



OYSTER CLUB

TRAINING GUIDE

YOUR GUIDE TO KNOWING, LOVING, & ENJOYING OYSTERS.



JAXOYSTERCLUB.COM

JAX & OYSTERS

WE ONLY SERVE THE GOOD OYSTERS. THE BAD ONES, WELL, WE DON'T EVEN LET THEM DATE OUR

NEIGHBOR'S DAUGHTER. At Jax Fish House & Oyster Bar, we search tirelessly for the freshest oysters. The best of the best is all we choose, and we fly them in, daily. Because of the healthy community of oyster lovers in Colorado, we are able to guarantee only the freshest and most highly sought after seafood in the country.

Jax Fish House is committed to serving you sustainable seafood. We are supremely concerned about global oceanic fish stocks; every decision we make is guided by that concern. Our relationship with a fishmonger is dependent on their commitment to respecting and maintaining sustainable fisheries. We partner with Monterey Bay Aquarium's Seafood Watch, The James Beard Foundation - Smart Catch Program, The Blue Ocean Institute, Sea to Table, and Fish Choice among other sustainable seafood certification organizations to share important news in the ever changing world within our oceans. Due to our dedicated sustainable seafood practices, Jax Fish House is proud to be the first restaurant in Colorado to be certified by the Monterey Bay Seafood Watch. Seafood is delicious...let's make it last forever.



'EM ARE SOME GOOD OYSTERS!

The Emersum Oyster is exclusive to Jax Fish House and is the result of months of research in cooperation with Rappahannock River Oysters (RRO). RRO has been run by the Croxton family since its inception in 1899. Resurrected by cousins, Ryan & Travis Croxton in 2002, the young upstarts have turned the oyster world on its...ear...by redefining the words "sustainability" and "restoration" in their oyster growing practices.

Every Emersum Oyster brings with it the certainty

of "merroir", the certainty that it was grown at 37°

36' 28 N Latitude & 76° 25' 48 W Longitude and the certainty that for every Oyster that's grown, dozens of wild oysters are seeded in an improved eco-system.

What does that kind of certainty mean exactly? It means that we don't just know where the Emersum Oyster comes from, we know where it lives. It means that we can point to an exact spot on a map where the Emersum was raised and know the quality of the water, the environmental influences and the conditions that will produce this consistently rich and delicious oyster with a size,



OYSTER 101

ANATOMY

Oysters breathe much like fish, using both gills and mantle. The mantle is lined with many small, thin walled blood vessels which extract oxygen from the water and expel Carbon Dioxide. An oyster can filter up to 50 gallons of water a day. A small three chambered heart, lying under the abductor muscle, pumps colorless blood, while its supply of oxygen, to all parts of the body. At the same time a pair of kidneys located on the underside of the muscle purify the blood of any waste products it has collected. Because oysters are filter feeders, the amount and types of salts and other nutrients in the water, water temperature, pollution levels, and seasonal changes effect an oyster's flavor, shell structure, and flesh color. Oyster's flavors and consistency can vary from bay to bay or from one side of an island to the other.

Oysters almost always bear the name of the region where they are grown as a means to distinguishing their individual flavors.

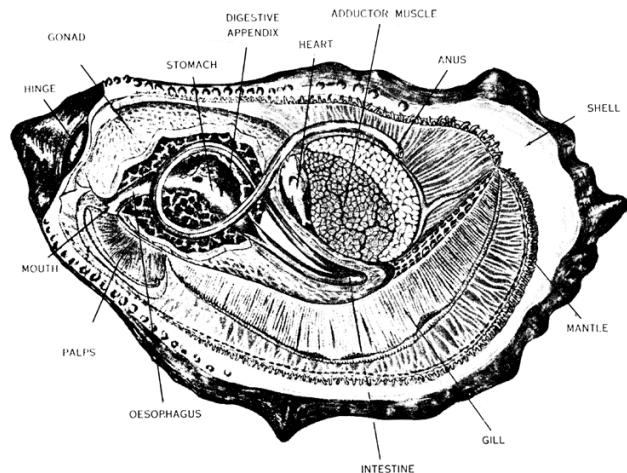


FIGURE 4. Anatomy of an oyster. From *Handbook for Oyster Farmers*, Division of Fisheries, Australia.

OYSTER SHELLFISH TAGS

All shellfish arrive to us with a tag attached to the box or bag they come in. This tag tells us where the shellfish originated from, when it was harvested, who shipped it and what type of species it is. We are required by law to hold on to shellfish tags for up to 90 days. Jax shuckers are required to write the date the oysters were washed on the tag. The tag will then follow those oysters, until the last oyster is shucked from that bushel. Once the last oyster is shucked, the date is written on the tag and the tag is filed. Shellfish tags are used in case someone gets sick, we can quickly find the source and hopefully avoid any other problems.

HOW DO PEARLS END UP INSIDE OYSTERS?

An oyster produces a pearl when foreign material becomes trapped inside the shell. The oyster responds to the irritation by producing a nacre, a combination of calcium and protein. The nacre coats the foreign material and over time produces a pearl.

THE 'R' MYTH

Folklore says that oysters should be eaten only in months with r in them, but oysters can be eaten 12 months a year. The notion that oysters should be eaten in r-less months, that is months that occur during warm weather, started in the days when oysters were shipped without adequate refrigeration and could spoil. But today all that has changed and we can enjoy oysters 12 months a year. Some warm water oysters (Apps, Chesapeake, etc.) spawn when the water gets too warm and they're not tasty.

NUTRITION - 'Eat Your Oysters'

Oysters are delicious, AND are also one of the most nutritionally well balanced foods, containing protein, carbohydrates and healthy fats. The national heart and lung institute suggests oysters as an ideal food for inclusion in low-cholesterol diets. Oysters are also an excellent source of vitamins A, B1 (thiamin), B2 (riboflavin), B3 (niacin), C (ascorbic acid), and D. Four or five medium sized oysters supply the recommended daily allowance of iron, copper, zinc, iodine, magnesium, calcium, manganese, and phosphorous.

OYSTER SPECIES

The five species of oysters cultivated in North America can be thought of as we do wine grapes. Each has classic characteristics, though they can be expressed quite differently, depending on location and growing conditions. Like grapes, an oyster's flavor, appearance and quality will vary depending on where they are grown, and due to that growing site, they will have certain predictable characteristics.

EASTERN OR EAST COAST (CRASSOSTREA VIRGINICA)

large, firm, briny

The 'Riesling' of oysters - with the wrong conditions, can be one dimensional. In great waters, it can achieve brilliant subtlety and refinement - an unsurpassed transparency of sea minerals.

PACIFIC OR WEST COAST (CRASSOSTREA GIGAS)

large, soft, sweet, with cucumber notes

The 'Sauvignon Blanc' of oysters - less mineral but far more fruity and aromatic, often having an aftertaste of cucumber, seaweed, melon, or even bitter walnut. Can be wildly different from place to place.

KUMAMOTO (CRASSOSTREA SIKAMEA)

small, creamy, with hints of melon

The 'Chardonnay' of oysters - buttery, round and smooth, with all the fruit of Pacifics but none of the bitterness. Everybody likes Kumos, causing some oyster snobs to distance themselves from the oyster and the maddening crowd, in search of more challenging and exclusive experiences. Just as ex-chardonnay drinkers have done.

EUROPEAN FLAT (OSTREA EDULIS)

medium, metallic, with a trace of caviar and hazelnut

The Barolo/Nebbiolo of oysters - Most oyster lovers cannot stomach this fish egg and metal flavor. Like the tannic Piedmont wine filled with complexity, this oyster can be unapproachable and does not want to be your friend.

OLYMPIA (OSTREA CONCHAPHILA)

tiny, coppery, and smoky

A friendlier version that is still metallic, but sweeter is well represented by 'Gewurztraminer' as it is unusual, mysteriously smoky and rich.



OYSTER SPECIES - EASTERN OR EAST COAST

Look at an Eastern oyster and you see a hard-bitten New Englander. The thick shell and lack of adornment. The simple, salty flavor. Clearly this is an oyster conditioned by many brutal winters to adopt a viewpoint all too familiar to Northeasterners: build yourself a strong house and don't show off too much. Unlike most of the world where the Pacific oyster has taken over the oyster grounds, America still has its native oyster, the same one that fed the pilgrims at Plymouth Rock. Because of the different conditions associated with each grow-out region - nutrients in the water, salinity levels, temperature, etc. - oysters vary in taste from one area to the next and often bear the name of the region where they were grown as a means of distinguishing their individual flavor attributes.

VARIETY	ORIGIN		FLAVOR PROFILE	SIZE
Barcat	Chesapeake Bay	VA	Mild, Sweet, Low Brine	Medium
Chesapeake	Chesapeake Bay	VA	Mild Salinity, Sweet	Medium / Large
Chincoteague	Chincoteague Bay	VA	High Salinity, Low Brine, Clean	Medium
Delaware	Delaware Bay	DE	Mild Salinity, Sweet	Medium / Large
Emersum *Jax Exclusive	Rappahannock River Oysters	VA		
French Kiss	Neguac	NB	High Salinity, Briny, Sweet Finish	Medium
Hurricane Harbor	Northumberland Bay	PEI	Crisp, Salty, Sweet Finish	Small
Northumberland	Northumberland Strait	PEI	Mild, Clean	Large
Riptide	Buzzard Bay	MA	Salty, Seaweed Finish	Small
Salutation Cove	Prince Edward Island	PEI	Med. Salinity, Crisp, Sweet Finish	Medium / Large
Tatmagouche	Tatamagouche	NS	Sweet, Salty	Large
Wianno	Cape Cod / Nantucket So	MA	Sweet, Briny	Small



OYSTER SPECIES - PACIFIC OR WEST COAST

Unlike the native East Coast oyster, the Pacific oyster is a Japanese transplant brought to this country after the turn of the century to revitalize the West Coast oyster industry after its native Olympia species crashed. Its shell resembles the pagodas of its original Japanese home, all curves and arches, showy colors, and fancy fruit flourishes.

The Pacific Oyster is now the most widely cultivated oyster in the world and is farmed from California to Alaska and in Australia, Europe and Asia. Pacifics grow like weeds - and sometimes taste like them. They are the kudzu of oysters, overrunning estuaries with breathtaking speed. They grow twice as fast as Virginicas, four times as fast as Olympias, Flats, and Kumamotos, all the while shrugging off pollution.

Thus, it comes as no surprise that they now supply 75 percent of the world market including more than 99 percent of that in France, whose culinary connoisseurs sneered at gigas until they found that they had almost none of their beloved Belons left, then embraced the immigrant like a long-lost son. Today, so many Pacifics are grown in France that tens of thousands of tons get bulldozed annually to keep the price from collapsing.

A Pacific, left to its own devices, will get huge fast in rich waters. Its meat will be streaky and watery, its shell thin. It's a bag of saltwater with a crust. But growers on the West Coast, in France, Australia, and elsewhere have discovered that with proper handling, a Pacific can develop into something with filigreed shells and stylish flavors no Virginica ever dreamed of. No other oyster has such range, and that makes gigas exciting. Will the one before you burst with melon and yuzu flavors, or leave you feeling like you're sucking on old aquarium goo?

VARIETY	ORIGIN		FLAVOR PROFILE	SIZE
Blue Pool	Hama Hama	WA	Med. Salinity, Vegetable Finish	Small
Chef Creek	Baynes Sound	BC	Creamy, Med. Brine, Sweet	Small
Fanny Bay	Baynes Sound	BC	Sweet Citrus, Cucumber Finish	Small
Golden Mantle	Texada Island	BC	Full Flavor, Sweet Melon Finish	Medium
Goose Point	Bay Center	WA	Crisp, Light Salt, Smooth	Medium
Hama Hama	Lilliwaup	WA	Firm, Briny, Mild Finish	Large
Kumamoto*		CA/WA	Low Salinity, Mild, Buttery	Small
Nisqually Sweet	Nisqually River	WA	Plump, Sweet, Creamy	Medium
Otter Cove	Discovery Bay	WA	Plump, Full, Med. Briny	Medium
Penn Cove	Coupeville	WA	Firm, Briny, Cucumber Finish	Medium
Ranier	Pudget Sound	WA	Full Meat, Firm, Briny	Large
Royal Miyagi	Sunshine Coast	BC	Light, Clean, Kiwi Finish	Medium
Sun Hollows	Hood Canal	WA	Slightly Briny, Sweet	Medium
Sunset Beach	Hood Canal	WA	Full, Silky, Med. Brine, Mineral	Medium / Large

OYSTER SPECIES - KUMAMOTO

"I have a love-hate relationship with Kumamotos. I love the taste. I love the smell. I love the extraordinary flourishes of the shells. I love everything about them. And I hate that."

Here's the problem. Everybody likes Kumamotos. They are sweet as heck and they smell like honeydew. Their shells are exquisite in adornment and curve, like little geishas. Beginners love them because they are small and don't have challenging aromas or flavors. Seasoned veterans love them because of their unmatched fruitiness and deep cups. It's no fun to like the same thing as everyone else does, so we want to hate them. But we just can't.

Although Kumos are often described as mild, they're not. They actually have a lot of flavor, just none of the alien ones that put off some Westerners. Many oysters have passing hints of musk or metal or seaweed that aren't the kind of thing you find at McDonald's - or French restaurants for that matter. Kumos flavor profile is much more within the Western comfort zone. Their texture is appealing and the meat is reliably firmer than that of Pacifics. The meat sits in the shell like a divan, all pillow-y flesh. They don't have much liquor, because the meat seems to take up all available space.

Kumos are contrary oysters. They sometimes struggle in algae-rich waters where Pacifics thrive, yet do well in thinner waters. Although they look like mini-Pacifics, they may have a different diet. We know that Olympias, the other small oyster, feed on particularly tiny plankton and reject larger plankton that Pacifics gobble up. Perhaps the same is true for Kumos. Do some of these larger plankton contribute bitter or fishy flavors? Hmm.... studies have yet to be done.

Originally from the Kumamoto Bay on the island of Kyushu, Japan, they are very slow growing oysters and small in size. They are commonly harvested in California, Oregon and Washington state. The bulk of our Kumamoto stocks come from WA.

OYSTER SPECIES - BELON OR EUROPEAN FLAT

Almost everybody who tastes a Belon hates it. Belons are off-putting and overwhelming, like an anchovy dipped in zinc. Most people can't take them. But if you can, you may find that very soon you can't stop taking them. You will be on your way to joining the cadre of Belon addicts. You see Belon addicts at oyster bars on those rare occasions when a bar has them. They order twenty-four Belons for lunch and another twelve for dessert. Not dainty belons, either. The true addict wants the platter-sized gagers, which can run upwards of five dollars apiece and have a crunch like calamari.

Flats, Europe's native oyster, look very different from Eastern or Pacific oysters, because they didn't evolve for life in the intertidal zone - the area of shore exposed to air every low tide. Flats aren't built to endure long stretches out of the water. Instead of a tear-shaped shell, Flats are round and shallow. They hold less liquid, which, along with their weak adductor muscles, means Flats dry out a lot faster than other oysters. Harvesters ship them with rubberbands around the shells to keep them closed.

Flats first acquired the name Belon in the nineteenth century when the river of that name, in Brittany, was reputed to have the tastiest variety. The name was soon adopted by all oyster growers in the area who might have conceivably dipped their oysters in the Belon. In the twentieth century true Belon growers tried to reclaim rights to their name, but it proved impossible and eventually Belon came to indicate any Flat from Brittany.

OYSTER SPECIES - OLYMPIA

The little Olympia oyster is special. It's an American native, like the Eastern oyster, but it has a rich, engaging, celery-salt flavor that has earned it the nickname Baby Belon. In fact, many connoisseurs prefer the smoky copper flavor of Olympias to the full metal jacket of Belons. James Beard, who especially liked them for breakfast, was a huge Oly fan: "I have tasted many oysters, and, to me, the flavor of the Olympia is one of the finest, if not the finest of all."

If they are so good, then why aren't Olympias more widely known? Because they are also the World's Most Inconvenient Oyster. Like European Flats, Olympias die if you look at them sideways. They are even less shippable than Flats. Being not much bigger than quarters, they hold very little liquid and dry out quickly. If you want them, you must head to the source.

You won't get full, however. Start shucking and eating and you will be reminded of the "wild blueberry" phenomenon. No matter how fast you work, you can get only so many of the tiny things into your mouth. But that's fine. The intense flavor, seemingly without mass, and the watchmaker's skills needed to unlock the delicate green shells make Olympias more entertainment than meal.

Though Olympias are passing rare today, they once flourished from San Francisco Bay to British Columbia, and were party food for many thousands of frontiersmen. It's hard to believe that an industry survived on the little oysters for fifty years, but it did. Shuckers were clearly cheap back then, because it takes significant time to produce a gallon of Oly meats.

The oysters were so small, and grew so slowly, that they went into decline when the first cities sprang up on the West Coast. Though remnants can still be found hiding out from California to West Vancouver Island, by the 1900's the only commercial crops were in Southern Puget Sound. Effluent from a pulp mill on Oakland Bay finished those off in 1927. The mill closed in 1957, but it took decades for the sound to flush itself clean. In the 1980's, the Olys started coming back, reseeded by larvae spawned from a few beds that survived in crooks of the sound that pollution never found, and aided by the Puget Sound Restoration Fund, which restocks native beds. Today, a handful of dedicated growers in Southern Puget Sound sells Olys, a labor of love.



TASTING

To understand the nuances of oyster flavor, it's necessary to unlearn the bad culinary habits America has taught us. Oysters don't taste like bacon double cheese burgers. They don't taste like Chinese barbecue. They don't even taste like grilled swordfish. They don't cater to our basic childhood preferences for sweet and fatty tastes, as so much contemporary food does. They are quietly, fully adult. If you like sushi, then you are well on your way to liking oysters. Sushi has surely been a factor in the current oyster renaissance. It got a whole generation of Americans comfortable with the idea that their seafood need not be cooked, and that strong flavors were not automatically better ones. Oyster flavor, like perfume notes, comes in three stages.

STAGE 1: SALINITY

This is what hits immediately when you tilt an oyster into your mouth. It can be overwhelming, unnoticeable, or anywhere in between. Oyster blood is seawater, more or less, so oysters take on the salinity of their environment, which can range from 12 to 36 parts per thousand (ppt). In their role of primordial bar snack, to accompany a pint of lager, a fully saline oyster can be great. Crisp, crunchy, salty - all the same adjectives that typify a bag of potato chips can likewise apply to a plate of Maine oysters. But if you plan to have more than a few, you may feel salt overload. It's worth pointing out that salt and acid cancel each other on the tongue, so a squeeze of lemon or a touch of mignonette will substantially reduce the impression of salt.

Oysters with very low salinity, on the other hand, can taste flat, like low-sodium chicken broth. We have grown accustomed to a certain level of salt in almost all our food. People who grew up eating low-salinity oysters, however, prefer them, insisting that too much salt masks the buttery seafood tastes that makes oysters unique.

Most people prefer the midrange of salt. Such oysters provide plenty of taste interest up front, but allow the body and finish of the oyster to come through.

STAGE 2: BODY & SWEETNESS

After the initial sensation of salt, you will sense the body of the oyster. For this, you will have to chew. Some squeamish eaters don't like to chew their oysters. We're sorry, but chewing is where all the toothsome pleasure of the oyster comes out. Chewing also begins to release an oyster's sweetness. In wine terminology, body refers to the way a flavor fills the mouth, and that's an important part of the pleasure of an oyster, too. Some just seem to vaporize. Others are dense with sweetness or savory richness. This doesn't always correlate with size. A tiny Olympia has plenty of body, while a large Gulf oyster can leave your mouth with very little sensation other than a compelling need to swallow. But, in general, a larger, older oyster is more likely to have a full body and an interesting palette of flavors.

STAGE 3: THE FINISH

These are the impressions that linger after you have chewed and swallowed, and sometimes are truly surprising. All the fruity flavors ascribed to oysters belong to Pacifics and their little cousin the Kumamoto. Eastern oysters taste of the salty sea and various minerals, not fruit. Olympias and European Flats taste metallic and smoky. There are also various nutty, buttery, musky, algal, fungal, citrus, seaweed, black tea, and grainlike flavors that turn up in particular oysters. Don't expect to identify these flavors the first time you taste an oyster. At first, oysters taste "oystery". But the more you taste them side-by-side, the more obvious the differences become. A world of wild and fascinating flavors opens up.

TAKE 'EM HOME

Your oysters gotta get home COLD! Plan ahead by bringing an insulated bag, cooler, or purchasing one of our custom Oyster Club transport totes. Once you pick them up, don't let them swim again. Keep them on ice, but never under water. Oysters that are submerged in water will open and that messes with the flavor, texture and quality. Once you get home, store your oysters at 35-40 °F, covered with a clean damp cloth. Do not seal live oysters in an airtight container - they won't be able to breathe and will die.

Once you're ready to feast, shuck your oysters and serve them on a bed of crushed ice. There are a variety of fixin's people enjoy with their oysters including fresh lemon, mignonette, cocktail sauce (with or w/o horseradish), hot sauce, and crackers.



CHEF SHEILA'S OG MIGNONETTE RECIPE

Yields 2 cups

2 C Red Wine Vinegar • 1 Shallot, finely diced • 4-5 Whole Peppercorns • 1 Bay Leaf • 3/4 C Sugar

- Bring the sugar, vinegar, bay leaf and peppercorns to a boil
- Strain out the peppercorns and bay leaf, and put into a container to cool
- While the liquid is still warm, add the shallots allowing them to poach in the liquid
- Chill and serve! *Mignonette has a long shelf life, if refrigerated

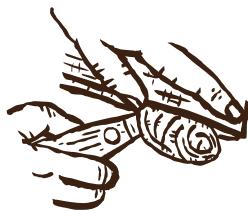
HOW TO SHUCK

1



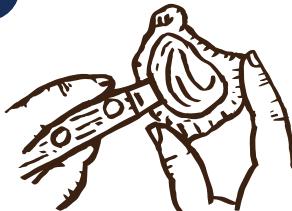
Clean oysters under cold running water with a scrub brush. Discard any light or opened oysters.

2



Place the oyster's hinge on a rolled up kitchen towel. Using an oyster knife, gently work the tip into the seam between the top and bottom shells. Look and you should see a natural place to insert your knife.

3



Gently wiggle the knife. When you hear a "pop", slide the blade along the top edge and remove the upper shell. Making sure not to spill the liquor, use the knife to carefully detach the oyster. Slurp.

LET'S GET SOCIAL

Jax Fish House is committed to serving you sustainable seafood. We are supremely concerned about global oceanic fish stocks; every decision we make is guided by that concern. We partner with lots of great sustainable seafood organizations to stay informed and involved. You can stay in-the-know too by following them online.

Monterey Bay Aquarium Seafood Watch [f /SeafoodWatch](#) [o @SeafoodWatch](#)

The Safina Center [f /TheSafinaCenter](#) [o @SafinaCenter](#)

Sea to Table [f /Sea2Table](#) [o @Sea2Table](#)

FishChoice [f /FishChoice](#) [o @FishChoicelnc](#)



WIN A TRIP FOR 2!

Share your best oyster creations, dinners, and overall seafood stories on Facebook & Instagram using **#JaxOysterClub**.

Doing something pretty epic? Use **#JaxOysterNinja** to show us what you've got!

We'll choose the best photo each quarter to win a chef tasting dinner for 2 at Jax Fish House.

At the end of the year, we'll ask our followers to vote for the best pic of the year who will win the ultimate prize...

a trip for 2 to Rappahannock River Oysters in Virginia to see where our Emersums grow!



[f /JaxFishHouseBoulder](#) [/JaxFishHouseLoDo](#) [/JaxFishHouseFortCollins](#)
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