

- *While his collar was off, he caught a female robin red breast. She was feeding from the seed bag of canary food, under the shelf by the back door. Fortunately, her mate and the two chicks are alive and well and the chicks were quite well grown and feeding independently, so it was not the disaster it might have been.*
- *This is the only bird he has caught (apart from the baby flycatcher) – so, bells on cats really do work.*
- *The bronze-wing pigeons just ignore him or run away – he doesn't try very hard and he has grown very used to my canary and has stopped jumping on the cage.*
- *He will walk away from the canary cage if you tell him "NO!" We helped train him with the hose!*



- *He has caught one or two mice; he doesn't eat them but since the chickens got taken by the foxes, there are few mice to catch. The few who escape Burt usually escape him as well.*

Canaries – from whence do they come?

Canaries (*Serinus cararius*) do actually come from the Canary Islands, in the Atlantic Ocean, and belong to the Finch family (Fringillidae.) In their wild state, they are not the brilliant yellow or orange birds we have come to recognise as canaries: their natural plumage is a greyish-brown with patches of colour. Bred as cage birds since the 17th century, canaries are the most popular pet birds in the world.

Cultivated first by monks in Europe, they would only sell male (cock) birds – but no females (hens), so no one else could breed them for a long time. The Italians managed to get both male and female birds, so more canaries became available, although they, too, would only sell the male birds at first.

According to the legend, a merchant ship floundered off the coast of Flanders over three hundred years ago, and the canaries on board were set free and flew to France. Later, Flemish traders brought their canaries to Norwich, in England, and so began a long history of breeding, trading and exporting the birds.

By 1909, canaries had been a major trade for over two hundred years in Norwich, and one remarkable breeder, Jacob Mackley, had more than 10,000 birds of his own. Between 25,000 and 30,000 birds were being exported overseas every year, with most of them going to America.

They went as pets, some to be expensive showy, singing birds and some to save lives in coal mines.

A few years ago, I wrote a short story about Ulla Bird and his life up to that point – and a friend phoned me to tell me about his grandfather – who used to take his canary with him, down into the coal mines in Cornwall. This was really interesting to me, because my Dad's family came from Cornwall.

Coalmines? What do canaries have to do with coalmines?



odourless.

Working in the coal mines is still very dangerous and dirty work, and in the 1900's and earlier, it was much worse than it is now.

The great dangers of coalmines are methane gas, carbon monoxide and carbon dioxide. All three gasses are colourless and

Methane is highly flammable (it catches on fire very easily); explodes with great force and has been the cause of almost all coalmine explosions and the deaths of many miners. It is the main component of natural gas, which we use in our homes for cooking and heating, as well as in factories.

Many years ago, gaslight lit the streets of London and other cities at night before electricity became more widely available.



Is your home lit by electricity or by old-fashioned gas lamps, such as we had on the farm, when my children were small?

To help keep us safe the gas which comes to us, whether by pipeline or in a gas bottle, has mercaptan (or methane thiol) added, to give it the distinct smell of gas we know so well. Most people can detect it in extremely small quantities, and, like natural gas, it is extremely flammable.



Coal miners used to work using an oil lamp for light. With the invention of the Davy lamp (pictured on the left) in 1815, there was far less risk of methane catching alight in the mine.

The Davy Lamp still has an actual flame, but the heat spreads over a metal mesh shield and this lowers the temperature of the lamp, largely preventing the ignition of methane.

In addition, in the presence of methane, the flame of the Davy lamp burns more brightly, so the coal miners knew it was there.

Canaries are very sensitive to both methane and carbon monoxide, and if they stopped their chirping and singing, and showed signs of having trouble breathing, the coal miners knew it was time to leave the mine.

Sometimes, the canary would even die. Before they used canaries, the miners used mice, but the canaries were much easier to observe – both visually and by sound.

You might be surprised to know the last canary in a coalmine in the United Kingdom was retired in the mid-1980's – which is not too long ago. They were traditionally used two birds to a pit, going back to 1911.

Carbon Monoxide will suffocate you very quickly. During WWII, because of petrol rationing, many cars were fitted with gas fuel tanks which gave off carbon monoxide, and my Mother tells me I was very lucky to survive becoming unconscious in a taxi in Perth, when I was just a baby.

The cars ran on gas produced from charcoal, in a somewhat complicated fashion; didn't have the power to travel up steep hills and it was common for the passengers to have to get out and push.

Taxi drivers and others were always worried about the amount of carbon monoxide their charcoal burners produced and could not leave the windows up overnight or park the car in a closed garage – they had to give the gas a chance to escape.



This is a picture of the canary carrying cage, used by US Rescue Corps you will see on the next page. In the early 1900's over 20,000 canaries were being sold to the US, every year.

With so many canaries being bred in Norwich, sold and sent overseas, there was no shortage of canaries for coalmines, but we found no reports of taxi drivers having a canary in their car.

When the US Rescue Corps had to go into the mine to check for carbon monoxide, they might wear a special suit, but they always carried a canary, as in this picture and the bigger one on the previous page.



These days, coalmines have much better ways of testing for methane and carbon monoxide, so the miners know when it is too dangerous for them to stay in the mine, at the risk of dying from suffocation or gas explosions.

But even today, we read of people being gassed by carbon monoxide when they use petrol driven engines, like generators, in enclosed spaces without sufficient ventilation.

Living In The Coal Mine

Canaries were not the only animals living in the coalmines. For hundreds of years, pit ponies helped pull the coal out of the mines or delivered it underground to the recovery shafts.

If it was a "shaft" mine, the ponies lived underground – with some lucky ponies coming to the surface in a hoist when the mine closed for the holidays. The same hoist would later lower them down, to live in stables below.

With the oats and straw, to stable and feed the pit ponies, came mice – running free and not being used to test for methane. So, a stray cat or two would be taken down the shaft to keep the mice under control.

Rats were plentiful as well, and insects of various kinds (including large cockroaches) would frequent the tunnels and the underground stables.