DragonflyTV: GPS Activity 4

Bird is the Word

New Mexico Museum of Natural History and Science

Albuquerque, NM

www.nmnaturalhistory.org

Cave Swallows

We're Isabel and Emily and we're spelunkers. That means we like exploring caves. We went to Carlsbad Caverns to help with an ongoing cave swallow study. But first, we stopped by the New Mexico Museum of Natural History and Science to check out what animals lived in our state during different times in history. There were plenty of interesting dinosaurs here, too, including some predecessors to birds! All of them are extinct now, of course. But that got us thinking: How are the cave swallows in Carlsbad Caverns doing?

We met up with Steve, a local high school teacher who has been helping run the cave swallow monitoring program for 25 years. He recruits students like us to help. Our job for the day took a little training. We helped trap swallows in a net as they flew out of a cavern. Then we weighed and measured the length of each bird. We collected data in three main categories of birds: those less than one year old, adults, and re-traps —that is, birds that were already banded from a previous catch. Before we released the birds, we banded them all, so researchers could track the growth of individual birds when they catch them in the future.

NEW MEXICO MUSEUM OF NATURAL HISTORY & SCIENCE

Icebreaker

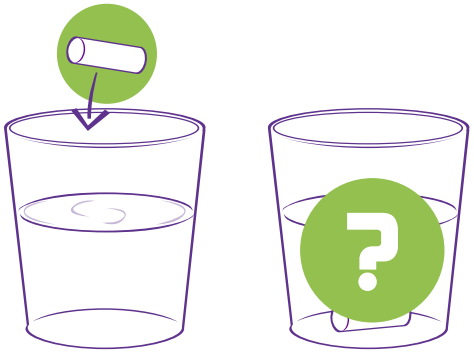
Try this investigation to see how caves form.

45 minutes

DragonflyTV Skill: Observing

Guide your kids as they

1) Fill one cup halfway with vinegar, and fill another cup halfway with water.
2) Place one piece of chalk in the vinegar cup and one piece of chalk in the water cup.
3) Observe what happens, and write down those observations.



You'll need:

- white chalk, broken into 1 cm pieces
- clear plastic cups
- white vinegar
- water

DFTV Science Helper

Chalk is chemically similar to the limestone found in Carlsbad Caverns—both formed at the bottom of ancient oceans by the accumulation of the bodies of ancient marine organisms. Scientists think that natural acids dissolved the limestone bedrock over millions of years to form the enormous caverns you can see today.

For more simple activities like this one, surf to pbskidsgo.org/dragonflytv/superdoit/index.html

Investigation
What Do Birds Do?

2+ hours

You'll need:

- paper
- pencils
- optional: binoculars and bird identification books

Guide your kids as they

1) Brainstorm, as a group, a list of possible bird behaviors. Possible behaviors might include:
   - Singing or calling
   - Bathing
   - Perching
   - Climbing a tree trunk or branch
   - Flocking together
   - Flying
   - Feeding
   - Preening (combing its feathers with its beak)
   - Walking or hopping on the ground
2) Prepare a scavenger sheet, one per team, with behavior list in one column, room for the location/habitat in one column, and identification in one column.
3) Go outside to an area where birds can be found: your backyard, a park, or a natural area. It is permissible to visit several areas, so record the location of each observation.
4) Record bird species, location, and bird behaviors, seeing which team can find the most different bird behaviors. Add to the list of behaviors when you see something you didn't think about before.

DFTV Science Helper

DFTV Science Helper: Bird identification books can be intimidating, so you may want to find out what birds your kids are likely to see and discuss their prominent features before you head outside. If you use binoculars, make sure your kids know how to adjust and focus them.

DFTV Kids Synthesize
Data and Analysis

Here's an example data sheet that can help you record your observations. Adjust the data sheet as necessary for your investigation.

Bird	Location	Singing	Bathing	Perching	Climbing	Flying	Feeding	Preening
Robin	yard	X		X				X
Blue Jay	yard			X			X	

Keep Exploring!

If you want to do more bird watching, you can participate in many citizen science bird watching efforts. Google "citizen science bird watching" to find opportunities in your community. Develop an investigation that can last over a period of days or weeks. Add new observations to your data each time you go birding. For example, does the number of birds of a certain species that you observe increase at certain times of the year?