

# Sea star juveniles still recovering

CORVALLIS — An unprecedented number of juvenile sea stars have been observed off the Oregon coast over the past several months, just two years after one of the most severe marine ecosystem epidemics in recorded history nearly wiped the population out.

The appearance of the juveniles does not mean the threat of “sea star wasting disease” is over, researchers caution. A second round of the disease could be disastrous to the purple ochre (*Pisaster ochraceus*) and other sea stars, some of which are considered “keystone” species in marine habitats because of their influence on the ecosystem.

A team of Oregon State University scientists who have been monitoring the sea stars for years reported on their status this week in the journal PLOS ONE.

“When we looked at the settlement of the larval sea stars on rocks in 2014 during the epidemic, it was the same or maybe even a bit lower than previous years,” said Bruce Menge, the Wayne and Gladys Valley Professor of Marine Biology at Oregon State University and lead author on the study. “But a few months later, the number of juveniles was off the charts — higher than we’d ever seen — as much as 300 times normal.

“It wasn’t a case of high settlement, or more sea stars being born. They just had an extraordinary survival rate into the juvenile stage. Whether they can make it into adulthood and replenish the population without succumbing to sea star wasting disease is the big question.”

Menge and his colleagues believe the reason for the high

survival rate is the availability of more food. The young sea stars feed on larval and juvenile mussels and barnacles, competing with adult sea stars for the same food source. The scarcity of adults provided a temporary smorgasbord for the juveniles.

Sea star wasting disease first appeared in Oregon in the summer of 2014. In rocky intertidal habitats, disease rapidly depleted populations of the dominant sea star, *Pisaster ochraceus*.

The sea stars first developed twisted arms, then showed deflation and lesions, and eventually lost arms and the ability to grip onto the substrate before finally disintegrating completely.

Over a period of about 15 months, the disease reduced the overall sea star population by 63 to 84 percent at different sites along the Oregon coast, and reduced the *Pisaster ochraceus* population by 80 to 99 percent.

The epidemic ranged from Alaska to Baja California.

Scientists from Cornell University attributed the epidemic to a Sea Star-associated Densovirus and researchers in Washington say warmer water may have provided the trigger for the disease in that state.

But Menge’s research group found no association between water temperature and the disease outbreak in Oregon.

“The longer-term ecological consequences of this (disease) event could include wholesale elimination of many low zone species and a complete change in the zonation patterns of rocky intertidal communities along the West Coast of North America,” the authors wrote in their study.

# SCORES & STANDINGS

## MEN’S GOLF

### Ocean Dunes Scramble

SATURDAY, MAY 14, 2016

DISTRIBUTION FOR — GROSS

RANK	NAME	GROSS/NET	AWARD
1	SEAN MOBLEY RYAN DAWES DARIEN DAWES MARK MOBLEY	58 / 47	125 125 125 125
2	BRANDON HEPNER AARON VANDEHEY AARON CARLUCCI KYLE WALDAHL	58 / 52 100	100 100 100 100
3	LOU BOUDREAU CHRISTIAN BOUDREAU RON YASENCHAK PAUL COGGIN	59 / 53 75	75 75 75 75
4	WADE MATTHEWS ZEV STATLER JOHN KAUFMAN DARTH WATKINS	59 / 49 25	25 25 25 25

### OCEAN DUNES WHITE

DISTRIBUTION FOR -- NET

RANK	NAME	GROSS/NET	AWARD
1	KAREN HEROY SUZANNE BOLTON LILA SHORT MELODY STANDEFORD	65 / 44	125 125 125 125
2	PAT BARRON KATE GALICK LESLIE MISENSOL SUN HWA TIBBITTS	64 / 45	100 100 100 100
3	RICHARD KAPRIELIAN BOB SULLIVAN BOB HIBBS JOHN J SMITH	64 / 45	75 75 75 75
4	ED GARRICK RICHARD CASTANEDA MATHEW HERRILLO CARL MIDDLETON	66 / 46	25 25 25 25



COURTESY PHOTOS

Winning team with a score of 58 (from left) Mark Mobley, Sean Mobley, Ryan Dawes and Darien Dawes

## MEN’S/WOMEN’S GOLF

### Ocean Dunes

SATURDAY, MAY 7, 2016

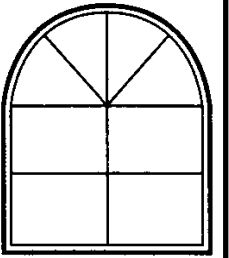
MEMORIAL TOURNEY 4-MAN SCRAMBLE	ROBERT YBARRA
1ST — SCORE: 61 JOHN KAUFFMAN, RENE PENGRA, ZEVION STATLER, BBBIE WELLS	KP #4: MOORE, MOORE, BAKER, SCHMALIG KP #8: MULVEY, BRACKNEY, RIPLEY, RIPLEY KP #12: WELLS, PENGRA, KAUFFMAN, STATLER
2ND — SCORE: 62 LINDA WILSON, JAY WILSON, JEANETTE WINTERMALDER,	KP #16: BAKER, MOORE, MOORE, SCHMALIG

THURSDAY, MAY 13, 2016

SCHREBER SURPRISE	PAUL RUNGE, DAVE RIPLEY, BOB KESSEL
1ST — SCORE: 119 RICK WIDLUND, WAYNE NOEL, BOB GRAVES	KPs: LARRY JONES, RICK WIDLUND, BOB GRAVES
2ND — SCORE: 120	

## Mark & Co.

The Window Company  
Your Neighbors Recommend  
FREE ESTIMATES  
Licensed • Bonded • Insured



Check out local incentive programs with the power company.

Mark C. Seery  
Owner  
CCB #119715

Eugene Office 689-2830  
www.markandcowindows.com

## CELEBRATE RHODY DAYS WITH US!

Sterling Silver Jewelry at a fraction of the price that other stores charge!



- Motorcycle Jewelry
- Gallery Pieces
- Turquoise Jewelry
- Glass Art
- Earrings
- Pendants
- Sterling Silver Jewelry
- Cremation “Urn Pendants”
- Engraving
- Collectable Hand Carved Eggs
- Gift Items & MORE ON SALE!



Please visit us in our NEW location  
1499 Bay Street (Old Port Building)

541-997-0111

# RV PALOOZA

RATES AS LOW AS  
**2.75%**  
APR  
WITH OCCU

## STARTS TOMORROW

You Could Save Thousands on an RV that Fits Your Lifestyle and Budget!

## 90 UNITS ON DISPLAY!

FREE Admission, Parking and BBQ<sup>^\*</sup>

## GET YOUR COUNTRY MUSIC PASS

**BI-MART**  
WILLAMETTE COUNTRY  
MUSIC  
FESTIVAL

**Purchase any RV and get exclusive camping next to the stadium entrance and premium tickets to see Miranda Lambert and Florida Georgia Line, compliments of Bi-Mart<sup>^</sup>**

**Open Every Day 10 am - 6 pm • May 19 - 22 • Three Rivers Casino Resort  
5647 HWY 126 • Florence, OR 97439 • BBQ 11 am - 3 pm**

**'16 COACHMEN Catalina 273DBS**

**\$187** /mo<sup>†</sup>

ONLY  
SALE PRICE \$25,199 • MSRP \$30,181 • VIN 022455 • T34739

**'16 JAYCO White Hawk 24RKS**

**\$198** /mo<sup>†</sup>

ONLY  
SALE PRICE \$26,899 • MSRP \$35,099 • VIN 450056 • T34570

**'14 ITASCA Spirit 25'**

**\$49,590**

ONLY ONE AT THIS PRICE!  
VIN 129046 • M31747A

**'06 DAMON Astoria 36'**

**\$69,979**

ONLY ONE AT THIS PRICE!  
VIN M43823 • M32663A

**'16 HEARTLAND Big Country 3800FL**

**\$17,000**

OVER OFF MSRP  
SALE PRICE \$72,999 • MSRP \$90,317 • VIN 302139 • T34601

**'15 LIFESTYLE Luxury RV 39FB**

**\$40,000**

OVER OFF MSRP  
SALE PRICE \$81,644 • MSRP \$122,073 • VIN 495581 • T32957

**RVPalooza.com**

877-999-1530

<sup>^\*</sup>Visit the Guaranty RV Palooza between 11 am and 3 pm, Friday - Sunday for free BBQ lunch. <sup>^</sup>While supplies last. <sup>†</sup>180 mos., 0% down @ 3.99% fixed annual percentage rate. All financing on approved tier one credit. Credit union membership and other requirements apply. An average credit score of 770 may be required. One vehicle per offer at these prices. Not all vehicles sold at MSRP. <sup>\*\*</sup>Offer available from OCCU on all new and 2012 and newer used RVs for Tier One borrowers up to an 84-month loan term. Payment example: RV financed at 2.75% APR for 84-month term is \$13.10 per \$1,000 financed. APR will increase 0.25% without enrolling in OCCU eStatements and increase 0.25% without enrolling in monthly autopay from an OCCU checking account or monthly ACH payment from another financial institution. Other exclusions, conditions and/or restrictions and membership requirements apply. See dealer for details. \$115 title and/or registration processing fees not included in sale price. Units subject to prior sale. Images for illustration purposes only. Offer expires 05/22/16.

BLACK YELLOW MAGENTA CYAN