

Poster Presentations

Invertebrate Biodiversity in the Karst Bio-space of Tasmania

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ABSTRACT

Karst is a word used to describe the landforms (eg. caves) derived from the natural solution of carbonate rocks, such as limestone or dolomite. Karst bio-space is a convenient term to describe the total habitat space for the aquatic and terrestrial species living in carbonate rock karst areas. The karst bio-space is represented as the sum-total of the actual or potential habitats and micro-habitats of all living species in karst. This bio-space can be described in dimensional terms as micro-caverns (<1mm), meso-caverns (1 to 15-20mm) and macro-caverns (>15-20mm). Although most of our cave fauna records relate to species known or collected from caves (the macro-cavern component of the bio-space), in many karst areas, the meso-cavern size voids, tubes or cracks probably represent the major habitat component for invertebrate cavernicoles in the karst bio-space: either in the saturated zone below the water table), or in the unsaturated zone above the water table. The spatial component of these meso-cavern spaces includes the numerous interstitial voids in cave streambed or streamside substrates as well as the minutely small solution tubes, cracks and fissures that distribute waters through the carbonate rock, draining surface mantles, surface soils and forest litters or ground cover. There are about 4,000 known caves in Tasmania in 135 karst areas and additional non-karst areas. Cavernicolous invertebrates have been recorded from almost half of the cavernous areas of Tasmania. The cave fauna database for the 1997 Tasmanian Regional Forest Agreement (RFA) includes a list of 692 recorded invertebrate species and a map shows the location of the major karst areas where cave invertebrates have been collected or recorded. The cavernicolous invertebrate biodiversity in Tasmania includes a range of aquatic and terrestrial species from several ecological niches, with varying dependence on the cave environment, and the relationship between some of these species can be demonstrated with a food web, typically expressed in some of the stream caves in Tasmania.

REFERENCES

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Graffiti at Loch Ard Gorge, Port Campbell National Park, Victoria

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ABSTRACT

Port Campbell National Park with its striking coastal scenery of rugged cliffs and stacks, The Twelve Apostles, is one of Victoria's icons. It is promoted in all tourist literature and Loch Ard Gorge is one of the featured attractions with a car park, developed walking tracks along the cliffs and a track with a timber stairway down to the beach in the Gorge. Loch Ard Gorge was the scene of the shipwreck of the Loch Ard in 1878 from which there were only 2 survivors. The two caves in the gorge are named Pearce Cave (3SW-2) and Carmichael Cave (3SW-3) after these survivors. Reputedly, they sheltered in the caves before being rescued.