1. Record Nr. UNINA9910253872703321

Titolo	The Effects of Noise on Aquatic Life II / / edited by Arthur N. Popper, Anthony Hawkins
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2016
ISBN	1-4939-2981-X
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (1243 p.)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 875
Disciplina	574.5263
Soggetti	Neurosciences Otolaryngology Physiology Otorhinolaryngology Animal Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This book presents the papers presented at the Third International Conference on the Effects of Noise on Aquatic Life that took place in August 2013 in Budapest, Hungary."
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- Noise-Induced Hearing Loss: Permanent Versus Temporary Threshold Shifts and the Effects of Hair Cell Versus Neuronal Degeneration -- Modeled and Measured Underwater Sound Isopleths and Implications for Marine Mammal Mitigation in Alaska -- Sources of Underwater Sound and Their Characterization -- Assessment of Marine Mammal Impact Zones for Use of Military Sonar in the Baltic Sea -- Contribution to the Understanding of Particle Motion Perception in Marine Invertebrates -- Functional Morphology and Symmetry in the Odontocete Ear Complex -- A Low-Cost Open-Source Acoustic Recorder for Bioacoustics Research -- Assessment of Impulsive and Continuous Low-Frequency Noise in Irish Waters -- Is the Venice Lagoon Noisy? First Passive Listening Monitoring of the Venice Lagoon: Possible Effects on the Typical Fish Community -- Effect of Pile-Driving Sounds on the Survival of Larval Fish -- Challenge of Using Passive Acoustic Monitoring in High-Energy Environments: UK Tidal Environments and Other Case Studies -- Hearing Mechanisms and Noise Metrics Related to Auditory Masking in Bottlenose Dolphins

(Tursiops truncatus) -- Effects of Hatchery Rearing on the Structure and Function of salmonid Mechanosensory Systems -- The Effects of Impulsive Pile Driving Exposure on Fishes -- Review of the Effects of Offshore Seismic Surveys in Cetaceans: Are Mass Strandings a Possibility? -- Addressing Challenges in Studies of Behavioral Responses of Whales to Noise -- Measurements of Operational Wind Turbine Noise in UK Waters -- A Bioenergetics Approach to Understanding the Population Consequences of Disturbance: Elephant Seals as a Model System -- Singing Fish in an Ocean of Noise: Effects of Boat Noise on the Plainfin Midshipman (Porichthys notatus) in a Natural Ecosystem -- Detection of Complex Sounds in Quiet Conditions by Seals and Sea Lions -- Offshore Dredger Sounds: Source Levels, Sound Maps, and Risk Assessment -- Peer-Reviewed Studies on the Effects of Anthropogenic Noise on Marine Invertebrates: From Scallop Larvae to Giant Squid -- Effects of Offshore Wind Farms on the Early Life Stages of Dicentrarchus labrax -- The European Marine Strategy: Noise Monitoring in European Marine Waters from 2014 -- Potential Population Consequences of Active Sonar Disturbance in Atlantic Herring: Estimating the Maximum Risk -- Fulfilling EU Laws to Ensure Marine Mammal Protection During Marine Renewable Construction Operations in Scotland -- Expert Elicitation Methods in Quantifying the Consequences from Acoustic Disturbance From Offshore Renewable Energy Developments -- Masking Experiments in Humans and Birds Using Anthropogenic Noises -- Documenting and Assessing Dolphin Calls and Ambient and Anthropogenic Noise Levels via PAM and an SPL Meter -- Soundscapes and Larval Settlement: Larval Bivalve Responses to Habitat-Associated Underwater Sounds -- Characterizing Marine Soundscapes -- Pile-Driving Noise Impairs Antipredator Behavior of the European Sea Bass Dicentrarchus labrax -- Using Reaction Time and Equal Latency Contours to Derive Auditory Weighting Functions in Sea Lions and Dolphins -- Does Primary Productivity Turn Up the Volume? Exploring the Relationship Between Chlorophyll a and the Soundscape of Coral Reefs in the Pacific -- Expert Elicitation of Population-Level Effects of Disturbance -- Current Status of Development of Methods to Assess Effects of Cumulative or Aggregated Underwater Sounds on Marine Mammals -- Seismic Survey Footprints in Irish Waters: A Starting Point for Effective Mitigation -- Stochastic Modeling of Behavioral Response to Anthropogenic Sounds -- Underwater Sound Levels at a Wave Energy Device Testing Facility in Falmouth Bay, UK -- Predicting Anthropogenic Noise Contributions to U.S. Waters -- Auditory Sensitivity and Masking Profiles for the Sea Otter (Enhydra lutris) -- Are Masking-Based Models of Risk Useful? -- “Large” Tank Acoustics: How Big is Big Enough? -- High-Resolution Analysis of Seismic Airgun Impulses and Their Reverberant Field as Contributors to an Acoustic Environment -- Underwater Sound Propagation Modeling Methods for Predicting Marine Animal Exposure -- Investigating the Effect of Tones and Frequency Sweeps on the Collective Behavior of Penned Herring (Clupea harengus) -- The Challenges of Analyzing Behavioral Response Study Data: An Overview of the MOCHA (Multi-study Ocean acoustics Human effects Analysis) Project -- National Oceanic and Atmospheric Administration’s Cetacean and Sound Mapping Effort: Continuing Forward With an Integrated Ocean Noise Strategy -- Understanding the Population Consequences of Acoustic Disturbance for Marine Mammals -- Multiple-Pulse Sounds and Seals: Results of a Harbor Seal (Phoca vitulina) Telemetry Study During Wind Farm Construction -- Developing Sound Exposure Criteria for Fishes -- Calibration and Characterization of Autonomous Recorders Used in the Measurement of Underwater Noise -- Intrinsic Directional Information

of Ground Roll Waves -- A Permanent Soundscape Monitoring System for the Care of Animals in Aquaria -- Playback Experiments for Noise Exposure -- Natural Variation in Stress Hormones, Comparisons Across Matrices, and Impacts Resulting From Induced Stress in the Bottlenose Dolphin -- Risk Functions of Dolphins and Sea Lions Exposed to Sonar Signals -- Residency of Reef Fish During Pile Driving within a Shallow Pierside Environment -- Hidden Markov Models Capture Behavioral Responses to Suction-Cup Tag Deployment: A Functional State Approach to Behavioral Context -- A Change in the Use of Regulatory Criteria for Assessing Potential Impacts of Sound on Fishes -- In-Air and Underwater Hearing in the Great Cormorant (Phalacrocorax carbo sinensis) -- Stress Response and Habituation to Motorboat Noise in Two Coastal Fish Species in the Bothnian Sea -- Cumulative Effects of Exposure to Continuous and Intermittent Sounds on Temporary Hearing Threshold Shifts Induced in a Harbor Porpoise (Phocoena phocoena) -- Great Ears: Low Frequency Sensitivity Correlates in Land and Marine Leviathans -- What We Can Learn From Artificial Lateral Line Sensor Arrays? -- Protection of Marine Mammals -- Avoidance of Pile-Driving Noise by Hudson River Sturgeon During Construction of the New NY Bridge at Tappan Zee -- Methods for Predicting Potential Impacts of Pile-Driving Noise on Endangered Sturgeon During Bridge Construction -- Automatic Classification of Marine Mammals with Speaker Classification Methods -- Directional Hearing and Head-Related Transfer Function in Odontocete Cetaceans -- Controlled Sonar Exposure Experiments on Cetaceans in Norwegian Waters; Overview of the 3S-Project -- SOFAR: A New Sound-Acquisition Software Package for Underwater Noise Monitoring -- Passive Underwater Noise Attenuation Using Large Encapsulated Air Bubbles -- Measurement of Underwater Operational Noise Emitted by Wave and Tidal Stream Energy Devices -- Likely Age-Related Hearing Loss (Presbycusis) in a Stranded Indo-Pacific Humpback Dolphin (Sousa chinensis) -- Impacts of Underwater Noise on Marine Vertebrates: Project Introduction and First Results -- Soundscapes and Larval Settlement: Characterizing the Stimulus from a Larval Perspective -- Does Vessel Noise Affect Oyster Toadfish Calling Rates? -- Comparison of PAM Systems for Acoustic Monitoring and Further Risk Mitigation Application -- Cardiorespiratory Responses to Acoustic Noise in Belugas -- Acoustic Communication in Fishes and Potential Effects of Noise -- Evaluation of Three Sensor Types for Particle Motion Measurement -- Regional Variations and Trends in Ambient Noise: Examples from Australian Waters -- Spatial Patterns of Inshore Marine Soundscapes -- Soundscape and Noise Exposure Monitoring in a Marine Protected Area Using Shipping Data and Time-Lapse Footage -- Global Trends in Ocean Noise -- Pile-Driving Pressure and Particle Velocity at the Seabed: Quantifying Effects on Crustaceans and Groundfish -- Measuring Hearing in Wild Beluga Whales -- Auditory Discrimination of Natural and High-Pass Filtered Bark Vocalizations in a California Sea Lion (Zalophus californianus) -- Hearing Sensation Changes When a Warning Predicts a Loud Sound in the False Killer Whale (Pseudorca crassidens) -- Does Masking Matter? Shipping Noise and Fish Vocalizations -- Noise Mitigation During Pile Driving Efficiently Reduces Disturbance of Marine Mammals -- Noise Impact on European Sea Bass Behavior: Temporal Structure Matters -- Does Noise from Shipping and Boat Traffic Affect Predator Vigilance in the European Common Hermit Crab? -- The Use of Deep Water Berths and the Effect of Noise on Bottlenose Dolphins in the Shannon Estuary cSAC -- Sound Transmission Validation and Sensitivity Studies in Numerical Models -- Patterns of Occurrence and Marine Mammal Acoustic Behavior in Relation to Navy Sonar Activity off Jacksonville,

Florida -- Hearing in Whales and Dolphins: Relevance and Limitations -- Humans, Fish, and Whales: How Right Whales Modify Calling Behavior in Response to Shifting Background Noise Conditions -- Renewables, Shipping, and Protected Species: A Vanishing Opportunity for Effective Marine Spatial Planning? -- Are the 1/3-Octave 63- and 125-Hz Band Noise Levels Predictive of Vessel Activity? The Case in the Cres–Lošinj Archipelago (Northern Adriatic Sea, Croatia) -- The Good, the Bad, and the Distant: Soundscape Cues for Larval Fish -- Terrestrial Soundscapes: Status of Ecological Research in Natural and Human-Dominated Landscapes -- Effects of Underwater Turbine Noise on Crab Larval Metamorphosis -- Temporary Threshold Shifts in Naïve and Experienced Belugas: Can Dampening of the Effects of Fatiguing Sounds be Learned? -- Pile Driving at the New Bridge at Tappan Zee: Potential Environmental Impacts -- Effects of Seismic Airguns on Pallid Sturgeon and Paddlefish -- A Summary Comparison of Active Acoustic Detections and Visual Observations of Marine Mammals in the Canadian Beaufort Sea -- U.

Sommario/riassunto

The meeting of Aquatic Noise 2013 will introduce participants to the most recent research data, regulatory issues and thinking about effects of man-made noise and will foster critical cross-disciplinary discussion between the participants. Emphasis will be on the cross-fertilization of ideas and findings across species and noise sources. As with its predecessor, The Effects of Noise on Aquatic Life: 3rd International Conference will encourage discussion of the impact of underwater sound, its regulation and mitigation of its effects. With over 100 contributions from leading researchers, a wide range of sources of underwater sound will be considered. .