

Nicholas T. Cohn

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EDUCATION

Oregon State University, College of Earth, Ocean, and Atmospheric Sciences; Corvallis, OR

Doctor of Philosophy Student in Geology, July 2012 - Present

Cumulative GPA: 3.86

Boston University, College of Arts and Sciences; Boston, MA

Bachelor of Arts in Earth Sciences, *Magna Cum Laude*, September 2006 - May 2010

Cumulative GPA: 3.72, Major GPA: 3.93

WORK EXPERIENCE

Oregon State University; Corvallis, OR July 2012 - Present

Graduate Teaching Assistant/Graduate Research Assistant

- Research on coastal morphodynamics with primary focus areas including onshore sediment transport mechanisms and feedbacks of nearshore morphology on wave runup
- Developing a coupled coastal modeling platform accounting for both subaqueous and subaerial sediment transport
- Involved in coastal field programs throughout Oregon/Washington (USA) and the Netherlands
- Teaching assistant for undergraduate geology labs

Applied Science Associates; South Kingstown, RI August 2010 - June 2012

Scientist

- Responsible for modeling sediment dispersal from dredging and offshore drilling operations
- Application of stochastic oil spill models for contingency planning and regulatory compliance

Boston University Coastal Sedimentology Laboratory; Boston, MA May 2008 - July 2010

Field/Laboratory Assistant

- Involved in field endeavors focused on characterizing the geologic evolution of coastal barrier island and marsh systems throughout New England
- Senior thesis work on overwash processes along low-lying coastal barriers

AWARDS/SCHOLARSHIPS

Graduate

George and Danielle Sharp Fellowship May 2015

NSF CSDMS Student Travel Award May 2015

Geological Society of America Student Research Grant April 2015

YCSEC Conference Poster Award July 2014

Nortek Student Equipment Grant March 2014

OSU Graduate School Travel Grant February 2014

Taubeneck Graduate Teaching Assistant Fellowship September 2012 - June 2013

Oregon Lottery Scholarship September 2012 - June 2013

Undergraduate

BU College Prize for Excellence in Earth Sciences May 2010

Geological Society of America Undergraduate Student Poster Award March 2010

BU UROP Student Research Award September 2008

BU CAS Dean's Scholarship September 2006 - May 2010

RESEARCH SKILLS

Scientific Programming: C++, Matlab

Sediment Transport Models: Coastal Dune Model, MUDMAP, OOC, Unibest, XBeach

Wave and Hydrodynamics Models: ADCIRC, Funwave, STWAVE, SWAN

Oil Spill Models: OILMAP, SIMAP

Other: Adobe Illustrator, ArcGIS, Trimble Geomatics Office, HYPACK

FIELD EXPERIENCE

Nearshore Bathymetric and/or Topographic Surveying

Netarts Littoral Cell (OR)	February 2015 - Present
South Beach (OR)	July 2014 - Present
MEGAPEX, Zandmotor, the Netherlands	September-October 2014
Columbia River Littoral Cell (OR, WA)	July-September 2012/2013/2014
Rockaway, OR	August 2013
Lincoln County, OR	July 2012
Boston Harbor Islands, Boston, MA	July 2008/June-July 2010
Sea Cove, Phippsburg, ME	May 2010
Duxbury, MA	October 2009

Hydrodynamic Deployments

Newport, OR (AWAC, OBS, CTD)	July-September 2014
Rowley Marsh, Rowley, MA (ADCP, OBS)	June- July 2010
Hampton Beach, NH (ADCP)	August 2008

Geoprobe Coring, Vibracore, and Ground Penetrating Radar

Bald Head Cove, Phippsburg, ME	October 2009
Salisbury, MA	August 2008
Plum Island, Newburyport, MA	June/August/October 2008

CONFERENCES AND WORKSHOPS ATTENDED

Community Surface Dynamics Modeling System Annual Meeting (Boulder, CO)	May 2015
Coastal Sediments (San Diego, CA)	May 2015
American Geophysical Union (San Francisco, CA)	December 2012/2013/2014
Argus Workshop (Delft, the Netherlands)	September 2014
2nd International Workshop on Swash Zone Processes (Newark, DE)	July 2014
Young Coastal Scientists and Engineers Conference (Newark, DE)	July 2014
International Coastal Symposium (Durban, South Africa)	April 2014
Geological Society of America NE/SE Regional Meeting (Baltimore, MD)	May 2010

MEMBERSHIPS

American Geophysical Union	August 2012- Present
Geological Society of America	December 2009 – Present
Student Advisory Committee (CEOAS OSU)	March 2013- April 2014

PUBLICATIONS

Cohn, N., and Ruggiero, P. (in review). The influence of seasonal to interannual nearshore morphological variability on extreme water levels: Modeling wave runup on dissipative beaches, submitted to *Coastal Engineering*

Cohn, N., Anderson, D., and Ruggiero, P. (2015). Observations of intertidal bar welding along a high energy, dissipative coastline, *Proceedings of the Coastal Sediments Conference 2015*

- Susa, T., Ruggiero, P., Anderson, D., and **Cohn, N.** (2014). Morphological change and sand transport mechanisms in the dynamic dune complex of South Beach State Park, Oregon. *Shore and Beach*
- Cohn, N.**, P. Ruggiero, J. Ortiz, and D. Walstra. (2014). Investigating the role of complex sandbar morphology on nearshore hydrodynamics. *Journal of Coastal Research – Special Issue 70*

CONFERENCE PRESENTATIONS

- Cohn, N.**, Goldstein, E., Ruggiero, P., Moore, L., Duran, O., Roelvink, J.A., and B. Hoonhout. Towards assessing the coastal zone as an integrated system: the development of a coupled nearshore and aeolian dune model. CSDMS Annual Meeting. Boulder, CO. May 2015.
- Cohn, N.** and P. Ruggiero. Observation of intertidal bar welding along a high energy, dissipative coast. Coastal Sediments. San Diego, CA. May 2015.
- Hoonhout, B., de Vries, S., and **Cohn, N.** The influence of spatially varying supply on coastal aeolian transport: A field experiment. Coastal Sediments. San Diego, CA. May 2015.
- Cohn, N.**, Anderson, D., Susa, T., Ruggiero, P., Honegger, D., and Haller, M. Observations of intertidal bars welding to the shore: examining the mechanisms of onshore sediment transport and beach recovery. AGU Conference. San Francisco, CA. December 2014.
- Cohn, N.** and P. Ruggiero. Temporal variability in coastal vulnerability associated with transient sandbar systems. Young Coastal Scientists and Engineers Conference. Newark, DE. July 2014.
- Cohn, N.**, Ruggiero, P., Ortiz, J., and D. Walstra. Investigating the role of complex sandbar morphology on nearshore hydrodynamics and sediment transport. International Coastal Symposium. Durban, South Africa. April 2014.
- Cohn, N.**, Ruggiero, P., and D. Walstra. Investigating storm-induced total water levels on complex barred beaches. Oral Presentation. AGU Conference. San Francisco, CA. December 2013.
- Ortiz, J., **Cohn, N.**, and P. Ruggiero. Interannual sandbar variability within the Columbia River Littoral Cell. AGU Conference. San Francisco, CA. December 2013.
- Cohn, N.**, Ruggiero, P., and D. Walstra. Exploring interannual sandbar behavior along a high-energy dissipative coast. AGU Conference. San Francisco, CA. December 2012.
- Cohn, N.**, FitzGerald, D., Buynevich, I., Georgiou, I., and C. Hein. Resolving storm intensity from overwash deposits: a case study at Bald Head Cove, Maine. Poster Presentation. NE/SE Geological Society of America Regional Conference. Baltimore, MD. March 2010.

INVITED TALKS

1. Observations of Intertidal Bar Welding Along a High Energy Dissipative Coast. Oregon State University, CEOAS Seminar. May 2015
2. Morphodynamics of Prograding Coasts. University of North Carolina – Chapel Hill. February 2015
3. Sandbar Welding: A Mechanism for Beach Growth and Recovery. Oregon State University, Nearshore Brownbag Seminar. January 2015
4. Morphodynamics of Prograding Beaches. Deltares (Delft, the Netherlands). October 2014
5. Exploring Sediment Transport Processes along a High-Energy Dissipative Coast. Oregon State University, Geo-Day. May 2013
6. Modeling Sandbar Behavior in the Pacific Northwest. Oregon State University, Geomorphology Brownbag Seminar. November 2012

SELECTED TECHNICAL REPORTS (NON-PEER REVIEWED)

- Mendelsohn, D., **N. Cohn**, and D. Crowley. Sediment Transport Analysis of Cable Installation for Block Island Wind Farm and Block Island Transmission System. ASA Project 11-243. Prepared for Tetra Tech EC. 23 May 2012.
- Cohn, N.**, T. Isaji, and E. Comerma. Oil Spill and Drilling Discharge Modeling, Block 4B-10, Offshore Sierra Leone. ASA Project 11-217. Prepared for Talisman Energy. 31 January 2012.

- Crowley, D. **N. Cohn**, and C. Swanson. Modeling Sediment Dispersion During Dredging Operations in the Hudson River for the Spectra Energy NJ/NY Expansion Project. ASA Project 10-309. Prepared for TRC Environmental Corporation. 6 June 2011.
- Cohn, N.**, R. Schmookler, J. Mendelsohn, T. Isaji, and D. Crowley. Oil Spill and Drilling Discharges Modeling, at Attamik, Eqqua, Lady Franklin, and Napariaq Blocks in Baffin Bay, Greenland. ASA Project 11-002. Prepared for Environmental Resources Management. 25 April 2011.
- Swanson, C., D. Mendelsohn, **N. Cohn**, D. Crowley, Y. Kim, L. Decker, and L. Miller, 2011. 2010 Field Program and Modeling Analysis of the Cooling Water Discharge from the Indian Point Energy Center. ASA Project 09-167. Prepared for IPEC, Buchanan, NY. 31 January 2011.