

Proceedings of the 7th International Coastal Symposium (ICS) 2002

Source: Journal of Coastal Research, 36(sp1)

Published By: Coastal Education and Research Foundation

URL: <https://doi.org/10.2112/1551-5036-36.sp1.ii>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

International Coastal Symposium (ICS 2002)

Edited by
J.A.G. Cooper and D.W.T. Jackson

Coastal Education & Research Foundation [CERF]
Journal of Coastal Research Special Issue 36

International Coastal Symposium (ICS 2002)

Edited by
J.A.G. Cooper and D.W.T. Jackson

Coastal Education and Research Foundation (CERF)
Journal of Coastal Research Special Issue 36

THE 7TH INTERNATIONAL COASTAL SYMPOSIUM (ICS 2002)

TEMPLEPATRICK, NORTHERN IRELAND

MARCH 25TH – 29TH 2002

TABLE OF CONTENTS

SPONSORED BY:

COASTAL EDUCATION & RESEARCH FOUNDATION [CERF],
OFFICIAL PUBLISHER OF THE
JOURNAL OF COASTAL RESEARCH (JCR)



2. TOURIST RESORTS AND THEIR IMPACT ON BEACH EROSION AT SOTAVENTO BEACHES, FUERTEVENTURA, SPAIN (ALONSO & CABRERA) PP. 1-7
3. BETWEEN WAVE- AND TIDE-DOMINATED COASTS_ THE MIDDLE GROUND REVISITED (ANTHONY & ORFORD) PP. 8-15
4. A NUMERICAL MODEL OF WAVE PROPAGATION ON MILD SLOPES (BALAS & INAN) PP. 16-21
5. AREAS OF OUTSTANDING NATURAL BEAUTY AS A MANAGEMENT TOOL FOR COASTAL MANAGEMENT IN NORTHERN IRELAND_ CAN THEY WORK (BANN & COOPER) PP. 22-27
6. GEOLOGIC EVIDENCE FOR THE INCORPORATION OF FLOOD TIDAL DELTAS AT TAVIRA ISLAND, SOUTHERN PORTUGAL (BARNHARDT ET AL.) PP. 28-36
7. EVOLUTION OF THE GLACIATED SHELF AND COASTLINE OF THE NORTHERN GULF OF MAINE, USA (BELKNAP, KELLEY, & GONTZ) PP. 37-55
8. UTILITY OF MORPHODYNAMIC CHARACTERISATION IN THE PREDICTION OF BEACH DAMAGE BY STORMS (BENAVENTE, DEL RIO, ANFUSO, GRACIA, & REYES) PP. 56-64
9. MIDDLE HOLOCENE SEA-LEVEL AND EVOLUTION OF THE GULF OF MEXICO COAST (USA) (BLUM, CARTER, ZAYAC, & GOBLE) PP. 65-80
10. INTERACTION BETWEEN CATCHMENT BASIN MANAGEMENT AND COASTAL EVOLUTION (SOUTHERN ITALY) (BONORA, IMMORDINO, SCHIAVI, SIMEONI, & VALPREDA) PP. 81-88
11. DUNE, BLUFF, AND BEACH EROSION DUE TO EXHAUSTIVE SAND MINING_ THE CASE OF SANTA BARBARA BEACH, SAO MIGUEL (AZORES, PORTUGAL) (BORGES ET AL.) PP. 89-95
12. SPATIAL VARIABILITY OF WAVE CONDITIONS ON THE FRENCH ATLANTIC COAST USING IN-SITU DATA (BUTEL, DUPUIS, & BONNETON) PP. 96-108
13. ORGANIC-RICH FACIES IN PARAGLACIAL BARRIER LITHOSOMES OF NORTHERN NEW ENGLAND_ PRESERVATION AND PALEOENVIRONMENTAL SIGNIFICANCE (BUYNEVICH & FITZGERALD) PP. 109-117
14. DISTRIBUTION OF FE, MN, CU, AND CD IN UPPER SEDIMENTS AND SEDIMENT-TRAP MATERIAL OF RIA FORMOSA (PORTUGAL) (CAETANO, VALE, & BEBIANNO) PP. 118-123
15. HOLOCENE EVOLUTION OF THE SALPI LAGOON (PUGLIA, ITALY) (CALDARA, PENNETTA, & SIMONE) PP. 124-133

- 16. WETLAND LOSS BY EROSION IN ODIEL MARSHES (SW SPAIN) (CASTILLO ET AL.) PP. 134-138**
- 17. SEDIMENTATION PROCESSES ON INTERTIDAL AREAS OF THE LAGOON OF VENICE_ IDENTIFICATION OF EXCEPTIONAL FLOOD EVENTS (ACQUA ALTA) USING RADIONUCLIDES (CIAVOLA, ORGANO, VINTRO, & MITCHELL) PP. 139-147**
- 18. VARIATIONS IN INLET BEHAVIOR AND SHOREFACE SAND RESOURCES_ FACTORS CONTROLLING MANAGEMENT DECISIONS, FIGURE EIGHT ISLAND, NC, USA (CLEARY) PP. 148-163**
- 19. THE BARRIER ISLANDS OF SOUTHERN MOZAMBIQUE (COOPER & PILKEY) PP. 164-172**
- 20. PREDICTIONS OF LARGE-SCALE COASTAL TENDENCY_ DEVELOPMENT AND APPLICATION OF A QUALITATIVE BEHAVIOUR-BASED METHODOLOGY (COOPER & JAY) PP. 173-181**
- 21. MEASUREMENTS OF CROSS-SHORE SAND FLUXES ON A MACROTIDAL POCKET BEACH (SAINT-GEORGES BEACH, ATLANTIC COAST, SW FRANCE) (CORBAU, CIAVOLA, GONZALEZ, & FERREIRA) PP. 182-189**
- 22. BEACH CARRYING CAPACITY ASSESSMENT_ HOW IMPORTANT IS IT (DA SILVA) PP. 190-197**
- 23. LOW-ENERGY MORPHODYNAMICS OF A RIDGE AND RUNNEL SYSTEM (DAWSON, DAVIDSON-ARNOTT, & OLLERHEAD) PP. 198-215**
- 24. FISH KILL EVENTS AND HABITAT LOSSES OF THE RICHMOND RIVER, NSW AUSTRALIA_ AN OVERVIEW (DAWSON) PP. 216-221**
- 25. MORPHODYNAMICS OF RIDGE AND RUNNEL SYSTEMS DURING SUMMER (APOLUCENO, HOWA, DUPUIS, & OGGIAN) PP. 222-230**
- 26. INFLUENCE OF HYDRODYNAMICS AND SEDIMENTARY CHARACTERISTICS OF BARQUEIRO RIA ON AREALONGA BEACH DYNAMICS (DELGADO, ALCANTARA-CARRIO, ALEJO, ALONSO, & LOUZAO) PP. 231-239**
- 27. SHORT-TERM MORPHOLOGICAL EXPRESSION OF DUNE SAND RECYCLING ON A MACROTIDAL, WAVE-EXPOSED ESTUARINE SHORELINE (DOBRONIAK & ANTHONY) PP. 240-248**
- 28. LIFE EXPECTANCY OF SHINGLE BEACHES_ MEASURING IN SITU ABRASION (DORNBUSCH, WILLIAMS, MOSES, & ROBINSON) PP. 249-255**
- 29. ASSESSING THE IMPACT OF AN ORGANIC RESTORATION STRUCTURE ON BOAT WAKE ENERGY (ELLIS, SHERMAN, BAUER, & HART) PP. 256-265**

30. **RELIABILITY-BASED RISK ASSESSMENT OF RUBBLE MOUND BREAKWATERS UNDER TSUNAMI ATTACK (ERGIN & BALAS) PP. 266-272**
31. **LONG- AND SHORT-TERM COASTAL EROSION IN SOUTHERN BRAZIL (ESTEVEES, TOLDO, DILLENBURG, & TOMAZELLI) PP. 273-282**
32. **STUDY OF HARBOUR INFILLING USING SAND TRACER EXPERIMENTS (FERREIRA ET AL.) PP. 283-289**
33. **INLET FORMATION AND EVOLUTION OF THE SEDIMENT BYPASSING SYSTEM_ NEW INLET, CAPE COD, MASSACHUSETTS (FITZGERALD & PENDLETON) PP. 290-299**
34. **MEASURING SWASH ZONE HYDRODYNAMICS AND MORPHODYNAMIC CHANGE_ A HIGH-RESOLUTION LABORATORY SYSTEM USING DIGITAL VIDEO (FOOTE, HORN, & LI) PP. 300-316**
35. **WIND DISTRIBUTION OVER BEACH-DUNE SURFACE_ IMPROVING AEOLIAN SAND TRANSPORT ESTIMATION (GOMES ET AL.) PP. 317-324**
36. **SAND DUNE MANAGEMENT PROBLEMS AND TECHNIQUES, SPAIN (GOMEZ-PINA, MUNOZ-PEREZ, RAMIREZ, & LEY) PP. 325-332**
37. **SEAFLOOR FEATURES AND CHARACTERISTICS OF THE BLACK LEDGES AREA, PENOBSCOT BAY, MAINE, USA (GONTZ, BELKNAP, & KELLEY) PP. 333-339**
38. **A SPATIAL SENSITIVITY ANALYSIS OF LAND USE CHARACTERISTICS AND PHOSPHORUS LEVELS IN SMALL TIDAL CREEK ESTUARIES OF NORTH CAROLINA, USA (HALLS) PP. 340-351**
39. **THE DISTRIBUTION OF SPARTINA ANGLICA ON ESTUARINE MUDFLATS IN RELATION TO WAVE-RELATED HYDRODYNAMIC PARAMETERS (HAMMOND, MALVAREZ, & COOPER) PP. 352-355**
40. **MESOSCALE MORPHOLOGICAL CHANGES ON LINEAR, NEARSHORE SANDBANKS, Co.WEXFORD, SE IRELAND (HANNA & COOPER) PP. 356-364**
41. **HISTORIC LAND RECLAMATION IN THE INTERTIDAL WETLANDS OF THE SHANNON ESTUARY, WESTERN IRELAND (HEALY & HICKEY) PP. 365-373**
42. **CO-MEASUREMENT OF BEACHES IN MAINE, USA_ VOLUNTEER PROFILING OF BEACHES AND ANNUAL MEETINGS (HILL, KELLEY, BELKNAP, & DICKSON) PP. 374-380**

43. PREPARING FOR THE IMPACTS OF CLIMATE CHANGE ON THE CENTRAL SOUTH COAST OF ENGLAND_ A FRAMEWORK FOR FUTURE RISK MANAGEMENT (HOSKING & MCINNES) PP. 381-389
44. MORPHOLOGICAL MONITORING OF A HIGH ENERGY BEACH SYSTEM USING GPS AND TOTAL STATION TECHNIQUES, RUNKERRY, CO. ANTRIM, NORTHERN IRELAND (HUANG, JACKSON, & COOPER) PP. 390-398
45. NUMERICAL AND EXPERIMENTAL ANALYSIS OF RAPID DELTA FORMATION, TURKISH COAST (IRTEM ET AL.) PP. 399-405
46. A NEW, HIGH-RESOLUTION 'DEPTH OF DISTURBANCE' INSTRUMENT (SAM) FOR USE IN THE SURF ZONE (JACKSON & MALVAREZ) PP. 406-413
47. GEOMORPHIC-BIOTIC INTERACTIONS ON BEACH FORESHORES IN ESTUARIES (JACKSON, NORDSTROM, & SMITH) PP. 414-424
48. SHORELINE SALIENTS AND TOMBOLOS ON THE SANTA CATARINA COAST (BRAZIL)_ DESCRIPTION AND ANALYSIS OF THE MORPHOLOGICAL RELATIONSHIPS (KLEIN, JUNIOR, & DE MENEZES) PP. 425-440
49. WIND ABRASION (VENTIFACTION) ON DONEGAL AND OREGON COASTS AND IMPLICATIONS FOR THE SEDIMENT DYNAMICS OF COASTAL SYSTEMS (KNIGHT) PP. 441-449
50. INITIAL SPREADING BEHAVIOR OF WATER RELEASED FROM A SWINGING GATE LOCK (LEMCKERT, TAYLOR, & SCHACHT) PP. 450-458
51. HYDRODYNAMICS AND SEDIMENT TRANSPORT THROUGH TIDAL MARSH CANOPIES (LEONARD & REED) PP. 459-469
52. COASTAL ZONE MANAGEMENT ON THE COSTA DEL SOL_ A SMALL BUSINESS PERSPECTIVE (GARCIA, POLLARD, & HUGHES) PP. 470-482
53. HIGH-RESOLUTION GEOPHYSICAL INVESTIGATIONS OF ESTUARINE AND NEARSHORE SEDIMENT DYNAMICS, RIVER BANN ESTUARY, NORTHERN IRELAND COAST (MCDOWELL, KNIGHT, & QUINN) PP. 483-486
54. SOCIO-ECONOMIC DATA IN COASTAL VULNERABILITY INDICES_ CONSTRAINTS AND OPPORTUNITIES (MCLAUGHLIN, MCKENNA, & COOPER) PP. 487-497
55. SELF-ORGANISED CRITICALITY AT THE ONSET OF AEOLIAN SEDIMENT TRANSPORT (MCMENAMIN, CASSIDY, & MCCLOSKEY) PP. 498-505

56. WAVE DISSIPATION OVER MACRO-TIDAL SALTMARSHES_ EFFECTS OF MARSH EDGE
TYPOLOGY AND VEGETATION CHANGE (MOLLER & SPENCER) PP. 506-521
57. INTEGRATED COASTAL AND MARINE MANAGEMENT IN NORTHERN REGIONS_ RECONCILING
ECONOMIC DEVELOPMENT AND CONSERVATION (MUIR) PP. 522-530
58. GEOMORPHOLOGICAL AND BIOLOGICAL MONITORING OF SENSITIVE INTERTIDAL FLAT
ENVIRONMENTS (NAVAS ET AL.) PP. 531-543
59. SPATIAL VARIABILITY IN APPROACHES TO COASTAL PROTECTION IN IRELAND (O'HAGAN &
COOPER) PP. 544-551
60. CHARACTERISATION OF THE DYNAMICS OF FIGUEIRA DA FOZ BEACH, PORTUGAL (OLIVEIRA,
FREIRE, & LARANGEIRO) PP. 552-563
61. GROUND PENETRATING RADAR ANALYSIS OF AN EMERGENT MID-PLEISTOCENE ESTUARINE
SHORELINE COMPLEX, CHESAPEAKE BAY, MARYLAND, USA (O'NEAL ET AL.) PP. 564-571
62. LONGSHORE TRANSPORT VOLUMES_ A CRITICAL VIEW (PILKEY & COOPER) PP. 572-580
63. PHYTOPLANKTON COMPOSITION OF EMPORDA SALT MARSHES, SPAIN AND ITS RESPONSE TO
FRESHWATER FLUX REGULATION (QUINTANA & MORENO-AMICH) PP. 581-590
64. MONITORING THE CRESMINA DUN EVOLUTION (PORTUGAL) USING DIFFERENTIAL GPS
(REBELO, BRITO, & MONTEIRO) PP. 591-604
65. UNDERSTANDING TIDAL MARSH SEDIMENTATION IN THE SACRAMENTO-SAN JOAQUIN
DELTA, CALIFORNIA (REED) PP. 605-611
66. THE VARIABILITY OF RIDGE AND RUNNEL BEACH MORPHOLOGY_ EXAMPLES FROM
NORTHERN FRANCE (REICHMUTH & ANTHONY) PP. 612-621
67. MONITORING AND MANAGEMENT OF THE NORTHERN IRELAND SEA DEFENCES USING A RISK
BASED APPROACH (ROBERTS ET AL.) PP. 622-633
68. EFFECTS OF ARTIFICIAL CANAL OPENINGS ON FISH COMMUNITY STRUCTURE OF
IMBOASSICA COASTAL LAGOON, RIO DE JANEIRO, BRAZIL (SAAD, BEAUMORD, &
CARAMASCHI) PP. 634-639
69. SAND WAVES IN THE MESSINA STRAIT, ITALY (SANTORO, AMORE, CAVALLARO, COZZO, &
FOTI) PP. 640-653

- 70. INFRAGRAVITY WAVE FREQUENCY STRUCTURE ON A DOUBLE-BARRED BEACH (SENECHAL, BONNETON, & DUPUIS) PP. 654-661**
- 71. RETENTION OF BEACH SANDS BY DAMS AND DEBRIS BASINS IN SOUTHERN CALIFORNIA (SHERMAN, BARRON, & ELLIS) PP. 662-674**
- 72. MODELLING WATER SURFACE TOPOGRAPHY AT A COMPLEX INLET SYSTEM_ TEIGNMOUGH, UK (SIEGLE, HUNTLEY, AND DAVIDSON) PP. 675-685**
- 73. INTEGRATED MANAGEMENT STUDY OF COMACCHIO COAST (ITALY) (SIMEONI ET AL.) PP. 686-693**
- 74. GLOBAL DISTRIBUTION AND MORPHOLOGY OF DELTAIC BARRIER ISLAND SYSTEMS (STUTZ & PILKEY) PP. 694-707**
- 75. TIDAL EFFECTS ON CROSS-SHORE SEDIMENT TRANSPORT ON A SHINGLE BEACH (TRIM, SHE, & POPE) PP. 708-715**
- 76. THE USE OF MULTIVARIATE STATISTICAL TECHNIQUES TO ESTABLISH BEACH DEBRIS POLLUTION SOURCES (TUDOR ET AL.) PP. 716-725**
- 77. RECOVERY OF SOUND QUALITY OF SINGING SAND BY SEDIMENT RENOURISHMENT (TSUJIMOTO ET AL.) PP. 726-731**
- 78. AEOLIAN SAND TRANSPORT ON A RIDGE AND RUNNEL BEACH_ PRELIMINARY RESULTS FROM LEFFRINCKOUCKE BEACH, NORTHERN FRANCE (VANHEE, ANTHONY, & RUZ) PP. 732-740**
- 79. RECENT EVOLUTION OF THE NATURAL INLETS OF A BARRIER ISLAND SYSTEM IN SOUTHERN PORTUGAL (VILA-CONCEJO, MATIAS, FERREIRA, DUARTE, & DIAS) PP. 741-752**
- 80. SEDIMENT RESUSPENSION WITHIN A MICROTIDAL ESTUARY_ EMBAYMENT AND THE IMPLICATION TO CHANNEL MANAGEMENT (WEBSTER & LEMCKERT) PP. 753-759**