

- 1. Cut out the bird.
- 2. Color feathers on the bird.
- 3. Attach a small paper clip to the slanted end of each wing.
- 4. Balance the bird by the beak on the tip of a finger.

Game: Steal the Worm

As a reminder that God designed birds and that each type of bird is unique play a version of "Steal the Bacon."

Instructions: Divide group into 2-4 even numbered teams. Line the teams up around the sides of the play area equal distance from a bean bag in the middle of the area. Assign each member of the teams the name of a specific bird (robin, jay, hawk, crow, owl, sparrow wren, dove, swan, seagull, duck, etc.). Each team will have all the same names as the other teams. When the leader calls out a bird name, the children from the different teams with that name run out to grab the worm (bean bag). When one child grabs it the others try to tag him before he gets the worm back past his team line. If the child gets the worm safely back, his team gets the point. If he gets tagged, the team of the child who tagged him gets the point. Keep track of points to determine the winning team.

JOURNAL

The journal is passed out at the end of class for the students to complete at home. It has six poetic readings and related Bible verses. It would be beneficial for the teacher to read through and be familiar with its content.