The passage meanders for about 200 yards in a southerly direction, and then the stream disappears through a small opening at floor level on the left. The continuing dry passage is mud floored and soon becomes impassable.

To follow the stream 10 ft. of ladder has to be lowered through the small opening. There is a belay point round a rock spur. The climb leads to a small pool and the stream runs off down another vertical of 25 ft. A 20-ft.-high canyon passage runs across the bottom of the second vertical in a north–south direction and, under the exceptionally dry conditions of 1955, carried only a very small stream, the main surface swallet being almost dry. The passage runs downstream in a southerly direction, as does the cave above the verticals, and presumably connects upstream with the swallet by the road. Progress in both directions was soon halted by the narrowness of the passage. No suggestions as to the possible resurgence of the cave waters can be made because of the short length of passage that can be followed.

M. BALISTER.

Cullaun Zero and Zero I.—Since Acke (1953) gave his account of these caves, further examination has been made of the surface features in the area. From Zero running approximately north is a line of shakeholes inside the shale boundary. These are interrupted by a col, which carries the road (Acke, 1954, *Fig.* 1). Beyond the col lies the depression with Zero I. Further north still is another col, with a blind valley beyond, in which are numerous small shakeholes, and finally two small surface streams on the shale at the extreme north end of the shale on Poulacapple ridge.

The general direction of the whole series is along the 196° dominant joint direction (Ollier and Tratman, p. 151), as with the other caves of the Cullaun series. It is reasonable to conclude that the northern extension, Cullaun Zero I and Zero are all parts of the same cave, which would account for the presence of the stream heard in Zero with no obvious surface feeder nearby.

E. K. TRATMAN.

Cullaun V Upper Direct and Loop Ways.—The published survey of Cullaun V (Jenkins, 1955) stops at the VB entrance. The survey has now been continued north, and the passages are shown in *Plate* 6, *A*. The Direct Way is the main stream route and runs approximately from north to south from north of entrance VC, past V (known locally as Pollycoe), by the roadside to VB. An approximately parallel passage, the Loop Way, runs to the east from a point about 150 yards north of entrance V and enters the Direct Way again about 50 yards north of VB.

The stream passing VC is the combined waters of Cullaun IV and a surface tributary. Most of the water flows down the Direct Way but when the stream is high enough, as it usually is, some of the water flows down the Loop Way. This accounts for the colouring of the water noted in both passages recorded by Jenkins when fluorescein was put in Cullaun IV. The streams reunite at the junction and the water disappears down a low bedding plane passage a few yards short of VB entrance and flows to the Stream Passage further east.

The Direct Way from VC down to V is a T-shaped meandering passage about 2 ft. wide and 4 ft. high. At V entrance the passage contracts and the explorer has to crawl. The floor soon drops first one bed and then another and the passage is once more a T-shaped canyon 2 ft. wide and 5 ft. high, with the usual meanders. There is considerable variation in the proportion of the horizontal component of the T to the vertical. The Loop Way starts as a crawl and continues so till about level with the first step down in the Direct Way. Thereafter the characters of the two

passages are almost identical. The floors and walls have asymmetrical scallops. It is noticeable that undercutting at meanders is on the inside of the bend and the tendency is for the stream to straighten its route.

H. M. K. TOMS.

Cullaun V Stream Passage.—This is the passage running north from the junction beyond the First Pitch (Jenkins, 1955, p. 105). In 1955 the C.R.G. grade 4–5 survey of this passage was completed as far as the point at which it divides into three small passages (*op. cit.*, p. 107). The survey shows that the stalactite block mentioned in the 1955 account is the one encountered at about 100 yards from the VA entrance (Acke, 1954, *Fig.* 1). Fluorescein tests have shown that the stream at the head of the Stream Passage is the VA stream, which ties in nicely with the findings for the two passages above the VB entrance (*see* Toms, p. 180).

E. K. TRATMAN.

Cullaun V. The Red Carpet Passage.—This takes its name from the flooring of soft calcite, light red in colour and about 2 ft. wide, which was found in the loop mentioned below.

The account by Jenkins (1955) of this cave states that " At section 30 the stream-way turns south-east though there is an ox-bow continuing in the general direction of the cave ". In 1955 this so-called ox-bow was entered in an attempt to by-pass the third bedding plane, but it was found that it was not an ox-bow but an entirely different passage which continued in the general direction of the cave for about 600 ft. The first part is a very twisting, dry passage which, in one part, performs an almost complete loop. Shortly before the loop a stream enters from the west, but it carries less water than in the main stream left at section 30. However, it could not be this stream which flows through the third bedding plane as this stream goes down a pitch, the bottom of which is lower than the level of the Red Carpet Passage. The stream does not flow through the loop, which contains the " red carpet ", but goes off to the right just before it and reappears just before the lower end.

The passage has a gentle gradient similar to that of most of the main cave ; near the lower end there is a 15-ft. waterfall beyond which the cave ends in a sump 10 by 5 ft. and more than 5 ft. deep. Downstream from the loop, and above the waterfall, the passage is crossed and recrossed by ox-bows which were dry when seen but contain silt and obviously take water in flood conditions. The level of the entrance to this passage where it leaves the present main route is such that under flood conditions part of the main cave waters will go down this passage, though this has not actually been observed.

The survey was made to a standard deemed to be Cave Research Group grade 4–5 (Butcher, 1950).

The fact that the passage continues in the general south-south-west direction of the cave suggests that the resurgence of the cave waters is at St. Brendan's Well.

C. INESON.

Faunarooska.—The entrance to this cave is an active swallet almost on the south edge of the townland, on the north-west side of Slieve Elva. The cave was discovered and explored by Bartlett (1938) and has since been visited by many speleologists. The R.A.F. group have made an accurate survey of part of the main cave. Members of this Society have examined the main passage of the cave and made a C.R.G. grade 2 survey in order to relate Faunarooska to other caves in the area. It is hoped that the following account will soon be superseded when the R.A.F. group publish their observations.