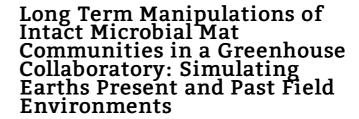


Long Term Manipulations of Intact Microbial Mat Communities in a Greenhouse Collaboratory: Simulating Earth's Present and Past Field Environments

NASA Technical Reports Server (NTRS), et al., Brad Bebout

DOWNLOAD



By Brad Bebout

Bibliogov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 34 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Photosynthetic microbial mat communities were obtained from marine hypersaline saltern ponds, maintained in a greenhouse facility, and examined for the effects of salinity variations. Because these microbial mats are considered to be useful analogs of equivalent ancient marine communities, they offer insights about evolutionary events during the greater than 3 billion year time interval wherein mats co-evolved with Earths geosphere and atmosphere. Although photosynthetic mats can be highly dynamic and exhibit extremely high activity, the mats in the present study have been maintained for more than one year with relatively minor changes. The major groups of microorganisms, as assayed using microscopic, genetic, and biomarker methodologies, are essentially the same as those in the original field samples. Field and greenhouse mats were similar with respect to rates of exchange of oxygen and dissolved inorganic carbon across the mat-water interface, both during the day and at night. Field and greenhouse mats exhibited similar rates of efflux of methane and hydrogen. Manipulations of salinity in the water overlying the mats produced changes in the community that strongly resemble those observed in the field. A...

Reviews

The most effective book i at any time read through. It is definitely simplistic but surprises in the fifty percent from the ebook. Your daily life span will probably be enhance once you full reading this ebook.

-- Jules Dietrich V

Extensive manual for pdf fanatics. This can be for all who statte there was not a well worth looking at. I am pleased to tell you that this is basically the very best pdf i have go through inside my individual existence and might be he finest ebook for at any time.

-- Dorian Roob

Other eBooks



Animalogy: Animal Analogies

Sylvan Dell Publishing. Paperback. Book Condition: New. Cathy Morrison (illustrator). Paperback. 32 pages. Dimensions: 9.8in. x 8.4in. x 0.4in.Compare and contrast different animals through predictable, rhyming analogies. Find the similarities between even the most incompatible animals...bat is to...



The Whale Tells His Side of the Story Hey God, Ive Got Some Guy Named Jonah in My Stomach and I Think Im Gonna Throw Up

B&H Kids. Hardcover. Book Condition: New. Cory Jones (illustrator). Hardcover. 32 pages. Dimensions: 9.1in. x 7.2in. x 0.3in.Oh sure, well all heard the story of Jonah and the Whale a hundred times. But have we heard it from the perspective of the...



God Loves You. Chester Blue

Henry and George Press. Paperback. Book Condition: New. Ursula Andrejczuk (illustrator). Paperback. 140 pages. Dimensions: 8.0in. x 5.2in. x 0.3in.BEAUTIFUL NEW ILLUSTRATIONS BRING THE STORY TO LIFE!A charming book about a mysterious bear that shows up in the right place at just...



Good Night, Zombie Scary Tales

Feiwel & Friends. Paperback. Book Condition: New. Iacopo Bruno (illustrator). Paperback. 112 pages. Dimensions: 8.2in. x 5.4in. x 0.2in. Welcome. Have a seat. Ignore the shambling undead outside. Let us tell you a story. But be warned. Good Night, Zombie isnt just any...



Molly on the Shore, BFMS 1 Study score

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 26 pages. Dimensions: 9.7in. x 6.9in. x 0.3in.Percy Grainger, like his contemporary Bela Bartok, was intensely interested in folk music and became a member of the English Folk-Song Society soon after his arrival in...



Yearbook Volume 15

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.This historic book may have numerous typos and missing text. Purchasers can usually download a free scanned copy of the original book (without...