

Waterfront is proudly presented by Centre for Architecture Victoria | Open House Melbourne, in partnership with Department of Environment, Land, Water and Planning and East Gippsland Shire Council. Waterfront is part of Melbourne Design Week 2021, an initiative of the Victorian Government in collaboration with the NGV.

CREDITS

Jar bag, upcycled aprons: Candelaria Ibáñez Sánchez
Upcycled table covering, bibs: Britta Rouse
Artwork: Alexandra Nemarič
Sea urchins: Pacific Sea Urchin
Refreshments: Monceau
Documentation: Ben Clement



LONG PRAWN

Long Prawn is an online and offline platform for spaghetti gazing, food research, events and ideas around eating. A cross-cultural boil that hopes to preserve food knowledge by reviving historical ideas and bringing them to the surface of the pot again.

@long_prawn

FURMIEN

All Furrmien products are informed by chance encounters with produce in the reduced, 'quick sale' section at the supermarket. Their goal is to transform perfectly edible yet commercially 'dead' produce such as blemished or overripe fruit and vegetables, scraps (peels, stems, and leaves) or overstock into living products. Their process uses fermentation and modern recipes to revive soon to be discarded and forgotten waste. While some are interested in the most prime ingredients, Furrmien uses their magic to 'FERMENT THE REST'.

@furrmien

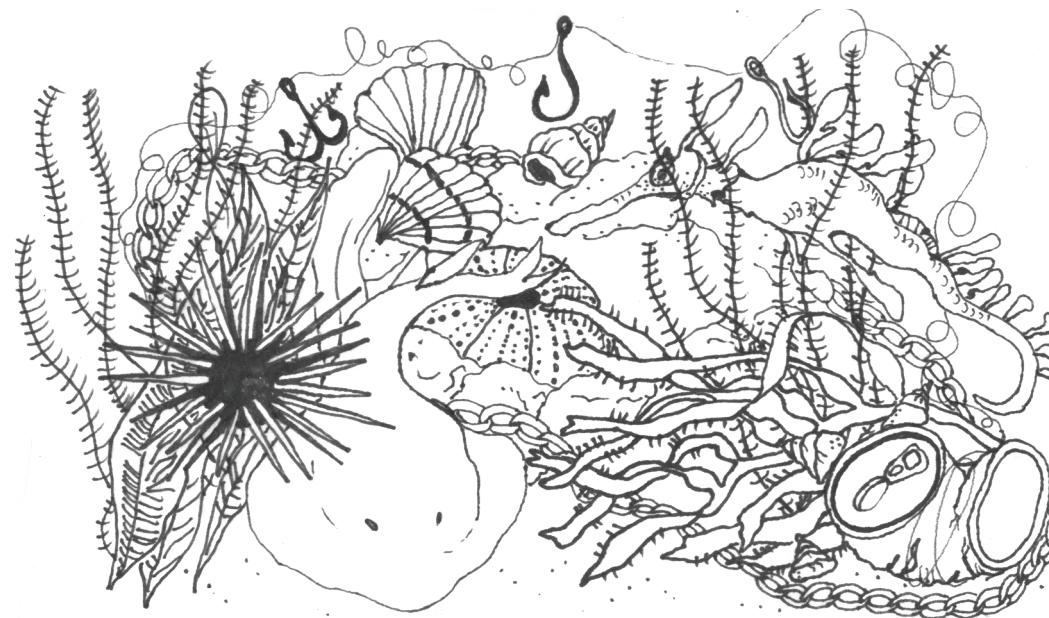
PIRJO HAIKOLA

Dr. Pirjo Haikola is a designer, researcher, educator and scuba diving instructor. Her research focuses on regenerative design and conservation technologies for marine ecosystems. As an 'underwater designer' Pirjo is passionate about contributing to ocean literacy through public engagement and teaching. Pirjo is currently Industry Fellow Lecturer in Design Innovation and Technology at RMIT University in Melbourne.

@pirjohaikola

WATERFRONT: BREAKING DOWN THE URCHIN

A participatory, informative and 'hands-on' river float aboard The Yarra Countess hosted by Open House Melbourne, Long Prawn, Furrmien and Pirjo Haikola.

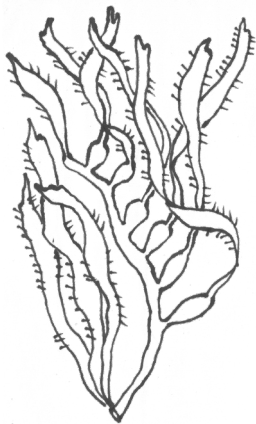


This event would not have been possible without the help of Pacific Sea Urchin.



In Port Phillip Bay and throughout the East Coast of Australia, the invasive sea urchin species *Centrostephanus Rodgersii* and *Heliocidaris Erythrogramma* have been exploding in numbers. Now, with the helping hand of humans, these native and beautiful yet voracious little creatures have the capacity to impact seaweed habitats and alter biodiversity. In those places where numbers are too high, hand-harvesting sea urchins for human consumption is a particularly suitable food choice. Further, while our seas are being drastically overfished of species that cannot sustain themselves, this is a delicious and helpful choice that protects our oceans.

Using eyes, ears and stomachs, this event prepares participants with the knowledge, skills and motivation to reclaim our sea floors. Over a two-hour period, guests will hear from NGV Triennial senior curator Ewan McEoin and artist Pirjo Haikola about Pirjo's work and research on sea urchins. Guests will then learn how to process and preserve sea urchin as garum (fish sauce) under the creative guidance of food researchers Long Prawn and fermentation experts Furrmien. Guests will be provided with a sea urchin roe snack and a cool beverage, as well as their own jar of sea urchin garum. Together, we will examine how we can creatively and consciously decide what food we eat.



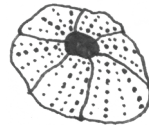
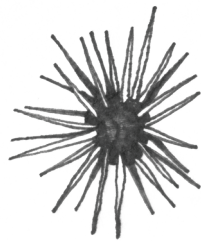
GARUM FISH SAUCE

The use of garum dates as far back as the 1st Century AD, where fishermen processed the leftovers of their catch with healthy handlings of salt and sun. It was not until some centuries later when production became more widespread across the ancient Mediterranean. While the Romans really did fancy the stuff, it is unlikely that they were first to transform fish and guts into this powerful juice. Some maintain that the word 'garum' is derived from the word 'shrimp' in Greek where others maintain that it is a Latin word for a specific fish used. Whether it was the ancient Grecians, Romans, Carthegeans and or most likely south-east Asian influences from the silk road, the condiment became the ketchup of the time. Extremely flavourful, arousing and a true relish to the palate. Some of the first and best garums were made in Carthage, North Africa which is now known as Tunisia. Here, fine slices of fish such as tuna, sardines, anchovies, mackerel and so on were placed among fish guts, scales and heads. The catch was then heavily salted in limestone vats and left to ferment in the sun, with nets to keep off the flies and birds off of course.

As pungency and popularity rose vastly, various methods and categories of garum appeared: Garum first appeared only using fish blood then moved to include both flesh and other viscera. Allec, a lower quality condiment, utilised the leftover sediment after straining a batch of garum and was more accessible to commoners as a paste or savory. Liquamen, often synonymous with garum utilised smaller fishes which often became liquified in the brine, hence the name. Like fine wines, these tastes of the sea greatly varied in availability and price.

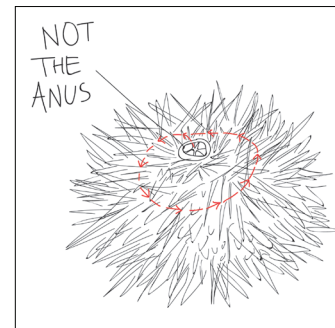
As the years went on, production of garum decreased, rumour has it the price of salt and the quantity needed made the brown liquor more scarce. Eventually, garum faded in the West. Whereas in the East, fish sauce secured itself as a pillar within Southeast and Northeast Asian cuisines. While fermented fish parts are found in Chinese cuisine as early as the Zhou Dynasty (1050-771 BC) a divide of fermented sauces aptly named the bean-fish divide saw two differing approaches in later years. Within Southeast Asia (Vietnam, Thailand, Cambodia) fermented fish was mainly used while in Northeast Asia (China, Korea, Japan) fermented beans were more predominant.

Fish sauce in Southeast Asia was made similarly to the West, except the fermentation was done in wooden vats with pressed bamboo mats weighed down with rocks and left under the sun for about 9 to 12 months. The fish sauce we are familiar with today has different names from different countries. In Vietnam, 'nuoc mam', in Thailand 'nam pla' and in China 'yuiee lu' and more.



FERMENTATION PROCESS

So what is happening behind the scenes when we make garum or fish sauce? Malodorous as it is, the liquid does not in fact putrefy, it ferments through a process called autolysis. Autolysis is when an organism 'digests' itself. Utilising the digestive enzyme's within the parts and guts, the fish actually breaks itself down. The salt plays the role of hastening the enzymatic process and prevents harmful microbes from growing. The reason why being under the beating sun, at around 30 celsius, is because temperature plays a big part in this enzymatic process. At 60-celsius enzyme activity level is at its max. And if you can maintain this temperature, the garum could be finished within 6 months. The key things to consider when making garum are time, temperature and salt percentage. A marvellous discovery, you can make using techniques thousands of years old. An elevation of profound flavour still reached for in homes and high dining today.



FURMIEN GARUM

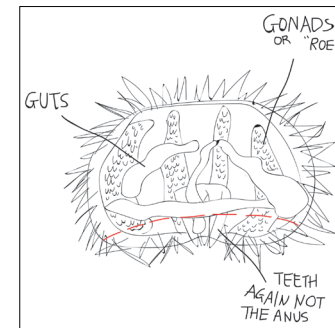
1 sea urchin (roe, mouth and guts)
80% water
18% salt

Using a pair of scissors cut around the mouth of the urchin and remove. Then cut a larger opening around the shell as per the diagram below to create an urchin bowl.

Remove the roe and guts carefully with your hands. In seawater or saltwater, rinse and remove any sand or seaweed from the insides leaving small parts of guts and the tongues of roe. Place aside the roe, and mouth. Rinse the inside of the shell thoroughly.

After you have weighed them, place the roe, guts and mouth back into the shell and muddle until a rough paste. You may find there are some spines in the shell, these are ok to muddle in also. Pour the urchin parts into a jar, add 18% salt and 80% water by weight, with the urchin parts making the final 2%.

Secure your lid well. Keep your garum at a consistent temperature out of the sun. Wait nine months yet shake regularly. Strain. Add to dishes for a salty seafood enhancement.



BURNT LIME, ONION AND TOFU DIP

6 spring onion bottoms (white)
250g oil
3 charred limes (zest and juice)
300g tofu
2g ground coriander seed
2g ground white pepper
Salt to taste

First thinly slice the spring onion bottoms and add them into a small pot along with the oil. Cook on low heat until the onions become translucent. While that's happening, zest the limes and half them. Next heat up a pan until smoking hot then add the limes to char until fully black. Once the limes have cooled down juice them and place them aside. Now strain and separate the onions, reserving both the oil and cooked onions. In a blender, blend the spring onions, spices, zest and charred lime juice on high for about 1-2 minutes until it is combined. Add the tofu and blend until smooth. Next, drizzle the infused oil in slowly while blending to form an emulsion.

Once completed, set up a smoking tray as shown in the diagram, burn the 'THINGS TO SMOKE' and cover it to trap the smoke. Allow it to smoke for 15-20 mins. Mix the dip mixture to ensure smokiness is spread throughout the dip. Then repeat the steps for 3-4 times until smokiness is achieved. Once done, season with salt to taste.

