

3rd Grade / Winter Outdoor Garden Lesson : New Science 21
UNIT: Interdependent Relationships in Ecosystems/ Animal Group Behaviors

Objective: To observe the winter garden habitat: nests in trees, tree stumps, and think about the animal group behaviors that take place here. Connect reading about **ecosystems**, habitats and animals to our local **deciduous forest habitats**. 3rd graders are learning about **animal group behaviors**: how species of the same kind, working together and living in groups. They may have read about fish, beavers, cheetahs, elephants, and ants. Some of the key terms they have learned are **cause and effect** (of the behaviors), **habitat, behavior, survival, and patterns**.

Time/location: The entire lesson can be done in 45-50 minutes in the school garden.

Materials: Prepared *worksheets* on clipboards, pencils, *animal-cards* (see attached)

Book: Once there Was a Tree by Natalia Romanova (*available in the ES Library, check w/ Mrs.Lewellyn*)

The Lesson:

Part 1 / 15 min

- Observe the two tree stumps (an older decaying one by the willow fort, and newer one by the blacktop)
- **Read the book:** *Once there Was a Tree* by Natalia Romanova
- As you read, you can stop to ask questions about the animals in the tree stump ecosystem. *Who does the tree stump belong to? How does the tree stump habitat change? How do different animals adapt? Which animals in the book work in groups? Which are more solitary?*
- **Think & talk about:** how and why do diverse organisms and species, interact with their changing environment and each other. How do they adapt (LS2.C Ecosystems: Interactions, Energy, and Dynamics)

Part 2 / 15 min student group work on **(LS2.D: Social Interactions and Group Behaviors)**

- Gather in a sunny spot (pollinator courtyard)
- **Hand out the worksheet** already prepared on clipboards w/ pencils.
- Depending on how many students in the class, group the students in groups of 2-4 students. See if they can divide **Total# of Students / by 6 animals = to know how many students per animal group**.
- **Hand out the animal-cards to each group:** Each of these animals exist in our local Deciduous Forest Habitat, and these animals work together in groups with different behaviors that involve movement.
- **Students can work in groups to answer the questions #1-5** on the worksheet about group behaviors, habitat, animal group names.
- **Go through this as a whole class**, so all the students hear about all the different types of animal behaviors. Ask students what they know: Keep engaging the students by asking them to answer aloud and share with their classmates.
- **#6 Make a drawing or diagram of these animal behaviors**, this drawing helps them with the final step: making up their animal group behavior dance!

Part 3 / 10 min Student group movement exercise / **#7 Animal Behavior Dance**

- Ask a student to read aloud all of #7, make sure they all hear and understand:

"In the habitat of our garden classroom, we need to make sure that each organism is respectful...."

- They have 5 minutes to make up a dance that represents their animal's behavior.
- Gather back together as a class and ask each group to perform their dance! Take pictures/ videos to share!

FOR REFERENCE/ ANIMAL GROUPS INFO

1 A colony or army of ants - communicate w/ scent to cooperate in foraging for food, and build their homes.

2 A herd of deer - communicate w/ scent hoofs & antlers, cooperate to establish territory for grazing.

3 A swarm of honeybees - communicate w/ waggles to point in the direction of nectar (food) in plants.

4 A colony bats- communicate with echolocation (squeaks to help each other know location,hibernate in huddles

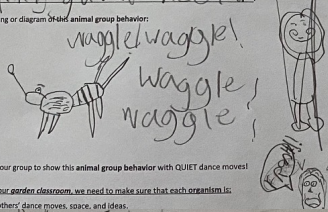
5 A colony or family beavers - Work together to build lodges & dams, to keep protected and care for the babies.

6 A flock or raft of ducks - The mother duck leads its babies to safety and warmth. They migrate as a V-shape

LESSON: ANIMAL BEHAVIORS



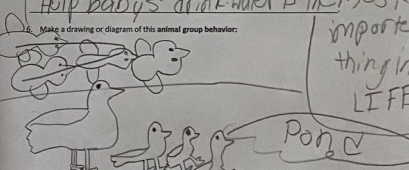
Science 21: Animal Group Behavior

1. What is your animal? Bee
2. This animal lives in a Deciduous Forest habitat.
3. A group of bees is a hive (animal name).
4. How does the animal group behave? (cause) they do wagg le wagg le wagg le wagg le
5. How does this help the animal group survive? (effect) wagg le wagg le wagg le wagg le
6. Make a drawing or diagram of this animal group behavior: 
7. Now work in your group to show this animal group behavior with QUIET dance moves!

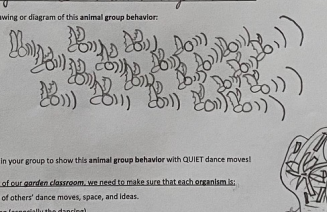
In the habitat of our garden classroom, we need to make sure that each organism is:

- 1 - Respectful of others' dance moves, space, and ideas.
- 2 - Participating (especially the dancing).
- 3 - Communicating positively.
- 4 - Being safe, while having fun.

EXTRA:
Close your eyes, and think about your last walk to James Pond, which is in a Deciduous Forest Habitat. What plants, animals and landforms make up the ecosystems in this type of habitat? How is their pond?

3. A group of ducks is a flock (animal name).
4. How does the animal group behave? (cause) Mama ducks babys towards
5. How does this help the animal group survive? (effect) Help babys drink water is the most important thing in LIFE.
6. Make a drawing or diagram of this animal group behavior: 
7. Now work in your group to show this animal group behavior with QUIET dance moves!

Science 21: Animal Group Behavior

1. What is your animal? Bat
2. This animal lives in a Deciduous Forest habitat.
3. A group of Bats is a colony (animal name).
4. How does the animal group behave? (cause) little squeaks called echolocation so they can hunt.
5. How does this help the animal group survive? (effect) if they find food or water they can eat it
6. Make a drawing or diagram of this animal group behavior: 
7. Now work in your group to show this animal group behavior with QUIET dance moves!

In the habitat of our garden classroom, we need to make sure that each organism is:

- 1 - Respectful of others' dance moves, space, and ideas.
- 2 - Participating (especially the dancing).
- 3 - Communicating positively.
- 4 - Being safe, while having fun.

EXTRA:
Close your eyes, and think about your last walk to James Pond, which is in a Deciduous Forest Habitat. What plants, animals and landforms make up the ecosystems in this type of habitat? How is their pond?



Name: _____

Science 21: Animal Group Behavior

1. What is your **animal**? _____.
2. This **animal** lives in a _____ **habitat**.
3. A group of _____ is a _____.
(animal name) (group name)

4. How does the *animal group* **behave?** (**cause**)

_____.

5. How does this help the *animal group* **survive?** (**effect**)

_____.

6. Make a drawing or diagram of this **animal group behavior**:

7. Now work in your group to show this **animal group behavior** with QUIET dance moves!

In the **habitat** of our ***garden classroom***, we need to make sure that each **organism** is:

- 1 - Respectful of others' dance moves, space, and ideas.
- 2 - Participating (especially the dancing).
- 3 - Communicating positively.
- 4 - Being safe, while having fun.

EXTRA:

Close your eyes, and think about your last walk to **James Pond**, which is in a **Deciduous Forest Habitat**.

What **plants, animals** and **landforms** make up the **ecosystems** in this type of **habitat**?

Hint: is there a pond?

