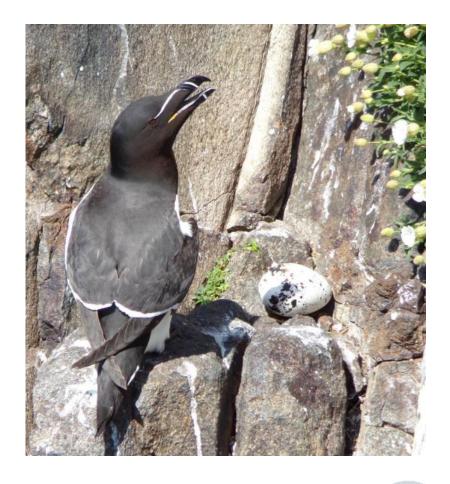




SSC DIVE IN! SPRING







BLOG





DJames Glossop

SPRING ON THE BASS: GANNETS AND GUGAS

Here at the Scottish Seabird Centre, it's not only rabbits that are important at Easter. In spring, the wild world outside is filled with hustle and bustle, as animals from the tiniest wren to the bulkiest badger bumble, flutter, hop, swim or scuttle about their business. For some creatures, this is a time to stretch and yawn as they emerge from hibernation, and for others it's time to carefully construct a nest, creating a protected place to lay their eggs.

Have you ever seen a nest in a tree? Or perhaps on a roof or window ledge? Some birds lay their eggs on the ground,

nestled between plants or camouflaged on the rocks. Other birds, like puffins, even lay their eggs UNDER the ground, hidden away in burrows that they dig out using their beaks and feet.

A few weeks ago, I jumped on a boat to visit **Bass Rock**. Bass Rock is an island which you can see from the Seabird Centre in North Berwick and, in the summer, it is absolutely COVERED in gannets. In fact, so many gannets visit that, from a distance, the whole island looks white. Gannets are one of Scotland's largest seabirds. Even if you stretch your arms apart as far as you can, a gannet's wingspan is still much MUCH bigger than yours (up to **2 metres**). They are bright white all over, with a jet-black tip on each wing.

Gannets nest in a colony (a big group), and Bass Rock is the largest colony of gannets in the WORLD. If springtime is usually busy for wild animals, can you imagine what it's like to be a gannet building your nest on Bass Rock? Talk about crowded! **150,000** gannets build their nests and raise their chicks there every year. Not only does that mean lots of birds, but it also means thousands of noisy neighbours and LOTS of fishy gannet poo!

Luckily for any grumpy gannets short of space, these birds only lay **1** egg each year. They put all their effort into raising a single chick, looking after the egg for up to **46** days before it even hatches. When the chick, which is called a guga, finally appears, the dedicated parents look after it for as many as **97 MORE days** before it is ready to leave the rock and take care of itself.

When I visited Bass Rock, the earliest gannets were just starting to return, probably hoping to claim the best nest sites before thousands more birds join them. Some of them were resting on the rock and some were fishing out in the open water, soaring high in the sky and then plunging down into the sea like an arrow, at speeds of up to 60 miles per hour! That's more than double the speed that Usain Bolt can run on the track! By Easter time, lots more gannets will have arrived back at Bass Rock, where they will reunite with their partners and begin building their nests, ready for the busy summer ahead.

DID YOU JUST BECOME A GANNET GURU?

Find out if you just upgraded to guru status by answering the following questions:

- 1. What's a baby gannet called?
- 2. How fast can a gannet dive?





EGGS-ELLENT EGGS

Draw an arrow to match the egg to the bird. Use the information in the boxes to help you.











razorbill



cuckoo



blackbird



chicken

They have one pointed egg with brown blotches.

Some lay their eggs in the nest of another bird.

3 – 5 blue/green eggs with brown speckles.

They can have a brown or white shell.

Nests are where birds (and some other animals) lay eggs. Usually they are high up in tree branches, but they can also be perched on a cliff or down low on the ground. They are commonly made of sticks and twigs and they are quite strong.









Your mission:

Can you help these baby birds? They need you to build a nest to protect them with the cut-out sticks, leaves and feathers or you can create your own.





Don't forget to send us your designs. We'd love to see what you create!





SEABIRD EGG GUIDE

Did you know, each species of bird produces a different looking egg? Differences include size, shape, colour and even pattern! Below is a photo of our egg cabinet inside the Scottish Seabird Centre.

What colours and patterns can you see?



EGGS-ELLENT FACT!

Eggs vary in colour and pattern for a variety of reasons. Scientists think one reason might be where and how birds nest! For example, Guillemots lay their eggs on busy cliff ledges so being speckled helps parents recognise which eggs are theirs. Puffins, on the other hand, lay their eggs in burrows so have relatively plain, white-ish eggs—there's no need for them to be **camouflaged** if they're hidden underground!



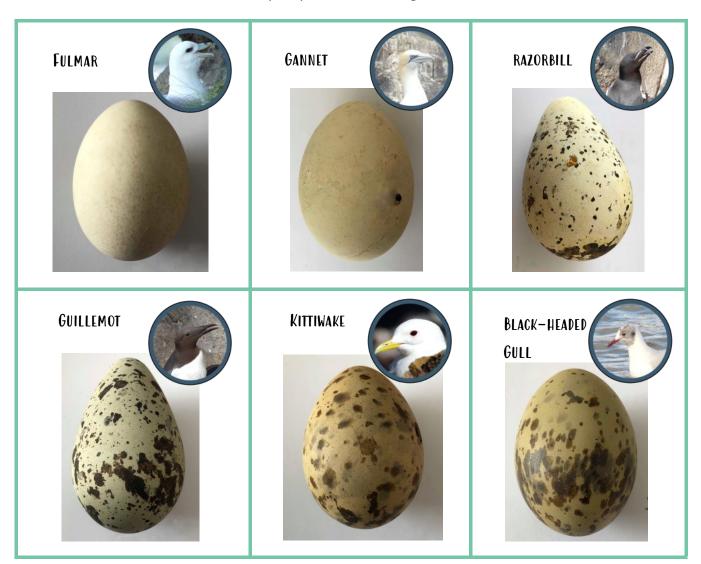




SEABIRD EGG GUIDE

Did you know, most true seabirds (birds that only visit land during breeding season), nest in colonies on islands and cliff faces?

Why do you think that might be?



EGGS-ELLENT FACT!

The number of eggs laid at one time is known as a **clutch.** Clutch size varies amongst species. The species above typically make this number of eggs each season:

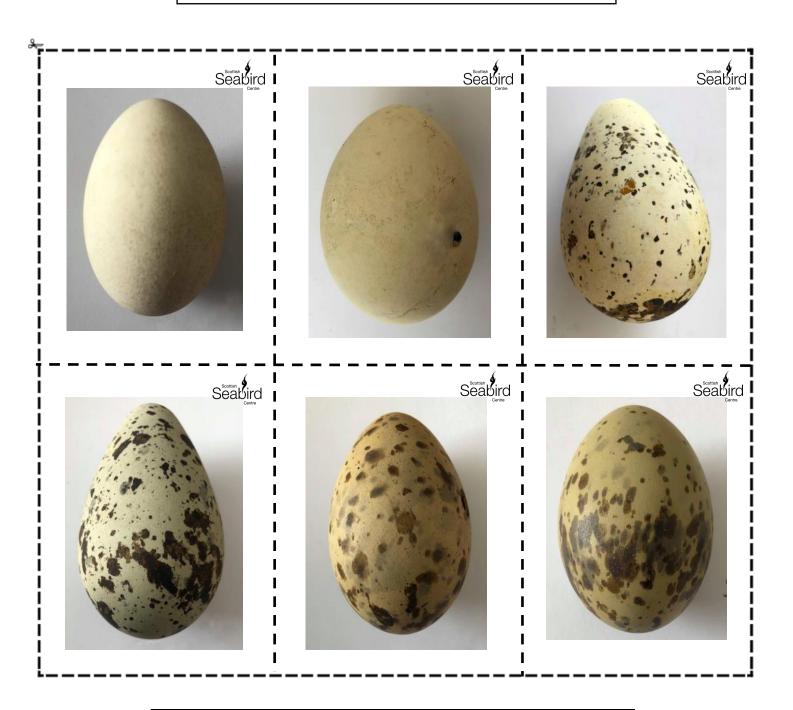
Fulmar: 1 egg Gannet: 1 egg Razorbill: 1 egg

Guillemot: 1 egg Kittiwake & Gull species: 2-3 eggs

f@ y **



ACTIVITY: SEABIRD EGG CARDS



Instructions:

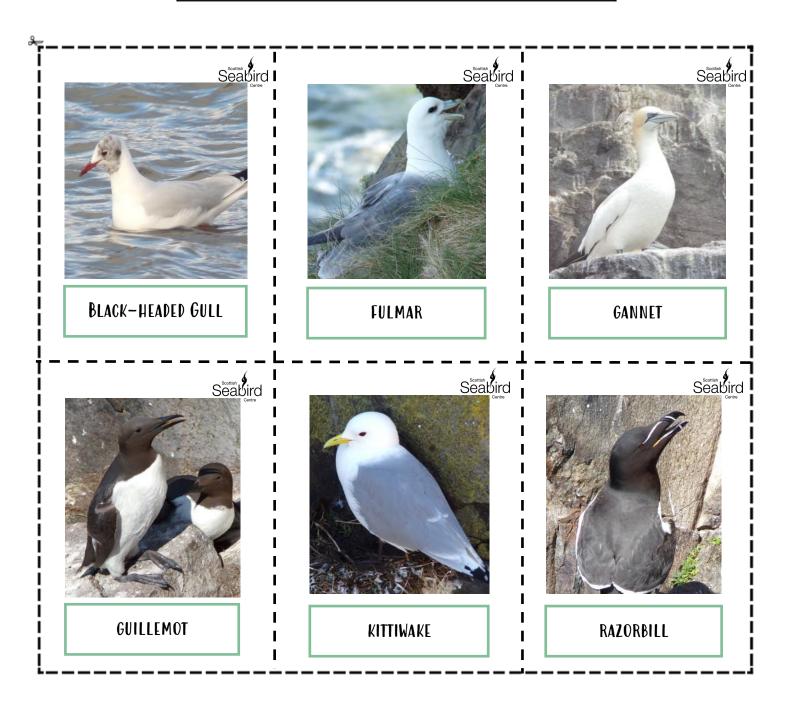
Print out this page then cut along the dashed lines to create your very own pack of Seabird Egg cards.

See additional instructions sheet for game and activity ideas.





ACTIVITY: SEABIRD CARDS



Instructions:

Print out this page then cut along the dashed lines to create your very own pack of Seabird cards.

See additional instructions sheet for game and activity ideas.





CARD GAME IDEAS & INSTRUCTIONS

WHAT DO I NEED?

• Pack(s) of Seabird Cards

Pack(s) of Seabird Egg Cards

• Seabird Egg Guide Handout

SCRAMBLED EGGS

Number of players: 1

Handouts needed: 1x pack of Seabird Cards. 1x pack of Seabird Egg Cards.

1) Lay out the cut out Seabird Cards in a line

Shuffle your pack of Seabird Egg Cards

Try to match each Seabird Egg Card to the correct Seabird Card, one at a time

Tips! Use the Seabird Egg Guide to help identify each egg. Print and cut out more Seabird Egg packs to make the game last longer. Make the game a challenge by setting yourself a time limit or trying to beat your record.

SNAP!

Number of players: 2

Handouts needed: Either **6x packs of Seabird Cards** (easy) OR **6x packs of Seabird Egg Cards** (hard)

1) Each player has 3x packs of cards

Pach player shuffles all 3 of their packs together (so each player has a 1 pile of cards)

The first player places a card face-up, followed by the second player, followed by the first, and so on.

When the same card appears as the last, the fist player to shout "SNAP!" wins the pile of cards that has been placed down in that round

5 Repeat until one player has run out of cards

Look out for more ideas on the next page!







CARD GAME IDEAS & INSTRUCTIONS

EGG HUNT

Number of players: 2+

Handouts & kit needed: 1x pack of Seabird Cards. 6+ packs of Seabird Egg Cards. 6x boxes/bowls

- 1) Place one Seabird Card inside each box / bowl
- One player hides the Seabird Egg Cards
- The other players find the Seabird Egg Cards and place them in the correct box / bowl
- The player to have collected the most eggs wins!

Tips! Use the Seabird Egg Guide to help identify each egg. Print and cut out more Seabird Egg packs to make the game last longer. Make the game a challenge by setting yourself a time limit or trying to beat your record. Alternative way of playing is for each player to collect only one type of Seabird Egg.

NO PRINTER? NO PROBLEM!

If you don't have access to a printer, why not have a go at creating your own Seabird or Seabird Egg Cards?

- Cut out card-sized pieces of paper/card
- 1 Draw a picture of a different seabird or egg on each

Tips! You can copy the pictures from the Seabird Egg Guides, Card sheets or Seabird pages on the Scottish Seabird Centre website (www.seabird.org).









CRAFT: MAKE A PUFFLING

A **puffling** is a baby puffin, they look very different to the adults. They are shades of grey, white and black, and their smaller beaks don't have the bright colours that the adults have in summer. Use the photo to help you colour in your puffling.

Materials:

- Scissors
- •Glue
- Card
- Puffling Template
- Paint
- A sponge
- Feathers



Step 1: Draw around or copy the puffling template onto card and cut out.

Step 2: Use a sponge to dip into black or grey paint and cover the chick. Leave to dry.

Step 3: Use glue to stick 2 black or grey feathers on the back of your chick. These are their wings! If you don't have feathers, try looking in the garden or making some out of paper or fabric.

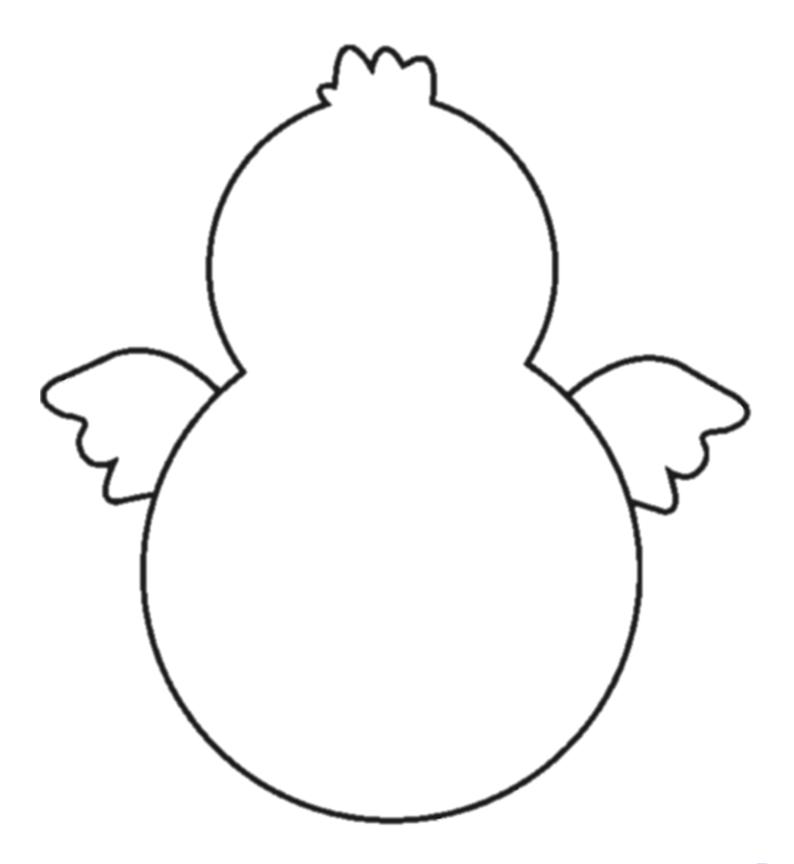
Step 4: Cut out a diamond shape and colour black to make the beak. Fold in half and glue onto the puffling's face.

Step 5: Use felt pens to draw eyes on to your puffling.





PUFFLING TEMPLATE









EGGS-PERIMENT

HOW DO RAW EGGS REACT WITH DIFFERENT LIQUIDS?

Materials:

- 4 raw (uncooked) eggs
- 4 large cups or glasses
- Milk
- Water
- Vinegar
- Tomato juice

- Paper towels or plates
- Table covers



- Step 1: Carefully place the eggs into the glasses take care not to break them!
- Step 2: Pour in milk until the egg is covered. Look carefully do you notice anything?
- Step 3: Repeat this process with the remaining eggs and liquids.
- Step 4: Leave the eggs in their liquid overnight.
- Step 5: Next day, carefully remove the eggs and place each on a paper towel. What do you notice?
- Step 6: Make sure your table/area is fully covered and protected!
- Step 7: Try dropping the eggs. What happens?





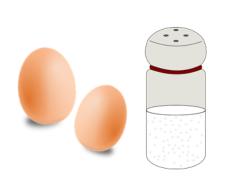


EGGS-PERIMENT

CAN YOU MAKE AN EGG MOVE WITHOUT TOUCHING IT?

Materials:

- 2 hard boiled eggs
- 2 large cups or glasses
- Salt
- Stirrer
- Spoon
- Water



Step 1: Carefully place the eggs into the glasses – take care not to break them!

Step 2: Pour in water until the eggs are covered. Look carefully – do you notice anything?

Step 3: Now, add a spoonful of salt to one of the cups and stir. Repeat until you notice a change.

Why has this happened?

- In the water, the density of the egg is greater than that of the water. Therefore, the egg sinks.
- In the salt solution, the salt causes the water to become denser than the egg. Therefore, the egg floats.

Challenge!

- Why not try to float a different object? Small plastic toys work well but make sure you ask permission first!
- Rubbish works too! You could investigate which wrappers in your house float or sink.
 How could this be a problem for marine life?





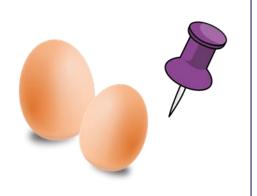


EGGS-PERIMENT

SHRINKING & SQUIRTING EGGS

Materials:

- 2 eggs
- Vinegar
- Strong sugar solution
- Water
- 2 cups or large glasses
- Pin



Step 1: Carefully place the eggs into the glasses – take care not to break them!

Step 2: Pour in vinegar until the eggs are covered. Leave for at least 24 hours.

Step 3: Now, remove the eggs from the vinegar. What has happened to their shells?

Step 4: Place one egg in water and the other in the sugar solution, leave overnight.

Step 5: Your eggs should look quite different now. Carefully, put a pin into the larger egg. What happens?

Why has this happened?

Osmosis – the movement of water through a semipermeable membrane. The egg in the sugar solution has lost water, while the egg in water has gained more water!

