SECTION 6 CAVE DOCUMENTATION

THE NUMBERING OF CAVES NOT FOUND IN SPECIFIC CAVES AREAS

- THE NEW SOUTH WALES SYSTEM

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ABSTRACT

Following active interest in the caves of the smaller limestone deposits and the non-limestone caves of New South Wales, a new numbering system was devised to encompass this development.

A series of "General Caves Areas" has been created, with the boundaries of each 1:250,000 topographic sheet delineating the area. The area codes are derived from the map identification number.

The numbering of each General Caves Area will be controlled by interested individuals and the N.S.W. Cave Numbering and Nomenclature Committee will oversee general administration.

The numbers will be allocated arbitrarily in each General Caves Area with specific emphasis on grid references for the location of caves.

This system is sufficiently flexible to be used throughout Australia and it is for this reason that it is brought to the attention of the Federation as a whole, in the hope that others may see in it the solution to their problems.

INTRODUCTION

The system has been instigated so that numbers may be allocated to all caves not found in specific cave areas. The system is based on the principle of General Cave Areas, delineated by the boundaries a 1:250,000 map, each general cave area is given a prefix drawn from data given on the map. Numbers for each cave within a general cave area are allocated by the co-ordinator of the area who is responsible to the Convenor of the N.S.W. Numbering and Nomenclature Committee.

THE AUSTRALIAN TOPOGRAPHIC MAPPING SYSTEM

For mapping purposes, the Central Mapping Authority has subdivided Australia into areas of six degrees of longitude, by four degrees of latitude, and each of these areas is covered by a 1:1,000,000 international map. Each of these is designated by an alpha-numeric code number, as well as a name. (See appendix 1) For example, the Sydney 1:1,000,000 sheet is designated SI 56.

The alphabetic part of the map reference number is drawn from the alphabetic

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labelling of each division of four degrees of latitude, starting with 'A' for the band 0° - $4^{\circ}S$ and so on. Each letter is prefixed with the letter 'S' to designate that it is in the Southern Hemisphere.

A similar numerical system operates with longitude, the division being every six degrees, starting at 180° (approximately the International Date Line), and moving eastwards round the earth. Thus Australia and Papua New Guinea fall into zones SA - SK for latitude, and 49 - 56 for longitude.

Each 1:1,000,000 sheet is further divided into sixteen 1:250,000 sheets. These are numbered 1 - 16, in four rows of four, and each sheet has a name also. For example, the Sydney 1:250,000 sheet is designated SI 56-5. (See appendix 1)

PREFIXES FOR GENERAL CAVES AREAS

As mentioned earlier, the prefixes for General Caves Areas are derived from the alpha-numeric reference number of each 1:250,000 sheet.

Since Australia is obviously in the Southern Hemisphere, it is felt that the 'S' can be deleted without confusion. Similarly, since the maps of Australia have longitude codes 49 - 56, and therefore all sheets except a small part of Western Australia west of longitude 114° are prefixed by a '5', and since the figure '9' does not appear in any of the other longitude designators, the 'tens' digit has also been dropped.

Since confusion could arise from using the numbers given to each 1:250,000 sheet by the C.M.A. (i.e. numbers 1 - 16, see appendix 1), it was decided instead to use the corresponding letter of the alphabet. For example, instead of SI56-5, which is the code number of the Sydney 1:250,000 sheet, the Area Code for the Sydney General Caves Area would be 16E.

This system is totally compatible with the format required by the ASF Cave Summary Form No. DOC2/403PGM as the field 1.2 is able to take three characters. The state prefix although superfluous should still be used in documentation as an aid to initial location, for example 216E.42.

IMPLEMENTATION

This system facilitates the ready numbering of any cave or other karst feature, or in fact any feature of speleological interest. The number given will have significance as to the location of the feature and the area code may be readily deduced from the 1:250,000 map covering the area, and similarly the reference number of the map may be calculated from the area code. The actual boundaries of each area are irrefutable and thus far superier to any arbitrarily assigned boundaries. This system does not require profound genetic decisions to be made as to whether the cave is a sea cave, limestone or non-limestone and thus many of the often pedantic arguments which have opposed systematic numbering of caves not found in specific cave areas do not arise.

The field where this system will find immediate use is the numbering of sea caves, and the area codes for the NSW coast are, from North to South, as follows:-

Area Code	Area Name/Map Name	Map Code
H6G H6K	Tweed Heads Maclean Coffs Harbour Hastings	SH 56-3 SH 56-7 SH 56-11 SH 56-14

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Area Code	Area Name/Map Name	Map Code
16B 16E 161 16M J5D	Newcastle Sydney Wollongong Ulladulla Bega Mallacoota	SI 56-2 SI 56-5 SI 56-9 SI 56-13 SJ 55-4 SJ 55-8
J 5H	Marracooca	00 33-0

It should be noted that the above areas also cover most of the other known caves not found in specific cave areas, for example, Kincumber, Basin Cave, Hilltop, Nangwarry. Thus there is no further need to proclaim a new Specific Cave Area to cover one cave, even if it is limestone, as it may be readily numbered in a General Cave Area, thus maintaining the simplicity of the Specific Cave Areas in existence.

NUMBERING & TAGGING

Numbering within each area is arbitrary, but the grouping of numbers is encouraged. For example, the numbering and tagging of sea caves of the Sydney General Caves Area is being conducted by P.S.G. commencing with 16E 1 in the North and numbering all caves sequentially Southwards.

Tagging is carried out under the supervision of the area co-ordinator, and if a cave is found the co-ordinator is contacted and a number allocated; or if a group is intending to investigate an area where caves have been reported, a block of numbers is allocated immediately with the understanding that a description and location of each cave tagged is given to the co-ordinator along with any unused numbers.

As previously mentioned, the co-ordinator is responsible to the N.S.W. Cave Numbering ξ Nomenclature Committee.

