

Florida Scrub-Jay Game

An Adaptation of Project WILD's "How Many Bears Can Live in this Forest?"
And the "Osprey Game" created by the Staff at Pelotes Island Nature
Preserve, Jacksonville, Florida <http://pelotes.jea.com/>



Grade Level: 4th - 12th Grades

Subject: Science

Duration: 35 Minutes

Materials: One set of Food Cards*, 21 Fledgling Cards,
Optional: 7 nest markers (sturdy leaves)

NGSSS: SC.3.N.1.1, SC.3.N.1.6, SC.4.L.17.2, SC.4.L.17.3, SC.4.L.17.4, SC.5.L.15.1,
SC.5.L.17.1, SC.7.L.17.1, SC.7.L.17.2, SC.7.L.17.3, SC.912.L.17.6 C,
SC.912.L.17.20

Overview: In this role-playing game, students become scrub jays and compete with man for their living space, see the effects of habitat loss, and deal with other natural obstacles. The purpose of this game is to give the players a better understanding and appreciation for the life and struggles of this unique and rare bird.

Objectives: Students will discover how the Florida scrub jay lives in extended family units. Students will learn that the scrub jay diet consists mainly of acorns, but they are omnivorous birds. Students will understand that habitat restoration is critical to the survival of the scrub jay species.

Background: See attached Florida Scrub Jay fact sheet.

SETTING UP THE GAME:

1. Assemble the students in "Family Groups" of scrub jays. Each family group will have 2 adults (a mated pair) and 1-3 sub-adults. (i.e. You may assign 2 students to each nest as adults and let the rest randomly select their nest).

For example a class of 25 students will have 7 "Family Groups":

- 14 adults
- 11 sub-adults

2. Randomly hand out the 21 fledgling cards so that each "Family Group" has 2-5 babies.
3. Assemble each "Family Group" at a nest. Nests should be formed in a circle.

* See end of activity for food card makeup.

TO BEGIN:

Developed by Around the Bend Nature TOURS for Manatee County Conservation Lands Management

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1. Place the nest markers in a large circle on the ground.
2. Scatter the Food Cards inside the circle.
3. Students will **walk** out into the middle and collect one food item at a time. Each time they pick up one food item they must return it to their nest before collecting the next one.

GOAL: Each scrub jay "Family Group" must collect enough food to survive.

- RULES:**
1. Scrub jays must walk.
 2. Scrub jays may only collect one Food Card at a time.

FINISHING THE GAME: After all of the Food Cards have been collected (45 seconds-2 minutes), each family will take inventory of the Food Cards they have collected.

1. Ask students to find any Food Cards that have "**FS**" (3) on them. This stands for "**Fire Suppression**". As a result of fire suppression the shrubby layer of oaks have grown too tall, hawks have flown in, and the habitat value to the scrub jay is diminishing. (A Family may only suffer 1 Fire Suppression card, ignore multiples). **Lose $\frac{1}{2}$ your cards.**
2. Have students check their Food Cards for "**D**" (1) this stands for "**Drought**". Explain that due to lack of rainfall there are fewer food resources this year. **Lose $\frac{1}{2}$ your acorns and berries.**
3. Have students check for "**H**" (2) Food Cards. "**H**" stands for loss of "habitat". This could be another development in the well-drained scrub. As the bulldozers make way for new homes you **lose all Acorns and Fledglings.**
4. Have students check for "**B**" (2) Food Cards. A **Bobcat** has eaten a fledgling. **Lose 1 Fledgling for each "B" Card.**
5. Have students check for "**N**" Food Cards. "**N**" (1) stands for "**Broken Neck**". A fledgling had an accident, **Lose 1 Fledgling for each "N" Card.**
6. Have students check for "**EC**" (3) Food Cards. "**Eastern Coachwhip**" is a snake that will eat eggs or baby scrub jays. **Lose 1 Fledgling for each "EC" Card.**
7. Have students check for "**CH**" (3) Food Cards. "**Coopers Hawk**" will eat a scrub jay when it can catch one. **Lose 1 Fledgling for each "CH" Card.**

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8. Now have students count all of their remaining Food Cards and Fledgling Cards. The number of Food Cards required to complete the game varies based on the number of players. Do a quick survey by raise of hands.
- The top $\frac{1}{4}$ will be in the **"Fat and Happy"** group. They have more than enough food to survive.
 - The middle 50% will be in the **"Healthy"** group. They're not as "fat and happy" as the other guys, but are certainly doing well.
 - The lower $\frac{1}{4}$ is in the **"Hungry"** group. (Remember, best not to kill the players.) Discuss who is in what group.
- How many fledglings remain? Will there be more helpers next year?
- Congratulate the group on teamwork. How many of the scrub jays in the hungry group are there because of something people did to them?

WHAT WE LEARN: Some of the scrub jays will always be hungry, and it is especially difficult for mated pairs without sub-adults to get enough food. Students will see that the larger groups are best able to compete successfully for enough food to survive. Also, they will see that man-made obstacles are very threatening to the continued existence of these friendly birds.

WHAT WE LEARN: Scrub jays have a difficult time surviving because of habitat destruction and fire suppression. It is especially difficult for smaller scrub jay families to get enough food. What can we do to protect these birds and help maintain their habitat?

* Set of Food Cards includes:

- 80 ACORN CARDS,
- 25 INSECT CARDS,
- 20 CATERPILLAR CARDS,
- 10 BLUEBERRY CARDS,
- 10 BLACKBERRY CARDS,
- 10 SPIDER CARDS,
- 5 LIZARD CARDS,

Hazards among Food Cards:

- > 2 BOBCAT CARDS "B"
- > 3 EASTERN COACHWHIP CARDS "EC"
- > 3 FIRE SUPPRESSION CARDS "FS"
- > 2 HABITAT LOSS CARDS "H"
- > 1 DROUGHT CARD "D"
- > 1 BROKEN NECK "N" CARD
- > 3 COOPERS HAWK CARDS "CH"

Total number of cards: 160 for about 25-30 players.

- 21 FLEDGLING CARDS

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