Seed Need

Note: Full sheets of each **"Seed" Wrap** (5 of same/page) are available at *www.projectwild.org/GrowingUpWILD.htm*.

Directions:

1. Copy the **"Seed" Wraps** at right onto plain white paper. You may want to shrink or enlarge them depending on the size of the objects around which you plan to wrap them. Make copies in multiples of five so that each child will have five of the same kind of animal/seed during the simulation.
2. Depending on the age, interest and abilities of your students, you may engage them in making the "seeds" for the simulation, or you may choose to make all of the "seeds" yourself.

   To engage students in "seed" production, distribute copies of **"Seed" Wraps** and allow children to color the animals and the seeds or fruit on each. While children are coloring, read the sentences together and discuss how each animal helps disperse the seeds of its food plant (see chart below). You may want to encourage children to color the white space on the **"Seed" Wraps** to match the color of the objects (plastic eggs or similar) you plan to use in the simulation. This will increase the objects' visibility on the playing field.
3. Depending on your students' skills, you may allow them to cut out the **"Seed" Wraps** and tape them to the objects you plan to use as seeds, or you may choose to do this yourself. Each type of **"Seed" Wrap** should go around objects of the same color (i.e. all "bear" wraps around blue objects, all "squirrel" wraps around pink objects etc.). **This color coding is very important to the simulation.**

Animal	Food and Seed Dispersal Method
Bear	Eats berries. Passes seeds in scat.
Squirrel	Eats acorns. Drops some. Buries and forgets some.
Mouse	Eats grain. Drops some. Stores and forgets some.
Deer	Eats grasses. May loosen seed heads. Some seeds may cling to fur.
Goldfinch	Eats dandelions, thistle and similar seeds. Loosens seed heads. Some drop and some are carried and dispersed by wind.
Robin	Eats cherries. Drops some. Carries some. Passes seeds in scat.

Seed Dispersal Simulation:

1. Select an open area to serve as your playing field. This could be a field of mowed grass, a paved playground, or even an open space indoors. Choose the playing field so that the "seeds" will be clearly visible on it after they are dropped.
2. Set up the simulation by placing all "seeds" of the same type in a basket labeled with the name and/or picture of the bush, tree, grass or weed they came from. There should be 6 different baskets, each representing a different plant.
3. Gather children on the playing field. Have them count off #1-6. Designate each number group as an animal: black bears, squirrels, mice, deer, goldfinches, and robins. Allow each "animal" to collect 5 "seeds" (plastic eggs or similar) of the same color from the appropriate basket. You may wish to give children small baskets, bags or other containers to help them carry their seeds.
4. Blow a whistle and encourage the "animals" to move off in any direction. The bears must skip, the squirrels must hop on one leg, the mice must crawl, the deer must walk, and the goldfinches and robin can "fly"/run. After about 5 seconds (more or less depending on the speed of your students and the size of your playing field), blow the whistle two times. All the "animals" should freeze. Each must drop a "seed" wherever she/he stopped. During the simulation you may want to caution children to avoid stepping on or kicking "seeds" on the ground.
5. Repeat Step 4 five times, reminding students that they may move in a different direction each time.
6. After the final seeds drop, gather the students on the sidelines to observe the field. Judging by the colors spread on the field, which animal covered the most territory? Which covered the least?

Note: It is expected that the seeds dispersed by the birds in this simulation would show the greatest spread, the seeds dispersed by the mice the least spread, and the seeds dispersed by the other animals intermediate spreads.

This simulation is intended only to serve as a model of dispersal in nature. Actual dispersal distances may vary greatly depending on the size of individual animal's home ranges and numerous other factors.

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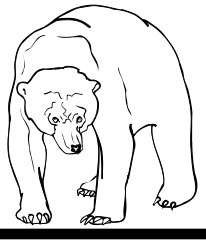
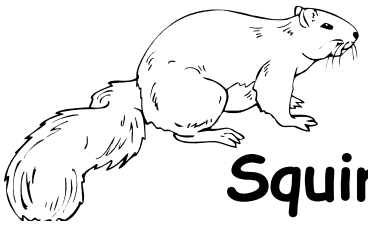
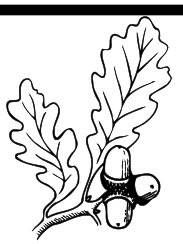
"Seed" Wraps



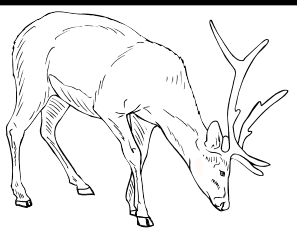
Bears eat berries.



Squirrels eat acorns.

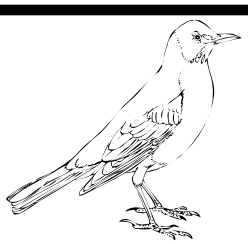


Mice eat grain.

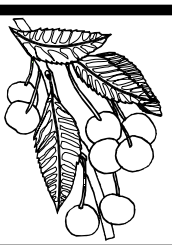


Deer eat grasses.

Goldfinches eat dandelions.



Robins eat cherries.



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