

# PROPOSAL TO QUARRY LIMESTONE IN THE MT. CRIPPS KARST OF NW TASMANIA

- Arthur Clarke

As recently reported in the last *ACKMA Journal* (Clarke, 2000), the exploration division of a Western Australian based company: Western Metals Resources Limited, has applied for an exploration license (EL) to mine limestone in the Mt. Cripps karst area of NW Tasmania. The EL application for limestone mining was advertised in only one newspaper: the NW Tasmania-based: "*The Advocate*". A summary of the human impacts on the Mt. Cripps karst area was described by Heap (1999) with an accompanying map figure depicting the karst on p. 5 of the December 1999 *ACKMA Journal* (No. #37).

Western Metals is currently applying for a 29km square area, which contains about 7/8ths of the Mt. Cripps limestone – covering the areas west of the *Macintosh Creek* and the *Vale River* and north of *Lake Macintosh*. The remaining small portion of limestone not included in the EL application: an area lying immediately west of the *Vale River*, forms part of the major component of the significant polygonal karst development described by Shannon *et. al.* 1991 and Heap, 1999. However, the northern and NW parts of this polygonal karst, along with other areas of known karst and caves are included within the application area to explore for limestone mining sites.

Immediately west and adjacent to the Mt. Cripps limestone area, is the Hellyer Mine, now owned and operated by the mining division of Western Metals Resources. Approximately 20 million tonnes of high-grade limestone is being sought by Western Metals, who in a joint venture with another W.A. based company (Dominion Mines) propose to use the calcium carbonate as a neutralising agent for the acid reduction treatment of mine tailings at the Hellyer Mine (in order to extract heavy metals, including gold and silver).

Four objections to the limestone exploration (mining) license have been lodged with Tasmanian Dept. of Mines – a body now known as Mineral Resources Tasmania (MRT). The objections were lodged by: Australian Speleological Federation, Southern Tasmanian Caverneers, Savage River Caving Club and the North West [Tasmania] Walking Club. All four of these groups have variously detailed the significant aspects of the known karst and its attributes within this virgin myrtle dominated rainforest, including cave fauna, sub-fossil deposits in caves and archaeological values. All the objections have more or less said "NO" to limestone mining (and further exploration for potential quarry sites) in the Mt. Cripps karst, suggesting/ requesting that the mining company investigates other alternative known sites of high-grade non-cavernous limestone or dolomite deposits. In addition, it is believed that at least two other Tasmanian Govt. departments have lodged submissions to MRT with comments regarding the karst significance and natural forest values, as

well as concerns for the size of the EL area being requested by Western Metals.

The ASF objection to the EL also included reference to private discussions with the Tasmanian General Manager of Western Metals, who suggested that the W.A. based wing of the company was a bit premature with its application to MRT: in terms of both the EL itself and the broad area extent of the EL application. The Tasmanian section of Western Metals Resources was still evaluating the results of a recent environmental report of karst impacts at their preferred mining sites in the Mt. Cripps area and the company was still amenable to considering alternate sources of high grade carbonate rock from other nearby localities.

In August last year, Ken Grimes completed a consultancy report for Western Metals that detailed the implications of karst and likely impacts at three of the four limestone quarry sites being proposed by the mining company: two sites near *Caverneer Creek* and one site at the junction headwaters of *Macintosh Creek* (Grimes, 1999). A fourth site being considered for limestone quarrying lies on the western bank of *Lake Macintosh*: a "new" hydro-electricity impoundment. Although now isolated from the rest of the Mt. Cripps karst by an arm of this new "lake" which has flooded the southern reaches of the *Southwell River*, the limestone in this western area has a few known karst features including possible sites of archaeological significance. Because of the company's environmental concern about the possible visual impact of hillside scarring due to formation of access roads and a quarry site – when viewed from the Cradle Mountain/ Barn Bluff area within the nearby World Heritage Area - Western Metals had advised Grimes that this fourth quarry site was not a preferred site. Despite the fact that this was not considered a preferred quarry site and there was no investigation of karst impacts by Ken Grimes in this area west of *Lake Macintosh*, the western area was still incorporated as part of the 29km square EL area applied for by Western Metals.

A mediation session is being established between Western Metals and the four appellants who lodged objections to the EL - with the Registrar of the Tasmanian Mines Dept. (Dennis Burgess) acting as mediator. Although I have objected to his role as mediator, I am advised that this form of "settlement" procedure with Mines Dept. Registrar acting as the mediator is a process that has been pre-determined and gazetted under auspices of the new (1995) *Mineral Resources Development Act of Tasmania*, which establishes the conditions for dealing with appeals or objections to exploration or mining proposals. If the mediation session does not successfully resolve the "dispute" between appellants and the mining company, the issue is then taken to a Full Bench of the Mining Tribunal in Tasmania. The

Registrar of Mines advises me, that since the new legislation came into force in 1995 all the appeals have been settled by mediation, so there has not been a single case required to go to the Mining Tribunal.

In addition to the four EL objections lodged with MRT, a number of other individual submissions were forwarded, either direct to the company (Western Metals) or to MRT, although some of these were received after the due date for lodgement of objections. Amongst these submissions, there was a detailed report by Henry Shannon, which is going to be also considered during the mediation process, despite being received out of time. Based on the known geology and karst development (Shannon, *et. al.*, 1991), Henry has divided the Mt. Cripps karst area into four component parts of varying significance and has not ruled out the possibility of limestone mining in any of the four areas. He relates to possible limestone mining in three parts of the Mt. Cripps area, by likening mining of the karst to being like taking the hand, arm or core body trunk of the karst, depending where mining is undertaken. Furthermore, Shannon has suggested that the area of limestone that lies close to the Hellyer Mine tailings (the area not investigated by Grimes) - west of the *Southwell River* (i.e., west of *Lake Macintosh*) - would be a preferred area for mining, because it has limited karst value to cavers. In order to extend the quarrying potential of this western area, Henry has also come up with a particularly novel suggestion

that the *Lake Macintosh* impoundment could be lowered - allowing for removal of dead "eyesore" trees and permitting limestone mining (or quarrying) to then go ahead (on present lake floor), with the lake being back-filled after the quarry has been completed! However, with the lake still in use for generating hydroelectric power and already being some 17-18m below normal lake levels, because of our extended Tasmanian drought, it seems unlikely that the "powers to be" [no pun intended] will agree to any request to lower the lake level to permit limestone quarrying.

The preliminary date set for the mediation hearing with Western Metals was 27 April - this has now been extended till Thursday 1 June 2000. Since two of the bodies lodging objections (and Henry Shannon's submission) originate from the north of the State, the MRT are stating that they have decided to hold the mediation session in northern Tasmania, preferably with all appellants attending at the same time. The MRT's Mines Dept. Registrar has suggested we (cavers and bushwalkers) meet with them: MRT officials and geologists in NW Tasmania: at the Burnie-based offices of the (Tasmanian) mining division of Western Metals Resources Limited. Stay tuned for the next report! If (or when) something more exciting eventuates before the next ACKMA journal, I will post a contribution to the ACKMA List Server, the *Cave Conservation* List Server and *OZCAVERS*.

## REFERENCES

- Clarke, A. (2000)** Mt. Cripps karst, Tasmania - Another Mt. Etna? *ACKMA Journal*, (March 2000) #38: 22-23.
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- Heap, D. (1999b)** Human Impact on the Mount Cripps Karst. *ACKMA Jnl.*, 37: 4-11.
- Shannon, H., Dutton, B., Heap, D., & Salt, F., (1991)** The Mount Cripps Karst, northwestern Tasmania. *Helictite*, 29(1): 3-7.