

International Blue Carbon Scientific Working Group 12th Annual Meeting & Nordic Blue Carbon Workshop

September 9th – 13th, 2019
Nordatlantens Brygge, Copenhagen, Denmark

AGENDA



Coordinating organizations:



Workshop partner organizations:



Funding organizations:



| Day 1 – Monday, September 9 th | |
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| 6:00 - 8:00 PM | Welcome Reception Drinks at Brewpub (en.brewpub.dk; Vestergade 29, 1456 København K) |

| Day 2 – Tuesday, September 10 th | |
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| 8:30 AM | Check-in |
| 9:00 | Host Welcome Moderator: <i>James Fourqurean, Florida International University</i> |
| | Welcome to the Region <i>Marianne Holmer, University of Southern Denmark</i> |
| | Workshop agenda and expected outcomes <i>Jennifer Howard, Conservation International</i> |
| | Welcome to the Nordic Blue Carbon Workshop Local organizing committee: <i>Marianne Holmer, University of Southern Denmark</i> <i>Mats Björk, Stockholm University</i> <i>Christoffer Boström, Åbo Akademi University</i> <i>Dorte Krause-Jensen, Aarhus University</i> <i>Helene Frigstad, Norwegian Institute for Water Research</i> <i>Steven Lutz, GRID-Arendal</i> |
| 9:30 | Introduction to Blue Carbon and the International Blue Carbon Scientific Working Group Chairs: <i>Emily Pidgeon, Conservation International</i> <i>Steve Crooks, Silvestrum Climate Associates</i> |
| 10:00 | Around the room introductions <i>Everyone states their name, organization, country of origin, and why they are here</i> |
| Session 1 | Blue Carbon – A Nordic Perspective Organizers: <i>Christoffer Boström, Åbo Akademi University; Dorte Krause-Jensen, Aarhus University; James Fourqurean, Florida International University</i> Moderator: <i>James Fourqurean, Florida International University</i> Outcome: Synthesis Paper on Nordic Blue Forests in relation to climate change mitigation and adaption: current understanding and science gaps |
| 10:30 | Blue forests in Norway – status and knowledge gaps <i>Jonas Thormar, Institute for Marine Research</i> |
| 10:45 | Blue forests in Sweden – status and knowledge gaps <i>Martin Gullström, Stockholm University</i> |

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| 11:00 | Blue forests in Finland – status and knowledge gaps <i>Christoffer Boström, Åbo Akademi University</i> |
| 11:15 | Blue forests in Denmark and Greenland – status and knowledge gaps <i>Dorte Krause-Jensen, Aarhus University & Marianne Holmer, University of Southern Denmark</i> |
| 11:30 | Coffee Break |
| Session 1 cont'd | Blue Carbon – A Nordic Perspective (continued) |
| 11:45 | Blue Carbon Distribution Map <i>Hege Gundersen, Norwegian Institute for Water Research</i> |
| 12:00 | Carbon Sequestration in the Salt Marshes of the Northern Wadden Sea <i>Peter Müller, Aarhus University</i> |
| 12:15 | Carbon sequestration of Danish saltmarshes/meadows <i>Elizabeth Graversen, Aarhus University & Gary Banta, Roskilde University</i> |
| 12:30 | Expanding Greenland seagrass meadows contribute new sediment carbon sinks <i>Núria Marba, Instituto Mediterráneo de Estudios Avanzados</i> |
| 12:45 | Discussion |
| 1:00 | Lunch – Provided |
| Session 2 | Blue Carbon and achieving the Paris Agreement – Science needed for Nationally Determined Contributions (NDCs), Greenhouse Gas Inventories and Actions Organizers: <i>Emily Pidgeon, Conservation International; Steve Crooks, Silvestrum Associates; Dorothee Herr, IUCN; Steven Lutz, GRID-Arendal</i> Moderator: <i>Salvatore Aricò, IOC-UNESCO</i> Outcome: Review of the Blue Carbon and NDC guidelines, IPBC |
| 2:00 | Inclusion of Blue Carbon in national inventories - lessons learned and challenges ahead <i>Steen Gyldenkerne, Aarhus University</i> |
| 2:15 | Mangroves: Integration in Payment for Carbon Services in Costa Rica <i>Marco Quesada, Conservation International - Costa Rica</i> |
| 2:30 | Blue carbon and the Kenyan NDC <i>James Kairo, Kenya Marine and Fisheries Research Institute</i> |
| 2:45 | New Guidelines for Blue Carbon in NDC, Inventories and National Climate Strategies <i>Tamara Thomas, Conservation International</i> |
| 3:00 | National work on blue carbon policies in Norway <i>Åsa Pedersen, Norwegian Environment Agency</i> |
| 3:15 | Discussion |
| 3:45 | Coffee Break and Group Photo |
| Session 3 | Restoration of high latitude blue forests (seagrass, salt marsh, macro algae) Organizers: <i>Steve Crooks, Silvestrum Climate Associates; Christoffer Boström, Åbo Akademi University</i> Moderator: <i>Christoffer Boström, Åbo Akademi University</i> |

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| | Outcome: <i>Understanding structured restoration planning</i> |
| 4:15 | Seagrass restoration in Sweden; implications for carbon and nitrogen stocks <i>Per-Olav Moksnes, University of Gothenburg</i> |
| 4:30 | Structured planning of restoration projects linking science to outcomes <i>Steve Crooks, Silvestrum Climate Associates</i> |
| 4:45 | Kelp forest restoration: nudging a phase shift on a sea urchin barren Speaker: <i>Hege Gundersen, Norwegian Institute for Water Research</i> |
| 5:00 | Discussion |
| 5:30 | End |

| Day 3 – Wednesday, September 11 th | |
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| 9:00 AM | Welcome |
| Session 4 | <p>Kelp forests and rocky shores in the Blue Carbon perspective</p> <p>Organizers: <i>Kasper Hancke, Norwegian Institute for Water Research; Dorte Krause-Jensen, Aarhus University; Jennifer Howard, Conservation International</i></p> <p>Moderator: <i>Jennifer Howard, Conservation International</i></p> <p>Outcome: Regional review paper of policy relevant science needs</p> |
| 9:15 | Macroalgae in the blue carbon context and seaweed farming perspectives <i>Dorte Krause-Jensen, Aarhus University & Carlos Duarte, King Abdullah University of Science and Technology</i> |
| 9:30 | Export and fate of macroalgae from coastal habitats <i>Morten Foldager Pedersen, Roskilde University</i> |
| 9:45 | Long-term changes in macroalgae along the Norwegian coast <i>Helene Frigstad, Norwegian Institute for Water Research</i> |
| 10:00 | Seaweed farming in Norway – Blue carbon and blue economy perspectives <i>Kasper Hancke & Jorunn Skjerme, Norwegian Institute for Water Research</i> |
| 10:15 | Discussion |
| 11:00 | Coffee Break |
| Session 5 | <p>Sea level rise and its effects on blue carbon</p> <p>Organizers: <i>Catherine Lovelock, University of Queensland; Neil Saintilan, Macquarie University; Marianne Holmer, University of Southern Denmark</i></p> <p>Moderator: <i>Steve Crooks, Silvestrum</i></p> <p>Outcome: To be confirmed</p> |
| 11:30 | Sea level rise and carbon stocks <i>Neil Saintilan, Macquarie University</i> |
| 11:45 | Can we estimate blue carbon mitigation potential with sea level rise? <i>Catherine Lovelock, University of Queensland</i> |
| 12:00 | Biogeochemical constraints on carbon preservation <i>Patrick Megonigal, Smithsonian Environmental Research Center</i> |

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| 12:15 | Gyldensteen Coastal Lagoon and carbon cycling <i>Cintia Quintana, University of Southern Denmark</i> |
| 12:30 | Carbon diagenesis, preservation, and seagrass <i>James Fourqurean, Florida International University</i> |
| 12:45 | Discussion |
| 1:15 | Lunch – Provided |
| Session 6 | <p>Blue Carbon Science Updates</p> <p>Organizer: <i>Emily Pidgeon, Conservation International</i></p> <p>Moderator: <i>Miguel Cifuentes, Centro Agronómico Tropical de Investigación y Enseñanza</i></p> <p>Outcome: To be confirmed</p> |
| 2:15 | UN Decade of Ocean Science <i>Salvatore Aricò, IOC-UNESCO</i> |
| 2:30 | Blue Carbon Manual, Volume 2 <i>Jean Brodeur, Conservation International</i> |
| 2:45 | The Blue Forests Economy - illustrating options for multiple revenue streams based on healthy blue forests to support goals in blue carbon and more <i>Steven Lutz, GRID-Arendal</i> |
| 3:00 | Novel Acoustic Remote Sensing Methods for Estimating Aboveground Biomass and Sediment Organic Carbon of Seagrass Meadows <i>Faiz Rahman, University of Texas Rio Grande Valley</i> |
| 3:15 | Ecosystem carbon stocks in tidal wetlands of the Pacific Northwest USA <i>Boone Kauffman, Oregon State University</i> |
| 3:30 | Coffee Break |
| Session 7 | <p>Methane and nitrous oxide emissions</p> <p>Organizers: <i>Patrick Megonigal, Smithsonian Environmental Research Center; Mats Björk, Stockholm University</i></p> <p>Moderator: <i>Dorothee Herr, IUCN</i></p> <p>Outcome: To be confirmed</p> |
| 4:00 | Overview of greenhouse gas emissions in blue carbon systems <i>Patrick Megonigal, Smithsonian Environmental Research Center</i> |
| 4:15 | Revision of Tier 1 methane emissions factor for ditches, ponds, and aquaculture <i>Catherine Lovelock, University of Queensland</i> |
| 4:30 | Effects of tidal marsh elevation on methane emissions <i>Peter Müller, Aarhus University</i> |
| 4:45 | Methane emissions from Baltic seagrass meadows <i>Mats Björk, Stockholm University</i> |
| 5:00 | Methane emissions after tidal reintroduction in an Australian salt marsh <i>Neil Saintilan, Macquarie University</i> |
| 5:15 | Discussion |
| 5:30 | Field Trip Information <i>Cintia Quintana, University of Southern Denmark</i> |
| 5:45 | End |

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| 7:00 | Workshop Dinner at Toldboden (toldboden.com/en ; 18-24 Nordre Toldbod, DK-1259) |
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| Day 4 – Thursday, September 12th FIELD TRIP: Choose either Channel Tour (1/2 day) or Glydensteen Tour (Full Day) (See travel tips document for more information) | |
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| 7:30 AM | Glydensteen Tour group meets inside Copenhagen Central Train Station (Banegårdspladsen 1, 1570 København V) in front of the 7-Eleven, box lunch will be provided during trip |
| 12:00 PM | Channel Tour group meets in Nyhavn at the Memorial Anchor (Nyhavn 1F, 1051 København) for box lunch |
| 1:00 – 3:00 | Channel Tour |
| 3:00 | End for Channel Tour group |
| 7:00 | End for Glydensteen Tour group |

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| Day 5 – Friday, September 13th | |
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| 9:00 AM | Opening Remarks - <i>Minna Epps, International Union for Conservation of Nature</i> |
| Session 8 | Designing a Nordic Roadmap for Blue Carbon Organizers: <i>Marianne Holmer, University of Southern Denmark; Mats Björk, Stockholm University; Christoffer Boström, Åbo Akademi University; Dorte Krause-Jensen, Aarhus University; Helene Frigstad, NIVA; Steven Lutz, GRID-Arendal; Jim Fourqurean, Florida International University</i> Moderator: <i>Marianne Holmer and Emily Pidgeon</i> |
| 9:05 | Break-out Groups and Discussion |
| 10:45 | Coffee Break |
| 11:15 | Break-out Groups and Discussion |
| 11:45 | Closing Remarks |
| 12:00 | Lunch – Provided - move to noon |