



Supporting outdoor nature education, exploration, and stewardship!



Every year the KSAT team looks forward to attending the SmallSat conference in Logan, Utah and visiting our friends at the Stokes Nature Center.

Over the last four years, we have built a relationship with Stokes that started based on a shared vision for protecting local ecosystems, promoting science-based education, and helping foster a renewed sense of stewardship in our home planet. Each year we have the option to provide a “giveaway” to be included in participant welcome bags – and rather than buy trinkets that are likely to end up in the landfill, we instead make a donation to the nature center in support of their education programs.

As we are all joining the conference virtually this year – we wanted to share our mission with all of you and your families at home by providing this activity created by the Education Staff at Stokes. While we are all joining from various corners of the world, we hope that you can enjoy exploring one of the most prolific classes of creatures – birds! Wherever you are, we hope you get outside and remember what a wonderful world we are lucky to inhabit.



Bird Adaptations!

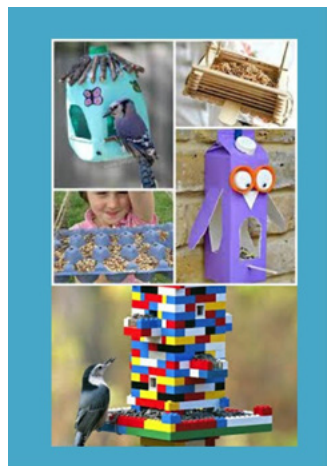
Begin by exploring some unique bird adaptations with our Naturalist Educator through the following video link: [Bird Adaptations](#)

Adaptation Artistry: For this activity all you need is the provided worksheet and some colored pencils, crayons or markers

Find the Egg/Nest pictures: Look through the pictures provided to see how well these birds hide their nest, eggs and young.

Watch a Killdeer protecting its nest by pretending to have a broken wing at here: [Killdeer Broken Wing Act](#)

Online Games: Try your hand at Project Nightjar. Project Nightjar has several online games to test your skills finding camouflaged eggs, nests or Nightjars at http://nightjar.exeter.ac.uk/story/nest_game Scientists at the Centre for Ecology and Conservation at the University of Exeter in England are actually using this game to study the evolution of camouflage and vision in animals! So not only is it fun and educational you are contributing to science.



Homemade Bird Feeders: Try creating a backyard bird feeder out of recyclable materials you have on hand at home such as empty milk jugs or cartons, popsicle sticks, egg cartons and more. **iNaturalist:** Download the iNaturalist app and record and identify any birds you see at your homemade feeder! [Staying Home with Stokes iNaturalist Project](#)

Field Trip: Take a field trip with your family to look for some birds, this could be as simple as visiting a local park or trail or for a real adventure, drive 30 minute to the Bear River Migratory Bird Refuge and drive the Auto tour route! Information for the Auto tour can be found here: [Bear River Migratory Bird Refuge Auto Tour Route](#)

Nest Camouflage: Look through the attached photos and see if you can spot the camouflaged nests, eggs or nestlings.

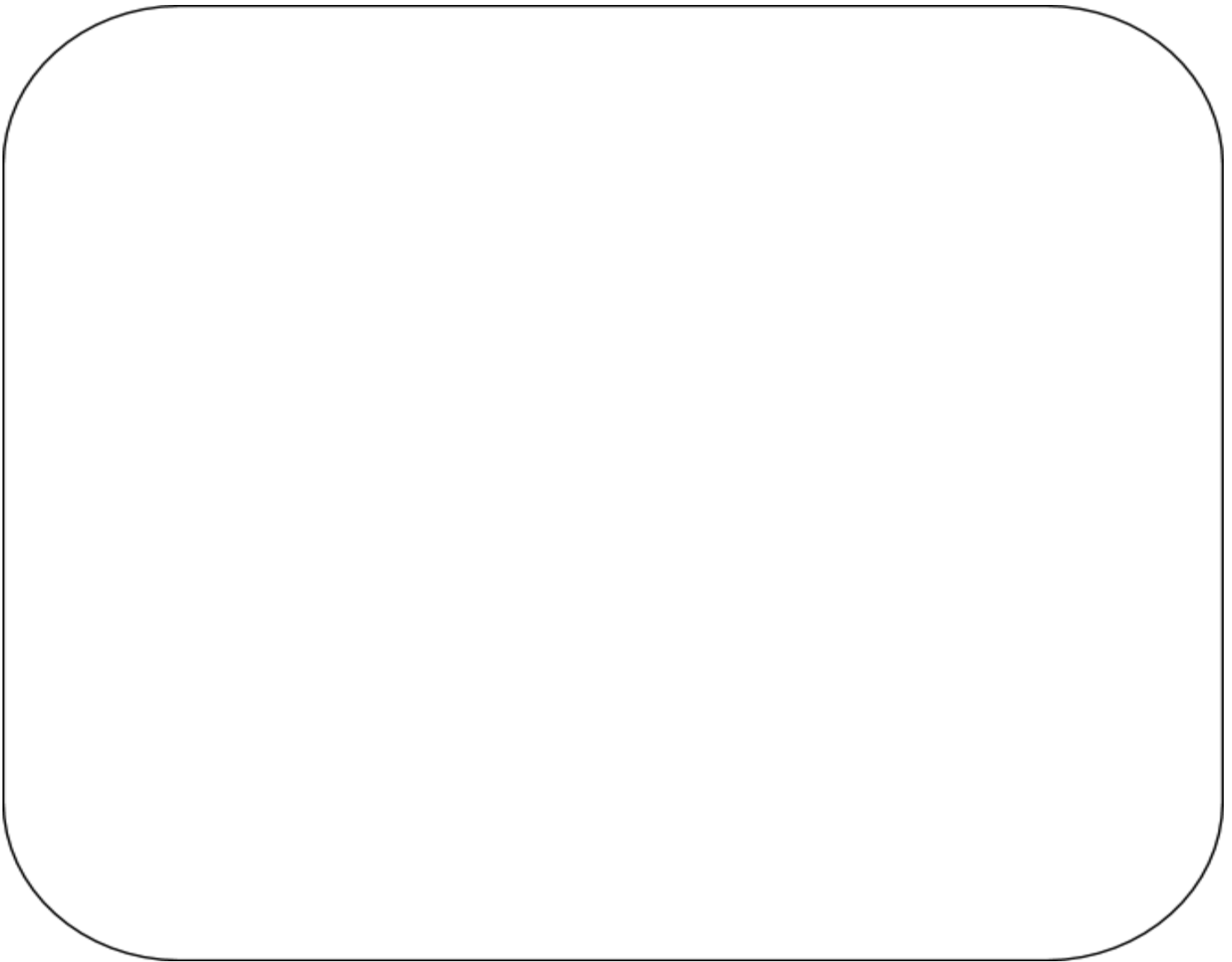
Adaptation Artistry

Birds have a variety of adaptations we discussed in our video today such as the shape of their beak and feet. In the space below or on another sheet of paper draw your own imaginary bird. Give your bird a name, a habitat/home, food to eat and adaptations to allow it to survive!

My Bird's Name is: _____

My Bird's Habitat is: _____

My Bird Eats: _____

A large, empty rounded rectangle with a thin black border, intended for drawing a bird. The corners are smoothly rounded, and the interior is completely blank.

Its Adaptations are: _____

Can You Spot the Killdeer Eggs?



Can You Spot the Killdeer Eggs?



Can you Spot the Golden Plover Chicks?



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Golden Plover Chicks are colored to look like moss!

Can you spot the Meadowlark nest?



Can you Spot the Meadowlark Nest?



This Sage grouse is another ground nesting bird



incredibly good at camouflaging her nest.



One egg is different from the rest. Can you spot it?

This is a Brown-Headed Cowbird egg. A female cowbird makes no nest of her own, but instead lays her eggs in the nests of other bird species, who then raise the young cowbirds. This behavior is called being a “Brood Parasite”