

How I came to envy the country mice

I have been living in London for more than 60 years, but still, when I'm driving and take some clever back-street short cut, I catch myself thinking: how extraordinary that it is me doing this! For a moment the town mouse I have become is being seen by the country mouse I used to be. And although, given a new start, I would again become a town mouse, when I visit relations in the country, I envy them.

Recently, I stood beside a freshwater lake in Norfolk, made by diverting a small river, near where my brother lives. As he was identifying some of the birds we could see, in came seven swans. They circled, then the haunting sound of their wing beats gave way to silence as they glided down for splashdown.

It is not a 'picturesque' part of the coast, but it has a definite character of line and light and colour. 'You do live in a lovely place,' I said to my brother, and he answered, 'Yes, I do.' There are probably few days when he does not pause to recognise its loveliness as he works with his boats – he teaches sailing – or goes about his many other occupations.

The lake's creator is a local landowner, continuing a tradition whereby the nature of our countryside has been determined by those who own the land. Formerly, landowners would almost certainly have made such changes for their own benefit, but this time it was done to help preserve the wildlife here, which is available for any visitor to see, providing they do nothing to disturb the birds. It is evidence of change: country life is changing fast.

One of the biggest changes I have witnessed is that second-homers, together with commuters, have come to be accepted as a vital part of the country scene. And the men and women who service their cars, dig their gardens, lay their carpets and do all the other things they need are vital to modern country life. It is quite likely that the children of today's workers may be moving into the same kind of jobs as the second-homers and the retired. Both the children of a country woman I know are at university, and she herself, now that they have left home, is working towards a university degree.

Much depends, of course, on the part of the countryside you are living in and on personality – your own and that of your neighbours. In my brother's Norfolk village, social life seems dizzying to a Londoner. In addition to dropping in on neighbours, people throw and attend parties far more often than we do. My brother's wife Mary and her friends are always going into Norwich for a concert or to King's Lynn for an exhibition. The boring country life that people from cities talk about is a thing of the past – or perhaps it was always mainly in their minds.

This is very unlike living in a London street for 50 years and only knowing the names of four other residents. In these 50 years I have made only one real friend among them. I do enjoy my life, and Mary says that she sometimes envies it (the grass on the other side of the fence ...); but whenever I go to Norfolk, I end up feeling that the lives of country mice are more admirable than my own.

- 31 It is sometimes a source of surprise to the writer
- A to find herself driving through back streets.
 - B that she has been in the city for so long.
 - C to realise how much she has got used to living in London.
 - D that she lives in the city when she prefers the country.
- 32 The atmosphere created by the writer when she describes the swans is
- A moving.
 - B frightening.
 - C deafening.
 - D disturbing.
- 33 What does 'It' in line 15 refer to?
- A the lake
 - B the fact that the lake belongs to a landowner here
 - C the reason for the landowner's action
 - D the fact that wildlife now needs to be preserved
- 34 What is suggested about outsiders who now live in the country?
- A that country people no longer reject them
 - B that they often do work like servicing cars and digging gardens
 - C that the men and women who work for them are from the city
 - D that many of them have been in the countryside for a long time
- 35 Social life in the country
- A depends completely on where you live.
 - B is not as boring as people in cities think it is.
 - C is not affected by your neighbours.
 - D is always less exciting than life in the city.
- 36 What do we learn about the writer's attitude to London in the final paragraph?
- A She can't adjust to living in London.
 - B She has regretted moving to London.
 - C The people in her street are unusually unfriendly.
 - D Life there is very different to country life.

Our amazing hands

The hand is where the mind meets the world. We use our hands to build fires, to steer airplanes, to write. The human brain, with its open-ended creativity, may be the thing that makes our species unique. But without hands, all the grand ideas we think up would come to nothing.

The reason we can use our hands for so many things is their extraordinary anatomy. **37** Some are connected to bones within the hand, while others snake their way to the arm. The wrist is a floating group of bones and ligaments threaded with blood vessels and nerves. The nerves send branches into each fingertip. The hand can generate fine forces or huge ones. A watchmaker can use his hands to set springs in place under a microscope. A sportsman can use the same anatomy to throw a ball at over 100 kilometres an hour.

Other species have hands too. **38** In other cases we have to look closer. A bat's wings may look like sheets of skin. But underneath, a bat has the same five fingers as a human, as well as a wrist connected to the same cluster of wrist bones connected to the same long bones of the arm.

In exploring how hands have evolved, researchers over the past 150 years have dug up fossils on every continent. They've compared the anatomy of hands in living animals. They've studied the genes that build hands. It appears that our hands began to evolve at least 380 million years ago from fins – not the flat,

ridged fins of a goldfish but the muscular, stout fins of extinct relatives of today's lungfish. Inside these were a few chunky bones corresponding to the bones in our arms. **39** The digits later emerged and became separate, allowing the animals to grip underwater vegetation as they clambered through it.

40 Some species had seven fingers. Others had eight. But by the time vertebrates were walking around on dry land 340 million years ago, the hand had been scaled back to only five fingers. It has retained that number of fingers ever since – for reasons scientists don't yet know.

Nevertheless, there are still many different types of hands in living species, from dolphin flippers to eagle wings to the hanging hooks of sloths. **41** They can also see that despite the outward differences, all hands start out in much the same way. There is a network of many genes that builds a hand, and all hands are built by variations on that same network. It takes only subtle changes in these genes to make fingers longer or to turn nails into claws.

The discovery of the molecular toolbox for hand building has given scientists a deeper understanding of evolution. **42** It may just be a little more of one protein here, a little less of another there. In the past, scientists could recognise only the outward signs that hands had evolved from a common ancestor. Today scientists are uncovering the inward signs as well.

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| <p>A Over time, smaller ones developed that would eventually become wrists and fingers.</p> | <p>E By studying these, scientists are beginning to understand the molecular changes that led to such dramatic variations.</p> |
| <p>B Although a vulture's wing and a lion's paw may appear to have nothing in common, the difference between them may come down to tiny variations.</p> | <p>F The thumb alone is controlled by nine separate muscles.</p> |
| <p>C They also use them for a number of different purposes.</p> | <p>G Early hands were more exotic than any hand today.</p> |
| <p>D No one would doubt that the five fingers at the end of an orangutan's arm are part of anything else.</p> | |

You are going to read an article about the activities organised by four schools for Environmental Awareness Day. For questions **43–52** choose from the schools (**A–D**). The schools may be chosen more than once.

Mark your answers **on the separate answer sheet**.

Which school

- | | | |
|--|----|----------------------|
| became better known after Environmental Awareness Day? | 43 | <input type="text"/> |
| provided online information about the environment? | 44 | <input type="text"/> |
| asked a specialist to give a talk? | 45 | <input type="text"/> |
| raised money to help an organisation? | 46 | <input type="text"/> |
| organised a trip to study animals by the sea? | 47 | <input type="text"/> |
| is following changes in general weather conditions? | 48 | <input type="text"/> |
| carried out a project about endangered animals and plants? | 49 | <input type="text"/> |
| arranged a talk on pollution and local architecture? | 50 | <input type="text"/> |
| decided to protect a local historical site? | 51 | <input type="text"/> |
| is located in the centre of the city? | 52 | <input type="text"/> |

Environmental Awareness Day

A Plumpton High School

This school decided to arrange a variety of activities, some aimed at achieving a better understanding of environmental problems, and others designed to be of practical help. For instance, the school magazine brought out a special edition on the subject, full of articles and stories where pupils expressed their feelings about the threats facing our environment. In another attempt to find out for themselves how serious these threats really are, the pupils decided to study the problem of pollution by making a survey, run by the science department, into air pollution in the local shopping centre. The school also held a sponsored walk and handed over nearly £1000 to the World Wide Fund for Nature. Pupils prepared a campaign to ban cars from the city centre and reduce traffic congestion. They gained a lot of publicity for the school by cycling through the city and handing out brochures about the benefits of cycling and walking.

B Cresswell College

The staff and students at Cresswell College held a meeting and discussed a number of suggestions. The most popular suggestion turned out to be the most practical one; it was decided that the local environment should be brightened up. Teams were sent out to plant flowers and young trees on areas of land in the neighbourhood. Senior students monitored the progress of species threatened with extinction and prepared a report on their findings. It was hoped that this would help publicise the problem. A leading expert on wild birds was invited to come and give a talk about the dangers faced by these creatures. He explained the importance of the food chain and asked people to support local wildlife reserves.

C Grayner Institute

This school had already been involved in some projects connected with the environment, though naturally efforts were increased for Environmental Awareness Day. For the last two years the school had been studying the effects of variations in climatic patterns around the world and how these can affect wildlife. A film about those magnificent marine mammals, whales, which was shown to the whole school as part of Environmental Awareness Day, was received with great enthusiasm by pupils. Meredith Summers was invited to talk about how pollution can destroy buildings in the region. Following that, pupils decided to launch a campaign for the restoration of the medieval square in the city centre and asked local authorities to support them financially.

D Halliwell Academy

The pupils at this inner-city secondary school felt that the best way to mark Environmental Awareness Day would be to help people in the area understand how important the environment is to them. One suggestion that was greeted with enthusiasm was to measure the levels of noise in Stanley Road, a busy local shopping street. The information was then placed on a website that the school had started. In order to give them a chance to see for themselves the problems facing some local species, the school took pupils to the coastal marshes of Easton. Many pupils reported afterwards that they had never realised how terrible the effects of pollution could be on coastal wildlife.