## Book Review by Hugh Prudden, Somerset Geology Group

Brunt, G. 2010. Surface geology, topography, agriculture and butterflies. In: *Butterflies in Somerset and Bristol.*Somerset and Bristol Butterfly Branch of Butterfly Conservation.

It is always of interest to see how geology links with other sciences. Brunt provides a simplified map of Somerset geology but, to be meaningful, one really needs small-scale sample areas to judge the ph, soil type and any superficial deposits that cover the 'solid' geology.

Brunt gives a table with the various rock groups and their alkalinity e.g. 'Greensand -Acid'. But the areas shown as Greensand in the Blackdown Hills are very complex; there are some seven soil associations determined by rock type, landforms and In this case, drainage. the peaty waterlogged seepages at the base of the Greensand are certainly acidic as are the superficial, stony podzolic soils on the plateau. However much of the Greensand is alkaline and not to be compared, for example, with the non-calcareous sands of the Dorset Heaths.

This is not to say one cannot connect the rocks with butterfly populations at specific localities as for example on the Polden Ridge (White and Blue Lias); you may have seen recent TV programmes about the introduction of the Large Blue on the SW facing warm escarpment south of Street.

Another fine example is Draycott Sleights on the south facing slopes of the Mendips where there is a thin soil cover over Carboniferous Limestone. The associations between the distribution of butterflies and soil types, vegetation and management is a fascinating study.

This compilation is a must for butterfly enthusiasts: superb colour plates, distribution maps for each species, trends in numbers, flight times, habitats and places to see butterflies. It is a tribute to all the hard work involved in monitoring Somerset's butterflies.

The book can be obtained from Alan Hold, 1 Brownings Road, Cannington, Bridgwater, TA5 2RH. £13.50 including p&p.

## A few Howlers.....

Spraying water on lahars and pyroclastic flows can slow them down.

My mother didn't do any recycling until she got a grey bin and then she turned green.

Peat is scared by fire.

Equation for photosynthesis: sun = oxygen + photosynthesis + glucose.

Nuclear power station might be in danger of traffic vibration from the nearby motorway.

A person can experience hazards like death, although not frequently.

Social impact of volcanoes – immediate death.