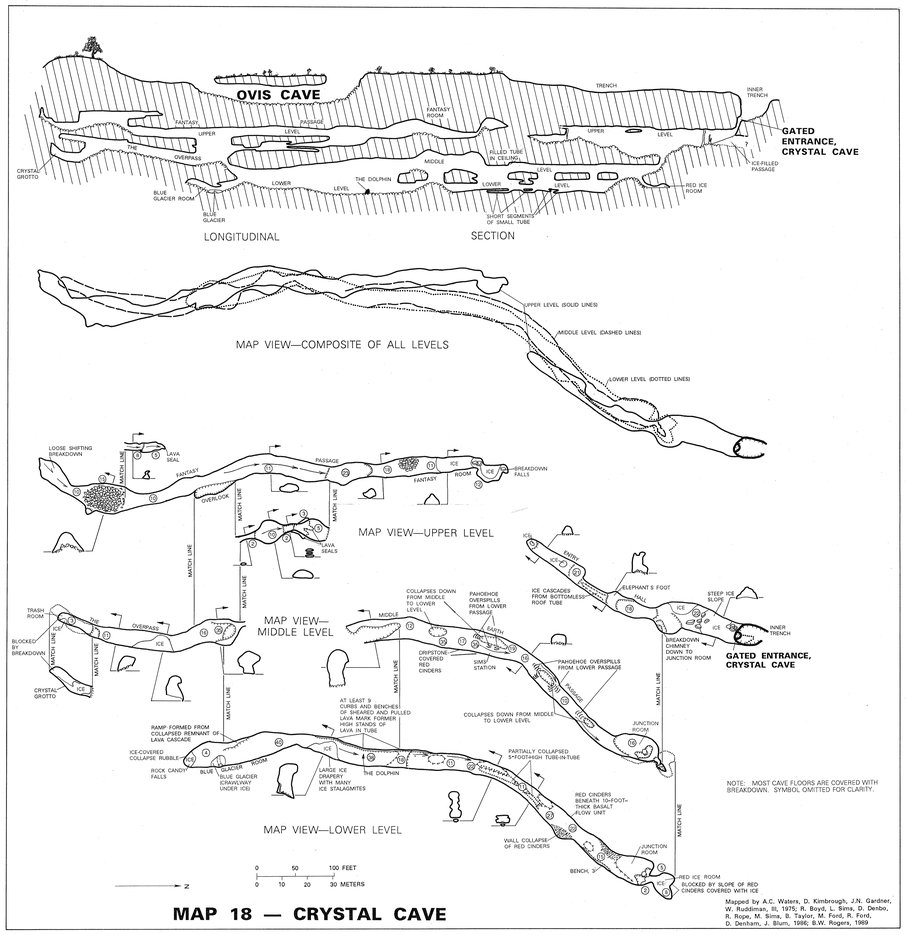
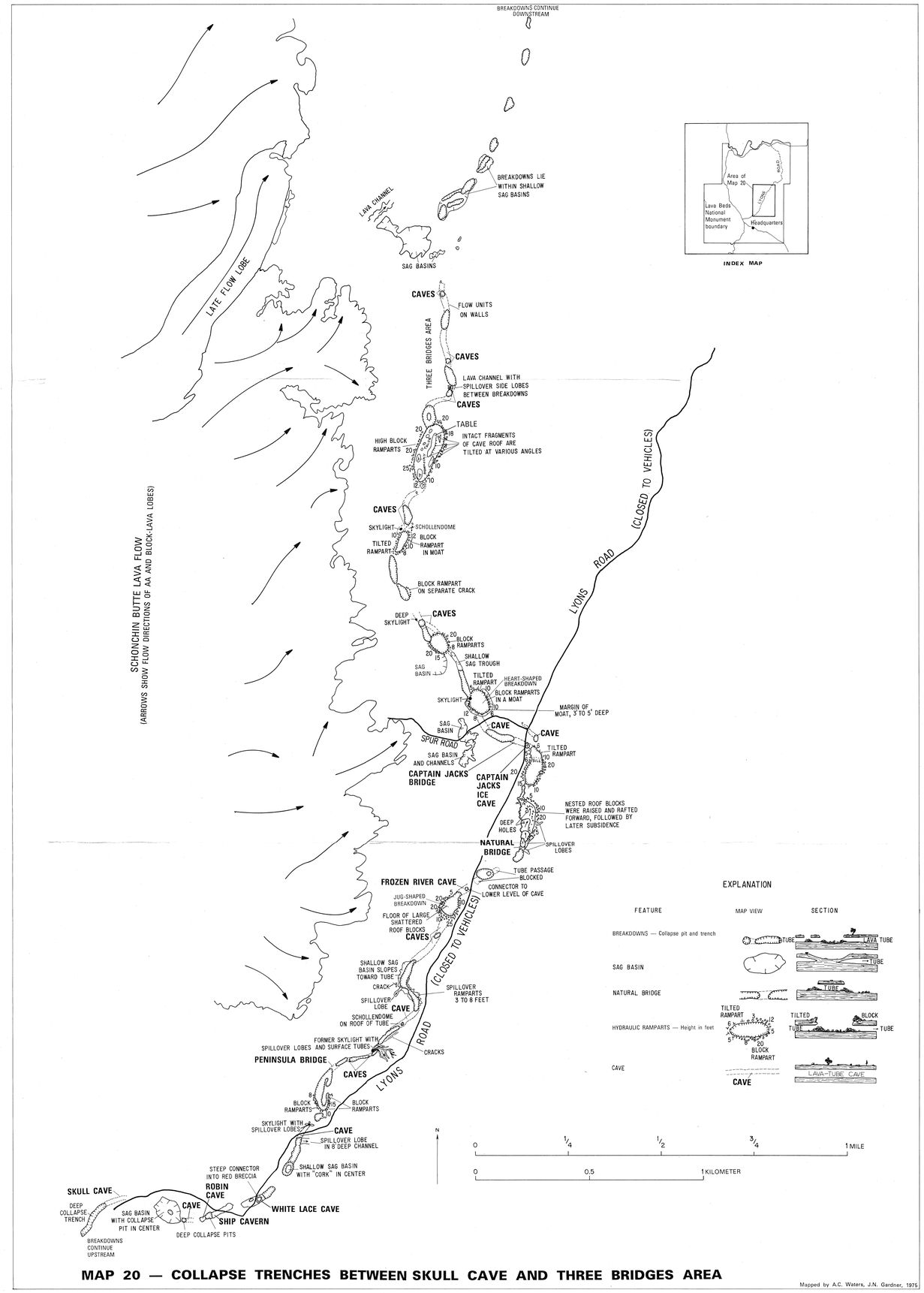


MAP 18 — CRYSTAL CAVE

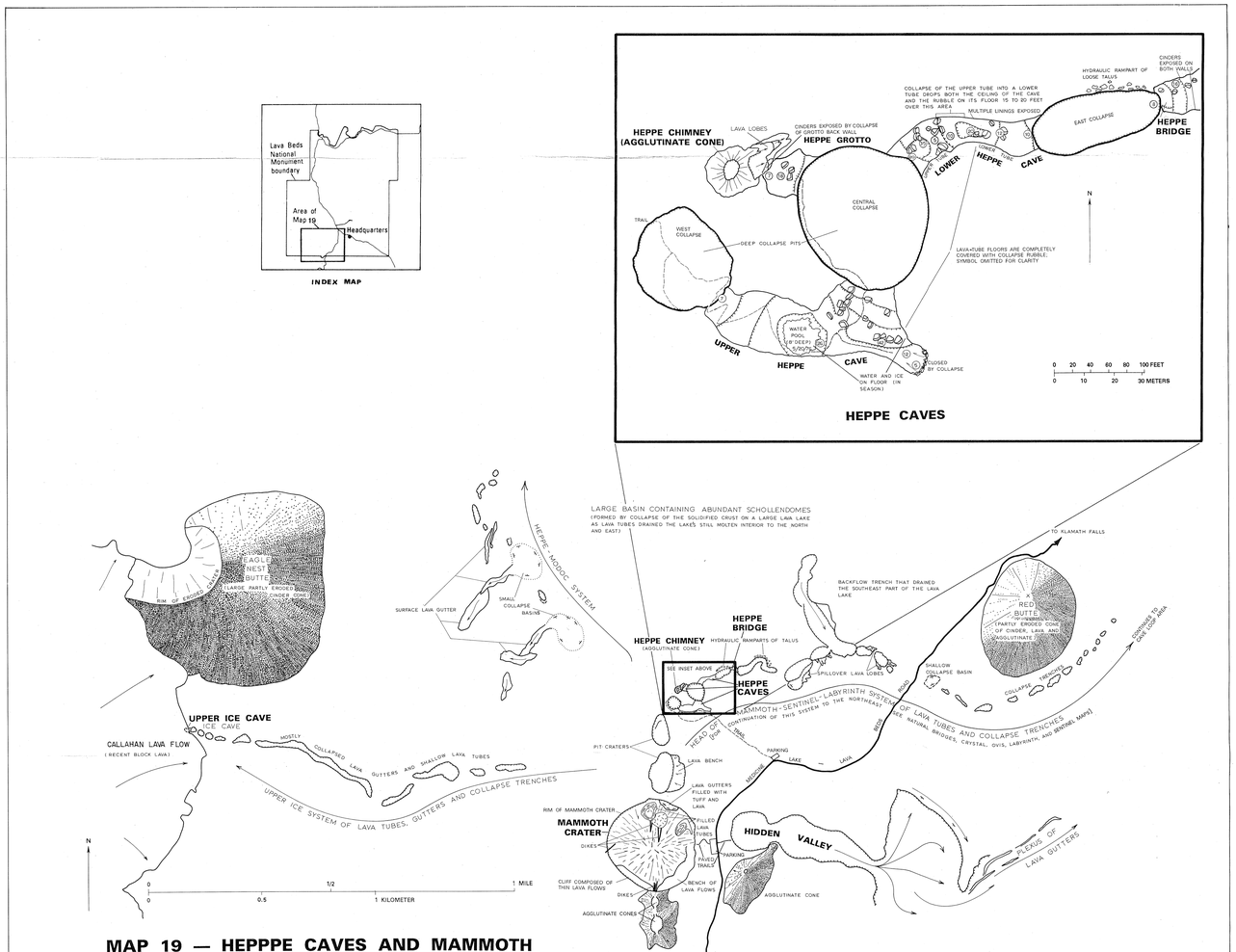
EXPLANATION
[Not all symbols appear on all maps]

- **ENTRANCE OR COLLAPSE TRENCH TO SURFACE**—Floor covered with breakdown
- **UPPER AND LOWER PASSAGES**—Lower passage shown by dashed or dotted lines
- **PAHOEHOE FLOOR**—Arrow shows direction of flow. Dashed arrows indicate backflow
- **DROP**—Hachures point downslope
- **BREAKDOWN OR COLLAPSE RUBBLE**—Half arrows point downslope; not shown shown everywhere it is present
- **BENCH OR BALCONY**—Height above floor in feet
- **PASSAGE BLOCKED BY LAVA**
- **PASSAGE BLOCKED BY BREAKDOWN**
- **RAFTED BLOCK**
- **LAVA CASCADE OR FALL**—Height in feet; barbs point downslope
- **FLOOR JAM OF PLATES**
- **CEILING HEIGHT IN FEET**
- **FRONT OF FLOW LOBE**
- **WASHED-IN SEDIMENT FLOOR**
- **TRAIL**—Short or long dash
- **STAIRS OR LADDER**
- **PIT OR COLLAPSE TRENCH**
- **DOME**
- **CROSS SECTION OF PASSAGE**—Arrow indicates direction of view



MAP 20 — COLLAPSE TRENCHES BETWEEN SKULL CAVE AND THREE BRIDGES AREA

Mapped by A.C. Waters, J.N. Gardner, 1975



MAP 19 — HEPPPE CAVES AND MAMMOTH CRATER - HIDDEN VALLEY AREA

Mapped by A.C. Waters, Alison Till, 1976; B.W. Rogers, R. Raines, 1989

Many of the feature names used on these maps were assigned by Bruce W. Rogers of the U.S. Geological Survey and the Cave Research Foundation. These names are not officially recognized or approved by the U.S. Board on Geographic Names and are thus considered informal

CRYSTAL CAVE, HEPPE CAVES, MAMMOTH CRATER–HIDDEN VALLEY AREA AND BREAKDOWNS BETWEEN SKULL CAVE AND THREE BRIDGES, LAVA BEDS NATIONAL MONUMENT, CALIFORNIA