



Stargazing beetles

Like astronomers, dung beetles spend a lot of time looking up at the stars. However, they do it for a very different reason. Staring at the night sky helps the beetles travel in straight lines and keep hold of their carefully collected balls of poo!

The Milky Way is a galaxy containing our planet and billions of stars. From Earth, it looks like a pale line across the sky.

Staying in line

After making a poo ball, dung beetles make a quick getaway. This is to stop other beetles stealing it. The best way to travel as far as possible is to run in a straight line. To do this, the beetles check the position of the Milky Way in the sky.



Looking to the sky

Other animals use the night sky to navigate, but different species look for different objects in space.



Moths fly in a straight line by keeping the position of the Moon in one place. Sometimes they mistake light bulbs for the Moon and fly round in circles.



Garden warblers use the stars to guide them on long migrations from Europe or Asia to Africa in winter.

Dung beetles

Dung beetles lay their eggs in the poo of larger animals. When each egg hatches, the larva eats the poo! Some beetles make the poo into a ball and roll it to a safe place before laying a single egg in it.

Nocturnal African dung beetle

This elephant poo is surprisingly nutritious!

To make sure it's on track, the dung beetle needs to be able to see the stars.

If a dung beetle doesn't get away from the poo pile, another beetle might steal its ball!

If the sky is cloudy, so the stars aren't visible, the beetle gets confused and can end up going round in circles!























**American
pika**

This pika is a small mammal that loves to eat plants. Some pikas live high up in the mountains, where there is lots to eat in summer but nothing in winter. They store vegetation when it's warm to keep them going until spring, but how do they make sure the food doesn't rot? With a bit of plant expertise.



Pikas collect lots of plants to store. Purple Parry's clover is a favourite; however, it doesn't last long before it rots. Yellow alpine avens contains chemicals that are poisonous to begin with, but they help to keep the plant fresher for longer.

January   	February 	March 	April 
May 	June 	July 	August 
September 	October   	November   	December   

Parry's clover

Alpine avens

Using plants

Pikas aren't the only animals that know about plants. Other animals also store vegetation, or even use it as medicine!



Acorn woodpeckers collect acorns in the autumn and store them in holes they have drilled into a chosen tree trunk. The acorns are then eaten over winter.



Gorillas use certain plants as medicines. They swallow some hairy leaves whole, which helps get rid of parasites from their gut.



Summer In summer, Parry's clover and alpine avens grow. The pika only eats the clover for now, because the avens contains a poison called phenol.

Harvest time The pika stores plants in a haypile, hidden in a rocky cave. The pika stores both the clover and avens. The avens won't be edible for a few months, but it will last into the winter.

Autumn menu In autumn, the pika starts to eat the stored clover; however, the avens is still too poisonous. The clover needs to be finished up before it rots.

Winter The clover has run out, but now the poisonous phenol in the avens has faded away and the plant is safe to eat. This keeps the pika going through winter.



Think about what you eat. Are there any foods you eat only in the Winter? Or foods you only eat in the Summer? Suitable for 7-9 years

Content from: *Clever Creatures*
Available now

