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**The “E” Surface casting project at Mistaken Point  
Ecological Reserve, Newfoundland, Canada**

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Located on the southeast coast of the Avalon Peninsula, Mistaken Point Ecological Reserve (MPER) is a globally significant palaeontological site because it contains fossils of the oldest- and largest-known complex, multicellular organisms, and the earliest macroscopic traces of locomotion in the fossil record. The world famous, 565 million-year old bedding plane known as the “E” Surface is unique and unsurpassed in terms of both the abundance (>4100 large life-forms) and diversity (15 + species) of its Ediacaran fossil assemblage. It has been described as “perhaps the finest exposure of an Ediacaran ecosystem available anywhere”. This Surface is one cornerstone of the Reserve’s ability to demonstrate the “Outstanding Universal Value” criterion demanded by UNESCO’s World Heritage Committee.

Currently, the “E” Surface is showing evidence of erosion (due to both natural processes and visitor foot traffic) and the

scientific value of its fossils will inevitably deteriorate over time. To preserve an exact record of these important fossils in perpetuity, the Newfoundland and Labrador Government's Department of Environment and Conservation, in partnership with the Royal Ontario Museum, Oxford and Queen's universities and the Johnson Geo Centre, contracted Research Casting International to make a 900 sq. ft. mould (and subsequently a master cast) of the best-preserved portion of the Surface. Both the moulding fieldwork and manufacture of the master cast were filmed for the Discovery Channel's "Daily Planet" show and these films can be viewed at: <[www.watch.discoverychannel.ca](http://www.watch.discoverychannel.ca) – clips 223723 and 247576>, respectively. As well as discussing the details and benefits of this project, a new, 12-minute long film (commissioned by Cape Race-PCS Heritage Inc.) introducing the Reserve and the casting project will be shown.