

Fig. 53

system adopted in "Caves of North-west Clare." Fresh water can also be found at the bottom of a deep grike about 100 yards inland from S₃, the level here also fluctuating with the tide.

On July 15th 1970, charcoal bags placed in S₃ rising during the simultaneous attempts at tracing Polldonough (Coolagh River Cave) to B11 pot-hole, and tracing Poulomega to the Oughtdarra risings, became positive after three days. The ambiguity of this finding necessitated separate tracing tests: Polldonough was dyed again on Aug. 14th 1970, and S₃ was found positive within two days. This test coincided with heavy rain, hence the shorter run-through time. Dye put into the Poulmagree water, which is eventually joined by the Poulomega stream, late on Sept. 29th, was also detected at S₃ after three days. Hence S₃ serves as a common resurgence for the Coolagh River, and the combined Poulomega and Poulmagree streams.

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Underground Water Tracing, N. W. Clare

Considerable progress has been made during the last two years. Assistance in this matter has been given by staff and students of the Gography Department of the University of Bristol. The following is a brief note on the results.

West side of Knockauns Mountain

The initial information about the resurgences at Lackanishka and Oughtdarra was obtained from Mr. Johnny Kelleher of Oughtdarra. The diagram (fig. 53) illustrates the results obtained using pyranine conc as the tracing dye and activated granular charcoal as the detector. Lackanishka is a complex resurgence in classical karst form. The water comes up at the foot of a limestone scarp, runs on the surface on the platform at the

foot of it, sinks to rise again at the foot of the next scarp and so on towards the sea. Oughtdarra (main) seems to be somewhat less complex than Lackanishka. At both resurgences the water is peat stained and has brought down quantities of shale debris.

Poulnagree also includes the water from Poulnagree North. No trace has yet been attempted for Pollballynahown. The waters eventually resurge on the coast at S3.

There is a minor resurgence (Oughtdarra W.) about 400 metres N.W. of the main one. Its water is peaty coloured and there is shale debris. None of this water is from Poulnagree or Poulomega nor from Hawthorn Swallet (A2a) or from Pollballiny (Blh) on the west side of Slieve Elva. The source of the water is likely to be the minor swallets N.N.E of Poulnagree N.

A resurgence, Oughtdarra East, lies at a higher level than the main one. This is clear water, which is depositing tufa, and there is no shale debris. A possible source is percolation water which resurges/sinks 300m. west of Poulomega and well above the level of the bottom of that cave.

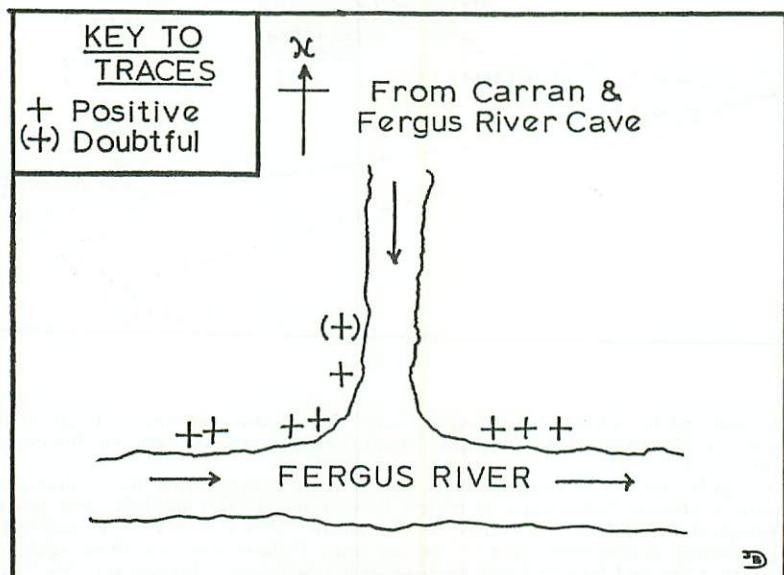


Fig. 54

Coolagh River (Polladonough)

This has been traced to S3 (p. 298).

Cullaun 5.

Over Easter 1970 a detailed search for a possible resurgence to the N.W. of Kilfenora was made. This is the area to which the cave might drain if it continued to follow the dip. No likely resurgence was found. Former repeated tests to St. Brendan's Well had been all negative. The Fergus River was left as the most likely site. In July, under very low flow conditions, no positive result was obtained. (Two out of the three detectors were removed by persons unknown). In September another attempt was made. This was blessed by high flow conditions at C5 and there was a successful trace to the Fergus River. This is a distance of 10 km. and the stream flows under the large shale-capped area intervening between the end of the explored cave and the resurgence. The tracer dye was detected most strongly (fig. 54) upstream from the left bank tributary (Clare 16, E.33.3 in. N.15.4 in.)

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