#### THE TASMANIAN REGIONAL FOREST AGREEMENT (RFA): "NON-OUTCOMES" FOR CAVE AND KARST CONSERVATION IN TASMANIA

- Arthur Clarke

# Reservation or protection of karst prior to the RFA process

Apart from the tenure of National Park or formal reserve status around some significant caves or karst areas including World Heritage Areas (WHA), tourist caves and wildlife (cave invertebrate) sanctuaries, the reservation process for Tasmanian karst areas has been somewhat ad hoc, often reliant on other natural values aside from the actual caves and karst itself. An example of this "accidental" reservation includes the Precipitous Bluff karst, reserved by inclusion within the Southwest National Park (WHA) boundary. Some forested karst areas with significant cave fauna communities had been managed in a manner sympathetic to the preservation of karst values before the RFA, but the present karst land tenure in many areas, including private land, does not offer long term security for karst.

However, there have been some more deliberate attempts in karst protection including the World Heritage Area nomination of Exit Cave, the establishment of National Parks and State Reserves around a number of tourist cave areas, plus the few Forest Reserves around selected caves with special values in some forested karst areas, e.g.: Little Trimmer Cave (at Mole Creek) and Welcome Stranger (in the Junee-Florentine).

Apart from actual reservation or karst prior to the RFA, a karst sensitivity classification system for protection of caves in forested regions of the Junee-Florentine karst, was recommended by Rolan Eberhard during his detailed (1994 - 1996) study of the Junee River and Florentine Valley karsts. With detailed maps of the area, Rolan designated the karst areas into high, medium and low sensitivity zones. Forestry Tasmania has allocated some of these karst sensitive areas under the auspices of its Management Decision Classification (MDC) system, so that the majority of the high sensitivity zone areas have been given MDC protection status. This means these areas will not be subjected to logging and will also be treated as informal reserves in the CAR ("Comprehensive, Adequate and Representative") reserve system. Most of the karst within Rolan's proposed medium sensitivity areas have been designated as special management zones under Forestry Tasmania's MDC system.

#### Input of karst values in the RFA process

There was no specific project looking at the surface vegetation communities in karst areas. The karst input into RFA was basically a twofold approach: devising management prescriptions for the conservation and protection of invertebrate fauna in caves of forested karst areas and an assessment of karst values from a geological and geomorphic perspective. These karst values were described in two reports: *A Compilation and* 

Assessment of Significant Geoconservation Sites by Grant Dixon and Nathan Duhig, plus a more broad scale report on Geodiversity and Geoconservation Requirements relating to Landforms in Tasmanian Forests (including caves and karst) by Grant Dixon, Rolan Eberhard, Ian Houshold, Mike Pemberton and Chris Sharples.

# The input of cave fauna management issues to the Tasmanian RFA

The cave fauna input was in itself twofold: a preceding database of occurrence records for invertebrate species from Tasmanian caves and the follow-up management report. The 187 page report by Arthur Clarke with recommended management prescriptions for the protection of cave fauna was based on an analysis of the unpublished database submitted to the GIS (Geographical Information Systems) of the and Department of Environment and Land Management. The database, which was used as the basis for the RFA report, included detail of over 4,700 occurrence records for 643 cavernicolous (invertebrate) species from 492 caves in 50 karst areas and another 18 pseudokarst areas, predominantly all cavernous areas that occur within Tasmanian forests.

Although a few of the management recommendations in the cave fauna report appear to have been accepted, there is very little evidence to suggest that the RFA process took much notice, if any, of the cave fauna database submitted. The existence of this large cave fauna database has not even been acknowledged in the list of RFA data sets used in the RFA process.

### RFA "non-outcomes" for cave fauna and geoconservation values

Caves and karst areas have generally not fared very well during the RFA process assessment of World Heritage (WHA) values. For example, Beginner's Luck Cave [JF-079] in the Junee-Florentine karst was recognized as an important Quaternary site with Pleistocene megafauna fossil deposits, but was excluded from further RFA assessment because it was considered as "...not globally significant". Although caves were seen as being a refuge for many important relict species with strong Gondwanan affinities, the endemic cave invertebrate species and rare troglobites unique to both the Mole Creek and Junee-Florentine karst areas were excluded from RFA assessment, because it was considered that temperate cave fauna values are already well represented in caves within the Tasmanian Wilderness World Heritage Area.

Fourteen (14) previously recorded rare cave fauna species were omitted from the RFA process, because their conservation needs were described as being met "....through management prescriptions in karst areas". In fact some of these species occur in karsts on both crown land and private land where there are no current cave or species management plans. Another four (4) cave invertebrates were excluded from the RFA because they were classified as Bass Strait endemic from karst and pseudokarst sites in the Kent or Furneaux Group islands and another eight (8) species excluded because they were protected within the World Heritage Area.

The Vale of Belvoir, west of Cradle Mountain (12km east-north-east of the Mount Cripps karst area) was excluded from the list of traditional hunting-and-gathering sites, along with a number of coastal sites: *Cave Bay Cave*, a Late Pleistocene occupation site on Hunter Island and un-named cave sites on Rocky Cape were also excluded because these areas are all presently considered as "...non-forest area".

Despite the fact that Forestry Tasmania has its own MDC (Management Decision Classification) system of land use zoning that incorporates nonwood values of forests, the recent RFA appears to have almost completely ignored proposals for karst reserves based on geoconservation values and largely ignored the biological conservation attributes of caves and karst areas. Apart from a few of the recommendations relating to protection for karst areas with significant invertebrate species described in the cave fauna survey, the concentration on old growth, wilderness and biodiversity during the RFA process (as opposed to geoconservation values which were not covered under JANIS) has meant that highly significant caves and karst systems remain unreserved and vulnerable to forestry and/or mining activities.

Prior to the RFA, the renown Mount Cripps karst area with its glaciated polygonal karst was in a recommended area for protection (RAP), but this is now subject to consideration for mining by the RDPC (see below). The RFA process also failed to address the lack of continuum in karst reservation at Mole Creek, where public (and private) lands lie between the ten (10) separated parcels of reserved land that compose the existing Mole Creek Karst National Park and, in theory, some of these intervening lands could now be considered for mining.

Cynical as it may sound, the "new" reserves being mooted by this RFA process - the extensions to/or proposals for National Parks, State Reserves and Conservation Areas, generally speaking - appear to be all mainly unallocated Crown land areas (including Informal Reserves) that were not intended for forestry purposes and extended boundaries of these "new" reserves appear to roughly coincide with the edge-lines of preexisting or planned Forestry logging coupes. Some of these recommended areas for reservation under the RFA include karst in forested areas not intended for wood production and generally already classified as Informal Reserves. Most of these areas are adjacent to existing State Reserves, National Parks or the WHA. In many of the other new reserves created from the RFA, including sensitive areas with known conservation values, mining is still permitted and as a direct outcome from the RFA, all public land that is not in a State Reserve or National Park will now be available for mineral exploration or mining.

#### Resource Planning and Development Commission (RPDC) investigation of RAP's following the RFA

As a result of the RFA, some of the areas that have been earmarked for possible reservation under JANIS criteria (wilderness, old growth, biodiversity), also coincidentally contain karst. Such areas, and others including RAP's (Recommended Areas for Protection), presently being further reviewed by RPDC to determine what level of reservation is appropriate. Unfortunately, the RPDC has been directed by government that most of these areas must remain open to mineral exploration and/or mining and therefore can only be insecurely reserved as a "Conservation Area" under the National Parks and Wildlife Act. The Tasmanian RFA process has largely ignored the bio-conservation and geoconservation aspects of karst (and other geomorphic systems) and its outcomes reveal a bio-centric focus towards selective reservation of predominantly non-karst areas with specific botanical values. Those karst areas that have been given consideration for reservation appear to be either "accidental", based on other natural and cultural values, or in areas that were already classified as informal reserves and are adjacent to existing State Reserves, Parks or WHAs. The tenure of some other formerly "protected" karst areas in Forest Reserves and Informal Reserves (including unresolved RAP's) remains uncertain and unsecure, since these areas have been referred to the RPDC under the RFA process for consideration of mining potential.

The foregoing article is based on the 10 page report to the Australian Speleological Federation's (ASF) Council meeting held in Melbourne on the Australia Day weekend, January 1998 and a further edited extract which was published in the TASMANIAN CONSERVATIONIST #261 (October 1998). The complete ASF Council report, including references, is available from the author.