Severn Expeditions

BRETT WESTWOOD

A hunting Hobby plucked a House Martin from the air overhead as we inflated the Environment Agency dinghy on the banks of the Severn at Arley on August 28 2009.

Harry Green, dinghy-provider Mike Averill and I had joined Rosemary Winnall and bryologist Mark Lawley on an expedition to survey mosses and other wildlife along the Severn corridor. We were hardly Lewis and Clark material, more like an episode from Just William, as we pushed off from land, trussed up tightly in life-jackets and wielding a bizarre assortment of paddles. Our clumsy efforts were mocked by Rosemary's balletic handling of her accompanying canoe, kindly lent by Phil Rudlin.

Locomotion was clearly going to be problem, but there were other complications. In the stretch of river we had to survey, we'd picked one of the most convoluted county boundaries known to mankind. Between Arley and Bewdley, the Severn flows through old Staffordshire, new and old Worcestershire and old Shropshire. The need to record mosses and other wildlife within the Watsonian Vice-county boundaries further complicated things and not for the first time, we realised the value of GPS.

Our first stop was directly across the river from our launch spot. At Worrall's Grove we took advantage of low water levels to explore rocky outcrops inaccessible from land. Inching his way along the shore, Mark Lawley began what was to become a familiar routine, scraping minute slivers of identical-looking green baize from rocks, bark or soil and lovingly enfolding each in a newspaper parcel, to be identified later, one of which turned out to be *Mnium marginatum*, not vouched from the vice-county of Staffordshire for more than 50 years. *Didymodon nicholsonii*, *Scleropodium cespitans* and *Rhynchostegiella teneriffae* also turned up, with the little liverwort *Leiocolea turbinata* finding a small niche of calcareous rock. Larger attractions here were about 150 umbels of Keeled Garlic (*Allium carinatum*), its rosy flowers past their best on a stony outcrop, which turned out to be the only extant colony in VC39 (Staffs). Also here was another very local plant for Staffordshire, Green Figwort (*Scrophularia umbrosa*), a nationally scarce species which seems to be on the increase along the Severn in Worcestershire.

Further downstream, we alighted near a small cluster of mossy stones near Victoria Bridge, which provided us with an otter spraint and the common river moss *Cinclidotus fontinaloides*.

We lunched on the shingle beach below Trimpley Reservoirs where the river flows rapidly over a deep pebbly channel below Seckley Dingle. One of us (BW) had been fascinated by an account written for the Worcestershire Record by the late Don Goddard, of his discovery of the water-bug *Aphelocheirus aestivalis* in the River Teme and this seemed an ideal location in which to look for it. This flattened and almost circular bug absorbs air through its plastron and so never needs to visit the surface. It seems to be restricted to fast-flowing well-oxygenated channels where it stalks its prey among water-rounded pebbles.

The lunchstop on the shingle at Trimpley, Mike Averill, Rosemary Winnall, Mark Lawley and Brett Westwood, 28th August 2009 Harry Green

We kick-sampled in the shallower riffles, turning up a bullhead and plenty of mayfly larvae, but when Rosemary ventured into deeper waters, she struck entomological gold. Soon we had three *Aphelocheirus* swimming nose-down in specimen trays. Handling these khaki-coloured bugs requires care because they have a piercing syringe-like organ called a rostrum through which they suck their prey's vital juices: they're not averse to probing human skin either. Although *Aphelocheirus* is widely distributed nationally, it is a local insect in Worcestershire and was new to all of us. After lunch we headed south again, stopping at various

Aphelocheirus aestivalis, Trimpley shingle Harry Green

Aphelocheirus aestivalis underside. See long rostrum held beneath abdomen and reaching middle pair of legs Harry Green

locations in various counties – more scraping, more green baize. Kingfishers darted across the river, and Mandarin Ducks, the drakes looking rather tatty in their eclipse plumage, rose up in front of the dinghy. Several Spotted Flycatchers were sallying out over the river from the fringing osiers north of Bewdley, a welcome sign given that numbers nationally are crashing. These may have been local breeders but could equally have been passage birds from elsewhere beginning the journey back to West Africa.

Just back within the vice-county of Worcestershire, an outcrop of rock on the eastern bank of the river at SO 778770 sprouted the moss *Epipterygium tozeri* new to VC 37, with *Didymodon nicholsonii* and *Mnium marginatum*. An *Amblystegium* creeping over the damp rock just above the abnormally low water-level of the river caused consternation when later examined microscopically, for it had markedly decurrent leaf-bases – a distinctive characteristic of the rare Red Data Book *A. radicale*. However, it turns out that *A. varium* (also uncommon) may also sometimes have decurrent leaf-bases, which is what this gathering from the Severn was.

Mark Lawley searching for bryophytes Rosemary Winnall

As we approached the Environment Agency's flow monitoring station in late afternoon, heavy rain set in and recording stopped. The true fruits of Mark's labours became apparent a few days later when he announced an impressive list of 54 mosses and 6 liverworts.

On October 3, the river was down to 827 million litres per day past the flow gauge station north of Bewdley as we set out for part two of the Severn challenge. Lack of rain in September had lowered levels so much that large aprons of rock were exposed near the bank, ideal for bryophyte surveying. A rocky exposure on the western bank (SO 782761) just in the vice-county of Shropshire supported *Rhynchostegiella curviseta*, a southern species which becomes rare in the Midlands, being replaced by *R. teneriffae*. A tuft of the thallose liverwort *Blasia pusilla* was unexpected, and more *Amblystegium varium* was also a welcome record.

On this our second adventure paddling down the Severn, we had to cope with crews from Bewdley rowing club powering upstream of the bridge and so like nervous

Keeled Garlic (Allium carinatum) Harry Green

Wyre Forest Study Group


Gomphus vulgastissimus exuvia, Bewdley quay Harry Green


Liverwort, Conocephalum salebrosum, Bewdley Harry Green

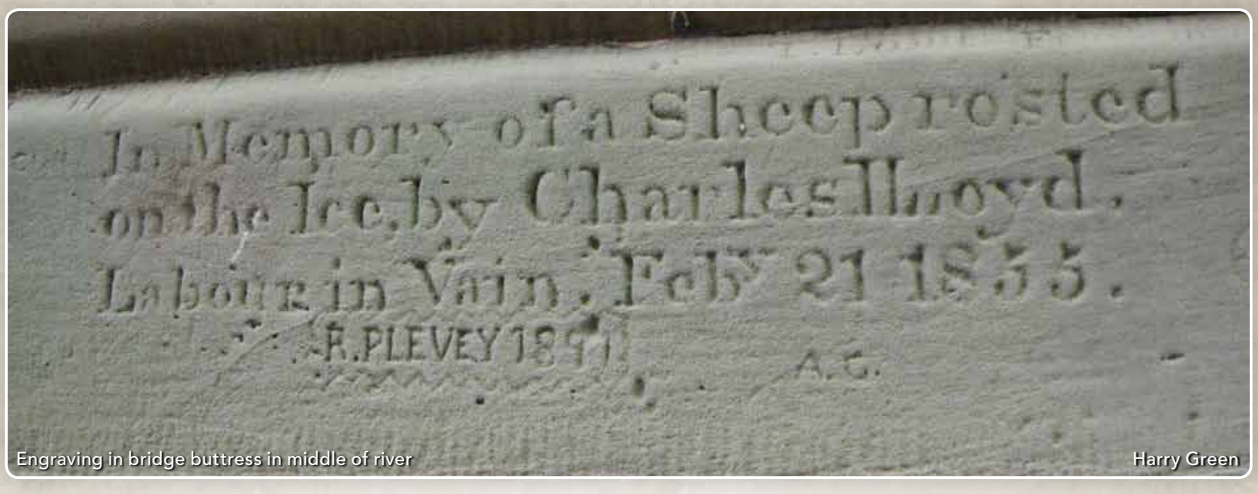
swimmers, we clung to the sides until we reached the town. Telford's sandstone arches were fully exposed by the low levels and Rosemary Winnall pointed out a neatly engraved inscription beneath one of them (see page 6). "In Memory of a sheep rosted on the ice by Charles Lloyd, Labour in Vain, February 21 1855", a testament to the severity of Victorian winters. On the bridge supports and river walls we found many mud-encrusted exuviae of Club-tailed dragonflies (*Gomphus vulgatissimus*) which had emerged in early summer and had survived the summer floods intact. Bryophytes included a second station in VC37 for *Epipterygium tozeri* – this time on a stone retaining wall at SO 787753 – as well as *Bryum gemmiferum* (much like the ubiquitous *B. dichotomum*, which also has vegetative bulbils in its leaf-axils, but *B. gemmiferum* seems to particularly favour riverbanks), *Fissidens exiguus* and *Gyroweisia tenuis*. Disappointingly, we failed to find *Fissidens fontanus* (*Octodiceras fontanum*) at Bewdley, where J. B. Duncan discovered it new to Britain in 1901. And we looked in vain for the rare *Tortula amplexa* (*Syntrichia amplexa*) that is known from the bank of the River Stour at Wilden Marsh, as well as in a gravel-pit south of Bridgnorth, further up the Severn valley.

South of the bridge, the river was so shallow that the dinghy grounded several times on the river bed, forcing us to get out and push: at one point we had to navigate behind anglers standing in mid-stream. We headed purposefully out of town towards the by-pass bridge aiming for a large and promising shingle beach. A stone beside the river downstream from the town sprouted a *Fissidens* moss that was later confirmed as the uncommon *F. rivularis*, new to Worcestershire. 51 species of bryophyte were recorded during the day. Under a flock of House Martins, we fished for *Aphelocheirus aestivalis* without luck - or so we thought. Examining his collection later, Harry Green found a single nymph from the site, giving us a second location for the Study Group's area. There were plenty of mayfly larvae, including *Ecdyonurus* species, a caseless caddis which Harry identified as *Hydropsyche pellucidula* and the introduced North American shrimp *Crangonys pseudogracilis*, greyish with an orange patch. Two molluscs provoked discussion and proved to be the Painter's Mussel (*Unio pictorum*) and the Duck Mussel (*Anondonta anatina*) with its distinctive triangular "wing". More discussion involved soft greenish patches on submerged stones - freshwater sponges, but which ones? Lacking concentrated nitric acid to free up their silicon spicules, we plumped cautiously for *Spongilla lacustris* which has two distinct spicule shapes, but couldn't rule out the similar *Ephydatia fluviatilis* which has only long spicules, but resembled our specimens more closely.

Searching for mosses under the by-pass bridge, Mark Lawley heard a sweet song like that of a warbler, which proved to be a dipper feeding on the exposed shoreline. Lack of rain had forced them off Dowles Brook and onto the river: at the same time there were also two birds feeding on shingle at Folly Point near Trimpley.

Our final stop was the massive sandstone hulk of Blackstone Rock, complete with hermit's cave and wild service trees. We negotiated carefully around its base collecting the river snail (*Viviparus viviparus*) and finding Navelwort (*Umbilicus rupestris*) in bloom before our trip was over.


Larva of a Caseless web-spinning Caddis (Hydropsyche pellucidula) from the River Severn near Bewdley Harry Green



Engraving in bridge buttress in middle of river — Harry Green

"In December 1890 the river froze over in Bewdley. The coldest night of the year was Sunday 28 December. Many people took advantage of the opportunity to skate. The ice was good between Dowles Railway Bridge and the Severn bridge but south of this, down to Ribbesford, the ice was dangerously thin. Although thousands skated almost daily over several weeks not a single accident of a serious nature occurred from the ice giving way. When the ice began to thaw it caused fear that the bridge might be washed away due to the pressure upon the pillars. The loss of river craft was considerable and amongst the boats damaged was the Floating Swimming Baths. They were later recovered and repaired. Many people's livelihoods were threatened and the Blackford Coal, Blanket and Clothing was of considerable help to poor families."

Images of England - Bewdley (Tempus Publishig Ltd.) 2005
Researched and produced by Bewdley Historical Research Group

Ice skaters on frozen River Severn, looking north from Bewdley bridge 1890 — From Bewdley Museum's collection