

Name:

Date:



Association
for the
Study of
Animal
Behaviour

Red Knot Knowledge... How much do YOU know?

What is a red knot? Knots are short and dumpy shore birds that you might see hanging out in muddy estuaries around the UK during the winter months. They eat cockles, other shell fish and worms. Their beaks can detect pressure changes in the sand and this can help them find their prey. Parts of their stomachs (gizzards) are soo strong that they eat the shellfish whole and crunch them with their insides!

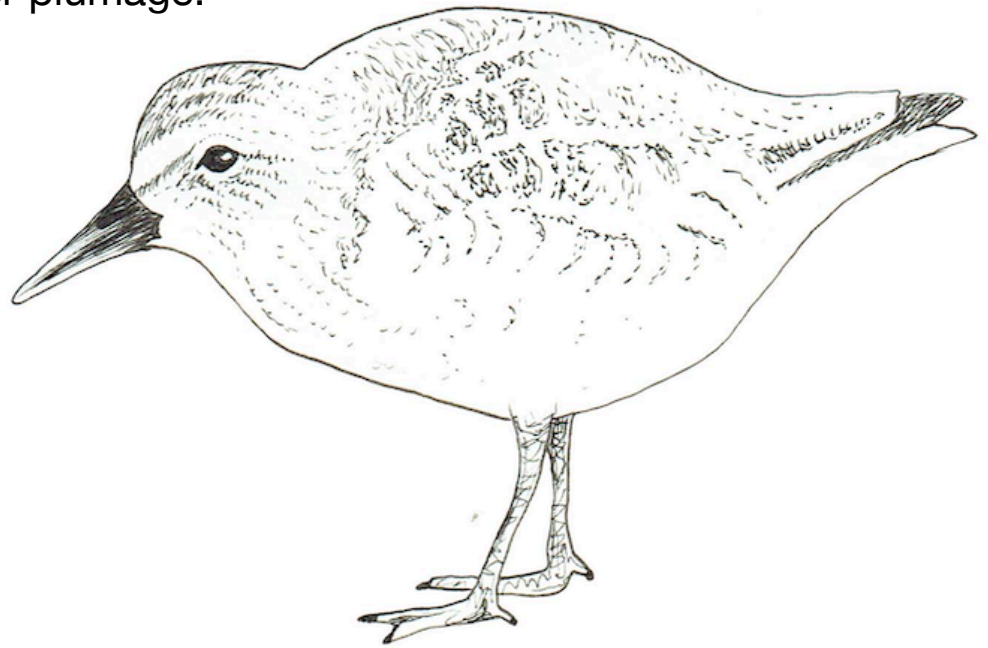
Guess what? The latin name for knots is *Calidris canutus*, named after King Canute who was a viking king in the 10th Century. King Canute ruled over Norway, Denmark and England, places where red knots are found today.

1: In the paragraph above, underline the genus name in red and underline the species name in green.

Imagine: This is what it's like to be with a flock of red knots *

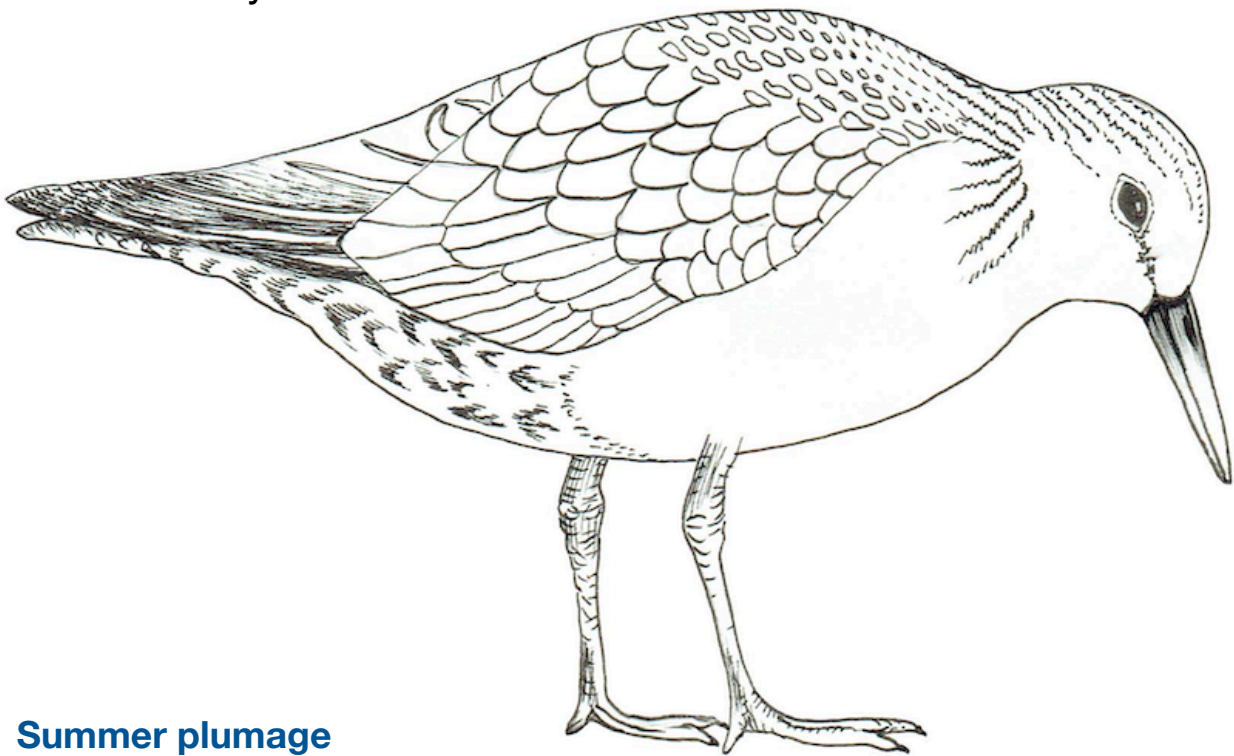
2: Click the link and describe what you can see and hear in the box below:

Knots look different depending upon the time of year, they have a beautiful rusty red breeding plumage and a more camouflaged winter plumage.



Winter plumage

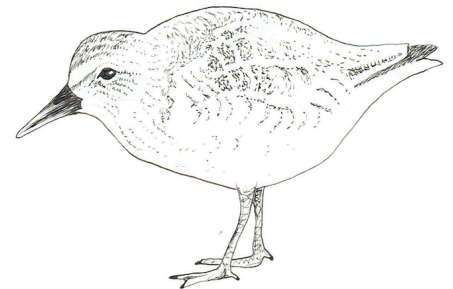
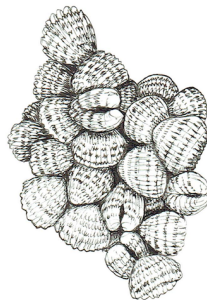
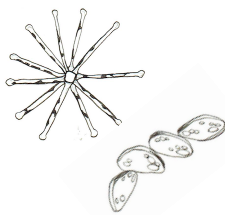
3: Do some **research** and **colour** in these drawings to show what the birds look like at different times of the year.



Summer plumage

Climate change: Red knots fly thousands of kilometres to South Africa for our winter. They do this because there is more food for them than there would be here in the winter. Scientists study these annual migrations, and feeding habits to see how the red knots' world works. Scientists also want to know how the populations of these animals are affected by human activity. Red knots hatch and grow up in the Arctic. The Arctic is rapidly warming, a result of climate change. This means that young chicks can miss the peak availability of food. Insects will emerge earlier than the chicks due to the warmer weather. This results in the birds being smaller and having shorter beaks. Having a shorter beak can mean it's much harder to find cockles and other molluscs in the sand.

Here is a food chain that shows red knots and their prey. Diatoms are a type of algae, they are found in almost all marine environments. They have skeletons made of silica and they are the start of this food chain.



4: Add arrows and labels to the food chain to show the direction of the flow of energy between the levels. Use these labels to help: **Red Knots, Diatoms, Cockles**

5: What do you think will be the consequence on the population of knots if it's harder for them to find their prey?

6: What do you think scientists can do to help red knots? How can we help?