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## A REVIEW OF BLASTOZOAN ECHINODERM RESPIRATORY STRUCTURES

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## A Review of Blastozoan Echinoderm Respiratory Structures

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**Abstract:** Echinoderms have evolved diverse and disparate morphologies throughout the Phanerozoic. Among them, blastozoans, an extinct group of echinoderms that were an important component of Paleozoic marine ecosystems, are primarily subdivided into groups based on the morphology of respiratory structures. However, systematic and phylogenetic research from the past few decades has shown that respiratory structures in blastozoans are not group-defining and they have re-evolved throughout echinoderm evolution. This Element provides a review of the research involving blastozoan respiratory structures, along with research concerning the morphology, paleoecology, and ontogeny of each of the major groupings of blastozoans as it relates to their corresponding respiratory structures. Areas of future research in these groups are also highlighted.

**Keywords:** Blastozoa, Paleozoic, echinoderm, respiratory, blastozoan

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## Contents

1 Introduction	1
2 Assessing Blastozoan Echinoderm Evolutionary Relationships	2
3 Respiratory Structures	6
4 Materials	10
5 Blastoidea	11
6 Eocrinoidea	25
7 "Cystoidea"	30
8 Diploporita	30
9 Rhombifera	43
10 Paracrinoidea	54
11 Parablastoidea	58
12 Future Work	62
13 Conclusions	63
References	65