AWG’s 2018 Classic Geosites in England Field Trip

In July, 15 intrepid AWG members participated in a field trip to visit classic geological sites in two different areas of England. The trip was ably led by Chris Darmon and Colin Schofield of Geo Supplies, Ltd. (www.geosupplies.co.uk), a company based in Sheffield specializing in selling geologic supplies and books, as well as running courses and field trips ranging from one-day to multiday “residential” geologic tours. In 2016, I attended a 10-day Scotland tour put together especially for the Northwest Geological Society (based in Seattle) and was impressed enough that I requested they put together an England trip for AWG. We settled on 2 full weeks, one week in Shropshire, England along the border with Wales, and one week in south-central England, focusing on beach exposures in Devon, Somerset, and Dorset along both the Bristol and English Channels. Aside from a misty morning in Lyme Regis, we had fair weather for the entire trip, including a few days with all-time record high temperatures, so we never really needed our raingear. It did, however, make for warm nights in our hotels, since air conditioning is nearly nonexistent outside of major cities.

For our week in Shropshire, we took day trips out of the lovely medieval town of Ludlow, including one day into Wales to see Ediacaran metagabbros preserved in the Welsh Borderland fault system activated during the continental collision that created Pangaea during the late Paleozoic Caledonian orogeny (the Allegheny in North America). Colin drove us all around in a 17-person mini-bus, navigating the narrow roads with great skill. We saw sites for each of the periods of the Paleozoic, including some type sections established by early British geologists such as Murchison and Lapworth. Most of the exposures were either in quarries, including a hike to see the basal Cambrian unconformity, with quartzites overlying latest Precambrian granophyre, or in roadcuts. Highlights included a tour of Snailbeach Lead Mine in the Stiperstones (a resistant ridge of Ordovician quartzites), a historic steam railway excursion up the Severn River to see Carboniferous exposures in a historic coal mining area, a hike along the Long Mynd (latest Precambrian sediments) to see features of the Church Stretton Fault (the southern margin of the Welsh Borderland fault system), and a driving/walking tour in and around Ludlow to see exposures where Murchison named several Silurian Epochs. We drove through other picturesque medieval towns that gave their names to Silurian Epochs, including Llandovery and Much Wenlock. Several stops gave us opportunities to collect fossils, including graptolites and trilobites. This week included a “free day” to give Colin a rest from driving, which several people took advantage of to properly tour Ludlow’s medieval castle, church, and streets lined with half-timbered buildings. A few of us took the train north to Shrewsbury to see the largest town in Shropshire, the medieval city where Charles Darwin grew up.

For our second week, we drove south to Taunton, a mainly Victorian railroad town chosen for its central location for our day trips. Our days generally alternated between trips north to the Bristol Channel coast and trips south to the English Channel coast. Both coasts featured fine exposures of Devonian through Mesozoic rocks, and structures dating back to the late Paleozoic Variscan (aka Hercynian) orogeny, as well as the late Mesozoic Alpine orogeny. They’re also major tourist attractions, and many days were punctuated by stops to sample the excellent local ice creams (Devon being famous for its cream).
Field Trip Continued from Page 12

We explored the Bristol Channel coast from Lee Bay in Devon near Ilfracombe east to Portishead (near Bristol) in Somerset. Highlights included a spectacularly scenic cliff walk through Devonian sandstones along the north Devon coast at the Valley of the Rocks near Lynton, a beach walk near Klive to see large ammonites (often pyritized) in lower Jurassic sandstones and mudrocks, and a beach walk near Portishead to see the tilted Devonian “Old Red Sandstone” unconformably overlain by basal Permo-Triassic “New Red Sandstone” breccia.

We explored the English Channel coast from Dawlish in Devon east to Kimmeridge Bay in Dorset. Highlights along that coast included a day in Mary Anning’s Jurassic fossil hunting grounds in Lyme Regis and nearby Charmouth (where most of us found several types of Jurassic marine fossils including small ammonites and brachiopods), a hike in the Dawlish area to see Permo-Triassic alluvial and dune deposits (the “New Red Sandstone”), and a short hike to Durdle Door along the English Channel coast, where vertically oriented Mesozoic rocks, turned on edge during the latest Mesozoic Alpine orogeny, create a large coastal arch. (Most of us were equally fascinated by the polished chert pea gravel beach and the horizontal decollement running through vertical beds of Cretaceous chalk.) Our trip was capped by a trip to the Isle of Portland near Weymouth, featuring a panoramic view of Chesil Beach, the nearly 12-mile long chert gravel spit/beach running northwest from the Isle, connecting it with the mainland and extending west down the coast. The source of all these chert gravel beach deposits is “flint” (so-called in Britain regardless of color) nodules from the Cretaceous chalk.

Next year’s field trip is still undetermined, but hopefully my new Field Trip Committee Co-chair, Sarah Cadieux, and I will decide on something soon. If New Zealand is on your bucket list, please plan to join us for a two-week trip in the February/March timeframe in 2020.

Waiting to get on our 17-person minibus. (Photo by Jean Bahr)
Crawford and Chrysalis Awardees Continued from Pages 11 and 9

Crawford Awardees (above): Samatha McComb and Molly Gallahue

Chrysalis Awardees (below): Stacy Hendricks, Alicia Tyson, and Maggie Graham
Left: Brenda Buck and Donna Jurdy get in the British holiday spirit and take to the water near Dawlish (Permo-Triassic red sands in the background). (Photo by Barbara Radovich)

Above Right: One of many ice cream stops. Note the normal fault in the background placing gray Jurassic sandstones and shales against red Permo-Triassic sandstones. (Photo by Brenda Buck)

Below Left: A typical lunch stop – picnic tables were rare. (Photo by Brenda Buck)

Below Right: Ammonite near Klive. (Photo by Jean Bahr)
Field Trip Photos Continued from Page 18

Left: Nina Baghai-Riding with statue of her hero Charles Darwin in front of Shrewsbury’s Castle Gates Library (Shrewsbury School when Darwin attended). (Photo by Marcia Knadle)

Above Right: The spectacular (and vertigo-inducing) Valley of the Rocks coastal walk near Lynton, Exmoor National Park, north Devon coast. (Photo by Jean Bahr)

Right: Gray Cambrian Wrekin Quartzite unconformably overlying pink latest Precambrian granophyre. (Photo by Jean Bahr)

Below: The historic Severn Valley Railway train we rode on. (Photo by Jean Bahr)