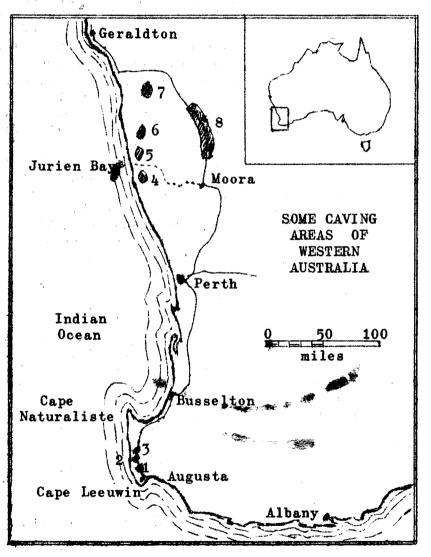
# ASF AUSTRALIAN SPELEOLOGICAL FEDERATION REWSLETER RE



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Note: Whenever possible correspondence should be directed to the current address of the appropriate executive officer.

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COVER: This map shows the location of some of the caving areas of the West, as described in this issue's feature article. The eight areas and some caves are:

1. AUGUSTA; Easter Cave, Jewell Cave and The Labyrinth.

2. ARUMVALE; Crystal Cave, Strong's Cave and the Arum System.

3. WITCHCLIFFE; Mammoth Cave, Calgardup Cave, Rudduck's Cave, Connolly Cave and Lake Cave.
4. SOUTH HILL RIVER; Pretty Cave, Quonding Cave, Thousand

Cave, Quonding Cave, Thousand Man Cave and Army Cave. 5. JURIEN BAY; Hasting's Cave,

Drovers' Cave, Smithy's Cave and Goosberry Cave.

6. STOCKYARD GULLY; ANU: Cave, and Beekeepers' Hole.

7. ARROWSMITH RIVER; Arramall Cave and River Cave.

8. MOORA GROUP; Coorow Cave.

## Change of Address

ASF LIBRARIAN, Graham Wallis, has changed his address to:

20 MALVERN AVENUE, ROSEVILLE EAST, NEW SOUTH WALES.

This is also the official address of the ASF Library.

Material for publication in the ASF Newsletter should be forwarded to the Publications Officer, at least one month in advance of the month of publication.

Because of automatic addressing, subscribers are asked to notify any change of address without delay.

# MISCELLANEOUS NOTES

\* PMSS have changed their address.
New address of this society is:

c/o GORDON BAIN (PRESIDENT), PO DOX 425, PORT MORESBY, TPNG.

- A Highland Caving Group, in Sydney, have reapplied for admission to membership of the Federation. The Secretary has received a comprehensive and generally favourable report on the Group, compiled by the NSW Co-ordination Committee. The matter is included in the Perth Conference agenda.
- # Persons compiling cave listings for the ASF Handbook should note that the Secretary would like them to include "...a short note on the structure and operation of their record heeping systems, including who doe: the cave numbering in any area and so on."
- A Opening day of the Porth Conference has been changed to: THURSDAY, DEC-EMBER 5:, 1954. In case members have not received details of the general organization of the Conference, which were printed in the March issue of the newsletter--obtainable from society secretaries-this information is repeated hereunder:

Accommendation. At camp a few miles from Perth. (Wembley, I think --Ed) Full catering, huts. beds, conveniences etc. If 45 persons book in, cost for 3-4 days will be £3-4. More persons will mean a lower cost. The Conference will be held at the camp site.

Caveman's Dinner will be an extra charge of about £1.

Transport. More cars brought over from the east will mean fewer transport difficulties where trips are concerned.

Excursions. Selected areas are described in this newsletter. All areas are readily accessible by roads and little walking is necessary.

Equipment. Carring gear (tents optional); usual trogging gear (wet suits or jumpers for Easter Cave); carbide will be supplied. Several extra 30 or 50 foot ladders will be required and visiting societies are asked to oblige. First Aid (including snake bite outfits) will be an asset. WA is hot and dry in summer.

Persons intending to participate in the Conference are requested to make application to: MR. TERRY BAIN, BOX S1349, GPO, PERTH. They should include wheir name, address and club, anticipated date of arrival, and intentions with regard to accomodation, Caveman's Dinner and excursions. The organizer would like to know of any transport and its capacity and the MASG Committee require written absolution of all legal responsibility from the parents of participants under 21 years of age.

As yet we have not been informed of the address of the camp and no contact in Perth has been given, but (and don't tell him I told you) I happen to know that the organizer—Terry Bain—resides at: 43 MATRORE STREET, MOUNT YOKINE.

# DOWN UNDER, ALL OVER

Inadvertently omitted from this column in March was news from SASS of a new area near Nowa Nowa. Two caves, in soft-rock, Tertiary limestone, have been explored, each consisting of a simple stream passage passing through a ridge. One houses a large bat colony and is probably Australia's dirtiest and most unpleasant cave.

CAVING AREAS

OF THE WEST

Western Australian Speleological Group

Below, we describe the eight caving areas we have selected for visits after the ASF Conference in January 1965. They represent only a portion of known West Australian caves and, with the exception of the Kimberleys, the Nullarbor and Exmouth Gulf, are a fair cross-section of the best and most interesting of our cavers.

#### Introduction

With the exception of Area 8--the Moora Group--the areas lie in the Pleistocene - Recent Aeolianites, which are consolidated calcareous sandstones varying in compactness and proportion of carbonate. These coastal limestones, formed originally as sand dunes, stretch over 2000 miles from near Esperence to the Northwest Coast. From Cape Naturaliste to Cape Leeuwin (Areas 1, 2, and 3) and points east they overlie Pre-Cambrian rocks while northwards they overlie Tertiary sediments. As the rock is wind-formed, a notable feature is the absence of joint and bedding planes, and the presence of an impervious travertine capensures a friable rock underneath. sequently, theories of cave origins have had to be modified. Only in some places does the Aeolianite exceed 150 feet in thickness.

#### Area 1 - Augusta

Southernmost area to be visited; 205 miles from Perth on good bitum-Caves lie in narrow band of limestone between underlying granites and overlying sandCaves reach depth of 140 feet where water table occurs in Easter Cave, Jewel Cave and The Labyrinth. Phreatic characteristics in all these caves. Area 1 has very heavy rainfall and luxuriant vegetation. Cave decoration is at its best; particularly striking are straws--longest is 19 feet  $4\frac{1}{2}$  inches (5.91 metres)-helictites and crystals. The Big Three have plenty of scope for further discoveries. The Jewel is a tourist cave; the other two each require up to 12 hours to satisfactorily visit them.

#### Area 2 - Arumvale

This area is 15 miles closer Perth than Augusta; centred around Overtime Lodge, our base camp in Southwest. Main feature of caves in this area--especially Crystal Cave, Strong's Cave and the Arum System--is that they are linear or stream caves. They share this feature with Area 3 but not with Area 1 which features lakes along the water table. Cave decoration is on a par with Area 1; but as there are more collapses from the surface the bone content becomes more significant. The Arum System, together with Mammoth Cave and Rudduck's Cave (both in Area 3), show stream entry from off the granites and into the sides of consolidated dunes in which the caves occur.

#### Area 3 - Witchcliffe

This area adjoins Area 2 and is a further 15 miles closer Perth; it represents the northern part of the limestone strip while Area 2 represents the southern part. lies in a separate limestone strip. Rainfall is slightly less than farther south and this results in a reduced stream flow and less dense surface vegetation. Mammoth Cave. Calgardup Cave and Rudduck's Cave are on the edge of the limestone (cf. Arum System) and are thought to link drainage with Connolly Cave on the coast and some 2 miles distant. Lake Cave, which actually carries a stream, is thought to resurge at sea. Other features of this area are large collapse entrances up to 200 feet in diameter

and over 100 feet deep, and a high concentration of fossil material (Mammoth Cave); over 60 known caves occur in a small strip a couple of miles long.

ASF

The remaining areas are north of Perth:

#### Area 4 - South Hill River

Chief caves are the Nambung Valley Caves; 150 miles north of Perth with some gravel roads (good condition in summer), Caves lie on high ground above Nambung Valley, the stream going underground through a yet undiscovered cave. summer, the creek carries a winter flow; there are masses of live decoration in some of the caves. a small number of the caves are known to WASG. Among the betterknown caves are Pretty Cave, Quondong Cave, Thousand Man Cave and Army Cave.

## Area 5 - Jurien Bay

Fifty miles farther north is Jurien Bay, approached either from Nambung or from the main Geraldton In common with all areas Highway. north of Perth, this area has a very much lower rainfall and vegetation is reduced to scrub which makes cave locations easier to spot (near trees). Chief interests here are the phosphate and bone deposits; cave bats are seldom found south of The caving is very Jurien Bav. Best known caves are Hasting's Cave, Drovers' Cave, Smithy's Cave and Goosberry Cave. Two exceptionally interesting stream caves are also known.

# Area 6 - Stockyard Gully

Thirty-five miles north of Jurien Bay is the Stockyard Gully area with its winter flowing gully and cave and a line of dolines culminating in ANU Cave and Beekeepers' Hole. There is very great potential in this area where new caves are concerned—unfortunately our trips

to the area have been limited in number by heavy winter rains and flooding tracks. Both ANU Cave and Beekeepers' Hole contain deep water ending in sumps. Drainage is through the Gully, along the line of holes, ANU Beekeepers' Hole and out to sea.

#### Area 7 - Arrowsmith River

This is the northernmost area to be visited; distance is about 280 miles north of Perth with bitumen and 20 miles of good gravel. Arrowsmith River drains into Arramall Lake, which overflows into Arramall Cave and River Cave. These two are horizontal caves radiating out from the lake, Arramall Cave being about 1 mile long and River Cave about 600 yards (550 metres). Decoration is limited but the area is geologically interesting.

## Area 8 - Moora Group

This area lies along the Geraldton Highway between 140 and 170 miles north of Perth. Coorow Cave occurs in a shallow lens of silicified dolomitic limestone surrounded by Palaeozoic rock (cherts). The limestone has a two-directional system of joints and this is reflected in the cave form. The limestone has been dissolved leaving quartz veins outstanding in a unique box-work structure. The very low humidity leads to muumification of animal carcases.

#### Summary /

The caves of the Southwest (Areas 1, 2 and 3) offer the greatest attractiveness where cave decoration is concerned, in addition to providing some sport and lots of scientific interest (mainly geomorphological and palaeontological). Scrub-bashing is harder than in the north but access roads are much easier and caves are usually close to cars! Technical problems are small; Labyrinth and Easter (espec-