

1. Record Nr.	UNISA996208041503316
Titolo	Biofouling [[electronic resource] /] / edited by Simone Durr, Jeremy Thomason
Pubbl/distr/stampa	Ames, Iowa, : Blackwell, 2009
ISBN	1-282-31687-7 9786612316876 1-4443-1546-3 1-4443-1547-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (460 p.)
Altri autori (Persone)	DurrSimone ThomasonJeremy
Disciplina	578.6509162 628.96
Soggetti	Fouling organisms Fouling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Biofouling; Contents; List of Contributors; Preface; I Processes in Marine and Freshwater Biofouling; i Larvae and Spores; Chapter 1 Reproduction and Larvae/Spore Types; Introduction; Some Terminology; Asexual Production of Propagules; Sexual Reproduction - Mechanisms Facilitating Fertilisation; Demographic Effects on Fertilisation Success - Allee Effects; Environmental Factors Affecting Fertilisation; Links Between Fertilisation and Subsequent Larval Attributes; Hatching and Development; Mobility and Survival of Larvae/Spores; Carry-over Effects; Conclusions; References Chapter 2 Larval Supply and DispersalIntroduction; The Significance of Scales of Larval Dispersal; Factors Influencing Dispersal Scales; Estimating Dispersal; Practical Consequences of Dispersal Scales; References; Chapter 3 Settlement and Behaviour of Marine Fouling Organisms; Introduction; Cues; Planktonic Propagules; Inert Surface Encounter, Followed by (Active?) Attachment or Rejection; Behavioural Surface Encounter, Exploration and Attachment or Rejection; Conclusions; Conclusions; References; ii Fouling Community Processes;

Chapter 4 Succession on Hard Substrata; Introduction

Succession and the Role of Disturbance; Models of Succession; Extension of General Models; Life History Characteristics; Patch Characteristics; Mode of Colonisation; Seasonality; Variable Endpoints of Succession; Conclusions; References; Chapter 5 Patterns of Fouling on a Global Scale; Background; Is There a Latitudinal Cline in Fouling Organisms?; The Pattern Revealed by a Global Modular Fouling Experiment; Are Biofouling Communities Saturated? The Relationship Between Local and Regional Diversity; Discussion and Future Perspectives; Conclusions; Acknowledgements; References

Chapter 6 Biofouling Patterns with Depth; Introduction; Major Forcing Factors Determining Subtidal Sessile Assemblages; Patterns of Vertical Zonation on Natural Substratum Subtidal Communities; Patterns of Vertical Zonation in Biofouling Communities on Man-made Structures; Conclusions; References; iii Epibiosis and Anti-epibiosis; Chapter 7 Epibiosis; Sessile Mode of Life; Consequences of Epibioses; Distributional Patterns of Epibioses; Conclusions; References; Chapter 8 Natural Control of Fouling; Biofouling and Its Biological Consequences; Defence Mechanisms Against Biofouling; Conclusions; References; iv Introduction to Microbial Fouling; Chapter 9 Marine Biofilms; Biofilm Development; Composition of Microbial Biofilms; Biofilm Dynamics; Signalling in Biofilms; Prokaryote-Eukaryote Interactions in Biofilms; Conclusions; Acknowledgements; Dedication; References; Chapter 10 Freshwater Biofilms; Introduction; Structure and Architecture of Freshwater Biofilms; Biofilm Biomass; Biofilm Metabolism and Its Role on the Aquatic Food Web; Dynamic Structure-Function in Freshwater Biofilms; Conclusions; Acknowledgements; References; Chapter 11 Biofilms in Medicine; Introduction; Infection of the Head and Neck

Sommario/riassunto

Biofouling (the colonisation of an interface by a diverse array of organisms) is almost always a problem where it occurs, as it negatively affects surfaces, the materials that they are made from and the structures that they form, and can even destroy them. This comprehensive book covers in detail in its first section the processes involved in marine, freshwater and medical biofouling including coverage of settlement by larvae and spores, biofouling community processes, epibiosis (biofouling on living organisms) and microbial fouling, including biofilms deleterious to human health.
