



Step outside during these early days of spring and quietly observe the magical changes happening all around. You will see little green sprouts peeking up from bare ground, blossoming spring bulbs, and swollen buds on trees. You will also hear and see some very noisy, busy birds twittering and fluttering about while gathering twigs, bits of string, leaves, and feathers. What are they up to?

When daylight hours increase in the spring, **physiological** changes (normal functions of the body and its systems) occur in birds that prepare them to breed. Birds look for new **territories** (areas claimed for themselves) to find food, protection from **predators** (animals that eat other animals), and for a place to build their nests. Nests are safe places for birds to lay their eggs and raise chicks. There are many different types of nests, and they can be found everywhere.

Birds are amazing engineers and builders! Using only materials that they can find outside, they manage to weave intricate structures that are strong enough to withstand wind, rain, heat, and cold. Sometimes they use mud or their own **saliva** (spit) to help hold the nests together. Usually the females build the nests, but sometimes both parents work together. A male American robin brings materials to his mate so she can build the nest. In some species, like the house wren, it is the male that builds the nest.

There are thousands of different birds in the world and many different types of nests. The following list includes just a few types of nests that you can see in Northern Nevada:

- **Platform nests:** These nests are built with layers of sticks and are cushioned inside with grass, dirt, leaves, or other soft materials. These are very large nests (5 - 6 ft. wide and 2 – 4 ft. tall), which can take three months to build. They are built up high so the birds can see all around them and keep an eye out for predators. Platform nests are long-lasting nests that are often used year after year by the same birds. Platform nesters include bald eagles, egrets, storks, and some hawks.



Bald eagles



Stork



Bald eagle

- **Scrape nests:** These are little hollowed out scrapes in the ground with a few stones and leaves added to cushion the eggs and keep them from rolling away. These nests aren't very safe from predators, so the parents are skilled at distracting predators from finding their nests. Some birds even pretend they are



injured or ill to divert predators away from the nest! Scrape nest builders include shorebirds, quail, ducks, and killdeer.



Nesting killdeer



Quail nest



Nesting shore bird

- **Cupped nests:** The very common supported cup nest can be found in the branches of trees or bushes and even on the ground. Sometimes the sides of cupped nests go up and make a roof or dome over the top. Hummingbirds and robins build cupped nests.



Hummingbird nest



Robin nest with eggs



Robin nest with baby chick

- **Cavity nests:** Cavity nests are made within holes found in trees, poles, or even buildings. Sometimes these holes already exist, and sometimes the birds work to create them. Examples of birds that build their nest in cavities include bluebirds, woodpeckers, chickadees, and sparrows.



Nesting bluebird



Woodpecker nesting hole

- **Floating nests:** Floating nests are built on top of the water. These are often built of **aquatic** (water) plants and mud. They are anchored to other plants so that they don't float away and to keep them



hidden from predators. Ducks, coots, and grebes are examples of birds that nest this way.



Three floating nests for waterfowl

- **Adherent nests:** These are often a type of cupped nest that are attached by a sticky substance, like mud or **saliva** (spit), to a vertical surface. Swifts and swallows build this type of nest.



Indian cliff swallow nest



Common house martin nest

ACTIVITY: Try to build a bird nest using materials that you find outside

Materials

- One chicken egg or a plastic egg to place in your nest
- Bucket or other container to collect nesting materials
- Empty box or tray to use to build your nest. This will help to contain any mess.
- Nesting materials that you find outside, like twigs, moss, string, water, mud



1. Spend some time outdoors in your yard or at a park and look for bird nests.
2. Do not touch the nests or disturb them but observe what kind of things that they are made of.
3. If you can't find any nests in your neighborhood, look online for images of bird nests (if you have internet access) or look through books and magazines about birds.

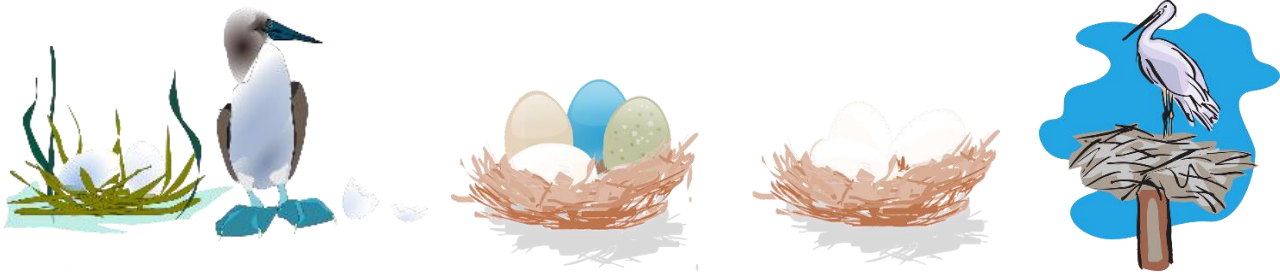


4. Go outside again and look for materials to build a nest.
5. Now use your materials to build a nest that will hold at least one egg.

Discussion:

Was this activity easier or harder than you expected? Did your nest stay together if you tried to move it? Blow on the nest using a hair dryer set on cool and low. Did it stay together? How could you make it stronger?

Wow! There are some very talented builders and engineers flying around your neighborhood!



ADDITIONAL RESOURCES

Materials available from the Washoe County Library System:

[*Annie and Snowball and the Cozy Nest*](#) by Cynthia Rylant

[*Baby Birds: An Artist Looks into the Nest*](#) by Julie Zickefoose

[*Baby Bird's First Nest*](#) by Frank Asch

[*Backyard Birding for Kids; A Field Guide and Activities*](#) by Fran Lee

[*Bird Egg Feather Nest*](#) by Maryjo Koch

[*Bird Nests*](#) by Helen Frost

[*Birdology: 30 Activities and Observations for Exploring the World of Birds*](#) by Monica Russo

[*Birds from Bricks; Amazing LEGO Designs that Take Flight*](#) by Thomas Poulsom

[*A Bird's Life*](#) by Ellen Lawrence.

[*Birds Make Nests*](#) by Michael Garland

[*The Boy Who Drew Birds: A Story of John James Audubon*](#) by Jacqueline Davies

[*Even an Ostrich Needs a Nest; Where Birds Begin*](#) by Irene Kelly

[*Fly With Me: A Celebration of Birds Through Pictures, Poems, and Stories*](#) by Jane Yolen

[*A Guide to the Nests, Eggs, and Nestlings of North American Birds*](#) by Paul J. Baicich

[*Have you heard the nesting bird?*](#) by Rita Gray

[*I Love Birds! 52 Ways to Wonder, Wander, and Explore Birds With Kids*](#) by Jennifer Ward



[*Into the Nest: Intimate Views of the Courting, Parenting, and Family Lives of Familiar Birds*](#) by Laura Erickson

[*The Magpies' Nest*](#) by Joanna Foster

[*The Nest That Wren Built*](#) by Randi Sonenshine

[*A Round of Robins*](#) by Katie Hesterman

[*Spit And Sticks; A Chimney Full Of Swifts*](#) by Marilyn Grohoske Evans

[*Spit Nests, Puke Power, and Other Brilliant Bird Adaptations*](#) by Laura Perdew and Katie Mazeika (ILT)

[*Urban Roosts: Where Birds Nest in the City*](#) by Barbara Bash

[*Bill Nye the Science Guy; Birds*](#) [DVD] a Disney Educational Production

Videos

BBC Studios, "Social Weaver Birds Nest In a Tree in Africa - David Attenborough - BBC wildlife"

<https://youtu.be/jPibkNv7IM>

Dickenson County Nature Center, "Spring Birds and Nests" <https://youtu.be/eSdYZ3GEysY>

SciShow, "7 Nests That Will Change How You Think of Birds" <https://youtu.be/mhWDCcBhxLQ>

Websites

American Eagle Foundation, Live HD Nest Cams

<https://www.eagles.org/what-we-do/educate/live-hd-nest-cams/>

The Cornell Lab of Ornithology <https://www.birds.cornell.edu/home/>

The Forest Preserve District of Will County, How to Identify Bird Nests

<https://www.reconnectwithnature.org/news-events/big-features/how-to-identify-bird-nests>

Lahontan Audubon Society <https://www.nevadaaudubon.org/>

National Audubon Society, Audubon for Kids

<https://www.audubon.org/get-outside/activities/audubon-for-kids>

PBS, The Life of Birds <https://www.pbs.org/lifeofbirds/>

