

Packaging: OSU team develops enviro-friendly material

Continued from Page 1

across the food supply chain. “We thought why not turn it into an environmentally friendly product that meets an industry need.”

Zhao envisions apple pomace being the main ingredient for molded pulp packing products such as take-out containers, flower pots, beverage cartons and bottles and clamshell packaging used for fruits and vegetables.

She is focused on apple

pomace, in part, because it’s readily available in the Pacific Northwest. When apples are processed for juice as much as 75 percent of the apple goes into the juice, leaving the rest as pomace.

One of the key problems to solve in creating pomace and paper-based packaging is improving water resistance so it can withstand high moisture, liquid food or nonfood items and products stored under high humidity conditions.

Information about their research was just published in Food and Bioproducts Processing, an industry periodical.

They used two strategies: incorporating polymers and compounds with characteristics to improve water resistance into the pulp formulation and applying superhydrophobic coatings on the product surface.

Zhao’s team has a long history of studying food coatings

as a barrier to water and gases. The team had previously created a two-step preparation of superhydrophobic coating that is heat, cold and water resistant.

The research was supported by the Oregon Department of Agriculture Specialty Crop Block Grant Program. Kerr Concentrates of Salem and Hood River Juice Company of Hood River provided fruit pomace for the research.

Crab fest returns to fairgrounds

The Astoria Warrenton Crab, Seafood & Wine Festival returns to an in-person celebration this year, April 22 to 24.

The event has been held virtually for the past two years.

The Astoria-Warrenton Area Chamber of Commerce coordinates the event, which features 175 vendors of hand-crafted arts, coastal cuisine, Oregon wine and local brews.

The festival is a major fundraiser for not only the chamber, but dozens of community organizations that participate, as well as hundreds of small businesses from our vendors and performers to hotels, restaurants and shops in the region.

“The virtual events in recent years were as fun as we could make them,” AWACC Executive Director David Reid said.

“However, we are excited to be planning to return to the festival format we have come to love and be among our friends – vendors, volunteers and attendees alike.”

Vendor applications opened in early February. Tickets will be available online April 1.

Bench: Zappone loved the water

Continued from Page 1

of his family and friends. ... The whole point of it is for us to have a place to come and have a quiet sit, a view of water, and think about him and how much he loved it.”

The board unanimously approved the Zappone family’s request.

Those who request memorial benches must fill out an application, which can be found on the city’s website, seek approval from the parks board, and pay for the cost of the bench and installation.

BUSINESS & SERVICES

DIRECTORY

POLK RILEY PRINTING & Design

Commercial Printing

for all your business needs

Business Forms, Proposals, Invoices
Statements, Work Orders, Sales Books,
Business Cards, Envelopes & More!
503.325.7776 • POLKRILEYS.COM



60 SE 1st Street
Warrenton
503-861-2791

503-861-2791



Appliances & Home Furnishings
“The Name You’ve Come to Trust”

529 SE Marlin Ave., Warrenton

MON.-FRI. 8AM-6PM; SAT 9AM-5PM; SUN 12-4



503-861-0929

BRIM’S FARM & GARDEN

34963 Hwy 101 Business, Astoria
Mon-Sat 9:00 - 5:30 brimgarden@gmail.com
503-325-1562

DEL’S OK

point S
TIRE & AUTO SERVICE

Most Major Brands
Tires • Alignment • Brakes

35359 Hwy. 101 Bus.
Astoria
503-325-2861

ASTORIA SCUBA & KAYAK
ASTORIA FIRE & SAFETY

We Service Life Support and Fire Extinguisher Services



Pier 39, Astoria
503-325-2502

astoriascuba.com

Edward Jones || INVESTMENTS

Member SIPC

Adam Miller
Financial Advisor

632-A W. Marine Dr., Astoria 503 325-7991

www.edwardjones.com



Service & Materials for
Residential, Commercial,
Industrial & Marine

Jack Dickey • Charlie Hansen

1715 Exchange St., Astoria

503-325-5501

cass@wadsworthelectric.com

DARLENE WARREN, AGENT

The Warren Family

Your full-service agency:

FARMERS
INSURANCE

1639 SE Ensign Ln.
Warrenton
503-861-2672

LIFE/HEALTH/MEDICARE
COMMERCIAL/BUSINESS
AUTO/BOATS
MOTORCYCLES/RVs

WWW.AGENTS.FARMERS.COM/OR/WARRENTON/DARLENE-WARREN

Reach your local market
for just pennies a day...

Call Peggy at 503-861-3331