

OBJECTIVES

LEARN WHICH BIRDS
OVERWINTER HERE IN THE
MIDWEST AND HOW THEY DO IT.
MAKE A QUICK SUET CAKE TO
FEED YOUR BACKYARD BIRDS.

MATERIALS

1 - 3 OZ. DIXIE CUP
2 OZ. OF BIRDSEED*/CORNMEAL
1 OZ. OF VEGETABLE/LARD
SHORTENING
1- 10" PIECE OF STRING OR YARN
PIECE OF CARDSTOCK
COPY PAPER
*PLEASE NOTE SOME BIRDSEED
CONTAINS NUTS, INCLUDING
PEANUT

GUIDING QUESTIONS

1. WHAT BIRDS STAY HERE DURING THE WINTER?
2. HOW DO THEY ADAPT TO THE WINTER CONDITIONS?

CONCEPTS

- BIRDS FACE TWO DILEMMAS IN WINTER: DON'T FREEZE AND DON'T STARVE.
- FOOD + FEATHERS = WARMTH
- SOME BIRDS CHOOSE TO MIGRATE SOUTH TO WARMER CLIMATES.

FACTS

- BIRDS NEED TO MAINTAIN THEIR BODY TEMPERATURE DURING THE WINTER JUST LIKE HUMANS. AVERAGE BIRD BODY TEMPERATURE IS 105F.
- MOST BIRDS FOLLOW A SIMPLE FORMULA: MAXIMIZE CALORIES (FOOD) INTAKE WHILE MINIMIZING CALORIES SPENT.
- BIRDS RETAIN HEAT IN THEIR BODY CORE BY FLUFFING OUT THEIR FEATHERS.
- AT NIGHT, THEY REDUCE HEAT LOSS BY SEEKING SHELTER IN TREE HOLES OR OTHER CREVICES, AND BY REDUCING THEIR BODY TEMPERATURE.



INTEREST APPROACH-ENGAGEMENT

ASK A QUESTION(S):

- 1. DO YOU THINK A BIRD'S FEET GET COLD?
- 2. WHERE DO YOU THINK BIRDS FIND FOOD DURING THE WINTER?
- 3. WOULD YOU WANT TO STAY IN THE COLD DURING THE WINTER OR FLY SOUTH FOR THE WINTER?



ACTIVITY 1: MAKING A SUET CAKE

- USING A PENCIL OR OTHER POINTED ITEM, POKE A HOLE IN THE BOTTOM OF A DIXIE CUP.
- TIE A DOUBLE KNOT IN THE YARN AND THREAD IT THROUGH THE CUP.
- TAKE LID OFF SHORTENING CONTAINER AND PLACE IT IN THE MICROWAVE.
- PLACE BIRDSEED IN A SEPARATE HEAT-SAFE CONTAINER.
- BY A GROWNUP OR UNDER ADULT SUPERVISION. CAREFULLY MELT THE SHORTENING IN THE MICROWAVE. WORK IN 10-SECOND INTERVALS CHECKING AFTER EACH. YOU MAY NEED TO STIR IT TO GET IT TO MELT. SHORTENING CAN ALSO BE MELTED IN A PAN ON THE STOVETOP. WATCH CAREFULLY AND REMOVE FROM HEAT AS SOON AS IT IS MELTED.
- CAREFULLY POUR THE MELTED SHORTENING OVER THE BIRDSEED.
- STIR. MAKE SURE THAT ALL OF THE BIRDSEED GETS COATED IN THE SHORTENING.
- POUR THE MIXTURE INTO YOUR PREPARED DIXIE CUP KEEPING THE PIECE OF YARN OR STRING IN THE MIDDLE OF THE CUP. PACK IT TIGHTLY IN THE CUP.
- PUT IT IN THE REFRIGERATOR OR IN A COOL PLACE TO ALLOW THE SHORTENING TO HARDEN. IF YOU WANT TO HURRY THIS PROCESS, PUT IT IN THE FREEZER. CHECK IT AFTER 60 MINS. IT WORKS BETTER FROZEN!
- ONCE SHORTENING IS SET, CAREFULLY PEEL THE DIXIE CUP AWAY FROM THE CAKE LEAVING THE BOTTOM CIRCLE. THIS WILL BE MESSY.
- HANG FINISHED SUET CAKE ON A TREE BRANCH IN SIGHT OF A WINDOW SO YOU CAN SEE THE BIRDS VISITING YOUR FEEDER.









ACTIVITY 2: OBSERVATIONS

- TAKE THE CARDSTOCK AND COPY PAPER AND FOLD THEM "HAMBURGER STYLE" (FAT WIDTH-WISE, NOT THIN LENGTHWISE).
- YOU CAN STAPLE THEM ALONG THE FOLD TO KEEP THEM TOGETHER OR PUNCH HOLES ALONG THE FOLD AND TIE THEM WITH A STRING OF YARN.
- THIS WILL BE YOUR OBSERVATION JOURNAL.
- DATE THE PAGE AND ADD WHAT WEATHER CONDITIONS YOU HAVE. KEEP TRACK OF WHAT BIRDS VISIT YOUR FEEDER(S). OTHER WAYS TO MAKE OBSERVATIONS WOULD BE TO DRAW WHAT YOU SEE, OR WRITE ABOUT THE BIRD'S BEHAVIOR. DO THEY GRAB A BITE AND FLY AWAY TO EAT IT, OR DO THEY EAT RIGHT THERE?

LESSON PLAN CREATED BY WENDY FERGUSON, PROGRAM COORDINATOR

Common Overwintering Birds in West-Central Illinois



Northern Cardinal, (Cardinalis cardinalis)

- Large, long-tailed songbird with short very thick bill.
- Males are bright red with a black mask and throat.
- Females are pale brown with reddish tinge in the wings, tail and crest.



Black-capped Chickadee, (Poecile atricapillus)

- Small, compact body, with a thin short bill.
- Black cap and bib, contrast with white cheeks, gray back and wings.
- Can perch sideways or upside down.



Dark Eyed Junco, (Junco hyemalis)

- Medium size sparrow, with round head, long tail and fairly pale bill.
- All juncos have prominent white outer tail feathers. These feathers are seen when they fly.
- They often are found feeding on the ground below your feeders.



Blue Jay, (Cyanocitta cristata)

- Blue above and white underside,
- Prominent crest and a black necklace
- Wings and tail are barred with black.



Downy Woodpecker, (Dryobates pubescens)

- Small with a short bill.
- Head striped black and white, males have red patch, females do not.
- Upper parts mostly black with a white underbelly.
- Bold white spots in the wings.



Hairy Woodpecker, (Dryobates villosus)

- Medium size, larger than Downy
- Fairly square head with a long needle like bill.
- Black and white overall.
- Males have a small red patch on their heads.

Want to know more?
The Cornell Lab of Ornithology is a great resource.
Find it at: https://www.allaboutbirds.org/guide/search