

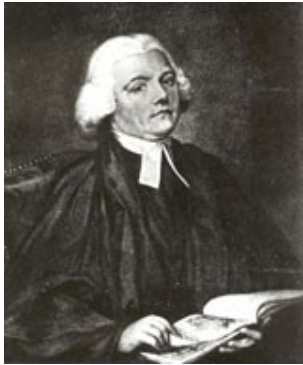
3rd February

Memory verse:

Take heed therefore that the light which is in thee be not darkness.
Luke 11:35

There is more information about this memory verse in the lesson for 30th January.

Something to find outside



In 1776 Gilbert White was documenting a severe cold spell all through January¹ which suddenly came to an end when February began. He wrote in his diary on today's date:

On February 3rd swarms of little insects were frisking and sporting in the court-yard as if they had felt no frost. Why the juices in the small bodies and smaller limbs of such minute beings are not frozen is a matter of curious inquiry.

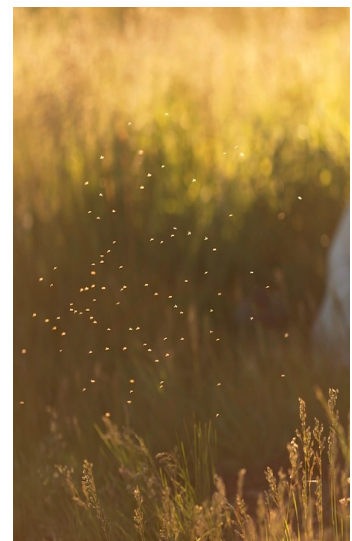
Some insects migrate to avoid the cold and some burrow underground where the soil and even the snow itself acts as a blanket to keep them warm. However the insects that Gilbert White saw on 3rd February were probably not insects that had done either of these things.

Insects can be divided into freeze tolerant and freeze *intolerant*. Freeze tolerant insects can survive the cold because they do not die even if their bodies are frozen solid. As water freezes it expands and if this happened to the water in the cells in an insect's body they would burst, causing it to die. However, a freeze tolerant insect can control where in its body the ice crystals form and the cells and organs remain undamaged. When the temperature rises again the ice melts and the creature can become active once more.

Freeze intolerant insects have chemicals in their bodies that act rather like the “anti-freeze” that is put into car radiators. These prevent the creature from freezing.

Gilbert White would have been fascinated! Go and have a look for insects in your own garden today. If the weather is sunny you may well find some “frisking and sporting” in a warm patch.

It would be very difficult to explain how such an ability to survive freezing weather could evolve through natural selection. The system would have to arrive in complete working order or it would be of no value to the insect. God put information into the DNA of insects to enable them to survive the conditions they face in this fallen world, even though the world he created in the beginning was perfect. How good God is!



¹ See lessons for 16th, 20th, 21st and 27th January.

A story from history: The South Sea Bubble²

In 1711, the ninth year of queen Anne's reign, a charter of incorporation was granted to a company trading to the South Seas; and the South Sea company's affairs appeared so prosperous, that, in 1718, king George I being chosen governor, and a bill enabling him to accept the office having passed both houses, on the 3d of February, his majesty in person attended the house of lords, and gave the royal assent to the act.

At this time there was a great enthusiasm for starting companies. Perhaps it was the materialism of this age when things were so low spiritually that made people willing to invest in any mad scheme, such as extracting gold from sea water, fattening pigs by a particular method, or making a perpetual motion machine. The South Sea Company, formed to trade with the Spanish colonies in South and Central America, was one of these. The directors of the company offered to take over the National Debt from the government so that people who lent money to the government became shareholders in the company. It offered to pay the government seven million pounds for this.

People at once thought that the company must have great prospects. They rushed to buy shares, the price of which rose dramatically.

Even the more prudent, who had laughed at the folly and madness of others, were seized with the mania; they borrowed, mortgaged, and sold, to raise all the money they could, in order to hold the favourite stock; while a few quietly sold out and enriched themselves. Prodigious numbers of people resorted daily from all parts of the kingdom to 'Change-alley,'³ where the assembled speculators, by their excessive noise and hurry, seemed like so many madmen just escaped from cells and chains. All thoughts of commerce were laid aside for the buying and selling of estates, and traffic in South Sea stock.

Prime Minister Robert Walpole warned of the dangers of what was happening but no one took any notice. Alas, some of the other companies were discovered to be frauds. A panic set in as people tried to get back what they had invested and most of the companies, the South Sea Company included, went bankrupt. Thousands of people lost all their savings. People began to fear that money lent to the government for the National Debt would also be lost. The Chancellor of the Exchequer was sent to the tower but people trusted Walpole. He had warned of the danger from the outset. His financial skill enabled him to put together an arrangement which left the South Sea shareholders less badly off than they had expected. But some people had also quietly gained from the Bubble:

In 1720, soon after the bursting of the South Sea bubble, a gentleman called late in the evening at the banking-house of Messrs. Hankey and Co. He was in a coach, but refused to get out, and desired that one of the partners of the house would come to him. Having ascertained that it was really one of the principals, and not a clerk, who appeared, he put into his hands a parcel, very carefully sealed up, and desired that it might be laid on one side till he should call again, which would be in the course of a few days. A few days passed away – a few weeks, a few months, but the stranger never returned. At the end of the second or third year, the partners agreed to open this mysterious parcel, in the presence of each other. They found it to contain £30,000, with a letter, stating that it was obtained by the South Sea speculation, and directing that it should be vested in the hands of three

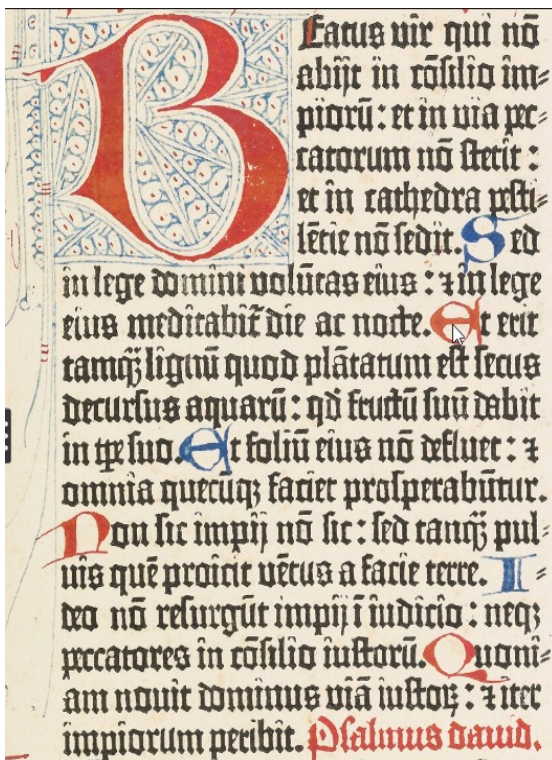
2 Adapted from *The Story of God's Dealings with our Nation* Volume 1 which is available here: <https://www.creationresearchstore.com/s/search?q=Dealings> Highlighted quotations are from William Hone, *The Every-day Book and Table Book*, Volume 1 (London, 1826) If you remember the lesson from 13th January about Jan Josephszoon van Goyen you will notice the similarities to the Dutch Tulip "Bubble."

3 An alley in London where there were coffee-houses where people bought and sold shares. The forerunner of the stock exchange.

trustees, whose names were mentioned, and the interest appropriated to the relief of the poor, which was accordingly done.

Something to do

Today marks the death of a man we know very little about but who did something that revolutionised the world and caused an explosion in the availability of God's Word. Johann Gutenberg (c.1386-1468) died on 3rd February. Gutenberg pioneered the use of printing using metal moveable type and he was responsible for what is possibly the first ever printed book, the Gutenberg Bible.⁴ The Gutenberg Bible is an edition of the Latin Vulgate.⁵ When that translation was first made, Latin was the common language of much of Europe. By Gutenberg's time this was no longer the case. Now it was only the language of scholars. Ordinary people did not speak it. One of the great things that happened at the Reformation period was the translation of the Bible into the languages that ordinary people spoke. Luther translated the Bible into German, Tyndale translated it into English, Diodati translated it into Italian and so on.⁶ In the picture below you can see part of a page from the Gutenberg Bible. It shows Psalm 1.



In earlier times all Bibles had to be copied by hand.

Copy out Psalm 1 in your best writing and time yourself carefully. How long does it take? There are 130 words in Psalm 1. There are 783,137 words in the whole Bible. How long would it take you to copy out the whole Bible if you could do it at the same rate? If you calculate the total number of hours then imagine you worked at copying for eight hours a day for six days per week. How long would that take you? I think this calculation will make you very grateful for Gutenberg's development of printing!

⁴ There is more information about Gutenberg in the lesson for 24th June.

⁵ See the lesson for 30th September.

⁶ See the lesson for October 5th for more information on Tyndale's translation and 3rd October for information on Diodati.