# Author examines 'the human side' of tides

#### Sailor and surfer Jonathan White journeys around globe

By Rebecca Herren Seaside Signal

When Jonathan White and a group of passengers were stranded by a 16-foot tide on a mud flat near Sitka, Alaska, White was able to get the tide out of the boat, but not out of his head. He wanted to know why and how this happened. To find the answers, White needed to understand the dynamics of tides so he set out on a near 20-year journey.

"I thought I would find my answers in a couple of books, but tides are really complicated," White said. Ten years and 300 publications later, White admitted, "the more I read the more complex, mysterious, fascinating and poetic tides became.'

White spoke in front of an attentive audience on July 13 at Beach Books to discuss his journey on tide study: how tides travel, their influences, their effect on rising sea levels and what they portend for the future.

His new book, "Tides: The Science and Spirit of the Ocean" is a mix of science, history and ocean lore. White's journey took him from the canals of Venice, Italy and France to Canada's Bay of Fundy and Ungava Bay near the Arctic Circle. It also includes stories about the human side of tides.

In his readings, White noticed the lack of any human stories. "There's a relationship people have with the tides over many thousands of years. I wanted to bring those two stories together: the deep spiritual, human story and the science story."



REBECCA HERREN

Jonathan White, author of "Tides: The Science and Spirit of the Ocean," at Beach Books.

"Most of human history before 1700 believed the Earth was the center of the universe, that it didn't move," White said.

It wasn't until Newton's planetary motion discovery that humans became aware of tides.

Because people didn't understand the reasons behind

the ebb and flow of tides, they speculated, creating a rich mythological history. Some believed when the tide went out, it disappeared into a web of vents below the ocean and came out through another vent. Leonardo da Vinci believed it was the six-hour inhale and six-hour exhale breathing of a large animal, and some astrologers thought it was divine power citing women's menstrual cycles.

"There are a lot of different ideas about this, but the science didn't even begin until about 300 years ago," he said.

He explained how a crest takes 12 hours to form from

high tide to high tide and low tide to low tide. "The tide is a long, low wave that travels around the globe at 450 miles. It has no beginning and no end."

Then there is tide friction. "Any dimple of tension, any thread of stress you see on the ocean's surface is evidence of friction," he said. "The tides rub against the ocean floor and create heat and some of that is dissipated into the water, but most of it is transferred into energy that acts as a break on the ocean's surface."

Known as a global phenomenon, this friction also slows down the rotation of the earth, acts as a torque on the moon's rotation and throws it away from the earth, and functions as an accelerator for longer days.

White's journey began after he graduated from Lewis and Clark College. He built a 600-foot sloop and sailed it through the Caribbean, Pacific and Atlantic oceans. In the early 1980s, he wanted to start a graduate program and saw a picture of an old wooden schooner. He said he "felt a crush coming on" and got into his Volkswagen bug and drove to Tillamook. It was a cold rainy day

and the boat was in the mud. "We went down below and I could smell rotting wood. It was painted orange, it leaked about 150 gallons a day and it was perfect," White said.

He started a nonprofit organization on the boat named Crusade, and for the next 11 years offered floating seminars on the 65-foot halibut schooner built in 1923.

His first seminar seemed to capture the essence, setting the tone for the next few years. "I invited a theater group from

Jonathan White 'There's a

relationship people have with the tides over many thousands of years. I wanted to bring those two stories together: the deep spiritual, human story and the science story.'

Jonathan White

Chicago to perform a play." He anchored the boat in a bay, set up a do-it-yourself amphitheater for the passengers and the play was performed on board the Crusade.

From 1983 to the mid-1990s, these floating seminars kept White out at sea for about seven months of the year, sailing the Inland Passage from Puget Sound to Alaska. His seminars attracted a mix of disciplines: scientists, environmentalists, conservationists, anthropologists, theologians, ecologists and writers including Ursula

### **Community** Calendar

### Friday, July 20

#### **AAUW Walkers**

9:30 a.m., 503-738-7751. This low-impact walking group meets weekly at different locations.

#### "The Musical"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG. "The Musical of Musicals: The Musical!" is an entertaining parody of musicals.

#### Saturday, July 21

#### **Beach Run**

7 a.m., 12th Ave. beach access, Seaside, 503-738-8304, www.seasidebeachrun. org, \$30 to \$40. Seaside Beach Run is a 5k/10k beach run, timed and non-timed 5k walk, kid's sand dash and treasure hunt; registration required.

#### **Craft Bazaar**

9 a.m., American Legion, 1216 Hemlock St., Cannon Beach. American Legion Auxiliary will host its annual craft fair fundraiser to benefit hospitalized veterans, includes baked goods, home décor and art work.

#### **Comic Con**

11 a.m., Seaside Convention Center, 415 First Ave., Seaside. Artists, entertainers, writers and gamers will be in attendance at the Versus Comic Con 2018 convention; open to the public.

#### "Baskerville"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG. "Baskerville: A Sherlock Holmes Mystery" is a whimsical spin on a classic Holmes mystery.

#### **Joe Woods**

7:30 p.m., American Legion, 1315 Broadway, Seaside, 503-738-5111, www.seasidepost99.org, no cover, 21+. Acoustic singer and songwriter Joe "The Mailman" Woods plays rock, blues, country and Americana music.

#### Sunday, July 22

#### **Comic Con**

11 a.m., Seaside Convention Center, 415 First Ave., Seaside.

#### **NAMI Meeting**

2 p.m., Seaside Library, 1131 Broadway, Seaside, 503-738-6165. The National Alliance on Mental Illness welcomes individuals and caregivers of anyone who suffers from a mental illness.

#### **Grant & Rudolph**

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25. Singer Shelly Rudolph joins pianist Tom Grant for an evening of smooth jazz and rhythm-n-blues.

#### Monday, July 23

**Pinochle Group** 1 p.m., Bob Chisholm Center, 1225 Avenue A, Seaside, 503-738-3311, \$1 per session per person. This is a weekly

regular play card game; prizes awarded.

### **Seaside City Council**

7 p.m., City Hall, 989 Broadway, Seaside, 503-738-5511, www.cityofseaside.us. The Seaside City Council meets on the second and fourth Mondays.

### Tuesday, July 24

#### **TOPS Meeting**

9:15 a.m., NC Family Fellowship, 2245 Wahanna Road, Seaside, 509-910-0354. Take Pounds Off Sensibly (TOPS) focuses on healthy lifestyle changes for weight loss, meets weekly.

#### Wednesday, July 25

#### **Chamber Breakfast**

8 a.m., Seaside Public Works, 1387 Avenue U, Seaside, 503-738-6391, www.seasidechamber.com. Open to the public, weekly speakers and discussions; locations subject to change.

#### Bingo!

12:30 p.m., Bob Chisholm Center, 1225 Avenue A, Seaside, 503-738-3311, 10 cents per card, \$2.40 (in dimes) all games. A weekly game of Bingo fun with

#### **Farmers Market**

3 p.m., Broadway Middle School parking area, off Hwy. 101, Seaside, 503-738-3311, www.seasidemarket.org. Seaside Farmers Market offers a variety of fresh produce, plants, meats, dairy, spirits, artisan food, art and hand crafted products.

#### **Necanicum Watershed**

6 p.m., Seaside Library, 1131 Broadway, Seaside, 503-717-1458. Necanicum Watershed Council meets monthly to discuss nature, wildlife, community and civic benefits.

#### "Baskerville"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG.

#### **Thursday, July 26**

#### **Ham Radio**

8 a.m., Finn's Fish House, 227 Broadway, Seaside, 503-739-3890. Ham radio operators meet every Thursday.

#### **SDDA Breakfast**

8 a.m., Pig 'N' Pancake, 323 Broadway, Seaside, 503-717-1914, www. seasidedowntown.com. Weekly speakers, discussions and a no-host breakfast.

#### **Kiwanis Club**

Noon, Seaside Golf Course, 451 Avenue U, Seaside, www.facebook.com/pages/ Kiwanis-Club-of-Seaside-Ore, open to the public. Features weekly speakers, discussions and a no-host lunch.

#### **Matinee Thursdays**

1 p.m., Bob Chisholm Center, 1225 Avenue A, Seaside, 503-738-7393. Enjoy popcorn and a movie on senior matinee **Thursdays** 

### Paint & Sip

6:30 p.m., The Whet Spot, 12 Holladay Drive, Seaside, 503-420-0405, \$35. Create an original piece of art in a relaxed setting with a choice of beverages; space is limited.

### **Book Presentation**

7 p.m., Seaside Library, 1131 Broadway, Seaside, 503-738-6742. Join Deborah Baldwin for a presentation of her book "Tillamook Rock Lighthouse."

**Cedar Teeth** 7 p.m., McMenamins, 1157 Marion Ave., Gearhart, 503-717-8150, www. mcmenamins.com, no cover. Cedar Teeth blends rough and rusty rock-n-roll with lyrical American roots music.

#### "The Musical"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG.

#### Friday, July 27

#### **AAUW Walkers**

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9:30 a.m., 503-738-7751, locations vary.

#### "Baskerville"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG.

#### Saturday, July 28 Birdwatching

#### 7 a.m., Stanley Marsh Habitat Reserve, Seaside,

503-/38-9126, www.nclctrust.org. Join Mike Patterson for an early morning birdwatching walk at Stanley Marsh; registration required.

#### **Magic Show**

1 p.m., Cannon Beach Library, 131 Hemlock St., Cannon Beach, 503-436-1391. Back by popular demand, the library will host a family-friendly magic show with local magician **Brett Willyard** 

#### **Just Us**

7:30 p.m., American Legion, 1315 Broadway, Seaside, 503-738-5111, no cover, 21+. Just Us plays country, rock and blues music.

### "The Musical"

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25,

#### Sunday, July 29

### **Regal Majesty**

3 p.m., Seaside Convention Center, 415 First Ave., Seaside, \$10 to \$65. Regal Majesty Pageant offers fun, fashion and talent; tickets are \$10 per event, \$20 finale, \$65 access pass.

### **Aaron Larget-Caplan**

7:30 p.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$20 to \$25. Aaron Larget-Caplan will perform compositions by Bach, Cage and Mussorgsky

#### Monday, July 30

#### **Coastal Edge** 10 a.m., Oswald West State Park,

#### Devil's Cauldron and Elk Flats; registration required.

Manzanita, 503-738-9126. Join Tom

Horning and Katie Voelke on a walk to

**Kidz Camp** 10 a.m., Coaster Theatre, 108 Hemlock St., Cannon Beach, 503-436-1242, \$275. "Return to Oz" is this year's theme for a two-week summer camp, open to kids 8 and older; scholarships available.

#### **Regal Majesty**

10 a.m., Seaside Convention Center, 415 First Ave., Seaside, \$10 to \$65.

#### **Pinochle Group**

1 p.m., Bob Chisholm Center, 1225 Avenue A, Seaside, 503-738-3311, \$1 per session

#### Tuesday, July 31

#### **TOPS Meeting** 9:15 a.m., NC Family Fellowship, 2245

Wahanna Road, Seaside, 509-910-0354.

#### **Regal Majesty**

10 a.m., Seaside Convention Center, 415 First Ave., Seaside, \$10 to \$65. Crowning at 3 p.m.

#### Wednesday, Aug. 1

#### **Chamber Breakfast** 8 a.m., Angelina's Pizzeria, 1815 Roosevelt

Drive, Seaside, 503-738-6391.

#### **Farmers Market**

3 p.m., Broadway Middle School parking area, off Hwy. 101, Seaside, 503-738-

### **Gearhart City Council**

7 p.m., City Hall, 698 Pacific Way, Gearhart, 503-738-5501, www.ci.gearhart. or.us. Gearhart City Council meets on the first Wednesday.

#### "The Musical"

St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG.

7:30 p.m., Coaster Theatre, 108 Hemlock

#### Thursday, Aug. 2

#### **Ham Radio** 8 a.m., Finn's Fish House, 227 Broadway,

Seaside, 503-739-3890.

8 a.m., Pig 'N' Pancake, 323 Broadway,

## Seaside, 503-717-1914.

SDDA Breakfast

**Kiwanis Club** Noon, Seaside Golf Course, 451 Avenue U, Seaside.

#### **Matinee Thursdays**

1 p.m., Bob Chisholm Center, 1225 Avenue A, Seaside, 503-738-7393.

#### **Grief Support**

A, Seaside, 503-338-6230, 18+. Lower Columbia Hospice provides group support through journaling and discussion.

2 p.m., Bob Chisholm Center, 1225 Avenue

#### "Baskerville" 7:30 p.m., Coaster Theatre, 108 Hemlock

St., Cannon Beach, 503-436-1242, \$20 to \$25, rated PG.

#### Friday, Aug. 3 **AAUW Walkers**

9:30 a.m., 503-738-7751, locations vary.

#### **RJ Marx Quartet** 7 p.m., WineKraft, 80 10th St., Astoria, 503-468-0206, no cover, 21+. The RJ

\$25, rated PG.

Marx Quartet delivers a hard-driving, soulful tribute to the great jazz masters. "The Musical"

7:30 p.m., Coaster Theatre, 108 Hemlock

St., Cannon Beach, 503-436-1242, \$20 to

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